"INNOVATIVE BUSINESS PRACTICES IN DIGITAL ERA"

Editor's

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TABLE OF CONTENTS

NEUROMARKETING: AN INNOVATIVE BUSINESS PRACTICE

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Abstract:-
Introduction: Marketing has been evolving in all its forms. In its present scope, it has metamorphosed from barter system, to production concept, to product concept & so on. New discoveries in neuroscience are revolutionizing twenty-first century life and marketing is no exception. Neuromarketing can be considered as another milestone, which is still evolving. Neuromarketing is a dynamic package of medical knowledge, technology & marketing. It can be a powerful tool in market research; where advertising is becoming more scientifically advanced. The human brain hasn't changed much in last 1, 00,000 years. But the role of women has changed dramatically. From the right to vote and own property to the right to govern your own reproduction, women have stepped into a new role. In today's situation there are more women than men at work place. In many cases women are the sole bread winners and the decision makers for the products they buy. Thus women worldwide have greater spending power.
Objective: Covering everything from product development to packaging to point-of-sale marketing neuromarketing is the guide to access today's newest business frontier: human brain.
Methodology: The paper attempts to throw light on the growing perspective of Neuromarketing in & around. The paper will bring forward the messaging elements the female brain loves. It will try to highlight the difference between a female brain and mummy brain. It is interesting to know that all mummies have female brain but not all females have mummy brains. This is reflected in their spending power as well as pattern. It will also focus why and how maternity enhances certain brain functions. Through various applications of neuromarketing study the paper will attempt to show what specific consumer behavior and prefences mummy brains share.
Findings & conclusion will depend upon the case study or example under review
Keywords: Advertising, Brain Mapping, Market Research, Mummy Brain, Neuromarketing

1. INTRODUCTION

Objective of all marketing communication is to induce or enhance purchase. Advertising is one of the major components of promotional mix and that of marketing communications. Marketing researchers have started questioning the premise that a target consumer would reflect 'what he/she really thinks' in response to a question in a questionnaire. If the consumer does not reflect his/her actual feelings to a marketing researcher, how can we assume that the results arrived at after such a research would be reliable.

We depend on the principle of marketing research to find out consumer preferences, attitudes, likes and dislikes. We analyze consumer responses and reach certain conclusions. On this basis, marketing and promotional mix is decided. However research has revealed that consumers do not necessarily provide the real answer to researcher. At times they do not even know as to what is that they really think about a given question.
Researchers all over the world are trying to find answers to questions on the unfathomable behavior of the target consumers in the fields other than those of consumer behavior, marketing and advertising.

Remember the pre-poll survey where the results declared that some political party would come to power at centre and actually the opposite happened. The survey was conducted by one of the best research organizations. Sometimes the consumers themselves do not know their real feelings about a given situation. They would act in a particular manner at the spur of the moment. It may also happen that, they know their actual feelings but do not intend the marketing researcher to know the same. This brings us to neuro-marketing. The field has unprecedented potential of showing the path to those managing brands, marketing communication.

2. NEUROMARKETING-WHERE BRAIN SCIENCE AND MARKETING MEE

In very simple terms, Neuromarketing is medical knowledge, technology and marketing. Neuromarketing is a new field of marketing that studies the consumer's response to marketing stimuli. Neuromarketing is the application of neuroscience to marketing. Neuromarketing includes the direct use of brain imaging, scanning, or other brain activity measurement technology to measure a subject's response to specific products, packaging, advertising, or other marketing elements. In some cases, the brain responses measured by these techniques may not be consciously perceived by the subject; hence, this data may be more revealing than self-reporting on surveys, in focus groups, etc.

This concept was developed by psychologists at Harvard University in 1990. The word Neuromarketing was coined by Ale Smidts in 2002.It is an emerging branch of neuro science in which researchers use medical technology to determine consumer reactions to particular brands, slogans and advertisements. The first ever Neuromarketing conference was held in 2004 at Baylor College of Medicine in Houston. The base of Neuromarketing is "meme". Meme is a unit of information stored in the brain. These units are effective influencing human who is making choices and decisions within 2.6 seconds. If mem is chosen properly we remember the good, joke or song and would share it. Memes stay in our memory and are affected by marketers. Examples of memes-aroma of fresh bread, biscuits, sweets, characters in fairy tales, stories of grandmother.

Thus, Neuromarketing is a promising and emerging field with tremendous potential for application in the functional areas of marketing, brand management and advertising. It has emerged after bringing together applicable concepts from the field of neural-science, psychology, human neuro-physiology and even neuro-chemistry.

2.1 Introduction of the Buying Brain

"*Understanding the human mind in biological terms has emerged as the central challenge of science in the twenty-first century.*"
-By Dr. Eric Kandel, Neuroscientist and winner of the Nobel Prize for Physiology or Medicine

Millions of people in our global economy have jobs that depend on communicating with and persuading the human brain. So it is vital for us to understand how the human brain really works, what is attractive to it, how it decides what it likes or dislikes or how they decide to buy or not buy the infinite variety of products and services.

"*We have learned more about the brain in the last five years than in all human history combined*".

-By Charlie Rose

The basic lesson is that human brains process much of their sensory input subconsciously. Most of the works our brains are doing day and night are below our personal consciousness. Our senses are taking in about 11 million bits of information every second. Most of that comes through our eyes but all other senses are contributing-hearing, touch, smell, taste. Research has shown that our conscious brain can process at best 40 bits of information per second. All the other is processed subconsciously. That is why our brain appears to be a mystery.

This has really widened the scope of Neuromarketing. The concepts of Neuromarketing provide a real competitive advantage in a crowded and cluttered market. The languages of consumers change from country to country and culture to culture, however the language of human brain is the same i.e. universal. Thus, Neuromarketing has greatly affected products, brands, packaging, and advertising as well.

2.2 Structure of Human Brain

Human brain is made up of billions of cells. These cells are called neurons. The neurons can communicate with one another through small junctions. These junctions are called synapses. When a neuron is active, it sends an electrical impulse to its own terminal or end. The impulse generates a sequence of physic-chemical events leading to the release of a chemical molecule. This chemical molecule is called a neurotransmitter and serves as a messenger. This neurotransmitter forms a bridge between the two neurons and the impulse

gets transferred. Once a neuron is activated it is described as 'a neuron has fired'. A single neuron connects with 600 to 1500 other neurons. Neurons form circuits, circuits form networks, networks form systems, systems form super systems and the super systems are equivalent to galaxies.

"Neurons are the basic working units of the brain and the central nervous system, designed to transmit information to other nerve, muscle or gland cells."

By Dr. A.K. Pradeep Founder and CEO, Neurofocus Inc.

2.3 Our Brain is a Part of Central Nervous System which has Following Parts
The table below shows the importance of different parts of brain to marketing and advertising managers:

Area of Brain	Function	Importance
Spinal cord	Sending message from nerves to different parts of the body	0
Medulla oblongata	Respiration, controls blood pressure, senses of taste and hearing	1
Pons	Controls movement, respiration and sleep	0.5
Cerebellum	Maintains postures, controls head and eye movements, muscle movements, language as well as cognitive functions	1.5
Midbrain	Co-ordination of visual and auditory reflexes	0.5
Thalamus	Taste, smell, touch	2
Hypothalamus	Eating, drinking, growth, motivation	3
VMFL(Ventro-medical Frontal Lobe)	Decision-making	4
Hippocampus	Memory	4

Value range 0 to 5
(Source: Neuromarketing a Peep into Customer`s minds by J.K. Sharma, Deepali Singh, K.K.Deepak, D.P.Agarwal)

3. THE SHE FACTOR
Till date only 17% of medical research was conducted on women. The main hindrance was the body cycle each month which is never static. As a result, no concrete baseline can be established. But this was the scenario before the Right for Inclusion of Women in Clinical Research was passed in 1995.Now the female brain is the prime focus for study.

The marketers can now target those five magic days to market their products or services that make women more attractive. New research shows that woman`s purchase behavior is unconsciously influenced by their hormones. Therefore, women at peak fertility unconsciously choose products that enhance appearance in order to outdo the attractive rival women. This research has practical implications for marketers as for about 5 to 6 days every month normally ovulating women may likely purchase clothing, shoes, accessories, health supplements, diet programmes etc. This has opened a new avenue in Neuromarketing- doing a blood draw along with brain scans & biometrics to evaluate the hormonal levels of female subjects.

3.1 Why SHE
Women in India have several layers to them. Marketers cannot afford to look at them as 'One Mass' due to their various life cycle stages, distinct life styles as well as consumption psyche. They play a significant role not only in consumption but in household buying decision-making as in India three-fourth of all families are nuclear.
Juxt Indian Women Study 2010 reveals following facts:
- There are only 40 million working women in India (i.e. 9% of all women).148 million are students while 260 million are housewives
- 72% of working women are working mothers
- Housewife mothers is the largest occupational-marital segment among women (50%)

- Only 1 woman in 10 works in corporate world. Southern region contributes the highest proportion of working women.

Segment	Description	% of Indian Women Population	No. in Millions
Women students	Unmarried & studying	33	148.5
Working maidens	Unmarried & working	2	7.2
Housewives	Married & not working	8	34.2
Housewife mothers	Married with children & not working	50	225.4
Working wives	Married & working	1	4.3
Working mothers	Married with children & working	6	28.6
Total		**100**	**448.2**

Source: Juxt Indian Women 2010 Study

3.2 A Peep into the SHE Brain

The female brain is fundamentally different from the male brain. She has four times more neurons connecting the right & the left brain. She processes information through both rational & emotional filters unlike men who use either one side or other to process the information. Therefore while constructing messages to her marketers need to include some emotional component. This balances of two hemispheres males the female brain multitasker of all the time. It is easy and natural for the female brain to move from home to work, from shopping to signing of contract and even combine all the activities. Men tend to focus on one activity with one hemisphere at a time. The female brain is capable of more uneasiness and to do more planning than the male brain. She will always be interested in finding the best deal for her time, money and effort. It may happen that the best deal is not sufficient as she is willing to pay more if your product or service satisfies her requirements as well as of her family. Thus the goal of a male brain is autonomy while that of female brain is community.

Following are some interesting facts about the female brain helpful for marketers by Louann Brizendine author of The Female Brain:

- The female brain is smaller than the male brain by about 9% i.e. the brain matter is more tightly packed in the female brain
- Women have about 11% more neurons in the language centers of the brain
- A woman has slightly smaller amygdala (controls sex & aggression).Therefore, sex is both emotional as well as physical for women
- Women have slightly larger prefrontal cortexes than men which allows them to control emotions during peak times of anxiety

3.3 Tips for Marketers

- The advertisements targeted towards female consumers must pay attention to facial expressions as well as tone of voice not just the text matter
- Social connections are vital for female consumers as a result shared stories are more appealing
- Avoid challenging the female consumers with messages like; "Don`t wait" or "Call now"
- Since both her hemispheres are connected, make sure that the message in the advertisement is based on some positive emotion than statistics or numbers

3.4 The Hands that Rock the Cradle Rule the World

Birth of a child is a powerful catalyst for the brain changes. Brain changes begin from pregnancy. Mothers are famous for their superior instincts and intuition skills. The enhanced prefrontal cortex gives her the ability to control emotions. Human mothers also build networks to support as well as bond with their babies. Mothers excel at what someone else is thinking. Just like human GPS (Global Positioning System) mommy brain has increased vigilance on all aspects i.e. safety and stability of her young one. Birth of a baby

is rebirth of her too. Therefore, it is rightly said that all mommies have female brain but not all females have mommy brain.

3.5 Tips for Marketers
- Show activities that the mother would like to engage with her baby
- The more she feels understood the more likely she will give attention or rely on the brand
- One negative view of your product, its promotion, packing, environment can easily spread amongst millions of mommies as they are socially very well connected
- Target the mommy brain from a new perspective i.e. emphasize safety in a positive emotional context and not through fear

4. SUCCESS STORIES OF THE APPLICATIONS OF NEUROMARKETING:
4.1 Frito-Lay
Women snack more than men but research showed that they did not prefer Frito-lay snacks. The organization conducted an extensive research campaign which brought forward the following results:
- Women snack only 14% of the time on salty foods
- 24% of the time on sweet food
- Other 61% includes drinks, fruits and vegetables

Later the organization decided to make use of various Neuromarketing techniques for adjusting their marketing strategy. The research suggested that communication centre in a woman's brain is more developed due to which they process advertisements with more complexity and more pieces of information. She is especially interested in the guilt factor. Almost 100 females were asked to keep a log of their lives for about two weeks. The outcome of this exercise was that women feel guilty about a lot of things in life.

The following was the action plan of Frito-lay after applying Neuromarketing techniques:
- They focused on their ad campaign as "guilt- free" snack. The organization spread message that;" Snacking should make you feel good, not guilty."
- They toned down their packing and showed healthy ingredients like 0% fat, fibre etc
- After acquiring Smart Food it introduced new line of sweet, low calorie popcorn with flavors like can berry-almond. The packing highlighted nutritional ingredients like: Calcium, wheat, almond, fiber.
- Firto-lay started with the campaign "Only in a Womans World". The campaign has four cartoon women whose names are Anna, Cheryl, Maya, Nikki each possessing a distinct personality. These women are termed as fabulous, funny, and fearlessly female.
- Frito-lay came up with TV, print, online and webisodes at www.AWomansworld.com

Frito-lay came up with following variants for guilt-free women:
- Baked Lays-"Eating better can be yummy."
  These are naturally baked with 65% less fat than regular potato chips. Baked Lays are light-tasting, crispy and full of flavors.
- Smart food Popcorn clusters-"Getting your fiber can be delicious"
  Popcorn clusters with excellent source of calcium, 5gms of fiber and no artificial colors or preservatives. Available in mouth watering flavors like: canberry almond, honey multigrain and chocolate cookie caramel pecan.
- 100 Calorie sun Chips-"Treat you to portion control".
  A 12 Gms of whole grain snack in interesting flavours like: harvest cheddar, white cheddar, asteroids.
- Flat Earth-"We snuck some veggies in your crisps."
  Half a serving of real vegetables in every ounce of crisps which are naturally baked with excellent source of vitamin A & C. Available in flavors like: tangy tomato, garlic & herb, spicy salsa.

5. FUTURE OF NEUROMARKETING
There is no element of doubt that Neuromarketing will enable advertisers to be very specific in providing products that the consumers really want. The more senses you trigger about

your products and service you can influence the buying behavior. Still Neuromarketing is in ones infancy and not free from critics as well as issues.

NeuroFocus, Inc. is an American multinational Neuromarketing company with headquarter in Berkeley. NeuroFocus combines neuroscience research with consulting and marketing practices. NeuroFocus is the global market leader in neurological testing. In India too they have set up an office in Chennai. First *annual Neuromarketing awards* were announced by media brands IPG Media Lab and Affectiva at Cannes Lions International Advertising Festival in June 2011.

Inspite of all these issues Neuromarketing is here to stay. All advertising campaigns are not commercial as many focus on changing the behavior of the people. For example to convince people not to smoke, don't drink and drive or talk on a cell phone while driving.

REFERENCES
1. Neuromarketing A peep in to Customer`s Minds by J.K. Sharma,Deepali Singh,K.K. Deepak and D. P. Agarwal
2. The Buying Brain- Secrets of Selling to the Subconscious Mind by Dr. A.K. Pradeep Founder & CEO, NeuroFocus, Inc
3. The Mommy Brain: How motherhood makes us Smarter by Katherine Ellison
4. The Female Brain by Louann Brizendine
5. "Ovulation, Female Competition, and Product Choice: Hormonal Influences on Consumer Behavior," from the *Journal of Consumer Research* August 18th,2010 by Kristina Durante
6. Neuromarketing Hope and Hype: 5 Brands conducting Brain research by Kevin Randal September 15th, 2009
7. Neuromarketing: The New science of Consumer Behavior by Christophe Morin January 14th,2011
8. Ad Experts not so quick to buy into 'Buy logy' by Miley,Marissa Advertising Age 2008,Volume 79,Issue 40,Page 4 to 30
9. Market Researchers make increasing use of brain imaging by David Lewis and Darren Bridger Nature Neuroscience Volume 17,July 2004
10. Neuromarketing: Who decides what you buy? By Vicky Phan The Triple Helix 2010
11. Neuromarketing Eye tracking helps Campbell March 9, 2010
12. The Marketing Whitebook 2011-12 by Businessworld
13. www.affectiva.com
14. www.awomansworld.com

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WORK FROM HOME IN INDIA AND ITS IMPACT

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Abstract:- CORONA- emerged from a city and spread across the world. The virus has taken over everything that was expected to be in control of corporate or government. This all happened suddenly resulting in lockdown. Economic activities are crippling at a slower rate from home because not all activities can take place from home. The present ongoing catastrophe has impacted us physically, psychologically and economically. Job cuts, pay cuts, even no pay and mass distress have been a new – normal and no one wants it. Employer – employee and economy are the tripods in which one needs to balance the other- so sooner the better.
Keywords: Covid, work from home, Employee turnover, Pay cut.

1. INTRODUCTION

Companies and employees had plans. Appraisals were in offing in April. But March gave a different turn to plans. Suddenly everything was halted under lockdown. Unexpectedly a virus has taken over the control and no one had any solution but to shutdown. Initially there were news, apprehensions and everyone was trying to understand what to do, how to do, how long will we be behind the close doors? As the time passed by, people understood that it will not be soon that things go back to normal and slowly but steadily we are moving towards a new normal.

Companies stated figuring out how to keep business moving even when their human asset is locked behind the doors. IT companies has less trouble shifting work from home as compared to others. Slowly everyone followed - One or the other way to keep the wheels of economy moving while employees were stationed at home. This paper explores the impact of COVID – 19 in terms of work from home and on employees at a large.

2. WORK FROM HOME IN INDIA – THE PAST

Many industries especially in service sector have allowed the employees to work from home. For many industries this is a new concept. In the past, work from home was considered as excuse for not working (Saraswathy, 2013). This concept of work from home was never an option for us. We have always discouraged work from home. The attributable reasons could be – its not part of our culture – work and home are different concepts. People often misuse the concept and take the work for granted if allowed from home. Many companies had to revoke their policy of telecommuting and call the employees back to offices citing immaturity of staff, need of team work, fulfilling the social need, fruitful interaction with colleagues, productivity and most importantly measuring performance (Spector, 2017, Saraswathy, 2013).

From the employees perspective, a survey commissioned by Indeed, was conducted by Censuswide found that 83 % of employees prefer working with company having a remote working facility, 48 % employees said that they would consider a job switch if the company doesn't continues with remote work policy. Employees also felt that work from home helps them in maintaining work-life balance, reducing stress and increasing morale (Moneycontrol.com, 2019).

This may be one side of the picture. Many companies discouraged work from home for reasons being – disengaged employees owing to lack of interaction with peers, hard to measure efficiency, need for physical monitoring and control, preference of face to face interaction over web based systems, motivation and coaching is more effective when the employee is with his colleagues, privacy to work which is more at office rather than home or shared PG, mindset to work is influenced by the facility, influence and interaction with peers, issue concerning long hours of working when logged in from home/remote location as compared to the "office – time" distractions and concentration issue when working from home and the issue of creating trust with company that the employee is "working" even from home or a remote location – out of sight issue. (Krishnamoorthy, 2019, Kajarekar, 2020, Pinto, 2020)

Companies with exceptions have tried to manage/allow employees to work from remote locations only during the cases of bandh or employees attending sick relatives but have the practice of work from home has been discouraged off late before the onset of corona crisis. As Covid has happened to us – by this we mean, suddenly – being caught unprepared, it is changing many things for us. Everything has come to a halt. People are at home trying to figure out what to do and most importantly how to do?

3. WORK FROM HOME IN INDIA – THE PRESENT

Covid – 19 is a natural calamity that has happened without any warning or better to say we were unable to catch up early signals. The result of this – we are unprepared, trying to figure out what to do and how to do. A report by Gartner group asserts that more than half of the Indian companies lack in appropriate infrastructure and resources to support remote working especially small scale companies and non – IT companies. The non-availability of software or better say lack of knowledge of appropriate software, its cost, Wi-Fi, its speed, concern for privacy, habit of working offline and trying to migrate offline work methods to online are some of the impeding factors in work from home (HT Correspondent,2020).

Once the lockdown was announced, companies started figuring how to utilize the manpower and that's how work from home was figured out. Today many companies have reported that their employees are working from home. Ford Motors has asked almost 10,000 of its Indian employees to work from home except for those having critical business role. Similar move has been made by Volvo cars too (PTI, 2020). There are many examples of ITES, software companies and other operations though not much, which have moved to remote location or at done from home.

A report by Naukri.com suggests that there is a threefold jump in work from home during past months. Many jobs that were office based in pre – pandemic times are now based from home or remote location. This has seen upsurge in many sectors where physical presence was significant like education, BFSI and for some sectors like hospitality it has meant a temporary shutdown. (IANS, 2020)

Based on the data between February and July, 2020 report by Indeed portal asserts that job searches for work from home in India have surged over 442 percent, the highest globally. There has been a rise in jobs from software, healthcare, marketing and delivery. Work from home gives flexibility to millennials and helps organizations to maintain the business continuity (PTI, 2020).

Most IT companies have allowed almost 80% of its workforce WFH but they not cancelled their office lease in the hope that someday it will be packed to full capacity (Poovanna and Nandy, 2020)

WFH is still a challenge –
1. Many job profiles may not be WFH or cannot be performed remotely. In continuation with this, even if it's performed online like in case of education sector, it's not as effective as it was in the physical classroom; even professor from USA admits this.
2. 'Work' and 'Home' are two different concepts in Indian context. Home is for leisure, so it becomes practically difficult to mix these two diverse places and prepare a mental model and space (especially) in metros for WFH.
3. Most of the bosses don't understand WFH or appreciate it – for employee working long hours to justify his salary and maintain continuity and bosses on the other hand take a jibe on the employee of being at home – at & in rest.
4. Suddenly everyone is at home – so all issues from connectivity, to availability of space, to device – everything. 5. Appraisal of work from home – not possible in all the cases. (Mani and Tomar, 2020, Moorthy and Saraswarthy, 2020)

4. THE FUTURE

Most of us are apprehensive about the future of COVID–19. With unlock and rise in number of cases, what will happen to the work? Will it continue to be WFH? Or a hybrid model will evolve? Many webinars are being conducted to answer these questions. To us in sectors like software development, education, ITES and other similar sectors where WFH is possible or has been made possible, this will continue. Companies will also evolve mechanisms of hybrid model of working in the sense that to the extent possible and keeping in mind employee safety & business. Some jobs may be redundant, others be modified. COVID will

help organizations realize the value of employees – those who can add value will continue. (Roy, 2020, Ramchandani, 2020)

Will WFH be the future of work? For some jobs yes – companies will cut on the cost of space and resources and bring in a win-win opportunity for both the company and employee. For rest as the unlocking continues companies and government both will try to bring in people at work- to restore normalcy in economy ASAP (Chakrabarti, 2020). Job cuts, pay cuts, even no pay and mass distress have been a new – normal and no one wants it. Employer – employee and economy are the tripods in which one needs to balance the other- so sooner the better. Some experts feel that the normalcy will be restored once a near cure or vaccine is there and fingers crossed for this to happen.

In a new survey, by Valuevox conducted for Indeed.com, close to 60% employers are not in favour of work from home and 3 out of 4 also agree that there has been no decline in productivity of employees. This survey was conducted between December 2020 and January 2021 covering 1,200 employees and 600 employers across 12 cities in India. On the employee's side, 46% opine that the reverse migration is temporary while 50 per cent are willing to shift back to a metro from their native place if the job demands it. Only 9% assert that they will stay on in their native places permanently and 32 percent are willing to take any form of pay cut if they find suitable employment in their native place (Kulkarni, 2021).

5. CONCLUSION

The present ongoing catastrophe has impacted us physically, psychologically and economically. Economically, pay cuts, job loss or conditions eventually leading to this are inevitable. But I don't attribute it all to the supply chain jams, lockdowns etc because to me the willingness to pay is more important than the ability to pay. I have been talking to MSME entrepreneurs and most of them in their own capacities are taking care of their employees with all the limitation of resources they have. They are hopeful of recovery within a year or so and most of them stress upon the idea that during their good times they earned because of their employees, so it's the payback time. This will keep the employees engaged and attached to them. I asked them that let go the employees probably after the lockdown; they can get many others at a cheaper rate. To this most had the opinion that the trust and bonding that they share is priceless. It's this that brings the hope of survival. Extending help to employees in cash and / or kind is not new for MSMEs – the soft loan with no interest, repayable from future salary. So it's not new to do it during this crisis time as well. The economic support will bring a psychological relief. The mental well being will boost the immunity and take care of the physical well-being. We will be able to restore normalcy if we help each-other.

REFERENCES

1. Chakrabarti A (2020), Not a win-win situation — why we should not work from home after the Covid-19 lockdown, retrieved from https://theprint.in/opinion/pov/not-a-win-win-situation-why-we-should-not-work-from-home-after-the-covid-19-lockdown/397284/, accessed on July 2020.
2. HT Correspondent (2020), Coronavirus: 54% of Indian firms can't support work from home, says report, retrieved from https://www.hindustantimes.com/india-news/coronavirus-54-of-indian-firms-can-t-support-work-from-home-says-report/story-WX5di64FrNMo1KQyNZwrcL.html, accessed on July, 2020
3. IANS (2020), Hiring for work-from-home jobs surges in India: Report, retrieved from https://economictimes.indiatimes.com/jobs/hiring-for-work-from-home-jobs-surges-in-india-report/articleshow/77738199.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst, accessed on August, 2020.
4. Kajarekar R (2020), Shocking! 99.8% Of Indian IT Employees Cannot Work From Home Due To These Reasons, retrieved from https://trak.in/tags/business/2020/04/11/shocking-99-8-of-indian-it-employees-cannot-work-from-home-due-to-these-reasons/, accessed on August, 2020.
5. Krishnamoorthy M (2019), Top 10 reasons why Indian IT continues to discourage "work from Home", retrieved from https://www.expresscomputer.in/guest-blogs/top-10-reasons-why-indian-it-continues-to-discourage-work-from-home/42126/, accessed on July, 2020.
6. Kulkarni R (2021), 70% Indian Companies Will End Work From Home Forever; Why India Is Against WFH?, retrieved from https://trak.in/tags/business/2021/03/19/70-indian-companies-will-end-work-from-home-forever-why-india-is-against-wfh/, accessed on April, 2021.
7. Mani D and Tomar S (2020), Work from Home in the time of COVID-19, retrieved from https://www.thehindu.com/opinion/op-ed/work-from-home-in-the-time-of-covid-19/article31207008.ece, accessed on July, 2020.
8. Moneycontrol.com (2019), Indian employees ready to take pay cut for companies offering remote working: Survey, retrieved from https://www.moneycontrol.com/news/business/economy/indian-employees-

ready-to-take-pay-cut-for-companies-offering-remote-working-survey-3522911.html, accessed on July, 2020.

9. Moorthy S and Saraswarthy M, (2020), Coronavirus: Over 20 lakh employees to work from home, but is India Inc ready? Retrieved from https://www.moneycontrol.com/news/business/companies/coronavirus-pandemic-over-20-lakh-employees-to-work-from-home-but-is-india-inc-ready-5031181.html, accessed on August, 2020.

10. Pinto V S (2020), Coronavirus: Health scare forces work from home, but is India Inc ready?, retrieved from https://www.business-standard.com/article/companies/coronavirus-health-scare-forces-work-from-home-but-is-india-inc-ready-120032300027_1.html, accessed on July, 2020.

11. Poovanna S and Nandy M (2020), Work from home transforms Bengaluru's IT clusters, retrieved from https://www.livemint.com/news/india/work-from-home-transforms-bengaluru-s-it-clusters-11596375108870.html, accessed on August, 2020.

12. PTI (2020), Coronavirus | Ford asks 10,000 employees in India to work from home, retrieved from https://www.thehindu.com/business/Industry/coronavirus-ford-asks-10000-employees-in-india-to-work-from-home/article31089427.ece, accessed on July, 2020.

13. PTI (2020), Job search for work from home in India rises 442% during Feb-Jul: Report, retrieved from https://economictimes.indiatimes.com/jobs/job-search-for-work-from-home-in-india-rises-442-during-feb-jul-report/articleshow/77335359.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst, accessed on August, 2020.

14. Ramchandani N (2020), FUTURE OF WORK - It took a pandemic for India Inc to accept the benefits of working from home, retrieved from https://qz.com/india/1819365/india-inc-should-have-adopted-work-from-home-before-coronavirus/, accessed on July, 2020.

15. Roy S (2020), Will work from home be the new normal for India?, retrieved from https://m.economictimes.com/small-biz/sme-sector/will-work-from-home-be-the-new-normal-for-india/articleshow/75592738.cms, accessed on July, 2020.

16. Saraswathy M (2013), Why work-from-home doesn't work -- in India and elsewhere, retrieved from https://www.business-standard.com/article/opinion/why-work-from-home-doesn-t-work-in-india-and-elsewhere-113041000391_1.html, accessed on July, 2020.

17. Spector N (2017), Why Are Big Companies Calling Their Remote Workers Back to the Office?, retrieved from https://www.nbcnews.com/business/business-news/why-are-big-companies-calling-their-remote-workers-back-office-n787101, accessed on July, 2020.

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"BHAIRAVGARH BATIK - COLOR JOURNEY FROM SOIL TO WAX: IN CONTEXT TO INNOVATIVE BUSINESS PRACTICES IN DIGITAL ERA"

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Abstract:– Digital innovation is no longer just the business of software companies. It is now practiced by an increasing number of firms including the craft sector.

The present status of crafts in India owes much to rich craft traditions of the past. Most of the crafts from the past continue to boom due to their utilitarian nature, their availability to the common people and popularity in domestic and foreign markets. The special needs of the patrons and royalty with vivid eye on foreign boom owing to the assimilating nature of Indian culture. Highly accommodative nature of the craftsmen to accept and use new ideas is also responsible for boom.

The present study shows the importance of Indian traditional craft on global scenario. Indian fashion designers are now focusing on the immense potential and revival of traditional Indian textiles to infuse modern style element into diversification of batik fabrics. With the objective to create a new market segment for the artisans, to give new dimension to the traditional textile, and to make artisans create a niche in market according to the fashion trends. This will be a strong step in the direction of traditional textile of Madhya Pradesh and will give the exposure of global market. With these efforts the clothing in India had undergone a drastic change for the benefit of craftsmen also. Indian fashion designers had refined and popularized the traditional Indian clothing and textiles on the map of world with the concept – **"Vocal for Local".**

Keywords: Batik, Bharavghar, Traditional textile, resist dyeing, global market, craft revival.

1. INTRODUCTION

Man is always attracted by colors using leaves and flowers, he gradually prepared colors from natural ingredients as per his imagination and using these colors, he created to day's world of multicolor fabrics.

This most liked free hand style of color craft probably came to India from Indonesia or China .As regard Bhairavgarh art it is spreading its beauty for almost 700 years.

2. THE HISTORICAL ANGLE....

Bhairavgarh situated at the bank of river Kshipra, has been the center of attraction for crafts man of colors for centuries, due to favorable chemical composition of its soil and water.

Though from the historical angle the background of advent of dying and printing is not known, but the "Tarunakaragam" dressed heroin or the "Hansachinda" "dukulwan" claded hero of the great poet Kalidas , represent the colorful dresses of the golden age.

The bhagva cloak of sanyari or the kesiriya apparel of the gallant soldier's, is the symbol of correspondence relevance of the colors.

That is the reason, why this tradition of Bhairavghar print, which started with blocks, made of potatoes and bandhej, has passed through its long journey through the blocks of soil or wood and further through alijarin chemical and screen printing process to provide livelihood to about 150 families.

Previously in this process specially prepared soil was used but now a days hot melted wax is used to give shape to the imagination with the help of pen or brush for dying. In case of more than one colors the process is repeated for each color. Lastly, the cloth is dipped into boiling water to remove wax.

Mechanization of dying and printing, has affected the work of the craftsmen, but they have kept their tradition alive by fighting spirit, efficiency and adopting the methods of works, according to time and market demand.

2.1 Motifs Used

The traditional or conventional motifs like floral motifs with creepers are usually developed by Artisans on their own and sometimes on the demand of buyers. Their main inspiration is nature such as flowers, leaves, paisley's & occasionally the animals. Some motifs like statue of Natraj or Dancing Shiva, statue of Buddha, a rising Sun placed in the centre of the bed

sheet. Statues from Khajuraho temple, dancing human figures, Animal figures like elephant with Hose are usually created on curtains.

As this art is learned or inherited by these artisans from their ancestors and practiced it in their guidance. This is the reason that they have in born ability to develop the motifs of their own. More or less the technique of batik changed from time to time but the motifs like heart shape & flowy designs remained the same.

2.2 Process of Batik→

The word batik has been derived from the word "ambatik" which translates as "cloth with little dots". It is a method of applying designs on to materials. This is carried out by waving the parts that are to remain without dye. Batik is based on the principle that water and wax repel – says Mr. S. A. Majid of Ekta Batik Arts.

Fabric should be made from natural fibers such as cotton, linen, muslin or silk. For intricate designs it is important that the fabric has a high thread count. Synthetic fibers cannot hold dye sufficiently.

2.3 Equipments Used in BATIK→

1. Frames
2. Wax
3. Electric WAX POT
4. Brushes
5. T-Jantings
6. Adye Bath
7. Cold Dyes
8. Soft Pencils

Selection and the preparation of the fabric and the frame is done. First wash or bleach the selected material to remove any remain stains. When dried cut the material to your preferred size leaving 5-10 cm for over lapping on the frame. Make preliminary sketches for your design. These can be drawn or traced using a soft blunt pencil. This can be done before or after framing. Pencil marks will be removed in the boiling out process. Stretch the material as taut as possible over the edges of the frame. The fabric can be secured using dress making pins drawing pins or masking tape depending on the thickness of the material.

It is important that the fabric is stretched as taut as possible. This will allow the wax to be applied evenly. Being to pin the material from the middle on opposite sides of the frame pushing outwards, stretching as you go.

First wax the areas that are to remain white using brushes or tjantings. Use newspaper to prevent any drips from the pot occurring on other areas. If using Tjantings it is important that they stay in the wax pot until needed. Fill the reservoir with enough wax to run from the spout. Do not over fill. If you are covering a large area using the appropriate size brush ensuring that the wax is pushed in to the fibers of the fabric.

When the area is covered with wax ensure that the surface has been penetrated by turning over the frame and checking the back of the batik. It is possible to re wax the surface underneath the batik to provide extra security in the dyeing process.

Mistakes with wax are not easy to remove, however it is not impossible. To remove a bad area scrape off the wax on both sides of the batik using a knife. Soak a teaspoon in boiling water and then use it to gently rub over the surface of the damaged area. Repeat this process until it is removed.

The fabric must be free of wax before the dye will penetrate the surface, says – "Mr. Rashid" In charge of the Ekta Batik Prints.

2.4 Dyeing→

Pre-planning is important when considering the colors used in batik. It is often easier to use colors, which are related as the overlapping of each color affects the previous. The lightest color should be dyed first then the rest according to shade. Dark colors can not be made lighter.

Many factors can affect the final appearance of the color. The proportion of dye used may determine the strength of the final color. When wet the tone of the color will appear darker than the tone when dry. This will also occur during the boiling process. The material

used will also affect the concentration of the color. It is important to test says- "Mr. Irshad" in charge of Dyeing section.

Dye is mixed with the fixative and poured in to the dye bath. The fabric is removed from the frame and immersed in to the dye bath. Ensure that the fabric is flat as the wax may crack. As the dye penetrates in the fabric the fabric is removed from the dye bath. The process is being repeat if the color is not strong as desired. The fabric should not get fold as the dye will get collect in the cracks. It is also possible to paint on the dyes by using brushes Use newspaper to prevent spillages on other areas and blotting paper to remove excess dye.

Hang the batik up to dry using plastic pegs. It is possible to use a hair dryer to assist the drying process, however, be aware that the wax may melt. Leave the batik to dry overnight-Says "Mr. Rashid"

Remove as much wax as possible from the batik using a knife or a scraper Boil the batik in water with detergent to remove all remaining traces of wax. Let the dyed fabric dried in shade.

3. MAIN UNITS EXPLORING THE ART OF BATIK WITH INNOVATIVE PRACTICES →
Madhya Pradesh originally had centers, which only produced print for use by the local tribal population or the peasantry. The All India Handicrafts Board assisted the State Government in reorganizing its printing industry to cater to a larger market.

Bharavghar, the main centre of Ujjain, has large printer's community who print on various fabric and which command an excellent market all over India & internationally. Some of the famous printers and artist in Bharavghar are-

3.1 M.I. Printers→
As 'Mr. Mohammad Ibrahim Badwala' says that their firm basically work on both block printing & batik. For visitors and buyers they have done cataloging of designs on a bed spread which carries a lot of styles in it and they had cataloged their style on various swatches of fabric which shows the actual layout of color combination and placement of designs. Sometimes they create motifs on their own & sometimes they heir artisans and designers to create new innovative motifs for their firm.

3.2 Modernisation with Block Printing→
Their artisans are using new innovative techniques according to the market demand. They are using stencil printing with block printing, warli motifs are very commonly used now a day's to give new dimension to this traditional act. Some artisans are taking inspiration from Tkat motifs in batik art.

The paraffin wax is used in it. Bees wax is not used. To avoid cracks resin is mixed with the melted wax. The ratio to be taken is 1 kg (wax), 250 gm (resin) as explained by Mr. Mohammad Ibraham. Dyes are sourced from Ahmedabad & local market of Indore.

The Industry pays lot of attention on recycling of wax. Artisans often reuses the wax when on scratched out of cloth which reduces the expanse done on the purchase of Paraffin wax. As batik industry is facing the problem of lack of finance.

3.3 Production→
This unit has the capacity of preparing 10 bed spreads per day. They have nearly 15-20 artisans working for their industry. As facing the financial crisis they can't heir more artisans. They are not able to upgrade their industry in the lack of proper guidance.

Sometimes they heir designer's to give new creative or innovative look according to the demand and trend of market-says" Mr. Mohammad Ibrahim"

They use dyes like vat, Persian, napthol, pigment and rapid action dyes are used. Earlier Napthol dyes were in tradition but for better results now a days vat dyes often termed as hot dyes are used. They mainly concentrate on single bed sheet, wall panels, sarees, suits, Tops.

4. RAHIM GUTTI'S ART GALLERY→
The 80 year old designer and owner of this firm is Mr. Rahim Gutti who is a graduate from J.J school of Arts, Mumbai in Fine Arts, associated with this field from almost 30 years and his firm desire is to explore his art in the world.

He is an excellent artist who had master the skills in kalamkari paintings portraits & landscapes done by vegetable dyes, herbal dyes, direct & pigment dyes on the face of the fabric He prepare dyes from the herbs & vegetables on his own. His experienced and skill hands craft the facial details & the scenic details on the fabric, in the form of portraits, landscapes & birds.

4.1 "Get Color of Herbal Dyes in Gutti's Style" →
Red is prepared from pomegranate yellow or shades of yellow from Marigold, Pink from onion peel, orange from tesu flower, brown & shades of brown from tea leaves. Golden yellow from turmeric etc.

They use a wooden pen made of bamboo stick. Except this art he also work o the batik art, which is quite same in function as M.I printer. They also prefer dyeing the fabric in vat dyes to get better shades and color combinations. This firm usually cater to national market & produce articles like sari ,curtains, bed sheets, suits kurta's, portraits and landscapes.

Many students has done the research & job work under Mr. Rahim Gutti as he wants this art to explore more & more.

4.2 Koshal Vikas Yojana →
An organization working for empowerment of women to make them learn the skill of combining batik with surface ornamentation. The batik is often combined with various embroidery stitches like feather stitch, Herring bone, satin, sequence work, katha stitch, Ari work, Mirror work. By teaching them these skills the organization is trying to make these women literate and financially independent as well.

The project is given by Nabard Bank to this NGO. But they are also facing the financial problem. As they have restricted money so they can't explore more or try new experiments or innovations. That's why the artisans are fixed with the traditional motifs & work. They need good financial back up as well as a proper training which gives them stand in market- says the Project In charge.

4.3 Ekta Batik Art→
We work in step by step process from bleaching of fabric to batik- says Mr. Abdul Majid the owner of this unit. The grey fabric is kept in water for 5 days to remove starch. Then bleached by solution of bleaching powder in ratio of 36 mts=1/2 Kg bleach. After bleaching the fabric is treated with terkiret oil (TRO) for softening of fabric. After all these process the fabric is kept for drying and then the war is applied on the designs.

Both traditional designs as well as modernize or stylize designs are used by this unit. They combine batik with screen printing & some designs are developed with the help of blocks to give a stylized look. They try to create or develop designs according to the market trends & buyer's demand.

4.4 Production→
The main production of this unit covers suits, kurti, single bed sheets, curtains. This is quite big unit of Bharavghar in comparison of others. They have nearly 25-30 artisans who prepare nearly 50 articles per day in form of suits, bed sheets, kurti etc, according to the buyer's orders.

4.5 New Dimensions in Batik with Block→
Now a days batik motifs are created with the help of wooden blocks. Motifs of repeat designs are first designed by designers on papers and then send for preparation of block. These paper patterns are made on 5"× 5" block. Reference is being taken from books. There are already 1000 designs of traditional motifs and they tend to increase 10 motifs every year.

4.6 With- Screen→
Batik Motifs are mixed with intricate screen printing and by using the intricate beautiful motifs are developed on suits and dupattas, short kurtas also.

4.7 Batik Incorporated with Warli & African Motifs→
Some firms like Ekta Printers are working on motifs inspired from warli paintings and Batik has been given new dimension by developing it in African Motifs which is completely new and revolutionary from the conventional type of Bharavghar Batik.

4.8 Color Combinations →
Earlier the batik was done with Azo or Napthol dyes in their conventional shades or combinations like- yellow & Red, Red & Black, Orange & Black, Yellow & Brown, Yellow & Maroon, Yellow & Green, Violet combinations.

But now a days Batik is being done by cold reactive dyes and vat dyes. Because of their contribution in the range of combinations has increased. Pinks and magenta are being broadly used with violet, grey, ferozi and deep green.

The color scheme should always go from light color to dark color. One tone darker of a color is prepared to get the required final shade.

4.9 Aims and Objectives
- Improve the overall quality of the existing products through refinement of processes and materials in use.
- Develop design extensions of the present product line to include a greater variety and a wider range for both utilitarian and non-utilitarian use.
- Develop a range of products that offer a higher perceived value with the existing skills and capabilities, thereby enhancing earnings resulting from the investment of time and skill.
- Exploit market niches offering distinctly higher value realizations for the product.
- Create demand commensurate with the immediate and medium-term production potential given available artisanal strength and production capacities.
- Create product differentiation across functions, uses, styles and material combinations as well as customization based on buyer/consumer needs.
- To give artisians the exposure of global market scenario by creating the fabric according to designers and buyers demand by keeping alive the royal heritage with new dimensions.

5. REVIEW OF LITERATURE
1. **Sustainable Batik Production: Review and Research Framework by by IAT Rahayu 2020 -** The study reveals that the Batik is one of the works of ancient art in some countries. This art has become closely associated with the identity of Southeast Asia particularly Indonesia. We define sustainable batik production as a batik production process that is non-polluting, conserving energy and natural resources, economically viable, safe for workers and consumers.
2. **Contemporary Designs of Batik:** Dr. Isha Bhatt - Published: Sep 2014 – Fiber 2 fashion.com – The present study unfold the history of batik art and the contemporisation of it.
3. **The Journey to Revival: Thriving Revolutionary Batik Design and Its Potential in Contemporary Lifestyle and Fashion by Stephen Poon -** Malaysian batik has permutated from a traditionalist position as a communal craft to becoming a brand identity feature of the nation. This paper provides in-depth understanding of the factors which have enabled the traditional batik craft sector to experience a popularity revival, despite perceived threats from mass-produced products.
4. **A Comparative Study of Traditional and Modern Batik Anjana and Veenu Nagar – A Case Study – July 2009 –** A study on the manufacturing process of batik, colours used, motifs, contemporisation of batik.
5. **A Study of Batik Printing on Natural Fiber Fabrics and Their Derivatives By Kar.Al Kay Howard - Bachelor of Science - University of Texas – 1968 -** As discussed in the study, the author has worked with many types of natural fiber fabrics. The results obtained on each of these fabrics have been summarized.

6. METHODOLOGY
Based on the research objectives, both quantitative and qualitative methodologies were decided to be the instruments of research as mixed method. A questioner was designed to

measure a sampling of respondent's awareness and perceptions about the potential of Bhairavghar batik. Design program was conducted for the artisans for making them aware of latest market trends and the innovations. An Interview of designers and the entrepreneur in the in the field of batik was also conducted.

7. RESULTS & FINDINGS

Based on the survey conducted on 50 artisans of Bhairavghar under Per – Training & Post – Training program. Their knowledge regarding design innovations and market trends, like digital portals for selling their products were found on average level before attending the design program and learning the importance of design process and modification in motif development.

Questioner based on the points along with the collection of demographic data.
1. Cultural Background
2. Motifs History & significances
3. Color Theories
4. color combinations
5. Modern Relevance
6. Recognition of craft in today's Scenario
7. Current efforts by designers to conserve it
8. Media being helping hand
9. Design innovations/ interventions
10. Trade Shows/ Events
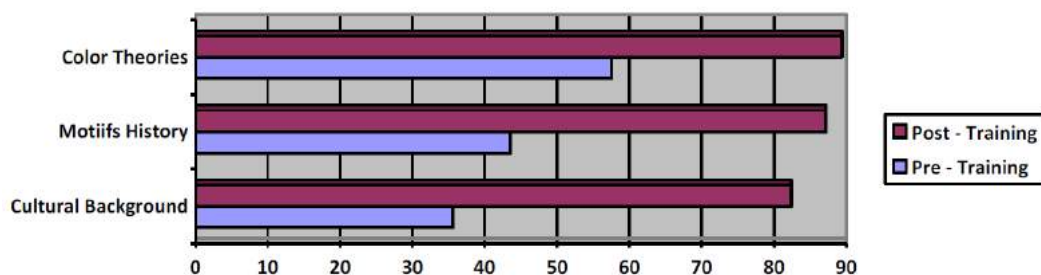
Table – 1

Based on the survey conducted on artisans (25 – 45 yrs) out of 50 samples (Pre – Training & Post – Training) of respondents reveals as shown in Table -1, that before training the knowledge and exposure to the artisan on cultural background was (35.6%), motif history (43.5%) and on color theory (57.5%).

Whereas the results of post – training survey shows increase in their knowledge and perception towards cultural background (82.4%), motif history (87.2%) and color theories (89.4%) was recorded.
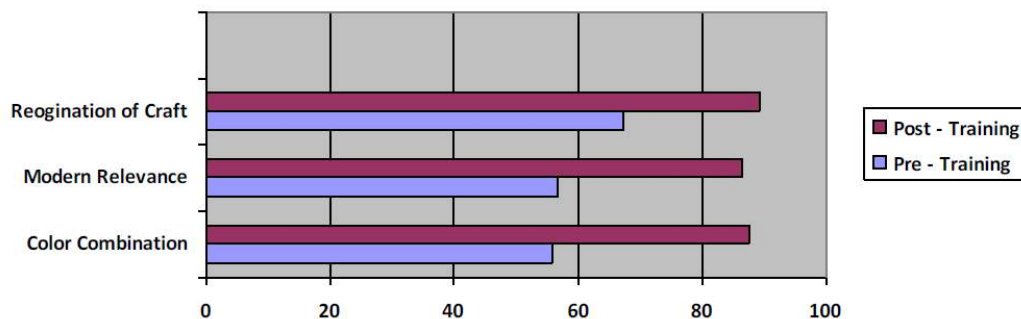
Table - 2

Results mentioned in Table – 2 of pre – training sessions on questions based on color combination was (55.7%), modern relevance (56.7%) and recognition of crafts in today's scenario (67.3%).

But the impact of design process session's interaction with designers can be noticed in the Post – training session's results of color combination (87.6%), modern relevance (86.5%) and Recognition of craft in today's scenario (89.4%).
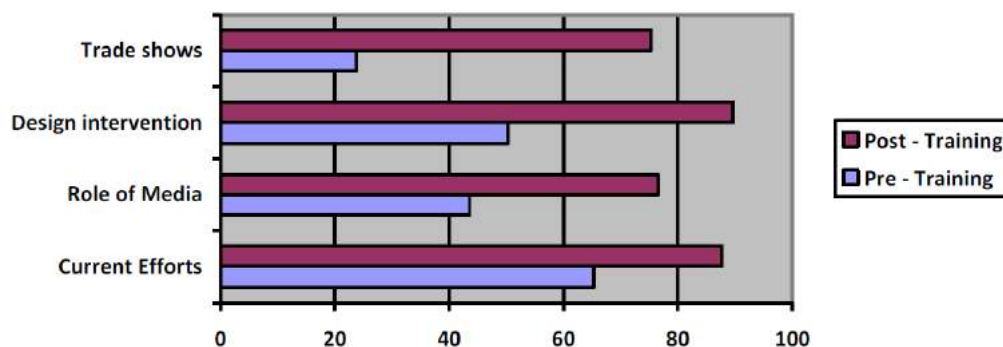
Table - 3

The questions shown in Table – 3 during the pre – training session on current efforts by designers to conserve it (65.3%), role of media (43.6%), design innovations/interventions (50.2%) and knowledge of trade shows/events (23.7%) were recorded through survey.

Whereas tremendous change can be noticed in the results after the conduction of sessions of design process program, interactive sessions with designers and media professionals. Results of post – training sessions of current efforts by designers to conserve it (87.7%), role of media (76.5%), design innovations/interventions (89.6%) and trade shows/events (75.3%) was observed in the survey.

8. CONCLUSION
Present research represents the identity of bhairavghar batik art that it has grown tremendously from its traditional form. Innovative crafting and design techniques have expanded its potential ability to serve different markets. Ultimately, understanding its heritage and aesthetic value as a handmade craft would result in appreciation for the artisans and uplift their life style with incorporating innovative business practices in the digital era, yet maintaining its traditional essence on the concept – **"Vocal for Local".**

9. RECOMMENDATIONS
The following issues need to be addressed in order to realize a mature, independent and proactive responsiveness initiated through the intervention:
- Provide entrepreneurial motivation for the younger generation of artisans to manage their own activities, needs and operations by regularly holding workshops, seminars, interactions and exposure sessions.
- Enhance processes, equipment and tools, as well as increase requisite skills and knowledge, which will increase productivity, consistency and variety.
- Mobilize craft communities to adopt collective and ownership-based structures, capable of self-governing and possessing self-evolving potential.
- Inculcate capabilities for sourcing raw materials, undertaking specialized processes and incorporating inputs with a critical commercial sense.
- Increase awareness and sharing of the learning and experience amongst larger groups to increase the number of beneficiaries.
- Develop forms of long-term patronage; seek sustained support from government as well as non-government agencies to fund activities of a collective nature catering to larger interests such as marketing, trade events, etc.
- Adopt a distinctive image/brand for the initiative that leverages the unique characteristics and features of the craft communities and their products both in socio cultural as well as ethno-contemporary contexts.
- Ensure the sustained involvement of and inputs from various experts and institutions to achieve the above objectives.
- Create the requisite understanding of and engender insights into contemporary market opportunities in the form of products, uses, functions, occasions, consumer

values, and related aesthetic and style preferences within which the craft communities have to find their niche.

REFERENCES

1. The Thames and Hudson manual of textile printing "joyes storey" (1974) beginning of textile page No. 16.
2. The book of batik by "Ernst muehling" Page No. 5
3. Tie & Dye and batik "Patidjah Anderson" Batik page No. 55.
4. January February (1998) Volume 6 Issue I conference Report "The Role Texstile" From Diana Collins.
5. Batik with noel Dyrenforth "JohnHuston" 1975 tradition and the craft page No. 16.
6. ELLIOTT, I. M. Batik: fabled cloth of Java. Tuttle Publishing. 2013.
7. HITCHCOCK, M., NURYANTI, W. Building on Batik: The globalization of a craft community. Routledge. 2016.
8. SADDHONO, K., WIDODO, S. T., Al-MAKMUN, M. T., TOZU, M. The Study of Philosophical Meaning of Batik and Kimono Motifs to Foster Collaborative Creative Industry. Asian Social Science, 10(9), 52, 2014. [6] VIBIZMEDIA. Batik industry is increase 14,7% with export value reach IDR 50,44 Trillion. http://vibizmedia.com/2015/10/02/. 2015.
9. MULYASARI, T. M., MUKONO, J., SULISTYORINI, L. The Effect of Batik Waste Disposal into the River to the Level of Cadmium in the Dug Well Water. International Journal of Research in Advent Technology, 4(7), 67, 2016.
10. SUSANTY, A., PUJOTOMO, D., ARIS, I. Gap analysis of CSR implementation in SMEs Batik Tulis Lasem. In Computers and Industrial Engineering (CIE), pp. 1. IEEE. 2010.
11. YOSHANTI, G., DOWAKI, K. Batik Life Cycle Assessment Analysis (LCA) for Improving Batik Small and Medium Enterprises (SMEs) Sustainable Production in Surakarta, Indonesia. In Sustainability through Innovation in Product Life Cycle Design, 997. Springer Singapore. 2017.
12. VELEVA, V., ELLENBECKER, M. Indicators of sustainable production: framework and methodology. Journal of cleaner production, 9(6), 519, 2001.
13. HOPWOOD, B., MELLOR, M., O'BRIEN, G. Sustainable development: mapping different approaches. Sustainable development, 13(1), 38, 2005. [12] TREFOIS, R. Fascinating Batik: Technique and practice. 2010.
14. KUSUMA, P. D. Fibrous Root Model in Batik Pattern Generation. Journal of Theoretical & Applied Information Technology, 95(14), 2017.

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"वर्तमान परिदृश्य में शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयोगिता का अध्ययन"

पिंकी मंसूरी
शोधार्थी, मन्दसौर विश्व विद्यालय, मन्दसौर
जयदीप महार
सहायक प्राध्यापक, मन्दसौर विश्व विद्यालय, मन्दसौर

सारांश :–
संसार परिवर्तनशील है। संसार की प्रत्येक वस्तु में परिवर्तन सहज रूप से देखा जा सकता है। शिक्षण प्रक्रिया भी परिवर्तन से अछूती नहीं है। वर्तमान का समय डिजिटल तकनीकी का युग है। वर्तमान समय में परम्परागत शिक्षण विधि की तुलना में नई नई तकनीकों पर आधारित शिक्षण विधि की आवश्यकता महसूस होने लगी है। इसलिए शोधार्थी द्वारा वर्तमान समय में शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयोगिता का अध्ययन किया गया है। अध्ययन में प्रयोगात्मक शोध विधि का उपयोग किया गया है। न्यादर्श के रूप में उच्च माध्यमिक स्तर के 200 विद्यार्थियों एव 50 शिक्षकों को लिया गया है। सांख्यिकी विश्लेषण हेतु t-test का प्रयोग किया गया है। सांख्यिकी विश्लेषण के आधार पर पाया गया कि शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयुक्तता पाई गयी। साथ ही छात्र छात्राओं के शैक्षिक उपलब्धी भी बड़ी है। शिक्षण प्रक्रिया को रोचक व प्रभावपूर्ण बनाने के लिए शिक्षण अधिगम सामग्री लाभप्रद है।
मुख्य शब्द – शिक्षण अधिगम सामग्री, शिक्षण प्रक्रिया, शैक्षिक उपलब्धी।

प्रस्तावना :–
किसी भी देश के विकास और उन्नति में तकनीक और विज्ञान का विशेष योगदान होता है, यह तथ्य वर्तमान परिस्थितियों में स्पष्ट रूप से दृष्टिगोचर हो रहा है। नयी पीढ़ी अपने ज्ञान, विवेक एवं खोज की प्रवृत्ति के कारण नई नइ तकनीकों का अविष्कार कर रही है। इन आविष्कारों के अंतर्गत ही शिक्षण प्रक्रिया में सीखने सिखाने में शिक्षण अधिगम सामग्रियों के प्रयोग का अत्यन्त महत्वपूर्ण स्थान है। वर्तमान समय में शिक्षा के क्षेत्र को इसने बहुत प्रभावित किया है तथा शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री ने महत्वपूर्ण स्थान बना लिया है। विषय वस्तु को विद्यार्थियों तक पहुँचाने के लिए शिक्षक द्वारा अनेक शिक्षण अधिगम सामग्रियों का प्रयोग कर विद्यार्थियों को कठिन से कठिन विषय वस्तु को आसानी से समझाया जा रहा है।

पूर्व शोध का अध्ययन :–

- अवस्थी एवं वैष्णव, पी. के एवं नरोत्तम दास (1981) ने शोध "उज्जैन संभाग के उच्चतर माध्यमिक विद्यालय में नवीन गणित एवं परम्परागत गणित के प्रति शिक्षकों की अभिवृत्ति का एक तुलनात्मक अध्ययन" का अध्ययन किया।

- क्लेमेन्ट्स (1999) के अनुसार जो विद्यार्थी अपनी गणित की कक्षाओं में शिक्षण अधिगम सामग्री का उपयोग करते हैं वे सामान्य विद्यार्थियों की बजाय बेहतर प्रदर्शन करते हैं। हालाकि शिक्षण अधिगम सामग्री से होने वाला फायदा विभिन्न

कक्षा स्तरों, योग्यता स्तरों, प्रकरण, शिक्षण अधिगम सामग्री की अर्थपूर्णता पर निर्भर करता है। उनके अनुसार शिक्षण अधिगम सामग्री का उपयोग धारण क्षमता, समस्या समाधान योग्यता, गणित के प्रति अभिवृत्ति बढ़ाने में सहायक है।

- कोठारी, अनुपमा (2003) ने अपने शोध में गणित शिक्षण में विभिन्न शिक्षण विधियों की परस्पर तुलना की। पहले प्रकार के अनुदेशात्मक माध्यम में दृश्य–प्रक्षेपण सामग्री (ट्रांसपेरेंसी आदि) का उपयोग किया गया जबकि दूसरे प्रकार के अनुदेशात्मक माध्यम में गतिविधियों तथा प्रयोगों का उपयोग किया गया। तीसरी शिक्षण विधि के अंतर्गत अभिक्रमित अनुदेशन सामग्री का उपयोग किया गया एवं इसके अतिरिक्त एक समूह को परंपरागत शिक्षण विधि से पढ़ाया गया। शोध हेतु पूर्व–पश्च परीक्षण नियंत्रित समूह अभिकल्प का उपयोग किया गया। प्रतिदश में कक्षा 9 वीं के 240 विद्यार्थी शामिल किए गए थे। शोध परिणाम बताते हैं कि कुछ विषय वस्तु के लिए दृश्य प्रक्षेपण सामग्री जबकि कुछ विषय वस्त के लिए गतिविधियाँ तथा प्रयोग ज्यादा प्रभावी रहे। इसी प्रकार कुछ विषय वस्तु के लिए अध्ययन हेतु अभिक्रमित अनुदेशन सामग्री ज्यादा प्रभावी रही। हालांकि चारों विधियों में दृश्य–प्रक्षेपण सामग्री अपेक्षाकृत ज्यादा प्रभावी रही।

- अयाचित एवं राजावत, मृदुला एवं निर्भय सिंह (2005) ने ''गणित विषय के कक्षा शिक्षण में विभिन्न विधियों एवं उपागमों द्वारा अध्यापन एवं परम्परागत अध्यापन के प्रभाव का तुलनात्मक अध्ययन'' पर शोध किया। जिसके उद्देश्य थे– 1. हाई स्कूल स्तर पर गणित के सम्पूर्ण पाठ्यक्रम की। विभिन्न उप इकाईयों का उचित अध्यापन विधि से अध्यापन का छात्रों की उपलब्धि पर प्रभाव का अध्ययन करना। 2. शिक्षण विधियों से अध्यापन एवं परम्परागत अध्ययन का कक्षा के वातावरण पर प्रभाव का अध्ययन करना। 3. उचित शिक्षण विधियों एवं उपागमों के माध्यम से गणित विषय को रोचक बनाने का प्रयास करना। 4. नियमित कालखण्डों में विभिन्न विधियों द्वारा अध्यापन की संभावनाओं को स्पष्ट करना। 5. परम्परागत अध्यापन की तुलना में विभिन्न नवाचारों की उपयोगिता, महत्व को स्पष्ट करना। प्रस्तुत लघुशोध की परिकल्पना। 1. विभिन्न विधियों एवं उपागमों द्वारा अध्यापन एवं परम्परागत अध्यापन से उपलब्धि पर प्रभाव में कोई सार्थक अन्तर नहीं है। 2. विभिन्न विधियों एवं परम्परागत अध्यापन से कक्षा के वातावरण में कोई सार्थक अन्तर नहीं है। न्यादर्श के रूप में उज्जैन नगर के एक विद्यालय के 70 छात्राओं को लिया गया। प्रस्तुत लघुशोध के निष्कर्ष –1. हाई स्कूल स्तर पर गणित शिक्षण में विभिन्न शिक्षण विधियां पारम्परिक शिक्षण विधि की अपेक्षा अधिक प्रभावशाली है तथा इससे विद्यार्थियों का उपलब्धि स्तर बढ़ता है। 2. विभिन्न शिक्षण विधियों से अध्यापन से कक्षा में अधिगम के लिए अधिक उपयुक्त वातावरण का निर्माण होता है।

- महेश, सुविधा (2007) द्वारा ''मल्टीमीडिया के द्वारा कक्षा आठवीं स्तर के लिये गणित विषय हेतु कम्प्यूटरीकृत स्वअधिगम सामग्री का विकास – एक अध्ययन।'' विषय पर शोध करने पर पाया कि– 1. गणित विषय की चयनित इकाईयों का कम्प्यूटरीकृत स्वअधिगम सामग्री द्वारा अध्ययन करने पर विद्यार्थियों में समझ का स्तर उच्च पाया गया। 2. स्व–अधिगम सामग्री द्वारा अध्ययन कराने में विद्यार्थियों की रुचि पाई गई। इससे उनमें सृजनात्मक वृद्धि क साथ स्वाध्याय की प्रवृत्ति का

विकास हुआ। 3. विद्यार्थियों को मल्टीमीडिया सामग्री रुचिकर एवं समझने में आसान लगी।

शोध के उद्देश्य: शोध के उद्देश्य निम्नलिखित है –
1. शिक्षण प्रक्रिया में शिक्षण अधिगम सामगियों की उपयुक्तता का अध्ययन करना।
2. बालकों की शैक्षिक उपलब्धि पर परम्परागत शिक्षण एवं शिक्षण अधिगम सामग्री के प्रभाव का अध्ययन करना।

परिकल्पना: शोध की परिकल्पनाएं निम्न लिखित है –
1. शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयुक्तता पाई जाएगी।
2. बालकों की शैक्षिक उपलब्धि पर परम्परागत शिक्षण एवं शिक्षण अधिगम सामग्री से शिक्षण में अंतर नहीं पाया जायेगा।

शोध विधि : प्रस्तुत अध्ययन हेतु प्रयोगात्मक अनुसन्धान विधि का प्रयोग किया गया है।

न्यादर्श : कक्षा 10 वीं के 200 विद्यार्थियों आर 50 शिक्षकों को लिया गया है।

उपकरण : स्वनिर्मित प्रश्नावली ।

चर :
- आश्रित चर – शिक्षण अधिगम सामग्री तथा परम्परागत विधि।
- स्वतंत्र चर – शैक्षिक उपलब्धि।

सांख्यिकीय विश्लेषण :– प्रस्तुत शोध में सांख्यिकीय विश्लेषण हेतु मध्यमान, मानक विचलन, मध्यमान में अंतर की सार्थकता की गणना की गयी है।

परिकल्पना क्रमांक – 01
"शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयुक्तता पाई जाएगी।"
उपरोक्त परिकल्पना की पूर्ति हेतु शिक्षकों का अभिमत जानने के लिए प्रश्नावली भरवाकर एवं विश्लेषण कर व्याख्या की गयी प्राप्त अभिमत को सारणी में प्रतिशत में दर्शाया गया।

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सारणी क्रमांक – 01
शिक्षकों के लिए प्रश्नावली

</div>

क्रमांक	शिक्षकों के लिए प्रश्न	हाँ (उत्तर प्रतिशत में)	नहीं (उत्तर प्रतिशत में)
1	क्या आपको शिक्षण अधिगम सामग्री की जानकारी है?	90%	10%

2	क्या परम्परागत शिक्षण की अपेक्षा शिक्षण अधिगम सामग्री से शिक्षण करना आसान है?	70%	30%
3	क्या परम्परागत शिक्षण की तुलना में शिक्षण अधिगम सामग्री से शिक्षण करवाने से विद्यालय में उपस्तिथि बढेगी?	90%	10%
4	क्या परम्परागत शिक्षण की तुलना में शिक्षण अधिगम सामग्री से शिक्षण करवाने से विद्यालय में विद्यार्थी पुरे समय रुकेंगे?	90%	10%
5	क्या परम्परागत शिक्षण की तुलना में शिक्षण अधिगम सामग्री से शिक्षण करवाने से विद्यार्थियों की अध्ययन के प्रति रुचि बढेगी ?	90%	10%
6	क्या आप इस बात से सहमत है कि विद्यार्थियों को जिस विधि से शिक्षा दी जाये वह रोचक एवं प्रभावपूर्ण होना चाहिए?	100%	0%
7	क्या शिक्षा का केंद्र बिंदु विद्यार्थी होना चाहिए?	100%	0%
8	क्या विद्यार्थियों में शिक्षण अधिगम सामग्री के उपयोग से स्वाध्याय की आदत को बढाया जा सकेगा?	85%	15%
9	क्या विद्यार्थी करके सीखने से अधिक और जल्दी सीखते है?	100%	0%
10	क्या परम्परागत शिक्षण की तुलना में शिक्षण अधिगम सामग्री के प्रयोग से कक्षा का वातावरण प्रभावी होगा तथा बालक अधिक सक्रीय होगा?	100%	0%
11	क्या परम्परागत शिक्षण की तुलना में शिक्षण अधिगम सामग्री के प्रयोग से विद्यार्थियों की शैक्षिक उपलब्धि अंतर पाया जाता है?	90%	10%

उपरोक्त विश्लेषण के आधार पर यह कहा जा सकता है, कि अधिकांश शिक्षक शिक्षण अधिगम सामग्री से शिक्षण देने हेतु सहमत है व इसे रोचक और प्रभावपूर्ण मानते है।

परिकल्पना – 02

"परम्परागत विधि से शिक्षण पश्चात तथा शिक्षण अधिगम सामग्री द्वारा शिक्षण पश्चात विद्यार्थियों की शैक्षिक उपलब्धि में अंतर नहीं पाया जायेगा।

सारणी क्रमांक – 02
विद्यार्थियों की शैक्षिक उपलब्धि परिक्षण की व्याख्या एवं विश्लेषण

समूह	न्यादर्श	मध्यमान	SD	Sed	df	t nm	T मान की सार्थकता
परम्परागत शिक्षण आधारित समूह	100	71.87	5.37				
				0.76	198	9.19	P < 0-05
शिक्षण अधिगम सामग्री आधारित समूह	100	78.12	5.47				

उपरोक्त सारणी से स्पष्ट होता है कि परम्परागत एवं शिक्षण अधिगम सामग्री द्वारा शिक्षण समूह के विद्यार्थियों की शैक्षिक उपलब्धि के लिए t का मान 9.19 प्राप्त हुआ है। जो df = 198 के सार्थकता स्तर 0.01 के सारणीमान से अधिक है। अतः दोनों समूहा के मध्यमान में सार्थक अंतर है। इस आधार पर परिकल्पना अस्वीकृत की जाती है। इस प्रकार दोनों समूह के विद्यार्थियों की शैक्षिक उपलब्धि में अंतर पाया गया।

निष्कर्ष :–

1. शिक्षकों की दृष्टि से शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री की उपयुक्तता पाई गयी।
2. परम्परागत एवं शिक्षण अधिगम सामग्री द्वारा शिक्षण समूह के विद्यार्थियों की शैक्षिक उपलब्धि में अंतर पाया गया। शिक्षण अधिगम सामग्री से शिक्षण से विद्यार्थियों की शैक्षिक उपलब्धि अधिक पाई गयी। कक्षा शिक्षण प्रभावी होता है। छात्र रूचि लेकर एवं सक्रीय होकर सीखता है। जबकि परम्परागत शिक्षण में निष्क्रीय रहते है व रूचि नहीं लेते है।

सुझाव :–

1. शिक्षण प्रक्रिया में शिक्षण अधिगम सामग्री का प्रयोग एक सशक्त साधन है। इससे विद्यार्थियों, शिक्षकों, पालकों को भी परिचित करवाया जाना आवश्यक है। शिक्षकों को इसका कक्षा शिक्षण में उपयोग करने हेतु प्रेरित करना लाभप्रद होता है।

2. शासन शिक्षकों को निर्देशित करे कि शिक्षण अधिगम सामग्री का प्रयोग करते हुए छात्रों को ऐसी शिक्षा प्रदान करे जिससे विद्यार्थिया के उपलब्धि स्तर में वृद्धि हो।

परिसीमन – यह शाध नीमच जिले की उच्च माध्यमिक शालाओं के विद्यार्थियों तक परिसीमित है।

संदर्भ ग्रन्थ :–

1. अग्रवाल वन्दना, (2005) पारम्परिक व्याख्यान विधि एवं कम्प्यूटर आधारित शिक्षण की प्रभावशीलता का अध्ययन।
2. शर्मा – गाँधी, आनंद कुमार – संजय (2008): गणित की ज्यामिति शाखा के कक्षा शिक्षण में परम्परागत अध्यापन एवं बालकेन्द्रित उपागम के प्रभाव का तुलनात्मक अध्ययन।
3. त्यागी (2007) गुरुशरणदास – नन्द रू उदीयमान भारत में शिक्षा विनोद पुस्तक मंदिर, आगरा।
4. रानावत – सोनी, हेमा – नरेन्द्र (2009): "गणित विषय के प्रति अध्यापकों की जागरूकता का अध्ययन" एम.एड. अप्रकाशित लघु शोध प्रबंध इलाहबाद विश्वविद्यालय, आगरा।
5. पाठक – त्यागी, पी. डी. – एस. डी. (2007): भारतीय शिक्षा आयोग विनोद पुस्तक मंदिर, आगरा।

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TECHNOLOGICAL BREAKTHROUGHS IN THE DIGITALIZATION OF AGRICULTURAL INDUSTRY

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Abstract:- The agricultural sector is India's backbone, employing majority of the population. However, due to a variety of factors such as pest and disease control, pesticides, fertilizer and processing, Indian farmers are unable to earn the expected and fixed income from this sector. Digital agriculture, in particular, has the ability to make agriculture more sustainable and reliable, as well as more effective with the use of time and resources. This has significant benefits for farmers as well as larger social benefits around the world. From data collection to management and processing, as well as direction and control, digital devices add something useful to farming. This paper is an attempt to gain an understanding of emerging technologies and applications of sensors, communication networks, unmanned aviation systems (UAS), artificial intelligence (AI), robotics, and other automated machines in the agricultural sector, as well as the potential of digital technology in India, following the principles of the internet.
Keywords: Artificial intelligence, automated machines, communication networks, digital agriculture, precision farming, robotics.

1. INTRODUCTION

In the next 20 years, India's already large population will surpass Japan's to become the world's third largest. Higher agricultural productivity or increased food demand will be needed to meet the resulting increase in food demand (Adam, 2011). Agriculture is India's most substantial economic sector. Agriculture is essential to 70 percent of rural households in India, where the agriculture sector accounts for 18 percent of GDP and employs 60 percent of the population (Madhusudhan, 2015). Digital agriculture refers to the integration of emerging and existing technology into a single framework to help farmers and other stakeholders in the agriculture value chain to increase food production.

The majority of today's farmers focus their attention on a combination of rough calculations, experience, and advice, such as how much fertilizer to add. After deciding on a course of action, it is carried out, but the effects are usually not visible until harvest (Diez, 2017). Digital agriculture is described as the design of data ecosystems that support the delivery of timely, targeted information services to make farming profitable and sustainable while providing healthy, nutritious, and affordable food to all (Manfre et al., 2018). A digital system collects data more regularly and reliably, and it is frequently combined with data from other sources (such as weather information).

The combined data is then analyzed and interpreted so that the farmer can make better-informed decisions. Robotics and advanced machinery can then easily execute these decisions with greater precision, and farmers can receive real-time input on the effect of their actions (Diez, 2017). Precision agriculture (PA), also known as satellite farming or Site-Specific Crop Management (SSCM), is a farming management term that involves observing, measuring, and reacting to inter- and intra-field variability in crops (Dwivedi, 2017).

2. THE KEY AGRICULTURAL STATIONS

2.1 Agriculture 1.0

The early twentieth century was a labor-intensive, low-productivity agricultural scheme era. It was capable of feeding the population, but it necessitated a large number of small farms and the participation of a third of the population in the primary agricultural production process.

2.2 Agriculture 2.0 (Next Generation Agriculture)

This process of farming began in the late 1950s, when agronomic management practices such as supplemental nitrogen, as well as new tools such as synthetic pesticides, fertilizers, and more efficient specialized machines, enabled farmers to take advantage of relatively inexpensive inputs, resulting in dramatically increased crop yield and increasing level of output at all levels (Dwivedi, 2017).

2.3 Agriculture 3.0

When military GPS signals were made available to the general public, "precision farming" began. Precision farming entails solutions for the following issues:

- **Guidance:** In the mid-1990s, early adopters used GPS signals for manual guidance. They improved on technology that was already used in aerial spraying. In the late 1990s, the first automatic steering systems were introduced. Guidance precision was increased to 5 cm in the 2000s.
- **Sensing and Control:** In the 1990s, combine harvesters were outfitted with GPS-based yield monitors. At the same time, the first automatic Variable Rate Application (VRA) began. Variable rate technology was initially hampered by low fertilizer prices and high technology costs. VRA was initially focused on soil sampling input, but performance improved dramatically as yield monitor data became available.
- **Telematics:** Telematics is a vehicle fleet management technology. It was influenced by the transportation industry and first appeared in the early 2000s. It is built on cellular technology and enables the farm's logistics processes to be optimized.
- **Data Management:** Since the PC's introduction in the early 1980s, farming software has been widely available.

Agriculture 3.0 can be thought of as the incremental adoption of increasingly sophisticated and mature Precision Farming technologies. The emphasis has shifted from cost-cutting efficiency to profitability, which can be described as objectively and creatively finding ways to reduce costs, improve quality, or produce differentiated goods.

2.4 Agriculture 4.0 (The New Concept)

Precision agriculture experienced a resurgence in the early 2010s, owing to the advancement of many technologies such as low-cost, high-performance sensors and actuators, low-cost microprocessors, wireless networking with high bandwidth, ICT frameworks built on the cloud and analytical big data. Smart technologies are increasingly being installed as standard features on tractors, combine harvesters, and other equipment in the 2010s, such as intelligent control systems (on-board computers), many sensors for system and agronomic process service, advanced automation capabilities (guidance, seed placement, spraying, and so on), integrated communication technology (telematics) in the automobile (Manfre et al., 2018).

This development is occurring in tandem with similar developments in the industrial sector, which are termed "Industry 4.0" and are focused on a vision for future manufacturing. As a result, the word "Agriculture 4.0" is often used in agriculture. Agriculture 4.0 paves the way for the next phase of farming, which will include robotic operations (such as BoniRob) and self-driven decision-making systems. Robotics and (some kind of) artificial intelligence will be central to Agriculture 5.0 (Batte and Buren, 1999).

2.5 The Digital Gap

All aspects of economic growth have been greatly influenced by digital technologies. It has so drastically altered our way of life that it is impossible to imagine life without it. Agriculture can become more sustainable, reliable, and effective with the use of time and resources thanks to digital agriculture. This has significant benefits for farmers as well as broader social benefits around the world. It also allows businesses to exchange knowledge across conventional market sectors, allowing for fresh, disruptive opportunities to emerge. Digital technology and analytics are already transforming agriculture in developing countries, making farm operations more insight-driven and effective. However, agricultural productivity in developing countries is increasing, but many people in developing countries, including India, are still unaware of the numerous digital technologies available, and their use is still limited. As a result, this research paper informs readers about the different applications of digital devices and technologies in agriculture.

3. TECHNOLOGICAL ADVANCEMENTS

Agriculture today employs advanced technologies such as robots, temperature and moisture sensors, aerial photographs, and GPS technology on a regular basis (Table 1). Businesses can be more productive, effective, safer, and environmentally friendly with these advanced devices, precision agriculture, and robotic systems (USDA-NIFA, 2020). Sensors, GPS, communication networks, UAS, Artificial Intelligence (AI), robotics, and other sophisticated

machinery are all used, and the Internet of Things concepts are frequently used. From data collection to management and processing, as well as guidance and direction, each of these brings something useful to farming. This integrated framework provides new ideas that help people make better decisions and then put them into action (Diez, 2017).

3.1 Global Positioning System (GPS)

The Global Positioning System (GPS) is a satellite-based navigation system that allows users to accurately record positional data. Farmers may use this to know the exact location of field data including type of soil, weed invasion, pest infestation, water holes, barriers and obstacles. To measure their location, there is an automated controlling device with a light or sound guiding panel (DGPS), antenna, and receiver. Based on performance standards and previous input operations, the system helps farmers to accurately classify field locations so that inputs (seeds, fertilizers, pesticides, herbicides, and irrigation water) can be applied to each field individually (Batte and Buren, 1999).

3.2 Remote Sensing

The science of obtaining information about objects or areas from a distance, usually through aircraft or satellites, is known as remote sensing. The energy reflected from the earth is detected by remote sensors, which collect data. These sensors could be installed on satellites or on aircraft. There are two types of remote sensors: passive and active. External stimuli elicit a response from passive sensors. Natural energy that is reflected or released from the Earth's surface is recorded by them. Reflected sunlight is the most common source of radiation detected by passive sensors. Active sensors, on the other hand, gather data about the earth using internal stimuli. A laser-beam remote sensing device, for example, projects a laser onto the Earth's surface and tracks the time it would take for the laser to respond to its sensor.

Table – 1: Cloud technologies for digital farming

Production Areas	Types of Technologies	Features and Benefits
Technologies covering several agricultural disciplines	Computational Decision tools	Utilize data to create management recommendations and optimize a wide range of farm activities.
	The Cloud	To aid farm management, provide reliable, low-cost, and consolidated data storage, computation, and communication.
	Sensors	To aid management decisions, gather information on the use of equipment and farm resources.
	Robots	Execute operations with precision with as little human labour as possible.
	Digital Communication tools	Allows regular, real-time contact between farm resources, staff, managers, and technological resources intended to facilitate with management.
Field	Geo-locationing (GPS, RTK)	Provide precise position of farm resources (field equipment, livestock, and so on), which is often combined with measurements (yield, etc.) or used to direct equipment to specific locations.
	Geographic information systems	Use computerized mapping to help with inventory management and crop input prescriptions based on location (fertilizers, etc.)
	Yield Monitors	Use sensors and GPS on harvesters to monitor harvest rates and create yield maps that can be used to identify local yield variability.

	Precision Soil Sampling	To detect and manage fertility patterns in fields, soil at high spatial resolution (in zones) is used.
	Unmanned aerial systems	Unmanned aerial systems (UAS, or drones) are lightweight, easily deployable remote-control aerial vehicles that use imaging to track farm resources.
	Spectral reflectance sensing	To make determinations on soil patterns and crops, use satellite, airplane, or UAS imaging, or field equipment-mounted sensors to measure light reflectance of soil or crop.
	Auto-steering and guidance	Self-driving farm machinery (including robots) can reduce labor and fatigue, as well as precisely direct equipment in fields for highly precise crop input placement and management.
	Variable rate technology	With field applicators for crop inputs, enable continuous adjustment of application rates to precisely fit localized crop needs in field areas (chemicals, seed, etc.)
	On-board computers	Field data is collected and processed using advanced computer hardware and software on tractors, harvesters, and other machines, which are also connected to sensors or controllers.
Livestocks	Radio frequency ID	Transmit identity data via tags attached to production units (mostly animals), allowing for performance data collection and management on an individual basis.
	Automated milking, feeding and monitoring systems	Automate milking and feeding operations with robotic systems, which are often combined with sensors that collect simple biometric data on animals, reducing labor requirements and enabling more individualized animal management.

3.4 Agriculture Robotics

Agriculture is rapidly evolving into a high-tech industry, attracting new experts, businesses, and investors (https://www.automate.org/blogs/robotics-in-agriculture-types-and-applications). One of the most significant advantages of robots is their ability to perform a wide range of tasks and applications in a variety of settings. People are less accurate and reliable than they are. Since they can complete tasks more efficiently, they boost efficiency and profit margins. The need for dramatically improved output yields is at the core of this phenomenon. According to the United Nations, the global population will increase from 7.3 billion today to 9.7 billion by 2050. The planet will need significantly more food, and farmers will be under extreme pressure to meet demand. Harvesting, weed management, automated mowing, pruning, seedling, spraying and thinning, sorting, and packing are just a few of the common uses for robots in agriculture. Harvesting and picking is one of the most common robotic applications in agriculture because of the precision and speed with which robots can increase yields and minimize waste from crops left in the farm (https://soup-project.gr/robotics- in-agriculture/).

4. TECHNOLOGIES FOR SENSORS

Humidity, soil, temperature, texture, structure, external character, humidity, nutrient level, vapour, and air are all analyzed using standard technology such as electromagnetic, conductivity, photo electricity, and ultrasound. Crop species are identified, stress conditions are located, pests and weeds are identified, and drought, soil, and plant conditions are monitored using remote sensing data. Sensors allow for the processing of massive amounts of data without the need for laboratory analysis (Masoud et al., 2019).

Table - 2: Characteristics of the leading agricultural digitalization applications

Applications	Features	Application Website
AgriApp	Online farming marketplace that connects farmers with agricultural inputs/outputs, and government services; also includes a chat feature.	https://www.agriapp.co.in/
Iffco Kisan App	Provides up-to-date agricultural advice, mandi rates, and various farming tips. Provides weather forecasts.	https://www.iffcokisan.com/
Agri Media Video App	Online marketplace that features videos on emerging technology, rural growth, and agriculture news.	https://krishijagran.com/agriculture-world/agrimedia-video-mobile-app-for-farmers/
FarmBee-RML Farmer	Provides content and knowledge about fertile agriculture at any point of the crop's life cycle.	https://download.cnet.com/FarmBee-RML-Farmer/3000-2164_4-77540219.html
Kisan Yojana	Provides detail to the farmers on all government schemes. It bridges the knowledge divide between rural residents and the government.	https://pmkisan.gov.in/
Sowing App	Send targeted SMS to farmers about sowing and other farm management activities at the right time.	https://www.icrisat.org/tag/sowing-app/
iHub	Mentors agricultural technology start-ups in order to advance the science of execution and develop the research program.	https://www.icrisat.org/tag/ihub/
Plantix	Assist extension officers in diagnosing and responding to disease and pests automatically.	https://plantix.net/en/
LeasyScan	To rapidly determine the characteristics of leaf surface area and water stress	http://gems.icrisat.org/leasyscan/
HarvestMaster	Maintains highly detailed records of grain weight and moisture characteristics for the purpose of developing new varieties.	https://www.harvestmaster.com/

Farming apps are perhaps the most effective and economical way to direct farmers through the process of farming. It lays out the steps for farming, seed cultivation, sowing, and harvesting any crop or vegetable in a scientific manner. Farmers can easily solve pest or insect infestations, as well as any other issues that place them in a difficult situation (Table 2). A farming app can be a farmer's best friend, allowing them to increase their productivity without having to spend any money.

5. CONCLUSION

Given that 68 percent of India's population lives in rural areas and agriculture is the primary source of income for 58 percent of the population, the importance of Digital Agriculture in Digital India must be considered. Digital agriculture is characterized as the use of ICT and data ecosystems to support the production and distribution of timely, targeted (Localized) information and services to make farming profitable and sustainable (socially, economically, and environmentally) while providing healthy, nutritious, and affordable food to all. The agriculture climate is constantly changing as a result of the

ongoing digital transformation, and it may eventually turn into digital and smart agriculture. We will be able to recognize holes, risks, and opportunities by understanding the big changes and how they are driving new business models, adapting innovations, and ultimately changing the economic, social, and environmental elements in the digital age. Today, we see a thriving agriculture that is leaps and bounds ahead in the digital transformation process, but we also see how small farmers are left out of this transformation, widening the digital divide, not only in terms of access or electronic literacy, but, more importantly, in terms of production and economic and social integration.

REFERENCE

1. Adam C. Economic Development and Agriculture in India. Bulletin. 2011; 8.
2. Batte MT, Van Buren FN. Precision farming - Factor influencing productivity; 1999.
3. Díez C. Hacia una agricultura inteligente (towards and intelligent agriculture). Cuaderno de Campo. 2017; 60: 4–11.
4. Digital AgriMedia. Top 5 best android apps for Indian farmers/agriculture; 2018. Available: https://yourstory.com/mystory/e374fa4df7-top-5-best-android-app [Accessed April 2021].
5. Dwivedi Ashish. Precision agriculture. Parmar Publishers & distributors, Dhanbad, Jharkhand.2017; 83-105.
6. Feed the future, USAID, features ICRISAT's Digital Agriculture work as a case study – ICRISAT. Icrisat.org; 2020.
7. ICRISAT. Sowing App Infographgic.2017; 2:8. Available: http://www.icrisat.org/sowing- app-infographgic/ [Accessed April 2021].
8. Madhusudan L. Agriculture role on Indian economy; 2015. Available: http://www.omicsonline.org. [Accessed April 2021].
9. Manfre Cristina, Wesley L. Digitizing the science of discovery and the science of delivery. United States Agency International Development; 2018.
10. Manfre Cristina. Digitizing the science of discovery and the science of delivery. ICRISAT; 2017.
11. Mohammad Masoud, Yousef Jaradat, Ahmad Manasrah, Ismael Jannoud, Sensors of smart devices in the internet of everything (IoE) Era: Big opportunities and massive doubts. Journol of Sensor. 2019; 1(2):1-26.
12. Plantix "plantix;" 2020 Available: https://plantix.net/en/ [Accessed April 2021].
13. Robotics online marketing team, report on "Robotics in agriculture: Types and applications." Robotics Online Marketing Team; 2017. https://www.automate.org/blogs/robotics-in-agriculture-types-and-applications
14. SOUP team. Robotics in agriculture." 2017. Available: https://soup-project.gr/robotics- in-agriculture/ [Accessed April 2021].
15. USDA National Institute of Food and Agriculture; 2020. Available: http://nifa.usda.gov [Accessed April 2021].

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"WELL-BEING AT A DISTANCE": ADVENT OF TELEMEDICINE IN COVID-19 PANDEMIC ERA

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Abstract:- In the global battle against the ongoing COVID-19 pandemic, telemedicine has been thrown into the spotlight and is being used in a variety of ways to help address the challenges. Though telemedicine is being used to impart healthcare at a distance for many decades, it garnered enormous popularity during the pandemic. It offers a plethora of benefits such as savings in cost, timely action, better efficiency, an abundance of options etc. while also maintaining the social distancing protocol. Owing to these enormous benefits it provides, a large number of public and private telemedicine providers rose up globally. Telemedicine came as a boon for the patients, the healthcare givers and the telemedicine business owners. It has the potential of resolving many challenges that the world is facing because of the pandemic. It is approximately a 1000 million USD business currently and will likely take a permanent stance in the healthcare industry with continual upgradation provided by technological advancements.
Keywords: Telemedicine, Covid-19, e-Healthcare, Pandemic.

1. INTRODUCTION

Global pandemics such as the Spanish Flu (1918-1919), the yellow fever (1800s) and several others in the past resulted in mass level fatalities. However, unlike these historical pandemics, the world could rely on support of technology during the ongoing COVID-19 pandemic because of the digital era. On a global level, the healthcare industry is leaning on digitization as a critical ally in dealing with the COVID-19 pandemic. A limitation on the accessibility to hospitals, medical stores, doctors, and other healthcare facilities in these extreme circumstances led to the rise of provisions such as telemedicine. This e-healthcare technology has largely benefitted the common people in need of healthcare as well as the healthcare industry at large. With the use of this digitization and technology, the capacity of the healthcare was increased while also maintaining social distancing and helping those in quarantine.The World Health Organization (WHO) recommended the use of telemedicine as an essential strategy to combat the spread of COVID-19 (WHO, 2020).

2. REVIEW AND ANALYSIS

The healthcare ecosystem is overcrowded and the supply is much lesser than the demand for healthcare provisions. The key dilemma in the widely contagious pandemic has been to resolve this constraint in healthcare facility while also maintaining a physical distance. E-healthcare has been achieved by adopting telemedicine. Telemedicine refers to the use of technology in enabling any kind of healthcare at a distancewith the use of information and communication technology (ICT) (Strehle et. al., 2006). Telemedicine provides a way of effectively covering large populations in a shorter time while also maintaining physical distance. In the common sense, it refers to a patient-doctor interaction over tele-communication; however its scope is far beyond this. Earlier, telemedicine was a vital link between healthcare and people from rural or sparse population countries. But, because of the need of social distancing in COVID-19, telemedicine became a popular practice across the globe including urban locations at a mass scale.

As per a McKinsey COVID-19 survey, telemedicine users in the United States skyrocketed from 11% in 2019 to 46% in 2020 and 76% showed high interest towards it. Additionally, they also reported 50-175x growth in telehealth visitors from pre-COVID days. The physician willingness to use telehealth also increased from 57% in 2015 to 69% in 2019 (Impact, 2020). Multiple telemedicine providing firms are coming up across the globe such as Teladoc and AmWell in the United States and DocOnline, Growman Research Group, and many others in India.

A wide literature is also available on the meaning, evaluation, benefits and drawbacks of telemedicine, and it is gaining even further popularity now amongst the researchers. A 2020 study on five online databases (PubMed, Scopus, Embase, Web of

Science and Science Direct) revealed the role of telemedicine in combating with the COVID-19 pandemic including reduced physical contact, established consensus amongst physicians through online discussion forums, wireless monitoring, faster rate of service delivery, easier follow-ups and many others (Monaghesh et.al, 2020).

Telemedicine may be classified on the basis of two parameter: type on interaction or type of information being transmitted. (Wootton et.al., 2017) On the basis of type of interaction, telemedicine may be real-time (through email, video conferencing, phone calls etc.) or pre-recorded (information stored and looked by the expert at a later time). On the basis of type of information, telemedicine may be still images (including data, text, images etc.) or moving images (including videos). Combining these two parameters, a telemedicine can be categorised (figure 1).

Types of Telemedicine	Information Transmitted		
		Still Images	**Moving Images**
Interaction	**Real time**		e.g. telepsychiatry
	Pre-recorded	e.g. teleradiology	

Figure 1: Classification of telemedicine

3. BENEFITS AND DRAWBACKS
The Centres for Disease Control and Prevention (CDC), a national public health agency in US, promotes global use of telemedicine during COVID-19 due to benefits such as remote monitoring of patients over call/videocall, diagnosis of reports sent via email, saving on travel costs, reduced waiting time for service, quick access, abundance of multiple opinions, etc. Using telemedicine, one can screen a person's COVID-19 symptoms, suggest recommendations, prescribe apt medication, counsel on nutrition, counsel on mental health etc. (CDC, 2020). Telemedicine has certainly provided many benefits such as improvement in equity of healthcare access, efficiency of healthcare delivery, access to information, costs of healthcare and many others. Despite the wide range of potential benefits offered by telemedicine, there are some evident disadvantages as well: a broken link between patient and health professional's relationship, compromised quality of information being passed on electronically, lack of diagnosis requiring physical touch, organization difficulties, confidentiality of data etc. (Hjelm, 2005).

3.1 Issues and Need for Future
In an October 2020 report by UNESCO's Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), it was revealed that the frequency of emergence of pandemics like COVID-19 will further increase because of increasing biodiversity and climate crisis, unsustainable consumption practices, human activities, disrupted natural ecosystems, extensive trade and consumption of wildlife etc. (IPBES, 2020). Additionally, the World Economic Forum (WEF) also established the same that with the increasingly connected age, epidemics and pandemics will become increasingly common. Hence, preparedness for future pandemics needs to be the way forward and telemedicine has proven to be an effective pivotal tool for the same. Moreover, with increasing digitization, it is imperative that government and healthcare organizations incorporate telemedicine within their structure and strategy. A plan to encourage and develop it must be put in place by policymakers. Practice guidelines, quality control, training of the involved personnel, facilitating the relevant infrastructure and continual audits are the need of the hour for a healthier present and future.

3.2 Current Scenario of Telemedicine in India
India realized the need and scope for telemedicine owing to its fast growing population and a scarcity of healthcare long ago. In 2005, the Health Ministry of India setup a National Telemedicine Taskforce which paved way for successful delivery of projects such as NeHA, ICMR-AROGYASREE, and VRCs. In 2019, Govt. of India launched "eSanjeevani", an online telemedicine initiative, under Ayushman Bharat scheme of Government of India in 2019 in

order to provide healthcare at home and it has been adopted by 21 states and union territories since then.In the modern times, the increased usage of wireless technology and the surge in the COVID-19 pandemic, led to a rise in large number of private healthcare firms providing telemedicine too. Numerous premier hospitals have come forward to adopt telemedicine practices such as All India Institute of Medical Sciences (AIIMS) for non-COVID ailments, Sri Ganga Ram Hospital, Delhi for mammography, Regional Cancer CentreTrivandrum for oncology services and many others. It was also the need of the hour owing to an extremely low doctor-population ratio of 0.62:1000 in India against a WHO suggested ratio of 1:100 (Chellaiyan et.al., 2019). The telemedicine market of India grew from 85 million USD in 2010 to 829 million USD in 2019 and further projects report an increase to over 5000 million USD by 2025 (figure-2).
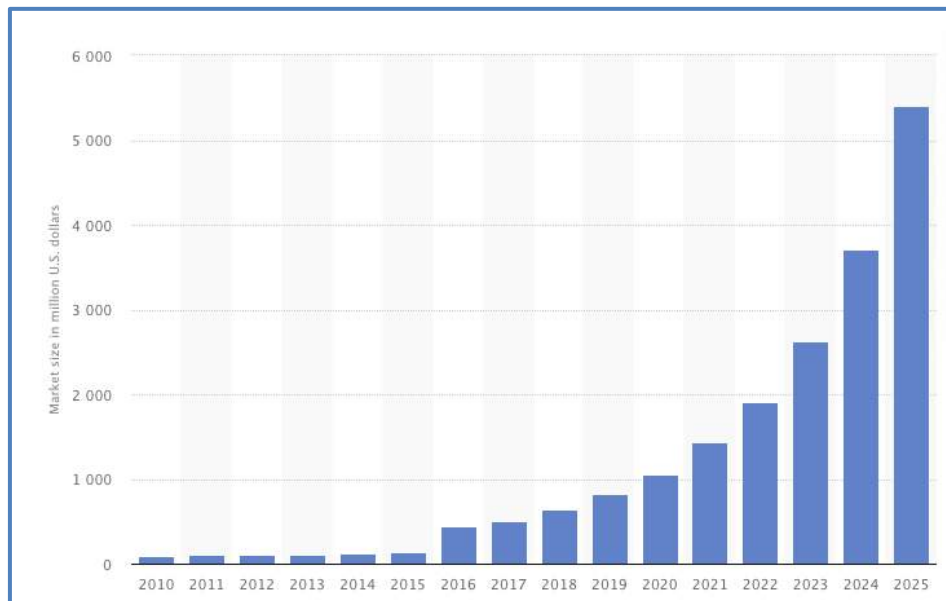
Figure 2: Indian telemedicine market size from 2010 to 2019 with an estimate till 2025 (Statista, 2020)

In a survey of 3000+ respondents across 250+ India cities by a private telemedicine firm Dr. on App (DrOnA) and Mankind Pharma, a three times increase in digital usage of medicinal services was reported and only 23% respondents denied for considering online consultation in future. The top most reasons that came up for considering telemedicine are indicated in figure-3.

Figure 3: Demand for telemedicine to rise post covid-19: survey (ET Health World, 2020)

4. CONCLUSION

Telemedicine is capable of webbing a large part of healthcare infrastructure into one virtual network. By using this virtual system, essential COVID-19 care has been delivered to the

patients and it is gaining popularity with each passing day in this digital era. It has the potential of reducing mortality and morbidity in the pandemic. And hence, owing to the numerous potential benefits it provides, use of telemedicine tool must be expanded even further. By addressing the underlying gaps, a shift in focus from regular healthcare to telemedicine must be eventually catered to. It holds a promising future for the world and especially for developing nations like India.

BIBLIOGRAPHY

1. Chellaiyan, V., Nirupama, A., & Taneja, N. (2019). Telemedicine in India: Where do we stand? Journal of Family Medicine and Primary Care, 8(6), 1872. https://doi.org/10.4103/jfmpc.jfmpc_264_19
2. Coronavirus disease 2019 (COVID-19). (2020, September 15). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/telemedicine.html
3. www.ETHealthworld.com. (2020, October 6). Demand for telemedicine to rise post COVID-19: Survey. ETHealthworld.com. https://health.economictimes.indiatimes.com/news/industry/demand-for-telemedicine-to-rise-post-covid-19-survey/78516110
4. IPBES (2020) Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Daszak, P., das Neves, C., Amuasi, J., Hayman, D., Kuiken, T., Roche, B., Zambrana-Torrelio, C., Buss, P., Dundarova, H., Feferholtz, Y., Foldvari, G., Igbinosa, E., Junglen, S., Liu, Q., Suzan, G., Uhart, M., Wannous, C., Woolaston, K., MosigReidl, P., O'Brien, K., Pascual, U., Stoett, P., Li, H., Ngo, H. T., IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4147317
5. Hjelm, N. M. (2005). Benefits and drawbacks of telemedicine. Journal of Telemedicine and Telecare, 11(2), 60-70. https://doi.org/10.1258/1357633053499886
6. India - telemedicine market size 2010-2025 | Statista. (2020, September 1). Statista. https://www.statista.com/statistics/1174720/india-telemedicine-market-size/
7. Monaghesh, E., &Hajizadeh, A. (2020). The role of Telehealth during COVID-19 outbreak: A systematic review based on current evidence. https://doi.org/10.21203/rs.3.rs-23906/v
8. Strehle, E. M., &Shabde, N. (2006). One hundred years of telemedicine: Does this new technology have a place in paediatrics? Archives of Disease in Childhood, 91(12), 956-959. https://doi.org/10.1136/adc.2006.099622
9. Telemedicine 'here to stay' post COVID-19, according to local health professionals. (2020, June 25). impact.
10. WHO. Strengthening the Health System Response to COVID-19 Recommendations for the WHO European Region Policy brief. Geneva: World Health Organization; 2020. Available from: http://www.euro.who.int/__data/assets/pdf_file/0003/436350/strengthening-health-system-response-COVID-19.pdf.
11. Wootton, R., Craig, J., & Patterson, V. (2017). Introduction to telemedicine (2nd ed.). CRC Press.

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CUSTOMER ALLEGIANCE – AN OUTCOME OF TRUST, QUALITY AND SATISFACTION: A REVIEW BASED RESEARCH IN ONLINE B2B MARKETS

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Abstract:-
Purpose – The objective of this Literature Review (LR) is to outline the existing research in the field of Customer Allegiance or Loyalty in Online B2B markets. The present work aims at providing a LR on the most relevant contributions related to role of trust, service quality and satisfaction in building customer loyalty. Moreover, an attempt has been made to discuss the precedents and consequences of the variables involved in the present research.
Methodology – The LR is based on 70 research papers published in peer-reviewed journals during 1992-2017. After providing a brief overview of customer loyalty in online B2B markets, the LR presents various domains around which existing research on customer loyalty is focussed.
Findings – The researches outcomes presented in the LR mainly concluded that trust, perceived service quality and customer satisfaction are important determinants of customer loyalty. Moreover, interrelationships among these variables have also been evident in B2B context. Some studies mention here revealed that it is more difficult to maintain customer loyalty in online B2B markets as compared to B2C. Hence, there is a need to find out the measures to enhance customer loyalty in this regard.
Keywords: Customer loyalty, trust, customer satisfaction, service quality, literature review.

1. CUSTOMER LOYALTY IN ONLINE B2B MARKETS

Customer allegiance or loyalty, as a concept, has been used extensively in consumer behaviour for many years. Loyalty is vital for the success of business organizations, usually because attracting new customers is more expensive than retaining existing ones. Most of the researches suggested that loyal customers are like competitive assets and relationship with them should be nurtured and taken care of skilfully. The widely accepted definition of Customer loyalty is "a deeply held commitment to repurchase or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Oliver, 1997).

For B2B companies, it is vital to foster customer loyalty and to build long-term relationships in order to avail more opportunities with their clients. Customer loyalty also results into referrals leading greater brand awareness, acquiring new customers, cross-sell/upsell opportunities. Thus, marketers are now putting efforts to obtain knowledge on different ways to build customer loyalty (Bowen and Chen, 2001).

The present study aims to ascertain the role of customer trust, perceived service quality and customer satisfaction in developing customer loyalty in the context of online B2B markets thus it becomes imperative to understand the differences in B2B and B2C markets. B2B is different to B2C in terms of customers representing a larger pool of prospective business relations, which may be also extremely unique. B2B markets require more frequent and more customized service encounters and, more professional personal interaction with customers with the assistance of improved technology (Narayandas, 2005). As compared to B2C markets the relationship in B2B is closer, deeper, and long lasting. Hence, the business complexity involved in B2B market is higher than B2C. Moreover, intense competition, higher level of deregulation, and digital revolution cause difference in determinants of loyalty in B2B and B2C depending on the nature of the targeted customers (Morris and Holman, 1988).

In the online space, e-loyalty is a strategy that creates mutual rewards to both the clients. In fact, there are several companies that have applied loyalty as a powerful tool to positively affect their performance and it becomes an important source of competitive advantage for them (Zineldin, 2006). Further, loyalty can result into increased competitiveness of both the parties involved and decreasing transaction costs in B2B markets (Ganesan and Hess, 1997). Similarly, Fornell & Wernerfelt, (1987) stated that new customers acquisition costs is significantly higher than those of retaining existing

customers thus, customer retention is an important business objective rather than putting efforts for acquiring new customers.

For the purpose of present study, only three components have been identified as pre- cursors to customer loyalty viz., trust, perceived service quality (PSQ) and customer satisfaction which have been shown in figue-1.

Figure 1: Determinants of customer loyalty

1.1 Rationale of the Study
Over the years customer loyalty has been defined and measured in several ways in B2C context however, in B2B context the term is still under-defined (Gil-Saura, 2008). Still, a gap exists to conceptualize loyalty and to research its antecedents (Lam et al., 2004). The intended contribution of the present study is to overcome the non-existence of a comprehensive review of existing studies in this domain. The present study is focussed on presenting a literature review (LR) concerning role of trust, PSQ and satisfaction in customer loyalty from interdisciplinary angles to identify possible avenues for future research.

2. RESEARCH METHODOLOGY
This LR is intended to contribute to the existing research body by presenting a systematic summarisation of research carried out during 1992–2017 on important determinants of customer loyalty to academicians and researchers. The LR is based on articles sourced, using keywords, from various databases. The search includes all the relevant articles until 2017. Finally, 70 papers were shortlisted after avoiding duplicity and further review of sources cited and their significance.

3. LITERATURE REVIEW
Based on this extensive and systematic research, a list of 70 research and scholarly journal articles was selected for LR. For the purpose of better understanding, the researcher has categorized these research studies in three heads showing their focus and research outcomes.

3.1 Customer Trust

This section covers the researches undertaken with a view to analyze the role of trust in developing customer loyalty. The studies mention here revealed that trust is an important determinant of customer loyalty. Customer trust is perceived as a vital antecedent for developing mutually and long term beneficial relationships and is important to build relationships (Bilgihan 2016; Upamannyu et al. 2015). Trust is present when a partner to a business relationship has confidence in another partner's integrity and perceives them as reliable (Theron, Terblanche & Boshoff 2012). Accordingly, a customer is willing to engage in a long-term relationship with a supplier who caters for their needs or meet their expectations. The construct of trust is important in supplier-business relationships, because customers buy products and services based on trust. Over time, trust enables companies to gain a sustainable competitive advantage (Nguyen, Leclerc & LeBlanc 2013). In B2B context, Spiros and Venetis (2002) have stated that trust is critical in facilitating B2B exchanges. The following table lists the authors who focused their researches on these aspects and contributed in this regard.

S. No.	Focus	Authors	Research Outcome
1.	Trust as a precursor to Loyalty	Chaudhuri & Holbrook (2001); Oliver, 1999; Trif (2013); Chiou & Droge (2006) and Rauyruen & Miller (2007); Reichheld & Schefter (2000); Ramaseshan, Rabbanee & Tan Hsin Hui (2013); Sirdeshmukh, Singh & Sabol (2002), Delgado-Ballester & Munuera-Aleman (2001); Pamies (2012); Osman, Z. & I. Sentosa (2013); Loureiro & Gonzalez (2008); Akhbar & Parvez (2009); Liang (2008); Luarn & Lin (2003); Horppu et. al (2008); Kassim & Abdullah (2010); Ribbink Riel, Veronica Liljander & Streukens, (2004); Hussain, S. (2017)	Explored that there is a significant positive link between trust and customer's loyalty.
2.	Trust precedes repurchase intention in e-commerce	Corbitt et al. (2003); Y. Bart, V. Shankar, F. Sultan, & G.L. Urban (2005); S.G. Krauter & Kaluschab (2003); D. Kim & I. Ben basat (2003); J. Kim, D. Morris, & J. Swait (2008); Ling et al., (2010); Kim et al. (2009); Gefen (2000); Ha et al. (2010)	Revealed that Trust is a critical component of purchase intention in e-commerce arena.
3.	Trust enhances Credibility of Seller	Loureiro and Gonzalez (2008); Erdem et al. (2002); Ganesan (1994); Lau & Lee (1999); San Martin Gutierrez (2000)	Stated that Trust has influence on credibility and credibility which increase behavioural intentions towards seller.
4.	Sustainable	Nguyen, Leclerc & LeBlanc (2013); Boyt (1997); Woodruff (1997)	Mentioned that

S. No.		Authors	Research Outcome
3.	Importance of trust in Online vs. Offline markets	Corritore et al. (2003); Reigelsberger et al. (2003); Yoon (2002)	Explained that an online buyer is exposed to greater risk than in offline transactions and hence, importance of trust is particularly enhanced.
4.	Security/Privacy	Jarvenpaa & Todd (1996); Pavlou et al. (2007); Park & Kim (2003)	Security assurance leads to increased level of trust in e-commerce.
5.	Fulfilment	Bauer, Falk & Hammerschmidt (2006); Reynolds (2000), Corritore et al. (2003)	Order fulfilment builds trust with online retailers.

(The first partial row at the top of the page, spanning from the previous page: "competitive advantage" / "Trust enables companies to gain a sustainable competitive advantage.")

3.2 Perceived Service Quality

A number of studies are listed here which shows the importance of service quality in determining customer trust, loyalty and satisfaction. It is very interesting to accurately measure perceived quality for better understanding its important precursors and outcomes and how to improve service quality to gain competitive advantage and win customer loyalty (Palmer & Cole 1995; Zahorik & Rust 1992). Zeithaml et al. (1996) argued that it is essential for a company to measure the degree of relationship between service quality and retention to know the financial implications. Through this literature review it has been tried to determine the nature and strength of the relationship between perceived service quality and loyalty for a firm.

S. No.	Focus	Authors	Research Outcome
1.	Perceived service quality (PSQ) as a precursor to	Gounaris (2003); Palmer and Cole (1995); Zahorik & Rust (1992); Bloemer & Kasper (1995); Brady and Robertson (2001); Butcher, Sparks & O'callagham (2001); Cronin,	Confirmed that the relationship between perceived quality and

	Loyalty	Brady & Hult (2000); Ennew & Blinks (1999); Fullerton (2005); Lee & Cunningham (2001); Melta & Durvasula (1998); Olsen (2002); Wong & Sohal (2001); Anderson & Sullivan (1993); Cronin & Taylor (1992); Harrison-Walker (2001); Botha & Van Rensburg (2010); Santouridis & Trivellas (2010); Chodzaza & Gombachika (2013); Rai & Medha (2013)	customer loyalty exists and is positive.
2.	PSQ as an antecedent to Trust	Mukherjee S. (2016); Gounaris (2003); Cho & Hu (2009); Spiros & Venetis (2002); Alam et.al. (2008); Chen et.al (2013); Nasser et.al. (2013)	Revealed that PSQ has a positive and significant impact on developing Customer Trust.
3.	Determinant of customer satisfaction	Rodgers et.al (2005); Chang & Wang, (2008); Jayawardhena et al. (2007)	Explored that Customer Satisfaction is determined by quality of service delivered.

3.3 Customer Satisfaction

This section deals with the research outcomes reveal that customer satisfaction determines customer loyalty and is influenced by many factors in online B2B markets. Customer satisfaction has been understood as "the degree to which customers' expectations from a product/service are met and hence, can act as a reflection of consistency between actual and anticipated performance of a product or service" (Oliver, 1999). In the age of digitalization, e-satisfaction is known as "contentment of the customer with respect to his/her prior purchase experience with a given electronic commerce firm" (Anderson & Srinivasan, 2003). Hence, customer satisfaction arises when the final deliverable meets or exceeds customer's expectation.

S. No	Focus	Authors	Research Outcome
1.	Satisfaction as a precursor to Loyalty	Botha & Van Rensburg (2010), Pamies (2012); Homburg et al. (2006); Taylor et.al (2004); Faullant, Matzler, & Ller (2008); Pantouvakis & Lymperopoulos (2008); Akhbar & Parvez (2009); Hume & Mort (2010); Chen & Lee	Found that Customer satisfaction is positively and significantly correlated to

		(2008); Rizan (2010); Reyes (2012); Klee (1997); Y. Liu (2007); Singh S. (2017); Anderson & Sullivan (1993), Fornell et al. (1996), Oliver (1997), Kim et al. (2004); Xu et al. (2006); Chadha & Kapoor (2009); Hussain, S. (2017)	customer loyalty.
2.	Correlation with Trust	Kantsperger & Kunz (2010); Yeh & Li (2001); Ribbink, Riel & Semeijin (2005); Sahadev & Purani (2008); Edwin, Nic & Christo (2011); Yeh & Li (2009); Jose (2011); Edwin et al. (2011); M.A. Razzaque & T.G. B00n (2003)	Explored that Customer satisfaction is the main antecedent to trust and positively and significantly correlated to it.
3.	Satisfaction leads to purchase intention	Alam & Yasin (2010); Tjiptono (2005)	Revealed that Intention to repurchase is sure when customers are satisfied with the services provided by the seller.
4.	Website Design	Wolfinbarger & Gilly (2003); Park & Kim (2003); Cyr D. (2008); Choudhury& Kacmar (2002); Alam et.al. (2008)	They found a strong dependence of customer satisfaction on the quality of website design.
5.	Larger product assortments	Chernev & Hamilton (2009); Broniarczyk, Hoyer, & McAlister (1998); Kahn & Wansink (2004); Borle et al. (2005)	Availability of wide range of products has a positive relationship with customer experience and more satisfaction to customers.

| 6. | Security/Privacy | Szymanski & Hise (2000); Parasuraman, et.al (2005); Reichheld & Schefter (2000) | Online security is found to have an important determinant in online satisfaction and purchase intention. |
| 7. | Fulfilment | Semeijn et al. (2005); Wolfinbarger & Gilly (2003); Bienstock (2006); Parasuraman, et.al (2005) | Positive relationship was found between fulfilment and satisfaction. |

4. CONCLUSION

The present LR is based on 70 research papers sourced from various databases published during 1992–2017. Despite of growing importance of customer loyalty in online B2B context, the empirical research on this issue is found to have many gaps. The key findings of the LR are:

- Research studies have used various research techniques such as quantitative analysis, qualitative and conceptual approach and case study method to examine the determinants of customer loyalty.
- It has become evident that trust, perceived service quality and customer satisfaction are important determinants of customer loyalty. Moreover, interrelationships of these variables have also been mentioned to reveal their importance in B2B context.
- Some studies mention here revealed that it is more difficult to maintain customer loyalty in online B2B markets as compared to B2C. Hence, there is a need to find out the measures to enhance customer loyalty in this regard.
- The findings confirm that every variable studied in the present research has different precedents and consequences. Hence, if studied thoroughly, the LR presented here can serve as a guide for researchers and academicians for further research in this regard and it may show them the path in the identification of related studies in the literature review phase of their work.

REFERENCES

1. Akbar, M.M and Parvez, N. (2009). Impact of service quality, trust and customer satisfaction on customer loyalty. ABAC Journal 29(1), 24-38.
2. Alam, S.S. & Yasin, N.M. (2010). An Investigation into the Antecedents of Customer Satisfaction of Online Shopping. Journal of Marketing Development and Competitiveness, 5, 1, 71-78.
3. Alam, S.S., Bakar, Z., Ismail, H.B., and Ahsan, N. (2008). Young Consumers Online Shopping –An Empirical Study. Journal of Internet Business, 5, pp.81-98.
4. Anderson, E.W. and Sullivan, M.W. (1993), "The antecedents and consequences of customer satisfaction for firms", Marketing Science, Vol. 12 No. 2, pp. 125-143.
5. Bart, Y., Shankar, V., Sultan, F. and Urban, G.L. (2005), "Are the Drivers and Role of Online Trust the Same for all Website and Consumers? A Large-scale Exploratory Empirical Study", Journal of Marketing, Vol. 69, pp. 133–152.
6. Bauer, H.H., Falk, T. & Hammerschmidt, M. (2006). eTransQual: A Transaction Process- Based Approach for Capturing Service Quality in Online Shopping. Journal of Business Research, 59, 7, 866-875. Bienstock (2006);
7. Borle, S., Boatwright, P., Kadane, J.B., Nunes, J.C. & Shmueli, G. (2005). The Effect of Product Assortment Changes on Customer Retention. Marketing Science, 24, 4, 16-622.
8. Boyt, T. and Harvey, M. (1997) Classification of industrial services: A model with strategic implications. Industrial Marketing Management 26 (4), 291-300.
9. Broniarczyk, S.M., Hoyer, W.D. & McAlister, L. (1998). Consumers' Perceptions of the Assortment Offered in a Grocery Category: The Impact of Item Reduction. Journal of Marketing Research, 35, 2, 166-176.
10. Chadha, S. and Kapoor, D. (2009). Effect of switching cost, service quality and customer satisfaction on customer loyalty of cellular service providers in Indian market, The ICFAI University Journal of Marketing Management, 1(1), 23-37.

11. Chaudhuri, A., and Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. Journal of Marketing, 65(2), 81–93.
12. Chang, H.-H. & Wang, H.-W. (2007). The Relationships among E-Service Quality, Value, Satisfaction and Loyalty in Online Shopping. European Advances in consumer Research, 8, 10-14.
13. Chen, C., and Cheng, L.T. (2012). A study on mobile phone service loyalty in Taiwan. Total Quality Management & Business Excellence, 23(7/8), 807-819.
14. Chernev, A. & Hamilton, R. (2009). Assortment Size and Option Attractiveness in Consumer Choice among Retailers. Journal of Marketing Research, 46, 3, 410-420.
15. Chiou, J.-S. & Droge, C. (2006). Service Quality, Trust, Specific Asset Investment and Expertise: Direct and Indirect Effects in a Satisfaction-Loyalty Framework. Journal of the Academy of Marketing Science, 34, 4, 613-627.
16. Cho, J. E., and Hu, H. (2009). The effect of service quality on trust and commitment varying across generations. International Journal of Consumer Studies, 33(4), 468-476.
17. Corbitt, B.J., Thanasankit, T. & Yi, H. (2003). Trust and e-Commerce: A Study of Consumer Perceptions. Electronic Commerce Research and Applications, 2, 3, 203-215.
18. Corritore, C.L., Kracher, B. & Weidenbeck, S. (2003). On-line Trust: Concepts, Evolving Themes, A Model. International Journal of Human-Computer Studies, 58, 6, 737-758.
19. Cronin, Jr. J. J., & Taylor, S. A. (1992). Measuring service quality: A re-examination and extension. Journal of Marketing, 56(3), 55-68.
20. Cyr, D. (2008). Modeling Web Site Design across Cultures: Relationships to Trust, Satisfaction and E-Loyalty. Journal of Management Information Systems, 24, 4, 47-72.
21. Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J. and Bryant, B.E. (1996), "The American customer satisfaction index", American Marketing Association, Vol. 60 No. 4, pp. 7-18.
22. Fullerton, G. (2005) How commitment both enables and undermines marketing relationships. European Journal of Marketing 39 (11/12), 1372-1388.
23. Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. Journal of Marketing 58, 1-19.
24. Gefen, F., Karahanna, F. and Straub, D.W. (2003), "Inexperience and Experience with Online Stores: The Importance of TAM and Trust", IEEE Transaction on Engineering Management, Vol. 50, pp. 307–321.
25. Gounaris, S. P., Stathakopoulos, V., and Athanassopoulos, A. D. (2003). Antecedents to perceived service quality: an exploratory study in the banking industry. International Journal of Bank Marketing, 21(4), 168-190.
26. Ha, H.Y., Janda, S. and Muthaly, S.S. (2010), "A New Understanding of Satisfaction Model in E-re-purchase Situation", European Journal of Marketing, Vol. 44(7/8), pp. 997–1016.
27. Horppu, M., Kuivalainen, O., Tarkiainen, A. & Ellonen, H.-K. (2008). Online Satisfaction, Trust and Loyalty and the Impact of the Offline Parent Brand. Journal of Product & Brand Management, 17, 6, 403-413.
28. Husain, S. (2017). The Determinants of Loyalty in Online Commerce - An Exploratory Study in India, EJISDC 81, 7, 1-17 Retrieved from: https://www.researchgate.net/publication/318053783
29. Jarvenpaa, S. and Todd, P.A. (1996). Consumer Reactions to Electronic Shopping on the World Wide Web. International Journal of Electronic Commerce, 1, 2, 59-88.
30. Kantsperger, R. and Kunz, W. H. (2010). Consumer trust in service companies: a multiple mediating analysis. Managing Service Quality 20(1), 4-25.
31. Kassim, N., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: a cross cultural analysis. Asia Pacific Journal of Marketing and Logistics, 22(3), 351-371.
32. Kim, M., Park, M. and Jeong, D. (2004). The effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services, Telecommunication Policy, 2(1), 145-59.
33. Kim, D. and Benbasat, I. (2003). "Trust Related Argument in Internet Stores: A Framework for Evaluation," Journal of Electronic Commerce Research, Vol. 4(2), pp. 49–64.
34. Ling., K.C., Chai, L.T., and Pew. T.H. (2010). The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience towards Customers" Online Purchase Intention. International Business Research, 3(3) pp. 63-76.
35. Liu, Y. (2007). "The Long Term Impact of Loyalty Programs on Consumer Purchase Behavior and Loyalty", Journal of Marketing, Vol. 17(4), pp. 19–35.
36. Luarn and Hain-Hui Lin, A customer loyalty model for e-service context, journal of electronic commerce research, 4(4), 2003, 22-32.
37. Mukherjee, S. (2016). Antecedents and Impact of Consumer Trust in Business to Business Markets. Amity Journal of Marketing, 1(1), (41–58)
38. Oliver, R.L. (1997), Satisfaction: A Behavioral Perspective on the Consumer, M.E. Sharpe, Armonk, NY.
39. Oliver, R.L. (1999), "Whence consumer loyalty?" Journal of Marketing, Vol. 63 No. 4, pp. 33-44.
40. Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions", Journal of Marketing Research, 17(4), 460-9. [18] Tjiptono, FandyPemasaran Jasa, (Edisi Pertama, Diterbitkan oleh Bayumedia Publishing. Malang-Jawa Timur, 2005)
41. Olsen, L. L. & Johnson, M. D. (2003). Service equity, satisfaction, and loyalty: from transaction-specific to cumulative evaluations. Journal of Service Research, 5 (3), 184.
42. Osman, Z., and I. Sentosa (2013). A study of mediating effect of trust on customer satisfaction and customer loyalty relationship in Malaysian rural tourism. European Journal of Tourism Research 6(2), pp. 192-206
43. Pamies, D. S. (2012). Customer loyalty to service providers: examining the role of service quality, customer satisfaction and trust. Total Quality Management, 23(11), 1257–1271.
44. Parasuraman, A., Zeithaml, V., and Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing 64(1), 29–40.

45. Park, C.-H. & Kim, Y.-G. (2003). Identifying Key Factors Affecting Consumer Purchase Behavior in an Online Shopping Context. International Journal of Retail & Distribution Management, 31, 1, 16-29.
46. Pavlou, P.A., Liang, H. & Xue, Y. (2007). Understanding and Mitigating Uncertainty in Online Environments: A Principal-Agent Perspective. MIS Quarterly, 31, 1, 105-136.
47. Ramaseshan, B., Rabbanee, F. K., & Tan, H. H. (2013). Effects of customer equity drivers on customer loyalty in B2B context. Journal of Business & Industrial Marketing, 28(4). 335 – 346.
48. Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. Journal of Business Research, 60(1), 21-31.
49. Reichheld, F.F. & Schefter, P. (2000). E-Loyalty: Your Secret Weapon on the Web. Harvard Business Review, 78, 4, 105-113.
50. Reigelsberger, J., Sasse, M.A. & McCarthy, J.D. (2003). Shiny Happy People Building Trust? Photos on E-Commerce Websites and Consumer Trust. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (121-128), New York: ACM.
51. Reyes, C. (2012). The satisfaction of wine tourist: causes and effects. Doctoral dissertation summary. European Journal of Tourism Research 5(1), 80-83
52. Reynolds, J. (2000). E-Commerce: a Critical Review. International Journal of Retail & Distribution Management, 28, 10, 417-444.
53. Ribbink, D., Van Riel, A.C.R., Liljander, V., Streukens, S. (2004), Comfort your online customer: Quality, trust and loyalty on the internet. Managing Service Quality, 14(6), 446-456.
54. Ribbink, D., A.C.R. van Riel, and J. Semeijn. (2005). Policy decisions and modal choice: an example from the European Union. Transportation Journal 44(1), 33-44.
55. Rodgers, W., Negash, S., and Suk, K. (2005). The moderating effect of online experience on the antecedents and consequences of on line satisfaction. Psychology and Marketing, 22, pp. 313-331.
56. Sahadev, S. and Purani, K. (2008). Modelling the consequences of e-service quality. Marketing Intelligence & Planning 26(6), 605-620.
57. Semeijn, J., van Riel, A.C.R., van Birgelen, M.J.H. & Streukens, S. (2005). E-Services and Offline Fulfilment: How E-Loyalty is Created. Managing Service Quality: An International Journal, 15, 2, 182-194.
58. Shrivastava, M. (2015). Influencers of Customer Satisfaction -Customer Loyalty Relationship: A Conceptual Research Model. IMJ, Volume 7 Issue 1
59. Singh S. (2017). Examining Factors Influencing Customer Loyalty and Repurchase Intentions in Online Shopping: An Indian Perspective. IMR (Indira Management Review), Volume XI, Issue II.
60. Sirdeshmukh, D., Singh, J. and Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. Journal of Marketing, Vol. 66, January, pp. 15-37.
61. Spiros, P., and Venetis, G. K. (2002). Trust in industrial service relationships: Behavioral consequences, antecedents and the moderating effect of the duration of the relationship. Journal of Services Marketing, 16(7), 636 – 655.
62. Taylor, S. A. and Baker, T. L. (2004) An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. Journal of Retailing 70 (2), 163-178.
63. Trif, S.-M. (2013). The Influence of Overall Satisfaction and Trust on Customer Loyalty. Management & Marketing, 8, 1, 109-128.
64. Wolfinbarger, M. & Gilly, M.C. (2003). eTailQ: Dimensionalizing, Measuring and Predicting Etail Quality. Journal of Retailing, 79, 3, 183-198.
65. Woodruff, R.B. (1997). Customer Value: The Next Source of Competitive Advantage. Journal of the Academy of Marketing Science, 25, 2, 139-153.
66. Xu, Y., Goedegebuure, R. and Heijden, B. (2006). Customer perception, customer satisfaction, and customer loyalty within Chinese securities business: towards a mediation model for predicting customer behavior, Journal of Relationship Marketing, 4(1), 79-104.
67. Yeh, Y.S. and Li, Y.-M. (2009). Building trust in m-commerce: contributions from quality and satisfaction. Online Information Review 33 (6), 1066-1086.
68. Yoon, S.-J. (2002). The Antecedents and Consequences of Trust in Online-Purchase Decisions. Journal of Interactive Marketing, 16, 2, 47-63.Zahorik & Rust (1992).
69. Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996), "The behavioral consequences of service quality", Journal of Marketing, Vol. 60 No. 2, pp. 31-46.

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FROM PANIC BUYING TO SENSIBLE CONSUMPTION IN PANDEMIC: A STUDY

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Abstract:- The current pandemic has brought about a tectonic shift in consumer buying behaviour. In the initial days of pandemic, people resorted to panic buying however, soon the patterns changed and people went in for more mindful consumption. This research paper is an exploratory study that examines these changes, if any in consumer buying patterns and the reasons thereof. The results reveal that consumers have resorted to more conscious consumption. In the initial phases of pandemic, consumers resorted to panic buying and hoarding of essential goods as well as products such as sanitizers, masks etc. Additionally, there has been a shift towards products that are simple, fuss free and can be managed on one's own. Demand for DIY products and work from home has gone up tremendously as the work from culture becomes the new normal.
Keywords: panic buying, pandemic, consumer buying behavior, mindful consumption.

1. INTRODUCTION

It is seen that consumer is the driving force of consumerism. The economic growth and Economic stability emerges from the kind of money put in by consumers in buying consumer goods. Needless to say, the current pandemic has brought about a tectonic shift in consumer buying behaviour. The changed consumer behaviors would affect all spans of life, from the way we work to the way we shop to our entertainment methods. These tectonic shifts have profound implications for retailers and consumer packaged goods companies. These long term changes are in the formative stage and thus provide excellent opportunity to marketers in determining the new normal. In the initial days of pandemic, people resorted to panic buying however, soon the patterns changed and people went in for more mindful consumption.

2. LITERATURE REVIEW

Flatters and Willmott (2009) claim that consumers try to maximise their utility, satisfaction, or joy by purchasing consumer goods. As regards utility in shopping, Grundey (2009) points out that typically a consumer finds utility in agricultural and industrial goods, services, housing and wealth. This utility or satisfaction emerges from buying consumer goods (Flatters and Willmont, 2009). So literature points out that in times of crisis, consumers spend more on essentials and less on luxury or non essential goods and services. A report by McKinsey points out that the period of contagion, self-isolation, and economic uncertainty will change the way consumers behave, in some cases for years to come. (www.mckinsey.com). Researchers like Donthu and Gustafsson, (2020) posit that Covid-19 has tremendously changed business and consumer behaviour. A very elaborate research by Kirk and Rifkin (2020) figures out importance of three phases in a crisis namely reacting, coping, do-it-yourself behaviour, and affects longer-term adaptation. Pantano et al (2020) too suggest changes in consumer behaviour due to a pandemic.

2.1 Need for Study

The researches and studies point out that the consumer behaviour is influenced by various social, economic needs and also is impacted by occasions, social leaders and economic conditions. The pandemic has brought about an uncertainty that is unparalleled and would certainly lead to a change in the consumer buying patterns. It needs to be studied whether the consumers attitudes have changed vis a vis their expenditure in different buying categories, whether the tendency to hoard products like sanitizers, masks etc. had reduced or is still the same, whether people have plans of exotic holidays or they are choosing Indian locales, whether they are ordering online or going out to eat, among others. Since there is no precedent, it is difficult to predict consumer confidence and consumption patterns. An exploratory study can help us understand the shift, if any.

3. RESEARCH METHODOLOGY

The study is an exploratory study. Sample is non-random and convenience based. Research tool is Google form. The respondents were consumers of various cities. The age groups

ranged from 15 years to 75 years. The questions focused on customer expenditure in various categories during the initial and later phase of pandemic. The period for which respondents were asked about their shopping habits was April 2020 to March 2021. Following hypothesis was developed.

- Ho: There is no difference in buying behaviour of consumers during initial phases of pandemic and later stages of pandemic.
- H1: There is difference between buying behaviour of consumers during initial phases of pandemic and later stages of pandemic.

4. ANALYSIS AND DISCUSSION
4.1 Expenditure on Essential Goods (Staples) vs. Non-Essential Goods
The majority of respondents replied that in the initial phase of pandemic, they stopped the expenditure on non essential items and focused only on the basics (89% expenditure) that is food and day to day essentials. With the opening up of lockdown and economy recovering, many of them are spending around 64 % of money on essentials and remaining on shopping goods too. (Fig 1)
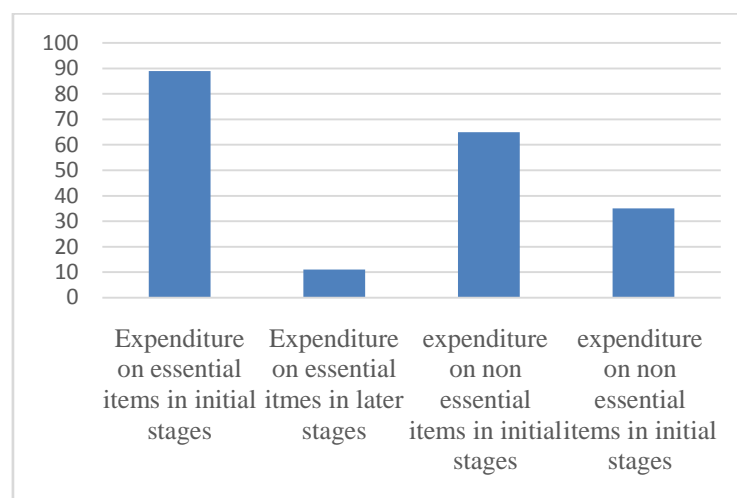
Figure 1: Expenditure on essential vs non essential items

4.2 Concern about Own Health vs Community Health in Different Stages of Pandemic
Results show that consumers became very concerned about their own health when the pandemic arose. However as the pandemic stretched and the initial dust settled, people got concerned about others health and well being too (Fig.2). One reason for this could be the contagious nature of the Corona virus that could spread easily. People therefore deemed it important to start taking care of community health. Use of masks was considered as a measure of safety for oneself as well as others.
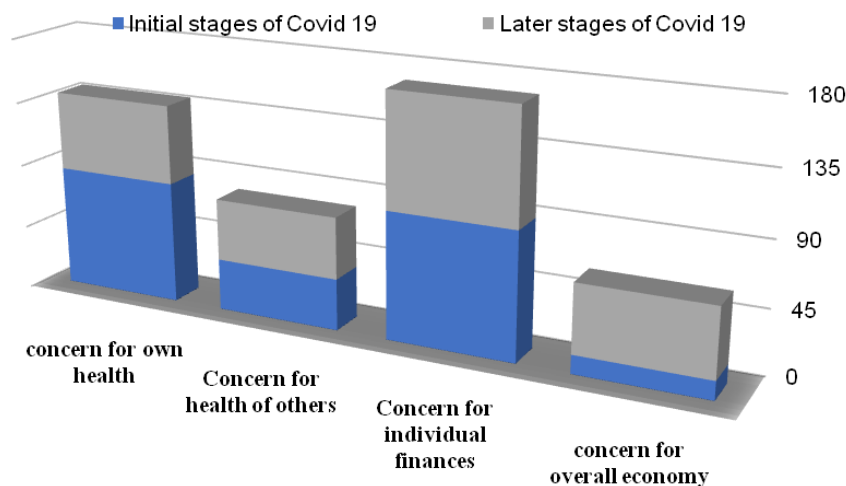
Figure 2: Concern about own health vs community health

4.3 Categories of Consumption

When asked about the categories where consumers have spent, the results were as follows (Fig 3):

(i) **Panic Buying of Staples and Wellness Products:** A vast majority (90%) agreed that they got into panic buying and hoarded products like sanitizers, masks, vitamin tablets, staples like flour, biscuits, oil, etc. Some said that they had to incur extra cost for sourcing these products too. However later stages of pandemic has calmed down people a bit yet the habit of hoarding has continued in 2021 too, although in lesser proportion.

(ii) **Buying from Local:** Most respondents have started buying organic or home grown products more. They rely more on the neighbourhood mom and pop store rather than big superstores. Also, sale of unbranded goods increased manifold as many ladies started making products at home and selling it to nearby houses.

(iii) **Sustainable Buying:** Many respondents shared that they have started spending on products that are sustainable and environmentally friendly. Also, a trend is seen towards buying seeds etc. for growing their own fruits and vegetables. Rather than fashionable frivolous products, people wish to be more conscious about their choices and opted for eco friendly products.

(iv) **Emphasis on DIY Category:** Due to store closures as a result of nationwide lockdown, people could not but things from stores and hence the trend of Do it yourself accelerated in the Covid times. This seems to become a permanent trend especially in categories like beauty and wellness where customers are using more home made products. Many salons and barbers closed, people are doing more of their own cosmetic maintenance at home. So people became more creative and came up with recipes and other solutions and shared it on social media benefitting many more.

(v) **Donations and Charities:** When asked whether respondents feel concerned about their financial position, most of the respondents said that initial phase when lockdown was imposed and many lost their jobs or work, they became extremely distressed about their monetary situation. However, as things progressed, they realized that country's economic recovery is important to bring back buoyancy in marketplace. As a result, respondents said they started contributions in charity and other noble causes.

(vi) **Spending on Apparel and Footwear:** With shoppers unable to buy clothing in person as many shops and malls remain closed, many started buying online. With more people working from home, there's been an increase in athletic and leisure wear apparel.

(vii) **Ordering Food Online:** With the arrival of Covid19, not visiting restaurant became a lifestyle for many. People were more conscious about the food they eat and due to physical distancing being strictly enforced in India and around the world during Covid-19, a lot of the people opted for online food ordering.

(viii) **Using Contactless Services:** Contactless services and payments had already made a breakthrough even before the Covid-19. The pandemic has taken this form of payment to another level, since, contactless payments have proved to be create and enable a germ-free environment. Many respondents said that they tried contactless payments for the first time during the pandemic. Moreover, contactless deliveries have become popular too.
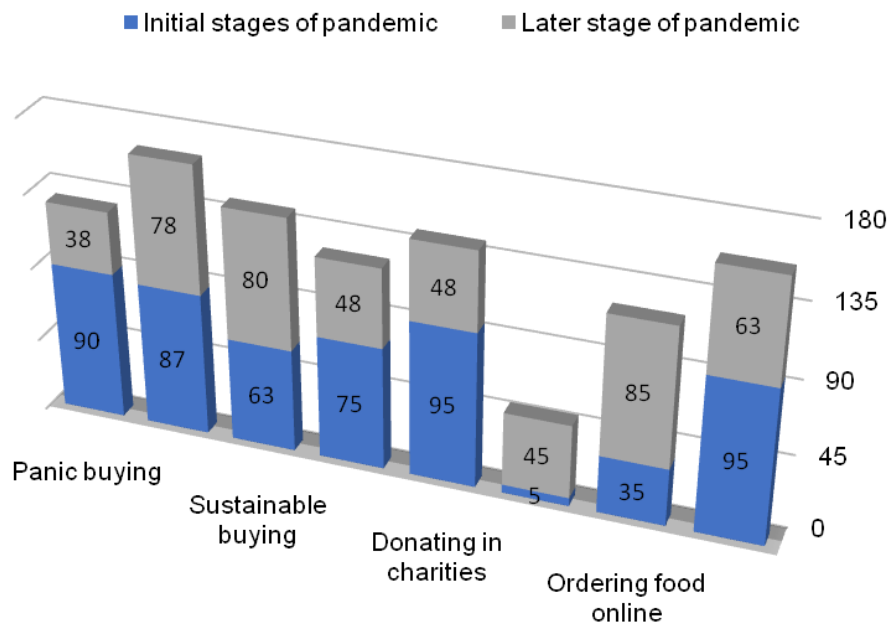
Figure 3: Spent on different categories

5. CONCLUSIONS

As the results reveal, there is no precedent and hence it is difficult to predict consumer confidence and consumption patterns in the present times as well as times to come.With people being more conscious about their lifestyle choices, they are making more mindful purchasing decisions, and choosing sustainable alternatives. The pandemic and its resulting lockdown caused shortages of many types of products in retail stores and online merchants. This happened because consumers actually altered their purchasing habits. Since the shops were only allowed to be visited in certain hours, with a limited number of people able to enter, people were panicky and hoarded essential staples and medicines and masks, sanitizers etc. Quarantines and lockdowns resulted in shutting down of many businesses, leaving thousands of people jobless. This was reflected in their buying behaviour as they spent only on essentials. The concepts of social distancing affected business such as fine dining, tourism, travel etc. negatively. In several sectors, manufacturing and consumption were ceased for long periods.

People have become conscious about their shopping habits. They have become conscious about how they consume food, where is food sourced from, made & finally delivered. People today are getting increasingly curious about how and where something is made, as well as its impact on the environment. They are preferring eco friendly products, also products that are fuss free and simplistic in nature. They are preferring sustainable products, DIY products and contactless deliveries. Work from home equipment, gadgets, clothing have become the new rage.

5.1 Implications for Marketers

It is evident that consumers are making efforts to take better care of themselves and focusing more on proactive well-beingand health, taking care of the nutrition, weight management, to general immunity building and health. As regards the consumer buying behaviour, it is not easy to predict. These are questions that we cannot answer with full certainty. However, research shows that affordability, physical and mental wellness will remain priorities beyond the current moment in time. These are important factors to consider for marketers. All consumer-facing businesses have to understand changing preferences of consumers and pay attention on setting up an environment and shopping experience that is bang on the offering hygiene, should be safe, packaging should be customer friendly and delivery contactless. Its time for marketers to use customer centric content. Since the demand profile coming out of the crisis is too uncertain, marketers need to respond and re evolve by innovating and increasing the speed and agility of merchandise buying cycles. It is important to stay closely connected to loyal customers, ensure that the physical stores are safe spaces and should invest to differentiate the physical shopping

experience from online through playfulness, brand personality and personalised services. Digital commerce is the next new thing and retailers have to make their presence felt online if they need to attract customers.

REFERENCES

1. Douchová, J., Komárková, R., Mejtská, D., Rymeš, M., Vysekalová, J. (1993). Základypsychologietrhu. Praha: H &H
2. Donthu, N., Gustafsson, A., (2020). Effects of COVID-19 on business and research. J. Bus. Res.
3. Flatters and Willmott (2009) Understanding the Postrecession Consumer, Harward Business Review
4. Kirk, C.P., Rifkin, L.S., (2020). I'll trade you diamonds for toilet paper: consumer reacting, coping and adapting behaviors in the COVID-19 pandemic. J. Bus. Res.
5. Laato, S., Islam, N.A.K.M., Farooq, A., Dhir, A., (2020). Unusual purchasing behavior during the early stages of the COVID-19 pandemic: the stimulus-organism-response approach. J. Retailing Consum. Serv.
6. Pantano, E., Pizzi, G., Scarpi, D., Dennis, Ch, (2020). Competing during a pandemic? Retailers' ups and downs during the COVID19 outbreak. J. Bus. Res.
7. Dolgui, A. &Proth, J. (2013). Outsourcing: Definitions and analysis. International Journal of Production Research. Abingdon, England. Taylor & Francis Group.
8. Sheth, J., (2020). Impact of Covid-19 on consumer behavior: will the old habits return or die? J. Bus. Res.

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A COMPREHENSIVE STUDY ON GST -ONE NATION ONE TAX

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1. INTRODUCTION

GST is defined as a destination – based consumption tax levied at multiple stages of production and distribution of goods and services. The regime considers goods and services alike and within the supply chain, are taxed at a flat single rate till the customers can access them. This tax reform thus gives equal footing to large and small and medium enterprises and taxes the stock transfers uniformly. The concept of GST was visualized for the first time in 1999-2000. In 2004-05, the Kelkar Committee recommended rolling out GST as suggested by the 12th Finance Commission. Following the same recommendations, Finance Minister P Chidambaram in February 2006 proposed a GST rollout, by 1 April 2010. However, the resignation of Asim Dasgupta as the head of the GST committee halted the reform. On 8 August 2016, the Constitutional Amendment Bill for GST was passed by the Parliament, followed by ratification of the bill by more than 15 states and its enactment in early September. The Goods and Services Tax was finally launched at midnight on 1 July 2017. The launch was marked by a historic midnight (30 June–1 July) session of both the houses of the Parliament convened at the Central Parliamentary Hall.

The research paper focuses on the importance of Goods and Services Tax (GST) embodied recently in the Indian Tax structure. The paper discusses the genesis of Indian Taxation System with reference to the Arthasastra and Revenue Act of 1924. The contents of the research paper include the evolution of GST in India. The research objectives focuses around the evolution of GST, the comparison of present and GST tax structure, How GST will function in India, the economic implication of GST which unifies India and the basic challenges faced in GST. The milestones of GST have been discussed to analyze how it impacts India's economic environment. The transition of GST to an amalgamated structure has also. The economic implications of GST in India, the challenges and roadblocks faced in India have been depicted in this research paper. The paper also illustrates how GST works in India.

2. LITERATURE REVIEW

- Neha Kanojia, A Study on Godds and services Tax in India, the International Journal of Social science and Management, ISSN: 22511571. The paper discusses on the benefits of GST and it's current implication in India. The current system of indirect taxes is not able to implicate tax evasion and distortion. It also indicates how GST is an improvement over VAT and Service Tax.
- Monika Sehrawat, UpasanaDhanda, GST in India: A Key Tax Reform, International Journal of Research Granthalaya, Vol 3, No: 12(2015) 133-141. The paper focuses on the overview of GST concept, the features along with it's time line of implementation in India with the challenges faced in it's implementation. It includes an exploratory research. It includes implementation to threshold limit.

2.1 Objectives

- To study the Comparing Present Tax structure and GST.
- To study challenges in implementing GST.

3. RESEARCH METHODOLOGY

The research paper has gathered data based on secondary research and information gathered from the other research papers, the current affairs, news dailies and the current GST discussion etc have been imperative in framing this conceptual paper.

3.1 Why We Need GST?

- Need for integrated one Indirect Tax Structure.
- Number of Taxes, Complexities, Compliances, Litigations are increasing day by day.
- Tax chain should start from origination and reach its destination (ultimate consumer) without break in the chain, i.e. Destination based tax.
- Both Goods & Service should share Tax Burden-fair and equitable tax system.

- Removing cascading effect of taxes– no tax on tax.
- One standard tax rate across the country with minimal exemptions and very few items of reduced rates.
- The law for taxation of Goods & Services is same across the country and procedures are also almost identical with may be, few, very special case exceptions with adequate documentation to explain the logic for the same.
- Widening of tax base.
- Minimizing Tax Gap.
- Self policing mechanism to minimize tax evasion.
- Technology is used to facilitate ease of compliance.
- Robust monitoring mechanism.
- Effective grievance redressal mechanism.
- The tax system should be is fair & equitable and should be build on sound economic principles.

Taxes subsumed and not subsumed in GST15

Subsumed in GST	Not Subsumed in GST
Service tax	Electricity duty
Vat/sale tax	Basic custom duty
Central tax	Toll tax
Entertainment tax	Alcohol for human consumption
Luxury tax	Property tax
Purchase tax	
Entry tax	

3.2 GST Law
- One CGST law will be applicable all over India.
- Separate SGST law for every State with common provisions for various essential items.

3.3 GST Structure
- Dual structure – **Concurrent powers to Union and State** to levy and collect **Goods and**

3.4 Service Tax
- World-wide : Unified Structure

3.5 GST Will Cover
- Sale of goods /'Provision of Service' concept replaced by 'Supply of Goods or of services or both'.
- Stock Transfer/Goods sent for Job Work is also covered.

3.6 GST Will Not Cover
- Taxes on supply of alcoholic liquor for human consumption. State Excise will be payable on this.
- Tobacco & Tobacco Products / Petroleum & Petroleum Products – in addition Central Excise Duty will be levied.

- Electricity.
- Immovable Property / Real Estate.

3.7 Advantages of GST
- More efficient Tax System
- Neutral in its application
- Distributional attraction
- Lower Tax Rates over years
- Eliminating Classification dispute
- Elimination of multiple taxes
- Elimination of cascading effects

3.8 Taxes to Continue
- The taxes, levies and fees which are not related to supply of goods & services
- Basic Custom Duty on Imports
- VAT on certain goods - Petroleum, Alcoholic Liquor for human consumption
- Professional Tax
- Income Tax (being Direct Tax)
- Immovable Property- Stamp duty.
- Motor Vehicle Taxes
- Entertainment tax can be imposed only by Panchayat, Municipality or Regional Council or District Council – of course SGST will be imposed on entertainment
- Basic Customs duty to continue. IGST instead of present CVD and SAD.

3.9 Indirect Tax structure
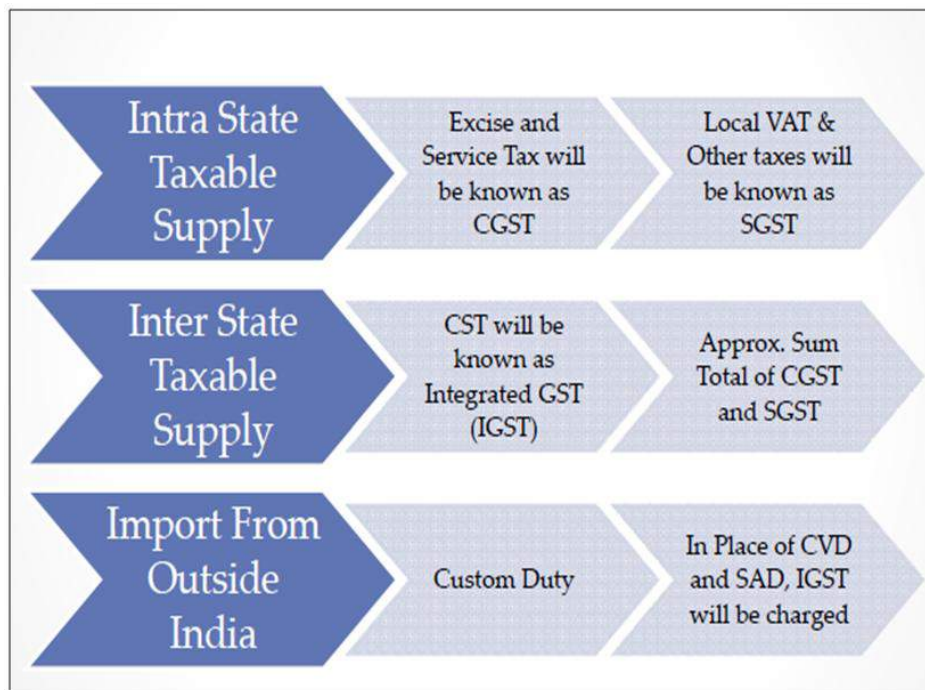
4. POINT OF TAXATION (TIME OF SUPPLY)
4.1 For Goods
1. Normal Supply of Goods-Earliest of removal of goods (in case of movable), made available to recipient (non movable), invoice raising, receipt of payment, accounting in books).
2. Continuous Supply of Goods - on successive payments/statement of account or invoice/payment.
3. Returnable/On Approval Basis - earliest of 6 months/date of confirmation of supply.

4.2 For Service

1. Normal Supply of Service
    a. When Invoice raise within time-Earliest of invoice raising or receipt of payment.
    b. Otherwise-earliest of completion of service, receipt of payment or accounting in books.
2. Continuous supply of services - When due date is ascertainable from contract, the due date else each time payment is received / invoice issued, in case payment is linked to completion of event.

4.3 Reverse Charge
Earliest of date of receipt of Goods/Service, Payment, Invoice, Accounting in books.
5. PLACE OF SUPPLY
5.1 For Goods
Place where the goods are delivered except in case of goods not involve movement, assembled / installed at site --- location of goods.

5.2 For Services
    A. In case of a registered person - location of such registered person.
    B. In case of a unregistered recipient - address of the recipient and if it is not available, the location of the supplier of services.

5.3 Payment of Challans
    a. Tax payable as per return shall be paid on or before the last date for filing the return, i.e. on or before 20th of the next month in case of monthly return.
    b. Electronically Generated Challan from GSTN Common Portal
    c. No manually prepared Challan - Online Payment
    d. Anytime, anywhere mode of payment of tax.
    e. Tax collection data in electronic format
    f. Faster remittance of revenue to the Govt. Account
    g. Paperless Transactions
    h. Speedy accounting and reporting
    i. Electronic reconciliation of all receipts
    j. Simplified procedure for Banks
    k. Warehousing for Digital Challan

6. SUGGESTIONS
 • Tax Base should be widened. For this, there should be mechanism that there will be no assessment, audit, survey, search of Registered Person. Instead attempt should be made to find new taxpayers.
 • Advance receipt is also considered in Time of Supply. If GST is payable on advance receipt, then it will be difficult to reconcile the same in returns.
 • If Output is tax free, there will be no ITC on Inputs. This will increase cost of tax free goods and in turn inflation.
 • GST Rates should not be frequently changed, i.e. there should be clear verdict in the Act/Rules that GST Rates will be unchanged for certain period, say 3 years.
 • Bill Wise details of Purchases and Sales should not be asked in Returns. Instead Dealer wise summary will suffice.
 • English Version of Acts & Rules should prevail.
 • There should be illustration/example below each Section.
 • Detailed/Exhaustive FAQ covering all aspects of GST.
 • Nomenclature of various commodities: Besides HSN Codes, common parlance name of commodities should be given.
 • Entry Tax (subsumed) should not be levied by the local bodies.
 • Entertainment Tax (subsumed) should not be levied by the local bodies.
 • All State Govts. should continue existing VAT/Entry Exemptions.

REFERENCES
1. Jaspreet Kaur, Goods and service tax (GST) and its impact; International Journal of Applied Research 2016; 2(8): 385-387.

2. Shakir Shaik, S.A.Sameera, Sk.C. Firoz. Does Goods and Services Tax (GST) Leads to Indian Economic Development?; IOSR Journal of Business and Management (IOSR-JBM). Volume 17, Issue 12 .Ver. III (Dec. 2015), PP 01-05.Websites
3. http://economictimes.indiatimes.com/news/economy/policy
4. http://indianexpress.com/article/explained/gst-bill-parliament
5. http://www.ey.com/in/en/services/ey-goods-and-services-tax-gst

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JOINT FAMILY EDUCATION&WISDOM FROM ANCESTORS - CONCEPTUAL STUDY BY OBSERVATIONS

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Abstract:- What you see has a greater impact on you compared to what you listen. Value system of Joint family and the deep down ability to sacrifice which family member use to hold for each other has created a parallel school of knowledge for many generations. Environment and upbringing teaches you in very subtle manner. One can still observe the lifestyle of parents and grandparents and see how much they care for environment and people around them. Wisdom from ancestors are always coded, they don't teach in explicit manner. They teach in very unusual manner so that message can only be conveyed to the one who is eligible enough to receive that wisdom. Observations on small issues and small acts leads to different level of awareness and it leads to the power of being. Ones you have power of Ancestors wisdom you can feel the deepness and holisticness in your own being which you can transfer to your joint family members and hence the legacy of not only family members will continue but we will also be able to protect great and rare knowledge.
Keywords: Ancestors, Joint family, Knowledge, Education.

1. INTRODUCTION

Knowledge is not completely dependent on books. It can be transferred within family members from one generation to other generations in terms of rituals, deeds, morals, ethical ideologies, behaviours, discipline and in various other ways. Rituals and moral conduct which joint family members follows within family has greater impact on the education structure of child and also the way he will perceive life and environment. From the ancient times, scriptures always quoted a concept called "PITRA KRIN" means "Ancestors Indebtness" which one need to payoff by good deeds in this lifetime. In India you can easily observe people saying this in rural area joint family gatherings that "If a parent raises great and ethical child he is merely paying off the debt of his ancestors"

Observations are the root of any deep wisdom and knowledge. Great scientists, astrologers, writers, poets, painters and many renounced personalities have their breakthrough just by keen observations which we call "UNSPOKEN MESSAGES". Same applies within family members, there is always an UNSPOKEN MESSAGE hidden in every act and every sacrifice which members do for each other. With each generations moving forward the family values, rituals, education seems to be lost if it is not taught or if it is not observed by the new members due to less understanding or different belief system.

2. LEARNINGS FROM JOINT FAMILY EDUCATION

2.1 Atithi & Agantuk

In India you will find people saying, believing and living the word "ATITHI DEVO BHAVAH" but what about AGANTUK and is their any difference between ATHITHI & AGANTUK. Yes there is huge difference and it is never taught in formal education structure and it is not the part of curriculum too but yes in joint family education system one can easily understand the concept just by having dinner with your grandparents or by just sitting near gathering of elderly people. AGANTUK is the person whom you can invite and he will accept your invitation and he will visit your place at the time of invitation. ATITHI is the person who is beyond your reach to invite, you cannot imagine even that you will be able to see that person ones, ATITHI is like god to you because you know that you don't have ability to serve that person but still due to your "PUNYA KARMAS" or by the "GRACE OF ALMIGHTY" that person visited your place than we will call "ATITHI DEVO BHAVAH".

2.2 Pratham Sukh Nirogi Kaya

In joint family you will never see any person going to work or leaving home without having proper food. Health is biggest Wealth one can have. They always focuses on having their own water to drink while travelling. Having at least daily dinner together with all members leads to better bonding and better understanding among members. MAYA means MONEY is always considered a secondary priority in older generations, NIROGI KAYA means

HEALTHY BODY is the top most priority for them and they always conveyed this to younger generations.

2.3 Trikaal Sandhya
Prayers are the part of our soil from thousands of years and when nothing works, prayers do if they are from pure heart and without any selfish motto. TRIKAAL SANDHYA is practised in joint family which ancestors use to practise and believed that it is must for family to receive the blessings of almighty and to be protected from any past curse or any bad karmas within the family. It focuses on prayer with complete devotion three times a day at a fixed time, at a fixed place , facing the fixed direction and with fixed prayer dedicated to a particular deity.

3. TOP TWO ANCESTORS WISDOM MUST FOR FAMILY HEALTH, WEALTH AND LONGETIVITY
3.1 Kuldevi and Kuldevta Poojan
Ancestors always started any function with the prayers and offerings to KULDEVTA AND KULDEVI. Concept of KULDEVI AND KULDEVTA is from ancient time and it is knowledge and wisdom which is transferred from one generation to other by small anecdotes or by just informing to the younger generations. Quoting it in a metaphorical way one can understand this concept by a simple example, KULDEVI AND KULDEVTA are your guardians in different realm of life. They will bestow you the health, wealth and prosperity. If they are not happy with you and your family and even if you consider yourself spiritual and religious, one must face difficulty in life. Joint family members always receive instructions from grandparents to visit KULDEVTA AND KULDEVI temple ones in a year. There are many mythological and ancient stories which focuses on the importance of this pujan which is still practised by many families across India.

3.2 Knowing and Worshiping Your Ishta Devta
Ancestors always restated the fact that "EK SADHE SAB SADHE" means bow down to "ONE". If you dig for even 1000 years to different places you cannot find water but if you dig at right place for few days you can have source of water, this is a metaphorical example to understand that worshipping many GOD will not lead you anywhere but KNOWING your ISHTA DEVTA and worshipping will lead to magical changes in your life. Question is how to know who is your ISHTA DEVTA. From ancient time there is an Astrological method to know that and other is very simple, you can just feel in your being that with which form you can feel connect. Ones you have connect with your ISHTA DEVTA, one need to find the way you are more connected, BHAKTI YOGA, KARMA YOGA or RAJ YOGA.

4. CONCLUSION
Wisdom of joint family and Ancestors need to be protected and transferred to next generations. The more you go deep in your being more is the possibility to achieve great heights of materialism and one you know the futility of materialism you try to find that formless presence in the presence of which everything works and in the absence of which nothing works. Ancestors know that without having the hunger for materialism but for younger generations knowledge and wisdom of joint family members together with their own experiences matters the most. Concept of KULDEVTA & KULDEVI need to be discussed and each member should know how to connect to the higher realm of consciousness by finding ISHTA DEVTA. When one is ready to sacrifice everything like "RISHI DADHICHI" for a greater cause and for a higher purpose one can be eternal and legacy of that pure soul will continue for thousands of years.

REFERENCE
1. William Baker, 1982, Carlyle Newsletter, THE WISDOM OF OUR ANCESTORS and DANIEL HIPPS, Published by Saint Joseph's University Press
2. John C. McCall,Vol. 65, No. 2 (1995), page 256 - 270 (15 pages)Africa: Journal of the International African Institute, Published By - Cambridge University Press

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GLASS CEILING: FEMALES IN SOCIETY - REVIEW OF LITERATURE

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Abstract:- Women in society are a topic which has been drawn after reviewing many research papers. Many studies had proven the existence of glass ceiling in the world where women are continuously facing problem in their career. This problem may be intentional or unintentional. After reviewing the literature the study found hindrances such as un-supporting organizational policies and practices, organizational culture, stereotype attitude of men towards women, pregnancy, absence of role model and training, lack of self efficacy are some of the barriers found in women career advancement. The study do not show the ways of breaking the glass ceiling which can be count as the limitation. But with the help of secondary data, we found that glass ceiling are still in exist in the world.

S. No	Name of Author's	Year	Source of Data	Findings
1.	Firdausia, Yusuf and Anggarani	2020	Primary	1. The findings revealed that there was a strong correlation between gender stereotypes and self-efficacy with the glass ceiling phenomenon experienced by female civil servants in Central Java.
2.	Shaikh and Adel	2020	Primary	1. Lack of a female mentor as a barrier to forward progress and growth. 2. Women do not found much time to spend her time with her children or family. 3. Equal pay remains an issue. 4. Women more likely to experience physical, emotional, and verbal abuse.
3.	Weaver, Smith and Sims	2020	Primary	1. Due to poor representation, women are less likely to be recognized as experts in their field, and not asked to give named lectureships which then create a barrier to promotion. 2. The low rate of female named speakers suggests that there remains a "glass ceiling" when it comes to upper-level participation in national trauma meetings.
4.	Srivastava, Madan and	2020	Primary	1. The study revealed that there is reciprocal relation between glass ceiling and employment satisfaction which shows

	Dhawan			that when glass ceiling exist in the workplace, employee feels demoralized and found no career in the organization.

2. Further the outcome of the investigation revealed that after introducing the mediating variables that is trust and workplace identification will decrease the impact of glass ceiling and increase the career satisfaction.

3. The study also found that absence of informal networking, mentoring, poor working condition in the workplace and unsupportive family members are the indirect causes of glass ceiling. |
| 5. | Omar Hussein Karie and Dr. Stanley Kavale | 2019 | Primary | 1. The study found that two barriers namely individual and organization barriers which hamper the women career enhancement.

2. The study also revealed that there is positive interconnection between stereotype and women leadership in the organization.

3. Women also faced problem due to pregnancy as after that she is not allowed for increment or promotion.

4. The study also revealed that higher the education wider will be the gender gap.

5. There is a correlation between advanced education and women leadership.

6. Lastly, the study also found that there is no correlation between organizational culture and women leadership |
| 6. | Wolfert, Rohde, Mielke and Duran | 2019 | Primary | 1. Absence of same gender role model

2. Women are more concerned about their family responsibilities as compared to their career.

3. Women perceived that they do not get the equal opportunities as men get and |

				feeling disadvantage for being a woman.
7.	M. Bastida Domínguez, et al.	201 9	Primary	1. Women do not have the international capabilities to represent herself. 2. Absence of network also creates hurdles in women life. 3. Traditional stereotype made organization to make male dominated culture. 4. Due to this, women forms negative attitude.
8.	Carvalho, Costa, Lykke and Torres	201 9	Primary	1. Women work revealed that hidden discrimination is more pervasive than overt discrimination. 2. Women are family oriented. 3. Assumption that women are less competent than men. 4. Male homo-social ties and exclusionary practices.
9.	Tiwari, Mathur and Awasthi	201 9	Primary	1. The investigation found that there is positive correlation between glass ceiling and organizational turnover intention. 2. The study also found that there is positive relation organizational commitment and turnover intentions. 3. The study also found that there is negative relation between glass ceiling and organizational commitment.
10.	Azeer and Priyadarshi ni	201 8	Primary	1. The investigation developed the theoretical models. 2. Found personal barriers, societal barriers and organizational barriers as independent variable. 3. Dependent variable as career advancement of women which directly influence each others. 4. The result of investigation showed that

				societal barrier affects the most in women employment along with personal barriers and the perception of management.
11.	Junaimah and Vinccilau	2018	Primary	1. The study found that culture of the association, networking in the organization and hierarchical practices significantly affect profession improvement of women. 2. Further it was found that family factor and personality characteristics has no critical effect on women progression advancement. 3. Where society support which was treated as moderate variable in the investigation.
12.	Edirisinghe, CL	2018	Primary	1. There is moderate strong positive correlation between individual and organizational barriers on glass ceiling effects. 2. Further, organizational barriers (40.3% of the variances) contribute more on glass ceiling as compared to individual barriers (36.2 % of the variances)
13.	Dr. Rohini G Shetty	2018	Secondary	1. The investigation found that there are some barriers like perceptual barriers, attitudinal barriers and family barriers that affects the women career advancement in the organization. 2. Further the study also found the barriers to women leadership and these are as follows: Inclinations and Costs of Entry, yearnings and desires, repugnance for competition, gender discrimination, measurable discrimination, discrimination in selection, absence of access of possible female contender to casual systems administration openings and absence of women recognition.
14.	Mitashree Tripathy	2018	Secondary	1. The investigation found that due to stereotypical attitude and prejudice of men towards women creates problem in

women career especially in male oriented culture.

2. Discouragement and stereotype discrimination is common in India where women are not allowed to take managerial position.

3. Although working pattern are same for males and females, still male are paid more than women.

4. Further the promotion criteria also vary, where male are easily promoted in the organization as compared to women.

5. Marriage, maternity and domestic obligation creates problem I women career.

6. Lastly, the study also revealed that neither family nor association help women in enhancement but always create problem in their career in India context.

15.	Saxena and Kawitkar	2017	Primary	1. Biased based impediment have a noteworthy effect in the advancement of female. 2. The investigation found that females are getting indistinguishable open doors from men partner for development and advancement. 3. Females are not easily acceptable as leaders in the association and this hamper the growth of female enhancement.
16.	Saleem, Rafiq and Yusaf	2017	Secondary	1. Social role theory and discriminatory constraint was contrarily identified with both female viability and choice advancement. 2. The examination distinguished a few factors, such as under-portrayal of women on Board of Director meeting and stereotypical attitudes frames of mind towards women that stop women to

contact her goal place (top level).

17.	Lathabhavan and Arasu	2017	Primary	1. There is existence of glass ceiling factors in Asian organization where these factors are divided under some theories.
				2. These factors are as follows personal centered, situational centered, social role theory interaction centered theory, human capital, family obstacles were found mainly in different region in Asian Organization that affect the women enhancement
18.	Rathore. S	2017	Primary	1. There are some hindrances that affect the women employment in the workplace.
				2. The study also showed that discriminatory limitation and women vocation improvement have a moderate negative relationship.
				3. Further it was also found that individual factor, organizational factor and cultural factor significantly affect women career advancement.
				4. Among those family factor has more impacts on the biased based impediment.
19.	Fosuah, Agyedu and Gynamfi	2017	Primary	1. The investigation found the four elements which influence female employment in the workplace.
				2. These elements are gender personality traits, human resource traits, societal barriers and government barriers.
				3. On the other hand, the study also indicates that there is negative impact on public institution. Due to many reason like sexual harassment in workplace, bias in promotion which is normally done by management, under-representation of women from the society, absence of women who have high profile role model that increases labor turnover. This enforced women to give up in her life.

| 20. | Lathabhavan and Balasubramanian | 2017 | Secondary | 1. The study takes different theories like person oriented, organizational oriented, social role theory, interaction oriented, human capital and preference theory which are related to the barriers faced by women in the organization.

2. The study also found that the presence of social, cultural and religious barriers stops women to easily enter to the managerial hierarchy.

3. Gender bias attitude, gender wage gap and the culture of organization hampers women career enhancement in the nations like China, Japan, South Korea and North Korea.

4. The study also revealed that organizational obstruction and cultural obstruction is the main barrier in women life in Malaysia, Singapore, Indonesia and Thailand from Southeast Asia and Tajikistan and Uzbekistan. |
| 21. | Karin Amrein · Simone Stoisser · Magdalena Hoffmann | 2017 | Secondary | 1. Women in high profile was found rare in the Australian organization.

2. Old boy club in the organization don't let females to reach the managerial hierarchy.

3. Nepotism and sexual harassment are the two main reasons for where women work harder for same academic recognition.

4. Traditional stereotype attitude for women are still exist in the world.

5. Un-supporting family members are also the reason where women take their step back from the managerial position. |
| 22. | Smt. Nabanita and Smt. Paramita Chatterjee | 2017 | Primary | 1. The study revealed that the glass ceiling and women career development (WCD) have a moderate negative relationship and furthermore show that Individual elements, organizational |

variables and Cultural components significantly affect women career development.

2. The current paper investigations the sexual orientation holes and segregation of females in their vocation. The significant obstacles influencing females' interest in the labor force is the absence of schooling and abilities.

3. It likewise centers around the critical impacts of the glass ceiling on women career development (WCD) of executive level and limited scope business level.

23.	Konstantinos Vassakis, Georgia Sakka and Christos Lemonakis	2017	Primary	The outcomes demonstrate that sexual orientation job generalizations are tested. It appears to be that the apparent administrators' character is involved both agentic/manly and shared/females like attributes and this discernment isn't seen distinctively by people. This discussion on whether the "biased based impediment" exists because of different determinants.
24.	Thomas H. Stone, Jeff Foster, Brian D. Webster, Jennifer Harrison & I. M. Jawahar	2016	Primary	1. The study found that sexual orientation had just negligible consequences for evaluations for few explicit work execution measurements. 2. This was by and large obvious whether or not the work Execution measurement was more agentic or shared in nature, regardless of whether the work was an administrative or a non-managerial position, and paying little heed to the extent of men or females that generally involve a particular work. 3. In general, our outcomes are more reliable with the sexual orientation similitude speculation than the organization/fellowship worldview and job congruity. 4. Performance evaluation favor men as men is considered as risk taker and found

that men have high self confidence whereas women are high rated on achievement and work ethics.

25.	Madhulata	2016	Primary	1. The study revealed that sex based unfair limitation is discovered wherever on the planet it was discovered that practically all investigations show presence of unattainable rank in abroad, two examinations showed that in the present time biased based impediment is breaking and just one examination uncovered non-presence of discriminatory constraint abroad. 2. In India additionally all examinations show presence of unfair limitation, through audit of writing basic variables were assessed which prompts low portrayal of females in top positions and the grouping of factor affecting the most was hierarchical factor, individual factor, generalizing factor, socio – social factor, political factor and inappropriate behavior.
26.	K.N. Ginige, R.D.G. Amaratunga, R. Haigh	2016	Secondary	1. The perspectives and generalizations of society in regards to overseeing work and assets in that hard climate - by females, typically expected to be the heart of the family scene, with social duties and in the customary nurturing job - are forestalling the advancement of women chiefs in the business. 2. Since perspectives are individuals' inclinations or propensities that impact their reaction to circumstances, exercises or individuals, changing perspectives can be utilized as an incredible gadget for adjusting the example of reasoning and human conduct. 3. The development business will profit with more women chiefs if the horrible perspectives in regards to the advancement of females administrators

can be changed.

27.	Carol Kulik	2015	Secondary	1. Stereotype attitude and absence of role model are the major barriers found in women life and influence the leadership style.
				2. Male dominated culture in the organization affects women advancement.
				3. Performance evaluation and reward management support men as compared to women.
28.	Mpho M. Pheko	2014	Primary	1. The study found that individual and family barriers affects women career enhancement in Batswana.
				2. Lack of support from the top management also affects the most.
				3. The study also found that the women in top also don't let other women in top hierarchy.
				4. Informal networking that excludes women in men's group also has negative impact on women awareness and enhancement.
				5. Tokenism also affects career advancement of women in the organization.
29.	Dominique E. Uwizeyimana and Navela S Mathevula	2014	Primary	1. The primary finding of this exploration is that while there is by all accounts sex based distinction on certain elements like family obligations, absence of desire to the executives positions, absence of portability, female instructors' wellness to stand firm on administration situations and absence of steady organizations similar to the fundamental obstructions to female instructors' advancement in school the board positions; the sex put together contrasts exist with respect to different factors, for example, absence of support from male partners, sexual orientation generalizing, female

				instructors' vulnerability about their own capacities to oversee.
30.	Helen K. Arkorful, Frederick Doe and Collins B. Agyemang	2014	Primary	1. Workers from public associations showed more positive mentality towards female administrators than workers from the private area.

2. Workers who had fulfilling past collaborations with female supervisors were probably going to communicate inspirational disposition toward them than the individuals who had unfortunate encounters.

3. Female workers and more youthful representatives exhibited more ideal perspectives toward female administrators than male and more established workers. 4. The current discoveries loan backing to the social character hypothesis that females would be more open than male to the fittingness of having women serve in administrative jobs however repudiate the situation of the job incoherency hypothesis that women performing agentic jobs normal for men will be opposed in light of the fact that they are performing jobs unique of their sex. |
| 31. | Awais Jabbar and Asma Imran | 2013 | Primary | 1. The study shown that to a huge degree, the insight different relying upon the respondent's variety in the segment profile. In this manner, developing mindfulness about the work power variety and equivalent utilizing open doors in the general public at the more extensive level and in the organization's labor force on the limited level can be thoroughly examined and viable system to diminish the unreasonable impediment impact that women faces in the organization. |
| 32. | Antoni Bernard | 2013 | Primary | 1. The study found that formal and secret hierarchical practices, which maintained sexual orientation separation and predisposition, were the fundamental |

difficulties that women face.

2. These practices incorporated the insufficient convenience of women novel physical, personality and balance of fun and serious activities needs.

3. Components of women versatility incorporated the utilization of gentility, receiving male qualities, mentorship and intrinsic inspirational elements.

| 33. | Indra Devi Subramania and Tanusia Arumugam | 2013 | Primary | 1. The study found the barriers like family related hindrances, negative stereotype, discriminatory constraint and ability the executives essentially contributed 36% to the variety in females directors' profession movement. The entirety of the factors had huge relationship with women administrators' vocation movement.

2. Negative stereotype was found to contribute most to the variety in women administrators' profession movement followed by family related boundaries, ability the executives and unfair limitation. |
| 34. | Thembinkosi Tshabalala and Tichaona Mapolisa | 2013 | Primary | 1. The finding showed that there are numerous unpretentious boundaries that upset the rise of women into senior administrative roles. The public authority has proclaimed extremely sure strategies for women headway but then has overlooked the social and social practices that nullify female's progression.

2. The examination likewise uncovered that there are not many females educators with the essential capabilities to take up administrative roles. The investigation suggests that women ought to be conscientised about approaches set up by the public authority for their headway in the work spot and females ought to be urged to concentrate to achieve higher capabilities for qualification for advancement. |

| 35. | Richard F. Martell, Cynthia G. Emrich, James Robison-Cox | 2012 | Primary | 1. The study found that sexual orientation isolation in associations is an new wonder that emerges from the aggregate conduct of people who express just a little inclination for guys, working together with the signs administering advancement choices and hierarchical versatility

2. The rise of a sex isolated organization is frequently unexpected and the base up and top–down measures that produce isolation are hard to see.

3. Agent-based displaying is particularly appropriate for enlightening the elements of predisposition that produce sex isolated associations.

Further this theory is considered in literature on association stratification by

1. Noteworthy the way in which miniature level and large scale level powers plot, intermittently accidentally, to create sex isolated associations.

2. Giving new and altogether different bearings for future exploration on sexual orientation isolation that depend on specialist based displaying; and in particular

3. Moving 30-year banter over "this present reality" effect of sexual orientation predisposition that keeps on involving the field of human asset the executives and, most as of late, Supreme Court judges on to more rich ground. |
| 36. | Janka I. Stoker • Mandy Van der Velde •

Joris Lammers | 2012 | Primary | 1. The outcomes affirm our speculations that, although the overall generalization of a director is manly also, albeit most lean toward a man as a supervisor, female workers, representatives with a female supervisor, and representatives working in an association with a high rate of female supervisors, have a more grounded inclination for women like |

attributes of supervisors and for female administrators.

2. Additionally, we track down that proximal factors are a lot more grounded indicators of these inclinations than more distal factors.

37.	Ronit Kark and Ronit Waismal Manor	2012	Primary	The finding show that among both male and female pioneers, 'hermaphrodism' was all the more unequivocally identified with groundbreaking authority and adherents' recognizable proof than 'non-bisexuality', and that pioneers' 'womanliness' was more emphatically identified with administration viability than 'manliness'. Besides, the outcomes show that females took care of a higher punishment for not being seen as 'gender ambiguous' (blending 'gentility' and 'manliness'), in contrast with men as to individual recognizable proof. While inspecting same-versus cross-sex connections, we tracked down that 'non-hermaphroditic's male administrators were appraised higher by their male workers than by their female representatives. Our discoveries propose that females and men who are keen on being seen as successful pioneers might be very much encouraged to mix 'female' and 'manly' practices, and surprisingly more so when they are in circumstances of non-congruency (i.e., females in influential positions and driving in cross-sex connections)
38.	Rajshekhar (Raj) G. Javalgi and Robert Scherer, Carol Sa´nchez et.al	2010	Primary	The discoveries show that cliché view of women as administrators exist between people in the USA, China, and Chile.

2.US and Chilean men had more certain impression of women as administrators than Chinese men. Chinese people showed the least discernments of women as chiefs. |

39.	Galanaki, E., Papalexandris, N. and Chalikias, J.	2009	Primary	1. The study also found that more prominent presence of women in administrative positions, and moderately stable perspectives towards women as chiefs. Fulfillment with boss doesn't seem, by all accounts, to be altogether connected with the supervisors' sexual orientation, while, simultaneously, no critical contrast seems to exist between the authority styles that male and female chief receive.
40.	Maria D'Agostino and Helisse Levine	2009		1. In opposition to assumptions, the connection between profession movement of women and family-accommodating usage doesn't have all the earmarks of being genuinely huge. In any case, the time it takes respondents who used family-accommodating practices in their associations to arrive at upper-level the board diminished by 0.037 years. 2. Furthermore, in opposition to assumptions, women who use advancement rehearses are bound to accomplish leader level status, despite the fact that it doesn't really take them less an ideal opportunity to do as such.
41.	Vishal K. Gupta, Daniel B. Turban, S. Arzu Wasti and Arijit Sikdar	2009	Primary	1. The study found that business visionaries were seen to have transcendently manly qualities. Extra outcomes uncovered that albeit the two people see business visionaries to have qualities like those of guys (manly gender role generalization), just women additionally saw business people and females as having comparative attributes (female like sex job generalization). 2. Further, however people didn't vary in their innovative aims, the individuals who saw themselves as more like peoples (high on male gender distinguishing proof) had higher pioneering aims than those who considered themselves to be less like peoples (low male sex distinguishing proof). No such distinction was found for

				individuals who considered themselves to be pretty much like females (female sex recognizable proof).
42.	Canan Koca*, Bengu Arslan and F. Hulya Ascı	2009	Primary	1. The finding demonstrate that both female and male laborers in the GDYS scored lower on their perspectives towards women work jobs and held more negative mentalities towards women chiefs. Although male laborers scored higher on mentalities towards women work parts than female specialists they held more negative mentalities towards women chiefs.
43.	Chieh-Chen Bowen, Yan Wu, Chi-en Hwang and Robert F. Scherer	2007	Primary	1.The study also found that there is an overall absence of comprehension of the Chinese culture and absence of experimental investigation on view of women

As administrators in China.

2. This investigation gives verifiable, social, social and legitimate settings of the Chinese society and exactly looks at mentalities toward women as chiefs among understudies and laborers.

3. Results show huge sexual orientation and test impacts. Further examination uncovered that the sex impact was more grounded than the example impact.

4. Women have a much more certain, liberal and libertarian mentality toward females as administrators than men. Nonetheless, the disastrous likenesses in mentalities toward females as chiefs between more youthful male understudies and more seasoned male laborers show that we actually have some time to stand by before women truly hold up portion of the sky in China. |
| 44. | Dimitrios Mihail | 2006 | Primary | 1. The investigation revealed that the essential wellspring of forming respondents' mentalities is their own sex. |

				2. Other individual qualities like age, schooling, administrative experience, and working under a female director appear to be not to measurably affect representatives' stereotypic mentalities toward women in administration.
				3. Besides, hierarchical attributes like the association's ethnicity, proprietorship, area, or division don't appear to give any wellspring of difference in workers' perspectives.
45.	Peter Dudno	1985	Primary	1. The study found that male students had negative attitude towards women officers. 2. During the period of 1975-1983, when feminism came into forced still male attitude towards women did not change. 3. Due to this attitude, male who hold the top position creates problems in women career. 4. Gender wage gap also found in the study where male gets more salary as compared to women

REFERENCES

1. Agostino, M., & Levine, H. (2010). The career progression of women in state government agencies. Gender in Management: An International Journal , 25 (1), 22-36.
2. Amrein, K., Stoisser, S., & Hoffmann, M. (2017). Women atmedical conferences 2016 – still hitting their head at the glass ceiling. Wien Klin Wochenschr , 129, 287-288.
3. Arkorful, H., Doe, F., & Agyemang, C. (2014). Attitude of Private and Public Sector Employees towards Female Managers in GhanaInternational Journal of Human Resource Studies. International Journal of Human Resource Studies , 4 (3), 241-253.
4. Azeez, N. P., & Priyadarshini, R. (2018). Glass ceiling factors affecting women career advancement in IT industry in India. OP Conference Series: Materials Science and Engineering , 390, 1-8.
5. Barnard, A., & Martin, P. (2013). The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. SA Journal of Industrial Psychology , 39 (2), 12.
6. Bates, C. K. (2020). From the Editor's Desk: Can JGIM Promote Cracks in the Glass Ceiling? J Gen Intern Med .
7. Bowen, C., Wu, Y., Hwang, C., & Scherer, R. (2007). Holding up half of the sky? Attitudes toward women as managers in the People's Republic of China. International Journal of Human Resource Management , 18 (2), 268–283.
8. Carvalho, I., Costa, C., Lykke, N., & Torres, A. (2018). Women at the Top of Tourism Organizations. Journal of Human Resources in Hospitality & Tourism , 17 (2).
9. Domínguez, M. B., Rivo-López, E., & Villar, M. V. (2019). 'The glass ceiling':Myth or reality? An expatriation perspective. Organizational Dynamics , 48, 1-8.
10. Dubno, P. (1985). Attitude towards women executives: A longitudinal Approach. The Academy of Management Journal , 28 (1), 235-239.
11. Edirisinghe, C. (2018). The Paradox of Glass Ceiling Effect: A Study on the Individual Barrier and Organizational Barrier among Female Executives in the Selected Large Apparel Industry, Sri Lanka. International Journal of Scientific and Research Publications , 8 (8), 343-348.
12. Elkbuli, A., & Shaikh, S. (2020). Women trauma surgeons penetrating the glass ceiling. The American Journal of Surgery , 220 (5).

13. Firdausia, S., Yusuf, M., & Anggarani, F. K. (2020). Gender Stereotypes and Self-Efficacy as Determinants of the Glass Ceiling Effect: A Study of Female Civil Servants in Central Java. Jurnal Psikologi , 47 (1), 56-63.

14. Fosuah, Agyedu, & Gynamfi. (2017). Effect of Glss ceiling on Women Advancement. The International Journal Of Business & Management , 5 (10), 257-267.

15. Galanaki, E., Papalexandris, N., & Chalikias, J. (2009). REVISITING LEADERSHIP STYLES AND ATTITUDES TOWARDS WOMEN AS MANAGERS IN GREECE: 15 YEARS LATER. Gender in Management: An International Journal , 1-24.

16. Ginige, K., Amaratunga, R., & Haigh, R. (2007). EFFECT OF ATTITUDES TOWARDS CREATING WOMEN MANAGERS IN THE CONSTRUCTION INDUSTRY. 7th International Postgraduate Conference in the Built and Human Environment , 169-.

17. Gupta, V., Turban, D., Wasti, A., & Sikdar, A. (2009). The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur. ENTREPRENEURSHIP THEORY and PRACTICE , 397-417.

18. Jabbar, A., & Imran, A. (2013). Perception of Glass Ceiling in the Educational Institution: An Evidence from Pakistan. World Applied Sciences Journal , 23 (5), 628-634.

19. Jauhar, J., & Lau, V. (2018). The 'Glass Ceiling' and Women's Career Advancement to Top Management: The Moderating Effect of Social Support. Global Business and Management Research: An International Journal , 10 (1), 163-178.

20. Javalgi, R., Scherer, R., Sa´nchez, C., Rojas, L., Daza, V., Hwang, C., et al. (2011). A comparative analysis of the attitudes toward women managers in China, Chile,and the USA. International Journal of Emerging Markets , 6 (3), 233-253.

21. Karie, O., & Kavale, S. (2019). Factors Affecting Women Leadership in Secondary Education in Benadir Region, Mogadishu – Somalia. INTERNATIONAL JOURNALS OF ACADEMICS & RESEARCH , 1 (4), 56-69.

22. Koca, C., Arslan, B., & Hülya As¸çı, F. (2009). Attitudes towards Women's Work Roles and Women Managers in a Sports Organization: The Case of TurkeygwaO. Gender, Work and Organization. , 1-21.

23. Kulik, C. (2015). GENDER RESEARCH IN AMJ: AN OVERVIEW OF FIVE DECADES OF RESEARCH AND CALLS TO ACTION. Academy of Management Journal , 58 (5), 1459–1475.

24. Lathabhavan, R., & Arasu, S. (2017). "Glass Ceiling and Women Employees in Asian Organizations: A Tridecadal Review". Asia-Pacific Journal of Business Administration , 9 (3), 232-246.

25. Madhulata. (2016). EXISTENCE OF GLASS CEILING AND FACTORS AFFECTING WOMEN IN REACHING TOP POSITIONS. International Journal of Advanced Research , 4 (12), 1448-1460.

26. Martell, R., Emrich, C., & Robison-Cox, J. (2012). From bias to exclusion: A multilevel emergent theory of gender segregation in organizations. Research in Organizational Behavior , 32, 137–162.

27. Mihail, D. (2006). Gender-based stereotypes in the workplace: the case of Greece. Equal Opportunities International , 25 (5), 373-388.

28. Mihail, D. (2006). Women in management: genderstereotypes and students' attitudes in Greece. Women in management Review , 21 (8), 681-689.

29. Nabanita, & Chatterjee, P. (2017). EFFECTS OF GLASS CEILING ON WOMEN CAREER DEVELOPMENT IN INDIA. International Research Journal of Management Sociology & Humanity , 8 (2), 109-125.

30. Pheko, M. (2014). Batswana female managers' career experiences and perspectives on corporate mobility and success. SA Journal of Human Resource , 12 (1).

31. Rathore, S. (2017). Coperate glass ceiling : An Impact on Indian Women Employee. International Journal of Engineering and Management Research , 7 (4), 264-269.

32. Saleem, S., Rafiq, A., & Yusaf, S. (2017). "Investigating the glass ceiling phenomenon: an empirical study of glass ceiling's effects on selection - promotion and female effectiveness. South Asian Journal of Business Studies , 6 (3), 297-313 .

33. Saxena, V., & Kawitkar, S. S. (2017). STUDY OF GLASS CEILIING IN PROMOTION OF FEMALE EMPLOYEES IN AMRAVATI CITY (With special reference to Corporate Sector). International Journal of Management, IT & Engineering , 7 (6), 207-219.

34. Shetty, R. (2018). Labyrinth of Women Leaders : Manifestations& Ramifications. International Journal in Management and Social Science , 6 (4), 43-53.

35. Stoker, J., Van der Velde, M., & Lammers, J. (2012). Factors Relating to Managerial Stereotypes: The Role of Gender of the Employee and the Manager and Management Gender Ratio. Journal Business Psychology , 27, 31–42.

36. Stone, T., Foster, J., Webster, B., Harrison, J., & Jawahar, I. M. (2016). Gender differences in supervisors' multidimensional performance ratings: Large sample evidence. HUMAN PERFORMANCE , 29 (5), 428–446.

37. Subramaniam, I., & Arumugam, T. (2013). What is Preventing Malaysian Women Managers' Career Progression? Journal of Basic and Applied Scientific Research , 3 (5), 86-296.

38. Tiwari, M., Mathur, G., & Awasthi, S. (2019). A STUDY ON THE EFFECTS OF GLASS CEILING & ORGANIZATIONAL COMMITMENT ON CORPORATE WOMEN'S TURNOVER INTENTIONS. Academy of Strategic Management Journal , 18 (2).

39. Trpathy, M. (2018). Breaking the Code of Gender Barrier to Leverage the Position of Women in Indian Workplaces. A peer reviewed India focused International Journal in Humanities and Social Sciences , 6 (3), 180-193.

40. Tshabalala, T., & Mapolisa, T. (2013). FACTORS CONTRIBUTING TOWARDS THE LOW REPRESENTATION OF WOMEN IN LEADERSHIP POSITIONS IN ZIMBABWEAN SCHOOLS: A CASE STUDY OF NKAYI NORTH CIRCUIT. International Journal of Advanced Research , 1 (10), 746-752.

41. Uwizeyimana, D., & Mathevula, N. (2014). Promotion of Female Educators into School Management Positions: A Gendered Perspective. Mediterranean Journal of Social Sciences , 5 (20), 1203-1213.

42. Vassakis, K., Sakka, G., & Lemonakis, C. (2018). Demystification of the glass ceiling phenomenon Gender stereotyping and successful managers' personality traits in Greece. EuroMed Journal of Business , 13 (1), 2-19.

43. Weaver, J., Smith, A., & Sims, C. (2020). Is there a glass ceiling at national trauma meetings? American journal of surgery .
44. Wolfert, C., Rohde, V., Mielke, D., & Hernández-Durán, S. (2019). Female Neurosurgeons in Europe—On a Prevailing Glass Ceiling. Women in Neurosurgery , 7 (1), 1-8.

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DATA DRIVEN FARMING AN INNOVATIVE CONCEPT OF AGRICULTURE IN INDIA

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Abstract:- World demand for food is going to increase by 70% in the next 30 years in spite of increasing agriculture productivity there is decline in agriculture labour, decrease in cultivated land, rise in temperature, shifting in weather pattern, land degradation etc. To overcome all these challenges in agriculture sector Precision farming or Data Driven Farming is the only way which integrates information technology, artificial intelligence with the agricultural sciences to increase the production of agriculture farms in sustainable and eco-friendly way.
The main objective of the present research is-
1. To understand the strategies of precision farming.
2. To know the challenges of Precision farming adaptation into Indian agriculture sector.

Keywords: Precision Farming, spatial variability, GPS, GIS, Artificial intelligence.

1. INTRODUCTION

The world food problem is increasing day by day. It is estimated that world's food production needs to be increased by 70% by 2050 to feed the whole population of the world, but if you think of providing nutrient rich food to the world then the problem is even more severe. (GAP Report 2018) This is because of limited land resource, less water availability etc. The Agriculture scientists have been thinking about this problem and most innovative approach right now seems to be Data driven Farming or Precision Agriculture.

2. PRECISION AGRICULTURE

Precision Agriculture is the new concept of farming where agriculture inputs are used effectively and efficiently to increase the productivityof the crops without land degradation and environmental pollution. It is becoming popular in modern agriculture practices by using Information technologies like-
- GIS: Geographical Information System
- GPS: Global positioning System
- Remote Sensing

2.1 The Main Inputs where Precision Agriculture Works

The major inputs on which precision agriculture works are Pesticides, fertilizers, tillage, and irrigation water. The main principle on which Precision Agriculture works is 4R principal.
1. Right thing
2. Right place
3. Right way
4. Right time

It is the technique which has been shown to improve crop yield, reduce the cost of cultivation of crops as farmers will have to use less water, less pesticides and thereby safe the environment by unnecessary inputs. (Liagh at and Balasundaram, 2010) Thus today through the concept of Precision Agriculture we can produce more crops of good quality with lot of efficiency.

3. MANAGEMENT STRATEGY

Site specific management strategy is followed in Precision Agriculture. The tools which are used in Data Driven farming are trying to quantify changes in either crop canopy or soil types then it is documented and finally decisions are made for specific locations instead of considering the complete farm uniformly. In other words Precision Farming usually quantify spatial Variability and translate it to decision model, instead of applying same amount of nutrient to the entire field. It is programed in such a way that more inputs are applied in the places where it was not being focused earlier and less input are applied where everything is in optimum level.

3.1 How to address Spatial Variability?

According to Precision agriculture concept one big field should be evaluated separately not uniformly to get higher yields at low cost. It reallocates some of the resources where it is not required and move them to the areas where they can make a difference.

There are many approaches to explain Spatial Variability. In the field of Agriculture there are many variables or factors which effects farming like Crop, Pest, weeds, climate, soil, and Water etc. The two best approaches which explain this variability are:

3.1.1 Soil Base Management

It can be performed in the field with the use of following tools of Precision Agriculture

  i.   **The Bare Soil Imagery**: It provides information on soil organic matter, moisture content and other soil properties (bilk density, texture etc.)
 ii.   **Field Topography:** The field topography can be studied with the help of high resolution GPS maps.It is important because the yield of crop is related to the field topography or elevation Maps.
iii.   **Farmer's Experience :** The farmer go out and map the field boundary and with the use of GIS make some polygons considering the part of field which produces more , medium and low yield year after year.

The overall findings of nutrient management across soil Zones has shown to enhance:

  a.   Overall grain yield of the field.
  b.   Nutrient use efficiency
  c.   Net returns to the farmers
  d.   Reduces overall nutrient losses from the field.

In the above discussion only soil management zones are considered which only the first half part ofthe picture is.

3.1.2 Crop Based Management

This is the second half of the picture. The tools which are commonly used in crop based management are Handheld sensors, tractor mounted sensors etc. Soil sensing along with crop sensing can bring good output from the field by providing efficient nutrient management.

4. PRESENT SCENARIO OF PRECISION AGRICULTURE IN INDIA

The Precision Agriculture is very much discussed in developed country but in India it is in the infancy stage. In India ISRO and CPRI has only initiated the use of remote sensors and artificial intelligence in the field of agriculture (Panigrahy and Parihar., 2001)The main challenges of using precision agriculture in India are listed below:

  1.   Small farm size.
  2.   Weak internet connectivity in rural areas.
  3.   High investment costs.
  4.   Knowledge and technical gaps.
  5.   Lack of technical experts.

4.1 All These Above Challenges can easily be solved

Problem of small farm size should be converted to Group farming so that reasonable amount of data can be collected through data driven farming. (Haile and Wassie, 2016)

Problem of Weak internet connectivity in rural areas can be solved with the use of T.V white spaces. In villages lot of T.V channels are unused. This unused channels provide spectrum of signals at which we can connect lots of sensors, cameras drones etc. for the data collection. (IEEE802.15)

The problem of high investment cost can be managed intelligently by the minimum use of soil and crop sensors in the whole field. Through the use of GPS and GIS, Maps are made which high lights the hot spots area for locating the sensors. So, with the limited number of sensors we can collect the data in short time or with the help of UAV and drones which can fly large area very quickly they have camera in the bottom which can take the image of the entire farm and this aerial image is analysed by the artificial intelligence for developing the model for the entire farm.

Lack of expertise problem in the country can be solved if agriculture professionals will work together with IT professionals. In the field of agriculture we have lots of data which has to be collected properly and needs to be analysed and there after recommends solution to the problem or develop prescriptive models which can be used in future .

5. CONCLUSION

In the last 20 years there has been numerous changes in the way of agriculture. These changes have two sides good as well as bad. Under positive side we are becoming more technical to control the variables of our field but on the other hand due to industrialization and urbanization the misuse of land was made to large extent and has intensified the deterioration of the ecosystem leading to depletion of natural resources. The agriculture in India during 1950-1960 was eco- friendly but now it is chemicalized and commercialised. In future, Indian agriculture will have to face many challenges to provide nutrition. This is the right time to take step to increase agriculture productivity in eco-friendly and sustainable way. The latest knowledge in science and information technology should be used together with conventional agriculture to enhance the productivity. Thus it is the time for Evergreen revolution in agriculture through Precision farming or Data driven farming. Thus by amplifying human ingenuity India can fly into wings of fire, as 800 million people main occupation is agriculture. In the near future, to supplement us with sufficient amount of nutritive food we have to use Precision Agriculture and Artificial Intelligence and landscape our fields with the new found knowledge.

REFERENCES

1. Haile, Wassie. (2016). Re: How to implement Precision agriculture on small farmers holdings in developing countries?
2. IEEE802.15- www. standards.ieee.org/about/get/802/802.15.html
3. Liaghat, S; and Balsundaram, s.k (2010)A review: remote sensing in precision Agriculture, Journal of Agriculture and biological Sciences: Vol5(1) pp 9-10
4. 2018 Global Agricultural Productivity Report® (GAP Report®)
5. Ray, S.S., Panigrahy, P. and Parihar, J.S., 2001, Role of Remote Sensing for precision farming, Space Applications Center (ISRO), Ahmedabad, pp: 1-21.

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ESTABLISHMENT OF COMMERCIAL PLANT TISSUE CULTURE LABORATORY

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1. INTRODUCTION

Plant tissue culture is not a separate branch of plant science like taxonomy, cytology, plant physiology etc. Rather it is a group of experimental strategies of growing large number of isolated cells or tissues under sterile and controlled conditions. The cells or tissues are obtained from any a part of the plant like stem, root, leaf etc. that are encouraged to produce additional cells in culture and to express their totipotency (i.e. their genetic ability to produce a lot of plants). Cells or tissues are fully grown in different varieties of glass vials containing a medium with essential nutrients, vitamins and plant growth regulators. The tissue culture raised plants are free from disease and pest, if the quality procedures are adopted for production. Tissue culture plants grow quicker and higher, however they are as vulnerable as the other plants unless applicable precautions are taken. However, tissue culture plants are free from soil borne and air borne diseases. As tissue culture plants are uniform, vigorous and disease free, if correct cultivation practices are properly followed, the overall yield is expected to be higher compared to traditional plants. Therefore, to carry out the experiments using tissue culture techniques, a well-equipped laboratory is first needed. In recent years there has been a large increase within the range of analysis laboratories using tissue culture techniques to research several elementary and applied aspects of higher plants. However, the utilization of those techniques is not confined to research alone.

Tissue culture techniques are being exploited by several commercial laboratories. Even several agriculture corporations are setting up small units to multiply plants that are difficult to propagate by conventional methods. The general organization of a tissue culture laboratory and the basic techniques are going to be mentioned under different subheadings. A perfect tissue culture laboratory should have a minimum of two huge rooms and a small room. One big area is for general laboratory work like preparation of media, autoclaving, distillation of water etc. the other big area is for keeping cultures under controlled light, temperature and humidity, the small room is for sterile work and for keeping autoclaved articles.

2. PROCESS OF PLANT TISSUE CULTURE
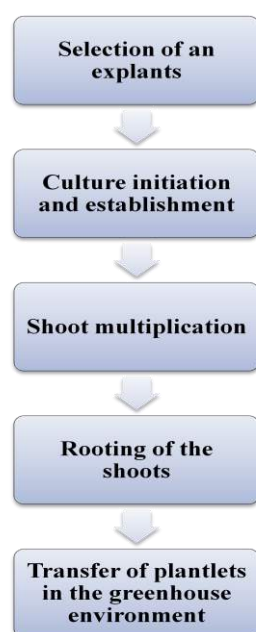
Process of Plant Tissue Culture

2.1 Nutrient Medium Preparation

A semi-solid medium is ready in double distilled water containing macro components, micro components, amino acids, vitamins, iron source, carbon source like sucrose and phyto-hormones. The medium is heated for dissolving the agar and 25 to 50 ml is distributed into every wide mouth bottles. The vessels containing culture media are then sealed and sterilized by autoclaving.

2.2 Establishment of Culture in the Aseptic Condition

The beginning material for the method is generally an actively growing shoot tip of axiliary or terminal bud or shoot tip of a plant. The method of tissue culture starts from the choice of mother plants having the required characteristics. Ex-plant preferably the meristematic tissue of the selected mother plant is isolated. The excised tissue/explant is washed with water then rinsed with a disinfectant like savlon or detol solution followed by a sterile-water wash. The tissue is then dipped in 100% bleach solution for 10 minutes for disinfecting the plant tissue material, killing most of the fungus and microorganism organisms. Sterilization method of explants depends on the plant species and kinds of explants

2.3 Inoculation of Explants under Aseptic Conditions

In this process explants or small shoots are transferred on to the sterilized nutrient medium under sterile condition.

2.4 Transfer and Development of Plants in Growth Room

After the inoculation of the plant tissue, the bottles are sealed and transferred into growth area to trigger developmental process under diffused light (fluorescent light of 1000-2000 lux) at 25 ± 2 and 50 to 60 minutes relative humidity. Light and temperature necessities vary from species to species and generally throughout the varied stages of developments. The cultures are observed daily for growth and any signs of infection/contamination. Cultures, that do not show good growth or infected, are discarded. The healthy cultures grow into tiny shoot buds. These are subcultured on the fresh medium after 4 weeks. The number of subcultures needed is restricted to the plant species, which are standardized. The shoots generally develop when 4 weeks. After enough number of shoots is developed in every container (10 to 15), to a minimum height of 2 cm they are transferred to a different medium for initiating the process of rooting. The constituent of rooting medium for every plant species are specific. Roots are generally formed within 2 to 4 weeks. Plants at this stage are delicate and require careful handling

2.5 Hardening and Acclimatization of Tissue Culture Plant

Hardening process of micro plants because of very high humidity within the culture vessel and artificial conditions of development, the plantlets are tender and are therefore are not prepared for coping up with the field conditions. The plants removed from the sterile medium are washed and are maintained under intermittent mist or are covered with clean clear plastic. After 10 to 15 days under high humidity, the plants are transferred to green house and maintained for another 4 to 6 weeks. They are then able to be transferred to net house or the field. Normally, the tissue culture plants are sold-out either as ex-agar plants or hardened plants from the green house.

Ex-agar plants depending on the parameters like location/the site of planting, soil quality and also the atmospheric condition defined by the client, the ex-agar plant purchasable could be in vitro rooted plants or solely the shoots. When the tissue culture plants are sold at this stage, the plants are washed in sterilized water to get rid of the agar medium. The washed plants are sorted into 2 to 3 grades and packed in corrugated plastic boxes lined with sterilized paper as per specifications of the Plant Quarantine Authority, Government of India for exports. The amount of plants per box depends on the customer's demand, depending on the final destination and also the preference of the client; the plants are treated with specific fungicides and antibiotics to avoid infection. The ex-agar plants are most popular for export or for destinations where hardening facility is available. The plants after being removed from nutrient media should preferably be transplanted within 72 hours.

Hardened plants the plants are transferred to net pots/ protrays for acclimatization after they totally develop shoots and roots in the bottles. The rooted plantlets are

transferred to pots filled with suitable substrate and are watered. This operation is carried out on an open bench. These pots are then transferred to the green house for 4 to 6 weeks. During this process, they are given fertilizers and treated like plantlets obtained by any other means of propagation. After the plants are acclimatized fully, they are transferred to poly-bags. At this stage the plants are completely hardened and are able to be planted in the field for cultivation. Hardening units can be started in sites away from the micropropagation unit.

3. COMPONENTS FOR ESTABLISHMENT OF COMMERCIAL PLANT TISSUE CULTURE UNIT

Room -1	Room -2
❖ Storage room ❖ Media Preparation and Washing area	❖ Inoculation chamber ❖ Growth / Culture Room
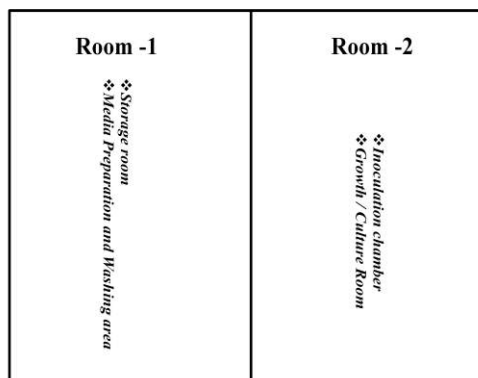
Layout of Plant Tissue Culture Laboratory

3.1 Storage Room
It is advisable to possess a separate space for storage of chemicals, apparatus and equipments. Chemicals needed in little amounts should not be purchased in large quantities as they will lose their activity, pick up wetness or get contaminated. Such issues are overcome by buying small lots on a regular basis.

3.2 Media Preparation and Washing Area
The glassware washing space ought to be situated close to the sterilization area. This space should have a minimum of one large sink but two sinks are preferable with running water. Adequate space is needed on every sides of the sink; this area is employed for glassware soaking and drainage. Plastic netting is placed on surfaces close to the sink to reduce glassware breakage and enhance water drainage. The outlet pipe from the sink should be of PVC to resist damage from acids and alkalis. Both hot and cold water should be available and the water still and de-ionisation unit should be situated near. The washing space should be swapped sporadically. Mobile drying racks is used and lined with gauze to prevent water dripping and loss of little objects. Ovens or hot air-cabinets should be placed on the brink of the glassware washing and storage area. Dust-proof cabinets and storage containers should be installed to permit for easy access to glassware. When culture vessels are removed from the growth space, they are usually autoclaved to kill contaminants and to soften semi-solid media. It should be attainable to maneuver the vessels simply to the washing space. The glassware should be close to the wash area to expedite storage and access for media preparation. The media preparation area should have smooth walls and floors, which change easy cleaning to maintain a high degree of cleanliness. Minimum number of doors and windows should be provided during this area however inside the local fire safety room. Media preparation area should be equipped with each tap and purified water. An applicable system for water purification must be chosen and fitted after careful consideration of the value and quality. Variety of electrical appliances is needed for media preparation; therefore, it is essential to have safety devices like fire extinguisher, fire blanket and a first aid kit within the media preparation space. A range of glassware, plastic ware and stainless-steel equipment is needed for measurement, mixing, and media storage. These should be stored within the cabinets engineered under the worktables and taken out to be used as and when needed. The water supply and glassware should be in or close to the media preparation area. The worktable tops should be made with laminate surfaces

which will tolerate frequent cleansing. Media room should have capability to storage the media for a minimum of 7 days.

3.3 Inoculation Chamber
The most necessary work space is that the inoculation space wherever the core activity takes place. The transfer space must be as clean as possible with lowest air disturbance. The walls and floors of the inoculation area should be smooth to make sure frequent cleanup. The doors and windows should be minimal to stop contamination however inside the local safety code. There is no special lighting demand in the transfer requirement. The illumination of the laminar air flow chamber is comfortable for work. Sterilization of the instruments will be through with glass-bead sterilizers or flaming after dipping in alcohol, usually ethanol. The culture containers should be stacked on mobile carts (trolleys) to facilitate simple movement from the medium to the transfer room, and at last to the culture space. Fireplace extinguishers and first aid kits should be provided within the transfer area as a security measure. Special laboratory shoes and coats should be worn during this area. Ultraviolet (UV) lights are generally installed in transfer areas to disinfect the room; these lights should be used only when people and plant material are not in the room.

3.4 Growth/Culture Room
Culture space is an equally necessary space where plant cultures are maintained under controlled environmental conditions to realize optimum growth. It is recommended to have more than one growth room to supply varied culture conditions since completely different plant species could have different necessities of light and temperature throughout in vitro culture. Also, in the event of the failure of cooling or lighting in one room, the plant cultures can be moved to another room to prevent loss of cultures. In the growth space, the amount of doors should be lowest to stop contamination. The culture containers may be placed on either fixed or mobile shelves. Mobile shelves have the advantage of providing access to cultures from either side of the shelves. The height of the shelves should not exceed 2m. The first source of illumination in the growth room is generally from the lights mounted on the shelves. Overhead light sources can be minimized, as they would be in use only whereas operating during the dark cycle. Plant cultures might not receive uniform light from the traditional downward illumination. Lights directly fitted to the racks create uneven heat distribution. Sideways illumination is an alternative, which requires less number of lights, and provides a lot of uniform lighting. However care has got to be taken to not break the lights while moving the cultures across the shelves.

4. EQUIPMENTS NEED FOR TISSUE CULTURE
Major equipment and instruments required for the plant are as follows.
Autoclave, Laminar air flow cabinet, Equipment for sterilization, Electronic weighing balance, Water distillation apparatus, Air handling units, Refrigerator, Air conditioners, Stereomicroscope, Digital pH meter, Shelves/racks, and Green house material

5. NEED FOR CERTIFICATION OF TISSUE CULTURE RAISED PLANTS
Micropropagation is effectively used for producing quality planting material free from disease. However there is threat of inadvertent propagation of virus infected plants which are able to not only result in loss or poor performance of the crop however additionally spread of virus. Further failure to used normal crop specific guidelines can lead to variations in the plants produced. The most hurtful variants in tissue culture raised plants are those who affect yield through somaclonal variations and carry viruses and different pathogens that are difficult to diagnose. This is an area of great concern and requires a well structured system to support the tissue culture business to ensure virus free quality planting material for industrial production. With the target of production and distribution of quality tissue culture planting materials Department of Biotechnology (DBT), Government of India has established National Certification System for Tissue Culture Raised Plants (NCS TCP). For details concerning NCS-TCP, please refer the manual on "National Certification System for Tissue Culture Raised Plants (NCS-TCP): an overview or log in to www.dbtncstcp.nic.in. DBT is that the Certification agency for the aim for certification of Tissue culture raised plants/propagules up to laboratory level and to manage its genetic

fidelity as authorized vide the Gazette of India Notification dated 10th March 2006 of Ministry of Agriculture under section 8 of the Seeds Act, 1966.

6. ADVANTAGES OF MICROPROPAGATION TECHNOLOGY
- Rapid mass multiplication plants
- Requirement of only limited explants
- Production of true to type plants
- Storage of germplasm
- Production of disease free planting material
- Growth manipulation
- Round the year production
- For species that have long life cycle

7. SUMMARY
Plant tissue culture techniques are indispensable for both basic as well as applied research areas of plant sciences. However, it is recommended to check the basic facilities before the start of any experiment and commercial production of plant to summarize, the major basic facilities used in tissue culture techniques that should be present in a standard tissue culture laboratory include area for washing and storage of plastic ware and glassware, preparation, sterilization and storage of nutrient media, aseptic manipulation of plant material, maintenance of cultures under controlled environmental conditions in culture room, data collection and an area dedicated for the acclimatization of in vitro developed plants for commercial purpose of micropropagation.

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रैगिंग का विद्यार्थी के शैक्षणिक एवं सामाजिक जीवन पर प्रभाव—सामाजिक विधिक अध्ययन

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सारांश :—

प्रत्येक सभ्य समाज के विकास में शिक्षा का महत्वपूर्ण योगदान होता है। समाज के सामाजिक आर्थिक, नैतिक विकास का माध्यम शिक्षा होती है। अतः शिक्षा के प्रसार एवं विकास हेतु शैक्षणिक संस्थाओं की स्थापना की जाती है एवं संस्थानों में एक आदर्श शैक्षणिक वातावरण स्थापित करना आवश्यक है। इस आदर्शवादी शैक्षणिक संस्थान के विकास की संकल्पना के परे उच्च शिक्षा संस्थानों में एक शैक्षणिक जीवन की बुराई संत्रापित करती है जिसे रैगिंग कहते हैं। रैगिंग एक ऐसी सामाजिक बुराई है जो समाज के युवा वर्ग को शिक्षा के क्षेत्र में भय, हिंसा एवं विचलन कराती करती है।

साधारणतः यह घटना देखने में आता है की महाविद्यालयों एवं विश्वविद्यालयों में वरिष्ठ छात्रों द्वार कनिष्ठ छात्रों को मानसिक एवं शारीरिक रूप से प्रताड़ित किया जाता है। इन घटनाओं से संत्रापित कई छात्र छात्राओं के भविष्य की परिणीति न केवल उनके व्यवसायिक व सामाजिक जीवन को प्रभावित करके होती है वरन उनके जीवन के साथ जुड़े सुनहरे भविष्य के सपनों का अंत आत्महत्या के साथ होता है।

सांकेतिक शब्द— रैगिंग, शैक्षणिक संस्थान, शिक्षा, हिंसा, महाविद्यालय, छात्र।

1. प्रस्तावना :—

समाज में शिक्षा के क्षेत्र में रैगिंग एक ज्वलंत व सामान्य समस्या है। रैगिंग ने अपने जन्म से लेकर परिपक्वता तक एक लम्बा मार्ग तय किया है। इस दरमियान रैगिंग ने अपना जो रूप धारण किया है वह सामाजिक व शैक्षणिक ढांचे में सामंजस्य बिठाने में असफल हुआ है। परिणामस्वरूप रैगिंग ने हमारी शैक्षणिक सामाजिक व नैतिक मान्यताओं को आहत किया है। रैगिंग के दुष्प्रभावों में मानसिक व शारीरिक प्रताड़ना के सभी स्वरूपों को सम्मिलित किया जाता है। शारीरिक क्षति के अन्तर्गत मारना—पीटना या फिर आपत्तिजनक लक्ष्यों को रखना जिसकी परिणीति मानसिक आघात के रूप में होती है। भय की अनवरतता, हीनता एवं एकाग्रता की कमी अपराधबोध की भावना को जन्म देती है। इससे भी आगे जाकर रैगिंग का अन्त आत्महत्या पर होता है। रैगिंग के दुष्प्रभाव न सिर्फ पीड़ित तक सीमित नहीं रहते हैं वरन यह पीड़ित के परिवार को भी प्रभावित करते हैं। यदि रैगिंग का गहराई से अध्ययन किया जाये तो हम पायेंगे कि यह जनमानस के अंतःकरण को भी प्रभावित करती है जो कि अपने आने वाली पीढ़ियों के भविष्य के लिए एक चिंता को जन्म देती है। रैगिंग से उत्पन्न भय, आने वाली पीढ़ियों के भविष्य की सम्भावनाओं को प्रभावित व बाधित करता रहा है। विद्यार्थी हमारे देश का भविष्य है इस प्रकार की घटनाओं को समाप्त करने के लिए इसके पीछे छिपे कारणों एवं मनोदशा को समझते हुए कुछ सख्त कदम उठाये जाने चाहिए।

2. उद्देश्य :—

1. रैगिंग के कारणों की खोज।
2. रैगिंग का विद्यार्थी के व्यवसायिक जीवन पर पड़ने वाले प्रभावों का अध्ययन।

3. रैगिंग के निषेध संबंधी सामाजिक एवं विधिक उपायों की विवेचना करना।

3. शोध क्षेत्र एवं शोध पद्धति :–

शोध क्षेत्र के अन्तर्गत रैगिंग से संबंधित घटनाओं का विवेचन न केवल महाविद्यालय तक सीमित है साथ ही विद्यालय भी शोध का अहम हिस्सा है। विधि के अन्तर्गत रैगिंग से जुड़ी समस्या का अध्ययन कर शोध की रूपरेखा को तैयार किया गया है एवं द्वितीयक सामग्री के आधार पर विश्लेषणात्मक अध्ययन किया गया है।

4. रैगिंग के कारण :–

रैगिंग न सिर्फ एक क्रिया है वरन यह एक दूषित विचार भी है जो कि मनुष्य के मस्तिष्क में पनपता है। रैगिंग के परिणाम हमारे सामने होते है किंतु वे कारण जो कि रैगिंग को पोषित करते हैं वे हमारे सामने नहीं होते हैं। एक व्यक्ति की सोच पर उसकी सामाजिक, राजनैकि व आर्थिक व्यवस्था की छाप होती है। जब सैनिक केम्प में रैगिंग की शुरूआत हुई थी तब वहां का वातावरण भिन्न था रैगिंग उस वातावरण के अनुकूल थी। इसके अतिरिक्त बढती हुई प्रतिस्पर्धा, ग्लोबलाईजेशन, भौतिकतावाद ने भी रैगिंग को बढावा दिया है। दूसरे शब्द में एक विद्यार्थी की प्रतिस्पर्धा की भावना, जलन, द्वेष, भविष्य के प्रति चिंता आदि मनोभाव रैगिंग के रूप में प्रकट होते हैं।

विद्यार्थियों का रैगिंग जैसी क्रियाओं में संलग्नता के पीछे कोई एक निश्चित कारण नहीं है। विद्यार्थी अपनी पीड़ी का अनुसरण क्यों करने लगता है? एक विद्यार्थी के लिए यह मनोरंजन का साधन हो सकता है तो दूसरे के लिए अपने मन की भड़ास निकालने का माध्यम। रैगिन्ग के संभावित कारण निम्नलिखित हो सकते है–

1. विद्यार्थी कि वरिष्ठ होने की सोच उसे रैगिंग के प्रति आकर्षित करती है।
2. खुशी व मनोरंजन का साधन।
3. शिक्षा व्यवस्था का व्यवसायिकरण, शिक्षकों के द्वारा केवल तकनीकी योग्यता पर ध्यान दिया जाना एवं नैतिक पहलु को इससे उपेक्षित कर दिया जाना।
4. छात्रावास एवं महाविद्यालय प्रशासन के नियंत्रण का अभाव रैगिंग को पोषित करता है।
5. रैगिंग के नियम बनाये गये नियमों का ठीक प्रकार से लागू नहीं किया जाना।

5. प्रभाव :–

रगिंग मानव दुर्व्यवहार का अमानवीय रूप है। रैगिंग से संबंधित, स्तब्ध कर देने वाली कई घटनाएं सामने आ रही है। वर्तमान समय में शैक्षणिक जगत कई तरह की समस्याओं का सामना कर रहा है जिसमें रैगिंग एक ऐसी प्रथा है जो समय के साथ बुराई में तब्दील हो चुकी है विशेषकर व्यवसायिक पाठ्यक्रम में जैसे मेडिकल, इंजीनियरिंग, मेनेजमेंट आदि। रैगिंग प्रत्यक्ष रूप से विद्यार्थी को तो प्रभावित करती है बल्कि अप्रत्यक्ष रूप से यह विद्यार्थी के परिजन, संरक्षक, समाज एवं उससे भी आगे वह देश के भविष्य को भी प्रभावित करती है न सिर्फ आर्थिक रूप से वरन सांस्कृतिक एवं राजनैतिक रूप से भी। रैगिंग से प्रभावति संबंधित विभिन्न पहलु इस प्रकार हैं–

5.1 विद्यार्थी जीवन पर रैगिंग का प्रभाव –

रैगिंग की अनचाही चोट पहुंचाने वाली मानसिक व शारीरिक घटनाएं स्थाई रूप से पीड़ित के मन को प्रभावित कर सकती है। उसकी मनोभावनों में डर उत्पन्न कर सकती है। फलस्वरूप वह आने वाले कई वर्षों तक उससे मुक्त नहीं हो पाता है। घृणित भाव पीड़ित विद्यार्थी के मन में जाग्रत हो सकते हैं जिससे वह स्वयं को दूसरों की अपेक्षा हीन महसूस करने लगता है। कहीं न कहीं इन घटनाओं से विद्यार्थी का जीवन प्रभावित होता है। यहां तक कि ये घटनाएं व्यवसायिक जीवन को भी प्रभावित कर सकती है।

5.2 महाविद्यालयों पर रैगिंग का प्रभाव –

रैगिंग न सिर्फ विद्यार्थी जीवन को प्रभावित करती है वरन वे शिक्षण संस्थान जहां पर की वे अध्ययन कर रहे हैं उनको भी प्रभावित करती है। शिक्षण संस्थान मानव मूल्यों को निर्मित करने की एक संस्था मानी जाती है जहां से की देश के उज्जवल भविष्य की कामना की जाती है। यदि रैगिंग हमारे मानवीय मूल्य में संत्रापित हो जाती है तो वह दिमक की भांति मानवीय मूल्यों को खा जाती हैं। वर्तमान में रैगिंग ऐसी बुराई है जिसका जन्म शैक्षणिक संस्थानों होता हैं और जहां इसका पालन–पोषण होता है। वे शिक्षण संस्थान जहां भी इस तरह की बुराई का पालन पोषण होता है वे अपनी प्रतिष्ठा को खो देते हैं।

5.3 समाज पर रैगिंग का प्रभाव –

रैगिंग प्रत्यक्ष रूप से विद्यार्थी को प्रभावित करती है साथ ही शिक्षण संस्थान को भी प्रभावित करती है किन्तु इसका सीधा प्रहार समाज पर होता है। वर्तमान में यह महाविद्यालय में घटित होने वाली एक सामान्य घटना है जिसे समाज के द्वारा अप्रत्यक्ष रूप से स्वीकार कर लिया गया है किन्तु यह तथ्य कोई नहीं देख पाता है कि यह समाज को भी प्रभावित कर रही है। रैगिंग करने वाला एवं पीड़ित दोनों ही शिक्षा उपरांत समाज के अंग बनते है। यदि वे शिक्षण संस्थान जहां पर सभ्य समाज को निर्मित करने की शिक्षा दी जाती है यदि वही सभ्यता का हनन होगा, तब केवल एक असभ्य समाज का संगठन ही संभव है।

6. शोध की उपयोगिता :–

रैगिंग न सिर्फ शिक्षा जगत से जुड़ी समस्या है वरन यह मानविय अस्मिता के अस्तित्व पर भी पश्न चिन्ह लगाती है। रैगिंग ने महाविद्यालयीन परिसर को पार करते हुए समाज के विभिन्न क्षेत्रों में प्रवेश कर एक राष्ट्रीय समस्या का रूप धारण कर लिया है अतः समस्या के निवारण के माध्यम से न सिर्फ शिक्षा को गरिमामय बनाया जा सकता है वरन–

1. सुदृढ़ शैक्षणिक व्यवस्था का निर्माण किया जा सकता है – एक राष्ट्र की बौद्धिक सम्पदा उस राष्ट्र की सुदृढ़ शैक्षणिक व्यवस्था पर निर्भर करती है। शैक्षणिक व्यवस्था जितनी समृद्ध होगी उस राष्ट्र का बौद्धिक स्तर पर भी उच्च होगा। कला, साहित्य, व विज्ञान वहां उतना ही फलेगा फूलेगा। ठीक इसके विपरित बीमार शैक्षणिक व्यवस्था अगर स्वयं समस्याओं का सामना कर रही हो तब वह विद्यार्थियों को जीवन में समस्या से लडना नहीं सिखा सकती है

2. जाति सूचक संव्यवहारों में अ.जा./अ.ज.जा. और पिछडे वर्ग के विद्यार्थियों के जीवन को समृद्ध एवं गरिमापूर्ण बनाया जा सकता है – महाविद्यालय व होस्टल परिसर

क्षेत्र में किसी विद्यार्थी के द्वारा जाति भाषा नस्ल क्षेत्रायिता के आधार पर, किसी अन्य को मानसिक व शारीरिक तौर पर प्रताड़ित किया जाना रैगिंग है। यद्यपि इसे रैगिंग नहीं माना जाता है। होस्टल व महाविद्यालय में होने वाले अनुचित व्यवहार को रैगिंग निवारण विधि के माध्यम से जाति सूचक संव्यवहारों में अ.जा / अ.ज.जा. और पिछड़े वर्ग के विद्यार्थीयों के जीवन को समृद्ध और गरिमापूर्ण बनाया जा सकता है।

3. लोकतंत्र के विकास में निवारक विधि एक महत्वपूर्ण भूमिका निभा सकती है– किसी देश की लोकतंत्र की सफलता इस तथ्य पर निर्भर करती है कि उस देश का जानादेश, वहां की राजनीतिक व्यवस्था में कितना विश्वास करता है एवं किसी सीमा तक वह अपनी सहभागिता देता है। यह तभी संभव है जबकि वहां के लोगों में उच्च श्रेणी के नैतिक मूल्यों का विकास हो। यह वहां के शिक्षा तंत्र पर निर्भर करता है शिक्षण व्यवस्था का स्वस्थ होना अत्यंत अनिवार्य है। रैगिंग उसी शिक्षा व्यवस्था में पनप रही एक बीमारी है जो शिक्षण व्यवस्था को प्रत्यक्ष एवं समाज को अप्रत्यक्ष रूप से प्रभावित करती है।

7. रैगिंग के निशेध संबंधी सामाजिक एवं विधिक उपाय : –

शोधकर्ता का यह मानना ह कि विधि समाज के विभिन्न पहलुओं को नियंत्रित एवं संचालित करने की प्रभावशाली व्यवस्था है इसी प्रकार रैगिंग जैसी समस्या को भी विधिक उपचार से निषिद्ध किया जा सकता है। चूंकि यह एक ऐसी बुराई है जिसमें सामाजिक पहलू भी संलिप्त है इसलिए सामाजिक उपचार भी, समस्या के समाधान का सशक्त माध्यम है।

7.1 राज्य विधान पालिकाओं द्वारा निर्मित विधि –

भारत में रैगिंग निरोधक विधि सर्वप्रथम तमिलनाडु राज्य के द्वारा 1997 में पारित की गई थी। विश्व जागृति मिशन के द्वारा दायर जनहित याचीका के माध्यम से सन 2001 में सुप्रीमकोर्ट के द्वारा दिया गया ऐतिहासिक निर्णय रैगिंग निरोधक विधि व रैगिंग के खिलाफ छेड़ी गयी जंग को बल प्रदान करता है। 2001 के पश्चात सुप्रीमकोर्ट के आदेश का पालन करते हुए विभिन्न राज्यों की विधानपालिकाओं के द्वारा रैगिंग निषेध विधि का निर्माण किया गया।

7.2 रैगिंग बिल 2005 –

महाविद्यालय एवं शैक्षणिक संस्थानों में रैगिंग की रोकथाम हेतु यह विधेयक भारतीय गणराज्य के 56 वे वर्ष में संसद द्वारा निर्मित किया गया।

रैगिंग निषेध और उन्मुलन अधिनियम 2011 अधिनियम क्र. XXVII2011 महाविद्यालय एवं शैक्षणिक संस्थानों में रैगिंग को निषेध एवं उन्मूलन करने हेतु अधिनियमित किया गया है।

रैगिंग निषेध और महाविद्यालय एवं शैक्षणिक संस्थाओं में प्रक्रिया अधिनियम 2012 अऋजु व्यवहार प्रतिषेध

यह अधिनियम विश्वविद्यालय एवं शैक्षणिक संस्थाओं में रैगिंग की अनुमानित क्रियाओं को प्रतिबंधित करने हेतु अधिनियमित किया गया है।

7.3 भारतीय दण्ड संहिता में रैगिंग से संबंधित प्रावधान–

रैगिंग से संबंधित छोटी घटनाओं के प्रावधानः

339	सदोष अवरोध
340	सदोष परिरोध
394	अश्लील कार्य और गाने
506	आपराधिक अभित्रास के लिए दण्ड

रैगिंग से संबंधित बड़ी घटनाओं के प्रावधानः

323	स्वेच्छा उपहित कारित करने के लिए दण्ड
324	खतरनाक आयुधों या साधनों द्वारा स्वेच्छया उपहित कारित करना।
325	स्वेच्छया धोर उपहित कारित करने के लिए दण्ड।
326	खतरनाक आयुधों या साधनों द्वारा स्वेच्छया धोर उपहित कारित करना।

मृत्यु /आत्महत्या घटित होने संबंधी प्रावधानः

304	हत्या की कोटि में न आने वाले आपराधिक मानव वध के लिए दण्ड।
306	आत्महत्या का दुष्प्रेरण
307	हत्या करने का प्रयत्न

7.4 UGC द्वारा जारी दिशा निर्देश –

2009 में अमन काचरू की मृत्यु के पश्चात विश्वविद्यालय अनुदान आयोग ने शैक्षणिक संस्थाओं में रैगिंग को निषेध करने हेतु विश्वविद्यालय अनुदान आयोग अधिनियम 2009 पारित किया है जिसके अंतर्गत अधिनियम के उद्देश्य का वर्णन करते हुए रैगिंग की प्रकृति जटीलता को परिभाषित किया है साथ ही शैक्षणिक संस्थाओं के कर्तव्य, दायित्व एवं संस्था के स्तर पर अपनाये जाने वाले अन्य उपायों का वर्णन किया है।

7.5 विश्वविद्यालय एवं महाविद्यालय की भूमिका के संदर्भ में माननीय सर्वोच्च न्यायालय के द्वारा जारी दिशा निर्देश –

विश्व जाग्रति मिशन ने 1998 में रैगिंग के उपर सर्वोच्य न्यायालय में एक जनहित याचिका दायर की थी जिसमें केन्द्रिय अनुदान अयोग प्रतिवादीयों में से एक प्रतिवादी था। प्रस्तुतवाद ने देश के संपूर्ण शैक्षणिक संस्थानों में रैगिंग के प्रभावों को उजागर किया। 16 जुलाई 1999 को इस केस की सुनवाई के दौरान न्यायालय के द्वारा केन्द्रिय अनुदान आयोग एवं विश्वविद्यालय को इस संबंध में उपयुक्त कदम उठाने हेतु दिशा निर्देश जारी कियें। न्यायालय द्वारा जारी दिशा निर्देशानुसार– संस्था के द्वारा रैगिंग निषेध कार्यक्रम प्रारंभिक स्तर पर सत्र में प्रवेश के समय, रैगिंग निषेध विधि के विज्ञापन के माध्यम से किया जा सकता है। प्रवेश हेतु इच्छित विद्यार्थी को, विवरण पुस्तिका प्रवेश फार्म, एवं अन्य साहित्य जारी किया जाना चाहिये। जिसमें स्पष्ट शब्दों में यह अभिलिखित किया जाना चाहिए कि रैगिंग जैसी क्रिया यहां प्रतिबंधित है, यदि कोई विद्यार्थी संलग्न पाया जाता है तब वह पर्याप्त दड से दंडीत होगा, जिसका विस्तार महाविद्यालय से निष्कासन तक हो सकता है या सीमित समय के लिए महाविद्यालय एवं कक्षा से निलंबन सहित जुर्माना। इसके अतिरिक्त विश्वविद्यालय पोर्टल पर एंटी रैगिंग ऐल्पलाईन एवं विश्वविद्यालय व महाविद्यालय स्तर पर एंटी रैगिंग कमेटी का गठन किया जाना चाहिए।

7.6 अन्य सामाजिक उपाय –

समाजिक उपयों के अंतर्गत हम उन माध्यमों का चुनाव करते है जो कि समस्या को सार्वजनिक रूप दे सके और लोगों के मध्य उसे स्थापित करे। न सिर्फ समस्या को प्रस्तुत करे वरन उन्हें जागरूक बनाये एवं समस्या के निदान में उनकी सहभागिता सुनिश्चित करे। इस कार्य को समाचार पत्र पत्रिका, रेडियों एवं टेलीविजन न्यूज चेनल बखुबी कर सकते हैं क्योंकि यह सरकार और उसके विभिन्न निकाय, एवं आम व्यक्ति के मध्य की सुनहरी कड़ी होती है।

8. निष्कर्ष एवं सुझाव :–

रैगिंग एक ऐसी समस्या है जो कि भारतीय शैक्षणिक जगत में गहरी जड़े जमा चुकी है। वर्तमान समय में यह समस्या इतनी गंभीर हो चुकी है। अब निदान मात्र विधि से नहीं किया जा सकता है विधि दण्ड की व्यवस्था करती है दण्ड भय को उत्पन्न करता है। दण्ड अपराध निवारण विधि का सबसे अहम हिस्सा रहा है किन्तु यह एक मात्र उपाय नहीं हो सकता है क्योंकि जब इस आपराधिक कृत्य को करने की विद्यार्थी की प्रवृत्ति उसको आनंद देने लगे तब वह इसके परिणामों को जानते हुए भी अपने आपको नहीं रोक पाता है। यहां एक विद्यार्थी की अभिरूचि उसके कृत्य के भय को परास्त करती है। वह एक नकारात्मक ऊर्जा है जो कि विद्यार्थी को गलत दिशा की और ले जा रही है तब दण्ड एक मात्र सफलतम व्यवस्था नहीं हो सकती है। अतः समस्या जितनी गंभीर होती है उसका निदान भी उतनी गंभीरता से किया जाना चाहिए। रैगिंग मानव मस्तिष्क की उपज है जहां समस्या का उद्गम है वहीं समाधान भी है। ऐसा नहीं है कि रैगिंग जैसी समस्या की शुरुआत एकाएक महाविद्यालय में होती है। यह विद्यालय में पनपति है महाविद्यालय तक आते आते परिपक्व हो जाती है। विद्यालय एक मात्र ऐसा स्थान होता है जहां विभिन्न वर्ग व विचारधारा का प्रतिनिधित्व करने वाले विद्यार्थी एक साथ अध्ययन करते हैं जहां पर कि दूसरे का अपने से प्रथक मानने वाली सोच को धूमिल किया जा सके एवं अपनेपन व एकत्व की भावना का विकास किया जा सके। महाविद्यालय न सिर्फ व्यवसायिक शिक्षा का केन्द्र है वरन मानवीय मूल्य निर्मित करने के संस्था भी है। हमारी शिक्षा मानवीय मूल्यों पर आधारित होनी चाहिए। विकृत मानसिक विचारधारा रैगिन्ग की जननी है। नैतिकता एवं मानवीय मूल्यों पर आधारित शिक्षा ही रैगिंग को जड़ से समाप्त कर सकती है

BIBLIOGRAPHY

1. Law realating to ragging it's Crime....Don't risk it, Naman Mohan,P 9, 2014 Edition,Universal Law Publication
2. Law realating to ragging it's Crime....Don't risk it, Naman Mohan,Pp10-11, 2014 Edition,Universal Law Publication
3. INDIAN PENAL CODE, Dr.N.V paranjape Pp625-697, 2018 Edition ,Central Law Agency
4. International Journal of Multidisciplinary Education Research ISSN:2277-7881,VOLUME 1,ISSUE 4 SEPT 2012.P232 ISSN :2277-7881 VOLUME 1
5. International Journal of Multidisciplinary Education Research ISSN:2277-7881,VOLUME 1,ISSUE 4 SEPT 2012.P233 ISSN :2277-7881 VOLUME 1
6. Ragging in Educational institutes: A Human Right..Available at http://www.legalserviceindia.com/article/ragging.htm last accessed on the 13 january 2014
7. Ragging as human right abuse ?|Analysis |Education available at http://infochangeindia.org/education/analysis/ragging-as-human-right-abuse.html last accessed on 1 january 2014
8. Vishwa Jagriti Mission Through...VS Central Govt, Through Cabinet...on 4 May,2001 Write Petition (civil) 656 of 1998

9. https://indiaKanoon.org/doc/1631949
10. Ragging in India-Wikipedia, the free encyclopedia available at https://en.wikipedia.org/wiki/Ragging_in_India last accessed on the 20 january 2015

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कोविड-19 के संदर्भ मे स्वास्थ संचार

श्वेता कानूनगो
पत्रकारिता और जनसंचार, रेनेसां विश्वविद्यालय, इंदौर

शोध सारांश :–

कोरोना वायरस पूरी दुनिया के लिए एक बड़ी समस्या है। हर कोई सर्वव्यापी कोरोना नामक बीमारी के कारण होने वाले परिणामों से परेशान है तथा उनका सामना करने के लिए मजबूर भी है। कोरोना वायरस जैसी महामारी के कारण मानव समाज में संतुष्टि की कमी देखी गई है, और लगभग हर कोई भविष्य के लिए चिंतित है। आज दुनियाभर में कोरोना वायरस की महामारी के कारण कई राष्ट्रों में लॉकडाउन जैसे कदम उठाए गए।

चीन जैसे अधिक जनसंख्या वाले देश द्वारा कोरोना वायरस जैसी महामारी पर आसानी से नियंत्रण पाना बड़े सवालों की और ले जाता है। चीन पर लोगों और वैश्विक मंच द्वारा कई सारे आरोप लगाए गए है जिसमें की कोरोना वायरस से पीड़ित लोगों के वास्तविक आंकड़ों की संख्या को छुपाना, लोगों ने तो यहां तक कि कहा कि चीन द्वारा अपनी अर्थव्यवस्था का मजबूत करने के लिए कोरोना वायरस नामक जैविक हथियार चीन द्वारा रचित की गई संयंत्रण नीति है।

भारत के संदर्भ में बात करें तो अगर साल 2020 की शुरुआत में या कोरोना वायरस का पता लगते ही अगर कोई कड़े प्रयास किए गए होते तो आज स्थिति बहुत अच्छी हो सकती थो। 12 अप्रैल 2020 को संपूर्ण भारत में कोरोना वायरस से संक्रमित लोगों की संख्या 8447 पहुंची, जिसमें 273 लोगों की मौत और 766 लोग स्वस्थ हुए। भारत सरकार तथा अन्य राज्य सरकार द्वारा स्वास्थ्य संचार में जारी निर्देशों के संपूर्ण रूप से पालन के पश्चात हम कोरोना वायरस से बचा जा सकता है।

शोध संकेतः कोविड-19, भारत मे स्वास्थ संचार, उपाय।

परिचय :–

भारतको कोविड-19 जैसी वैश्विक महामारी की समस्या का सामना करना पड़ रहा है, कोविड-19 नामक वायरस से पूरे विश्वभर की अर्थव्यवस्था को कड़ी टक्कर मिली है साथ ही इसने अथव्यवस्था को सुचारू रूप से चलने से रोक भी दिया है। आज दुनिया भर में ऐसे कई देश है, जो आर्थिक रूप से संघर्ष कर रहे हैं। यहां तक की बड़े से बड़े ताकतवर देश भी कोरोना वायरस से परेशान है। भारत में लोकडॉन के कारण दैनिक मजदूर, कर्मचारी तथा छोटे वर्ग के लोग, बेरोजगारी का शिकार हो रहे हैं, इन्हीं संबंधित कई परेशानियों के कारण व्यवसाय उद्योग भी रुक गए हैं।

अमेरिकी राष्ट्र की बात करें तो अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप ने डब्ल्यू एच ओ के खिलाफ एक बड़ा बयान दिया जिसमें दावा किया गया है कि डब्ल्यूएचओ दुनिया के बारे में सोचने के बजाय चीनी आउटलुक के साथ सेटिंग करता है, यह बयान उस संदर्भ में है जब ऐसी कई बातें सामने आई कि चीन को कोरोना वायरस के तोड़ का सबसे पहले पता चला और उसी के साथ डब्ल्यूएचओ को भी इस बारे में जानकारी थी इसी तर्क के संदर्भ में अमेरिकी राष्ट्रपति डोनाल्ड ट्रंप ने कोविड-19 कहर से पीड़ित दुनिया के बारे में सोचने के बजाय डब्ल्यूएचओ ने चीन का साथ ज्यादा उचित माना। कोरोना वायरस के बारे में किसी भी नतीजे पर पहुंचने से पहले आइए हम जानते हैं–

कोरोना वायरस क्या है :–

यह वास्तव में एक वायरस का समूह है जो मनुष्य और पक्षियों में बीमारी का कारण बनता है मनुष्य में कोरोना वायरस श्वासपथ के संक्रमण से होता है, जो हल्के हो सकते हैं जैसे कि सामान्य सर्दी और फ्लू के लक्षण कुछ मामलों में घातक जैसे कि एस ए आर एस, आर एस, एमीआर आदि कोविड–19 सकारात्मक आर ए एन वाले विषाणु हैं।

कोरोना वायरस की प्रवृत्ति को समझने के बाद यह जानना महत्वपूर्ण है कि कोरोना की मूल शुरुआत मानव कोरोना वायरस जहां पहली बार सन 1960 के अंत में पाया गया, जो 2020 में महामारी के रूप में लोगों से परिचित हुआ वह दिसंबर 2019 के आस पास बुहान चीन में पुष्टि की गई। खोज करता के पास अभी तक कोई सटीक उत्तर नहीं है लेकिन वे संभावित परिदृश्य की बात करते हैं जो कि

कोरोना वायरस की शुरुआत :–
चीनः

दिसंबर 2019 को चीन में कोरोना वायरस का मामला सामने आया विश्व स्वास्थ्य संगठन द्वारा एनसीओवी जिसे बाद में एसएआरएससीओवी–टू विषाणु माना गया। कोरोना वायरस से संक्रमित विषाणु पृथ्वी पर गिरा जो बाद में रंगोली के संपर्क में आया और बुहान की समुद्री भोजन बाजार में बेचा जा रहा था ऐसा माना जाता है कि पहला मामला उन्हीं समुद्री भोजन बाजार मे सामने आया लेकिन शोधकर्ता अभी भी इस कहानी की निशिता पर बहस कर रहे हैं।

कोरोना वायरस के भी बहुत से लक्षण निमोनिया की तरह है जिसमें सर्दी, खांसी, गले के अन्य रोग शामिल है, इसी तरह के निमोनिया के साथ रोगियों के बहुत से लक्षण शहर से उभरने लगे और उनमें से अधिकांश थे। समुद्री भोजन बाजार के कुछ याउन में अन्य कनेक्शन। जब फ्लू और निमोनिया के पहले 7 मामलों में बीमारी के समान पैटर्न का इलाज हो रहा हो, डॉ। वेनलियानघ (जो नए वायरस के अधिकारियों को चेतावनी देने वाले पहले व्यक्ति थे और जिन्होंने वुहान में मरीज का इलाज किया)। वायरस इतना घातक हो सकता है और दुनियाभर में तबाही मचा सकता है बीमारी को समझने की कोशिश और जल्द ही महसूस किय ह अस ऐआरअस–2003 की तरह ही एक नया वायरस है, इसके बारे में उनके सहयोगियों ने समूह चौट मे आपको बाद में WEIBO पर अपनी कहानी पोस्ट की थी जिसमें अस्पताल के खराब राशि से अपनी प्रारंभिक चेतावनी खर्च करने के बाद। उन्होंने वायरस से बचने के सात मामलों को देखा था, जिन्हें उन्होंने अस ऐ आर अस– वायरस की तरह था, जो 2003 में वैश्विक महामारी की आर जाता है। 30 दिसंबर को उन्होंने एक चौटग्रुप में डॉक्टरों को फॉलो करने के लिए एक संदेश भेजा जिसमें उन्हें संक्रमण से बचने के लिए एक सुरक्षात्मक कपड़े पहनने की चेतावनी दी गई थी। चार दिन बाद उन्हें सार्वजनिक सुरक्षा ब्यूरो में बुलाया गया, जहाँ उन्हें पत्र में एक पत्र पर हस्ताक्षर करने के लिए कहा गया था, उन्होंने उन झूठी टिप्पणियों को बनाने का आरोप लगाया था, जिन्होंने सामाजिक व्यवस्था को गंभीर रूप से वितरित किया था। स्थानीय अधिकारियों ने अपने WEIBO में डॉलि से माफी मांगते हुए बताया कि कैसे 10 जनवरी को वह अगले दिन पीड़ित होने लगे जब उन्हें बुखार था और दो दिन बाद वह अस्पताल में थे। उन्होंने संक्रमित इलाज करते हुए वायरस का मुकाबला किया और 30 जनवरी को सकारात्मक निदान किया गया था दुर्भाग्य से वह लंबे समय तक जीवित नहीं रह सके वह एक नेत्र

चिकित्सक थे। किसी ने भी उन्हें गंभीरता से नहीं लिया, अगर उनकी बात पर गौर किया जाता तो शायद कोविड–19 नामक बीमारी महामारी का रूप नहीं लेती।

चीन और कोविड–19 :–

आइए पहले देखें कि कोविड–19 चीन में और विश्व स्तर पर कैसे फैलने लगा और सरकार द्वारा किए गए उपाय और जनवरी में इसका समग्र प्रभाव क्या रहा। जैसे जैसे समय बीतता जा रहा था विषाणु पहले से ही हजारों को भी संक्रमित में थे जो कि जल्द ही जनवरी के अंत तक कहीं और लोगों को संक्रमित कर चुके थे जिससे कि पूरी दुनिया में अलग–अलग जगहों पर कोविड–19 के कई मामले सामने आए, हम सभी अगर चीन की बात करें तो चीन में भी कोविड–19 के संक्रमित मामले देखे गए पर उसके द्वारा दर्ज की गई मौतों की संख्या अन्य देशों की तुलना में अत्यधिक कम है, इसकी कई और वजह भी हो सकती है जैसे कि चीन में गंभीरता के साथ कोविड–19 वायरस से लड़ने के लिए तैयारियां जल्दी ही शुरू हो गई थी महंगी और बुनियादी अस्पताल का निर्माण किया गया कोरोना वायरस से बचने के लिए चीन द्वारा लॉकडाउन पहला पड़ाव था तथा लोगों को सामाजिक दूरी का अभ्यास कराना दूसरा पड़ाव लोगों को अपने घरों पर बुनियादी सुविधाओं के साथ रखा गया।

लोगों को किसी भी स्थिति में उनके घरों से बाहर निकलने या सामाजिक दूरी को तोड़ने के लिए इजाजत नहीं दी गई और लोगों तक उनकी जरूरत की चीज, भोजन होम डिलीवरी के द्वारा पहुंचाई गई। इसीलिए ही शायद जब विश्व के कई देशों की अर्थव्यवस्था लॉकडाउन के कारणों से कम हो रही थी तो चीन की अर्थव्यवस्था रोमांचित हो रही थी। यह आश्चर्य की बात है कि जो कोविड–19 बीमारी दुनिया भर में फैल गई वही चीन में कुछ किलोमीटर में ही दर्ज की गई है ध्यान देने योग्य बात है कि के मामलों में एक मात्र संख्या चीन में 81000 और उनमें से 3000 लोगों की मौत हुई।

आज कोरोना वायरस की चिकित्सा आपूर्ति और कई जरूरतों के लिए अन्य देश को चीन की जरूरत है और किसी तरह चीन ने भी विभिन्न मांगों के लिए आज के परिदृश्य में खुद को बिठाया है, चीन पर लगाए गए आरोपों के मामले में कोई रिपोर्ट नहीं आई और विशेष रूप से अन्य आंदोलनों तथा आरोपों पर लगे सभी प्रतिबंधों को हटा दिया गया और चीन अभी भी अन्य देशों की आपूर्ति के लिए अचानक तैयार है।

भारत मे कोरोना वायरस :–

भारतीय आयुर्विज्ञान अनुसंधान परिषद और स्वास्थ्य एवं परिवार कल्याण मन्त्रालय ने 24 अप्रैल 2020 तक कोविड–19 संक्रमित से भारत में 23,077 मामलों की पुष्टि की है जिसमें 718 लोगों की मृत्यु हुई है। और लंबे समय के साथ ही भारत उत्तर पूर्वी में कोविड–19 से अनुसूचित थे, लेकिन कुछ दिनों में मामलों ने सातबहन राज्यों में भी बढ़ोतरी शुरू हुई। भारत मे हर हालत में कोविड–19 वायरस पूर्ण विराम के खिलाफ धड़क रहा है, जबकि कुछ राज्य में चीजें और स्थिति एक ही समय में हाथ से बाहर जा रही हैं, दूसरी तरफ छत्तीसगढ़ जैसे राज्यों में कोविड–19 वायरस पर कड़ी पकड़ है स्थिति को अच्छी तरह से नियंत्रित बरामद किया जा रहा है।

उदेश्य :–

– कोविड–19 के सन्दर्भ मैं भारत मैं स्वास्थ संचार की भूमिका का वर्णात्मक अध्यन और सार्वजनिक सेवा घोषणा का योगदान।

स्वास्थ संचार संदेश – लॉकडाउन, ग्रीन, रेडजोन

कोविड–19 संक्रमित से 22 मार्च को, भारत सरकार ने देश के 22 राज्यों और केंद्र शासित प्रदेशों के 82 जिलों को पूरी तरह से बंद करने का निर्णय लिया। 24 मार्च को, प्रधानमंत्री नरेंद्र मोदी ने कोरोना वायरस से निपटने के लिए पूरे भारत में 21 दिनों के लिए आधी रात से लॉकडाउन करने का आदेश दिया, 14 अप्रैल सुबह 10 बजे प्रधानमंत्री नरेंद्र मोदी ने देश को संबोधित करते हुएकोरोना वायरस से निपटने के लिए लॉकडाउन की अवधि आगे बढ़ाकर 3 मई करने का फैसला लिया और कहा कि अगले एक हफ्ते नियम और सख्त होंगे। साथ ही मोदी ने कहा कि जहां नए मामले सामने नहीं आएंगे वहाँ कुछ छूट दी जाएगी।

कोरोना वायरस निवारक उपाय :–

स्वास्थ्य और परिवार कल्याण मंत्रालय द्वारा जारी किया गया कोरोना वायरस से निपटने के लिए जागरूकता पोस्टर मार्च के प्रारंभ तक सरकार ने देश में कोरोना वायरस महामारी के बिगड़ते हालात से निपटने में अतिरिक्त संगरोध और उपचार सुविधाओं की स्थापना के लिए एक साथ काम करने वाले सात मंत्रालय शामिल हैं। गृह, रक्षा, रेलवे, श्रम, अल्पसंख्यक मामलों, विमानन और पर्यटन सहित राज्यों और बीस मंत्रालयों को नियोजन योजना के बारे में सूचित किया गया है।

स्क्रीनिंगः

4 मार्च 2020 को, स्वास्थ्य और परिवार कल्याण मंत्री डॉ। हर्षवर्धन ने कोरोना वायरस के प्रकोप से निपटने भारत आने वाले सभी अंतर्राष्ट्रीय यात्रियों की अनिवार्य स्क्रीनिंग की, उन्होंने यह भी कहा कि अब तक हवाईअड्डों पर 589,000 लोगों की स्क्रीनिंग की जा चुकी है, नेपाल म सीमाओं पर एक मिलियन से अधिक की स्क्रीनिंग और 27,000 के आसपास वर्तमान में सामुदायिक निगरानी में।

हेल्पलाइनः

कोरोना वायरस की इस महामारी से निपटने के लिए भारत की केंद्र सरकार और राज्य सरकारों ने क्रमशः राष्ट्रीय और राजकीय हेल्पलाइन सेवाएँ लागू की हैं।

आरोग्य सेतुः

इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी मंत्रालय ने राष्ट्र में कोविड–19 महामारी के "संपर्क ट्रेसिंग और प्रसार से युक्त" में मदद करने के लिए आरोग्यसेतु नामक एक स्मार्टफोन एप्लिकेशन लॉन्च किया। विश्व बैंक ने कोरोना वायरस महामारी से निपटने के लिए इस तरह की तकनीक की जल्द तैनाती की सराहना की। वैश्विक प्रौद्योगिकी दिग्गजों एप्पल, और गूगल ने 11 अप्रैल को घोषणा की, कि वे स्मार्टफोन के लिए सॉफ्टवेयर के निर्माण में मदद करेंगे, कोरोना वायरस के जो संपर्क का पता लगाने में मदद करेगा, जैसा कि आरोग्य सेतु आवेदन करता है।

परीक्षणः

कोरोना वायरस परीक्षण के परिणामों का सारांश नमूने 541,789 का परीक्षण किया, प्रति 1 मिलियन लोगों पर टेस्ट 401 परीक्षित व्यक्ति 525,667, सकारात्मक 23,502 का परीक्षण किया

परीक्षण के आँकड़ेः

ICMR के अनुसार, कोरोना वायरस महामारी से निपटने के लिए 525,667 व्यक्तियों में से 541,789 नमूनों का परीक्षण 22 अप्रैल तक किया गया है और कोरोना वायरस सकारात्मक के 23,502 व्यक्तियों की पुष्टि की गई है।

इलाजः

इंडियन इंस्टीट्यूट ऑफ केमिकल टेक्नोलॉजी, काउंसिल ऑफ साइंटिफिक एंड इंडस्ट्रियल रिसर्च एंड सिप्लाकॉर्पोरेशन, ने एंटी–कोविड–19 दवाओं के विकास के लिए एक संयुक्त उद्यम शुरू किया।

कोरोना वायरस से निपटने के लिए आर्थिक मदद :–

19 मार्च को, केरल के मुख्यमंत्री पिनारयीविजयन ने राज्य को पक 20,000 करोड़ (US $ 2.8 बिलियन) का प्रोत्साहन पैकेज देने की घोषणा की, जिससे राज्य कोविड –19 महामारी और आर्थिक कठिनाई दोनों से उबरने में मदद कर सके।

21 मार्च को, उत्तरप्रदेश के सीएम योगीआदित्यनाथ ने सभी दिहाड़ी मजदूरों को US 1,000 (US $ 14) देने की घोषणा की। 22 मार्च को, पंजाब के सीएम अमरिंदर सिंह ने सभी पंजीकृत निर्माण श्रमिकों को US 3,000 (यूएस $ 42) देने की घोषणा की।

तेलंगाना के मुख्यमंत्री के। चंद्रशेखर राव ने घोषणा की कि सफेद राशन कार्डधारकों को राशन की दुकानों के माध्यम से प्रति परिवार (1,500 (यूएस $ 21) प्रदान किया जाएगा।

26 मार्च को, केंद्रीय वित्त मंत्री निर्मला सीतारमण ने, 1.7 लाख करोड़ (US $ 24 बिलियन) के आर्थिक राहत पैकेज की घोषणा की, जो मुख्य रूप से प्रवासी मजदूरों और

दैनिक मजदूरी करने वालों के लिए खाद्य सुरक्षा और प्रत्यक्ष नकद हस्तांतरण का मिश्रण होगा।

केंद्रीय रिजर्व पुलिसबल, और प्रधानमंत्री वेंकैया नायडू कानून मंत्री रविशंकर प्रसाद और राकांपा के सांसदों के एक महीने के वेतन से प्रधानमंत्री राष्ट्रीय राहतकोष को कई दान मिले – 3,381 करोड़ (यूएस $ 470 मिलियन) ।

राकांपा अध्यक्ष शरद पवार ने घोषणा की कि उनकी पार्टी के विधायक अपने एक महीने के वेतन को महाराष्ट्र के सीएम के राहतकोष में दान करेंगे।

आरबीआई के गवर्नर शक्तिकांतदास ने सभी बैंकों को एनपीए के बारे में चिंता किए बिना और अपनी पुस्तकों को स्वस्थ रखने के लिए तीन महीने के लिए सभी ऋणों पर स्थगन प्रदान करने की अनुमति दी। उन्होंने प्रणाली में बतवतम 3.74 लाख करोड़ (US $ 52 बिलियन) की तरलता को इंजेक्ट करने के लिए कई उपाय भी किए।

केंद्र सरकार ने 31 4,431 करोड़ (US $ 620 मिलियन) जारी किए, जो दिहाड़ी मजदूरों के लंबित वेतन का भुगतान करते हैं जो मनरेगा योजना के तहत आते हैं।

कोषः

टाटा संस और टाटा ट्रस्ट्स (1,500 करोड़), विप्रो और अजीम प्रेमजी फाउंडेशन (1,125 करोड़), रिलायंस इंडस्ट्रीज (500 करोड़), आदित्य बिड़ला समूह (a 500 करोड़), इसके अलावा, बिजली और नवीकरणीय ऊर्जा ने कुल, 925 करोड़ का योगदान दिया,

गैस सिलेंडरः

26 मार्च को, वित्तमंत्री निर्मला सीतारमण ने प्रधानमंत्री उज्ज्वला योजना के लाभार्थियों को तीन महीने के लिए मुफ्त गैस सिलेंडर देने की घोषणा की।

राशनः

22 मार्च को, कर्नाटक के सीएम बीएसयेदियुरप्पा ने सभी लोगों के लिए दो महीने के मुफ्त राशन की घोषणा की। आंध्रप्रदेश के सीएम, वाईएस जगनमोहन रेड्डी ने गरीबों के लिए मुफ्त राशन देने की घोषणा की। तेलंगाना के सीएम ने घोषणा की कि राशन की दुकानों के माध्यम से सफेद राशन कार्डधारकों को प्रति व्यक्ति 12 किलोग्राम मुफ्त चावल (6 किलोग्राम प्रति कार्ड व्यक्ति की मासिक आपूर्ति के साथ) प्रदान किया जाएगा। 23 मार्च को, बिहार के सीएम नीतीश कुमार ने सभी राशन कार्डधारकों के लिए एक महीने के मुफ्त राशन की घोषणा की।

मास्क और उत्पादन आपूर्तिः

25 मार्च को, विवो ने कहा कि वे महाराष्ट्र सरकार को 1 लाख सर्जिकल और 5,000 एन 95 मास्कदान करेंगे। भारत में आई आई टी दिल्ली, आई आई टी जैसे प्रमुख विश्व विद्यालयों ने अपनी प्रयोगशालाओं में हाथ सेनाइटिस तैयार किया था लोगों को वितरित किया। भारतीय शहरों और कई राज्य में चेहरे के मास्क पहनना अनिवार्य कर दिया।

विश्व स्वास्थ्य संगठन के स्वास्थ्य आपात स्थिति कार्यक्रम के मुख्य कार्यकारी निदेशक माइकलरयान ने कहा कि कोरोनो वायरस प्रकोप से निपटने के लिए भारत के पास "जबरदस्त क्षमता" हैं और दूसरे सबसे अधिक आबादी वाले देश के रूप म, इससे निपटने के लिए दुनिया की क्षमता पर भारी प्रभाव पड़ेगा। अन्य टिप्पणीकारों ने कोरोनो

वायरस लॉकडाउन के कारण होने वाली आर्थिक तबाही के बारे में चिंतित हैं, जिसका अनौपचारिक श्रमिकों, सूक्ष्म और लघु उद्यमों, किसानों और स्वरोजगार पर भारी प्रभाव पड़ता है, जो परिवहन और बाजारों तक पहुंच के अभाव में कोई आजीविका नहीं छोड़ते हैं।

प्रेक्षकों का कहना है कि कोरोनो वायरस लॉकडाउन ने महामारी की विकासदर को 6 अप्रैल तक बढ़ाकर हर 6 दिनों में दोगुना करने की दर को धीमाकर दिया है, और 18 अप्रैल तक, हर 8 दिनों में दोगुने की दर से बढ़ा दिया है।

ऑक्सफोर्ड कोविड–19 गवर्नमेंट रिस्पांस ट्रैकर (ऑक्सजीआरटी) ने 73 देशों के आंकड़ों के आधार पर अपनी रिपोर्ट में बताया कि भारत सरकार ने महामारी से निपटने में अन्यदेशों की तुलना में अधिक सख्ती से जवाब दिया है। इसने सरकार की त्वरित कार्रवाई, स्वास्थ्य सेवामें आपातकालीन निवेश, राजकोषीय उपायों, कोरोनो वायरस वैक्सीन अनुसंधान में निवेश और स्थिति पर सक्रिय प्रतिक्रिया देने के लिए आपातकालीन नीति का उल्लेख किया और भारत को इसकी कठोरता के लिए "100" के साथ स्कोर किया।

सार्वजनिक सेवा घोषणा का योगदान :–

सार्वजनिक सेवा घोषणाएँ– "सामाजिक जागरूकता विज्ञापनऽ यह बढ़ावा देता है समुदाय का स्वास्थ्य और यह सुनिश्चित करता है कि विज्ञापन से लोग शिक्षित हों कोरोनो वायरस जैसे मुद्दे पर जागरूकता, ऐसे माध्यम लोगो तक जानकारी पहचाने में अत्यंत सहायक होते है स्वास्थ संचार संदेश –घबराएं नहीं" कोरोना वायरस के प्रकोप से निपटने में भारत का मार्गदर्शक मंत्र रहा है। कोरोनो वायरस मामलों में हमें सतर्क रहने की जरूरत है।

निष्कर्ष :–

विश्व में सबसे बड़ा लोकतंत्र भारत, एक विकासशील राष्ट्र है। हमें नहीं भूलना चाहिए इसके हाथ में सर्वोत्तम संभव चिकित्सा सुविधाएं और स्वास्थ्य सुविधाएं नहीं हैं और यदि ऐसा है, तो एक ऐसी आबादी का कोरोनो वायरस से इलाज चुनौती पूर्ण कार्य हो सकता है।

भारत को कम से कम परीक्षण के लिए जिम्मेदार ठहराया जा रहा है, लेकिन क्या ऐसा हो सकता है। अब तक देश में कोरोनो वायरस संक्रमण के चरण 3 में प्रवेश नहीं किया गया है जो कि सामुदायिक प्रसारण है कुछ राज्य ने चरण 3 को छुआ हो सकता है, लेकिन अधिकांश राज्यों ने ऐसा नहीं किया है जैसा कि हम जानते हैं कि भारत में अधिकांश कोरोनो वायरस सकारात्मक मामले ऐसे लोग हैं जो विदेशी भूमि से लौटे हैं। इसलिए कोई यह कह सकता है कि भारत को अपने लोगों का परीक्षण करने की आवश्यकता हो सकती है, ताकि भारत के बच्चों और भारत की जनसंख्या का परीक्षण किया जा सके। लेकिन भारत की सबसे अच्छी बात यह हो सकती है कि कुल लॉकडाउन और कोरोनो वायरस संदिग्ध मामलों के परीक्षण से वायरस को फैलने से रोका जाए,

कोविड–19 जैसे वायरस से पूणतः छुटकारा मिलने में समय लग सकता है पर कुछ आसान बातों का पालन करके, तथा लोगो को सार्वजनिक सेवा घोषणाएँ (पीएस ए), स्वास्थ संचार संदेश के जरिये और इन बातो का पालन करने के लिए प्रेरित करके हम कोविड–19 से बच सकते हैं–

1. अपने हाथों को बार–बार धोएं हर 20 मिनट के बाद, अपने हाथों को साबुन और पानी से धोएं या अल्कोहल–आधारित सैनिटाइजर से हाथ साफ करें। क्यों? –

अपने हाथों को साबुन और पानी से धोना या अल्कोहल–आधारित सैनिटाइजर से हाथ साफ करें उन वायरस को मारता है जो आपके हाथों पर हो सकते हैं।

2. सामाजिक दूरी बनाए रखें कम से कम 1–मीटर, घर पर रहे जरुरी दवा और राशन के लिए पुलिस सहायता नंबर या सुपर मार्किट एप से घर पैर डिलीवरी ले, और आपके आस दृपास रहने वाले बुजर्गो से भी फोन करके पूछ ले ओर उनकी जरुरत का सामान भी उन तक पहुँचवादे।

3. छींकते समय अपनी नाक या मुँह को कोहनी से या टिश्यू पेपर से कवर करे या मास्क का उपयोग करें क्यों? वहां से, वायरस आपके शरीर में प्रवेश कर सकता है और आपको बीमार कर सकता है। सुनिश्चित करें कि आप, और आपके आस–पास के लोग, अच्छी श्वसन स्वच्छता का पालन करें। मास्क को डिस्पोज करें यदि वह केवल एक बार उपयोग करता है और यदि आप धोने योग्य मास्क का उपयोग कर रहे हैं तो मास्क पर सैनिटाइजर डालें और इसे तुरंत वॉशिंग पाउडर से धोलें । खांसी या छींक बूंदों से वायरस फैलता है। अच्छी श्वसन स्वच्छता का पालन करके, आप अपने आसपास के लोगों को सर्दी, फ्लू और कोविड–19 जैसे वायरस से बचाते सकते हैं।

4. अगर आपको बुखार, खांसी और सांस लेने में कठिनाई होती है, तो जल्दी से चिकित्सा की तलाश करें क्यों? आपके क्षेत्र की स्थिति की जानकारी के लिए राष्ट्रीय और स्थानीय अधिकारियों के पास सबसे अधिक होगी। अग्रिम में कॉल करने से आपका स्वास्थय देखभाल प्रदाता आप को जल्दी से सही स्वास्थय सुविधा के लिए निर्देशित कर सकेगा। यह आपकी रक्षा भी करेगा और कोविड–19 वायरस और अन्य संक्रमणों को फैलने से रोकने में मदद करेगा।

5. फल और सब्जी को उपयोग से पहले नमक के पानी में थोड़ी देर के लिए रख दीजिये।

6. स्वस्थ, साफ आर स्वच्छ खाना ओर अपने परिवार की इम्युनिटी को बढ़ाए।

7. आपने दिन की शुरुआत एक्सरसाइज या योग से करे और रेस्पिटोरी सिस्टम को हेल्दी बनाये ।

8. सूचित रहें और अपने स्वास्थय प्रदाता द्वारा दी गई सलाह का पालन करें। क्यों? कोविड–19 आपके क्षेत्र में फैल रहा है या नहीं, इस पर राष्ट्रीय और स्थानीय अधिकारियों को सबसे अधिक जानकारी होगी। उन्हें इस बात की सलाह देने के लिए सर्वोत्तम स्थान दिया गया है

9. दुसरो की मदद करे, मानवीयता का फर्ज निभाए, हेल्थ केयर एड वाइस को ना भूले।

10. पक्षियों और जानवरो को खाना दे, उनकी मदद करे, कोविड–19 लॉकडाउन को फॉलो करो।

11. अपने आसपास हो रहे किसी भी प्रकार की घरेलू हिंसा के लिए पुलिस को सूचित कीजिये।

12. डिजिटल पेमेंट्स एंड ट्रांसक्शन्स करे, आपके एक क्लिक कोरोना वायरस से हमें दूर रख सकते है।

13. कॉलोनी मै पुलिस नहीं आ रही तो रोड पर ग्रुप नहीं बनाये, घर पैर रहे, ये सोचिये आप पुलिस को धोखा दे रहे है या खुद को

14. ऊमीदो मै सकारात्मकता होनी चाहिए, कोविड–19 रिपोर्ट्समैन हीं।

15. हम सुरक्षित तो सब सुरक्षित।

संदर्भ :—

1. एबियोडून, ओ।, (2013) ।सूचना और संचार प्रौद्योगिकी के माध्यम से गरीबी उन्मूलनरू नाइजीरिया का एक केस स्टडी। इंटरनेशनल जर्नल 0 एफ मल्टीडिसिप्लिनरी साइंसेज एंड इंजीनियरिंग, 4 (7), 20—24।

2. एंडरसनलैब (स्क्रिप्स रिसर्च इंस्टीट्यूट, लाजोला,)

3. एलेक्जेंडर हसनिन, लेक्चरर (एचडीआर), सोरबोन यूनिवर्सिटी, "कोरोना वायरस उत्पत्तिरू जीनोम विश्लेषण बताता है कि दो वायरस संयुक्त हो सकते हैं" वर्ल्ड इकनोमिक फोरम

4. अग्रवाल, बी। सी। (2006)। संचार प्रौद्योगिकी और ग्रामीण विकास भारतरू वादे और प्रदर्शन। इंडियन मीडिया स्टडीज जर्नल, 1 (1), 1—9।

5. बकार, के। (2011)। ओगुनराज्य, नाइजीरिया में ग्रामीण विकास के लिए पर्यटन जागरूकता सृजन पर चयनित संचार मीडिया की प्रभावशीलता। अफ्रीकी अनुसंधान की समीक्षा रेस। रेव।, 5 (1) ।

6. 预防控制中心 "(चीनी में), 9 जनवरी 2020। पीपुल्स रिपब्लिक ऑफ चाइनारू चीनी सेंटरफॉर डिजीज कंट्रोल एंड प्रिवेंशन।

7. डोनालू" 1 अप्रैल 2020, रोगी शून्य का शिकाररू कोरोना वायरस का प्रकोप कहाँ से शुरू हुआ?", न्यूजसइंसेटिस्ट, स्वास्थ्य,

8. फेहर, एंथोनीआर।य पर्लमैन, स्टेनली (12 फरवरी 2015)। ष्कोरोनावीरसरू उनकी प्रतिकृति और रोग जनन का अवलोकनष्। कोरोना वाइरस। पप्र। १—२३ डीओआइरू 10. 1007ध978—1—4939—2438—7ऋ़1। अभिगमन तिथि 9 अप्रैल 2020।

9. झोउ, पी।, यांग, एक्स।, वांग, एक्स। एटअल।, (2020) एक निमोनिया का प्रकोप संभावित बैटमूल के एक नए कोरोन वायरस से जुड़ा हुआ है। नेचर 579, 270दृ273 (2020)। https://doi-org/10-1038/s41586&020&2012&7

10. हबीबजादे, परमय स्टोनमैन, एमीलीके (05—02—2020)। "द नॉवेल कोरोना वायरसः ए बर्ड्स आईव्यू"। इंटरनेशनल जर्नल ऑफ ऑक्यूपेशनल एंड एनवायर्नमेंटल मेडिसिन (श्रवनतदंस।) । 11 (2): 65—71। आइडसुएन॰ 2008—6520। डीओआइः १०.१५,१७१/ijoem.2020.1921।

11. इंटरनेशनल कमेटी ऑन वायरस (24 अगस्त 2010)। "आईसीटीवी मास्टर प्रजाति सूची 2009 — अ10" (से)।

12. ज्योतिंद्र दुबे, 28 मार्च, 2020 "बिजनेस स्टैंडर्ड, कोरोनो वायरस संकट के विस्तार को कम करने में आपकी मदद करने के लिए पांच स्पष्ट डेटा रुझानों को सूचीबद्ध करता है", नई दिल्ली, 08:25 IST

13. कोविड 2020, 12 जनवरी 2020 प्लेटफार्म. गीसाइड. ऑर्ग,।'' कोरोना पर CM योगी आदित्यनाथ की टीम 11, मंत्री ने घर पर बनाया कंट्रोल रूम"। आज तक।

14. एंडरसनकेजी, रामबुट ए, लिपकिनवाई, होम्सईसी, गैरी आर एफ। नेटमेड, 17 मार्च 2020. [1] SARS-CoV-2 कासमीपस्थमूल।

15. वर्ल्ड हेल्थ आर्गेनाइजेशन, 31 मार्च 2020, "कोरोना वायरस रोग (COVID–19) सलाह नए कोरोन वायरस के खिलाफ बुनियादी सुरक्षात्मक उपाय", होम/इमर्जेंसी/ रोगध्कोरोना वायरस रोग 2019/" जनता के लिए सलाह सार्वजनिक,

16. कोरोना वायरस, २०२० भारत में कोरोना वायरस महामारी विकिपीडिया

17. कोरोना वायरस (COVID&19) (NIH) कोविड—19, इआरइस,एस एआरएस (राष्ट्रीय एलर्जी और संक्रामक रोग / NIH संस्थान)

18. "कोविद —19 फैक्टॉइड आज के कोरोना वायरस डेटा के रुझान हमें क्या बताते हैं",

19. काजी, डब्ल्यू। ए। (1999) ।मास मीडिया और सामाजिक जागरूकता, समाज कल्याण,

20. कृष्णापाल सिंह और अनुराग सिंह, (2017), भारत में युवा सेवा विज्ञापनः साहित्य, इंटरनेशनल जर्नल ऑफ मार्केटिंग एंड फाइनेंशियल मैनेजमेंट, ISSN: 2348—3954, (ऑनलाइन) ISSN:

2349–2546 (प्रिंट) खंड 5, (अंक 3, मार्च 2017), पीपी 53–64, डीओआई URL: http://doi-org/10-5281/zenodo-833713

21. "लीवेनलियानगः 07 फरवरी 2020, वुहान डॉक्टर की कोरोनो वायरस मौत से गुस्सा फूट पड़ा", चीन, बीसीन्यूज

22. मैकबी, टी. ए. औरकाफटी, टी.पी. एमजेकॉमनसाइकोल (1982) 10ः 723. https://doi-org/10-1007/BF01312601

23. "मम, लयय डी, कैवनघ (1997)।" कोरोन वायरस की आणविक जीव विज्ञानष। वायरस अनुसंधान में प्रगति (!)। अभिगमन तिथि 9 अप्रैल 2020।

24. मायगोवेरमेंट, इंडिया, कोविड–19

25. न्यूमन, बेंजामिनडब्ल्यू। चुंबन, गैब्रिएलाय कुनडिंग, एंड्रियासएच। भल्ला, डेविडय बख्श, एम। फाजिलय कॉनलाइन, स्टीफनय ड्रोसे, बेनय क्लाउस, जोसेफपी।य माकिनो, शिनजीय सवाकी, स्टेनलीजी।य सिडेल, स्टुअर्टजी।य स्टामौ, दिमित्रियोसजी।य विल्सन, इयान ए।य कुह्, पीटरय बुचमियर, माइकलजे (2011)। "कोरोना वायरस विधानसभा और आकृतिविज्ञान में एम प्रोटीन का एक संरचनात्मक विश्लेषण"। जर्नल ऑफ स्ट्रक्चरल बायोलॉजी। पपृ। 11–22। डीओआइः 10.1016/ र.रेइ.2010.11.021। अभिगमन तिथि 9 अप्रैल 2020।

26. "पूरा भारत बंद, 9 अप्रैल 2020।, 21 दिन के लिए लागू हुआ कोरोना कर्फ्यू"।, आजतक।

27. रॉबर्टगैरी (तुलन यूनिवर्सिटी स्कूल ऑफ मेडिसिन, न्यूऑरलियन्स), कोरोना वायरस अफवाह नियंत्रण (फेमा)

28. सार्वजनिक सेवा घोषणा (PSA)ः परिभाषा, उद्देश्य और दिशानिर्देश। (2018, 24 फरवरी), स्टडी . कॉम, Https://study-com/academy/lesson/public&service&announcement&psa&definition&purpose&guidelines-html

29. श्वेता कानूनगो, मार्च २०२० पीएचडी शोधार्थी, रनेसा विश्वविद्यालय, इंदौर रोल ऑफ पब्लिक सर्विस एडवरटाइजिंग इन न्यू मीडिया, शोध सरिता, ISBN – २३४८–२३६७, वॉल्यूमनंबर ७, इशूनंबर २५, जनवरी – मार्च २०२०, पेजनंबर – ३२२–३२७।

30. सुनार, सिंथियाएस।य टाटी, कैथलीनएम।य क्सिजेक, थॉमसजी।य रोलिन, पियरे ई।य कॉमर, जेम्स ए।य ली, विलियमडब्ल्यू।य रोटा, पॉल ए।य बंकम्प, बेटिनाय बेलिनी, विलियमजे।य जकी, शेरिफआर (2004)। "एसएआरएस कोरोना वायरस का अल्ट्रा स्ट्रक्चरल कैरेक्टराइजेशन"। उभरते संक्रामक रोग। पपृ। 320–326। डीओआइः 10.3201/eid1002.030913। अभिगमन तिथि 9 अप्रैल 2020।

31. सिन्हुआ, 9 जनवरी 2020। चीनी जनवादी गणराज्य विशेषज्ञ" वुहान में न्यू–टाइप कोरोना वायरस निमोनिया का कारण बनता हैः"

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न्यू मीडिया के ओटीटी प्लेटफॉर्म का युवाओं पर प्रभाव और व्यापारिक विश्लेषण

हीना तिवारी,
शोधार्थी, पत्रकारिता एवं जनसंचार विभाग, रेनेसा विश्वविद्यालय, इंदौर

अब्स्ट्रेक्ट :–
न्यू मीडिया ने कई आयामों को जन्म दिया है जिसमें एक ओटीटी प्लेटफॉर्म है। ओटोटी प्लेटफॉर्नों को शुरूआत में लोकप्रियता हासिल नहीं हुई। लॉकडाउन के दौरान ओटीटी प्लेटफॉर्म्स के व्यापार में एक बड़ा बदलाव देखा गया। इसी के साथ फिल्म इंडस्ट्री में भी बदलाव आ गए। जिससे मूलरूपेण मनोरंजन का तरीका बदल गया। युवा वर्ग द्वारा ओटीटी को बड़े मनोरंजन प्लेटफार्म के रूप में उपयोग में लाया जा रहा है। जिससे उनकी मानसिकता और मस्तिष्क की स्थिति, ओटीटी पर दिखाई जा रही हिंसा का खासा प्रभाव भी पड़ रहा है। इस शाध पत्र के लिखें जाने के दौरान कुछ युवाओं से चर्चा की गई जिसमें पाया कि उन्हें कुछ चीजें ओटोटी की पसंद है ता कुछ ना पसंद। यदि आटोटी प्लेटफार्म्स में नवीनता के अच्छे बदलाव किए जाते है तो युवा वर्ग के साथ–साथ अन्य वर्ग के लोग भी इसे ज्यादा पसंद करने लगेंगे। जो इस व्यापार को बढ़ाने के लिए सार्थक सिद्ध हो सकता है। वर्तमान परिस्थितियों में ओटीटी प्लेटफॉर्म्स के लिए बहुत सी संभावनाएं खुली हुई है।
की वर्ड – ओटीटी प्लेटफॉर्म, न्यू मीडिया, युवा वर्ग, मानसिक प्रभाव, व्यापार।

न्यू मीडिया ने वर्तमान समय में युवा पीढ़ी में अपना वर्चस्व बना लिया है। जिसके कई सार्थक प्रमाण मिलते है जो यह बताते है कि युवा वर्ग न्यू मीडिया से प्रभावित होता जा रहा है। यहां तक कि युवा पीढ़ी इसे अपने व्यवसायिक माध्यमों के लिए भी उपयोग कर रहा है। न्यू मीडिया का एक अभिन्न अंग ओटीटी प्लेटफॉर्म भी है। ओवर–द–टॉप एक ऐसा शब्द बन गया है जिसे लागों ने अपने जीवन में आसानी से शामिल कर लिया है। इसकी शुरुआत भारत में 2008 में रिलायंस इंटरटेनमेंट ने की थी, जिससे पहले ओटीटी प्लेटफॉर्म के रूप में बिगफिल्क्स (BIGFlix) को आरंभ किया था। वहीं 2010 में डीजीवाइन ने भारत का पहला ओटीटी मोबाइल ऐप लॉन्च किया जिसे नेक्सजीटीवी (nexGTv) के नाम से जाना गया। इसमें ऑन डिमांड कंटेंट और लाइव टीवी दोनों की सुविधाएं दी गई थी।

इसी के साथ आटीटी प्लेटफॉर्म का आरंभ भारत मे हो गया। वर्ष 2008 से 2018 का सफर कुछ धीमा रहा लेकिन समय के साथ–साथ यह मनोरंजन के क्षेत्र में व्यापार का एक बड़ा साथी बन गया। कोविड–19 के चलते 2020 में जब लॉकडाउन लगा तक भारत में इस व्यापार ने और भी तेजी पकड़ ली। खास कर युवा वर्ग ने इसे काफी पसंद किया और अपना लॉकडाउन का अधिकांश समय न्यू मीडिया के इसी माध्यम के साथ बिताया। लॉकडाउन के दौरान जब सिनेमा घरों को बंद कर दिया गया तब ओटीटी प्लेटफॉर्म बड़ा माध्यम बन गया, जहां लोगों ने मनोरंजन के रूप नई फिल्मों को इसी माध्यम पर देखा।

इसमें सबसे ज्यादा सहभागिता निभाई मोबाइल फोन और इंटरनेट ने। वर्तमान में दूरसंचार और उपकरणों को उन्नत क्षमता में तकनीकि प्रगति के पारिस्थितिकी तंत्र के प्रकाश में, उपभोक्ताओं के मीडिया की खपत में बदलाव लाया है। लॉकडाउन के दौरान ओटीटी माध्यमा में बदलाव आए और उपभोक्ताओं का आकर्षित करने के लिए स्ट्रीमिंग

सेवा प्रदाताओं के बीच कड़ी प्रतिद्वंद्विता देखने को मिली। जिसका परिणाम यह हुआ कि फिल्म इंडस्ट्री की कई हस्तियां इस माध्यम से जुड़ गई। साथ ही लोकप्रियता को बढ़ता देख प्रदाताओं ने सदस्यता शुल्क लागू कर दिया। जिसने लागा का आटोटी प्लेटफॉर्मस की सदस्यता लेने के लिए मजबूर कर दिया। यह भी इस क्षेत्र में व्यापार का माध्यम बन गया।

विश्व में डिजिटलीकरण में मनोरंजन और मीडिया के उपभोग के तरीके को बदल कर रख दिया। इंटरनेट कनेक्शन की संख्या में बढ़ोत्तरी, बेहतर नेटवर्क, तकनीकि नवाचार और स्मार्ट उपकरणों ने ओटीटी प्लेटफॉर्म को मजबूत बना दिया। फलस्वरूप भारत ओटीटी प्लेटफॉर्म के उपभोग के मामले में दूसरे स्थान पर पहुंचने वाला है। भारतीय मीडिया और मनोरंजन के लिए तैयार की गई रिपोर्ट के अनुसार 2019 में 2018 की तुलना में 9 प्रतिशत वृद्धि हुई। वहीं फिक्की (फेड्रेशन ऑफ इंडिया चेम्बर ऑफ कॉमर्स एंड इंडस्ट्रो) की 2020 की रिपोर्ट का अनुमान है कि भारतीय मीडिया और मनोरंजन के क्षेत्र में 2021 में 25 प्रतिशत बढ़ने की संभावना है। जिसके चलते 2021 के अंत तक 30 से 35 मिलियन ओटीटी ग्राहक होगें। इसके साथ ही डिजिटल मीडिया के उपयोगकर्ताओं की संख्या के लिए अनुमान लगाया गया है कि 2023 के अंत तक 425 बिलियन भारत में होगी। वहीं 2020 में जबकि टेलीविजन सबसे बड़ा मनोरंजन का साधन बना। इन सभी के साथ प्रिंट मीडिया से भी यह आगे निकल गया। मीडिया और मनोरंजन के क्षेत्र में आमतौर पर भारत में तीन गुना की गिरावट आती है। लेकिन इस बार जीडीपी में लॉकडाउन में सिनेमा घर बंद होने के बाद भी वृद्धि आई है। हालंकि यह वृद्धि नाम मात्र की ही है। जिसमें सदस्यता से विज्ञापन की तुलना में अधिक राजस्व की वृद्धि हुई है।

न्यू मीडिया से वर्ष 2020 में 235 अरब रूपए तक की वृद्धि दर्ज की गई, जो लगभग 6.5 प्रतिशत है। वहीं वर्ष 2023 में यह 425 अरब रूपए तक पहुंचने की संभावना है। याने कि चक्रवर्ती वार्षिक वृद्धि के आधार पर 22 प्रतिशत बढ़ोतरी आंको जा सकती है। वर्ष 2020 में डिजिटल सदस्यता 43.5 अरब तक पहुंचना बताया गया है जो कि लगभग 49 प्रतिशत की बढ़ोतरी को दर्शाता है। इससे अंदाजा लगाया जा सकता है कि भारतीय बाजार में इस न्यू मीडिया के घटक ओटीटी की लोकप्रियता कितनी अधिक हो गई है। इसके साथ यह भी कहा जा सकता है कि घर में बैठे लोगों को नई मनोरंजन की सामग्री के लिए ओटीटी प्लेटफार्म पर आना मजबूरी बन गया, लेकिन इसका सीधा फायदा न्यू मीडिया के इस प्लेटफार्म को मिला।

वर्ष 2020 में पहली बार पेड आटोटी सब्सक्रिशन 50 मिलियन को पार कर गया। इसका नतीजा यह रहा कि डिजिटल विज्ञापन पर अपना खर्च बढ़ाना कंपनियों ने आरंभ कर दिया। ऑनलाइन ई-कॉमर्स प्लेटफॉर्म के साथ निवेश प्रयोग अधिक किए गए।

फिक्की की रिपोर्ट कहती है कि वर्ष 2024 या 2025 तक अन्य सभी विज्ञापन को न्यू मीडिया के विज्ञापन पछाड़ने में कामयाब हो सकते है। यह संख्या सक्रीय उपयागकर्ताओं की आज एक माह में होती है वह आने वाले समय में एक दिन के सक्रीय उपयागकर्ताओं की हो जाएगी।

बार्क ब्राडकॉर्स्ट ऑडियन्स रिसर्च कॉन्सिल इंडिया की 2021 रिपोर्ट के अनुसार कुल टीवी व्यूअरशिप में 9 प्रतिशत की बढ़ोतरी हुई। वर्ष 2019 में रोजाना 3 घंटे 42 मिनट दैनिक औसत समय देते थे, जो बढ़ कर 2020 में 4 घंटे 2 मिनिट का हो गया। लॉकडाउन क चलते समाचार और बच्चों के लिए गैर-प्राइम टाइम व्यूअरशिप भी बढ़ गया

है जिसमें 31 प्रतिशत तक की बढ़ोतरी हुई है। वहीं व्यापार की बात करें तो 2019 की तुलना में 2020 में विज्ञापन 34 प्रतिशत बढ़ गए है।

फायनेशियल एक्सप्रेस समाचार पत्र में 18 अप्रैल 2020 में प्रकाशित एक खबर के अनुसार बार्क निलसन की रिपोर्ट का कहना था कि लॉकडाउन के कारण ओटीटी प्लेटफार्म का वर्चस्व बड़ा है। इस इंडस्ट्री में 10 टॉप सीरीज रही है जिसे युवाओं द्वारा अधिक पसंद किया गया है। इसमें एमेजान प्राइम, हाटस्टार, एमएक्स प्लेयर ऑनलाईन, नेटफिल्क्स, वुट और जी 5 शामिल है। जिसमें नेट फिल्क्स की मनी हिस्ट, स्ट्रेनजर थिंग्स, लिटिल थिंग्स, सेक्स एजुकेशन, नार्कोज, डिज्नी हॉटस्टॉर की आउट ऑफ लव, स्पेशल उप्स, वुट की असुर, होस्टेजेज, अमेजन प्राइम की टॉम ल्येन्सीसिज जेक रियान यह वह ओटीटी प्लेटफॉर्म्स पर प्रदर्शित वह फिल्में है जिन्हें युवाओं द्वारा काफी पसंद किया गया है।

वर्ष 2020 में इंटरनेट मुवी डाटा बेस (आईएमबीडी) के अनुसार भारत में सबसे ज्यादा लाके प्रिय सीरीज में सबसे टॉप पर स्केम 1992 रही है। इसी के साथ लुडो, मुर्जापुर सीरीज 2, पावा कधाईगल, सी यू सून, पाताल लोक, सूराराई पोत्तरु इन वेब सीरीज न भी अपना वर्चस्व दिखाया और दर्शकों ने इन्हें बहुत पसंद किया। इन वेब सीरीज को ओटीटी प्लेटफॉर्म पर रिलीज किया गया। जिसमें मनोरंजन के क्षेत्र में व्यापार और वृद्धि को कम नहीं होने दिया। सबसे बड़ा फायदा ओटीटी प्लेटफॉर्म का लॉकडाउन का मिला।

बिजनेस न्यूज डेली में 5 नवम्बर 2020 में प्रकाशित एक आलेख में बताया गया था कि सफलतम बिजनेस के लिए सही समय का होना भी जरूरी है। इस सही समय में सही योजना के साथ काम करना भी आवश्यक है। ओटीटी प्लेटफार्म के साथ-साथ मनोरंजन की दुनिया में काम करने वालों ने भी सही समय का उपयोग कर ओटीटी प्लेटफार्म से जुडकर नई पहचान बना ली और ओटीटी की लोकप्रियता लॉकडाउन में बड़ा दी।

व्यापार के क्षेत्र में भी ओटीटी प्लेटफॉर्म ने नवीन सोच और सही समय ने अपना स्थान बना लिया। किसी भी व्यापार के लिए नवीनता बहुत जरूरी होती है। ओटीटी ने कहानी और फिल्मांकन के साथ भी नवीनता दिखाई। फिल्म मेकर ने वहीं दिखाया जो युवा वर्ग देखना चाहता है। सेंसरशिप नहीं होने का फायदा भी कई हद तक इन ओटीटी प्लेटफॉर्म को मिला। 18 से 35 वर्ष तक के 50 लोगों से बात करने पर पता चला कि आटोटी प्लेटफॉर्म्स अधिकांश लागा ने पसंद किया। लागा को इसमें सबसे ज्यादा पसंद यह आया कि वह जो सीन नहीं देखना चाहते थे उन्हें वह आगे बढ़ाने की अनुमति मिलती है। फिल्मांकन पर कोई सेंसरशिप नहीं थी इसलिए एक ही घर में दो अलग-अलग लोगों ने एक ही प्लेटफार्म की सदस्यता ले रखी है। जिस समय चाहे याने कि दिन रात कभी भी अपने समय अनुसार इसे देखा और बंद किया जा सकता है। इस तरह की सुविधा सिनेमा घरों में नहीं मिलती है इसलिए 70 प्रतिशत लागों को सिनेमा घर से ज्यादा ओटीटी प्लेटफॉर्म पसंद आए। इन्हीं कुछ मुख्य बिंदुओं के चलते ओटीटी प्लेटफार्म की लोकप्रियता बढ़ी है।

भारत की पुरस्कृत डिजिटल एंजेन्सी वाट कंसल्ट के संस्थापक सीईओ राजीव डिंगरा का कहना है कि ओटीटी प्लेटफॉर्म का बिजनेस या राजस्व मुख्य रूप से विज्ञापनों से उत्पन्न होता है। यह प्लेटफॉर्म सामग्री को बेचने के लिए विपणन रणनीतियों का उपयोग कर रहे है। जैसे की नेटफिल्क्स और अमेजन वेब सीरिज और फिल्मांकन के आधार पर आगे आ रहे है तो हॉटस्टार बड पैमाने पर क्रिकेट के लिए पसंद किया जा रहा

है। इस तरह की प्रतिद्वंदिता में यह अपने जगह बाजार म बनाए हुए है। साथ ही इस प्रतिद्वंदिता में ओटोटी प्लेटफॉर्म्स किसी भी हद तक जाकर प्रसारण करने को तैयार हो गये है। जिससे युवाओं और बच्चों को वह विषयवस्तु भी देखने मिल रही है जो उनके मस्तिष्क के लिए अनुकुल नहीं है।

जुलाई 2020 म वाणिज्य और उद्योग मंत्री पीयूष गोयल ने भारत के खराब चित्रण का हवाला देते हुए मनोरंजन उद्योग को अपनी सामग्री को स्व–विनियमित करने के लिए कहा था। उन्होंने कहा कि ओटीटी प्लेटफॉर्मो जैसे नेटफिलक्स, प्राइम वीडियो, हॉटस्टार आदि दशकों के बीच लोकप्रियता के लिए कच्वी और बिना काट–छाट किए सामग्री दे रहे है। जिससे इनका तेजी से विकास हो रहा है। भारत में नैतिक पुलिसिंग अधिक है इसके तहत वह किसी भी कार्य जो उन्हें नापसंद है उस पर प्रतिबंध लगा देते है जैसे कि वेलटांइन डे बाहर घूमने वाले जोडो को रोकना हो या फिर गामांस पर प्रतिबंद लगाना हो। यह सब व्यक्ति सार्वजनिक हित के लिए करता है। इसलिए भारत सरकार का मंत्रालय आपत्तिजनक सामग्री को प्रदर्शित करने पर मौजूदा कानूनों को सही ठहराने की कोशिश कर रहा है, वास्तव में यह पर्याप्त नहीं है। सिनेमैटोग्राफिक अधिनियम 1952 के तहत केंदोय फिल्म प्रमाणन बोड की स्थापना की गई थी, जिसे सामान्य भाषा में सेसंर बोड कहा जाता है। इस अधिनियम के तहत नियमों को 1983 और दिशानिर्देशों को 1991 के साथ फिल्मों को सेसर द्वारा प्रमाणित करने के तरीको को निर्धारित किया है। अधिनियम में कहा गया ह कि एक फिल्म को सार्वजनिक प्रदर्शनी के लिए प्रमाणित नहीं किया जाएगा, यदि प्रमाण पत्र प्रदान करने के लिए प्राधिकारी की राय में, फिल्म या इसका कोई भी हिस्सा शालीनता के हितों के खिलाफ है। इसके साथ ही दिशानिर्देशों में कहा गया है कि प्रमाणन को कलात्मक अभिव्यक्ति और रचनात्मक स्वतंत्रता सुनिश्चित करनी चाहिए। यह प्रमाणीकरण सामाजिक परिवर्तन के लिए उत्तरदायी है।

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भारत में सफेद पोश अपराध 'कारण एवं निवारण'

डॉ. अकिला नागोरी
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प्रस्तावना :–

मनुष्य एक ऐसा प्राणी है जिसमें काम, क्रोध, मद, लोभ, मोह और माया के यह 6 (छः) अवगुण सर्वधा व्याप्त रहते है। कोई भी मनुष्य इन अवगुणों से अछूता नहीं है। इनमें सबसे बड़ा अवगुण है लालच (लोभ)। इस लोभ से बाकी के अवगुणों का जन्म होता है। यह अवगुण व्यक्ति को स्वार्थी बनाकर समाज विरोधी कार्य करने के लिए प्रेरित करता है।

वर्तमान समय में इसी लोभ के कारण एक नये अपराध का जन्म हुआ है जो परम्परागत अपराधों से भिन्न है जिसे सफेद पोश अपराध कहते है।

इस अपराध के अंतर्गत बुद्धिजीवी वर्ग आता है। यही बुद्धिजीवी वर्ग योजनाबद्ध तरीके से इसे अंजाम देता है। इस अपराध का समाज पर सीधा प्रभाव नहीं पड़ता है इस कारण इसे आसानी से किया जाता है और यह अपराध फलफुल रहा है। इस अपराध का उद्भव प्रायः आर्थिक क्षेत्र में प्रतियोगिता के कारण भी हुआ है। प्रगतिशील समाज में यह वग संघर्ष की देन है। इसके पीछे व्यक्ति की मंशा धनी होने की होती है।

वर्तमान समय में व्यक्ति के नैतिक मूल्यों में कमी के कारण समाज के सफेदपोश अपराधी खुलेआम सफेदपोश अपराधों को साकार रूप दे रहे है।

वर्तमान समय में सफेद पोश अपराध किसी एक देश की समस्या न होकर विश्वव्यापी समस्या बन गई है। जिससे हमारा भारत भी अछूता नहीं है।

अर्थ / परिभाषा :–

सफेद पोश अपराध अर्थात् एक ऐसा अपराध जो समाज के उच्चवर्गीय, बुद्धिजीवी, सम्पन्न, तकनीकी ज्ञान के धनी व्यक्तियों द्वारा योजनाबद्ध तरीके से अपने व्यवसाय के अनुक्रम में किया जाता है।

आज के अपराध आर्थिक दरिद्रता के कारण या मानसिक विकृति के कारण नहीं किए जाते है न ही उन लोगों द्वारा किए जाते है जिनसे गेरीफेलो का आपराधिक प्रकार पाया जाता है। आज सर्वसम्पन्न एवं उच्च प्रतिष्ठित तथाकथित कुबेर लोग समाज विरोधी कार्य करते है जिन्हें सफेद पोश अपराधों के नाम से जाना जाता है।

अमेरिका के सुप्रसिद्ध अपराध शास्त्री सदरलैण्ड ने सर्वप्रथम 1940 में समाज के प्रतिष्ठित एवं सम्पन्न वर्ग द्वारा किए जाने वाले इन अपराधों को सफेद पोश अपराध की संज्ञा दी। अर्थात्

''प्रतिष्ठित एवं उच्च सम्मानित पद के व्यक्ति द्वारा अपने व्यवसाय के समय में किया गया अपराध ही सफेदपोश अपराध है।''

वाल्टर सी. रैकलैस के अनुसार ''सफेद पोश अपराध उन व्यक्तियों के अपराधों का प्रतिनिधित्व करते है जो व्यवसायों की नीति एवं कार्यक्रम निर्धारित करते है।''

प्रो. पी. गोस्वामी के अनुसार ''उच्च–प्रतिष्ठा प्राप्त व्यक्तियाकें के द्वारा अपनी प्रतिष्ठा की ओर से किया गया कानून का उल्लंघ ही अपराध सफेद पोश अपराध एक व्यक्ति द्वारा अपनी आवश्यकता के लिए नहीं अपितु लालच के लिए किया जाता है।''

मार्ईल किलनार्ड के अनुसार ''सफेद पोश अपराध प्रमुख रूप से व्यापारियों, पेशेवर व्यक्तियों, और राजनीतिज्ञों द्वारा अपने पेशे या धन्धे के संबंध में किया गया कानूनी उल्लंघन है।''

सफेदपोश अपराध की विशेषताएँ :—
सफेदपोश अपराध अन्य अपराधों से भिन्नता के कारण समाज के समक्ष आने में अक्षम अथवा वंचित रहा है। इसका कारण यह है कि सफेद पोश अपराध व्यवसायिक नियमों का उल्लंघन हैं एवं यह पदों के पीछे 'सुनियोजित आपराधिक योजनाएँ है जिनके बारे में सामान्य नागरिक एवं कर्मचारी अनभिज्ञ होते है। अतः इसी कारण इस अपराध की कुछ प्रमुख विशेषताएँ है जैसे —

1. सफेदपोश अपराध उच्च सामाजिक एवं आर्थिक वर्ग के प्रतिष्ठित लोगों द्वारा किए जाते है।
2. सफेद पोश अपराध प्रतिष्ठित व्यक्तियों द्वारा व्यवसाय के अनुक्रम में किए जाते है।
3. सफेद पोश अपराध सामान्यतः आर्थिक आपराधिक प्रघटनाओं से संबंधित होते है। अधिकाधिक धनोपार्जन करने के संदर्भ में ऐसे अपराध किए जाते है।
4. सफेदपोश अपराधों में बड़े—बड़े व्यापारिक समूहों तथा पूंजीपतियों का हाथ होता है। अतएव इनकी निरपेक्ष न्यायिक जाँच संभव नहीं पाती है।
5. सफेदपोश अपराधियों की सामाजिक, आर्थिक एवं राजनीतिक प्रास्थिति उच्चतर होने के कारण यथोचित रूप से इन पर कानून का भय नहीं होता तथा इस पर सामान्य अभियोग नहीं चलाया जा सकता है।
6. सफेद पोश अपराधी प्रायः न्यायालयों के न्यायाधीश, अधिवक्ताओं एवं विधायकों के समतुल्य होते हैं अतः ये शासनतंत्र, पुलिस तंत्र को प्रभावित किये रहते है यदि इनके विरूद्ध कोई अभियोग चलाया भी जाता है तो इनके प्रति शासनतंत्र न केवल भाँति मौन साधे रहता है अतः इसी कारण ऐसे अपराधियों को गिरफतार करना एवं दण्ड प्रदान करना संभव नहीं होता है।
7. सफेदपोश अपराधियों के काले कारनामों का आसानी से प्रमाण नहीं मिल पाता है और न हो उनके आपराधिक कृत्यों के बारे में भी किसी प्रकार की सूचना नहीं मिल पाती है।
8. श्वेत पोश अपराध पेशेवर अपराध होता है और जानबूझकर किया जाता है।

सफेदपोश अपराध के प्रकार :—
विभिन्न विचारकों एवं अपराध शास्त्रियों ने अनेक प्रकार के सफेदपोश अपराधों को चिन्हित किया है जिन्हें हम सफेद पोश अपराधों के विभिन्न प्रकारों के नामों से जानते है जिनका क्षेत्र परिभाषित करना बड़ा कठिन कार्य है।

धोखा (Fraud), जालसाजी (Forgery), घूसखोरी (Bribery), गबन (Embezzlment), भ्रष्टाचार (Corruption), परिबजारी या कालाबाजारी (Black Marketing), तस्कर व्यापार (Smuggling), बैंक घोटाला, साइबर क्राईम, कर चोरी, नकली मुद्रा, स्वस्थ धोखाधड़ी, यौन अपराध।

सफेदपोश अपराधों में वृद्धि का कारण :—
1. राजनीतिक अस्थिरता तथा भ्रष्टाचार।

2. कानूनों के क्रियान्वयन में दृढ़ इच्छा शक्ति एवं आधुनिक तकनीक का अभाव।
3. सामाजिक मूल्यों का ह्रास।
4. उपभोक्ता एवं बाजारवाद।
5. जनजागृति एवं राष्ट्रीयता की भावना की कमी।
6. दण्ड की उदारवादी नीति या दण्ड की कमी।
7. महंगाई एवं भ्रष्टाचार।

सफेदपोश अपराधों सबंधी न्यायिक दृष्टिकोण :–

1. सत्यम घोटालाबोफोर्स
2. दलाली काण्ड
3. चारा घोटाला 1996
4. शेयर घोटाला 1992–97
5. पैट्रोल पम्प घोटाला 1996
6. दूरसंचार घोटाला 1996
7. यूरिया घोटाला 28.05.1996 – 26.12.1997
8. यूटीआई घोटाला 2001
9. आवास घोटाला 1996
10. हवाला काण्ड 1991

- स्टेट बनाम बगारप्पा (2001 क्रि.ला.ज. 111 सु.को.)
- दत्तात्रय खाडेकर बनाम बार कौंसिल ऑफ महाराष्ट्र 1984 (एस.सी.88)
- बौधिसत्व गौतम बनाम शुभा चक्रवर्ती (ए.आई.आर. 1996 एस.सी.922)
- ए.आर. अतुले बनाम आर.एस. नायक (ए.आई.आर. 1988 एस.सी.153)
- ए.के. दास गुप्ता बनाम स्टेट ऑफ हरियाणा (1996 (2) आई.आर. 200 एस.सी.)
- हमदर्द दवाखाना बनाम यूनियन ऑफ इण्डिया (ए.आई.आर. 1960 एस.सी.554)
- अब्दुल गफ्फार बनाम स्टेट ऑफ मध्यप्रदेश (1993 सी.आर.एल.आर. / म.प्र.जे.एन. 141)
- नारायण लाल निराला बनाम स्टेट ऑफ राजस्थान (1993 क्रि.लॉज. 3911 ए.आई.आर.1994 एस.सो.)
- एम.के. आनंद राव बनाम स्टेट ऑफ आंध्रप्रदेश (ए.आई.आर. 1979 एस.सी.701)
- केरल राज्य बनाम वर्गोस (ए.आई.आर. 1987 एस.सी.33)

सफेदपोश अपराधों का समाज पर दुष्प्रभाव :–

- आर्थिक हानि
- सामाजिक क्षति
- नैतिक मूल्यों का ह्रास
- संवेदनाओं का ह्रास
- भावी पीढ़ी के शत्रु

सफेद पोश अपराधों को रोकने के उपाय/सुझाव –

सफेदपोश अपराध समाज की जड़ों में समा गए है इनका उन्मूलन प्रायः असंभव सा प्रतीत होता है परन्तु फिर भी निम्नलिखित सुझावों को अपनाकर हम सफेदपोश अपराधों की रोकथाम कर सकते है।

1. राजनीति में अपराधियों के प्रवेश पर रोक लगाई जाना चाहिए।

2. राजनीतिक पार्टियों में पारदर्शिता सुनिश्चित किया जाना चाहिए तथासंसद एवं सांसदों के लिए आचार संहिता बनाई जाना चाहिए।
3. राजनीतिज्ञ जवाबदेही के लिए आयोगों का गठन किया जाना चाहिए।
4. अफसरशाही में भ्रष्टाचार चरम पर है अतः भ्रष्टाचाररोधी सतर्कता विभागों का पुनर्गठन किया जाना चाहिए।
5. स्थानांतरण नियमों का उचित रूप से पालन किया जाना चाहिए।
6. आपराधिक विधि में नये सिरे से विचार एवं मनन किया जाना चाहिए।
7. सफेद पोश अपराधों की सुनवाई के लिए अथवा विचारण के लिए विशेष अधिकरण गठित किए जाने चाहिए।
8. भारतीय दण्ड संहिता में सफेदपोश अपराधों को सम्मिलित किया जाना चाहिए।
9. दण्ड प्रक्रिया संहिता में संशोधन करके यह व्यवस्था होना चाहिए सफेदपोश अपराधी दोषसिद्धी पर अपनी प्रतिष्ठा का लाभ न उठा पाए।
10. समाज के साधन सम्पन्न राजनैतिक व्यक्तियों, बड़े–बड़े प्रशासनिक अधिकारियों, उद्योगपतियों के विशेषाधिकारों एवं राजनीतिक अधिकारों को समाप्त किया जाना चाहिए।
11. वकीलों, चिकित्सकों, इंजीनियर्स आदि द्वारा अपने व्यवसाय से संबंधित आचार–संहिता का पालन करवाया जाना चाहिए और आचार संहिता के उल्लंघन पर उनकी सनद और डिग्रियों को निरस्त किया जाना चाहिए।
12. न्यायाधीशों का अपना कार्य ईमानदारी, सत्यनिष्ठा व पक्षपात रहित होकर व किसी भी दबाव से मुक्त होकर करना चाहिए।
13. व्यापारियों, मिलावटखोरों, कालाबाजारी करने वाले लाईसेंस जब्त कर आजीवन प्रतिबंध लगना चाहिए।
14. पुलिस को वी.आई.पी. दबाव से मुक्त कर उनकी आर्थिक और परिवारिक जिम्मेदारी सरकार की होना चाहिए।
15. सफेद पोश अपराधों के बारे में जनता को जागरूक करना चाहिए।

सारांश :–

सफेद पोश अपराधों के लिए व्यापक क्रांति की आवश्यकता है सफेद पोश अपराधों के निवारण पर प्रभाव डालने वाले प्रतिबंधों से युक्त समुचित विधानों का निर्माण तो आवश्यक है ही साथ ही साथ उनके प्रवर्तन के लिए दृढ़ इच्छा शक्ति भी जरूरी है। राष्ट्र के छोटे व्यक्ति स लेकर बड़े बलशाली व्यक्तियों में राष्ट्रीय कल्याण की भावना का जब तक संचार नहीं होगा तब तक इस समस्या का हल नहीं हो सकता। चूंकि सफेद पोश अपराधों का उद्भव आर्थिक क्षेत्र में प्रतिस्पर्धा के कारण हुआ है यह वर्ग संघर्ष की देन है इसके पीछे यह दर्शन छिपा है कि व्यक्ति की सफलता उसके धनी होने में छिपी है इसलिए धन किसी भी प्रकार से शाम–दाम–दण्ड–भेद से कमाया जाना चाहिए चाहे धन प्राप्ति के लिए समाज व राष्ट्र को कितनी ही हानि क्यों न हो जाए। अतः इस दर्शन को न्यायालयों, विधेयकों और नये विचारों से युक्त लोक मत द्वारा नष्ट कर समाज से सफेदपोश अपराध को खत्म किया जा सकता है।

साथ ही साथ सफेद पोश अपराधों के निवारण के लिए जनजागृति लाने की दिशा में मीडिया, और संचार माध्यम को अहम भूमिका निभाना चाहिए। तथा सफेदपोश अपराध

के मूल कारण जैसे बढ़ती अमीरी, गरीबी, भीख, शिक्षा में असमानता, सामाजिक, आर्थिक, राजनीति असमानता को कम करके सफेपाश अपराधों की रोकथाम की जा सकती है।

संदर्भ सूची :—

1. अपराध शास्त्र एवं अपराध प्रशासन – प्रो. मुरलीधर चतुर्वेदी।
2. अपराध शास्त्र एवं आपराधिक न्याय प्रशासन – प्रो. एन.बी. परांजपेय।
3. भारत का संविधान – जे. नारायण पाण्डेय।
4. म.प्र. क्रिमिनल रिफ्रेरेन्स – श्री विनायक शंकर चराटे।
5. क्रिमिनल लॉ – पी.एल. पिल्लै।
6. अपराधशास्त्र – बसंतीलाल बावेल।
7. क्रीनिकल पत्रिका।

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"MARKET VALUATION OF VARIOUS FIRMS WHICH ARE LISTED IN INDIAN MARKET"

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Abstract:- The study pertains to comparative analysis of the Indian Market with respect to various international counterparts. Exchanges are now crossing national boundaries to extend their service areas and this has led to cross-border integration. Also, exchanges have begun to offer cross-border trading to facilitate overseas investment options for investors. This not only increased the appeal of the exchange for investors but also attracts more volume. The market controllers should draft suitable approach structure to settle the economic situations for holding financial backer certainty and stable costs. Interests in capital serious areas more steady and manageable execution. Notwithstanding, one ought to be sufficiently wary to the essentials of ventures.
Keywords: Market, Valuation & Models.

1. INTRODUCTION

Resource estimating and market valuation has been the point of convergence of exploration in the area of account for the past numerous years. There are numerous ways one can survey its fairly estimated worth going from considering the costs of offers in the market to Market Value Added measure taken by limiting the financial worth added boundaries of a particular firm. Moreover, current money, an action registering connection between the market estimation of firms and their substitution cost. Such an action takes into consider both book worth and market estimation of obligation and value, henceforth more powerful in resource evaluating speculations.

There are a large group of variables influencing the estimation of firms at the commercial centres. These variables incorporate the exhibition of the economy, execution of the business that the organization has a place with or more every one of the basics of explicit firm itself. Indeed, the market valuation is the capacity of the joining of these powers for the value financial backer. One of the principle elements of a security investigator is to distinguish which of these variables incite the market valuation in a particular country. The current examination gathering monetary information of 50 organizations endeavour to gauge the market estimation of firms utilizing Tobin's from the outset and afterward decide the unmistakable monetary factors that influence the extent f such market boundaries.

One of the genuine troubles looked by a value financial backer especially from a developing business sector, is the place where he ought to contribute and what factors he ought to consider while taking his speculation choices.

For the most part, it is accepted that the income and monetary states of a firm will be reflected in the costs at which the portions of such firms executed in market bourses. Albeit numerous examinations previously managed this matter under observational system, the discoveries of the vast majority of them are profoundly veering in nature. In any case, in a developing business sector setting, the determinants of market valuation are secretive and financial backers are losing their route especially under unusual conditions. Subsequently, this examination means to zero in basically available valuation of the 50 clever organizations. Each organization's book esteem is not quite the same as its reasonable worth relying on different components or boundaries.

An investigation of this sort in firm valuation has numerous functional ramifications. The exploration hopes to precisely gauge both the market worth and substitution expenses of resources. There are different ideal apparatuses for assessing the better entertainers as per the various boundaries and variables. Besides, this market valuation measure fuses to the past occasions, future propensities (market estimation of the offers) remembering the assumptions for progress for the execution of new tasks. It is likewise conceivable to decide the level of imposing business model over change utilizing.

The excess part of this paper is coordinated as follows. The following area presents the important writing. At that point a conversation on the information and procedure utilized in the examination is made. The experimental outcomes and conversation on the equivalent are made in the accompanying segment. The paper closes for certain finishing up comments.

2. LITERATURE REVIEW

Critical prescient force in the clarifying valuation outcomes of major corporate arrangement factors Chung, Wright and Charoenwong [1]. Their examination created experimental proof for this connection. In another examination on and monetary arrangement, Chirinko [2] stressed the significance of connecting the monetary and genuine areas and working with advancing models. Model of speculation would seem to give a system fulfilling these two rules. Rather than the first introduction of the Q model, the proper advancement has not perceived that the firm effectively partakes in various monetary business sectors; in this more extensive setting, Q might be a uninformative and conceivably deceptive sign for venture uses. In their exploration on Market valuation and the hypothesis of venture, [3] analyzed speculation work is poor. Their exploration neglected to discover the cointegrating connection between the two measures. The examination likewise showed that business visionaries place more accentuation on negligible q than on normal q in venture choices. In an investigation on the effect of Tobin's and income on speculations[4], showed systematically that venture is emphatically identified with income, even without change expenses or financing contacts[5] look to appraise the overall significance of industry, center, and offer impacts in deciding firm execution and the investigation found that industry impacts represent most of the clarified difference.

Corporate ventures, Financing and Risk the board and presumed that speculation relies upon the proportion of minimal Q to the minor estimation of liquidity. They likewise showed the connection among speculation and negligible Q changes with the peripheral wellspring of subsidizing.

Utilizing information for an uneven board of UK organizations over the time frame 1975-86, assessed a Q model of speculation. The outcomes discovered Q as a huge factor in the clarification of organization venture, despite the fact that its impact is little and a cautious treatment of the unique design of Q models seems basic. Notwithstanding Q, both income and yield factors are found to assume an autonomous and critical part. Notwithstanding, Q models have not been discernibly effective in representing the time arrangement variety in total venture[6],firm expansion are adversely related. Their proof is predictable with the view that organizations look for development through enhancement whenever they have depleted inside development openings. Along these lines they have neglected to discover proof steady of the view that broadening furnishes firms with an important elusive resource.

In business games on Total Enterprise Simulation model, Sauaia and Castro [7] thought about the estimation of the each re-enacted organization with seven other past execution markers. Actually like in innovative reality, the speculation was demonstrated that organizations with a superior showed toward the finish of ten adjusts a higher incentive for the than those with a lacklustre showing. Different monetary markers of a business game organization's presentation exist[8]. In a neoclassical entomb transient system genuine speculation is controlled by Tobin's negligible Q. The model is utilized to clarify UK fixed interest in the assembling area 1968–1990 utilizing a blunder amendment model and cointegration methods [9]. They grew such way to deal with incorporate both office expenses of obligation a d system changes, where in certain periods the firm might be request compelled.

2.1 Model

Two step analytical procedures have been pursued in this study. At first the study computes for judging how far the firms are getting market valuation higher than their replacement cost or book value of assets. Thereafter, using Ordinary Least Square (OLS) multiple regression analysis, the study captures the financial factors relevant in affecting the market valuation of firms in India. Only four financial variables – Financial Leverage, Dividend Payout, Earnings Growth and ROI- have entered into our regression system as exogenous construct. The variable selection is based on empirical literature and the intuitive knowledge of the researcher.

2.2 Variables Used

Tobin's Q, or the Q proportion, is the proportion of the market estimation of an organization's resources (as estimated by the market estimation of its remarkable stock and obligation) isolated by the substitution cost of the organization. The market esteem alludes

to the sum a firm is worth available (by increasing offers by the going piece of the overall industry cost), while the book esteem alludes to the aggregate estimation of an organization's net resources (less devaluation, obligation, etc.).Tobin's Q is seen as a depiction of a company's monetary exhibition.

Q Ratio = Total Market value of the company + liabilities
             Total assets (or book) value + liabilities

- If q>1, then firms have an incentive to increase their capital stock because capital once installed and producing goods and services is priced more than its cost.
- If q<1, then firms should scrap capital, close plants etc.

2.3 Financial Leverage
Monetary influence is how much an organization utilizes fixed-pay protections like obligation and favoured value. The more obligation financing an organization utilizes, the higher is its monetary influence. A serious level of monetary influence implies high revenue instalments, which contrarily influence the organization's primary concern income per share. The expansion under water and favoured values in an organization's capital construction makes expansion in monetary danger the firm through expanded interest instalments

2.4 Dividend Payout Ratio
The profit payout proportion is the measure of profits paid to investors comparative with the measure of absolute overall gain of an organization. The sum that isn't delivered out as profits to investors is held by the organization for development. At the point when the profit payout proportion equation is repeated on a "per share" premise, the recipe will be:

DividendS Per Share (DPS)
Earnings Per Share (EPS)

Return on Investment (ROI)

An exhibition measure used to assess the general effectiveness of a venture or to look at the productivity of various speculations. return for money invested measures the measure of profit from a venture comparative with the speculation's expense. To ascertain ROI, the advantage (or return) of a venture is isolated by the expense of the speculation, and the outcome is communicated as a rate or a proportion. Truth be told ROI clarifies the twin presentation of the organization - productivity on one side and resource the board proficiency on opposite side.

Earnings After Tax
Total Asset Investment
Earnings or Profit Growth

Earnings Growth rates refer to the year of year percentage change of profits within a specific time period, given a certain context. Such growth is mathematically measured by:

Earnings After Tax$_t$
Earnings After Tax$_{t-1}$

3. RESULTS AND DISCUSSIONS

Table 01

Year	Variables	Coefficient	t	P value	R
2013-2014	FL	3.754	12.331	0.000*	0.859
	DP	-0.001	-0.128	0.899	
	Growth	-0.005	-1.523	0.135	
	ROI	0.059	4.671	0.000*	
	FL	0.748	0.883	0.382	

2014-2015	DP	-0.002	-0.232	0.817	0.36
	Growth	-0.003	-0.205	0.838	
	ROI	0.027	0.705	0.480	
Overall	FL	2.384	8.413	0.000*	0.237
	DP	0.003	0.583	0.560	
	Growth	0.000	-0.774	0.440	
	ROI	0.031	2.650	0.009*	

*Significant at 1% level **significant at 5% level ***significant at 10% level

Table 1 reports the relapse consequences of and its connection with the select firm financials. On examining the outcomes, it is very clear that specific monetary boundaries like Financial Leverage/Capital outfitting practices and Overall Profitability (ROI) constantly sway the market valuation of firms in India. Its effect is altogether high and rate difference clarified by them is at bigger degree during the year 2013-2014. In 2013-2014 around 85 percent of varieties were clarified by Financial Leverage and Return on Investment. Be that as it may, during the start and end years the investigation couldn't perceive any factual importance in the boundaries.

Apparently, the market esteem forecasts intermediary dependent on firms' essentials have inferred huge improvement during the years and 2013-2014. It is very astonishing to take note of that the clarified difference during such years delivered around 40 to 50 percent improvement over the earlier year forecasts. Such a finding uncovers that the level of effect of firms financials available valuation intermediary of time changing and relies upon the speculation environment in the country. Strangely, essential attributes, for example, influence proportions and ROIs altogether catch the precise danger component of market fluctuations in India. In addition, we should see that the indication of relapse is reliable with what one may naturally anticipate. Our examination discovers comparative positive useful connection between market beta and obligation financing by firms. Additionally, the presence of positive connection among beta and benefit income proposes that the more grounded the productivity over the long run, better the market esteem, accepting all the other things stays steady.

4. CONCLUSION

The examination sought after both distinct and inferential methodology utilizing various relapse structure in its insightful approach. Tobin' s Q is a sound measure for making a decision about the market valuation of firms since it consider two dimensional parts of valuation-inborn valuation and market valuation. The organizations have a place with the capital escalated areas like FMCG and Pharmaceuticals have higher market valuation proportions and the Public Sector Undertakings (PSUs) are consistently getting lower valuation comparative with their book esteem. The bullish development in the bourses is the main consideration affecting higher market estimation of firms according to the examination did in this investigation.

OLS based different relapse models discovered genuinely huge causal relations between market valuation of firms and monetary influence and generally speaking benefit measure ROI. The clarified difference by these two factors in relapse during specific years got around 40 to 50 percent improvement over the earlier year expectations. Such a finding uncovers that the level of effect of firms financials available valuation intermediary time differing and relies upon the speculation environment in the country. The effect is persevering at exasperate level particularly during bullish economic situations. During the start of versatility stage the examination couldn't discover any relations of market valuations with ROI and monetary influence. The effect on market valuation could be twice. One is through the increment in share costs in the market because of general value conditions and second is because of the presence of obligation that brings advantages of monetary influence and benefit subsequently appreciation in value market costs.

This investigation welcomes numerous approach suggestions. Since capital development in the economy lies at the center of steady and reasonable execution of the monetary business sectors, the examination unveils the firm-level factors that sway the market valuation component in arising economies like India. Consequently, the market controllers should draft suitable approach structure to settle the economic situations for

holding financial backer certainty and stable costs. Interests in capital serious areas like Pharma and FMCG offer more steady and manageable execution. Notwithstanding, one ought to be sufficiently wary to the essentials of ventures in which the firm works and need suitable change in such manner to warrant better assessments.

REFERENCES

1. Chung, K. H., Wright, P., & Charoenwong, C. (1998). Investment opportunities and market reaction to capital expenditure decisions. Journal of Banking & Finance, 22(1), 41-60.
2. Chirinko, R. S. (1987). Tobin's q and financial policy. Journal of Monetary Economics, 19(1), 69-87.
3. S Bhagat, B Bolton Corporate governance and firm performance Journal of Corporate Finance, volume 14,issue 3, p. 257 – 273 Posted: 2008
4. Nikolaus, V. (2015). Determinants of firm financial performance in Indonesia and the Netherlands: A comparison (Bachelor's thesis, University of Twente).
5. T G Arun, J D Turner Corporate Governance of Banks in Developing Economies: concepts and issues Corporate Governance: An International Review, volume 12, issue 3, p. 371 – 377 Posted: 2004.
6. Jain P C (1987), "The Effect on Stock Price of Inclusion in or Exclusion from the S&P 500", Financial Analysts Journal, Vol. 43, No. 1, pp. 58-65.
7. Kumar S SS (2005), "Price and Volume Effects of S&P CNX Nifty Index Reorganizations", Metamorphosis – A Journal of Management Research, Vol. 6, No. 1, pp. 9-32.
8. Dhillon U and Johnson H (1991), "Changes in the S&P 500 List", Journal of Business, Vol. 64, No. 1, pp. 75-85.
9. Gupta, J., Bunkanwanicha, P., Khaskovo, S. and Spieser, P. (2016). Do Financial Indicators Drive Market Value of Firms in the Transition Economies? The Russian Case.Journal of Emerging Market Finance, 15(2), 225-268.
10. Masih, A. M. M. & Masih, R. (1997). A comparative analysis of the propagation of stock market fluctuations in alternative models of dynamic causal linkages. Applied Financial Economics, 7 (1), 59-74.
11. Agarwal, R N (2000): 'Financial Integration and Capital Markets in Developing Countries: A Study of Growth, Volatility and Efficiency in the Indian Capital Market', mimeo, Institute of Economic Growth, Delhi.

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A STUDY OF EDUCATORS' AND STUDENTS' PERCEPTION TOWARDS ONLINE EXAMS AS A MODE OF EVALUATION IN SCHOOLS OF CHANDIGARH AND HARYANA

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Abstract:- The entire education system has been experiencing a paradigm shift for some time, and more so during COVID Pandemic era. E-learning, Electronic Teaching Tools and Digital Assessment have been there for a while. Digitization and Automation in Education has improved effectiveness and efficiency of systems and processes. 'Blended Learning' promises to emerge as the 'New Normal' of Learning. Online Evaluation forms an integral and important part of online learning, but, there has been limited implementation of online invigilated examinations. This article addresses the perceptions of educatorss as well as students towards the use of online exams as an evaluation tool in schools. This has been done through a questionnaire, seeking views on advantages and challenges associated with online exams as compared to traditional offline mode. The participants were Government school students and practicing educators of schools in Chandigarh and Haryana. The paper examined the feedback provided by participants while discussing Blended Mode of learning and the suitability of online exams. Measures for conducting e-exams have also been suggested.
Keywords: Blended Learning, COVID-19, Online Education & Evaluation, Teachers' Perceptions, Technology.

1. INTRODUCTION

School education was majorly limited to face-to-face discussions in classrooms till now, with a few exceptions of self- driven teachers and high-tech institutions, imparting education through the use of internet based content and technology. But the Global COVID-19 Pandemic has shaken the roots of the education system all over the world, India being no different. Over the last few months, all stakeholders of the education system, primarily, teachers and students, have experienced newness in teaching, learning and also in evaluation.

Even before the pandemic, concepts related to E-Learning, Flip Teaching and Blended Classrooms, were certainly not unknown in India, but characterising "Blended Learning" as 'New Normal' of education, has opened new avenues in Indian School Education system. Blended mode is basically a combination of the best elements of both online learning and face to face learning, more like distance education where students have the convenience of learning at their own place, time and pace.

Blended learning can be defined as the combination of traditional methods of learning and online learning. Traditional methods include face to face interaction with teachers whereas in online teaching, students are centers of teaching and learning process (Shivam and Singh, 2015). Blended Learning is a two-way process with its innovative technology and teacher acting both as a facilitator and a motivator for the students in the classroom (Kliger & Pfeiffer, 2011). Use of blended learning technology in classroom teaching and learning processes helps students to manage technology effectively throughout the course and develop the project and time management skills (Horn & Staker, 2011). Students can engage in personal and relevant experiences through interactivity and collaborations. Students can communicate and collaborate outside classroom settings through Whatsapp, Skype, Google Meet, Zoom etc. It develops a stronger sense of community among students than either traditional or fully online courses (Rovai and Jordan, 2004).

Blended purpose multimodal framework is comprised of six objectives which shape the approaches of teachers to both design and teaching in blended learning settings i.e. Content, Dialectic/ Questioning, Collaborative Learning, Social and Emotional support, Incorporating Reflection, Synthesizing, Evaluating and Assessing. Teachers can experiment with new approaches to learning and introduce new types of educational technology into their learning such as the web. Students need someone to speak at all levels, either to understand a complex concept or to seek advice regarding career and professional

opportunities. With dialectic/questioning, teachers can check the knowledge of students and further hone it to perfection. Discussion Board Activity centered on a specific topic (Socratic Method) is the main interactive tool for evaluating online learning activities of many courses.

The increasing importance of blended learning during this time of COVID pandemic creating positive impacts on students learning (Köse, 2010; Yapici & Akbayin, 2012). Therefore, understanding teachers' and students' perceptions about the e-exams as an evaluation tool in blended learning is the main emphasis of this study. This study becomes even more important as the Terminal Subjective Exams have already been conducted online in December, giving firsthand experience to the stakeholders.

1.1 Objectives

The objectives of the present study are:
1. To study the perception of educatorss and students towards online exams as a mode of evaluation in schools of Chandigarh and Haryana.
2. To compare online exams and traditional mode of conducting exams.

2. RESEARCH METHODOLOGY

2.1 Sample

In order to get the students' perception, the questionnaire was shared with 100 students, out of which 74 students participated in the survey. Among the respondents, 34 students were from class 12 whereas 40 students were from class 11 (Fig. 1). Nearly 55 percent (number 41) participants were girls and 45 percent (33) were boys (Fig. 2).

Figure 1: Number of student respondents
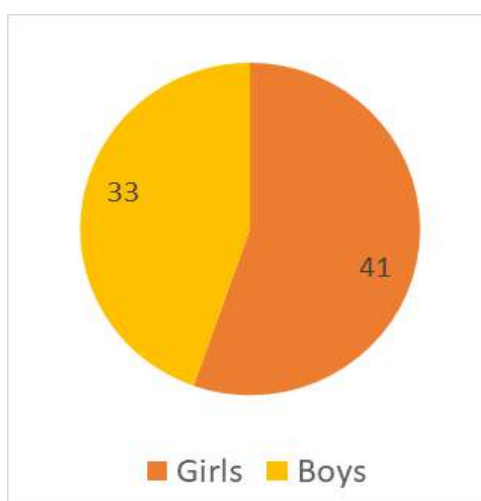
Figure 2: Number of girls and boys respondents

For knowing about educators' perception, 20 participants responded to the google form. Out of which 3 are principals, 13 PGT lecturers, 3 JBT teachers teaching senior secondary classes, and 1 pupil teacher having the experience of teaching in senior secondary school (Fig. 3). Varied subjects being taught by these educators are Biology, English, Physics, Psychology, Science, Chemistry, and Physical Education. Based on their views and in hand experience, they were also recorded through discussions and semi-formal interviews.

Figure 3: Categorisation of educator's respondents

2.2 Tool

In order to achieve the aforementioned objectives, a multi-methods approach has been utilized to collect data to assess the perception of students regarding online examination, a questionnaire was prepared and was conveyed to them as Google form in their respective class groups. The survey form was of mixed bag format including close-ended questions in form of checklists and open-ended questions seeking personal views of the respondents. To study the perception of educators, a questionnaire was designed in Google form which was shared online with the educators. Furthermore, in-depth interviews were conducted to gather information regarding the perception of the educators.

2.3 Procedure of Data Collection

A government senior secondary school in Chandigarh was randomly selected for the study. To assess the perception of students regarding online examination, a questionnaire was prepa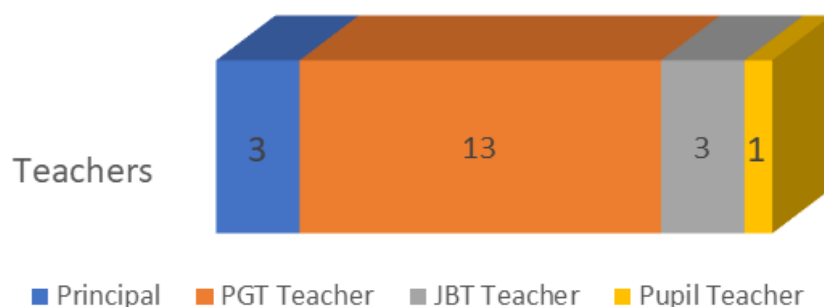red and was conveyed to them as Google form in their respective class WhatsApp groups. Furthermore, in-depth interviews were conducted to gather information regarding the perception of the educators.

The target population of the present study is 11th and 12th class students studying in Government Senior Secondary Schools located in Chandigarh. Medical streams of Class 11th and 12th were designated as 11 D and 12 D were determined as research samples through cluster random sampling. A survey form was shared online with the students in respective class Whatsapp groups. The survey form was of mixed bag format including close-ended questions in form of checklists and open-ended questions seeking personal views of the respondents. The questionnaire provided general information about how the participant uses blended learning and technology. To study the perception of educators, data has also been collected through on-line mode. A questionnaire has been designed in Google form which was shared online with the educators.

2.4 Data Analysis

As discussed above, various questions related to blended teaching and its evaluation methods have been asked from the students and educators of Chandigarh. Their views have been analyzed in the form of simple percentages and represented through graphs and tables.

3. RESULTS AND DISCUSSION

The results of the study have been explained in sequence of the questions asked from the participants.

1. Perception of educators and students regarding evaluation of knowledge using online examination as an evaluation tool

Papers, Tests, Assignments and Portfolios are being done electronically with the help of CMS and other online Tools. This helps the teachers to assess "what works in their class". Close cooperation among academic and technical units is needed for success of online assessment. Instructors should be trained on conducting course online and asking carefully prepared questions via the Internet. Preparing questions for online settings requires extra efforts as they shall be able to seek the intended level of knowledge among the students. Administrative units should support such a teaching-learning environment and should prepare the required structure for the system. Instructors and institutions should spend the time, money, and effort to create positive student perception of online assessment. (Yasar Özden, Ertürk and Sanli, 2004)

Online examinations, commonly known as electronic examinations (e-exams) can be defined as "a system that involves the conduct of examinations through the web or the intranet" (Ayo et al., 2007, p. 126). Online examination systems therefore enable the simplification of the traditional paper based examination. They include designing and delivering the exam to marking, reporting to storing the results, and conducting statistical analysis (Osiyi, 2012; Farziz, 2016)
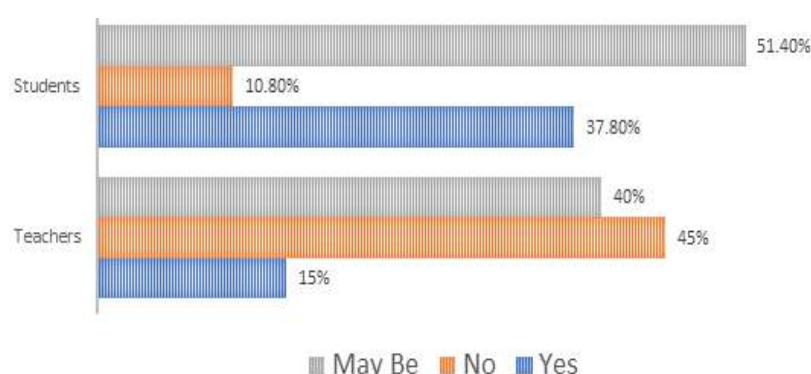
Figure 4: Educator's perception on online exam as a mode of assessment

The analysis shows that among the educators only 15 percent considered online exams as a fair method of evaluation of student's knowledge, whereas 45 percent of educators blankly negated the consideration of online exams as fair means (Fig. 4). The remaining 40 percent of educators were not quite sure about the method of evaluation.

On the other hand, out of 74 students who responded, nearly 38 percent of students feel online exams are a fair medium to evaluate the knowledge of students, whereas 11 percent were negative towards conducting exams in online mode. A slightly more than half of the respondents (51 percent) were not very confident about the online medium being fair and selected the "Maybe" option as a response. Most of the students faced problems in online exams as they do not have required resources such as laptop, smart phone, internet connection etc

2. Perceptions of educators and students regarding the usefulness of online examinations as compared to traditional offline exams in Schools
The results highlighted that only 15 percent of educators felt the online mode of evaluation is better and useful than the traditional method i.e. offline mode (Fig. 5). They considered it a more comfortable mode for the examinee as they can be conducted anywhere, anytime. Educators consider online exams as a safe, time-saving, and cost-effective medium of evaluation in which a large number of students can be covered by a common question paper.
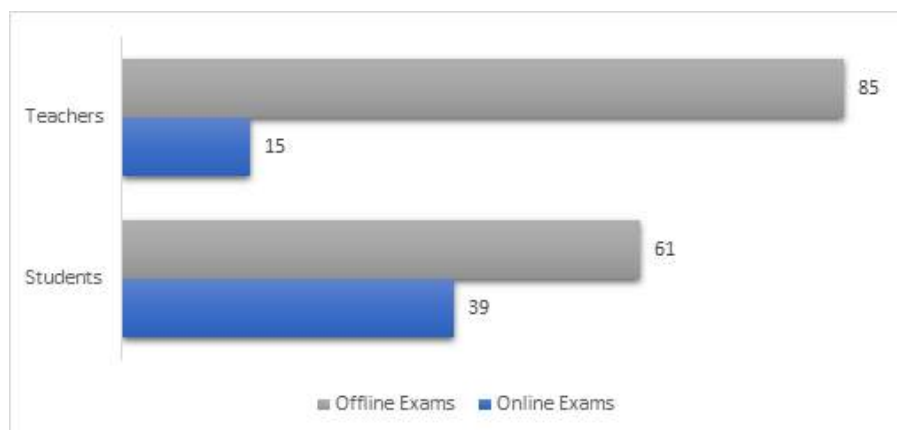
Figure 5: Perception on offline exams and online exams

According to respondents, both objective and subjective questions could be easily evaluated in online exams. An educator remarked, 'During emergencies like COVID-19, online exams have emerged as a good substitute by ensuring the swift movement of the academic calendar'.

As per the perceptions of students, 61 percent of students also perceived offline mode to be a better medium of evaluation considering various challenges associated with online exams. While 39 percent consider online exams as an effective method of evaluation. They feel online mode of evaluation offers a conducive and convenient environment. The students who reside far from school or are out of station still get to appear in the exam and it saves traveling time. A student remarked, 'As in today's era everything including studies is going online, so exams could also be held in online mode and if students write exam honestly, it is as good as offline exam.' Students perceive that online exams can be easily conducted at home. No transportation hassles are involved.

Gender of the student has also been found to have an influence on the preference towards the mode of examination. On one side, only one in every four girl students (26%) has fondness for the online testing system. But on the contrary, as many as half of the male students prefer online mode of exams over the traditional system. Thus, our hypothesis that there is no significant difference in opinion on online exams among male and female students has been rejected (p value = 0.04).

As far as the grade wise perception of the students regarding the conduction of online examination is concerned, four in every five students (80%) appearing for the final board exams prefer the traditional offline exam method. Hence proving our hypothesis that the majority of the students appearing for board exams are not in favour of online exams (p value < 0.05). The dominant reason for this perception is the competitive environment in which the students prepare to achieve high grades and the traditional exam format provides indistinguishable testing conditions which are lacking in the online mode. On the other side of the spectrum as many as half of the students of grade XI have an inclination towards the online format of exams.

3. The main problems faced in conduction of online examinations in Schools
In regular classroom settings both educators and students pose problems in implementation of Blended learning. As for teachers, their attitude towards learning new methodologies, and getting trained in computer applications to fully understand its implications, shall be at the forefront (Capo & Orellana, 2012; Kliger & Pfeiffer, 2011). Another major obstacle is unavailability of devices and internet connection as students find it difficult as well as frustrating if they do not have personal devices to study and work upon. Blended learning requires both the time and a willingness to learn new things (Yonge, 2014; Picciano's, 2009). Adjustment for both teachers and students is required when an online component has to be added to a traditional classroom context (Swenson and Redmond, 2009).

"With the increase in the use of Computer-Assisted Assessment (CAA), there is a need to conduct research about Educators' and Student's perception of online assessment. CAA encompasses a range of activities, including the delivery, marking, and analysis of all

or part of the student assessment process using stand-alone or networked computers and associated technologies "(Özden, Ertürk, and Sanli, 2004). "Processes can be simplified by online evaluation systems which include designing and delivering the exam to marking, reporting, storing the results and conducting statistical analysis" (Osuji, 2012; Farzin, 2016).

The data of the survey explains that half of the sampled educators find difficulty in conducting and checking the subjective answer sheets online (Fig. 6). Nearly 35 percent of educators consider online checking easy while 15 percent consider it moderate.
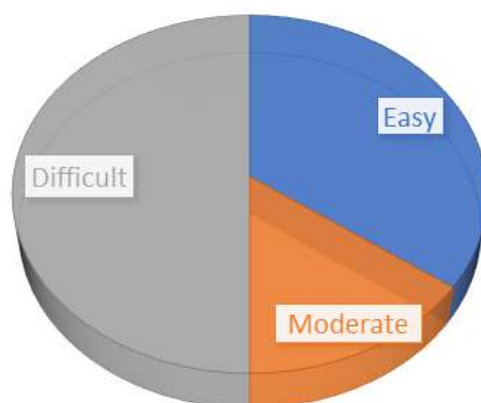
Figure 6: Checking of online papers by educators

Educators stated that everyone is not technologically sound so this poses a problem to teachers and students. Comprehensive knowledge of students cannot be tested. There can be issues with electronic gadgets and cheap internet unavailability. Difficulty in transparent conduction and online exams are more susceptible to cheating. A teacher remarked 'a lot of technical glitches, lack of digital literacy and lack of adequate supervision are major problems in online exams'.

In the view of students, about 71 of them found it difficult to appear in online exams. Students stated that they had to face many problems in online exams like sometimes the server of the internet is down and students are not able to submit the paper on time. Most students feel technology and network issues may lead to delay in the submission of answer sheets as hundreds of students try to submit the exam at roughly the same time which leads to a crash of the website. Server overload, connectivity issues, slow data network, site crashes, and hanging of phones were cited as common issues. Not all students have access to smartphones, laptops, and the internet. The Possibility of cheating is not overlooked. Students feel teachers cannot possibly catch a student cheating as some students may indulge in smart cheating like using search engines on different browsers. They can Google the answer or cheat from notes.

Health issues like anxiety to finish and upload answer sheets in stipulated time and eye problems also surfaced. One student stated "online mode of examination does not provide the competitive environment which one gets in examination hall; background disturbances at home can distract an examinee; poor interconnectivity can create several hindrances".

"Among their major advantages over paper-based examinations are that they constitute a fully automated system which improves assessment validity, in which the examinee's performance is a fair measure of skill and understanding and which uses enhanced question styles, incorporating interactivity and multimedia. Feedback can be provided immediately, thus, removing misconceptions. Compared to paper-based exams, data management tasks such as marking, moderating and storing information become more efficient, which saves time of teachers" (JISC, 2010).

4. Whether students are serious about online exams or not
Only 15 percent of educators responded affirmatively, whereas, 50 percent educators feel that students do not take exams seriously when conducted online. Nearly, 35 percent of educators were not sure about the seriousness of exams.

On the other hand, nearly 55 percent of students are of opinion that students take online exams seriously and only 12 percent of the student respondents were of view that students don't take exams seriously. Nearly one-third of respondents (33 percent) were doubtful about online exams being taken seriously by students.
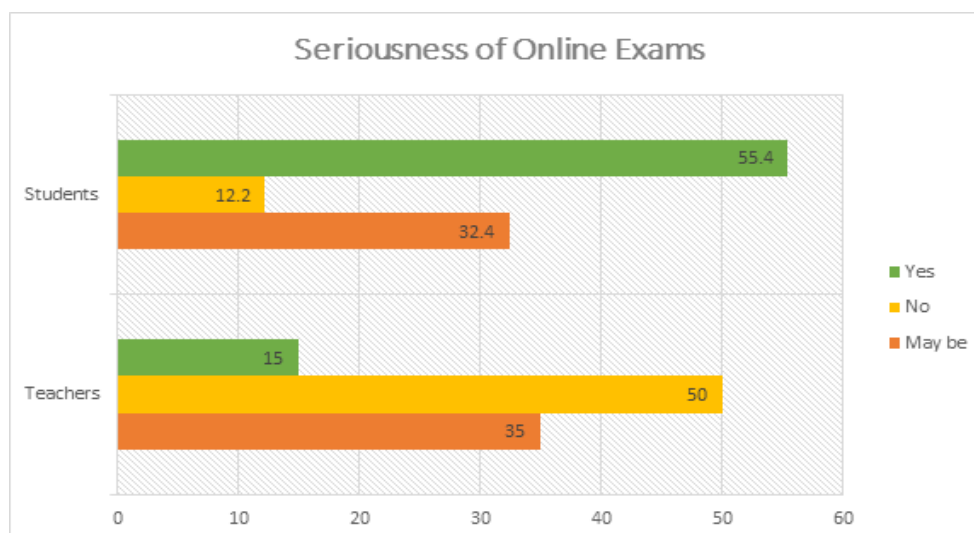
Figure 7: Seriousness of online exams

5.   Educators and students' perception on possible measures that should be taken for the successful implementation of online exams as part of evaluation in schools

In today's times of pandemic, conducting exams online is the best way to keep ourselves safe. If the exams are in digital format, a lot of paper is saved which is great. Even the parents know exactly if their ward is attempting the exam fairly or not. In Blended learning, the parents get to be a part of their wards' educational journey and can ensure honest all-round development of kids by monitoring online evaluation processes. The operative, administrative and logistic costs are less in online exams as compared to offline exams.

Educators and Students feel cheating and taking more time than stipulated on various pretexts is one of the major issues with online exams (Ramu, T. and Arivoli, T, 2013). According to Atoum, Chen, Liu, Hsu and Liu (2017)," the ability to efficiently proctor remote online examinations is an important limiting factor to the scalability of this next stage in education. Presently, human proctoring is the most common approach of evaluation in present times is human proctoring in which the test taker is required to be physically present in the examination center, or a webcam can be used to monitor them during exams". However, such methods are labor intensive and costly.

In the present study, both educators and students provide various suggestions on how to prevent cheating in online exams and for successful implementation of online exam methods.

The suggestions by educators to check cheating and successful implementation of online exam are as following:
1. Online teacher supervision during exam.
2. Selection of questions based on creativity and logic instead of typical textbook questions.
3. Different teachers can be allotted to students on Google meet (just like in offline exams) in different rooms.
4. Setting time limits for exams.
5. Restricted forwarding and downloading of question paper.
6. Video conferencing with students and requesting parents to supervise the children.

The possible ways by which this issue can be resolved as suggested by students are:
1. Online exams should be conducted using platforms like Google meet, Zoom etc.
2. Switching on their camera, while attempting the paper.

3. Setting a time limit for each question, so that students don't have much time to cheat.
4. Talking to parents about invigilating their child for fair conduct of online exams.
5. Matching answers of different papers randomly.
6. 'Secure Browser technology' that prevents users from opening any other Window.
7. Using Forms which closes as soon as another tab is opened up on the computer.
8. Specialized software to keep a check on the students.
9. Using various online proctoring software providers which offer a host of anti cheating methods to predict and prevent cheating.

As a whole, the findings of this study and other academic studies focused on blended learning have found that it has both positive and negative sides for educators and students. But during the time of pandemic, it is the best way of teaching as compared to traditional methods. A lot of groundwork needs to be done to update schools to be ready for the Blended Learning Mode of education in general and using Online Mode of examination as means of evaluation in particular.

4. IMPLICATIONS AND FURTHER SCOPE

Online Evaluation is an important part of Blended learning as many a time it is required that evaluation be done simultaneously along with sharing asynchronous material. In unusual conditions, like the current COVID-19 Pandemic, when it is not feasible for everyone to be physically present in school to maintain social distancing, it becomes very important to keep the cycle of education keeps moving. As evaluation is an important aspect, online exams offer big respite in adverse conditions. As obvious from current research findings, online exams come with baggage but these issues can be sorted out by conscious efforts to a great level. It is clear that students consider Network connectivity and Cheating to be two big hindrances in online evaluation mode. Proctoring methods do exist but more research is required on how to make them effective in local conditions especially in developing countries where infrastructure and funds are a big issue.

In the present research, only the perception of stakeholders of education in Chandigarh schools was considered. In the future, the impact of conducting exams online on academic performance can also be studied. The size of the sample used in this study is small, and research can be done with greater sample size. Moreover, in this paper, students from only one Government school were approached. Now, students and educators from different governments and private schools can be approached to study what all efforts will go into making schools ready for this digital revolution.

5. CONCLUSION AND SUGGESTIONS

Going by the pros and cons of online exams as compared to offline exams, most educators and students feel offline mode is a better mode of evaluating the knowledge of students in the present scenario. Educators and students stated the availability of electronic gadgets and the internet are major hindrance for online exams. Moreover, extensive knowledge of students cannot be tested in online mode of exams. Due to network issues, server problems students find difficulty in submitting the answer sheets online. Not all students have access to smartphones, laptops, and the internet.

As obvious from current research findings, educators and students perceive that online exams come with baggage. But these issues can be sorted out by conscious efforts to a great level. If the design of online exams is valid, reliable, secure and flexible, they will be more effective. Instructors should be trained on how to conduct a course online and ask questions via the Internet. Training programs should be provided to educators in order to learn new pedagogies and skills for blended teaching mode. To address the problem of cheating and other unfair means, some authentication techniques can be used. Online exams need to be efficiently proctored incase the educationists want to scale the next stage with technology.

To address the problem of cheating and other unfair means, some authentication techniques can be used. A user-id and password scheme is some of the authentications required for online exams. In the Profile based authentication process, if the answers to profile and challenge questions of a student match with already stored profile information, then only the student will be allowed to appear for an online exam otherwise not. Identification of an individual based on physiological and behavioral characteristics is called

biometrics. Face, odor, fingerprint, hand geometry, palmprint of a hand, eye, skin, ear, dental, and DNA as well as voice, gait, signature, keystroke, mouse movement, and pulse can be used for authentication. If two or more aforementioned biometrics are used together (Multimodal) in a system, the recognition accuracy is enhanced.

In a nutshell "Successful implementation of blended teaching requires institutional support, including the creation of suitable conditions for conducting online examinations, facilitating administrative procedures, providing the necessary financial support, improving infrastructure, building the capacity of academic staff and providing them with guidance and with technical and pedagogical support" (Shraim, 2019).

REFERENCES:
1. Ayo, C. K., Akinyemi, I. O.; Adebiyi, A. A. & Ekong, U. O.(2007). The prospects of e-examination implementation in Nigeria. Turkish Online Journal of Distance Education, 8(4), 125-134.
2. Capo, B. H., & Orellana, A. (2011). Web 2.0 technologies for classroom instruction: High school teachers' perceptions and adoption factors. Quarterly Review of Distance Education, 12(4), 235-253.
3. Farzin, S.(2016). Attitude of Students towards E-Examination System: an Application of E-Learning. Management Science and Information Technology, 1(2), 20-25.
4. GEÇER, A.(2013), Lecturer-Student Communication in Blended Learning Environments. Educational Sciences: Theory & amp; Practice - 13(1) • Winter • 362-367
5. Horn, M., & Staker, H. (2011). The rise of K-12 blended learning. International Association for K-12 Online Learning. Retrieved from http://www.innosightinstitute.org/innosight/wp-content/uploads/2011/01/
6. Jeffrey, L. M., Milne, J., Suddaby. G., & Higgins, A. (2014). Blended learning: How teachers balance the blend of online and classroom components. Journal of Information Technology Education: Research, 13, 121-140. Retrieved from http://www.jite.org/documents/Vol13/JITEv13ResearchP121-140Jeffrey0460.pdf
7. JISC (2010). Effective Assessment in a Digital Age. A JISC report. Retrieved April 12, 2018 from http://www.jisc.ac.uk/media/documents/programmes/elearning/digiassass_eada.pdf
8. Kliger, D., & Pfeiffer, E. (2011). Engaging students in blended courses through increased technology. Journal of Physical Therapy Education, 25(1), 11-14. Retrieved from http://www.aptaeducation.org/members/jopte/
9. Köse, U. (2010). A blended learning model supported by Web 2.0 technologies. Science Direct, 2(2), 2794-2802. doi:10.1016/j.sbspro.2010.03.417
10. Osuji, U.(2012). The use of e-assessments in the Nigerian higher education system. Turkish Online Journal of Distance Education, 13(4),140–152.
11. Ozden, Y., Erturk, I. & Sanli, R.(2004). Students' perceptions of online assessment: A case study. Journal of Distance Education, 19 (2), 77-92.
12. Picciano, A. (2009). Blending with Purpose: The Multimodal Model. Journal of the Research Center for EducationalTechnology, 5(1), Pp. 4–14
13. Ramu, T., & Arivoli, T. (2013). a framework of secure biometric based online exam authentication: an alternative to traditional examan alternative to traditional exam International Journal of Scientific & Engineering Research, Volume 4,Issue 11, November-2013 52 ISSN 2229-5518 IJSER © 2013 http://www.ijser.org
14. Rovai, A.P and Jordan, H.M. (2004). Blended Learning and Sense of Community: A comparative analysis with traditional and fully online graduate courses. Retrieved August 10, 2015 from www.irrodl.org
15. Shivam, R. and Singh, S. (2015), Implementation of Blended Learning in Classroom: A review paper. International Journal of Scientific and Research Publications, 5(11).
16. Shraim, K.(2019). Learning. Retrieved May 2012 from www.innosightinstitute.org online examination practices in higher education institutions: learners' perspectives. turkish online journal of distance education-tojde, 20(4).
17. Swenson, P. W., & Redmond, P. A. (2009). Online, hybrid, and blended coursework and the practice of technology-integrated teaching and learning within teacher education. Issues in Teacher Education, 18(2), 3-10.
18. Y. Atoum, L. Chen, A. X. Liu, S. D. H. Hsu and X. Liu, " Automated Online Exam Proctoring,& quot; in IEEE Transactions on Multimedia, vol. 19, no. 7, pp. 1609-1624, July 2017, doi: 10.1109/TMM.2017.2656064.
19. Yapici, I. U., & Akbayin, H. (2012). High School Students' Views on Blended Learning. Turkish Online Journal of Distance Education, 13(4), 125-139. Retrieved from http://tojde.anadolu.edu.tr/.
20. Yonge, P. K. (2014). Blended Learning: Making it Work in Your Classroom. Retrieved July 22, 2015 from www.edutopia.org.

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"BATTO BAI DOLLS - EXOTIC HANDICRAFT FROM THE HERITAGE CITY OF MADHYA PRADESH: IN CONTEXT TO INNOVATIVE BUSINESS PRACTICES IN DIGITAL ERA"

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Abstract:- The paper explains Battobai dolls of Madhya Pradesh .These dolls have unique tempting appeal. They are more than decorative object, It played many important role in society. It has been used as toy, puppets and show piece. Its association with religion and usage in religious ceremonies has given a deeper significance and a wider dimension. It was the source of income for many generations. But with the passage of time this handicraft faded away. The present study approaches to understand the importance of craft like battobai dolls.
Keywords: Handicraft, dolls, Hindu Religion, Decorative item, puppet, childhood.

1. INTRODUCTION

Indian handicrafts have been a traditional craft and the skill of making handicrafts has been passed in families from generation to generation. Millions of Indians depend on indigenous mode of production, traditional skills and techniques to fulfill their livelihood based on handmade goods. With the increased in development products are becoming more and more commoditized and artisans find their products competing with goods from all over the world. Handicrafts are a labour intensive industry with high potential of employment for poorer section of the society in rural and urban areas. Handicrafts have been essential for the rural people to earn their living in day to day life. One of the famous crafts is making of toys and dolls that is also passed on generation to generation one of which is battobai dolls. Battobai dolls is the famous handicraft of Gwalior Madhya Pradesh. This famous craft is influenced by Scindia's traditional cloths .It is originated in Gwalior by Battobai family since decades. These dolls made out of small piece of clothes and bamboo sticks. The craft women battobai has achieved national fame and her next generation her daughter in law Naval Kishori has achieved state fame .Generally these dolls have found traditional in clothes mostly used as décor object, playing toy, puppet and widely used on Gangaur and guripurwa. As per the hindu religion there is a myth said to be great tradition that when bhagirath brings gange on earth they did kanyadan of clay doll.

These dolls are mostly sold in pairs. They are generally dressed in traditional clothing which are influenced by maharaja and Maharani of Gwalior, Boat shaped turban on head is likely to be taken from Maratha culture. In the earlier times saris or lehenga choli is draped are dyed by natural dyes and then order are decorated by colorful papers. Facial expressions are made by natural colors and kumkum. Tools used to make facial expressions are tili (a wooden thin stick) and brush. Handmade glue is used for sticking.

1.1 Why cloth dolls?

Cloth dolls are easy to make very light weight and ecofriendly at the same time as no harmful things have used to prepare them as it is made with cloth, some wooden waste and bamboo sticks . It is long lasting quite simple and easy to handle. These dolls are very soft, no sharp edges so it does not cause any harm to children.

Artist - Naval Kishori with her Dolls

1.2 Aims & Objectives

1. To investigate the past and Provence of Indian Art.
2. To decode the style of handicraft and understand how they were taken into daily practices for years.
3. To examine how the interpretations and representations varied with the passage of time, places, religion mythology, use of materials.
4. To understand how battobai dolls came into existence on a wider scale in the field of handicrafts and lost its identity with time.
5. To give exposure of National and International market to the craft.

1.3 The main Objectives were

1. To give a brief study about the lost art of making handicrafts.
2. For better understanding in reviving the lost traditions.
3. To create responsibility to animate the dying traditional arts.
4. To put forward the contemporary system that resuscitates the crafts and bring out information.
5. To provide a futuristic approach to the craft.

2. METHODOLOGY

The methodology that has been used to prepare this paper from its start to end are as follow:

2.1 Data Collection Based on Survey

The success of this kind of study depends on the potential approach of survey. An investigation through observation or personal interview.

The strength of well-structured questionnaire helped in the conduction of the survey in an unbiased manner.

Explored and evaluate the geographical area and socio-economic prospects related to the craft.

2.2 Perception Study

The subject had aroused the interest of many scholar and academicians of several disciplines as a topic of interest.

The source of data is both primary and secondary in nature.

Study also shows that playing with dolls allows children to develop empathy and social processing skills.

The study by neuroscientists from Cardiff University provides first neuroimaging evidence of brain activations during natural play with dolls made possible by using functional near-infrared spectroscopy technology.

- Evidence shows that doll play activates brain regions which are associated with social information processing and empathy, indicating that doll play enables children to rehearse, use and perform these skills even when playing on their own
- Other findings show that doll play allows children to develop empathy and social processing skills more so than solo tablet play, even when playing by themselves
- This study is the first time that some of the fundamental theories around play being social of Jean Piaget, considered by many as the father of developmental science, have been evidenced at a brain level.

3. DATA ANALYSIS

To analyze data in this paper work, structured questionnaire was framed and reviewed the data with the help of the contemporary clay doll maker who all are involved in this crafts from generations. Data base which is used to analyze this study are as follow- Users involve ethnographic technique.

- Direct observation and observation in a way involving participation.
- Interviewing pragmatically in non-structured and /or semi structured format

All the previous works including, published books and research papers as well as unpublished works, doctoral thesis and master dissertation on different aspect of the earthen doll art of Bengal have been taken into consideration.

3.1 SWOT Analysis

Strengths
1. The handicrafts industry has potential in domestic as well as international markets.
2. It provides vast variety and exhibit diversified culture of India.
3. Gives potential source of employment.
4. It requires low capital investment.

Weakness
1. Lacks communication and infrastructure.
2. Lack of co-ordination between manufacturers and exporters.
3. Inadequate information available on new technology.
4. Industry is still confined to rural areas of the country with no promotional support.

Opportunities
1. Emerging demands of handicrafts across the nation.
2. Development of retail sectors and changing lifestyles offer huge requirements of such products.
3. Rise in the industry is due to development in tourism
4. Internet has emerged as a mean to develop its market network.

Threats
1. Increasing competition in domestic markets.
2. Better trade terms are offered by other countries.
3. Lack of technological support.
4. Challenge to establish balance between demand and supply of quality products.

3.2 Major Findings

- Battobai dolls are associated with the family of battobai from ancient time which involves all the female members of the family in making of these dolls and this tradition passed on to generation to generation. It was first made for the kids play then turned into tradition.
- With time these traditional dolls were welcomed in the local markets for sale. Since it was family bounded traditional art it did not set its existence for longer period of time and eventually lost its identity.
- People lag interest in making these dolls as its time consuming with low income.
- Presently demand of handmade dolls have decreased with the increase in demand of machine made toys.

4. CONCLUSION

The analysis shows battobai doll art has lost its identity in the field of handicrafts. Government should take initiatives in reviving this ancient art of making dolls. Battobai dolls can be flourished in the field of handicrafts industry through proper strategies of government.

REFERENCE

1. https://www.dollsofindia.com/library/dollmaking/
2. https://indianculture.gov.in/indian-dolls-and-toys
3. https://www.journalcra.com/sites/default/files/issue-pdf/23924.pdf
4. https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Toy.pdf
5. http://ijmrr.com/admin/upload_data/journal_Suhail%20M%20ghouse%20%20%208au12.pdf
6. Sahai Baldeo :Indian Heritage, Pub Div; New Delhi;2005
7. Kamla Devi Chattopadyaya: Bhartiya hastashilp parampara;Pub Div New Delhi;1991; pg-17-53
8. Ibid: Pg- 1-4 [4] http//www.mapsofindia./Madhya-Pradesh/arts-and-crafts.html;Arts and Crafts of Madhya Pradesh
9. Pandey Anjali: The Changing Pattern Of Design In Bell Metal;Souvenir,Issue-2/Pg34-362013/ Some Aspect Of Traditional Toys In Indian Art And Culture; International Journal Of Social And Life Sciencesvol-Xvii-1Dec2014/Pg-86-92
10. www.indianetzone/indian crafts/woodcraft of central india

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GREEN BANKING AND SUSTAINABLE DEVELOPMENT

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Abstract:- Now a days, everybody is more and more concerned about the natural environment. Environment and climate change are the most complex issues in the world today. So, adoption of changes is the need for survival. The new innovative ideas are applied which are overlapping old traditional way of doing activities .It gives lots of benefits like help in saving time, cost, convenient and eco-friendly. In short today's business is all about being green. Being a financial organization banks are responsible for the economic development of nation and in wide of world. So, banks introduce a new way of doing banking activities which are Eco-friendly, less errors and frauds, cost reduction, greater operational efficiencies and convenient for customers known as Green Banking. These activities are like-online banking, paying bills online and so on. On the other hand, Sustainable development means to meet the need with present without compromising with future generation needs. Reserve Bank of India also gives motivation to take such initiative to contribute in the sustainable development. The study of present paper is exploratory in nature and has view points of different researchers and shows the initiative by various banks adopted green banking in India and displaying challenges of green banking.
Keywords: Environment, Banking, Green Banking, Sustainable Development, Challenges.

1. INTRODUCTION
1.1 Green Banking
Banking industry is one of the industries which is directly or indirectly responsible for increasing environmental hazards. To reduce these environmental hazards the concept of green banking came into existence. Under the concept of green banking more emphasis is given on mobile banking, internet banking etc. The basic aim of green banking is to save the environment and make the banking Eco-friendly.

In the concept of green banking customers are advised to use online payments, channels of online deposits, channels of online investments, and online transfer of money through mobile banking or internet banking. So Green banking is an initiative to make the banking more Eco-friendly so that your carbon footprints can be reduced as much as possible.

2. SUSTAINABLE DEVELOPMENT
Sustainable Development is that development through which we meet their needs of present without negotiate the ability of future generation to meet their own needs. Sustainable Development includes:-
1) Environmental Factors
2) Economic Factors
3) Social Factors
   Without above mention factors sustainable development is nothing.
   Sustainable development in the country or region consider some parameters which must be full fill like pollution control, renewable resources, Population control, Integrated land using planning, Biosphere conservation and water resources management. It is important in all industrial and commercial sectors, as all practices have the potential to challenge social and environmental quality for a better future.

2.1 Green Banking and Sustainable Development
Sustainable development through Green Banking is the new phenomenon in the financial world which concentrates on eco- friendly and society responsible investing Green Bank also called Balanced Bank as they being balance in the environment. India is developing country than such step should be taken into consideration for sustainable development. In the developed countries green intuitive has got rapid attention and extension. In every economy banking industry acts as a pillar of economic system. Banks act as a change agent in the economic and developmental activities and they have planning vital role in promoting

overall sustainable development. Green bank, balanced banks as the name suggested, which main objective is to protect the environment and it is controlled by some authorities same like as traditional banks do. As a social practice green bank plays a brilliant role to define words like sustainable development.

According to RBI, Green Banking is to make a internal bank process, physical infrastructural, and information technology as effective and efficient as possible with zero or minimum impact on environment.

Environment management in the banking business is included as risk management (As hacking is possible of any account or transaction).But inspire of this factor it increases now a days because banks has taken so many measure to keep every transaction and account safe and secured .It helps in increasing wealth and higher profit ratio by providing quality loans which gives higher earnings, so that social and economic objectives are served.

According to Indian Banks Association (IBA) 2014,"Green Bank is like a normal bank, which considers all social and environmental/ ecological factor with an aim to protect the environment and conserve natural resources".

3. REVIEW OF LITERATURE

Hyoungkun Park & Jong Dae Kim (2020) they studied green banking area of creating competitive advantages and new business opportunities for private sector banks and expanding the mandate of central banks and supervisors to secure the financial system and control risks of individual financial institutions and climate related risks also. This paper is beneficial for identify barriers in green banking and analyze activities that are needed to reach desired results and impacts.

Dipika (2018) from her studied concluded that there is still need to create awareness, implementation and following green banking as much as possible in modern business world which is full of new technologies. The author took secondary data for study and saw online procedure of banking transactions and its implementation.

Bhardwaj and Malhotra (2014) they studied connection of the performance of bank with the green banking adoption. They found a good relationship between adoption of green banking and bank profitability

Dharwal, M. and A. Agarwal (2013) from there studied they argued that green banking or ethical banking is a key to reduce various types of risks like- legal risk ,the credit risk and reputation risk. The authors also given some suggestions on green practices- ,green financial products, green buildings ,carbon credit business, green mortgages, carbon footprint reduction, energy consciousness, and social responsibility services towards the society.

Jha and Bhome (2013) After his study on green banking trends in India concluded, he taken various aspects such as green banking, strategy, and its limitations in paper usage as much as possible and relying on online/electronic transactions for processing so that we get Green credit card and green mortgage mills and so on. He also said that banks can also set standards for lending, which is actually an active consideration that will enable environmentally friendly business practices.

Suresh Chandra Bihari (2011) from his study come to end that Green Banking promoting corporate social responsibility (CSR) in financial aspects. The aim of his study is to protecting the environment where banks consider before financing a proposal if it is eco-friendly and does not make any implications for the better tomorrow. An organization will be given loans only when all environmentally friendly standards are complied with. Green banking can be implemented efficiently with the use of technology and guidelines.

Bihari Suresh Chandra (2010) from his study it is concluded that it is highlighting the green banking initiatives taken by the Indian banks. The State Bank of India is the first bank which adopted Green Banking. The author also discussed Green banking is Ethical banking as it also aims to protect the environment.

3.1 Objectives
1. To study the concept and process of Green Banking.
2. To study the concept of Sustainable Development.
3. To understand the benefits of Green Banking.
4. To Know the Green Banking Challenges.

4. RESEARCH METHODOLOGY

The basis of the study is exploratory in nature and makes an attempt to review the literature and information was collected through secondary source of collecting data from different websites, journals and various research papers.

4.1 Limitations

The study is limited to exploratory in nature.
The paper is based on secondary data.

The Green Banking is a broader term. There is no any proper definition on Green Banking. The activities which are done in traditional banking all the same activities are done in Green Banking, but they have distinct identity for environment sustainability. For sustainable development banks should develop innovative green market financial products which can directly or indirectly help in reduction of carbon emission. As people of the society are becoming more aware about the exhaustion of natural resources and these resources cannot be renewal, then organizations or institution especially where public services are adopted and have started corporate social responsibility.

5. EVOLUTION OF GREEN BANKING

The first Green Bank is a commercial bank located in Mt. Dora, Florida, United States began its operations in 2009. The company is known for focusing on environmental friendly banking practices. The bank worked with employees who received Leadership in Energy and Environmental Design (LEED) accredited professional designation, meaning they understood high-performance green building practices from the traditional buildings practices and offered consumers an incentive to purchase high-efficiency vehicles such as hybrid automobiles and has a hybrid Toyota Prius as its own courier car.

5.1 Current Global Scenario of Green Banking

27 green banks before exist in 12 countries and 25 more jurisdictions are cordially examined the model to apply nationally determined contributions, catalyze local green markets and create jobs. The current green banks have shown an impressive track record to invest around $ 25 billion of their own capital to the date, with a total value of $ 70 billion by the mid-2020 of their subsidiaries and ancillary projects. More than $ 45 billion (or 64 percent) of this amount has come from the private sector. Although existing green banks are primarily located in high-income countries, the green bank model is not limited to develop nations. Emerging Green Banks are in 25 countries with worldwide income levels and geographies. Moreover, after all survey the majority of emerging green banking indicated they will need a support from multilateral and bilateral organization for the seed capital(initial).And other problems also like lack of technical knowledge and expertise globally.

6. GREEN BANKING IN INDIA

In India also development of Green Banking is needed. In India, presently 11 banks are there who have adopted green banking initiative. Some of them are as follows State Bank of India, Punjab National Bank, Bank of Baroda, Canara Bank ,IDBI Bank, Axis Bank, ICICI Bank, HDFC Bank and etc have started Green Banking and it has reduced lots of cost, increases productivity, controlling and management of Non Performing Assets (NPA) and improved customers' service to their best possible way. Green Banking reduces paperwork and goes for online transaction. Paper less work will give safety to trees.

6.1 Benefits/Advantages of Green Banking

- Reduces use of paper work.
- Creating awareness about environment sustainability.
- Time saving.
- Reduces cost of services and administration cost.
- Loans at Comparatively lesser rates.

6.2 Strategies of Green Banking

- **Carbon Credit Business**- At international level under the agreement of Kyoto protocol all nations must reduce green house gases emission and reduce carbon to protect environment. These omissions must be certified commonly known as carbon credit.
- **Paperless Banking**- All banks should adopt electronic media and information technology for working as paperless banking. Many transactions through on line system can save money, time and natural resources.
- **Green Credit Card**- In the form of eco friendly rewards or using biodegradable credit card material so that credit cards going green.
- **Green Loan**- It means giving loan to a project or business which is considered environmentally sustainable.
- **Green Mortgage**- It is type of mortgage which provides money saving discount or a bigger loan than normally permitted as a reward for making energy- efficient improvement.

6.3 Green Banking Opportunities

- Adopt techniques and plans to minimize inventory wastage.
- Create financial products and services that support economic development in the nation with environment benefits.
- Inspire and motivate the workforce to follow green practices and also encourage the clients, suppliers to adopt green practices.

6.4 Challenges Regarding Implementation of Green Banking

- **Start Up:-** Customers are more convenient, comfortable, habitual and feel more trust on traditional systems. So, green banking is the new concept which will take time to concept.
- **Operating Cost:-**Green Banking requires innovative, initiative, experienced and highly catching and adopting staff so that they provide proper services and technologies. For doing all this activities operating costs is increased.
- **Brand Risk:-**If banks are involved in those projects which are damaging the environment they are prone to loss of their brand reputation.
- **Credit Risk: -** It arises due to lending those businesses which are pretentious by the cost of pollution, changes in environmental regulations or high due to probability of customer default as a result of uncalculating expenses for capital investments in production facilities, third party claims and so on.

7. CONCLUSION

Implementation of Green Banking is more than just saying eco- friendly. It is inclusion of two different sectors, one is financial and another is environment. It is connected with lots of activities and profit of the bank like reduction of risk as well as cost. So as provide a useful information base for planning and formulating policy for the integrated sustainable development and growth of the nation. For avoiding the damage of environment and achieving sustainable development ethical lending, conservation of energy and efficient initiative must taken by service providing industry such as banking and financial institution, as their social responsibility. Green Banking offers various benefits over traditional banking like digitization of banking processes, 24x7 access facility and available 365 days, time effectiveness and convenience. If green banking is implemented than it will act as an effective and preventive measure for decreasing environmental pollution. Government should play major role and formulate green policy guidelines and financial incentives for going green. Suitable training, technology awareness and educational programs by banks for the green initiatives will actually make green banking successful.

REFERENCES
WEBLIOGRAPHY
1. www.iisd.org
2. www.researchgate.net
3. https://shodhganga.inflibnet.ac.in
4. www.academia.edu

5. www.rbi.org.in
6. www.idrbt.ac.in
7. https://www.quora.com/How-many-Indian-banks-have-green-banking-initiatives
8. https://www.greenbiz.com/article/2020-showed-green-banks-are-global-movement-making#:~:text=Twenty%2Dseven%20green%20banks%20already,green%20markets%20and%20create%20jobs

BIBLIOGRAPHY

1. Hyoungkun Park & Jong Dae Kim,(2020), Transition towards green banking: role of financial regulators and financial institutions, Asian Journal of Sustainability and Social Responsibility volume 5, Article number: 5 (2020)
2. Dipika,(2018), Green Banking in India: A Study of Various Strategies Adopt by Banks for Sustainable Development, IJERT, NCETEMS – 2015 (Volume 3 – Issue 10)
3. Bhardwaj, B. R. &Malhotra, A. (2014). Green Banking Strategies: Sustainability through Corporate Entrepreneurship. Greener Journal of Business & Management studies, Vol. 4, No. 4, PP 180-191.
4. Dharwal, M. and A. Agarwal, 2013. Green banking: An innovative initiative for sustainable development. 2(3): 1-5.
5. Jha and Bhome, (2013),A study of Green banking Trends in India, Abhinav International
6. Monthly Refereed Journal of Research In Management & Technology volume 2
7. Suresh Chandra Bihari, (2011),Green Banking – Socially Responsible Banking in
8. India, The India Banker, VI(1).
9. Bihari, Suresh Chandra, (2010), Green Banking- Towards socially responsible banking in India IJBIT4(1).

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"MADHUBANI PAINTING – A HISTORIC ART WHICH IS BRUSHING OFF : WITH REFERENCE TO INNOVATIVE BUSINESS PRACTICES IN DIGITAL ERA "

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Abstract:- Madhubani or Mithila painting is widely famous for its bold lines, vivid hues and intricate designs. The motive behind conducting this study is to create awareness regarding its declining utility and continuous fall of this art as it has became less know. Not only is this demand to explore prospect for the conservation of this art form via other artistic media for future generations. The current study is taken from secondary data and presented in order to achieve the objectives.
Keywords: Mithila, historic, mythology, Hindu deities, Brahmin, Kayastha, intricate, occasional.

1. INTRODUCTION

Madhubani is basically the name of the village which is situated in the darbhanga district o Bihar. Madhubani means forest of honey. The painting " Madhubani" got its name from there itself, earlier it was known as Mithila painting. It is because it was originated from the Mithila region when king janaka ruled that place. It is believed that during the marriage of sita, king janaka ordered the artists to paint the village with factual chronicles. Thenceforth , this custom of painting is done on every special occasion and considered auspicious. Earlier these paintings were done on the mud walls of the houses and on the floor. The art of making on the walls was named as "bhitti chitra" which we now call them as murals, "aripana" is the floor art, they used rice flour as a medium to epitomize.

This art form is practiced by the women community of the Jitwarpur village , which is popularly known as the hub of Madhubani paintings. These are made on special occasions such as marriages, birth ceremony and other functions. Every figure and motif has its significance, and historical background. These paintings have different styles and themes. Generally it is found that Hindu deities and Hindu mythology is depicted in every form. Motifs like fishes, lotus, tortoise, peacock, tree of life are also found in the paintings.

When we talk about Madhubani paintings , the colours that appears are very eye-catchy colours, and these bright colours are extracted from naturally available resources. They don't buy any of the colours from the market they make their own herbal colours from dried leaves, flowers and many other things that are available in our surroundings. Earlier when none of the colours were used in the paintings, only black and white color was used which was made up rice flour and wood coal powder or cow dung. Now–a–days various colours are made like orange from the palash and marigold flowers, blue color from indigo and from a flower called aprajita, yellow is made up of turmeric and green is from the leaves and stem of a plant. Artists, today use different synthetic based colours which are not appropriate and hence degrade the quality of paintings, some uses blocks to print the motifs and trace the designs which led to the duplication of the paintings.

Huge numbers of brushes and pens are available these days but in the old days Madhubani painting was done by using nibs, bamboo sticks, match sticks, fingers and twigs. As it was a wall art it was done on walls only but it has come on cloth, canvas and paper as well. Various designers have used this craft as their inspiration and had made collection out of it. Today we will find a huge number of products developed by using this art work.

2. STYLES

There are different styles of Madhubani paintings which can be seen on the canvas, they are named as kobhar, kachni, bharni, godna and tantric styles.

- Kobhar is a style which was practiced in old days, these paintings were painted in the room of the newlywed couple where they have to stay for four five days. The figures in this style include pairs of peacock, fishes and radha Krishna these figures symbolizes love, fertility, prosperity and divinity as well.

- **Kachni–** Kachni is basically a line drawing which is filled with thick and thin lines. Black and red colours are used to make these styles of paintings.
- **Bharni–** In hindi the word bharni means to fill, as its name suggests the paintings are filled with vibrant shades and the outer parts are marked with bold black lines.
- **Godna–** Godna means to tattoo so, the geometrical shapes are drawn in this types of painting, figures and images are repeated and are arranged in rectangle and circles.
- **Tantric-** Pictures of the Hindu deities are elaborated in this kind o paintings. The tantric texts are followed.

3. THEMES

As we know madhubani paintings are based on different themes .The following themes are influenced by the hindu dieties such as lord rama, krishna, radha, goddess durga and sarasawati. The social assembly in the palace were also flaunted. Subject matter of the paintings are based on the natural objects also like the sun, moon the flora fauna and the historical stories are depicted as well.

3.1 Problems Faced by the Artisans

There are a lot of problems that artisans have been through. Some of the major problems are that

- Inappropriate advertisements and cheap replication are introduced these days.
- Artisans are not financially strong enough to afford their expenses for travelling to the metro cities and attend exhibitions, as these paintings are the only source of income they have.
- Majority of the artists are women, and they were not allowed to step out of their house to sell their products. They were compelled to depend upon the mediator to sell their paintings outside the city.
- The artists are being told to not to write their names on their own paintings, it is because the mediator would lose business profit from the customers.
- They are not paid enough for their hard work, nor they get any acknowledge men.
- Only maithili was known to them not even hindi or any other language was spoken there, thus this was a major problem for the artisans to communicate with the customers.

3.3 Objectives

- To identify the themes of every style of madhubani painting.
- To study about the background of the artists and art work .
- To study the cultural and social aspects of the painting.
- To find out the awarness among the people about madhubani.
- To study the colour significance of the paintings.

4. REVIEW OF LITERATURE

- Research by Gourav, prashant barnwal, volume 2, number 1, august 2019, pp.1007-1017(11) society for makers, artists, researchers and technologies, shows that madhubani is communication medium which expresses each and every single part of the painting (with a message).

- Research paper by Riju Yamini (2020) titled as - a tool of women empowerment states that madhubani is a source of income for the women.
- According to Dr. Mohini gupta, swati gangwar (Gupta et.al., volume 4 ,may 2016) adaptation of design for the textile products inspired from madhubani paintings – this research paper states that inspiration was taken fron the motifs and themes of the paintings for the contemporisation products.
- Mithila a globalized art form by Dr. Meenakshi Thakur (thakur*, volume 5(Iss.2) february, 2017) this research shows the detailed study about the mithila painting and its characteristics.
- Preserving Traditional Art through Social business by Ankur joshi and SK Tapasvi (december 2, 2015) SSRN (papers.ssrn.com) states that how traditional handcrafts can be preserved through socisl businesses.

5. METHODOLOGY

The prsesnt study is taken from a secondary data. These data are collected from print sources and internet. From various documents and jourals it is found that this traditional craft of madhubani is on the verge of extinction, and losing its originality in this generation due to modernisation and introduction of new technologies daily. According to the data collected from sources it is also seen that women came across their boundries did their best to earn respect in the society, they made this wall painting art a source of their earning from walls and floor to canvas all over the world. The artists are the only ones who are preserving the heritage of our country by hook and crook.

5.1 Modern Expression

Designers from the apparel & Accessory design industries are getting inspired by this lively, mythological and colorful motifs of this art form and adapting it extensively in high end fashion, home furnishings & art facts.

Many designers are working in close association with local artisans who are serving to both like Revival & promotion of the craft by incorporating latest innovative ideas in apparel & accessory merchandise which can go along way in creating hype for this traditional folk art on National & Intarnational platforms.

Apparel and Accessory range featuring madhubani prints – either hand prined or simulated using screen printing techniques–are gaining world wide acceptance among teenagers and young professionals. Range of apparels embellished with madhubani paintings like sarees, draperies, stoles, ties, kurtis, tops and accessories like umbrella, footwears, handbags, masks, jewellery etc.

Adaptation of Madhubani motifs in Apparels and Accessories

6. CONCLUSION

The main purpose of this study is to analyze the reasons why this traditional art form of india is diminishing its originality. The artisans are not getting any recognition for their work, it should be promted by the government by providing them several facilities, so that

they can earn a little for their livelihood and to flourish this art form. And to maintain the originality and pureness of the madhubani paintings.

BIBLIOGRAPHY
1. https://medium.com/@kiukart2015/madhubani-paintings-origin-present-scenario-d47b8084dbf6
2. https://www.cleartrip.com/india/madhubani/
3. https://www.villagesquare.in/2018/07/13/madhubani-painters-want-better-deal-for-their-work/
4. https://www.madhubani.com/about-madhubani-art.aspx
5. https://www.allkarts.com/madhubani-painting/
6. https://www.indianmirror.com/arts/paintings/madhubani-painting.html

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निःशुल्क विधिक सहायता एवं अन्य योजनायें

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प्रस्तावना :–

विधिक सहायता का अर्थ निर्धन व्यक्तियों को न्यायालय अथवा अधिकरणों के समक्ष चलने वाली न्यायिक कार्य वाहियों मे निरूशुल्क विधिक सहायता के रूप में ग्रहण किया जा सकता है, जो विधि द्वारा प्रदत्त अपने अधिकारों का प्रवर्तन करने में सक्षम नहीं हैं। न्यायमूर्ति पी०एन० भगवती के अनुसार ''विधिक सहायता का तात्पर्य समाज मे एक ऐसी व्यवस्था प्रदान करना है जिससे न्याय के प्रशासन की मशीनरी तक आसानी से पहुंचा जा सके और यह लोगों की पहुँच से बाहर न रह सके जिन्हें विधि द्वारा प्रदत्त अपने अधिकारों के प्रवर्तन के लिए यहाँ तक आना जाना पड़े'' उन्होने यह ठीक ही कहा है कि निर्धन एवं अशिक्षित लोगों को न्यायलयों तक पहुँचने में सक्षम होना चाहिए और उनकी अनभिज्ञता एवं अशिक्षा को न्यायलयों से न्याय प्राप्त करने के उनके रास्ते पर रूकावट नहीं बनना चाहिए।

शाध सारांश :–

विधिक सहायता को समाज के निर्धन एवं कमजोर वर्गों को इस उद्देश्य से निःशुल्क विधिक सहायता प्रदान किये जाने के अर्थ में ग्रहण किया गया है कि वे विधि द्वारा प्रदत्त अपने अधिकारों का प्रयोग करने में सक्षम हो सकें। विधिक सहायता का उद्देश्य समान न्याय सुनिश्चित करना है। विधिक सहायता यह सुनिश्चित करने के लिए प्रदान की जाती है कि न्याय सुनिश्चित करने के अवसर से किसी भी व्यक्ति को उसकी निर्धनता, अशिक्षा आदि के कारण से वंचित किया जा सके। एम०एच०हासकाट बनाम महाराष्ट्र राज्य 1978 के मामले मे कहा कि ''निर्धनों को विधिक सहायता उपलब्ध कराना राज्य का कर्तव्य है, अनुकम्पा नही।'' कमिश्नर आफ दिल्ली पुलिस बनाम रजिस्ट्रार दिल्ली उच्च न्यायालय 1997 के वाद में कहा है कि मामलों का उचित एवं त्वरित विचारण न्याय प्रशासन की अहम् आवश्यकता एवं अपेक्षा है। विलंब से मिला न्याय नही के बराबर होता है।

विधिक सहायता के विभिन्न स्तोत्र :–

1. **मेग्नाकार्टा (अनु. 40 मेग्नाकार्टा 1215)–** विधिक सहायता स्कीम का प्रमुख स्तोत्र मेग्नाकार्टा है। मेग्नाकार्टा मे यह कहा गया है कि ''कोई भी व्यक्ति न्याय से वंचित नही किया जाएगा। न्याय विक्रय की वस्तु नही होगी और न ही न्याय में विलम्ब किया जाएगा।'' न्यायमूर्ति पी०एन०भगवती ने मेग्नाकार्टा को विधिक स्कीम के उदभव का प्रमुख स्तोत्र माना है।

2. **मानव अधिकारों की सार्वभौम घोषणा (1948)–** 1948 मानव अधिकार घोषणापत्र के अनुसार ''सभी व्यक्ति स्वतंत्र पैदा हुए है। जीवन स्वतंत्रता, व्यक्ति की सुरक्षा एवं विधि के समक्ष समानता उनके मूलभूत अधिकार है।''

3. **मानव के सिविल एवं राजनीतिक अधिकारों संबंधित अन्तर्राष्ट्रीय प्रसंविदा–** ''इसके अनु. 14(3) में भी प्रत्येक व्यक्ति को अपनी पसंद की विधिक सहायता द्वारा स्वयं की प्रतिरक्षा का अधिकार दिया है, जिसे भारत के संविधान में अनु. 22 (1) के रूप में समाविष्ट किया गया है।''

4. **फार्मा पापरिस–** पोप के राजा हेनरी अष्टम् ने विधिक सहायता को लागू करने के सार्थक प्रयास किये जिन्हें फार्मा पापरिस के नाम से जाना जाता था। यही व्यवस्था आगे 1951 में एक अधिनियम के रूप में जानी जाने लगी।

5. **भारत का संविधान–** अनु. 14 राज्य अपने राज्य क्षेत्र के अन्तर्गत किसी भी व्यक्ति को विधि के समक्ष समानता अथवा विधियों के समान संरक्षण से वंचित नही करेगा अनुच्छेद 14 का उद्देश्य समान न्याय सुनिश्चित करना है।समान न्याय की प्रत्याभूति अर्थहिन हो जायेगी। यदि निर्धन, अशिक्षित अथवा कमजोर व्यक्ति अपने अधिकारो का प्रवर्तन अपनी निर्धनता, अशिक्षा या कमजोर के कारण नहीं कर सकेंगे।

6. **विधिक सहायता क्लीनिक्स–** अनेक यूरोपिय देशों ने स्थानीय अधिवक्ताओं, समाजसेवी प्राधिकारियो आदि के सहयोग से चलित विधिक सहायता क्लीनिक्स स्थापित की। इन चलित क्लीनिक्स के सदस्य बंदीगृहों, बोर्स्टलो तथा सुधारग्रहों आदि में जाकर वहां के गरीब, निर्धन एवं साधनहीन अन्तरू वासियों का पता लगाकर उन्हें उनके अधिकारों तथा उपचारों से अवगत कराते थे, तथा उन्हें आवश्यक निःशुल्क विधिक सहायता उपलब्ध कराते थे।

7. **तैहरान सम्मेलन 1968–** राष्ट्रसंघ के तत्वाधान में ईरान की राजधानी तेहरान में अप्रैल मई 1968 मे विधिक सहायता के विभिन्न पहलुओं पर विचार विमर्श करने हेतु एक वृहद् सम्मेलन आयोजित किया गया जिसमे 84 देशों के प्रतिनिधियों ने भाग लिया इस सम्मेलन में सभी सदस्य देशों की सहमित हुई कि मानवाधिकार एवं मूलभूत अधिकार अप्रतिसंहरणीय है तथा सामाजिक, आर्थिक तथा सांस्कृतिक अधिकारों के उपभोग को सुनिश्चित के बिना सिविल एवं राजनेतिक अधिकारों का समुचित लाभ उठाना सम्भव नहीं होगा।

निःशुल्क विधिक सहायता सम्बन्धी अन्य योजनायें –

मध्यप्रदेश राज्य विधिक सेवा प्राधिकरण द्वारा गरीब, असहाय, पीडित, व्यक्तियों के अधिकारों के लिये और उन्हे सबके समान न्याय दिलाये जाने हेतु निःशुल्क विधिक सहायता / सलाह प्रदान कराई जाती है ।

विधिक सहायता ध्सलाह कौन–कौन प्राप्त कर सकता है –

ऐसा व्यक्ति विधिक सहायता प्राप्त कर सकता है :–

1. जो अनुसूचित जाति ध्अनुसूचित जनजाति का है।
2. ऐसा व्यक्ति जो लोगों के दुर्व्यवहार से पीडित है या जिससे बेगार कराया जा रहा हो।
3. महिला, बालक है।
4. ऐसा व्यक्ति जो मानसिक रूप से अस्वथ है या असमर्थ है, निर्योग्य है। निर्योग्य का मतलब है :– (1) अन्धापन (2) कमजोर दिखाई देना (3) जिसे कुष्ट रोग है (4) कम सुनाई देना (5) जो चल फिर नहीं सकता (6) जो दिमागी रूप से बीमार हो।
5. ऐसा व्यक्ति जो बहुविनाश से जातीय हिंसा या जातीय अत्याचार से सताया गया है, पीडित है तथा प्राकृतिक आपदा जैसे – भूकम्प, बाढ, सूखा आदि से पीडित है।
6. एसा व्यक्ति जो औद्योगिक कर्मकार है। (फैक्ट्री, कंपनी में काम करता है)
7. ऐसा व्यक्ति जो जेल में बंदी है।
8. ऐसा व्यक्ति जिसकी वर्ष भर की आमदनी 100000 रूपये से ज्यादा नहीं है।

किस तरह की विधिक सहायता मिलती है :–

ऊपर बता, गये व्यक्तियों में से जिस का मामला किसी भी अदालत में चल रहा हो या वह चलाना चाहता है, उसे मामले में लगने वाली कोर्ट फीस, तलवाना, टाइपिंग खर्च, गवाह खर्च, नकल प्राप्त करने हेतु खर्च, यदि फैसला अंग्रेजी में है, तो उसको हिन्दी में अनुवाद करने में लगने वाला सभी खर्च, निर्णय आदेश और अन्य कागजों की प्रमाणित प्रतिलिपि लेने के लिए पूरा पैसा मिलता है।वकील की फीस भी नहीं देनी पड़ती है। यह फीस विधिक सेवा का कार्य कर रहे प्राधिकरण या कमेटी द्वारा दी जाती है।

किन–किन न्यायालयों में और किन मुकदमों में विधिक सहायता मिलती हैं :–

विधिक सहायता सभी प्रकार की अदालतों में जैसे–उच्चतम न्यायालय, उच्च न्यायालय, जिला न्यायालय, तहसील न्यायालय, कमिश्नर, कलेक्टर, एस०डी०ओ०, तहसीलदार की अदालत, श्रमन्यायालय यानि जितनी भी अदालतें हैं, चाहे वे फोजदारी की हों, दीवानी की हों, राजस्व की हों या अपील की सुनवाई करने वाली हों, सबके लिए और सभी तरह के मुकदमों में विधिक सहायता दी जाती है।

किन–किन मुकदमों में विधिक सहायता नहीं मिलती है :–

1. मानहानि तथा विद्वेषपूर्ण मामलों में तथा न्यायालय की अवमानना तथा शपथभंग के मामलों में।
2. किसी चुनाव से संबंधित मामलों में।
3. ऐसे अपराधों में जिनमें जुर्माना 50–रूपये से अधिक न हो।
4. आर्थिक अपराधों एवं सामाजिक अपराधों के संबंध में मुकदमा होने पर विधिक सहायता नहीं मिलती। परन्तु अध्यक्ष, जिला प्राधिकरण ऐसे मुकदमों में भी विधिक सेवा प्रदान कर सकेगा।
5. जहां कोई व्यक्ति किसी मुकदमें में पक्षकार का प्रतिनिधि है अथवा मुकदमें में खास पक्षकार नहि है।
6. व्यापार तथा कारोबार करने के संबंध में धन या सम्पत्ति की वसुली के लिए कोई मुकदमा चलाने हेतु।

उच्च न्यायालय में विधिक सहायता – कोई पात्र व्यक्ति जो उच्च न्यायालय में अपना मुकदमा लगाना चाहता है या उसके खिलाफ उच्च न्यायालय में प्रकरण चल रहा हैं, उसे उच्च न्यायालय के लिए विधिक सहायता मिलेगी। यदि मुकदमा उच्च न्यायालय जबलपुर में चलाना चाहते हैं या चल रहा है तो वह सचिव, उच्च न्यायालय विधिक सेवा समिति/ उप समिति जबलपुर को, यदि प्रकरण खंडपीठ इंदौर/ग्वालियर में है या चलाना चाहता हैतो सचिव, उच्च न्यायालय विधिक सेवा उप समिति इंदौर/ग्वालियर को अपना आवेदन देकर विधिक सहायता प्राप्त कर सकता है।

जिले की सभी प्रकार के न्यायालयों में विधिक सहायता – यदि कोई पात्र व्यक्ति जिले की किसी भी अदालत में अपना मुकदमा चलाना चाहता है या उसके खिलाफ मुकदमा चलता है,तो वह जिला न्यायालय में जिला विधिक सेवा प्राधिकरण के आफिस जाकर जिला न्यायाधीश/अध्यक्ष, जिला प्राधिकरण, सचिव या जिला विधिक सहायता अधिकारी को अपना आवेदन देकर विधिक सहायता प्राप्त कर सकता है।

तहसील स्तर के सभी न्यायालयों में विधिक सहायता – तहसील की सभी प्रकार की अदालतों के लिए विधिक सहायता लेने के लिए उसे न्यायालय में तहसील विधिक सेवा समिति जाकर तहसील समिति के अध्यक्ष जो उस तहसील के बडे न्यायाधीश होते है, को आवेदन दे सकता है और विधिक सहायता प्राप्त कर सकता है। मध्यप्रदेश राज्य विधिक सहायता प्राधिकरण लोक अदालतों और निःशुल्क विधिक सहायता की योजना चलाने के अलावा अन्य योजनायें भीचला रहा है, जिसका लाभ प्रदेश में रहने वाल सभी लोगों को उठाना चाहिये।

विधिक साक्षरता शिविर योजना – विधिक साक्षरता का मतलब है, प्रदेश के हर व्यक्ति को उनके अधिकारों और कर्तव्यों की जानकारी देते हुए विधिक रूप से जागरूक बनाना। इसके लिए जिला एवं तहसील मुख्यालयों में हर माह तथा ग्रामीण अंचलों मे समय–समय पर विधिक साक्षरता शिविरों का आयोजन किया जाता हैं। इन शिविरों में न्यायाधीश, वकील, जिले के अधिकारीगण, सामाजिक कार्यकर्तागण, महिलायें, समाजसेवी आदि जाकर लोगों को, विशेषकर अनुसूचित जाति ध्जनजाति, पिछड़ावर्ग, महिलाओं, बच्चों, गरीब किसानों, मजदुरों की रोज की परेशानियों, कठिनाइयों को दूर करने तथा उनके लिए बनाये गये तरह–तरह के नियमों, कानुनों की जानकारी दकर उन्हे विधिक जागरूक बनाने का प्रयास करते हैं। राज्य प्राधिकरण तथा शासन द्वारा बनाई गई अनेक कल्याणकारी योजनाओं का लाभ कैसे मिल सकता है तथा विधिक सहायता कैसे और कहां से मिल सकती है। इसकी जानकारी विधिक साक्षरता शिविरों में दी जाती है। शिविरों में यह भी बताया जाता है कि यदि किसी के साथ कोई अपराध घटित होता है, अत्याचार होता हैं । छुआछूत, जाति–भेद होता है, जमीन जायदाद छुडा ली जाती है, तो उन्हें क्या करना चाहिये, किसको आवेदन देना चाहिए। मोटर दुर्घटना में किसी को चोट लगती है या सगे संबंधो की मृत्यु हो जाती, तो क्या करना चाहिये आदि की भी जानकारी दी जाती है। इन शिविरों मे कोई भी व्यक्ति जाकर अपनी समस्याओं का निदान करा सकता है तथा कानूनी जानकारी प्राप्त कर सकता है।

विवाद विहीन ग्राम योजना – विवाद विहीन ग्राम से मतलब ऐसे गांव से है, जिसमें उस गांव में रहने वाले व्यक्तियों में आपस में कोइ झगड़ा न्यायालय में लंबित न हो और यदि हो तो विवाद को आपसी सूझबूझ व समझौते द्वारा न्यायालय में निपने लिया गया है, जिससे गांव में कोइ विवाद बाकी न रहे। प्रत्येक जिले की प्रत्येक तहसील के गांवों को विवाद विहिन बनाये जाने का प्रयास किया जा रहा है। यह काम जिला विधिक सेवा प्राधिकरण व तहसील विधिक सेवा समितियों द्वारा किया जा रहा है। इसमें अधिक से अधिक गांवों को विवाद विहीन बनाये जाने का प्रयास किया जा रहा है। यह काम जिला विधिक सेवा प्राधिकरण व तहसील विधिक सेवा समितियों द्वारा किया जा रहा है। इसमें अधिक से अधिक गांवों को विवाद विहीन बनाया जाकर वहां सुख शाति लाने के प्रयास किये जाते हैं। जब गांवो में झगड ही नहीं होंगे, तो वहां रहने वाले सभी लोग सुख शांति स रहेंगे,उनमें भाईचारा रहेगा। वे अपना अधिक से अधिक समय अपने काम धंधों में दे सकेंगे, फसल की पैदावार बढा सकेंगे। ऐसे गांव हमारे प्रदेश के लिये ही नहीं ,पूरे देश के लिए आदर्श होते हैं।

पारिवारिक विवाद समाधान केन्द्र योजना – पारिवारिक विवाद में परिवार के सदस्यों के बीच पैदा हुये किसी भी तरह के विवाद, विवाह की समस्याओं, बँटवारा, भरण–पोषण, बच्चों की सुरक्षा, उनकी देखभाल आदि शामिल है। पारिवारिक झगड़ों को आपसी समय बूझ से सद् भावपूर्ण वातावरण में समझाते के आधार पर दूर करना चाहिए। इससे परिवार में एकता बढ़ती है। इसी को देखते हुए राज्य विधिक सेवा प्राधिकरण ने पारिवारिक विवाह समाधान केन्द्र योजना बनाई है। ये केन्द्र जिले एवं तहसील न्यायालयों में काम कर रहे हैं। परिवार में किसी भी तरह के झगड़े पैदा होने पर जिले में पदस्थ जिला विधिक सहाइता अधिकारी को आवेदन दिया जा सकता है, जिसे पारिवारिक विवाह समाधान केन्द्र की बैठक के समय सदस्यों के समक्ष रखा जाता है। केन्द्र के सदस्यों द्वारा दोनों पक्षों से बातचीत कर अच्छा और हंसी खुशी का वातावरण बनाकरआपसी समझौते के आधार पर विवादों का निपटारा कराया जाता है तथा पारिवारिक विवादों का तुरन्त समाधान किया जाता है। यह एक ऐसी योजना है, जिसकी मदद से टूटते–बिखरते परिवार आपस में मिलत हैं एवं सुख शाति का जीवन फिर से आ जाता है। इस केन्द्र द्वारा की गई कार्यवाही और समझौते को गुप्त रखा जाता है, जिससे परिवार के सम्मान को कोई ठेस नहीं पहुंच पाती। इस योजना का लाभ उन मामलों में लिया जा सकता है। जो अदालतों में चल रहे हैं और जो मामले अदालत में नहीं गये हैं, उनमें भी इसका लाभ मिल सकता है।

जिला परामर्श केन्द्र योजना – जिला परामर्श केन्द्र द्वारा लोगों को नि रू शुल्क विधिक परामर्श दिया जाता है। यह केन्द्र प्रत्येक जिले में जिले में जिला विधिक सेवा प्राधिकरण कार्यालय में स्थापित है। इस कार्यालय में जिला विधिक सहायता अधिकारी बैठते हैं। इस केन्द्र द्वारा ऐसे व्यक्तियों,जो अशिक्षा व अज्ञानता के कारण अपने कर्तव्यों एवं अधिकारों को नहीं जान पाते तथा अपने काम कराने के लिए दफ्तर–दफ्तर भटकते रहते हैं, उनकी समस्याओं का निदान किया जाता है तथा उन्हे निःशुल्कन परामर्श दिया जाता हैं। यह कार्यालय अवकाश के दिनों को छोड़कर बाकी दिनों में खुला रहता हैं। कोइ भी व्यक्ति इस केन्द्र में जाकर अपनी समस्याओं के बारे में परामर्श एवं जानकारी प्राप्त कर सकता हैं। इसके अलावा उच्च न्यायालय की तीनों पीठ अर्थात जबलपुर, इंदौर एवं ग्वालियर में उच्च न्यायालय भवन में ही लीगल क्लीनिक का कार्य आरम्भ हुवा है,जिसमे प्रति दिन (कार्य कारी दिवस पर) वहीं के वकील (अभिभाषक) पहले से तय किये गये समय पर बैठकर लोगों को उनकी समस्याओं के बारे में मुफ्त कानूनी सहायता करते हैं और सलाह देते हैं।

मजिस्ट्रेट न्यायालयों में विधिक सहायता अधिवक्ता योजना – यह योजना प्रत्येक जिला एवं तहसील मुख्यालय में कार्यरत मजिस्ट्रेट कोर्ट में लागू है। इसके अंतर्गत जेल में बंद कोई व्यक्ति चाहे वह किशोर संप्रेषण ग्रह में बंद हो, चाहे मनोचिकित्सकीय परिचर्या ग्रह में बंद हा, उसे अपने प्रकरण में बचाव हेतु विधिक सहायता प्राप्त करने का अधिकार है। ऐसे मुल्जिम अपनी असमर्थता या जानकारी न होने के कारण अपना बचाव नहीं कर पाते हैं तथा वकील के न मिलने से लंबे समय तक जेल में बंद रहते हैं। ऐसे कैदियों को पुलिस या न्यायिक अभिरक्षा में उनके रिमाण्ड के प्रकरणों में पैरवी करने तथा जमानत आवेदन देने हेतु जिला प्राधिकरण द्वारा वकील दिलाया जाता है। ऐसे दिये गये वकील की फीस। मुल्जिम को नहीं देनी पड़ती है। वही वकील आगे भी चालान पेश होने पर मुल्जिम का बचाव कर सकता है।जब मुल्जिम अदालत में पुलिस द्वारा लाये जाते हैं, तब वह

मुल्जिम अपना वकील न होने पर जिले के जिला विधिक सहायता अधिकारी को आवेदन देकर या न्यायालय में बैठे मजिस्ट्रेट को कहकर ऐसी सहायता प्राप्त कर सकता हैं।

निष्कर्ष :–

इस प्रकार इन सभी योजनाओं का लाभ सभी पात्र व्यक्तियों को लेना चाहिये ।इससे हमारे समाज में शिक्षा बढ़ेगी, झगड़े कम से कम होंगे, सद्भाव बढ़ेगा। परिवार में झगड़े नही रहेंगे और कानून, नियमों की जानकारी रहने से समाज में शांति रहेगी और हम अपना जीवन अच्छे–अच्छे कामों में लगा सकेंगें।

संदर्भ ग्रन्थ सूची :–

1. भारत का संविधान (डॉ. जय नारायण पाण्डेय)
2. भारत का संविधान (डॉ. बसंती लाल बावेल)
3. विधि एवं योजनायें (ए.के. सक्सेना)
4. लोक अदालत, विधिक एवं अर्धविधिक सेवाएँ (डॉ. कैलाश राय)
5. लोकहित विधिक सेवाएँ एवं लोक अदालतें तथा पैरालीगल सेवाएँ (डॉ.एन.वी. परांजपे)

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मृत्युदण्ड की संवैधानिकता

डॉ. अकिला नागोरी
रेनेसां यूनिवर्सिटी, इन्दौर (म.प्र.)

प्रस्तावना :–

प्राचीन काल से मानव समाज में सामाजिक नियमों को भंग करने की प्रथा चली आ रही है। इसीलिए राजनीति के लिए भारतीय आचार्य ने साम, दाम, दण्ड, भेद को उचित बताया। इसमें उन्होंने दण्ड को प्रमुख बताया है भारत में दण्ड संहिताकरण, मनु ने अपने धर्मशास्त्र में किया था। जिसे मनु स्मृति के रूप में जाना जाता है। मनु दण्ड को देवी उत्पत्ति के रूप में मानते थे। मनु के अनुसार दण्ड के तीन लक्षण होते है। पहला ईश्वर की उत्पत्ति धर्म के रक्षार्थ हुई है, दण्ड का कार्य प्रजा की रक्षा करना होता है तथा दण्ड ब्रहम्मा के समान तेज मय है अर्थात दण्ड का आधार सत्य और असत्य ही कहता है कि दण्ड के भय से सभी प्राणी अपने अपने भोगो को भोगते है और अपने धर्म से विचलित नहीं होते है। दण्ड ही सबका रक्षक है दण्ड ही सबके सो जाने पर जागता है क्योंकि दण्ड के भय से अपराधी अपराध नहीं करता। इसीलिए धर्म को दण्ड स्वरूप कहा गया है। आचार्य चाणक्य ने भी अपने प्रसिद्ध ग्रन्थ कौटिल्य अर्थशास्त्र में भी सभी प्रकार की विधाओं का साधक दण्ड को ही माना है।

दण्ड का सामान्य अर्थ पीड़ा, जुर्माना या न्यायिक दण्ड अनुसार दण्ड शारीरिक पीड़ा अथवा डांट फटकार देना होता है। भारतीय दण्ड संहिता 1962 में भी दण्ड को विभिन्न भागों में बांटा गया है। मृत्युदण्ड, आजीवन कारावास, काला पानी, साधारण व कठोर कारावास, जुर्माना एवं सम्पत्ति का समर्पहरण, इस सब में सबसे कठोर दण्ड मृत्यु दण्ड होता है। जहाँ तक मृत्युदण्ड की प्रकृति का प्रश्न है तो यह दण्ड व्यक्ति के जीवन का हरण करता है और जीवन से प्रिय कोई वस्तु नहीं होती है। भारत में मृत्युदण्ड का इतिहास उतना ही पुराना है। जितना कि मानव समाज वेदों में भी यह कहा गया है प्राण देना ईश्वर का कार्य है अर्थात् प्राण लेने का अधिकार भी ईश्वर को ही है अथवा उसके प्रतिनिधियों का और राजा उसके द्वारा नियुक्त प्रतिनिधि है। प्राचीन समय में शासक राजद्रोह हत्या, या बलात्कार जैसे गंभीर अपराधों के लिए मृत्युदण्ड देते थे। मनुस्मृति में दो प्रकार के मृत्युदण्ड का वर्णन ही ''चित्रवध'' और ''शुद्ध वध''।

''चित्रवध'' में अपराधी को पहले शारीरिक यातनाएं दी जाती थी और उसके बाद उसको मौत के घाट उतारा जाता था। ''शुद्ध वध'' में बिना किसी प्रकार की यातनाएं पहुँचाए बिना सीधे मौत के घाट उतार दिया जाता था।

इसके पश्चात् मध्यकाल में भारत में मृत्युदण्ड देने के तरीके अत्यंत अमानविक व विभत्स थे। सर काटना, हाथी के पैरों तले कुचलना, दीवार में चुनवा देना आदि तरीके प्रचलित थे। परन्तु मुगल काल के अंत तक फांसी द्वारा मृत्युदण्ड प्रचलन में आ गया था।

इसके पश्चात् 19वीं शताब्दी के प्रारंभ से मृत्युदण्ड के विरोध में यूरोप में जोरदार आन्दोलन हुआ यहाँ यह भी सच है कि मानव समाज में जैसे–तैसे प्रगति होती गई मृत्युदण्ड देने के तरीकों में नये–नये आविष्कार हुए इस क्षेत्र में अमेरिका अग्रणी देश रहा है बिजली की कुर्सी, गैस चैम्बर, जहर का इंजेक्शन, बेहोश करके फांसी देना, गोली मारना आदि को मृत्युदण्ड देने के लिए अपनाया जाने लगा।

भारत में मृत्युदण्ड का विधान संहिता के लागूकरण किये जाने के समय से ही हो रहा है और प्राचीन समय से भारत में मृत्युदण्ड का प्रचलन रहा है जो अभी तक चला आ रहा है। भारत में 1962 विधि आयोग ने 35वीं रिपोर्ट में मृत्युदण्ड समाप्त करने वाले विवाद में मृत्युदण्ड को समाप्त करने में असमर्थता व्यक्त की थी।

भारतीय संविधान के अनुच्छेद 14, 19, 21 प्रदत्त जीवन एवं स्वतंत्रता के अधिकारों का हनन चूंकि मृत्युदण्ड द्वारा होता है। अतः मृत्युदण्ड को संवैधानिक करार देने का प्रयास किया गया था परन्तु इसे समाप्त नहीं किया जा सका। नतीजा यह निकला कि "किशोरी लाल बनाम स्टेट आफ दिल्ली के वाद में यह निर्धारित किया गया कि मृत्युदण्ड विरले मामलों में दिया जाना चाहिए।

मृत्युदण्ड के विपक्ष में तर्क :–

मृत्युदण्ड तब उपयोगी था जब अपराधी की जिम्मेदारी व्यक्ति पर मानी जाती थी आज परिस्थितियों में भीषण परिवर्तन हुए है इस परिवर्तन से प्रत्येक विचारधारा और संस्था प्रभावित है कुछ इसी प्रकार का प्रभाव मृत्युदण्ड की संस्था पर भी है। आज अपराध की जिम्मेदारी व्यक्ति की न होकर समाज की है इसीलिए आज मृत्युदण्ड अनुपयोगी सिद्ध हो रहा है। अतः बहुत से विद्वान इसे अनवशय व अनुपयोगी मानते हुए मानवाधिकारों ाका हनन मानते है। कुछ विद्वानों के इसके विपक्ष में अपने तर्क प्रस्तुत किए। जिनके अनुसार—

- मृत्युदण्ड एक निश्चित प्रतिरोध नहीं है इससे अपराधें की संख्या में कमी नहीं आती है उनका तर्क है कि जिन व्यक्तियों को मृत्युदण्ड की सजा मिलती है उनमें से कुछ व्यक्ति व्यवसायिक और आदि होते है अतः उन व्यक्तियों पर इस प्रकार के दण्ड से भय की अनुभूति नहीं होती अतः उन लोगों का मानना है मृत्युदण्ड अपराधों का निश्चित प्रतिरोध नहीं करता और यह मानवाधिकारों के विरूद्ध भी है अतः इसका उन्मूलन हो जाना चाहिए।

- एक सामाजिक आवश्कत नहीं है – समाज को संगठित करने के लिए और अपराधों में कमी लाने के अनेक साधन है। आवश्यक नहीं कि मृत्युदण्ड इसके लिए आवश्यक रूप से अपनाया जाए। मृत्युदण्ड के अभाव में भी असमाज का विकास और प्रगति संभव है।

- मृत्युदण्ड बर्बरता की निशानी है। आधुनिक समाज का विकास बर्बरता से सभ्यता की ओर हो रहा है। अतः सभ्य समाज में मृत्युदण्ड जैसी बर्बरता और जंगली प्रथा को समाप्त होना चाहिए।

- वर्तमान युग सुधार का युग है और मृत्युदण्ड में सुधार की गुंजाइश नहीं है। मृत्युदण्ड सुधारवादी सिद्धांतों के विरूद्ध है। अतः इसका उन्मूलन कर दिया जाना चाहिए।

- अपराध एक बीमारी है जिस प्रकार से बीमार व्यक्ति को समाप्त करने के बजाए उसका उपचार किया जाता है ठीक उसी प्रकार अपराधी को भी मृत्युदण्ड देने के बजाए उसका सुधार किया जाना चाहिए।

- मानव जीवन बहुमूल्य होता है मनुष्य के लिए जीवन से ज्यादा मूल्यवान कोई वस्तु नहीं यदि किसी कारणवश परिस्थितियों के वशीभूत होकर कोई व्यक्ति अपराध कर देता है तो उसे उसके जीवन से वंचित करने के बजाए उसे पछतावा और सुधार का अवसर देना चाहिए।

- जनता किसी भी राष्ट्र की बहुत बड़ी सम्पत्ति होती है और मृत्युदण्ड से जनशक्ति का विनाश होता है। अतः इसका उन्मूलन कर देना चाहिए।
- अपराधी घृणा की अपेक्षा दया का पात्र है। अतः उसे मृत्युदण्ड न देकर सहानुभूतिपूर्वक विचार करके समाज के साथ सामंजस्य स्थापित करने में उसकी सहायता करनी चाहिए।
- अंत में गांधी जी के शब्दों में प्राणदण्ड अहिंसा के विरूद्ध है, अतः इसका उन्मूलन कर दिया जाना चाहिए।

मृत्युदण्ड और मानवाधिकार :–

मानवाधिकार से संबंधित संयुक्त राष्ट्र चटिर एमनेस्टी इंटरनेशनल, पीयूसीएल तथा अनरू अंतर्राष्ट्रीय संगठनों द्वारा मृत्युदण्ड को समाप्त करने की मांग कई दशकों से उठाई जा रही है। 1948 में गठित 'संयुक्त राष्ट्र' ने अपने मानवाधिकार घोषणा पत्र में प्रतिस्थापित किया था। इन्हीं मानवीय अधिकारों को भारतीय संविधान के भाग तीन में मौलिक अधिकारों के रूप में समावेशित किया गया है। जिसमें बताया गया था कि प्रत्येक व्यक्ति को जीवन, स्वतंत्रता एवं सुरक्षा का अधिकार है। साथ ही साथ मानवाधिकार के घोषणा पत्र के अनुच्छेद 5 के अनुसार कोई भी ऐसा क्रूर दण्ड किसी व्यक्ति को नहीं दिया जाना चाहिए।

मानवाधिकार के अंतर्राष्ट्रीय मानक यह बराबर गुहार लगाते रहे है कि या तो मृत्युदण्ड का प्रतिषेध होना चाहिए या फिर उसको कम किया जाना चाहिए। मृत्युदण्ड का प्रयोग केवल अतिआवश्यक मामलों में ही सीमित किया जाना चाहिए। अप्रैल 1999 में संयुक्त राष्ट्र संघ ने अपने सदस्य राष्ट्रों को बुलाकर एक दृष्टांत पास किया जिसके तहत मृत्युदण्ड को किसी भी कीमत पर समाप्त किए जाने या उनके उन्मूलन पर जोर दिया गया है। मानवाधिकार आयोग ने अपने सदस्य देशों से आग्रह किया है कि वे किसी तरह भी मृत्युदण्ड को बढ़ावा न दे, केवल अति विशेष अपराधों के अलावा तथा ऐसे अपराधों को करने से रोकने के लिए सकारात्मक उपाय करें जिसके लिए यदि मृत्युदण्ड का प्रावधान किया गया है। भारत में मृत्युदण्ड की सजा केवल कुछ घृणित कार्य या फिर क्रूर अपराधों के लिए ही निर्धारित है न कि सभी असामान्य अपराधों के लिए मृत्युदण्ड का प्रावधान किया गया है। रेयरेस्ट–ऑफ–रेयर मामलों में ही मृत्युदण्ड दिया जा सकता है। फिर चाहे "राजीव गांधी हत्याकाण्ड" के दोषी हो या फिर "नैना सहानी हत्याकाण्ड"। नैना सहानी हत्याकाण्ड में न्यायालय ने सुशील शर्मा को मृत्युदण्ड की सजा सुनाई क्योंकि यह मामला रेयरेस्ट–ऑफ–रेयर में आता है।

अतः भारत में विधि वेत्ताओं के समूह न मानवाधिकारों के तर्ज पर अपने–अपने अध्ययन को संकलित कर मृत्युदण्ड के संबंध में कुछ कारकों को न्यायालय में विचार करने का प्रस्ताव किया और कहा मृत्युदण्ड देने से पहले इन तथ्यों को ध्यान में रखा जाना चाहिए —

- अपराध यदि अत्यंत गंभीर मानसिक व भावनात्मक दबाव मे किया गया है।
- यदि अपराधी कम उम्र का है अथवा वृद्ध है तो उसे मृत्युदण्ड नहीं दिया जाना चाहिए।
- यदि अपराधी के सुधार की संभावना दिखाई दे और लगे यह पुनः कोई गंभी कृत्य नहीं करेगा।
- यह संभावना हो कि अपराधी उचित अवसर और माहौल देने से सुधर जाएगा।

- यह कि अपराधी ने यह कृत्य किसी के उकसाने पर किया है अथवा वह मानसिक असंतुलन की स्थिति में था और अपने विवेक से कोई निर्णय लेने में अक्षम था।

संबंधित न्यायिक दृष्टांत :–

1. बच्चनसिंह बनाम स्टेट ऑफ पंजाब, 16 अगस्त 1980।
2. मक्खी सिंह एवं अन्य बनाम स्टेट ऑफ पंजाब।
3. म्नी अप्पा एवं अन्य बनाम स्टेट ऑफ तमिलनाडु।
4. सुनी बत्रा बनाम दिल्ली एडमिनिस्ट्रेशन 1978।
5. बच्चन सिंह, सहर सिंह एवं अन्य बनाम स्टेट ऑफ पंजाब, 1982।

उपसंहार :–

भारतीय कानून की नीति में आए इस सकारात्मक परिवर्तन के बावजूद यह प्रश्न उठना स्वाभाविक है कि यदि फांसी पर लटकाये जाने के बाद यह बात पता चलती है कि व्यक्ति अपराधी नहीं था उसने वह अपराध किया ही नहीं तो उसकी क्षतिपूर्ति का जिम्मेदार कौन होगा। इस मुद्दे पर उच्चत न्यायलय ने मृत्युदण्ड को वैध घोषित करते हुए यह कहा है कि हमारी न्यायिक प्रक्रिया भ्रमशील है तथा ऐसा भी संभव है कि कई बार निर्दोष भी मृत्युदण्ड का शिकार हो जाता है। इस संदर्भ में भारत में भी ऐसी घटनाएं काफी हो चुकी है कि छोटी अदालतों ने जिस व्यक्ति को फांसी की सजा दी उसे बाद में बड़ी अदालत ने सजा मुक्त कर दिया।

अंततः यह आशा की जा सकती है कि मानवाधिकार के संरक्षण हेतु विश्वभर में चलरहे आंदोलन के फलस्वरूप मृत्युदण्ड की अमानवीय सजा समाप्त तो अवश्य हो जाएगी। विशेष तौर पर हमारी भारतीय परम्परा प्राण लेने में नहीं है, बल्कि उस अपराधी के सुधारात्मक दृष्टिकोण पर अधिक बल देती है।

संदर्भ :–

1. भारत का संविधान – जे.जे. पाण्डेय।
2. अपराधशास्त्र एवं दण्डशास्त्र – परांजपये।
3. मानवाधिकार – डॉ. जे.जे. राम उपाध्याय।
4. फेयर चाईल्ड डिक्शनरी ऑफ सोशियोलॉजी।
5. अब्राहम पत्रिका – कानपुर क्राईस्ट चर्च कॉलेज।
6. विधि आयोग की 35वीं रिपोर्ट।
7. भारत की सामाजिक समस्याएं – क्रानिकल बूक्स एन.एन. ओझा।

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सामाजिक न्याय में सर्वोच्च न्यायालय की भूमिका

डॉ. पीयूष पाण्डेय
संस्कृत महाविद्यालय, इन्दौर
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सामाजिक न्याय एक ऐसी अवधारणा है जिसके अंतर्गत समाज के सभी वर्गो चाहे वह आर्थिक रूप से कमजोर हो, सामाजिक रूप से कमजोर हो तथा लिंग भेद का शिकार हो, आदि के लिए न्याय क्योंकि समाज में हर व्यक्ति महत्वपूर्ण होता है चाहे वह स्त्री हो चाहे पुरूष हो चाहे थर्ड जेन्डर हो या फिर ट्रांसजेन्डर हो, बूढ़ा हो, बच्चा हो, गरीब हो या अमीर हो, कमजोर हो या ताकतवर हो, समाज सभी से मिलकर बना होता है कोई भी अकेला व्यक्ति समाज का निर्माण नहीं करता है। समाज में सभी का महत्वपूर्ण योगदान होता है।

जैसा कि आस्तु ने कहा है किसी समाज के अस्तित्व की निरन्तरता बनाये रखने के लिए व्यक्तियों का महत्वपूर्ण योगदान होता है। व्यक्ति के बिना समाज की कल्पना भी नहीं की जा सकती। इसी प्रकार समाज के बिन व्यक्ति की भी कल्पना नहीं की जा सकती, अतः व्यक्ति को भी समाज से कुछ अपेक्षाएं रहती है। समाज में उसे समान अधिकार मिले, भोजन, कपड़ा, आवास, सुरक्षा, शिक्षा और चिकित्सा आदि की सुविधाएं सभ्झी को समान रूप से प्राप्त हो और यह गलत भी नहीं है जब समाज में सभी व्यक्तियों को समान रूप से यह सुविधाएं प्राप्त तो इसी को हम सामाजिक न्याय कहते है। समाज में सामाजिक न्याय तभी आ सकता है जब कि राज्य नागरिकों में समानता का दृष्टिकोण प्रस्तुत करे। उसके लिए भारतीय संविधान की उद्देशिका मे परिवर्तन किया गया। संविधान में सामाजिक, आर्थिक, और राजनीतिक न्यास को, भारतीयों को दिया गया है तथा साथ ही व्यक्ति को गरिमा से जीने का अधिकार भी प्रदान किया गया है।

सामाजिक न्याय का विचार एक लोक कल्याणकारी राज्य की स्थापना करना है और इसीलिए सामाजिक व्यवस्था को अधिक से अधिक लोक कल्याण की प्राप्ति हेतु व्यवस्थित करना चाहिए।

अतः एक न्यायपूर्ण सामाजिक व्यवस्था एक नियोजन अर्थ व्यवस्था के माध्यम से प्राप्त की जा सकती है। साथ ही साथ वर्तमान आर्थिक कार्यक्रमों को जनउपयोगी बनाना और राष्ट्रीय आय का समानतापूर्वक वितरण करना ही सामाजिक न्याय के विचार को बल देगा।

जान रालंस ने सामाजिक न्याय की अवधारणा को एक मानक माना है। जिसके द्वारा समाज की मूल संरचना में वितरणात्मक न्याय के पहलू का मूल्यांकन किया जाता है।" यह वह तरीका है जिसके माध्यम से सामाजिक संस्थाएं, राजनीतिक संविधान और सामाजिक व्यवस्थाएं मूल अधिकारों और कर्तव्य का वितरण करती है और सामाजिक सहकारिता से लाभों के विभाजन का निर्धारण करती है।

आज हमारे संविधान में मौलिक अधिकार हो चाहे नीति निर्देशक तत्त्व सभी में सामाजिक न्याय को समावेशित किया गया है। चाहे वह समान सिविल संहिता हो, चाहे स्त्रियों को पुरूषों के समान अधिकार प्रदान करने की बात हो या बच्चों को संरक्षण प्रदान करना तथा उनकी शिक्षा तथा भोजन का प्रबंध करना। इन सभी को हमारे संविधान ने समावेशित किया गया है। हमारा संविधान सामाजिक न्याय से भरा पड़ा है। परन्तु इसके

बावजूद भी क्या वास्तव में हमारे समाज में समानता है क्या सभी को बराबर के अधिकार प्राप्त हो रहे है। क्या स्त्री पुरूष का भेद या अमीरी–गरीबी का भेद खत्म हो गया है...?

यदि हम वास्तविकता की बात करे तो आज भी हमारे समाज में सामाजिक न्याय व्याप्त नहीं हुआ है। आज भी हम दौहरी मानसिकता से घिरे हुए है। दूर की छोड़िये साामजिक अन्याय की शुरूआत हमार घरो से ही हो जाती है। जहाँ हम लड़के और लड़की में इतना भेद करते है लड़की को पैदा ही नहीं होने देते और हो जाए तो पैदा होने के बाद मार देते है। आज भी विवाह में लड़कियों से दहेज लिया जाता है क्यों....? सामाजिक समानता है! फिर लड़कियों को क्यों कमजोर, असहाय, अबला माना जाता है। आज भी हमारे समाज में थर्ड जेन्डर को हिन भावना से देखते है उनके लिए कोई सुरक्षा या सुविधा नहीं दी जाती है। आज भी कमजोर गरीब वर्ग सुविधाओं के अभाव में जीवन यापन करता है।

फिर कहाँ हुआ सामाजिक न्याय, न्याय तो कहता है सभी को सभी सुविधाएं मिलना चाहिए जिस प्रकार प्रकृति सभी मनुष्यो को समान दृष्टि से देखती है। उसी प्रकार हमारा समाज क्यों नहीं देखता, क्योंकि हम संविधान में तो सामाजिक न्याय प्रदान कर दिया हमारी नैतिकता में न्याय नहीं ला पाए इसीलिए समाज में सामाजिक न्याय स्थापित नहीं हो पाया।

सामाजिक न्याय में सर्वोच्च न्यायालय की भूमिका :–
किन्तु आज इन सब अंधेरों के बीच सर्वोच्च न्यायालय रोशनी की एक किरण बन कर आया है। आज सामाजिक न्याय प्रदान कराने में सर्वोच्च न्यायालय अहम भूमिका निभा रहा है। जहाँ सर्वोच्च न्यायालय ने अपने निर्णयों के जरिये सामाजिक न्याय प्रदान कर रहा है।

युसुफ अब्दुल अजिज बनाम बम्बई राज्य ए.आई.आर. 1954 एस.सी. 321
के मामले में भारतीय दण्ड संहिता की धारा 497 की संवैधानिकता को चुनौती दी गई थी इस धारा के अधीन जारकर्म के अपराध के लिए केवल पुरूष ही दण्डनीय होता है स्त्री नहीं। प्रार्थी को भी भारतीय दण्ड संहिता की धारा 497 के अंतर्गत जारकर्म के अपराध में यह दलील दी कि धारा 497 संविधान के आर्टिकल–15(1) का अतिक्रमण करती है क्योंकि इसके अधीन उक्त अपराध केवल पुरूष को ही मुख्य अभियुक्त के रूप में दण्डित किया जाता है। सी को उत्प्रेरक के रूप में भी दण्डित नहीं किया जाता है और इस प्रकार यह लिंग के आधार पर विभेद है और अवैध। उच्चतम न्यायालय ने धारा 497 को वैध घोषित किया, क्योंकि वर्गीकरण केवल लिंग के आधार पर नहीं बल्कि समाज में स्त्रियों की विशेष स्थिति के आधार पर किया गया था।

नैन सुख बनाम उत्तरप्रदेश राज्य ए.आई.आर. 1953 एस.सी. 384
के वाद में उच्चतम न्यायालय ने राज्य सरकार के एक कानून को इस आधार पर अवैध घोषित कर दिया कि वह विभिन्न धार्मिक सम्प्रदायों के लिए पृथक निर्वाचन मण्डल का प्रावधान करता है।

हुस्न आरा खातून बनाम बिहार राज्य
के मामले में उच्चतम न्यायालय ने अभिनिर्धारित किया कि ''शीघ्रतम परीक्षण'' और निःशुल्क

विधिक सहायता के अधिकार आर्टिकल-21 द्वारा प्रदत्त दैहिक स्वतंत्रता के मूल अधिकार का एक आवश्यक तत्व ही इसमें न्यायालय ने बिहार राज्य की विभिन्न जेलों में बन्द सिद्धदोष व्यक्तियो का जो कई वर्षों से परीक्षण की प्रतिक्षा कर रहे थे तुरन्त रिहा करने का आदेश दिया।

दीना बनाम भारत संघ ए.आई.आर. 1983 एस.सी. 1155

के वाद म उच्चतम न्यायालय ने निर्धारित किया कि पारिश्रमिक दिए बिना कैदियों से काम कराना बलात श्रम है और इससे आर्टिकल-23 का उल्लंघन होता है। कैदिया के अपने काम के लिए उचित मजदूरी पाने का हक है और न्यायालय को उनके दावे को प्रवर्तित करने का कर्तव्य है।

दिल्ली डोमेस्टिक वर्किंग वुमन्स बनाम यूनियन ऑफ इंडिया

के मामले में महिलाओं के साथ बढ़ते हुए यौन अपराधों के प्रति गंभीर चिंता व्यक्त की और ऐसे मामलों के शीघ्र परीक्षण तथा उन्हें प्रतिकर प्रदान करने एवं उनके पुनर्वास के लिए विस्तृत मार्गदर्शन सिद्धांत विहित किया।

विशाखा बनाम राजस्थान राज्य

के मामले में उच्चतम न्यायालय की तीन न्यायाधीशों की पीठ ने श्रमजीवी महिलाओं के प्रति काम के स्थान में होने वाले यौन उत्पीड़न को रोकने के लिए जब तक इस प्रयोजन के लिए विधान नहीं बन जाता विस्तृत मार्गदर्शक का सिद्धांत विहित किया है। न्यायालय ने कहा कि किसी वृत्ति, व्यापार या पेशा चलाने के लिए सुरक्षित काम का वातावरण होना चाहिए।

यूनीकृष्ण बनाम आन्ध्रप्रदेश राज्य

ये मामला बालकों को मुफ्त प्राथमिक शिक्षा से संबंधित था इस ऐतिहासिक निर्णय में उच्चतम न्यायालय ने यह अभिनिर्धारित किया कि 14 वर्ष के बालकों को निःशुल्क शिक्षा देना राज्य का संवैधानिक दायित्व है। क्योंकि आर्टिकल-21 के अधीन शिक्षा पाने का अधिकार मूल अधिकार है।

कन्ज्यूमर एजुकेशन एण्ड रिसर्च सेन्टर बनाम यूनियन ऑफ इण्डिया (1995)3 एस. सी. 42

के मामले में अपने ऐतिहासिक महत्व के विनिश्चय में उच्चतम न्यायालय ने यह अभिनिर्धारित किया है कि आर्टिकल-21 के अंतर्गत कर्मकारों को सेवा के दौरान तथा सेवा निवृत्त होने के पश्चात् भी स्वस्थ तथा चिकित्सा सहायता प्राप्त करना उनका अधिकार है। क्योंकि यह उनके जीवन को अर्थपूर्ण बनाता है। जो व्यक्ति की गरिमा बनाये रखने के लिए आवश्यक है तथा आर्टिकल-21 के अंतर्गत कर्मकारों को जीवन यापन का उत्तम स्तर, काम के स्थान को आरोग्य पूर्ण होना तथा आराम का समय दिया जाना भी आवश्यक है।

बीना सेठ बनाम बिहार राज्य ए.आई.आर. 1983 एस.सी. 339

के मामले में हजारी बाग की निःशुल्क विधिक सहायता समिति के द्वारा हजारी बाग जेल में कई बन्दीयों को अवैध रूप से बिना किसी औचित्य के अनेक वर्षों से निरूद्ध किए जाने के बारे में उच्चतम न्यायालय को सूचना दी गई निरूद्ध किए जाने के समय कैदियों को विक्षिप्त घोषित किया गया था। किन्तु बाद में डॉक्टरों द्वारा उन्हें स्वस्थचित्त (same) घोषित कर दिया गया था किन्तु अधिकारियों की उपेक्षा के कारण वे 20 से 30 वर्ष जेल में पड़े रहे। सुप्रीम कोर्ट ने निर्णय दिया कैदियों को तत्काल रिहा किया जाए।

नूर शाबा खातून बनाम मोहम्मद कासिम ए.आई.आर. 1997 एस.सी. 3280

के मामले में उच्चतम न्यायालय ने यह अभिनिर्धारित किया है कि एक तलाकशुदा मुस्लिम महिला को अपने बच्चों के लिए जब तक कि वह बालिग नहीं हो जाते पति से भरण–पोषण पाने का अधिकार है। न्यायालय ने कहा मुस्लिम पर्सनल लॉ और भारतीय दण्ड प्रक्रिया संहिता की धारा 125 दोनों के अधीन पति का दायित्व पूर्ण है जबकि बच्चे तलाकशुदा पत्नि के साथ रहते है।

रनधीर सिंह बनाम भारत संघ ए.आई.आर. 1982 एस.सी. 879

के मामले में उच्चतम न्यायालय ने यह अभिनिर्धारित किया कि यद्यपि समान कार्य के लिए समान वेतन संविधान के अधीन एक मूल अधिकार नहीं है किन्तु एक निर्देशक तत्व है, किन्तु यह निश्चय ही एक संवैधानिक लक्ष्य है और यदि राज्य इस मामले में विभेद करता है तो न्यायालय इसका पालन कराने के लिए आर्टिकल–32 के अधीन अपनी अधिकारिता का प्रयोग कर सकता है।

रनधीर सिंह के विनिश्चय को अनेक विनिश्चयों में अनुसरण किया गया है। समान कार्य के लिए समान वेतन का सिद्धांत दैनिक मजदूरी पर भी नियुक्त व्यक्तियों पर भी लागू किया गया है।

सारांश :–

इस प्रकार कुछ अन्य निर्णय देश के निर्धन और कमजोर वर्ग के लागों के अधिकारों को सजग प्रहरी के रूप में प्रतिष्ठित करता है और उस संकुचित विचारधारा को छोड़कर जिसके अनुसार केवल वही व्यक्ति न्यायालय में आवेदन द सकता ह या जा सकता है जिसके अधिकारो का हनन हुआ है। वर्तमान समय में न्यायालय स्वयं भी संज्ञान ले रहे है और सामाजिक न्याय प्राप्त करा रहे है। आज सामाजिक न्याय प्रदान करने में सर्वोच्च न्यायालय बहुत महत्त्वपूर्ण भूमिका निभा रहा है चाहे वह व्यक्ति के मूलाधिकारों का सजग प्रहरी बन कर चाहे समाज के उत्थान के लिए हर जगह आज सुप्रीम कोर्ट अपनी छाप छोड़ रहा है।

आज सर्वोच्च न्यायालय ने सामाजिक न्याय प्रदान करने में जो भूमिका निभाई है उससे नागरिकों की न्याय पालिका में आस्था बढ़ी है।

फिर चाहे शाहाबानो बेगम का वाद हो या फिर युनिकृष्णन का या फिर वैश्याओं के पुनर्स्थापन की बात हो या ट्रांसजेन्डर की पुलिस में भर्ती सर्वोच्च न्यायालय ने सामाजिक न्याय स्थापित किया है तथा "रूल ऑफ लॉ" की जगह "रूल ऑफ जस्टिस" को स्थापित किया है।

सामाजिक न्याय में न्यायालयों की भूमिका का जीवित उदाहरण अभी तमिलनाडु में देखने को मिला है। अब तमिलनाडु राज्य की पुलिस फोर्स में ट्रांसजेन्डर (Transgender) भी नौकरी कर सकेगं पुलिस विभाग ने कहा है कि इन पदों पर पुरूष और महिलाओ के साथ ट्रांसजेन्डर भी आवेदन कर सकेग और इन्हें आम लागों की तरह पेंशन और राशन देने का भी फैसला किया है। सरकार ने यह फैसला न्यायालय के पिछले साल के आदेश के आधार पर लिया है। पिछले साल कोर्ट ने ट्रांसजेन्डर "प्रिथिका यशिनी" को भर्ती करने के लिए आदेश दिया था उन्हें नौकरी दी गई थी। वह पहली ट्रांसजेन्डर पुलिस कर्मी बनी। अतः स्पष्ट है कि सामाजिक न्याय प्रदान करने में सुप्रीम कोर्ट महत्वपूर्ण भूमिका निभा रहा है।

संदर्भ सूची :—
1. जे.एन. पाण्डेय (इंडियन कोंस्टीट्यूशन)।
2. एफ.ए. हाईक — लॉ लेजिसलेशन एंड लेबरलि।
3. राल्स — ए थ्यौरी ऑफ जस्टिस।
4. पत्रिका न्यूजपेपर (24 अगस्त, 2016)।
5. ग्गल।

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CHANGES SEEN IN EXPORTS AFTER COVID-19 IN CONCERN WITH THE LIFELONG PERSPECTIVE

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Abstract:- Trade is the life blood for any kind of economy. Merchandise exports from India have exhibited a perceptible change over a period of time. Covid-19 has been world's most hazardous disease that is still in its effective state. Due to the pandemic, how trade has been affected on a large scale along with what all will be the long-lasting change in the business world has been portrayed in the research. The most relevant and convenient change observed is digitalisation in trade activities. How well trade copes up or can cope up with the current visible scenario is elaborated in the study.
Keywords: Trade, digitalisation, exports, covid-19.

1. INTRODUCTION

Detailing of enormous exports would fall short even if we try to configure all the relevant facts and figures simply because as to no new, international trade is growing as well as fluctuating at a pace. Exporting allows countries to accumulate knowledge by sharing of ideas, obtaining scale economies for innovations and by directly sourcing technologically embodied knowledge. International trade is the driving force of the economy itself. Keeping the trade levels in concern always and even as a yardstick, the country decides and take major decisions based on trade acts. Trade be it import or export, has simultaneous effects on each other basic reason being CHANGES. Change is the only constant which has a lifelong effect.

COVID-19 is a humanitarian crisis on a global scale. The global growth has halved to 1.5%, almost 24% contraction in GDP FY2020-21. The business activities have not only narrowed but shutdowns, the unemployment rate is rising and people falling short of even the basic necessities. The government is badly affected because the public fund is in shortage. Accumulation of fund for healthcare facilities, to help the low income groups by providing food and basic necessary items is declining. Not only this, India is also witnessing pre-pandemic slowdown.

India's exports in April 2020 fell by -36.65% year on year while imports in April 2020 fell by -47.36%.

India's export growth rate is negative since August 2019 key reasons being fall in shipments of sectors like engineering, gems, jewellery and petroleum.

After the considerable study, found out that the commerce ministry is undertaking steps such as initialising of the WTO-complaint export incentive scheme and the new foreign trade policy for the next five years to push the country's exports ascertaining growth.

2. REVIEW OF LITERATURE

Rachael Noyes says that the economic recession during the COVI-19 is not the financial shock, not a regular recession. Antonio Fatas, professor of economics, INSEAD said that 'it is a natural disaster'. Now the revived structure of the economy will completely rely on how the pandemic evolves with time.

The pandemic has imbalanced all the sectors of the world mainly being the financial sector of the economy. Inflation is rising, demand of the products is more than the supply giving it rise to the economical inflation.

Inflation	Units	2020	2019	Difference
All Commodities	%	2.26	2.93	-0.67
Food Articles	%	7.79	4.21	3.58
Non-Food Articles	%	6.82	2.07	4.75
Primary Articles	%	6.71	4.77	1.94
Minerals	%	2.5	18.42	-15.92
Fuel & Power	%	3.38	1.72	1.66
Manufacturing	%	0.42	2.34	-1.92

Products

Consumer Price Indices	%	-0.73	0.21	-0.94

Directly or indirectly affecting the national income

National Income	Units	2020	2019	Difference
GDP	%	4.7	5.6	-0.9
GDP From Agriculture	%	3.5	2	1.5
GDP From Industry	%	0.1	5	-4.9
GDP From Services	%	7.4	7.4	0

The national income is tremendously affected from the primary industry sector and its production related GDP growth that even shows negative views.

3. EXPORT PERSPECTIVE

Indian export policies and tariff structure is always rigid and complex since years also the lack of integrity towards global production chain is the reason that India's share in world exports is not that up to growth levels.

But in context with the pandemic, India has started export of major farm products like rice, meat, dairy and processed food items along with the help of government and its leniency towards export promotion and substantial growth. This has been supported by Agricultural and Processed Food Products Export Development Authority (APEDA).

The European Union has eased the import restrictions and policies for import of fruits like mangoes, bananas, grapes and oranges from India. Earlier the custom required the physical certificates assuring food safety and animal and plant health standards only now it includes an online certification issued by the authorities of exporting country.

Indian basmati rice exports have been increased in European countries like Germany and Poland because of an increase in rice consumption by these countries but they have rigid norms under stringent pesticide norms. But the alternative markets for Indian exporters to be considered are UK and Netherlands.

The groundnut market has taken a boom between April and December 2019 as compared to the previous year analysis. Due to the pandemic, the supply has been shortened from USA and Senegal resulting in increase in Indian exports. Exports to Italy have dried up because of the total lockdown there. Cereals, castor oils, jams, jellies, sugar etc has faced severe hit due to disruptions in shipping activity.

4. EXPORT-LED RECOVERY

As per the statistical data and the relevant research studies conducted, it is observed that India's economy has shown a remarkable resilience in the past few months, braving the impact of the corona virus pandemic by exports returning to growth trajectory, the chamber's assessment on state of economy report pointed towards a further pick up in the coming months.

India has exported over 5.84 crore doses of covid-19 vaccines to almost 70 countries hereby portraying the 'goodwill gesture'. This facilitates the dual objective of social welfare by helping the neighbour countries and also facilitating the export promotion in such a hard time.

Export of agricultural products has shown a rise as a percentage of India's agricultural GDP. Fruits and vegetables exports have increased as now after the logistics and transport have reopened the market and routes effectively. But as per the officials, they suggest that we should focus more on export of horticulture production.

In accordance, the agricultural ministry has now established product specific export promotion forums that promote grapes, mango, banana, onion, rice, nutri-cereals, pomegranate and floriculture and alongside these forums will be in touch with producers, exporters and stakeholders of these commodities facilitating support and providing them solutions. Besides they will study the market for respective commodities on a global basis.

5. DISCUSSION

Digitalisation is the incorporation of digital technologies into the business world with the goal to improve, innovate and upgrade these activities. The physical form of data is turned into digital data. Digitalisation in general has driven significant improvements in communication and information.

Hereby interconnecting the exports with the increase in digitalisation of the world in all its aspects. Due to the pandemic, world itself is following the non-contact form of trade as much it is possible. From the cashless form of payment methods to contactless deliveries, people have now formed safe transactional scenario that is widely accepted. Even working from home is now a safe trend that is increasing widely. Not only this, it is observed that more of online companies have been framed and formed that provokes more of digitalised format of working and handling their businesses. DIGITAL MARKETING is boosting on a regular basis. It's an ideology of today's business environment that businesses that have their existence on digital platform are only considered to be trustworthy and ethical because of social norms. Digitalised communications are much more appreciated.

This digitalised era has paved a tremendous way for exports. Since years, export growth rate was at stagnant but during and post covid19 exports have shown a remarkable growth especially in the field of agriculture. India that is 70% about the agricultural economy has finally paid off. Most of the export related communications has been handled digitally by sending quotations, information gathering has been through digitalised format of brochures and video calls for brief enquiries. The digital structure has extended its both ways or its intended network by hiring employees from all parts of the world and connecting with the work framework DIGITALLY. Outsourcing is the most common yet suitable example of innovate business practices in digital era.

By strengthening digitalisation in exports simply means welcoming the new era in the field of international trade where buyer and seller can not only easily connect to each other but gather transactional information as well that assures credit worthiness of each of them. The digital payment methods that are being innovated is like an icing on the cake that strengthens the business bonds.

6. CONCLUSION AND FINDINGS

With the current outlook on trade in regard with the pandemic situation, a necessity is felt to rebound the international trade in more of a profound way than earlier. Now the trade has to be in accordance not only with the trade laws but the health laws as well. As long as it is predicted the exports is likely to boost no matter if the MAKE IN INDIA concept failed. Reason being, as essential as the basic trade is, the international trade both import and export has its territorial benefits topmost reason that it is the primary source of most of the inputs needed in the processing of outputs. All kinds of businesses and services are bound to import or export directly or indirectly to facilitate their final productions.

Trade being pervasive, looking at the current scenario, trade restrictions should be reduced in order to facilitate time bound supply of goods and services. Import and export should not possess health risks.

The pandemic has been the life changing experience that brings changes all around everything. India being a developing country where all of the economic activities are aligned with the external country's support in each of the way, the pandemic has given a chance to be independent that supports overall growth.

Reasons supporting the statements are-

1) Lesser the availability of imported raw materials, more opportunity for the businesses to get along the alternative ways for processing the output. By that we mean that more business houses have focused around production rather than importing those products like earlier, making themselves self-reliant in that aspect resulting in promoting growth and development

2) Digitalisation has proven to be a blessing in all the business activities, enhancing their production level and volume. Growth levels have tremendously increased because of the globalisation impact all over the world. Business houses now generally prefer digitalised work environment that is presumed to be reliable and ethical with complete digital security.

3) Technology is advancing at a great pace on a regular basis that acts as a supportive tool to trade. Various new methods and techniques are launching which would help promoting trade with an upgraded version, hence supporting development of an economy.

BIBLIOGRAPHY

1. https://en.wikipedia.org/wiki/Economic_impact_of_the_COVID-19_pandemic_in_India#:~:text=The%20Indian%20economy%20was%20expected,trillion%20economic%20movement%20was%20functional.
2. https://www.newindianexpress.com/business/2020/may/15/covid-19-impact-indias-exports-plunge-to-record-low-of-6028-per-cent-in-april-2143848.html
3. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19
4. https://economictimes.indiatimes.com/topic/covid-impact-on-exports
5. https://economictimes.indiatimes.com/topic/covid-vaccine-export
6. https://unctad.org/system/files/official-document/osg2020d1_en.pdf
7. https://www.csis.org/changes-global-trade-and-investment-and-implications-china-us-economic-relations
8. https://www.who.int/emergencies/diseases/novel-coronavirus-2019?gclid=Cj0KCQjwse-DBhC7ARIsAI8YcWKoWs4c5zb-NZaS-tFA2i6Z8q9sT-MK5KTEbNiCYc1A0DCKJOFJh6AaAgQ3EALw_wcB
9. https://journals.sagepub.com/doi/full/10.1177/0972262921989126
10. https://www.moneycontrol.com/news/photos/india/covid-19-impact-on-india-multiple-sectors-affected-in-six-months-of-lockdown-5882081.html
11. https://www.statista.com/statistics/1107798/india-estimated-economic-impact-of-coronavirus-by-sector/

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DESIGN THINKING AND DIGITAL TRANSFORMATION

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Abstract:- Digitalization has a cascading effect in almost all the industries as it has redefined the business models. Everything can be digitalized accept human emotions, ethics, creativity etc. which is the most valuable aspect now. Business also need to consider the aspects which can-not be automated .Design thinking and Digital transformation is not exactly about technology but having technological changes strategically in any business with human centric approach. This is time to think beyond digitalization and make business more sensitive to read human-insight, which will be the future demand. A combination of both will give holistic approach to business. Technology represent how of the change and human represents why of the change. Business need to frame several strategies and make them competitive advantage. Several changes in the environment encourage the business to be more customers oriented and technologically sound. Future is technology but bigger future lies in absorbing the technological transformation completely.
Keywords: Digital transformation, Design thinking, Customer- Satisfaction, Business, Competitive.

1. INTRODUCTION

Every business is going through digitization, mobilization, augmentation, disintermediation, automation. Think about self driven cars and robots, this is the most transformational time in human history. Due to day to day challenges in business, winning and losing are happening faster in this time. We need innovative solutions to face challenges. It's important to decide are we driving the change or we are driven by it, anything which is not technology driven in this time will be extremely valuable like creativity, feelings, emotions, intuition and ethic etc. A perfect use of technology and strategic thinking is the way to success. This article is trying to acknowledge the transformation of business digitally in operations with different thinking approaches to serve customer in a better way.

Innovation is always an extension of the existing product and services offered by the business. It's a process where man and machine work together to built a successful business model. The technological innovation and management is the root to success, also the process adopted by the organization in every manner including –organizational hierarchy, employee engagement, adoption of process, adoption of several techniques in operations, customer handling getting feedbacks, everything comes under. Mostly innovation is directly driven by technology and goes hand in hand. As the customers taste and preferences changes with time, the business need a frame work of digital transformation and strategic thinking .The need of the hour is perfect blend of (technology, business and brainstorming) with a complete transformation.

2. JOURNEY OF DIGITALIZATION

The world is going digital and currently it has been estimated the 26.3 billion digital devices and connections exist. The idea of digital India originated with an objective to make India digitally strong, in 2015 Prime minister Shri Narendra Modi took initiative to start digital India Champaign by introducing 9 pillars-broad band highways, universal access to mobile, public internet access program, e-governance, e-kranti, global information, electronic manufacturing, Training in IT, early harvest programs. This was a digital revolution.

Every sector started getting digitalized, having a digital menu for lunch on mobile phone or tracking the traffic details or doing banking transactions from home, taking insurance policy or paying bills, everything just a click away. According to analyst this will boost GDP by 2025 to $1 trillion. Digitalization was a strong pillar and support to India during demonetization, when there was a strong currency crunch. It has even saved the business from the devastating effects of pandemic to the great extent in all the sectors like education, banking, insurance, health sector and so on. Various digital platforms were the big support like Google-app, Google meet, zoom, Webex etc.

Technological revolution every time impacted the global economy at a good pace. Everything now is the results of past innovation, the 1st industrial revolution started years ago from 1.0 to 6.0 the change in scenario equally impacted the business environment and

the behavior people living in the society. From that era we started the journey with steam engines, we crossed the super computer era and reached digital world. During 3rd industrial revolution began in 70s in the 20th century through partial automation by computer programming. Such inventions created a lot of change in the production and working of the companies. We are currently living in the age of Fourth industrial revolution that is age of information and technology, known as Industry 4.0 is the further extension of Industry 3.0. Due to which production is almost automated and also communication inside system became easy. Machines and process are self managed now and networks too. It's one of the most cost and time saving process if the system is automated.

The maintenance of system and working became very easy. Industry 4.0 is a game changer, for several process and services got refined due to digitalization. As we all know that every business is growing in the dynamic scenario and things are changing very fast. The technology is growing in many folds and faster, Digital technologies like AI, IoT, Big data, Block-chain etc are entering to all the sectors to make working easier and smarter. (Rogers2016) Digitalization has given a different reach and view to each and every business it can be insurance, banking, education, health, political or space. By moving to 5.0 technology with artificial intelligence, automation and robotics, customization was a breakthrough and here the needs of customer started increasing the coordination between man and machine, best examples are alexa, rumba etc. Leading to mass customization and personalization the production and the quality of workers required new skill sets to handle this automation. It won't be a replacement of worker but the advancement in the skills needed to perform the work and cope up with the artificial intelligence and robotics. The benefit is the worker will be able to spend more time on the planning and strategic part. The workers can spare more time on critical and logical thinking for innovation in work and better planning.

To make a better coordination the workspace will also upgrade by using cobots– collaborative robots. These cobots can perform the repetitive task and man power can be utilized for creative thinking and testing. Specifically–4 d's task can be taken care by cobots–dangerous, dull, dirty and dear. The change in the digital era is almost a paradigm shift for each and every business, almost all the sectors of economy has adopted this platform. According to a survey there is a drastic change due to digitalization USD 290 billion in 2018 and USD 665.0 billion by 2023.

2.1 Objectives
1. To understand the concept of digitalization and digital transformation
2. To understand the concept of design thinking.
3. To understand the framework of design thinking and digital transformation in business.

3. RESEARCH METHODOLOGY
As it's a new concept the researcher has explored various materials from journals, newspaper, magazines. Secondary data is used to understand and explain the concept.

4. REVIEW OF LITERATURE
With the journey of technology, it has brought a drastic change in over all scenarios-Dr. Western (2011), a research scientist said- For better performance of enterprises the use of technology is very important. Digital transformation is organizational strategy which should be executed and formulated by all the organization (Bharadwaj2013). Digital transformation is innovative approach. (Rogers 2016, Jobber- Lancaster 2017) stated that the Design thinking is a customer centric approach and should be adopted by the business. Process and working needs several improvements. It redefines the relation in buyer and seller. The reason to adopted design thinking is a managerial strategy for the organization to have smart ideas (Badke schaub et.al 2009). The approach seems to be more effective and strong in decision making (Brener and witty 2011). The design thinking should be treated as strong business strategy and important for business decision making (Badke schaub et.al 2009). Design thinking clearly states the way to deal with the opportunities and challenges of business (brown 2008).

Netflix is one of the example started digital transformation in 2000 and grown exponentially smarter. The integration of AI and machine learning, a successful strategy can transform business completely it is one of the best example.

To make business more competent you should have–(Digitization, Digitalization, Digital transformation with Design thinking).

- **Digitization-** Process of changing analog to digital form – example any script from handwritten to digital form. Ex: scanning, audio to mp3 etc.
- **Digitalization -** Process to change business model to create new opportunities. It is more about having advance business operations. To acquire new skill sets for industry, individual etc leveraging digitization and improve the working.
- **Digital Transformation-** Changing the core competencies of business, more customer oriented to meet changes and make product and services more market oriented, it also modify system and organizational hierarchy to modern way of working.

5. DIGITAL TRANSFORMATION

Digital transformation is getting digitally transformed is a new way of doing business. Its understanding the customer psychology and improving performance, using smart technology etc can bring business to get competitive advantage. It's a multidisciplinary approach which is data driven and set of incubation, generating new ideas. This approach has increased sales and revenue, personalized customer experience proved several benefits to business. In current scenario leapfrog is the company helps organization to get transformed digitally in operations, Tech giants like Microsoft and apple have built their companies by leveraging business operations.

Digital transformation brings a change in organization at several levels, as it is strategic in nature. Also the survey of Mc-kinsey stated that going digital for a business, leads to 25% improvement in the employee productivity also and better understanding of the behavior of consumer. Forbes examined business digital transformation and found that start-ups increased revenues by 34% by taking this as first business strategy. Especially in retail sector it is more of (CX) customer experience base, it's a proved and strong business model of revenue generation. Internally the organization should be agile in nature and small levels of hierarchy. PESTEL analysis and ansoff matrix can be part of strategic tools used for planning. Such strategy gives 45% reduction in maintenance and 20% reduction in operations cost and also gives 33% increased operational efficiency in many organizations. According to IDGs 2018 digital business research 50% business has adopted digital transformation as a 1stbusiness strategy. This has now increased more due to pandemic. A survey says companies are now prioritizing at this part so when business is digitally transformed it basically - **impact 5 dimensions – customer, value, competition, data and innovation**. (Introduced by David roger in his book) digital transformation play book.

1. **Customer–** Digital transformation helps business to serve customer better and help in observing the patterns and changes in the behavior from search to purchase.
2. **Value–** Value creation for- owners, customers and employees.
3. **Competition–** Digital transformation has given it a new look of cooperation and competition, a symbiotic relation.
4. **Data–** The digital transformation given a great access to big data, AI, IoT for better decision making.
5. **Innovation–** The digital transformation has given a different tangent to innovation with digital transformation.

5.1 Business Challenges

With the coming years every time it was the extension of technology along with the transformation of overall Business environments. The advancement of technology brings important cost factor for all the business. Also companies look for increasing the market share and customer satisfaction with max. Foot falls and strong brand loyalty. To think in such direction it is important to be innovative in approach because digitalization has increased the competition and has made every business more customers centric in approach. Lack of planning and implementation of approach may leads to losses for the organization. This is the time to serve business with intelligence. According to one of the report data is growing faster and from 33 zetta bytes and has reached to 175 zetta bytes by

2025. All the corporate, universities and organizations are gathering information every-time and securing the data online is biggest concern of security, at times when decision making is dependent on Big data. Several threats like cyber attack, insider treats, govt. intrusion, lack of standardization etc. Approx. 29% of the business faces these issues, between January and September 2019 there were over 7.9 billion data records exposed and approx. 33% increase in cyber attacks in 2018. And 2021 reported the worst year so far several cyber attacks like ransom ware, credential stuffing, malware and VPN exploitation happened in fact various hacking like polymorphic virus attack are also part of digitalization. In many cases transformation failed due to lack of experience and knowledge about the technology and poor planning. It's time to prepare better for new ecosystem.

Design-thinking firms stand apart in their willingness to engage in the task of continuously redesigning their business to create advances in both innovation and efficiency the combination that produces the most powerful competitive edge" – Roger Martin.

5.2 Design Thinking and Strategic move to the Challenges
5.2.1 Design Thinking
We need Innovative approach to face challenges in business, as mentioned before **this is the right time to serve business with intelligence;** it is always suggested to have right combination of **people with right technology**. As we all know that we are moving towards personalization and more customized products and service delivery. The approach of dealing with the customers should be more reasonable and satisfy the actual need of customer.

The innovative approach of Design thinking was introduced by Tim brown CEO, IDEO – mentioned in Havard business review. It's an approach brings innovation and transformation in the organization and makes process most customer centric (kumar and whitney 2007). The process of understanding your customer should be specific. The specifications should be measured before serving the needs of customer in market (customer orientation, Dunnes 2010). Organization needs to develop a think tank to deliver the specific need of customer also set the targets which are achievable. Browns (2008) in Harvard business review stated that human centric approach is important to create core ideas for serving customer satisfaction. It has been stated in several theories that rather creating the need for the product which is designed it's important to produce as per the customers requirement. The thought process of organization and technology together can create the competitive advantage (Martin 2009). Management thinkers and thinking innovations have solved several management issues and provide simple solutions (Ling 2010). Various models has been developed proving the tangibility of design thinking as the next competitive advantage for the business.

Deep empathy for people makes our observations powerful sources of inspiration."
― David Kelley

The frame work of design thinking is: (i) Empathy phase – this is the important phase to understand the root cause of the problem by observation , analysis , it's a ethnography gives a better connect to the design thinker with end user.(ii) define phase- where we define the statement of problem and plan for a innovative approach to solve the issue (iii) Ideate – the brain storming sessions with the design thinkers of the business and gathering the feedback (iv) Prototype – this phase is basically developing a framework of solution and get tested (v) Test – it's a process which shows the testing part of the solutions and if results are not satisfactory the process is iterated ,until we reach the solution. All the approaches are a-joint team work collaboration includes ideation, analysis and empathetic and problem solving. Solving problem needs strong observational approach and innovative thinking: It's a holistic and thinkers are more experimental and optimistic in approach. But every time they test the prototype before execution and implementation.

A. **Approaches for Design thinking:**
1. Tim brown's approach: Suggested 3 steps designing Inspiration, ideation and implementation- the process is a cycle and testing of prototype before

implementation. Success depends on feasibility of the concept and its application. (Feasibility, viability and desirability – give birth to innovation).
2. Dunnes approach: This method is used to solve wicked problems with date line it has steps like Inductive, deductive and abductive. Inductive and deductive are divergence and convergence where as abductive is generating idea out of the box.
3. Stanford d. school approach states understand, observe and point of view. While solving the problem it's important to think with open minded and emphatic observation. Mostly used by teachers to teach students more observation related projects.
4. Sap approach: Specifically end users oriented approach, creative and innovative techniques are used.
5. Several other techniques are used like st. gallens approach, IDEO and river dales school educators approach etc.

5.3 Implementation of Design Thinking with Digital Transformation

Design thinking can be a perfect base to implement the technology by various approaches and the frame work. The concept mostly useful to serve business in today's time, also used as a tool by several consultancy firms like pwc. Mc-kinsey and deloitte solve the issues in business. Also has been widely used by universities and schools in teaching learning process. SAP, IBM and DELL are the best examples who implemented this process at have generated there models.

6. CONCLUSION

Connection of technology with right mindset is important, the awareness of both the concepts is required also the application part of design thinking needs understanding after that proper execution of the strategy is also important. It's a multidisciplinary approach, Digital transformation with Design thinking is a way to reinvent the business and make it more customers centric, advance and cost effective. Design thinking believes to empathizes the end user should with the product and services. With various approaches it is useful for business and education in several ways. The digital transformation and the design thinking are a logical tools and techniques used to built strategies; it's a holistic approach to solve problems. Apple, Nike, Pepsi many big players are practicing this approach.

REFERENCES

1. Dunne D (2018) Design Thinking at work: how innovative organization are embracing design university of Toronto press, Toronto
2. Kotter JP (1996) Leading change. Harvard Business school Press, Boston.
3. Kumar v, whitneyP (2007) Daily life, not markets: customer–centered design. J bus strategy 28(4):46-58
4. Ling B. (2010) Design thinking is killing creativity. Design sojourn.http://designojourn.com/design-thinking –killing- creativity / Accessed 2021.
5. Bharadwaj A. (2013): Digital business strategy towards a next generation of insights.MIS Quarterly, Vol 37 No. 2, Pp 471-482
6. Brandenburger A., Nalebuff B.J. (1997) Co-Opetition. New York.
7. B. Nichol Peter (2016) Disintermediation and intermediation beyond theory.
8. IDEO (2012). Design Thinking for Educators. New York.
9. IDEO (2015) The Field Guide to Human-Centered Design. San Francisco.
10. IDEO Home Page (2020). Retrieved from: https://www.ideo.org/ Internet of Things - number of connected devices worldwide 2015-2025
11. Innov8rs Team (2017) How Innovating on Design Thinking Itself Drives IBM's Transformation Journey. Retrieved from: https://innov8rs.co/toronto/innovating-design-thinking-drives-ibms-transformation-journey/
12. Jain V. (2016) Dell: Utilizing Design Thinking for Digital Transformation
13. Richardson D. (2019) A new framework for Digital Transformation. Retrieved from: https://medium.com/design-ibm/a-new-framework-for-digital-transformation-5956dcb538e1
14. Kenton Will (2019) Disintermediation. https://www.investopedia.com/terms/d/disintermediation 15.Liedtka, J. & Ogilvie, T. (2011).Designing for Growth. Columbia Business School. USA
15. Marr B. (2017) Data Strategy How to profit from a world of big data, analytics and the internet of things. USA
16. Norman, D. A. (1990) The design of everyday things. New York: Doubleday.
17. NaimanL. (2019) European Business Review. Retrieved from: https://www.creativityatwork.com/design-thinking-strategy-for-innovation/
18. O'Toole James (2012) Harvard and MIT launch edX to offer free online classes. Retrieved from: https://money.cnn.com/2012/05/02/technology/harvard-mit-online/index.htm
19. Parker G. G., Van Alstyne M.W., Choudary S.P. (2016). Platform Revolution: How networked markets are transforming the economy and how to make them work for you. New York.

20. Plattner, H.; Meinel, Ch. & Weinberg, U.(2009).Design Thinking Innovation lernen, Ideenwelten öffnen.
21. München Pennington R. (2018) Why design thinking hasn't saved your digital transformation – yet. Retrieved from: https://www.cio.com/article/3292919/why-design-thinking-hasn-t-saved-your-digital-transform.

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BUDDHISM (WORLD RELIGION BEGIN FROM ANCIENT INDIA)

Vikram Singh Parmar

Abstract:- Whether or not Buddhism is a religion is always open to question, Buddhism was born in the region called Magadha. Various religious movements started in India with the rise of Magadha. This period gave world some of the greatest religion of the world such as Buddhism. The main reason for the rise of Buddhism was the increase of rituals and the misinterpretation of the Vedic philosophy. It was not possible for a common man to bear load of ritualistic Vedic religion. So with the increase in trade and commerce many lower caste people became financially strong and new religions such as Buddhism gave them social acceptance and respect. So a large population adopted Buddhism at that time Buddhism was the contemporary of another popular religion i.e. Jainism. Both Buddhism and Jainism flourished over the Indian Subcontinent in ancient Time.
Keywords: Buddhism, Teaching, Rituals.

1. INTRODUCTION

Buddhism as a religion and philosophy encompasses a variety of tradition, beliefs and practices largely on the teachings of the lord Buddha.

Gautam Buddha was founder of Buddhism. He was born in Sankhya Kshatriya clan. His childhood name was Siddhartha and known as Sakyamuni and was born in 563 BCE in Lumbni (Nepal). His father was King Shudhodhan of Kapilvastu (Nepal) and his biological mother was Mahamaya who was princess of Koshalana

When his mother was expecting him she saw a dream in which a bull or a white elephant carrying lotus in its trunk entered into her body. She has told this to her husband and later its meaning was interpreted by several scholars that the upcoming child will become a king or an ascetic.

Shuddhodhan decided the marriage of Siddhartha at a very early age of 16 and be also decided that he will never allow his child to face harsh reality of the world. Siddhartha real mother died at the time of his birth. So her mother younger sister Maha Prajapati Gautami married to Shuddhodhan and became step mother of Siddhartha.

Shuddhodhan gave all luxury and comfort to Siddhartha since his childhood he was also married to princess named Yashodhara in the teen age from whom he had son named Rahul.

Everything went on smoothly until one day when Shuddhaodhan moved out of the palace for some days Siddhartha desired was to experience world and his desire was fulfilled by his charioteer who took him outside the palace and he witnessed something outside which changed his perception about life and be decided to become an ascetic.

Those scenes are:
   a. A diseased man
   b. An old man
   c. A dead body
   d. An Ascetic

At the age of 29, he decided to leave his family and become a wandering Ascetic. In the search of truth and supreme knowledge. This event in Buddhism known as Mahabhinishkramana (Horse).

After becoming an wandering Ascetic he firstly met a Sankhya Philosopher named Alara Kalama who taught Siddhartha the technique of Meditation.

2. DOCTRINE OF BUDDHISM

Buddha was a practical reformer. His primary aim was to secure deliverance from the grim. Reality of sorrow and suffering.

So he pronounced the four noble truths (Aryasatya). The four noble truth thus include;
   1. Sorrow (Dukha): The world is full of sorrow
   2. The cause of sorrow is desire
   3. Cessation of sorrow is possible
   4. The path leading to the cessation of sorrow is by Ashtang marg.

The Noble 8 fold path
1. Right View (Samma Sankappa)
2. Right Aspiration /Understanding (Samnaz ditthi)
3. Right Speech (Samma Vaka)
4. Right Conduct (Samma Kammanta)
5. Right Livelihood (Samma Ajiva)
6. Right Efforts (Samma Vayamma)
7. Right Mindfulness (Sammasati)
8. Right Meditation (Samma Samadhi)

Gautam Buddha also suggested a person to follow the Middle path which is Madhammarg, in which a man should avoid extreme hardship at the same time avoid extreme luxury.

2.1 Buddhist Councils

Council	Year	Venue	Chairman	Royal Patron	Development
1st	483 BCE	Sapta-Parne Caves Rajgriha	Mahaksyapa	Ajatashatru (Haryank Dynasty)	Compilation of sutta pittaka and Vinaya pittaka by Ananda and Upali respectively.
2nd	383 BCE	Vaishali	Sabakami	Kalashoka (Shishunaga Dynasty)	Monks were split into Sthaviravada, Mahasangnikas
3rd	250 BCE	Patliputra	Maggliputta Tissa	Ashoka (Mauryan Dynasty)	Compilation of Abhidhamma pitaka and preaching of Buddhism in Srilanka and South-East Asia.
4th	72 AD	Kundalevana	Vasumitra Ashvagosh (Vice-Chairman)	Kanishka (Kushana Dynasty)	Division of Buddhism into Hinyana and Mahayana.

Tri Ratnas (Three jewels of Buddhism)
1. The Buddha (The enlightenment)

2. The Dhamma (The Doctrine)
3. The Sangha (The order)

The most sacred and most important festival of the Buddhist Vaishakha Purnima known in India as Buddha Purnima or Buddha Jayanti.

2.2 Sect of Buddhism
1. **Hinyana:** It is also called as 'Lesser Vehicle' the followers of Hinyana believe in the original teachings of Buddha and strongly oppose idol worship. They preached their religion mainly in Pali language. This sect was spread more in south India, Sri Lanka, Burma, Shyam (Thailand), java and Sumatra.
2. **Mahayana:** It means greater vehicle. The follower of this sect considered Lord Buddha as a God. And they started worshipping the idol of Lord Buddha. They Preached their religion mainly in Sanskrit language and other foreign language. Their religion was more over spread in Tibet, China, Northern India, Korea and Japan.
3. **Vajrayana:** Its follower believed that Nirvana can be achieved only with the help of magical powers which they called Vajrayana. This sect only became popular in modern day Bihar and Patna.

3. LITERATURE
Literature of Buddhism is mainly written in Pali text.
1. Tripitaka (3 baskets) – it was the teaching of literary work written by Lord Buddha.
2. Vinaya Pitaka – code of conduct of a monastery is given.
3. Abhidhamma Pitaka – the religious analysis of Lord Buddha is given in this text.
   - Dignikaya
   - Madhgami
   - Samyak
   - Anguttar
   - Khuddaka

A. **Milind Panho:** This literature contains questions of king Milander and the answers of Bhikshu Nagasena.
B. **Depa-Vamasa and Maha-Vamasa:** Third lliterature, these are the great literature of Sri Lanka in which the teaching of Buddhism and its principle by Ashoka are mentioned.
C. **Divya Vadan:** This is the great Tibetan literature of Buddhism preaching Mahayana Sect.
D. **Jataka:** Jatas were a collection of over 500 poems which describes the previous births of Buddha

3.1 Common Buddhists Mudras
1. Bhumisparsha Mudra
2. Dhyana Mudra
3. Vitraka Mudra
4. Abhaya Mudra
5. Dharamchakra Mudra
6. Anjali Mudra
7. Uttarabodhi Mudra
8. Varada Mudra
9. Karana Mudra

3.2 Names of Famous Buddhist Scholars
- **Ashvaghosha:** He was contemporary of Kanishka. He was a poet, musician, Scholar and debator.
- **Nagarjuna:** A contemporary of Satvahana rulers. He propounded the Madhyamica school of Buddhist philosophy knows as Shunyavad.
- **Buddhaghosha:** He lived in the 5th Century AD and was a great Pali Scholar.
- **Dharmakriti:** He lived in the 7th Century AD and was another great Buddhist Scholar.

3.3 Compare Jainism and Buddhism
Similarities
- Founder of both the religions had a common background of Aryan Culture.
- Both the religions were founded by Kshatriyas in Eastern India.
- Both were against the naturalistic interpretation of Vedas and opposed Brahmanical domination. Both preached truths, non-violence, celibacy and detachment from natural comforts.
- Both were non-aesthetic religions.
- Both were believe in Karma and truth.
- Both allowed the Shudras and women to follow their religion, become monks and attain salvation.
- Both opposed caste system but could not eliminate it.
- Both of them spread as a result of teaching in the language of the common man.

Differences
1. Jainism gave prominence to lay followers, while Buddhist followers relied mainly on the Sangha and its monks.
2. The method of attaining salvation for Jains was an extreme one but for the Buddhist it was quite moderate.
3. Jainism was confined to India, where as Buddhism spread rapidly to foreign lands.
4. Jainism was more liberal in iuts treatment of women
5. Jainism believed in soul while Buddhism did not.
6. Jainism laid emphasis on Ahimsa. In Buddhism, Ahimsa meant liberal feelings and practical behaviour.

3.4 Royal Patron of Buddhism
1. Bimbisar, Ajatshatru – Haryank
2. Prasenjit of kosala
3. Pradyota of Avanti
4. Emperor Ashoka
5. King Milander of Shakal
6. Kanishka of Kushana (gold coin)
7. Harshavardhana
8. Pal rulers of Bengal (Gopala, Dharmapala, Rampala).

3.5 Major Buddhist Architecture in India
1. Cave of Nagarjunakonda in Amrawati district of Andhara Pradesh
2. Sanchi, Raisen district of Madhya Pradesh
3. Bharhut Caves, Katni district of Madhya Pradesh
4. Caves of Ajanta and Ellora in Aurangabad district of Maharashtra.

3.6 Major Buddhist Universities
1. Nalanda University, Bihar, Kumaragupta I
2. Odantpuri Universityi, Bihar, Gopala
3. Vikramshila University, Bihar, Dharampala
4. Vallabhi University, Gujarat, Bhattaraka
5. Somapuri University, Bengal, Dharampala

3.7 Other Heterodox Sects
According to the Buddhist literary source, there were around 62 heterodox sect in India in 6th Century BCE. Important among them are.

1. The Ajivikas
It was propagated by Makhali Gosala. They believed in middle path Bindusara of Mauryan Empire was the follower of this sect. Another emperor Ashoka built some caves for saints of Ajivika sect in Barahar caves in Bihar. The son of Ashoka Dasharatha built some caves for saints of Ajivika sect in Barabar caves in Bihar. The son of Ashoka Dasharaha built some caves for these sages in Nagarjunkonde of Amravati in Andhra Pradesh.

4. CONCLUSION

By the 12th Century AD Buddhism became practically extinct in India. It became a victim to the evils of Brahmanism against which it had fought in the beginning. Gradually, the Buddhist monks were cut off from the mainstream of people's as they gave up Pali and shifted to Sanskrit .By the 7th century AD the Buddhist monasteries came to be dominated and became the centre of corrupt practices which Gautam Buddha had strictly prohibited. The now form of Buddhism was known as Vajrayana. Entry of women into the Buddhist sangas and the attacks of the Huna kings in the 6th Century AD and those of the Turkish Invaders. In the 12th century AD brought about a rapid extinction of Buddhism.

REFERENCES

1. Ariyaratne, A. T. (1979) Intellectual and Cultural Environment of Child in the Family, Moratuwa, Sri Lanka: Sarvodaya Press
2. Ariyaratne, A. T. (1980b) The role of Buddhist monks in development. World Development, 8(7–8), pp 587–89
3. Bobilin, R. (1988) Revolution from Below: Buddhist and Christian Movements for Justice in Asia: Four Case Studies from Thailand and Sri Lanka, Lanham, MD: University Press of America.
4. Dalai Lama (1999) Ethics for the New Millennium, New York: Riverhead Books
5. Dehejia, V.H. and Dehejia, R.H. (1993) Religion and economic activity in India: an historical perspective, American Journal of Economics and Sociology, 52(2) pp 145 - 153.
6. Harriss, I. (1991) How environmentalist is Buddhism? Religion 21(2), pp 101–114.
7. Loy, D. (no date) Shall We Pave the Planet, or Learn To Wear Shoes? A Buddhist Perspective on Greed and Globalization, www.bpf.org/tsangha/loy-globo.html
8. Perera, J. (1995) In unequal dialogue with donors: the experience of the Sarvodaya Shramadana Movement. Journal of International Development, 7(6), pp 869–78.
9. Zadek, S. and Szabo, S. (1993) Buddhist Organisation: The Case of the Sarvodaya Shramadana Movement, London: New Economics Foundation, Value-based Human Organisation Working Paper Series No. 2.
10. Wismeijer, H. (2000) Diversity in Harmony: A Study of the Leaders of the Sarvodaya Sharamadana Movement in Sri Lanka. Ph.D. Dissertation, Department of Cultural Anthropology, University of Utrecht, Netherlands

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MOBILE EDGE COMPUTING ROLE IN 5G NETWORK

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Abstract:- Distributed computing has caused an adjustment of use benefits profoundly and has expanded the purchasers' degree in registering, systems administration and information stockpiling. Anyway the undeniably commonness of computerized 'large information' inactivity delicate advances like the Web of Things, autonomous vehicles and brilliant urban communities has driven examination into elective computational ideal models and progressed figuring. MEC is a developing worldview, which offers handheld RAN figuring, putting away and organizing abilities. MEC workers are utilized on a typical PC network on RAN and can be utilized in closeness to end-clients for postpone touchy and setting cognizant applications. This model eases the spine and backhaul network and is essential to low idleness, high limit and lithe versatile organizations. This article accommodates a productive, setting mindful correspondence stage, which is at the edge of RAN, comprising of MEC workers and cell phones. Specifically, three emblematic instances of portable boundaries arrangement, joint reserving and preparing and multi-facet interference dropping were presented and contemplated. We show the promising advantages of the techniques proposed to assist the 5G organizations with creating. At long last, we talk about the key mechanical issues and to effectively join MEC into the 5G climate, open testing issues should be tackling.
Keywords: MEC, 5G networks.

1. INTRODUCTION

Distributed computing is becoming increasingly important to a variety of organizations is growing. Informal group administrations including Facebook and Twitter, YouTube and Netflix material, and Google Maps route apparatuses are all on the fritz. Furthermore, clients' growing reliance on mobile phones to perform register and capacity serious activities, whether personal or business-related, necessitates offloading to the mists in order to achieve better execution while extending battery life. These objectives would be difficult and expensive to achieve without bringing the cloud closer to the organization's and clients' edges. Because of this requirement, mobile administrators are working on Mobile Edge Computing (MEC), which integrates the processing, storage, and systems administration assets with the base station. At the organization's edge, escalated and dormant technologies like augmented reality and picture handling can be facilitated. 5G refers to a set of advancements and strategies that will be used by future organizations to meet capacity and execution demands. 5G is a collective term for technological advancements and strategies that will be implemented in future organizations to satisfy cap and execution demands.

The plan of 5G organizations would rotate around virtualization and programmability of organizations and administrations. It is imagined that progress to 5G will be worked with by the present arising advancements like Software Defined Networking (SDN), Network Functions Virtualization (NFV), Mobile Edge Computing (MEC) and Fog Computing (FC) [YI15]. SDN and NFV give new devices that improve adaptability in planning organizations. These reciprocal advances empower programmability of control and organization capacities and possible movement of these vital constituents of the organization to the cloud. In the following area we center on MEC, the focal subject of this article.
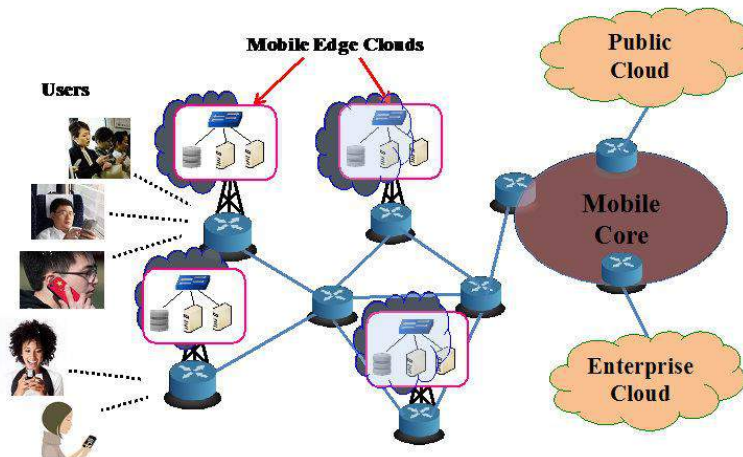
Figure 1

1.1 MEC and Application Splitting

Mobile-edge computing creates a highly distributed computing environment that can be used to develop games, utilities, and content storage and processing in close proximity to mobile users. As long as the moratorium and precision are retained, this can be broken down into small tasks, with some of the tasks being done at the imported or imported shadows. When distributing sub-tasks of a play among edge and other shadows, a number of difficult issues emerge. The mobile edge pall takes care of the low moratorium, high latency, and locally material employment when a play is broken.

1.2 The MEC Server Platform

The Commercial-Off-The-Shelf (COTS) application server, which is integrated with the base station, is a key component of MEC. As with conventional cloud infrastructure, the MEC server offers computing power, storage space, and networking. It also gives software developers access to user traffic and radio network data, which they can use to improve the user experience of their applications and services. It houses real-time analytics and artificial intelligence applications. It can handle queries with response times of less than 100 milliseconds. Data-intensive and high-latency operations are relegated to larger clouds for offline or batch processing.
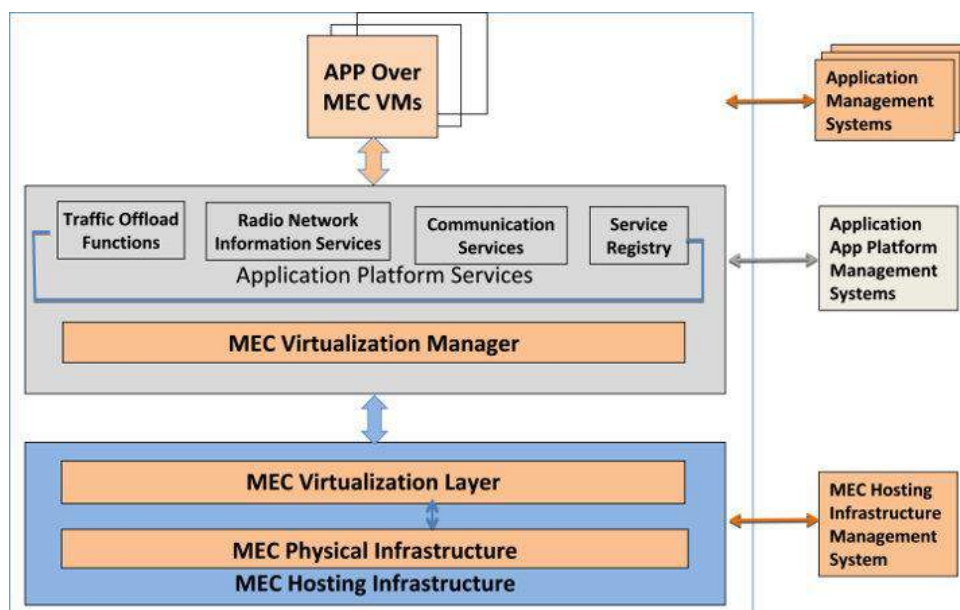
Figure 2: MEC server platform

1.3 MEC for Adapting the 5G RAN

Customarily, the radio access organization (RAN) has been the 'moronic line' for voice calls and information. In the 5G organization, the administrators would have the option to make these lines 'canny' by overlaying conveyed edge distributed computing onto the RAN. With virtualization at the edge of the RAN, the versatile organization administrators can permit numerous outsider occupants at the base board casting. The application suppliers have two primary motivating forces to have their applications, or a reasonable sub-division of it, on the edge–first, they get super low inertness (which is informally alluded to as zero dormancy) and high-transfer speed. Besides, the Radio Organization Data Administration (RNIS) module of the MEC worker gives them ongoing organization data about the cell load, endorser explicit transfer rapidity, and supporter area. This way the versatile administrator can take load off the center organization, diminish blockage and get more cash-flow out of the edge organization.

1.4 Dealing with the Edge Mists

According to the perspective of use specialist organizations, sending and overseeing conveyed applications across various mists is a troublesome suggestion. It turns out to be extremely hard for the suppliers to co-ordinate with singular mists specialist co-ops each with their own interfaces and between cloud network suppliers to deal with their utilization. They need an adaptable application sending and the board stage to have the option to upgrade utilization of assets, guarantee execution and contain cost. We are chipping away at an open source the board stage called MCAD (Multi-cloud Application Conveyance) that would permit application and 5G specialist organizations to determine multi-cloud virtual asset sending approaches, make virtual assets, send administrations in the most proper cloud(s) and oversee them while in activity. Recently named App Fabric [PAU14], the stage will speak with different cloud/network the executives frameworks and track down the ideal areas for virtual assets (virtual machines, stockpiling and virtual organization capacities) in light of the necessary expense and execution rules of an application.
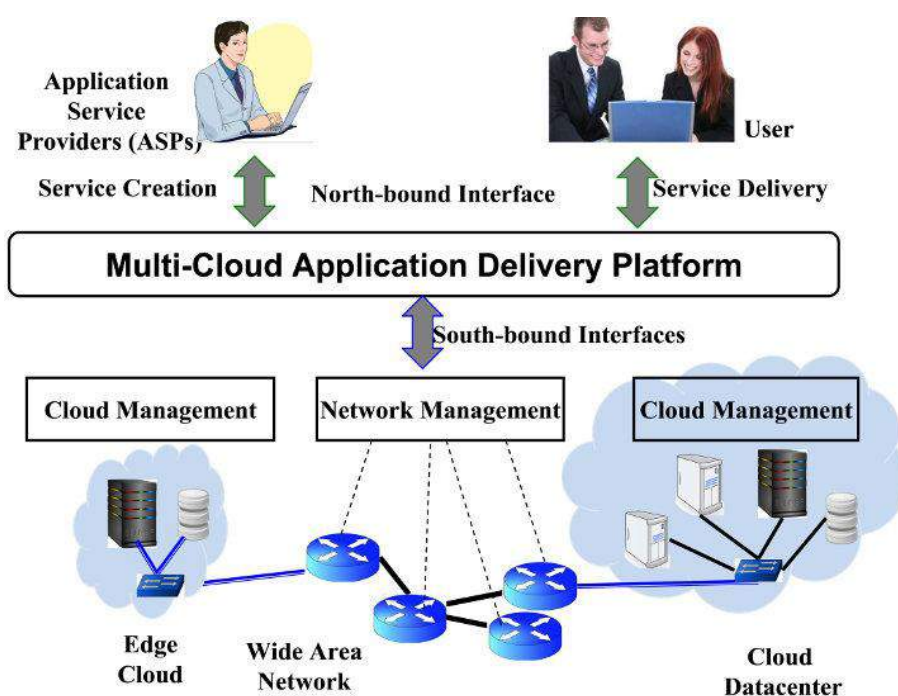
Figure 3: The MCAD based multi-cloud the executives design

As illustrated in fig. 3, MCAD configuration includes a crossover control framework with a focal worldwide regulator and per cloud/network neighborhood regulators. MCAD permits the cloud and systems administration asset proprietors to practice full oversight over their assets while occupants have their applications and program their arrangements on virtual assets anyplace on the partaking mists.

2. ORGANIZATIONS OF THINGS TO COME

5G is an aggregate name for advances and strategies that would go into the future organizations to meet the limit and execution requests. The expression 'no inactivity, gigabit experience' sums up the client assumptions that the business is trying to meet. Both of the significant normalization bodies, Global Broadcast communications Association (ITU) and European Media communications Principles Establishment (ETSI) have started exercises identifying with 5G with business organizations expected in 2021.

Clients expected key execution boundaries focused to be accomplished in 5G organizations are: per gadget information rates up to 20 Gbps, under 1ms idleness commitment of the radio part, versatility at 500 km/hour and terminal restriction inside 1 meter. It will focus on assistance progression in trains, scanty and thick territories, support for associating 20 million client gadgets and in excess of a trillion Web of Things (IoT)/Machine to Machine (M2M) gadgets with high unwavering quality.

2.1 Advances Significant for 5G

The plan of 5G organizations would rotate around virtualization and programmability of organizations and administrations. It is imagined that progress to 5G will be worked with by the present arising innovations like Programming Characterized Systems administration (SDN), Organization Capacities Virtualization (NFV), Versatile Edge Registering (MEC) and Mist Figuring (FC) [YI15]. SDN and NFV give new devices that improve adaptability in planning organizations. These integral advancements empower programmability of control and organization capacities and inevitable relocation of these vital constituents of the organization to the cloud. In the following area we center around MEC, the focal topic of this article.

2.2 Market Drivers

The development of versatile traffic and tension on costs are driving a need to execute a few changes to keep up nature of involvement, to create income, and enhance network activities and asset usage. The Web of Things is further blocking the organization and organization administrators need to do nearby examination to ease security and backhaul impacts. Endeavors need the capacity to empower and draw in with their clients with more productive, secure and low idleness associations. Application and substance suppliers are tested with the idleness of the organization when interfacing with the cloud. These provokes should be settled. Versatile administrators need to abbreviate an opportunity to dispatch new income producing applications for current clients yet in addition for explicit enterprises and areas, for example, yet not restricted to auto, industry computerization and government assistance ventures. Business change dependent on coordinated effort with the various parts in the worth chain can help in confronting these difficulties. Innovation enhancements which give low inertness, better adaptability, dexterity, utilization of virtualization, organization and setting mindfulness, and so forth can give the chance to expand the Nature of Involvement of end clients and make network activity more financially savvy and serious. Advanced cell and material applications move to the cloud.. The admittance to the cloud should be improved to ensure a rich encounter for buyers of an application or shoppers of substance and a tight cooperation is fundamental between network administrators and application and substance suppliers. This cooperation can prompt the arrangement of uses/content at the edge of the versatile administrator's organization, giving attention to the organization and setting information. Normalization will be fundamental for help this coordinated effort and the facilitating of cloud or web based applications inside a multivendor climate. The market drivers of MEC incorporate business change, innovation mix and industry coordinated effort (as outlined in Figure 1). These can be empowered by MEC and a wide assortment of utilization cases can be upheld for new and inventive business sectors, for example, e-Wellbeing, associated vehicles, industry robotization, expanded reality, gaming and IoT administrations.

2.3 Arrangement Situations

Portable Edge Figuring workers can be sent at numerous areas, for example, at the LTE large scale base station (eNodeB) site, at the 3G Radio Organization Regulator (RNC) site, at a multi-Radio Access Innovation (Rodent) cell conglomeration site, and at a total point (which may likewise be at the edge of the center organization). The multi-Rodent cell

accumulation site can be found inside an endeavor (for example medical clinic, huge corporate HQ), or inside/outside for an exceptional public inclusion situation (for example arena, shopping center) to control various nearby multi-Rodent passageways giving radio inclusion to the premises. This arrangement choice empowers the immediate conveyance of locally-significant, quick administrations from base station groups. Where a MEC stage is conveyed may rely upon various variables, including versatility, actual arrangement imperatives, execution measures (for example idleness) and which network data will be uncovered. Note that some MEC administrations may not be accessible/relevant in certain sending alternatives. MEC applications can be keenly and deftly sent in a consistent way on various MEC stages dependent on specialized and business boundaries. The sending of MEC applications on a specific MEC stage may rely upon the accessibility of explicit MEC administrations and on different Mec will use the nfv framework to address constraints such as inertness, prerequisites, necessary properties, usability of a particular vnf, adaptability, cost, and so on. The NFV stage might be devoted to MEC or imparted to other organization capacities or applications. MEC will likewise use (however much as could reasonably be expected) the NFV the board and coordination elements and interfaces.

2.4 Business Worth

Portable Edge Figuring offers an IT administration climate at an area viewed as a worthwhile point in the versatile organization: the Radio Access Organization (RAN) edge. Portrayed by vicinity, low inertness and high data transmission, this climate will offer restricted distributed computing abilities just as openness to continuous radio organization and setting data. Opening up this IT administration climate will permit applications and administrations from versatile administrators, administration and substance suppliers to be productively and flawlessly incorporated across multi-merchant, portable edge registering stages. The attributes and abilities offered by a MEC stage can be utilized such that will permit vicinity, setting, deftness and speed to be utilized for more extensive development that can be converted into remarkable worth and income age. Admittance to substance and applications can be sped up; their responsiveness can be expanded, boosting pace and intelligence. Famous and locally-pertinent substance can be conveyed straightforwardly where clients interface, restricting entrance transmission capacity deeply and cloud. Information on ongoing radio organization conditions and setting data can be utilized to advance the organization and administration activity (reacting and adjusting to changing organization conditions).

This would improve administration experience and the use of organization assets, empowering them to productively deal with expanded measures of traffic. Constant organization and fine-granular setting data (counting area) could be utilized to advance the versatile broadband experience by making profoundly customized administrations which are custom-made to singular necessities and preferences. Administrators can reposition themselves in the worth chain and rethink customized administrations. They can underwrite their organizations and free them up to approved outsiders (in a safe way), presenting abilities to Over the Top (OTT) players and application designers to deftly, spryly and quickly send imaginative applications and administrations towards portable supporters, undertakings and vertical s. Administrators will actually want to make new income streams, charm their clients by subsections up another variety of utilizations that offer steady benefit, and open up new market openings. Likewise, applications supporting more tight combination of organization and administration boundaries will improve both help insight and use of the organization assets. Application specialist organizations, OTT players and free programming sellers will actually want to make an interpretation of nearness and setting into esteem, and have the option to produce new earnings. Their applications and administrations can be upgraded and sped up to give a novel and unrivaled experience.

Inventive applications can be conveyed quickly in another norms based climate, exploiting new degrees of adaptability and readiness. Applications will actually want to extend their cloud into the portable arrange and make a totally different arrangement of administrations. They will actually want to feel and respond to end-client experience progressively, in light of the genuine radio conditions. The new MEC particulars will permit applications and administrations to be sent on top of multi-merchant Versatile Edge Processing stages, empowering them to be utilized by far most of the clients of a solitary

portable administrator. The portable end client will appreciate a one of a kind, satisfying and customized versatile broadband experience. The MEC activity will assist with creating great economic situations for all major parts in the worth chain just as work with financial development with a horde of new use cases across different areas (see Figure 2).

2.5 Mobile Edge Processing Administration Situations

As a rule the accompanying segments portray various help situations that have been considered inside ETSI ISG MEC. These show different situations which can exploit Portable Edge Registering to either build execution contrasted with offering such types of assistance through the cloud or through center organization workers, or to use the exceptional capacities offered by MEC stages, for example, nearness to the client and organization edge, serving a profoundly restricted territory. It ought to be noticed these models are non-thorough and further assistance situations are accessible in the ETSI ISG MEC determination for Versatile Edge Figuring Administration Situations, GS MEC 004. Different situations which can utilize MEC are additionally conceivable.

2.6 Evidences of Idea

To guarantee the achievement and far and wide sending of Versatile Edge Registering, it is important to have something beyond convenient and great particulars. It is significant to approve the determinations that are being created, and to show that the utilization cases have been satisfied. Moreover, the MEC idea should be shown to be plausible and important to every one of the significant partners in the worth chain to interest the broadest conceivable crowd. To feature the Portable Edge Registering idea, the ISG MEC has built up a Proof of Idea measure, indicated in GS MEC-IEG 005 [2]. A PoC proposition can be presented by a PoC group comprising of in any event one Versatile Organization Administrator, at any rate one framework seller and at any rate one substance or application proider. GS MEC-IEG 005 [2] determines the interaction and rules that a Proof of Idea show should hold fast to be acknowledged as a MEC PoC. A wiki site http://mecwiki.etsi.org has been set up to help PoC groups. This site has the PoC project proposition formats and the rundown of PoC Subjects, which are explicit regions where info or input from PoCs is required. One or a few PoC Subjects can be tended to by a solitary PoC project. The public exhibition of MEC Confirmations of Idea assists with building business mindfulness and trust in this innovation, and assists with building up a different, open, MEC biological system

3. CONCLUSIONS

Versatile Edge Processing empowers inventive help situations that can guarantee upgraded individual experience and improved organization activity, just as starting up new business openings. A couple of models are portrayed in this white paper to show how closeness to clients and articles, along with organization and setting data can be utilized by applications to make admiration. Portable Edge Figuring pulls in another worth chain and invigorated eco-framework, where everything players can profit by more tight coordinated effort. Portable administrators can assume an essential part inside the new worth chain and draw in OTT specialist co-ops, designers and Web players to improve over another front line innovation, while empowering setting mindful applications to run in closeness to the versatile endorser. Portable endorsers can appreciate a remarkable, really satisfying and customized versatile broadband experience which is custom-made to their requirements and inclinations. In light of a virtualized stage, MEC supplements NFV and is completely lined up with the arising conveyed cloud approach. It is perceived as a vital innovation of things to come 5G time, fulfilling the requesting prerequisites for super low inertness and animating development. The MEC innovation is characterized by the ETSI ISG MEC, which was dispatched in December 2014 with the expectation to build up the originally set of particulars over the next two years. The expectations will incorporate assistance situations, prerequisites, design and Programming interface particulars, supplemented with a PoC Structure detail and White Papers which intend to speed up the market appropriation of the MEC innovation. MEC upholds distinctive arrangement choices, as MEC Workers can be situated at better places inside the Radio Access Organization relying upon specialized and business requirment's. A MEC Evidence of-Idea (PoC) program has been set up to exhibit the suitability of MEC executions. The outcomes and exercises learned by the MEC PoCs

are taken care of back to the ISG MEC determination exercises. The MEC ISG is building up the establishment to empower an open radio access network which can have third get-together inventive applications and substance at the edge of the organization. The ISG is available to individuals and non-individuals from ETSI to take part and contribute towards this imaginative innovation, and to participate in the PoC exercises.

REFERENCES

1. [ITU15] Work plan, timeline, process and deliverables for the future development of IMT, ITU 2015
2. [ITU13-IMT2020] -High level 5G architecture, Network softwarization, gaps; http://www.itu.int/en/ITU-T/focusgroups/imt-2020/Pages/default.aspx
3. [ETSI15] 5G- The 5G Infrastructure Public Private Partnership: the next generation of communication networks and services, ETSI, 2015
4. [ETSI14] Mobile-Edge Computing – Introductory technical whitepaper, ETSI, 2014
5. [YI15] S. Yi, C. Li, Q. Li, "A Survey of Fog Computing: Concepts, Applications and Issues," ACM Mobidata'15, 2015
6. [PAU14] Subharthi Paul, Raj Jain, Mohammed Samaka, Jianli Pan, "Application Delivery in Multi-Cloud Environments using Software Defined Networking," Computer Networks Special Issue on cloud networking and communications, Volume 68, 5 August 2014, Pages 166–186
7. Mobile Edge Computing – An Important Ingredient of 5G Networks Lav Gupta and Raj Jain, Washington University in St. Louis; and H. Anthony Chan, Huawei Technologies, USA
8. 5G Vision: The 5G Infrastructure Public Private Partnership: the next generation of
9. Communication networks and services. From The 5G Infrastructure Public Private Partnership: https://5g-ppp.eu/wp-content/uploads/2015/02/5G-Vision-Brochure-v1.pdf
10. ETSI GS MEC-IEG 005; Mobile Edge Computing (MEC); Proof of Concept Framework.

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A STUDY OF BIOTECHNOLOGY BUSINESS THAT SAVES HUMANITY - VIRUSES ARE FUTURE WEAPON: DEMAND IS VACCINE AND SUPPLY DEPENDS UPON BIOTECHNOLOGY

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Abstract:- The entire study is focused on biotechnology. Biotechnology has been recognized as a significant component for the economic growth of nations and regions, regardless of the phase of rapid growth. These firms play an important role in saving lives from severe diseases and viruses. In essence, biotech firms use living cells and microorganisms to make effective products not for the human only but for the world as well. Biotechnology helps in making the environment sustainable. In the report, numerous terms are explained, such as a virus. Everyone knows the harshness of the virus in the body and life. However, biotechnology makes it possible to me virus as a weapon. In this research, how the virus is affecting the business of biotech firms has been evaluated. It is a true virus that can be a future weapon, and the vaccine is the demand, but supply depends on the biotech firms.

1. INTRODUCTION

The entire research aims to evaluate the business of the biotechnology firms. Biotechnological companies significantly help in saving humanity. To understand the concepts more effectively numerous terms has been defined and they are-

1.1 About Biotechnology

In simple words, Biotechnology is a technology based on biology. It uses cellular, living cells, molecules and bio-molecular methods to develop technologies and products that achieve better human life and the well-being of the planet. For example, biological processes of microorganisms to preserve useful food products, such as cheese, bread, and many dairy products. Biotechnology firms help develop medicines and medical products for the treatment of viruses and severe medical conditions. It also makes remedial devices and diagnostics, along with pollution control, bio-fuels, and so on. These biotech firms typically emphasize on generating and testing new medicinal compounds for medical use, which must endure prolonged testing and approval procedures for their products (Ahamat and Chong, 2020).

Biotechnology firms provide advanced products and technologies to encounter devastating situations and rare diseases such as lessen the hunger and feed the hungry, use cleaner energy, and more effective industrial manufacturing procedures. Further, the biotechnology industry is largely classified into agricultural and medical markets. The same bio-technology implemented for the development of medicine can progress agriculture and food products. It improves crop pest confrontation, boosts crop pesticide tolerance and enables the use of more ecologically sustainable agricultural practices. It helps in developing the crops with advanced nutritarians that facilitates vitamin, to help improve cardiovascular health and nutrient deficits. Hence, the broader view of biotechnology is a fast-growing scientific industry.

Biotechnology plays an important role of fuel in the world. The reason for this is that it uses procedures such as fermentation and uses biochemistry for instance yeast, enzymes, and other microorganisms to procedure microscopic manufacturing plants. Through which it reduces greenhouse gas emissions by 50% and decreases the water consumption.

Biotechnology helps heal the world by using nature's own mechanism and its own genetic features. Biotech helps in making more accurate tools for detection of the disease's and treating people by decreasing health risks and side effects (Arantes-Oliveira, 2007).

1.2 About Virus

A small micro parasite surrounded by a protein coat is considered a virus. It cannot be replicated by them self. Once a virus infects a vulnerable cell, it directs the cell machinery to produce more copies of themselves as their genetic material viruses contain RNA or DNA. Nucleic acids can be sole or double-stranded. This often supersedes the immune system's

production of protective antibodies. It means the virus has the power to kill the host cell and damage the host organism. Primarily, the virus has a reputation for being the root of contagion (Lodish, et al. 2000). Take Covid-19 as an example, how badly it is affecting the whole human life in the world. There is no doubt in the widespread incidence of disease and death.

Viruses do not have the exact mechanisms like bacteria; they cannot be slaughtered through antibiotics. Viruses can be transmitted from person to person. They can spread by touch, sex, saliva (coughing or sneezing), filthy food or water, and insects that carry them from one being to another. Antiviral drugs or vaccines can prevent them from spreading and eradicate or lessen the harshness of viral illnesses, including COVID-19, Polio, shingles, dengue fever, AIDS, smallpox, and many more. Moreover, the most significant role of biotechnology is on the identification, classification, and diagnosis of several growths of virus diseases. Hence, Biotechnological approaches are vital for effective virus disease management. Biotechnology is the key to resist virus diseases and should complement other traditional methods.

1.3 Virus as Future Weapon
Recent progression and developments in biotechnology, genetics are certainly generating a diversity of environmental, ethical, and social challenges for progressive humanities. Biotechnology helps in research about cell biology and biochemistry that identifies how viruses use their host cells to produce viral nucleic acids and proteins. Biotechnology makes it possible to make viruses as weapons of the future-immeasurable examples from the daily work of molecular biologists that demonstrate how biotechnology has come so far. For instance, advances in physics that can be deliberate by X-ray diffraction provided the high resolution needed to determine the basic edifice of minute viruses.

After the detection of massive viruses in aquatic surroundings in diverse parts of the world, their potential ecological significance was enhanced. In fact, the chemical and physical ease of viruses has made them a critical experimental tool for examining molecular procedures involved in certain life procedures.

Many bacteria are friendly viruses, such as microbes present in the intestine, and help to digest food. Humans can also carry supportive viruses that defend against dangerous viruses. It is one in which biotechnology strongly believes. In addition, the development of modern biotechnology in medicine and pharmaceutical research and production has facilitated the global accessibility of knowledge and conveniences. Where 40 years back, biotechnology meant baking bread only. Now high-tech facilities have created vaccines or single cell-protein inventions that can be the production of biological weapons. In today's world, nearly all nations have the technological latent to generate huge amounts of pathogenic microorganisms safe and sound. Thus, it is not wrong to say, with advanced biotechnology, it becomes thinkable to produce viruses as new biological weapons.

1.4 Vaccine Market
Vaccines are also recognized as an immunity booster. It injects into a person so that the body begins to make antibodies or invulnerability against the virus or illness. Vaccination plays a crucial role in sustaining the wellbeing and health of people; therefore, it is implemented in numerous regional anti-disease strategies. It has been seen the demand for vaccination has rapidly increased over past years (WHO|Vaccine Market 2021). The main actors in the vaccine market demand are developing nations, and the governments of industrial, health agencies, and various regulatory and advisory firms that direct the quality and wellbeing of the vaccination.

Increased demand for healthier healthcare infrastructure and high awareness levels about the aids of vaccination are the main factors driving the market growth. The participation of governmental and non-governmental bodies, which have gained eminence in this arena, is likely to give an operative lift to the field. In addition, the development of new and improved vaccination for numerous viruses is a vital factor that accelerates the growth of the vaccine market. Hence, these aspects prove that the vaccine market is proliferating.

2. LITERATURE REVIEW
2.1 The Business of Biotechnology

Demain (2007) states Biotechnology had its roots in 8,000 BC when humans learned to cultivate crops and domesticated animals, which led to the advancement of civilization. Emerging discoveries in the fields of cells and genetics in the 18th century carried forward the business of biotechnology. In this way, the Biotechnology business has arisen as a big business in the last quarter of the 21 centuries.

Today, biotechnology is on the front of modern science, which has discovered solutions to 21st century encounters such as starvation, alternate energy, and virus. Biotechnology is a key that forces advances in pure biologies, such as genetics, molecular biology, and embryology, to resolve glitches facing humanity.

Possibly no other segment has profited more from developments in biotech than health care. The main factors of biotech research and growth include neurology, oncology, immunology, infectious viruses, and regenerative medicine. The welfare of the Human Project pushes the boundaries of biotechnology research and development, leading to massive growth in cancer research. It is now probable to gene-sequence the tumor and classify the best treatment progression. Biotech is the upsurge of the future in the health care sector. In fact, the wave began a year ago, when hundreds of millions of dollars were poured into auspicious corporations that appeared in the field.

Due to Covid-19, the biotech firm has become a wave in healthcare. Competition in the biotech business has to turn out to be hotter than ever, as an ever-increasing number of firms enter a marketplace that is probable to gain huge rewards in the future, despite their risky nature. When human life is at stake, the urgency involved in turning such research into reality. Hence, many firms started investing in the biotech business in this way. A robust understanding of both business and science is crucial for victory within the biotech business. With its vast growth potential, the Biotech business will endure a notable role as an advanced manufacturing hub.

2.2 Biotechnology Business Models Work: Evidence from the Pharmaceutical Marketplace

A biotechnology company's business model is the means by which it makes a revenue - how it addresses its market, the aids it progresses, and the business associations to do so. Pharma's traditional business model depends on its capability to classify new molecules, test them in extensive clinical trials and endorse them with a wide-ranging marketing and sales occurrence. One of the significant functions of pharmaceutical firms does pick drug discovery and other venture projects while refusing or allocating additional funds for sustained investment.

In the flagship version of this model, a single company can hire contractors to enhance its own efforts, but it wants to make revenues on its own. In the views of Konde, (2009), Biotechnology companies implement strategies to achieve product sales before receiving payment. These strategies may comprise technical promotion services to purchasing research and development contracts from government, government, industry, and industrial partners - pharmaceutical, food processing, agriculture, chemical, energy, or waste treatment.

Furthermore, in order to make more revenue, pharmaceutical firms collaborate with other firms to develop new drugs that are cost-effective. To help patients sustain their health and certify that the products and services they offer genuinely make a transformation. For example, Johnson & Johnson Merger with Centocor, Inc. Pharma is formerly enduring such an era of disruptive innovation. By 2025, most drugs will be paid based on their results.

Furthermore, as per the What is Biotechnology? | BIO (2021) instead of the customer, the leading market segment for the pharmaceutical company is physicians. Pharmaceutical companies have hired sales representatives to explain the benefits of a particular drug to physicians. Moreover, the revenue model established by pharmaceutical businesses relied on the sales comparatively number of drugs. The value chain's structure of the individual pharmaceutical company was moderately self-contained. Each pharmaceutical business was fully united, conducting research, development, production, and supply of its own medicines. Oliveira, (2019) argues, this model will not become effective for numerous firms in the long term. If they are well-off, they will have to progress

their R&D productivity, decrease their prices, lessen the capacity of emerging countries, and switch from vending medicines to handling outcomes.

2.3 Assessment of the Factors Influencing Entrepreneurs on the Biotechnology Business Venture

As per the opinion of Kenney, (1986), Biotechnology is one of the advanced technologies that entrepreneurs are investing in to sustain sustainable development in the business. It is considered a domain of the future, with the result that more and more companies want to invest in a highly favorable dynamic globally. Exploring and producing business opportunities for new venture formation is significant to shape entrepreneurial functions and create potential commercial prospects. The foremost influencing factor for entrepreneurs on the biotechnology business venture is they get a chance to interrelate with a wide range in diverse turns of the world to progress their likelihoods of success and improve their performance.

Glick, (2008) Biotech entrepreneurship is the most significant opening to generate innovative and idiosyncratic goods and technologies that are often considered world-shattering and bring global gratitude, certainly impacting a wide range of customers. Hence, there is a high degree chance of innovation and capability to make beneficial impacts on consumers and industry. The innovative feature of any biotechnology method is crucial to expanding a fruitful commercial. Factors that motivate entrepreneurs to do business in the biotech industry are the opportunities to provide support and do something good in terms of the wellbeing of people around the world. Therefore, the biotech industry is an excellent field for entrepreneurial activity.

As per the National Academies of Sciences, Engineering, and Medicine, (2017), Biotech has now fully penetrated all industrial sectors and is significant for developing sustainable growth and development. It covers the pharmaceutical and food sectors to produce biofuels for the restoration and preservation of cultural heritage. Thus, it increases the chances of success and profit, which revenue-generating is the main factor of doing any business. Further, the uncertain victory of making new products and services and the challenges of emerging new administrations, passion can turn out to be a key factor of entrepreneurial deeds.

2.4 Research Question
- Q. How biotechnology science can be a future business that not only saves human life but also generates good revenue?
- Q. What are the case studies that show that biotechnology can be a future business?

3. METHODOLOGY

The method which is used in the study is Literature methodology. This will help the researcher analyse and sort the literature to identify the essential aspects of the material. The main question which help to understand the depth of the research are -
Q. How biotechnology science can be a future business that not only saves human life but also generates good revenue?
- Can Science be a Business

Consider the biotech sector, then yes, science can be a business. With a viewpoint, scientists become enthusiastically tangled in technology and knowledge. The purpose of business involved in science is to disseminate scientific innovation and expertise while protecting intellectual property. Scientific research and pioneering technology have profoundly changed the manufacturing procedures performed by companies. Biotechnology can save lots of pounds by capitalizing on a machine rather than a staff (Pisano, 2006). A science-based business will break down the barrier between basic and applied science and generate a set of new drugs. There will be huge benefits from drugs, and of course, investors will be well rewarded.

Undoubtedly, suppose science will be incorporated into the business. In that case, these firms are getting many benefits to companies and society and universities—business emphases on technological progressions, which usually needed to innovate. Further, the biotech sector established these domains as a science-business model, implemented by nanotechnology, advanced materials, and other manufacturing business. Many large firms

include big chemical ~ pharmaceutical companies know the importance of scient in the business.

- Biotechnology business models

A business model is made up of three factors - the value proposition, the value-chain structure, and revenue generation. A company's business model can determine its path to success. On the way to success, many biotechnology businesses have implemented numerous diverse business models to function effectively under national and international circumstances. The tremendous flexibility of biotech businesses is a strength that has assisted them in enduring times of economic hardship. Business models in the biotech area are not similar; they are divided into four such as platforms, products, verticals, and hybrid models.

Further, the platform business model was signified to empower technology, devices, and services, numerous alliances, abstemiously formed rights, and royalty interests to authenticate the platform (Fiskenand Rutherford, 2002). One benefit of this business model is that income is created comparatively swiftly. Moreover, the product business model was signified in basic and preclinical research, producing definite therapeutic areas and supporting clinical trials to public stakeholders.

A blend of product-platform business models is recognized as a hybrid model. In which technology platforms are united with the formation of services and products. The hybrid business model signifies the firm's characteristics such as unified technologies, branded biology, engrossed therapeutic interests and proficiencies, and renewable resources and services to generate income.

In addition, in the vertical business model, drugs are established until the end of clinical studies or till consent. It means that value formation is carried forward as much as probable.

- Business models and investment trends in the biotechnology industry

Knowledge changes every aspect of day-to-day existence with new technological innovations and development every day. The world is witnessing an extraordinary response to the pandemic by a wide range of biotechnology researchers, emerging firms, and pharmaceuticals. Results and the pace of innovation make investors eager to invest in the biotechnology industry. Biotech is a very capital-intensive occupation. Further, with advances in biotech, many researchers can now emphasize numerous diverse life science fields that can progress the quality of life, such as immunotherapy, precision surgery, and genetics. Surgeons can now help AI or artificial intelligence tools to do less invasive and more specific surgical operations on their patients. AI offers better information for registrars concerning their chosen technique of treatment.

Indeed, the digitization trend of biotech will upsurge through the likelihood of online and remote assistance, diagnosis, and treatment of patients worldwide. In addition to it, numerous physicians and health care physicians are accredited to endure their practice online. Telepractice is now an emerging and growing trend in the biotech field. Further, there is an ongoing trend of investment in the biotech sector, such as data management. With the help of cloud management, the information produced in laboratories is very easy to be stored and handled.

Q. What are the case studies that show that biotechnology can be a future business?

- Case study of US Biotechnology Industry

The growth of the biotech industry in the US is a unique story. In the nearly 30 years since the expansion of recombinant DNA technologies in investigating laboratories, more than 2,100 companies have been recognized in the US only to discover and leverage this new arena. Around 30 new products have grasped the medical market, and numerous hundred are in human clinical trials. In 1996, the market for such products increased dramatically to $ 7.6 billion. In the United States, 1,308 companies are set up primarily to commercialize biotechnology. The widely held American biotechnology firms are pursuing markets in health care. About 29 percent of biotech firms have a chief interest in medicine, while 17 percent of businesses have a primary focus on diagnostics. The US capital market is the prime sustenance for biotech. Moreover, the amount of money that medicines have put into R&D has increased year after year. Hence, although the US capital markets are still the

chief sustenance for biotech businesses, variations in global financial markets have created additional opportunities for companies to explore their borders.

- Business Development - Case of Biotechnology

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- Case Study of the San Diego Biotechnology Cluster

The notion of clusters has turned   out to be central to regional economic development strategies, chiefly in the high-technology and biotechnology businesses. The San Diego Sciences Cluster is made up of two sections: Biotechnology or Pharmaceuticals and Biomedical Devices or Products.

While San Diego promoted from the early success of Hybritech, maybe the most important advantage was the formation of a cadre of experienced biotechnology managers who start other companies (Kim, 2015).

San Diego's regional benefit in inspiring entrepreneurship and modernization lies in the formation and exploitation of knowledge and actions through the robust collaboration of its entrepreneurs and participation in local groups of practice. The emergence and accomplishment of the cluster lies in a dynamic setting of knowledge and engagement.

4. SUGGESTIONS
4.1 A Case Study on Obstacles to the Growth of Biotechnology
In today's world, biotechnology plays a crucial role in various manners. It is an extensive domain consisting of a package of techniques that work natural passive things with their enlarged potential in modified outcomes and an eternal return to products. The character of biotech brings innovative resolutions to many businesses, counting the pharmaceutical and health sectors, farming, environmental safety, and more. The growth of biotechnology is endless; it has been implemented for the benefit of peoples and the environment, with related expansions in scientific research and technological progress. Regardless, this sector is proliferating, even though the development of biotechnology faces many obstacles. As such, the field of biotechnology is changing quickly. Often, the rate at which new technologies are established outweighs regulatory version and change, which generates significant biotech issues. Next, developing a new product or replacing an existing one through biotechnology poses various difficulties.

Further, Time is the main obstacle to the invention of new products. It takes a lot of Time for an idea to be proven, framed, and established into a profitable discovery, which also determines the achievement of the product as there are many rivals in the market. Hence, Biotech development faces more obstacles such as funding, policy changes, ethical issues, and more.

5. RESULTS
The result which comes out from research in Biotechnology can be a future business that saves not only human life but also generates good revenue. The megatrends of biology, life sciences, and digitalization are growing organized, allowing new inventions that impact daily lives. This revolution is strengthened by the rapid upsurge in computing supremacy and the emergence of new competencies in AI, mechanization, and data analytics. These trends are quickening the pace of innovation and progress R&D productivity in life.

- For human health, for instance, an in-depth understanding of the association between genetics and disease has led to the development of products and drugs, which may possibly by biotechnology to make products which is more effective than

one-size-fits-all treatments. Hence, in the future, new technologies can assist the health industry in medicine and prevent diseases more effectively.

- Biotechnology has the potential to aid address some of the significant worldwide challenges, from weather change to epidemics, chronic illnesses, and worldwide safety. Today, Biotechnology has led to a bang of investigative projects in science and business. Every year, the amount of intellectual property connected to biotech is increasing.
- Due to digitization, enlarged connectivity, and dropping costs, noteworthy advances in biotechnology are related to more significant systemic variations in how bioscience will save lives and create decent revenue.

6. CONCLUSION

It has been summarised from the report that biotechnology is a fast-growing business. The aim of the report is to give a clear picture of the biotechnological firms and as well as their development and growth. Biotechnology firms deliver cutting-edge products and technologies to combat catastrophic conditions and starvation-less diseases and hunger, use cleaner energy, and more effective industrial manufacturing procedures. The primary role of biotechnology is the identification, classification, and diagnosis of the virus.

Therefore, biotechnological approaches are significant for virus disease management. Further, in this report, the biotech business growth has been analyzed, how this sector is developing faster and attracting more investors in the business. Due to Covid-19, the biotech firm has to turn out to be an upsurge in the healthcare market. This makes investors and companies are more likely to invest in biotech. There are many factors that influence the entrepreneur to start a business in the biotechnology field, such as innovation, fast-growing sector, enormous growth, higher profit, and more.

Moreover, the report suggested that the virus could be the weapon of the future. Biotechnology uses living cells to make products to fight diseases. In this way, biotech firms are capable of weaponizing viruses. In the same context, viruses could be the weapon of the future, and there is a demand for vaccines, but the supply depends on biotech firms.

REFERENCES

1. Ahamat, A. and Chong, S.C., 2020. Assessment of the factors influencing entrepreneurs on the biotechnology business venture. In Proceedings of the 24th International Business Information Management Association Conference-Crafting Global Competitive Economies (pp. 2171-2177).
2. Arantes-Oliveira, N., 2007. A case study on obstacles to the growth of biotechnology. Technological Forecasting and Social Change, 74(1), pp.61-74.
3. Demain, A.L., 2007. REVIEWS: The business of biotechnology. Industrial Biotechnology, 3(3), pp.269-283.
4. Fisken, J. and Rutherford, J., 2002. Business models and investment trends in the biotechnology industry in Europe. Journal of Commercial Biotechnology, 8(3).
5. Glick, J.L., 2008. Biotechnology business models work: Evidence from the pharmaceutical marketplace. Journal of Commercial Biotechnology, 14(2), pp.106-117.
6. Kenney, M., 1986. Schumpeterian innovation and entrepreneurs in capitalism: A case study of the US biotechnology industry. Research Policy, 15(1), pp.21-31.
7. Kim, S.T., 2015. Regional advantage of cluster development: A case study of the San Diego biotechnology cluster. European Planning Studies, 23(2), pp.238-261.
8. Kind, S. and zu Knyphausen-Aufseß, D., 2007. What is "Business Development"?—The Case of Biotechnology. Schmalenbach Business Review, 59(2), pp.176-199.
9. Konde, V., 2009. Biotechnology business models: An Indian perspective. Journal of Commercial Biotechnology, 15(3), pp.215-226.
10. Lodish, H. et al. (2000) "Viruses: Structure, Function, and Uses", W. H. Freeman, p. Available at: https://www.ncbi.nlm.nih.gov/books/NBK21523/#:~:text=A%20virus%20is%20a%20small,single%2D% 20or%20double%2Dstranded. (Accessed: 15 April 2021).
11. National Academies of Sciences, Engineering, and Medicine, 2017. Preparing for future products of biotechnology.
12. Oliveira, A.L., 2019. Biotechnology, big data and artificial intelligence. Biotechnology journal, 14(8), p.1800613.
13. Pisano, G., 2006. Can science be a business. Harvard business review, 10, pp.1-12.
14. van Aken, J. and Hammond, E. (2003) "Genetic engineering and biological weapons", EMBO reports, 4(S1). doi: 10.1038/sj.embor.embor860.
15. What is Biotechnology? | BIO (2021). Available at: https://www.bio.org/what-biotechnology (Accessed: 15 April 2021).
16. WHO | Vaccine Market (2021). Available at: https://www.who.int/immunization/programmes_systems/procurement/market/global_demand/en/ (Accessed: 15 April 2021).

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PAYMENT GATEWAYS: A REVIEW ON THE VISIBLE DIGITAL BUSINESS TRANSFORMATION

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Abstract:- Digital transformation is the loud word now a days which every budding business man wants to adhere with and with this Business Digitization is perhaps the most pervasive managerial challenge for incumbent firms of the last and coming decade. With the advancement of technology and internet usage, the world is shrinking day by day and the business boundaries are expanding beyond imagination. Any business owner now cannot dream of launching in a bigger way without the online presence (payment facility). In the same way consumers, with Ecommerce and best infrastructure to ship products, can dream of getting any product/service from any part of the world in a short time cutting across all barriers. This transformation has brough greater ease and comfort for them in dealing with their shopping habits and payments complications. Ecommerce systems depend mainly on the payment gateway service providers to facilitate payment transactions. Now the payment gateway service providers are focusing on providing lot of features and user-friendly options to increase market share. Through this paper, a new approach to the multiple payment modes is brought into light which will be different from the usual multiple payment options available in the Online Payment Industry. With this option, user experience is made great and time-saving with the flexibility of multiple options. This paper discusses an improvement in the existing important feature of Online Payment Gateway called Multiple Payments.
Keywords: Payment gateways, Digital transformation and E-Commerce.

1. INTRODUCTION

Today every business is empowered by multiple payment gateways which makes the consumers' life easy and gives them the luxury of purchasing and making payments to any biller in any part of the world. The global economy is becoming increasingly "electronized," with more and more transactions taking place online and electronic payments greatly outnumbering paper-based payment instruments. Payment gateways are commonly used to pay bills, send money, and make ecommerce transactions of products and services easier. As a result of this digitized transformation, various procedures and complicated processes are involved in the online payment cycle, even though the customer may only complete the payment in a few seconds. Several parties are interested in one such transaction. An Internet E-Commerce Payment Gateway is a critical piece of infrastructure that ensures that such transactions occur smoothly and securely over electronic networks. A Payment Gateway is a point of entry into the banking system on a national level. The security of all online transactions is needed. Payment Gateways connect the merchant's website to the financial institutions that handle the transaction. A Payment Gateway authenticates and routes payment information between different parties and related banks in a highly secure environment.

2. REVIEW OF LITERATURE

The online payment system is a comprehensive term, portraying various scopes of delivery through electronic multichannel. Its use for various purposes offers an amplified imprecision of characterizing online payment in literature. Online payment can be seen from its capacities as e-banking, m-payment, e-cash, internet banking, online banking, e-broking, e-finance and so on. All things considered, recent researchers have demonstrated a few endeavours to come up with a definition of online payment [8].

1. Dennis (2004), characterises the system of online or electronic payment as a type of financial commitment that includes the purchaser and the vendor enabled by the utilisation of electronic infrastructures [11]. Additionally, Briggs and Brooks (2011) views online payment as a type of inter-relation amongst associations and people helped by banks and inter-switch houses that empowers financial transaction electronically [17].

2. Another point of view is put forward by Peter and Babatunde (2012) who see online payment system as any type of money exchange through the internet [22]. On a

similar note, as indicated by Adeoti and Osotimehin (2012), a system of online payment alludes to an electronic method for making payments for merchandise obtained on the web or in markets and shopping centres [23]. Another definition suggests that online payment systems are payments made in electronic exchange conditions as exchange of money via electronic means [24].

3. Besides, Kalakota and Whinston (1997) view online or electronic payment as an exchange of money that happens online between the merchant and the purchaser [25]. In addition, Humphrey and Hancock (1997) are of the view that online payments allude to money and related exchanges actualized utilising means of electronics [26]. Online payment is also defined as payment by means of electronic exchange of details of credit cards, direct credit or some other electronic means other than payment with money and cheque [27].

4. Antwi et al. (2015) characterised online payment as an exchange of a fiscal claim by the payer on a party worthy to be useful [28]. Lin and Nguyen (2001) define online payment as payments made via the automated clearing house, commercial card systems and electronic transfers [29]. Shon and Swatman (1998) characterise online payment as any trade of money started by means of an electronic correspondence channel [30]. Gans and Scheelings (1999), define online payment as payments made by the use of electronic signals connected debit or credit accounts [31]. Hord (2005) observes online payment as any sort of non-money payment that does not include a paper cheque [32].

5. According to Dr Hem Shwetha Rathore (2017) the study on "Adoption of Digital Wallet by Consumers" gives a analysis about the various factors that could impact a consumer's decision in adoption of digital wallet as an mode of payment. It also attempts to study the various risk and challenges that are faced in using of digital wallet by users. A detailed analysis is carried to check in the comparison on mode of online payment and various age groups, also the way online payment are carried out with respect to occupation, factors that can create a influence on selection of digital wallet with reference to age groups, also the factors that affect a users willingness to adopt digital wallet as a mode of payment with reference to income level as well as the kind of satisfaction users receive on using use of Digital Wallet Services. The Study also predicts that main factors that play an important role in consumer adoption are divided into three - ease of online purchase, level of loyalty provided also the viability of digital wallet. The findings by the study include security and safe are the most challenging issues as well as the most accepted feature of digital wallet is the hassle free mode of making the payments.

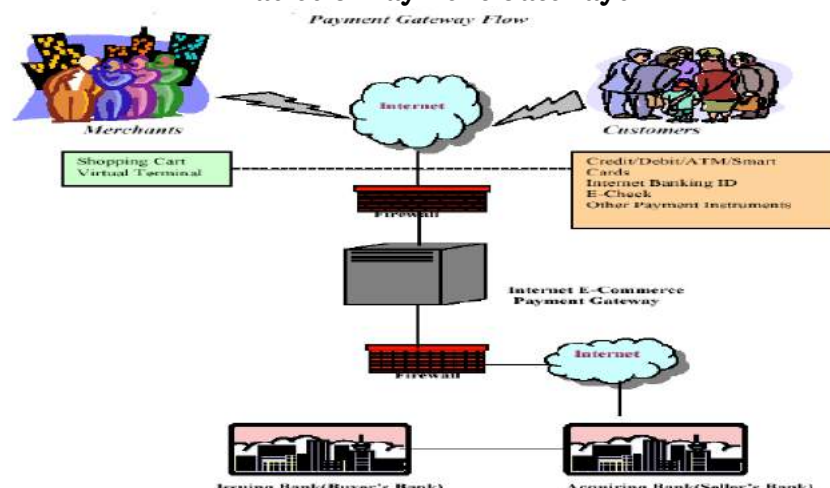## 2.1 Definition of Payment Gateways
The technology that collects and transfers payment data from the customer to the acquirer is known as a payment gateway. It is what keeps the payments ecosystem running smoothly by allowing customers and companies to make online payments. You don't have to be a payment gateway specialist to be an online retailer, but it's worth knowing the basics of how an online payment gets from your customer to your bank account.

2.2 The Key Players in Online Payments
We must first recognize the main players in online payments before delving deeper into the concept of a payment gateway. These are the main players involved in the payment process when a customer clicks on the "Pay" button on your website:

- **The Merchant**: This is you, i.e. an online business operating in any vertical (travel, retail, e-Commerce, gaming, Forex, etc), offering a product or service to customers.
- **The Customer:** The customer also called a cardholder, who wants to access the products or services that the merchant is selling, and initiates the transaction.
- **The Issuing Bank:** The issuing bank is the customer's bank that issues the cardholder's credit or debit card on behalf of the card schemes (Visa, Mastercard).
- **The Acquirer:** Also known as the acquiring bank, the acquirer is the financial institution that maintains the merchant's bank account (known as the merchant's account). The acquiring bank passes the merchant's transactions to the issuing bank to receive payment.

Basics of Payment Gateways

Payment Gateway Flow

3. BENEFITS OF PAYMENTS GATEWAYS

A Payment Gateway is immensely justifiable on account of the multiple benefits it offers including:

- The obvious 24x7x365 convenience
- Real time authorization of credit/debit cards
- Rapid, efficient transaction processing
- Multiple payment options
- Secure flow of transaction details among buyers, sellers and financial institutions
- Flexible, powerful real-time reports generation.
- Multi-currency settlements, if the need be
- Facility for customer refund
- Merchants can get rid of large databases, extensive processing and complex software
- CA (Certifying Authority) authenticated secure servers
- Collection of bulk data in a cost-efficient manner, with the additional benefit of being checked for card validity
- Access to card "hot-list" to filter out fraudulent deals
- Ability to provide value-added services to merchants, acquiring and issuing banks
- Provision for multiple host interfaces
- Comprehensive, simple administrative control
- Stringent security measures to gain customer and merchant trust

With the immense participation of the web in our everyday life, individuals feel accustomed to online exchange in E-Commerce for selling and purchasing of products and ventures.

Whenever a customer buys something from a virtual shopping mall, the Payment Gateway comes in the picture for the following functions:

- Authorising – Verifying the buyer's credit/debit card details.
- Clearing – Transferring the transaction to merchant's bank.
- Reporting – Recording all transactions.

Recent acceleration in uptake and use of mobile payments has brought India in line with China. 64% and 66% of their respective populations report recently using a mobile payment to settle a transaction.

Consumers who have used their mobile phone to make a payment over the past 6 months

Source: The Global Rise of Smartphonatics, AITE & ACI Worldwide
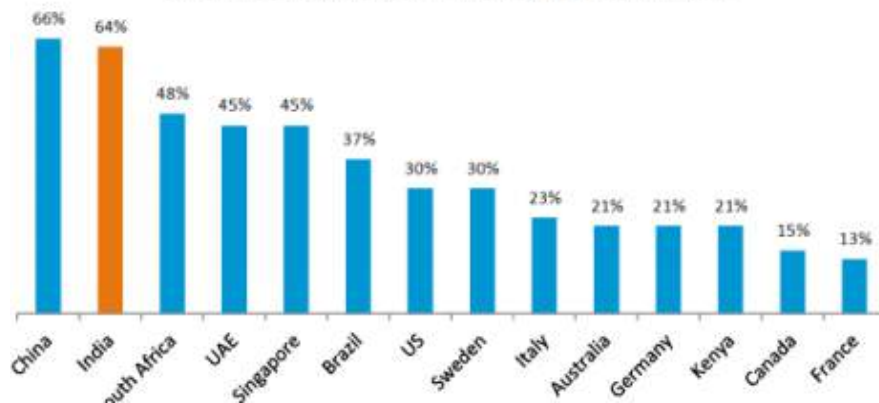
Furthermore, pure digital companies such as Facebook, Google, and Amazon have significantly increased the overall time to market and speed of their products. These companies set the pace for a series of closely timed product releases with continual changes in hardware, software, and connectivity. As a result, companies in the hybrid world (digital and physical) are under tremendous pressure to speed up their product launches. In a digitally transformed market, control of product creation and launch speed is increasingly shifted to an "innovation ecosystem," defined as a network of actors with complementary goods and services.

4. NEED OF BUSINESS DIGITIZATION

By accepting bankcards, most companies pursue online payment to boost sales. Using online credit payment reduces some inherent risks faced by companies, in addition to extending the payment options available to consumers. This segment examines five forms in which service providers add value to businesses:

1. Improved cash flow efficiency,
2. Guaranteed transactions,
3. Reduced costs,
4. Increased protection of sensitive information, and
5. Increased protection of the payment provider.

4.1 Improved Cash Flow Efficiency

Online payment services help companies keep their payment processing costs down while also expanding and improving their ability to raise funds. Any business must find a way to raise revenue that is both efficient and cost-effective. There are hundreds of ways for a company to build a dynamic website and collect customer information, but far fewer allow for easy money collection. For a small additional expense, online payment services boost cash flow quality.Customers can choose between making a one-time payment or paying by subscription for certain services. Depending on the type of account the customer chooses, all approaches usually come with transaction fees. Transaction fees allow further purchases to be made without incurring high upfront costs.

4.2 Guaranteed Transactions

Online payment services help to mitigate some of the risks associated with online shopping by ensuring smooth transactions and safeguarding confidential information. Customers who are unsure that a company will provide them with assured transactions may refuse to do business with the company, resulting in a significant drop in sales. Collaboration with larger corporations and major financial institutions is one way to acquire the capital needed to guarantee payments.Businesses can avoid being technically competent and adept at managing cryptography, server setup, redundancy, and load balancing by buying an online payment kit. When a company hires an online payment provider, it is effectively gaining access to best practices and professional expertise in the areas of online payment practises, software, and hardware. Customers are also covered by online payment providers that

enforce policies under which the company assumes a portion of the transaction risk. This kind of deal necessitates a high degree of confidence. As a result, using a reputable e-credit provider could improve a customer's view of a small business website's trustworthiness.

4.3 Reduced Costs

By and the amount of paper work, processing time, and human resources required to make a transaction, online payment providers help both the company and the customer save money. Customers insert their own information into the system rather than relying on a customer service agent to enter the data for them, which could minimise data entry errors. Companies will also eliminate the need for costly servers, software, and administrative personnel by using online payment services. Many companies lack the financial resources to buy and install their own servers, and they just don't want to think about maintenance.Additionally, using an online payment provider will help you save money on server downtime. Since small businesses are far more vulnerable to losses caused by device downtime than larger businesses, reducing downtime is critical in these settings. Using a vendor also removes the need for technically skilled developers and administrators to ensure the payment system's reliability, timeliness, and performance.

4.4 Increased Protection of Sensitive Information

By improving the protection of confidential information, online payment providers can reduce the risk of payment fraud. In the virtual world, payment fraud is 30 times more common than in the real world. As a result, customers who conduct business over the Internet are very concerned about the protection of their personal data. Using an online payment provider can limit employee access to financial data, minimize internal employee fraud, and safeguard confidential customer data.

4.5 Increased Protection of Sensitive Information

A company can access confidential information without having to invest in a complex web application by using an online payment provider. Online payment services usually bear the risk of credit card fraud, identity theft, and other financial fraud to reduce fraud costs even further. Using techniques like cryptography, online payment providers are usually well-equipped to provide improved data protection during transmission processes. To minimise the amount of fraud perpetrated with their services, almost all major online payment providers maintain sophisticated fraud monitoring groups that perform cyber sleuthing.

5. CONCLUSION

Researchers, faculty, and students must recognise the advantages and drawbacks of online payment technologies as companies rapidly embrace them. The systems that are currently available can help users save money, mitigate risks, and gain a competitive advantage. Electronic payment technologies provide both advantages and disadvantages. The most significant barrier to using online payments is protection and fraud prevention. If e-commerce becomes more common, this problem is expected to worsen. New services and innovations will evolve as the Internet continues to expand and develop in the coming years. Instructors and students in Information Systems must be aware of not only existing online payment options and how to introduce them, but also upcoming trends. This brief overview has so far concentrated on the various e-credit payment options that are currently available. Other types of systems, however, that may become more common in the future, are not expected. Future research opportunities include e-cash, micropayments, wireless commerce, and emerging architectures for online payment.

REFERENCES

1. J.V. Akkeren, and D. Harker, "The mobile internet and small business: an exploratory study of needs, uses and adoption with full-adopters of technology," Journal of Research and Practice in Information Technology, 35(3), 2003, 205 – 220.
2. N. Al-Qirim, & B.J Corbitt, "Determinations of innovation adoption in small to medium-sized enterprises in New Zealand: An electronic commerce capability model," Proceedings of the 6th Annual Collector Conference on Electronic Commerce, Coffs Harbour, NSW, Australia, December, 2001, p. 1-27.
3. S.K., Chung, R.K. Rainer, and B.R. Lewis, "The impact of information technology infrastructure flexibility on strategic alignment and applications implementations," Communications of the Association for Information Technology, 11 (11), 2003, 1-31.

4. R. Clarke, "The path of development of strategic information systems theory. Retrieved August 18, 2005 from http://www.anu.edu.au/people/Roger.Clar ke/SOS/StratIST h.html 2005
5. P. Ratnasingam, "Electronic commerce adoption in Australia and New Zealand," Malaysian Journal of Computer Science, 14 (1), 2001, 1-8. [48] E.M. Rogers, "Diffusion of Innovations," 4th edition. New York: The Free Press, 1995.
6. S.D. Vaidya and M. Nandy, "Use of business-to-business websites: delineation of measures and some influencing factors," Working Paper Series. Calcutta: Indian Institute of Management, 2006.

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"DIGITAL DISPOSITION- A CONTEMPORARY ENDEAVOUR TO SET NEW TONES FOR PUNJABI CINEMA"

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Abstract:- Punjabi Clan unanimously identified as convivial bracket across the planetary recognition. And this attribute got major hold as a core notion in Cinematic presentation by Punjabi Cinema. Filmamkers, producers and other associated triggered this regional Cinema by laughter Rides. They don't want to take risk as they accepted it as an easy way of earning.Inspite of the fact that Punjabis has rich culture, literature, historical events that can be worked upon to creating enduring effect on celluloid. But a mandatory masala of comic flavour didn't let other content to find its way. But the advent of digitalization in Cinema is like a new hope to this regional Cinema. This anticipation can give big blow for adding various shades to Punjabi cinema. Where content get freedom from the incarcerate of commercialization. The unmatched veracity of Punjabi culture conglomerated with the ceaseless efforts by Punjabi industry through digital inclination would elevate this regional industry to new highs. Initiatives have been put forward by certain luminaries of this industry and a ray of new hope is expected in this regional Cinema. Coming age of digital platforms reach out views in places where theatrical releases are not possible. This paper concentrate towards the efforts by Punjabi Cinema towards inclination over digital platforms that would contemplate a new way towards the thickening of this regional Cinema.
Keywords: Punjabi Cinema, digital, efforts.

1. INTRODUCTION

Cinema is always considered as a strapping platform in exemplify humans circadian rhythms.The ascendant strength of cinema not only lies in entertainment but influencing beliefs, attitudes, mindsets. This elemental disposition grounds in every cinema. Although Punjabi cinema is known for its brand of comedy. And this brand image at times create obstacle for other contents to get showcased. But with the advent of digitalization in Cinema, expected as a new hope for accomplishing ne. In reality, Punjabi cinema is passing through a crucial phase; barring a few, most films belong to one genre: slapstick/ situational comedy. Some films released recently were really good and enjoyable, whereas others forced you to believe that Punjab has no literature, history, culture or social issues. For overall growth of regional cinema, one needs films of different genres that thematically belong to the region.

When we look across at the regional cinema of other states such as West Bengal, Karnataka, Kerala, Assam or even Maharashtra, the content of our films stands nowhere tones to this regional Cinema. Direct-to-digital is the new buzzword of the entertainment industry and also the cause for the pandemic-driven cultural casualty. Gingerly efforts by certainluminaries of this regional industry is like a stepping stone towards this new path. Movies like 'ISHQ HAAZIR HAI', a first digital movie that was shot digitally and was released digitally on digital platform. That movie can be credited for amelioration of Punjabi Cinema on digital lines. In this proceed, PTC also took initiative in showcasing digital films every Friday. Such initiatives had opened new avenues for new talents and would prove a great way for exploring new contents. Digitalization of cinema would open new doors for creativity.

1.1 Objectives of Study

- To study digital inclination by Punjabi cinema.
- To study the vision of Baljinder Singh Mahant.
- To study initiatives by PTC.

2. RESEARCH METHODOLOGY

The methodology used in this paper is a case study from different cases or open–ended questionnaire. The articles, telephonic interview/discussion, reviews are used.

2.1 Digitalization of Cinema
Meaning-A journey from REEL to OTT
Digital Cinema- It means completely digital. The word itself is a broad term.it is used for technology. Technology of film making that is change from Reel to OTT platform. When content is produced digitally. Shoot is also by digital camera/technology. In fact it is showcased by digital medium like TV screen/mobile phones/laptops. Entire medium has changed. Audience don't have to move to other place. Cinemacomes to their home, to their mobile phones, TV screens.The process of making any movie, which involved the computer technology can be said digital cinema.

The digital cinema is not only the projection of the film through the digital mode, but the process which takes place of digital transformation of movies is called digital cinema. The old cinema-on-reels prints are fast becoming redundant as new films are distributed through digital prints. The production of analogue film prints is just 25% of a film's total print run. Trade pundits predicted a dip in the number of analog prints in the next three years Digital cinema helps wider release by satellite transmission and curbs piracy by not allowing the content to be leaked as it is encrypted.

2.2 Digital Inclination by Punjabi Cinema
Punjabi Cinema with its continuous endeavour is trying to add new shades to the growth of this cinema. Digitalmovies, web-series, short stories etc have been presented by Punjabi Cinema. Digital trials has been observed in this Cinema by various luminaries like **Baljinder Singh Mahant and Rabinder Narayan, PTC Head.** Baljinder Singh Mahant, had gifted audience with digital movie-**ISHQ HAAZIR HAI** starring Diljit Dosanjh. Rabinder Narayan had took initiative to release Digital movie every week. In fact certain big banners are coming up with their OTT Platforms. Digital cinema has various advantages over traditional Cinema

- Producer not have to put effort to take audience to theatre.
- Digital platforms would help Punjabi movies reach out to viewers in places where theatrical releases are not possible. Punjabi film industry is coming of age and growing.
- An efforts to bring high quality content to our viewers.

2.3 ISHQ HAAZIR HAI (A Capsule Entertainment)- Movie that Lead to Amelioration of Punjabi Cinema on Digital Lines (A Capsule Entertainment)
A movie directed by Baljinder Singh Mahant, starring Diljit Dosanjh and Wamiqa Gabbi. The main attraction of the movie was a content, its smart execution and its song-terekannavichgallankaranpyardiyan'. Diljit Dosanjh had enhanced the worth of this content with his poised acting skills. It was really surprising for audience to experience such capsule entertainment that hold the audience interest. Audience really appreciated such initiatives.

2.3.1 From the Hat of Baljinder Singh Mahant: Director, Writer, Producer of ISHQ HAAZIR
Baljinder Singh fond of doing innovative creative contents and he studied 2 different models- Ishq Haazir and DilWaliGal to explore digital possibilities.

Vision and Experience of Baljinder Singh Mahant was Recorded:
1. **How idea has been cropped?**
- **To Study Recovery Model- as That Time as-** That time digital medium was getting evolved.it was at infancy stage. We were not aware about recovery possibilities, what is the scope? Any business is only successful till its recovery model is designed. So, to study about its recovery model.
- **An Urge to do Something Innovative**- That time he was heading 9x channel head, and they were trend setters. And he was very keen to experiment new things. Thought was like to discover something. Even in TV channels he set new things. They discover new artists too.' kuditupatakakar' song that had 8 artists and all those are among topin today's world.so expectations were like to do something different.

- **Diljit Dosanjh was also interested Something Innovative**- Diljit was also interested to do something different. When he shared idea, he liked the idea. Different vision was also as in Punjab typical comedy movies run. Pure romantic cant work there. That time it was like all and all how romantic movies will respond. so, to test. content was created to explore different genres.

2.3.2 Challenges Faced
- **Recovery was a Challenge**-That time platforms were very limited. Only YouTube was there. They did with hungama.presently n numbers of platforms where you can reach and can generate revenue. But that need to build recovery model. They deducted cost for creating this half an hour
- **Time**- Time was less as Diljit Dosanjh had occupied schedule. He has to board flight. To complete this content 15-16 hrs. Shoot was done and song was shoot in 2 hrs.

3. POSSIBILITIES IN DIGITAL
- A lot of possibilities are expected in digital
- Mind-set of people arechanging, so acceptability by audience is easy.
- One can make any content on digital, and can showcase it so, a lot of content and lot of web series are worked upon
- A lot of platforms are available. Even in Punjab too, new OTT platforms are coming and would start around coming two months
- In digital world this thing is easy that various talents, technicians have a big opportunity. A lot of employment opportunities have been generated. For creative people, they have ample of opportunities in this. A new talent who have capabilities got opportunities. But need god's grace too. This is a golden period where talent and content is generated.
- Less cost as compare to theatre release as or theatre ready we need extra30-40 lakhs extra.
- Apart from content, extra cost is needed. That is also restriction

3.1 About Rights on Digital
- There is no such difference concerning rights as compare to theatrerelease, Except the extra cost of theatre is deducted. Ultimately cost is of content only. Value is only of content. Either one can keep the margin. Some big production houses, are making movies and sell their content further. They can sell music to t series, video rights to others, TV rights to others, so such production houses don't have anything .They have cash from various points.

Otherwise, It depends like-
- If you want to own it, and can release yourself.
- If you place content on YouTube, it wont be accepted on OTT as exclusivity would be lost. They will pay you per view.
- If you give your content on OTT like prime netflix or any other, they wont let you share on digital as they will monetize.it will be there usp. They will advertise, as they get a unique selling point.
- It also depends how many rights you hold more you hold the content. If you have say you have 500 movies library, 200 movies library. So for deal, OTT would preferred you as compare to going to independent.so for how long you hold your investment, it depends on that. Suppose one make movie, he can sell rights further, but he/she won't get any royalty. Risk is cover.so I can get my like x cost. So x-cost +10, will get. So will get one time profit
- In case if you hold and try to distribute by your own might be money won't recover fast but if your content would be nice. Later stages, it would be beneficial

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3.2 Star Cast Versus Content, What Matters?
Only content matters. Only content matters. In fact, ott has given many actors.as characters stay in your mind even in theatre also content like-khoslakaghosla, Vicky donor.

Sometimes for the first time may be star cast but otherwise only content. What matters how you communicate to audience, what is USP.

3.3 Any Benefits Concerning Promotion
Big platforms like Netflix, amazon prime, they have their set audience. Even during lock down, we were like we have seen everything. So, we have cravings for new things. So ott has audience but they want content. When they place content, they will advertise by their own. To feed the set audience is easy binge watchers, surfwhat'snew. So they have craving for content.

4. CHALLENGES IN DIGITAL
Revenue generation is through membership subscriptiononly. If we think from OTT prospective-product design. Approx 100 crore investment is needed at regional level.no one want to see add's on Ott. Second model is only subscription. Challenge is that whether average user will pay 500 -600 per month who is not ready to pay to cable operator. Its easy for big players like Netflix, amazonetc but difficult and challenging for small players. Like how to take out content cost, who to increase subscription. As Audience don't want to spend, they wish to give to cable operators/tatasky.audience are like they want to share other passwords.

One has to make different content ott is challenging as need to serve different talent. Online is personal thing. Consumption is challenging different genres need to try. Game changing it would be as a audience will grow, taste buds increase. Content spectrum will expand. Punjabi literature is so rich, that phase is wipe out, may be ott can fill this vacccum. As punnjabi culture is amazing and rich, game changer. Audience need to grow.

4.1 How Producer will Avail Benefits from Digital?
- If free pockets, content should be holded
- If it is quality content, then
- Ott,tv are platforms are the mediums to make available content to public. But mediums keep on changing.one thing that will be stable that is content.ultimately,if you have a good content library, your money is safe. Content hold
- Beginners need to sell to understand the market.
- For technical person, show reel is getting ready, it can be a part of their catalogue.

4.2 Your Vision on Inclination of Punjabi Cinema towards Digital Platform- Would be a Game Changer
100 percent Punjabi cinema will grow. Punjabi is very rich culture from sufi to desh bhakti to fights. Because of digital people trying different hands as otherwise Producers only play safe and 80 percent story telling is only of comic content and out of rest 20 percent, only five percent get successful. It would be game changer as a audience will grow, taste buds will increase. Content spectrum will expand.punjabi literature is so rich, that phase is wipe out, may be ott can fill this vacccum.as Punjabi culture is amazing and rich. Game change but If audience only wish to laugh, then it's very disappointing. As cinema should make you laugh, motivate. As a film maker want to make everything, want to learn, want to make thriller.

4.3 An Initiative by PTC Network
Managing director, President, PTC Network Rabinder Narayan, father of Punjabi satellite television had came up with innovative digital ideas to serve Punjabi language and to expose the talent of all artists worldwide Then they thought to produce films digitally and to air them every week.1 hour Punjabi digital film every week. On same lines, Digital films festival held by PTC on 17 Feb to honour digital film industry luminaries. Digital film festivals was organized at Chandigarh, three days to encourage digital films it was the first initiative by Punjabi entertainment world. On the global appeal of digital films, Narayan said, "We have got viewers from countries like USA, Canada and Australia, where around over one lakh people have viewed our films at one time. It is a remarkable achievement for us."

The event also included a panel discussion on 'Revival of Punjabi Cinema with Digital Innovation'. During the discussion, PTC Network executive editor Ramesh Vinayak,

along with leading names of the Punjabi film industry, including JassGrewal and RanaRanbir, discussed how digital filmmaking has revived Punjabi film industry, giving a new lease of life to local Punjabi film actors and makers.

An initiative was done by PTC to present one digital film every Friday.so new talent will get a platform to showcase their creativity.Alomost 60 films were produced in this line since last year and contents are relevant to our life. PTC had given platform to many new talents and had marked their talent worldwide. PTC Network is all set to commence the first ever Punjabi digital film festival and awards from February 15–17. The event is being organized to honour and appreciate the hard work done by the short film makers of Punjabi film industry. PTC Box Office Digital Film Festival and Awards 2020 is an initiative to celebrate and encourage upcoming talent of Punjabi film community. The first day of the event will have celebrities like Dolly Ahluwalia Tewari, Rana Ranbir among others inaugurate the festival. Day one had screened some of the best PTC Box office films like 'AddhichhuttiSaari', 'Chitthi', 'Hari Chutney', 'Azaab' among others.

(A) A Reason behind effort was done by PTC on digital platform
As Rabinder Narayan felt "When cinema becomes free of the pressure of selling tickets, then you create meaningful cinema". It's an initiative to bring New efforts new cinema at your place even Audience is very smart and receptive for new films and to:
- To restore pride of Punjab so that Good work, good people, good director got work in this field
- Realistic contents dipped in Punjabi culture will get space
- For Film makers, writers, theatre, artists, musicians has a revival as one get work on its own.
- No queue of tickets
- No efforts for publicity required as compare to theatre where a lot of efforts are required to bring audience more close to cinema
- No efforts required by producer as compare to theatre for bringing audience to theatre.

4.4 Webseries Content
Punjabi Cinema is also contributing towards digital web-series. They are also bringing something new, with variant genres. From comedy, action to romantic drama, all these Punjabi Digital series bring out something for every type of genre. Interesting stories, well-skilled characters, and impact-worthy dialogues are just that will keep you stick to watch the complete series. Even some of these are so interesting that people just can't wait for their next season to come live. A complete list of the top 10 must-watch Punjabi Web-series that created buzz in the entertainment world are-
1. Ishq De Bulle
2. YaarJigreeKasooti Degree
3. Gangland in Motherland
4. I No Angreji
5. College Romance
6. Chandigarh Dreams
7. Fookrey
8. Sleepless Nights
9. BholaBanuga Star
10. HardcoreSharabi

4.5 Present Reality of Punjabi Cinema
The word cinema stands for C-Create, I-Involvement, N-Natural, E-Entertainment, M-Magic, A-Art. Cinema creates an enduring effect on audience. But in aspect of Punjabi Cinema, it is passing trough crucial phase. As:
- Mostly films belong to comedy genre. Some films released recently were really good and enjoyable, whereas others forced you to believe that Punjab has no literature, history, culture or social issues. For overall growth of regional cinema, one needs films of different genres that thematically belong to the region.
- We don't expect the present lot of financiers of Punjabi movies to invest in alternative cinema. They are there to make money; least realising that the success

ratio is very low even in that genre of cinema. Another myth that most people live with is that offbeat cinema is not commercially viable.

- The single most important factor that makes a film work is its treatment. Trend of singer-actors in Punjabi movies has its own plus and minus points. No other state has had as many singers as Punjab. Some singers are reasonably good actors, and their success has made other singers believe that being a singer is akin to being a good actor. And so, all those who were making music videos earlier are now into making films. Under such circumstances, it is very difficult to even think of serious cinema. Go to any financier and the first question we are asked is: 'Kehda singer hai' (Which singer is your hero?), no one has ever asked what the subject or story of the film is Content is neglected.

4.5.1 Need of time
Change is expected. Audience are smart enough. Active participation is expected. Digital is the only way when audience is receptive. Digitalization would not only bring revival but renaissance too. If Bollywood can work on Punjabi theme, then why not Punjabi Cinema. A lot of feathers can be added with digitalization:

- Content spectrum would expand as Punjab has ample of content. Right from history to literature.
- Digital platform is a way to get freedom of creativity from the slave of communication.
- Producers, distributors wont to think to invest.
- No pressure of tickets.
- No pressure of TRP.
- In fact retirement security for many industry associates.

5. CONCLUSION CREATIVITY WILL GET FREEDOM FROM COMMERCIALIZATION
The gingerly efforts by various associates of Punjabi Cinema is contributing towards spreading wings of popularity of this cinema worldwide. And inclination towards digital platforms is opening new doors of opportunities for new contents, new talents .Punjabi is a rich culture and ample of contents fall in the lap of Punjabis. And using digital platform could help variant content to breathe. In fact coming up of new OTT Platform by this regional cinema would be a strong footing towards content variety. And Efforts towards using digital platform would free creativity from the trap of commercialization. Although bit challenges would be there, as audience is receptive and digital platforms are very personal. So, a lot of smart work is needed to work in this field. It would be a big blow for creative peoples as lot of employment opportunities would be generated in this field. And the mandatory masala of comic that had been labelled as a brand image of Punjabi Cinema, would get a break. And hope of innovative contents would be appreciated by audience. From vision of recovery, a lot of options are there depending on the option producer one to pick. So, overall a positive approach is expected by inclination towards digitalization.it would definitely a game changer for this Punjabi cinema that would add new shades to this regional cinema.

REFERENCE
1. Telephonic discussion with Baljinder Singh Mahant (Writer, director, producer –is hqhaazirhai)
2. Telephonic discussion with Rajdeep Singh(writer/director Punjabi Cinema)
3. PTC News

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DIGITAL DIVIDE DURING COVID 19

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Digital device creates have and have not in Internet domain. Since digital connectivity require smart phone and Internet connection, entry cost for poor people is high. Digital divide arises due to poverty and illiteracy and creates a vicious cycle.

1. MANIFESTATION OF DIGITAL DEVICE

1. Those with access have better information, more avenues to learn incredible skills, expand the business, switch to other business hence heading to informed and aware choices which increases the standard of living.
2. Those without access are left behind due to information asymmetry. In terms of
   - Education
   - Good access to business and finances.
   - Legal aid and telecommunication.
   - Financial inclusion.
   - Extension services.

All are affected and the mostneedy people are not able to access even basic services. Literacy is also considered to be another such element, it is widely shared view that being literate is essential to one's learning, to self-guided learning and to internet usage. Unfortunately, India's literacy rate for 2018 was **74.37%.** After the onset of the Coronavirus outbreak life has changed for almost all of us, we are majorly working online, all the work is being carried out at homes through our laptops and mobiles, this change however is only possible who have digital access. Privileged students are studying at home on various platforms to continue their education but the ones who have no such facilities are left behind, most of such students have to stop their education. This will create even a much bigger social divide.

Social media especially in the recent times where people are struggling to reach for help to save their dear ones from the fatal Coronavirus outbreak. People through posts on these platforms are helping each other find medicines, injections, hospital beds and other necessary items required to save lives of their dear ones. Also where you can not move physically you can help people through this.

Closing the digital divide is important to ensure economic equality, increased public participation in democracy through social media, Twitter has become a great link between the politicians and the people, economic growth as information technologies in general tend to be associated with productivity improvements.

2. RECENT STEPS

1. Kisan Call Centre to respond to issues raised by farmers.
2. Life Line India
3. Gyandoot Project: Gyandoot is an intranet in Dhar district connecting rural cybercafes catering to the everyday needs of the masses.
4. TDIL: The department of information technology initiated the TDIL (Technology Development for Indian Languages) with the aim of developing information processing tools and techniques to facilitate human-machine interaction without language barrier introduction of 5G networks by the telecom sector will also act as an impetus to online education.

Many efforts can be seen in India for bridging digital divide. These measures can act as a stimulus to the education sector and ensure that education reaches every student thereby reducing the digital divide. The above steps are appreciable more needs to be done to provide Internet access on every hand to ensure that people are not left behind in education and development sitting at home in this time of work from home.

REFERENCES

1. https://www.macrotrends.net/countries/IND/india/literacy-rate)

2. (https://www.researchgate.net/publication/236141535_Bridging_Digital_Divide_in_India_Some_Initiatives)

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INNOVATIVE PRACTICES IN FIELD OF FASHION WITH SPECIAL REFERENCE TO YARNS IN THIS DIGITAL ERA

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1. INTRODUCTION

In India fashion have its own place in heart of natives. It is found that in each part of India we have a different sort of fashion trend, if we move to south, we can see the dominance of green color, if we move to east we will see more use of white color specially in Bengal. Moving to north more colorful the dresses will be. In India fashion is associated with the climate of that particular area. Roots of fashion in India found before Haddapa & Mohanjodaro civilization.[1] There are ample examples of fashion related incidents in Indian mythology.[2] Use of color can bee seen in the rock painting which have the trace of colors which were made out of fruits and grains. The paints used by these people were made by grinding various colored rocks.They got red from hematite (Geru in India). Green prepared from a green colored rock called Chalcedony.White was probably from Limestone. Some sticky substances such as animal fat or gum or resin from trees may be used while mixing rock powder with water.Brushes were made of plant fiber.[3] In today's scenario out of $7 billion India's e-tailing market, online fashion retail stands with $2.4 billion contributions to it. While this estimation for Indian e-tailing market is expected to touch $60 Billion by 2022 and online Fashion Retail Market is expected to reach $20 Billion by 2022. Given the expansion of online apparel shopping (complimented by heavy advertising and better discounts), now industry is moving towards more natural products in terms of natural yarns to combat this situation specifically.

2. LITERATURE REVIEW

- Fangueiro Raul, Rana Sohel. (2016) this book collects selected high quality articles submitted to the 2nd International Conference on Natural Fibers (ICNF2015). A wide range of topics is covered related to various aspects of natural fibers such as agriculture, extraction and processing, surface modification and fictionalization, advanced structures, nano fibers, composites and nanocomposites, design and product development, applications, market potential, and environmental impact. Divided into separate sections on these various topics, the book presents the latest high quality research work addressing different approaches and techniques to improve processing, performance, functionalities and cost-effectiveness of natural fiber and natural based products, in order to promote their applications in various advanced tech.

- Bhatnagar, A., S. Misra, and H. R. Rao (2000) posit about risk and convenience associated with internet shopping. The degree of risk acceptance varies in individual to individual. Gender, age of individual, number of years the respondents had spent on the internet, marital status etc were analyzed. The article was based on the results obtained by analyzing Security of transacts, opinion of vendors, purchasing behavior and general demographics through online survey. The findings shown that convenience provided by internet got overshadowed by risk associated with product and internet. Marketers need to take some steps in terms of overcoming it. Likewise, gender, marital status and age were also bases for segmentation to be considered.

- Kang JH, Sung YY (2010) The impact of information technology on theprocess innovation and competitiveness in the fashion industry focused on the impact of natural and synthetic yarn on fashion industry with reference to ZARA brand and how they are using it in a new manner for sustainable growth.

- Eva Lambert (2010) Exploring natural and foolproof dyeing techniques--to coincide with the high demand for organic and rustic approaches to fiber arts--this colorful guide expertly utilizes the many modern and traditional methods intrinsic to

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[1] https://www.iiad.edu.in/the-circle/evolution-fashion-industry-india/
[2] https://ddceutkal.ac.in/Syllabus/MA_history/paper-8.pdf
[3] https://openart.in/history/rock-art-from-india/

creating beautiful fibers. Demonstrating that the use of natural dyes to create fabric, yarn, or fiber can be simple, eco-friendly, and surprisingly affordable, this thoughtful instructional is ideal for quilters looking to give their projects an edge, spinners searching for an eco twist, and knitters on a quest for that perfect color of yarn--all of whom will learn how different natural dyes will affect the colors obtained on various mediums and how to mix dye baths for unique results. Including comprehensive lists for measuring, weighing, and dyeing

- Agrawal et. al. (2009) posit that India is a country where shopping is counted as an entertaining activity. People go to the same shops with trust and value from generation to generation. To cater their needs apparel shoppers should focus on the friendliness easy operation and presentation of websites. Better websites designs, quality of service delivery and feedback system at one hand keep the existing e-consumers satisfied, will also create greater trust and comfort for new e-consumers. Enhanced website designs will result in giving better ideas about product complaint system will generate better security. Increased trust, comfort and security will to higher extent eliminate touch feel-hear aspect.

- Han-Yong Jeon. (2016) Non-woven Fabrics Non-woven Fabrics is differentiated text which covers overall stream from raw fibers to final products and includes features of manufacturing and finish process with specialized application end use. Application range of non-woven fabrics is extended to all the industrial fields needless to say apparel, such as ICT (information and communication technology), bio- and medicals, automobiles, architectures, construction and environmental. Every chapter is related to the important and convergent fields with the technical application purpose from downstream to upstream fields. Also, applicability of non-woven fabrics is introduced to be based on the structural analysis of dimensional concept and various non-woven fabrics as a state-of-art embedded convergent material are emphasized in all industry fields by using nanofibers and carbon fibers.

- Kristine Vejar (2020) Thousands of natural materials can produce glorious color—the insect cochineal produces pink, maroon, and purple, and more than 500 species of plants produce indigo blue. In The Modern Natural Dyer expert Kristine Vejar shares the most user-friendly techniques for dyeing yarn, fabric, and finished goods at home with foraged and garden-raised dyestuffs as well as with convenient natural dye extracts. Demystifying the "magic," Vejar explains in explicit, easy-to-follow detail how to produce consistent, long-lasting color. With stunning photography of the dyes themselves, the dyeing process, and 20 projects for home and wardrobe (some to knit, some to sew, and some just a matter of submerging a finished piece in a prepared bath), The Modern Natural Dyer is a complete resource for aspiring and experienced dye artisans.

- Bipin Kumar, Suman Thakur (2017) This book presents a global view of the development and applications of technical textiles with the description of materials, structures, properties, characterizations, functions and relevant production technologies, case studies, challenges, and opportunities. Technical textile is a transformative research area, dealing with the creation and studies of new generations of textiles that hoist many new scientific and technological challenges that have never been encountered before. The book emphasizes more on the principles of textile science and technology to provide solutions to several engineering problems. All chapter topics are exclusive and selectively chosen and designed, and they are extensively explored by different authors having specific knowledge in each area.

2.1 Research Problem

Based on the literature review, and after considering the questions that need to be answered, the research problem of the research paper is "Innovative practices in field of fashion with special reference to yarns in this digital era". This problem would specifically be emphasizing on the factors which affect use of natural yarns, how they are influenced to do use alternative yarns how online shopping has increased the propensity of such behavior.

2.2 Research Objectives

Based on the research problem of our paper, given below are the 3 major objectives which the paper will study and analyzing:

1. To understand use of natural alternative yarns.
2. To Define Importance of sustainable fashion in digital era.
3. To analyze industry focus on alternative natural yarn.

3. RESEARCH METHODOLOGY

A research design is a basic plan that guides the data collection and analysis phases of the research project. It provides the framework that specifies the type of information to be collected, its sources and collection procedure. A research design can be divided into 3 broad types, based on the type of research that is to be conducted. The 3 types are Descriptive, Exploratory and casual. We are using Contain Analysis & Review methodology.

3.1 Data Collection

- Secondary Data, in the form of various published articles, finding and case studies on the topic of innovative practices in fields of fashion has been used.

4. CONCLUSION

By reviewing articles and books researcher found following innovative trends

- **Recycled Cotton:** Cotton is one of the most widely recognized and most utilized textures (it speaks to almost a large portion of the texture utilized in the material business). This regular fiber is light and breathable which makes it a closet staple. Be that as it may, developing cotton can be tricky: traditional cotton is one of the thirstiest and most synthetic concentrated yields to develop. It requires a great deal of pesticides and, thus, negatively affects the planet, and the individuals who develop it. Natural cotton, a progressively practical option in contrast to customary cotton, has been blasting over the most recent couple of years.

- **Organic Hemp:** It appears as though hemp is wherever right now. Pot's 'calm cousin' is very adaptable: it's utilized as nourishment, a structure material, in beautifying agents, and it has been developed and utilized for many years as a texture. The incredible thing about hemp is that it's developed all around the globe and it requires next to no water, no pesticides, and normally treats the dirt it develops in – improving it much for the earth than different yields. Probably the most seasoned fiber on the planet, hemp helps keep you warm in winter and cool in summer and gets gentler the more you wash it.

- **Organic Linen:** Cloth is another characteristic fiber we've been developing for quite a long time. Like hemp, it's gotten from an exceptionally flexible yield: the flax plant. Material requires negligible water and pesticides, and even develops in low quality soil. Also, all aspects of the plant are utilized, so nothing is squandered. Material is solid, normally moth safe, and, when untreated (for example not colored), completely biodegradable. Notwithstanding being useful for the planet, it is additionally light and can withstand high temperatures, engrossing dampness without holding microscopic organisms. Characteristic, supportable textures have the benefit of being biodegradable and abstain from utilizing the plastics that go connected at the hip with the non-renewable energy source industry.

There are some industries that have created unique products from Mother Nature and software's to help us in day to day life which is follows:

- **Algiknit:** It produces textile fibers extruded from kelp, a variety of seaweed. The extrusion process turns the biopolymer mixture into kelp-based thread that can be knitted or 3D printed to minimize waste. The final knitwear is biodegradable and can be dyed with natural pigments in a closed loop cycle.

- **BioGlitz:** This Company produces the world's first biodegradable glitter. Based on a unique biodegradable formula made from eucalyptus tree extract, the eco-glitter is fully biodegradable, compostable and allows for the sustainable consumption of glitter without the environmental damage associated with micro plastics.

- **Circular fashion:** It has created software that interconnects circular design, circular retail models and closed loop recycling technologies enables fashion brands to

design circular garments. Circular clothes are attributed an identification tag that orchestrates a reverse supply chain network of consumers, sorting and recycling companies to close the loop to regenerated textiles.

- **Flocus:** The Company produces natural yarns, fillings and fabrics made from kapok fibers. The kapok tree can be naturally grown without the use of pesticides and insecticide in arid soil not suitable for agricultural farming, offering a sustainable alternative to high water consumption natural fiber crops such as cotton.

- **Frumat:** The brand uses apples to create a leather-like material. Apple pectin is an industrial waste product which can be used to create sustainable materials that are totally compostable whilst still being durable enough to create luxury accessories. The leathers can be dyed naturally and tanned without chemically intensive techniques.

- **Good on You:** This mobile app provides ethical ratings for about 1,000 fashion brands rated on their impact on people, the planet and animals. It is built on a robust brand rating system which aggregates standards, certifications and publically available data sources into a simple, accessible 5-point score to promote transparency across the fashion industry and to allow customers to make conscious purchasing decisions.

- **Mango Materials:** The Company produces biodegradable bio-polyester that can be used as a sustainable alternative to the present polyester utilized in the fashion industry. Microfibers produced from the biopolyester can biodegraded in many environments, including landfills, wastewater treatment plants, and the oceans helping to prevent microfiber pollution and contributing to a closed-loop bio economy for the fashion industry.

- **Nano Textile:** It offers a sustainable alternative to binder chemicals normally used to attach finishes onto a fabric. Its technology embeds fabric finishes directly into fabric using a process called Cavitations and can apply to a range of products such as antibacterial &antiodor finishes or water repellency. This protects the end-user and the environment from the leaking of hazardous chemicals.

- **Orange Fiber:** This Italian company manufactures natural fabrics from citrus by-products. Orange Fiber is made by extracting the cellulose from the fibers that are discarded from the industrial pressing and processing of oranges. The fiber, through nanotechnology techniques, is enriched with citrus fruit essential oils, creating a unique and sustainable fabric.

- **APTIC:** It manufactures bio-based alternative packaging materials that are made from sustainably sourced wood fibers. The material has the unique properties of paper and plastic commonly used in the retail sector, but with a much higher tear resistance than paper. The material can be recycled alongside cardboard

- **Planet Care:** It has developed a microfiber filter to be integrated in washing machines, that can capture micro plastics before they are released in wastewater. The system works on the microfiltration of water based on electrically charged fibers and membrane nanotechnology. This technology contributes to reducing micro plastics pollution ending up in the ocean.

- **Provenance Biofabrics:** Provenance bio-engineers offer a true leather equivalent by programming the self-assembly of collagen molecules the building blocks of leather. This next generation fabric delivers a more efficient and sustainable alternative to leather without harming animals.

- **Reverse Resources:** This platform enables fashion brands and garment manufacturers to address pre-consumer waste for industrial upcycling. The Software as a Service (SaaS) platform allows fabric and garment factories to map and measure leftover fabrics and scraps so that these become traceable through their following life cycles. By mapping the waste material in the factory, these resources can eventually be reintroduced into the supply chain, limiting the use of virgin materials.

- **Scalable Garment Technologies Inc:** SGTI has built a robotic knitting machine linked with 3D modeling software to make custom seamless knit garments. This new knitting technology enables digitization of the entire production process and on-

demand manufacturing of custom seamless knit garments. This allows responsiveness to consumer demand while reducing waste.

- **Style Lend:** It is a fashion rental marketplace. AI and machine learning is used to match users based on fit, as well as style. By renting out garments consumers can extend the life cycle of clothing and delay it from going into landfills.

REFERENCE
1. Agrawal Mohan, S.Vidhusi, and G.Gaurav (2009) Emerging Profile of Online Apparel Shoppers in India and Comparison with the US Online shoppers: A Few Marketing Implications Advances in Consumer Research, Asia Pacific Conference Proceedings,Vol.8, pp.6-15.
2. Bhatnagar, A., Misra, S., & Rao, H.R. (2000) On risk, convenience, and Internet shopping behavior. Communications of the Association for Computing Machinery, Vol.43, Issue.11, pp.98-105.
3. Goldsmith R. E & Flynn Leisa R. (2004) Psychological and behavioral drivers of online clothing purchase, Journal of Fashion Marketing and Management. Vol.8, Issue.1, pp.84-95.
4. Goldsmith, R.E. & Goldsmith, E.B. (2002) Buying apparel over the Internet. Journal of Product and Brand Management, Vol.11, Issue.2, pp. 89-102.
5. Gupta, N.; Handa, M. and Gupta B. (2008) Young adults of India—online surfers or online shoppers. Journal of Internet Commerce Vol.7, Issue.4, pp.425-444.
6. International Business Times, (2013) India Women Shift to Online Shopping for Apparels, Baby Foods and Beauty Products. http://au.ibtimes.com/articles/484136/2013 0628/survey-millions-indian-women-using-net-buy.htm (accessed on 4th April 2021).
7. Internet World Statistics (2012-Q2) Top 20 countries by users.
   http://www.internetworldstats.com/top20.htm (accessed 3rd April 2021).
8. Jeong et. al. (2008) The role of experiential value in online shopping, Emerald Group of Publishing limited.Vol.19, pp.105-124.
9. Jiyeon Kim and Sandra Forsythe, (2007) Adoption of Virtual Try-on Technology for Online Apparel Shopping. Journal of Interactive Marketing, Vol.22, Issue.2,

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मध्य प्रदेश शिक्षा में गुणवत्ता एवं प्रबंधन

डॉ. दीपमाला गुप्ता
विभागाध्यक्ष पत्रकारिता एवं जनसंचार विभाग, रेनेसां युनिवर्सिटी, इन्दौर

1.प्रस्तावना

मध्य प्रदेश के सर्वांगीण विकास में उच्च शिक्षा का महत्वपूर्ण स्थान है और साथ ही शिक्षा के सभी आयामों पर ध्यान देना जरूरी है, क्योंकि समाज में सोच के स्तर को बढ़ाकर ही भारतीय परंपराओं और मूल्यों के अनुरूप संस्थानों को आकार देना संभव नहीं है। मानव संसाधन विकास को गुणत्मक विकास से जोड़ते हुए सेमेस्टर पद्धति को इस प्रकार उपयोगी बनाया जाए जिससे मध्य प्रदेश के उच्च शिक्षा संस्थानों और विद्या परिसरों से पढ़कर निकलने वाले विद्यार्थी विभिन्न प्रतियोगी परीक्षाओं में सफल हो सके और अर्जित ज्ञान व कौशल से अपना भविष्य बना सके।

उच्च शिक्षा के सभी हितग्राहियों विद्यार्थी पालक शिक्षक अर्थात् सारे समाज की चेतना को गहराई से संस्कारित करने में उच्च शिक्षा की महान भूमिका है। इसलिए उच्च शिक्षा विभाग से जुड़े हुए अधिकारियों – कर्मचारियों और प्राध्यापकों को उच्च शिक्षा में गुणात्मक विकास क लिए मिलकर काम करना होगा, तभी शिक्षा के स्तर म गुणवत्ता को बढ़ाया जा सकेगा।

मध्य प्रदेश पहला राज्य है, जिसने सेमेस्टर प्रणाली द्वारा वर्ष 2008 से शिक्षा में व्यापक परिवर्तन करने का निर्णय लिया है। मध्य प्रदेश भारत का हृदय प्रदेश है। यहॉ शिक्षा संस्कृति कला की बहुत पुरानी परंपरा है। वर्तमान समय में भी यहॉ के अनेक विश्वविद्यालयों और महाविद्यालयों ने उच्च शिक्षा के क्षेत्र में उच्च स्तरीय मानदंड स्थापित किए हैं। यहॉ के संस्थानों, विश्वविद्यालयों से शिक्षा प्राप्त अनेक महत्वपूर्ण व्यक्तियों ने अंतर्राष्ट्रीय ख्याति अर्जित की है। वर्तमान में विश्वविद्यालयों और महाविद्यालयों में अध्ययनरत विद्यार्थियों की प्रतिवर्ष बढ़ती संख्या को देखते हुए गुणवत्ता युक्त शिक्षा प्रदाय करने का संकल्प आसान नहीं था, किंतु वैश्विक परिस्थितियों को देखते हुए यह निर्णय बहुत जरूरी था।

2. उच्च शिक्षा में मानकी करण की आवश्यकता

वर्तमान समय में मानव विकास की प्रतिस्पर्धा ने उच्च शिक्षा के महत्व को अधिक बढ़ा दिया है। देश में श्रेष्ठ उच्च शिक्षण संस्थान, सक्षम फेकल्टी तथा विद्यार्थी उपलब्ध है, परंतु ज्ञान की वैश्विक स्पर्धा में प्राचीन काल में ज्ञानगुरू रहे भारत की स्थिति को अब संतोषप्रद नहीं कहा जा सकता है।

आज अमेरिका और चीन के बाद भारत विश्व की तीसरी सबसे बड़ी उच्च शिक्षा व्यवस्था है। जिसे विश्वस्तरीय बनाने की आवश्यकता अनुभव की जाने लगी है ताकि भारतीय उच्च शिक्षा उत्पाद को विश्व बाजार की स्पर्धा में उतारा जा सके।

ऐसे में हमें अपनी उच्च शिक्षा व्यवस्था के दोषों को खोज कर उन्हें दूर करने के सामयिक प्रयास करने होंगे ताकि आगामी समय में भारतीय छात्र विश्वस्तरीय उत्कृष्टता का प्रदर्शन करके अपनी उपयोगिता सिद्ध कर सकें।

उच्च शिक्षा की इस स्थिति के आलोक में केवल एक ही प्रयास किया जाना समोचीन है कि अपने संस्थानों का स्वच्छ मूल्यांकन करें। संस्था व्यवस्था के मूल्यांकन से उसके सकारात्मक एवं प्रगति के अवरोधों का उद्घाटन होता है। जिससे उसके सुधार की संभावनाओं तथा अनुकूलतम उपयोग की संभावनाओं का आकलन करके वांछित सुधार किया जा सकता है।

3. उच्च शिक्षा संस्थान में मूल्यांकन के आधार

देश में उच्च शिक्षा के स्तर को गुणवत्तापूर्ण एवं विश्वस्तरीय बनाने के लिए 11वीं योजना में विश्वविद्यालय अनुदान आयोग उच्च शिक्षण संस्थानों की वास्तविक प्रगति ज्ञात करने के लिए राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद 1994 जो कि विश्वविद्यालय अनुदान आयोग के अधीन एक स्वायत्तशासी संस्था के माध्यम से संस्थानों का मूल्यांकन देश अन्य प्रगत संस्थानों की भांति किया जा रहा है।

शैक्षणिक मूल्यांकन के लिए परिषद द्वारा उच्च शिक्षण संस्थानों को तीन वर्गों यथा विश्वविद्यालय स्वशासी महाविद्यालय तथा संबद्ध महाविद्यालय में विभक्त किया गया है। शैक्षणिक निष्पादन के आधार पर व्यवस्था के मूल्यांकन के लिए 07 (मुख्य आधार) पाठ्यक्रम पक्ष, शिक्षण अधिगम तथा मूल्यांकन शोध, अनुवीक्षण एवं विस्तार, अधोसंरचना एवं अधिगम संसाधन, छात्र सहायता प्रगति, प्रशासन, नेतृत्व एवं प्रबंधक तथा नवाचार एवं स्वस्थ परंपराऐं 36 34 विभाग तथा 196 प्रमापी संकेतक निर्धारित किए गए हैं। इन संकेतको में से 25 संकेतक अति महत्त्वपूर्ण हैं। जिनके संबंध में विस्तृत सूचनाऐं प्राप्त की जाती हैं। संस्थाओं के संचालन एवं संगठन की प्रकृति क आधार पर 7 मुख्य आधारों के 36 उपविभागों को निर्धारित रूप से अधिभारित करके प्रक्रियानुसार ग्रेडिंग (A.B.C.D.) प्रदान करके संस्थान को मूल्यांकित किया जाता है।

4. मध्य प्रदेश में उच्च शिक्षा

मध्य प्रदेश में शासन ने उच्च शिक्षा के सुदृढ़ीकरण के लिए विश्वविद्यालयों तथा महाविद्यालयों में संरचनात्मक सुधार एवं विस्तार के साथ–साथ उच्च शिक्षा की गुणात्मकता बढ़ाने के लिए उल्लेखनीय प्रयास किए हैं। युवा पीढ़ी के समग्र विकास तथा ग्रामीण अंचल तक उच्च शिक्षा का व्यापक प्रसार करने हेतु सत्र 2010–11 में प्रदेश में 32 नवीन महाविद्यालय एवं 7 निजी विश्वविद्यालय प्रारंभ किए गए हैं। उच्च शिक्षा के वार्षिक प्रगति प्रतिवेदन सत्र 2010–11 के अनुसार प्रदेश में संचालित उच्च शिक्षण संस्थानों का वितरण निम्नानुसार है।

क्रमांक	उच्च शिक्षण संस्थान का प्रकार	संख्या
1	प्रादेशिक विश्वविद्यालय	06
2	केन्द्रीय विश्वविद्यालय	02
3	विश्वविद्यालय स्तरीय अन्य संस्थान	08
4	शासकीय महाविद्यालय	328
5	शासकीय अनुदान प्राप्त अशासकीय महाविद्यालय	77
6	शासकीय अनुदान अप्राप्त अशासकीय महाविद्यालय	578

इन संस्थानों के विभिन्न पाठ्यक्रमों में 0.54 लाख अनुसूचित जाति 01.31 लाख अन्य पिछड़ा वर्ग के साथ कुल 03.28 लाख विद्यार्थी अध्ययनरत हैं।

5. मध्य प्रदेश में उच्च शिक्षा व्यवस्था का मूल्यांकन

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद 1994 (NACC) के प्रतिवेदन के अनुसार समस्त 7 विश्वविद्यालयों का मानकीकरण एवं मूल्यांकन कार्य पूर्ण कर लिया गया है। प्रदेश के 4 विश्वविद्यालयो को सितारा मूल्यांकन के अनुसार। 4 सितारा ग्रेड प्रदान किया गया है। वहीं शेषविश्वविद्यालयों अवधेश प्रताप विश्वविद्यालय रीवा, बरकतुल्ला विश्वविद्यालय भोपाल, तथा रानी दुर्गावती विश्वविद्यालय जबलपुर को नवीन मूल्यांकन पद्धति के अनुरुसार कृमशः सी++, बी तथा बी+ग्रेड दिया गया है।

सामान्य उच्च शिक्षा से संबंधित समस्त विश्वविद्यालयों का मूल्यांकन कार्य शत्-प्रतिशत् पूर्ण होने से संस्थानों की गुणवत्ता का स्तर ज्ञात हो जाए आगामी योजना बनाने में जहाँ सहायता मिल सकेगी वहीं ये संस्थान समय पर आवश्यक सुधार कर सकगें। इस प्रकार विश्वविद्यालयों का मूल्यांकन कार्य सराहनीय है।

संबद्ध संस्थानों, महाविद्यालयों की स्थिति मूल्यांकन एवं प्रत्यायन के दृष्टीकोण से उत्साह जनक नहीं कही जा सकती। प्रदेश के 790 में से केवल 42 महाविद्यालयों द्वारा मूल्यांकन कार्य करवाया गया है जो कुल का केवल 05.5 प्रतिशत ही है। जिनमें 64 प्रतिशत महाविद्यालय नगरीय क्षेत्र से तथा 36 प्रतिशत ग्रामीण क्षेत्र से संबंधित है।

42 महाविद्यालयों में से 08 महाविद्यालयों को ए श्रेणी, 28 को बी तथा शेष 06 महाविद्यालयों को सी श्रेणी प्राप्त हुई है। अब तक किए मूल्यांकन में प्रशासकीय दृष्टी से 69 प्रतिशत शासकीय महाविद्यालयों तथा 31 प्रतिशत निजी महाविद्यालयों ने मूल्यांकन कार्य समपन्न कराया है जो महाराष्ट्र, हरियाणा तथा पंजाब जैसे राज्यों की तुलना में अधिक है।

6. सुझाव

परंपरागत पाठ्यक्रम में समसामयिक आवश्यकताओं के अनुरूप परिवर्तन एवं परिवर्धन करके उन्हें वास्तविक जीवन के लिए उपयोगी बनाया जाए।

ग्रामीण क्षेत्रों में स्थित महाविद्यालयों में आधारभूत संरचना एवं शिक्षण संसाधनों के लिए विश्वविद्यालय अनुदान आयोग द्वारा संचालित पिछड़े वर्ग से संबंधित अनुदान योजना के माध्यम से अतिरिक्त अनुदान प्राप्त करके अभाव को दूर करने के प्रयास किये जाए।

विश्वविद्यालयों एवं अशैक्षणिक स्टाफ के अभाव को यद्दपि अम्बेसेडर प्राध्यापकों, प्रतिभावान प्राध्यापकों तथा अतिथि विद्वानों के माध्यम से पूरा करने की कोशिश की जाती है, लेकिन यह उच्च गुणवत्ता के मानक को पूरा करने क लिए अपर्याप्त है। अतः पूर्णकालिक शैक्षणिक एवं अशैक्षणिक स्टाफ की व्यावस्था की जाना उचित है।

यह मूल्यांकन विश्वविद्यालय अनुदान आयोग आवश्यक क्षेत्रों में संस्थानों को अनुदान उपलब्ध कराने के लिए वांछित है।

परीक्षा संचालन एवं मूल्यांकन में वांछित सुधार करके कार्योपरांत परीक्षा परिणाम समय सीमा मे घोषित होना चाहिए ताकि छात्रों को अन्य परीक्षा में बैठने प्रवेश लेने का अवसर समय पर मिल सके।

सभी शैक्षणिक संस्थानों के लिए मूल्यांकन अनिवार्य करक इसके लिए समय सीमा तय करनी चाहिए ताकि मूल्यांकन कार्य को शीघ्र पूरा किया जा सके।

7. निष्कर्ष

उच्च शिक्षा में व्यापक परिवर्तन किए जाने की आवश्यकता है। हमें अपनी शिक्षण व्यवस्था में विचारों की सामयिकता, प्रयोगधर्मिता, वैचारिक उदारता, नवीनता, कार्यकुशलता, मौलिकता तथा समर्पण एवं समन्वयन को सम्मिलित करके लक्ष्य प्राप्ति के लिए समन्चित प्रयास करने होगें।

संदर्भ सूचो

1. डॉ. लक्ष्मण परवाल, डॉ. कमल जैन, डॉ. महेश गुप्ता, डॉ. प्रभाकर मिश्र के जर्नल के अंश साभार।
2. उच्च शिक्षा विभाग मध्य प्रदेश शासन भोपाल द्वारा जारी उच्च शिक्षा में गुणवत्ता प्रबंधन पुस्तिका वर्ष 2011—12 एवं व्यक्तिगत अनुभवों के आधार पर।
3. उच्च शिक्षा भोपाल द्वारा जारी पुस्तिका एवं पत्रों के आधार पर।
4. व्यक्तिगत प्राप्त जानकारी एवं अनुभव के आधार पर।

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RATIONALITY OF BUYING ELECTRONIC BIKES V/S PETROL BIKES AN EMPIRICAL STUDY

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Abstract- "Price of Petrol and diesel in India are increasing day by day. Prices of Petrol have crossed the rate of Rs. 100 per liter. The people who are laying under lower middle and middle class families it is not easy to maintain this too much expensive fuel for them. The reflection of this changing tendency of price of fuel like petrol and CNG is coming directly on demand of type of vehicles. The manufacturers of two wheelers are searching an option as production and selling of Electronic two wheelers instead of petrol operated vehicles. The study is conducted in Indore city selecting the 100 respondents randomly, how have recently purchased or they already have an electric operated two wheeler who have used petrol powered vehicles previously or still they are using their petrol vehicles. The overall assessment work is reflecting a result as in today's scenario by Taking variables as actual cost of buying, cost of fuel, maintenance cost, resale value, Pick-up, Speed, Load bearing capacity, Durability, appearance are taken in to account "There is no significant difference between cost effectiveness of both kind of vehicles." It can be concluded that overall cost for customer either Petrol powered or Electronic two wheeler is mostly same.
Keywords: Electronic and Petrol Powered tow wheelers, overall cost effectiveness, Price of fuel, Economic performance.

1 INTRODUCTION

Consumer preferences it is a crucial matter now a days that prices of petrol and diesel are increasing day by day. Cost of vehicles is also running in the same patch. Continuing the situation of recession job opportunities are decreasing. Expansion of city is resulting the increasing transportation cost for people. Going from workplace to organisation and from there to home getting expensive as compared to previous years it was. So people are now in search of an economic means of transportation to reduce the cost of transportation in this situation of long run recession. As a remedy Electric powered vehicles are coming in the market. As per the specialist it is being said that electronic vehicles are cheaper in maintenance cost as compared to petrol vehicle. The research problem thus came in the light to analyse the comparative cost of both kinds of vehicles. Continue hike in the price of petrol is pushing the demand of two wheelers towards Electric powered two vehicles instead of petrol powered. So the market is witnessing the interest of customer toward buying of Electronic vehicles. The study is conducted to assess the difference between overall cost of both kinds of vehicles. Keeping in the mind a question that Electric powered two wheelers are really cost effective as compared to petrol powered or both are giving same result as overall expensiveness for such lower middle and middle class families.

1.1 Research Objectives

No research can be fruitful without its objectives. The objectives "To study the customer Preferences towards TVs and MAHINDRA" are as follows.

- To study the comparative overall cost of Petrol powered v/s Electric powered vehicles.
- To Analyze Consumer perception toward use of petrol v/s Electronic vehicle.
- To recommend for manufacturing of less expensive two wheelers for customers.

2 RESEARCH METHODOLOGY

A convenient sample of 100 consumers was taken for conducting research. The primary data is collected by using questionnaire. Primary data was collected from the respondents with the help of its most popular tool, Questionnaire. The questions were mostly close ended and having multiple options so that respondents could answer accurately without any confusion. Questions were designed to generate the genuine responses about consumer perception towards Petrol v/s Electric powered two wheeler. Collected data are studied, analyzed and conclusion has been drawn by formulating the hypothesis and testing it by applying Chi-Square test through SPSS.

2.1 Hypothesis is formulated as:

H₀ = "Each variable at each scale is giving same level of peace of mind to the customer."

"H₁= "Each variable at each scale is not giving same level of peace of mind to the customer."

Variables taken for study of comparative level of peace of mind through use of Petrol V/s electric powered vehicle.

Q. N.	Attributes	V.H.I.	H.I.	M.I.	L.I.	N.I.
1	VAR00001 Price of Vehicle	5	4	3	2	1
2	VAR00002 Maintenance Charges	5	4	3	2	1
3	VAR00003 Fuel Cost	5	4	3	2	1
4	VAR00004 Expenses	5	4	3	2	1
5	VAR00005 Servicing facility	5	4	3	2	1
6	VAR00006 Durability	5	4	3	2	1
7	VAR00007 Features like Head light, Horn, Tell light, Break etc.	5	4	3	2	1
8	VAR00008 Easiness of Driving System	5	4	3	2	1
9	VAR00009 Colour	5	4	3	2	1
10	VAR000010 Engine Power (Pick- Up)	5	4	3	2	1
11	VAR000011 Availability of Spare parts	5	4	3	2	1
12	VAR000012 Brand Image in Market	5	4	3	2	1
13	VAR000013 Weight of vehicle	5	4	3	2	1
14	VAR000014 Seating-Arrangement	5	4	3	2	1
15	VAR000015 After sales service (System)	5	4	3	2	1
16	VAR000016 Stylish Look	5	4	3	2	1
17	VAR000017 Stepney Facility	5	4	3	2	1
18	VAR000018 Availability of vehicle	5	4	3	2	1
19	VAR000019 Sound Pollution	5	4	3	2	1
20	VAR000020 Air Pollution	5	4	3	2	1
21	VAR000021 Range of Distance	5	4	3	2	1
22	VAR000022 Fueling convenience	5	4	3	2	1

2.2 Demographic Segmentation of Customers:

| 1	Education	No. of Persons
	Higher Secondary	12
	Graduation	55
	Post-Graduation & Higher Ed.	33
	Total	100
2	**Annual family Income**	
	Below Rs. 2 Lacs	00
	2 to 3 Lacs.	8
	3 to 4 lacs.	16
	4 Lacs. & above	76
	Total	100
3	**Occupation**	
	Service	32
	Business	14
	Both	54
	Total	100
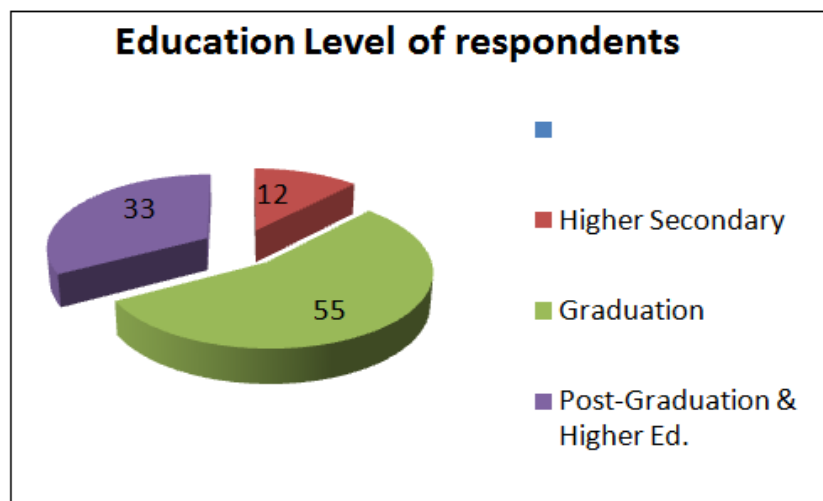
Fig. 1 Education Level of respondents

3 ANNUAL INCOME OF RESPONDENTS
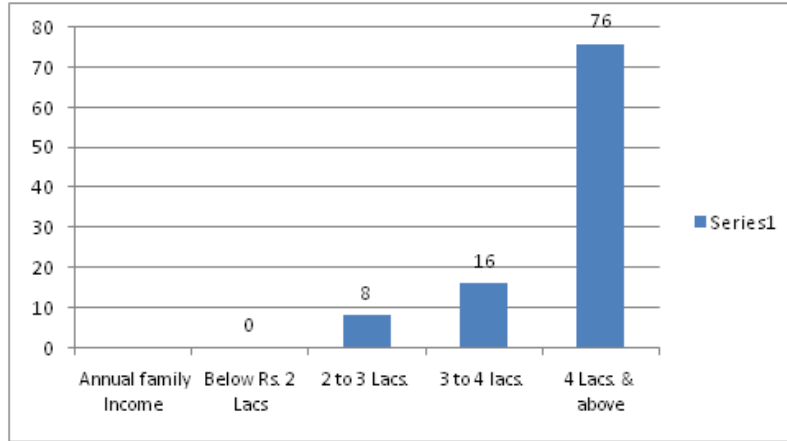
Fig. 2 Income Range of Respondent

3.1 Occupation of Respondents
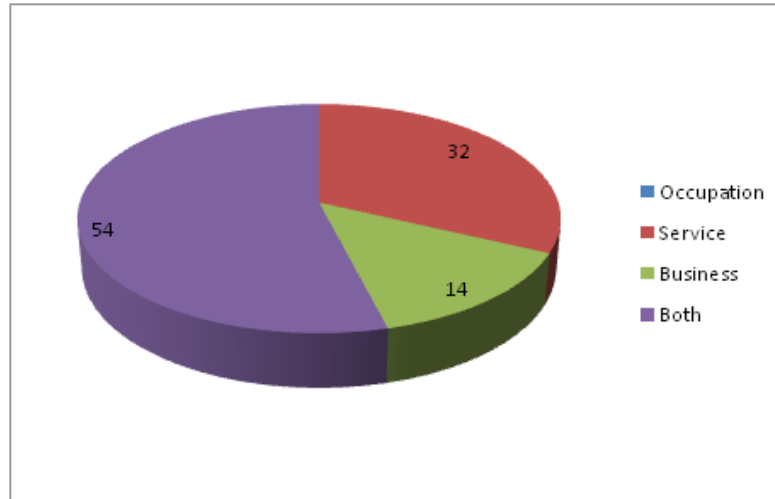
Fig. 3 Occupational Level of Respondents

Demographic analysis is showing that buyer of electric vehicles mostly are higher educated and laying under higher income range. The initial price of electric vehicle is not suitable for lower and middle income range customers.

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
VAR00001	99	1.5859	.71443	1.00	4.00
VAR00002	100	2.7600	.51483	2.00	4.00
VAR00003	100	4.4500	.74366	3.00	5.00
VAR00004	100	3.3800	.50812	3.00	5.00
VAR00005	100	3.4600	.52068	3.00	5.00
VAR00006	100	1.4900	.73161	1.00	5.00
VAR00007	100	3.9700	.26419	3.00	5.00
VAR00008	100	4.2800	.45126	4.00	5.00
VAR00009	100	4.0000	.31782	3.00	5.00
VAR00010	100	2.7900	.51825	2.00	5.00
VAR00011	100	2.1800	.55741	2.00	5.00
VAR00012	100	4.5500	.59246	3.00	5.00
VAR00013	100	4.3400	.53598	3.00	5.00
VAR00014	100	4.6000	.53182	3.00	5.00
VAR00015	100	3.9500	.29729	3.00	5.00
VAR00016	100	4.4800	.61101	3.00	5.00
VAR00017	100	3.4400	.49889	3.00	4.00
VAR00018	100	1.9900	.75872	1.00	4.00
VAR00019	100	4.8700	.33800	4.00	5.00
VAR00020	100	4.9400	.23868	4.00	5.00
VAR00021	100	2.0700	.76877	1.00	3.00
VAR00022	100	1.8600	.71095	1.00	3.00

When we look toward the descriptive analysis is reflecting level of peace of mind of customers. The Descriptive analysis table is focusing light on Mean of variables. It is clear that customers are feeling satisfactory with Operating cost, Fuel efficiency, Pollution control Maintenance charges features of bike, Driving convenience, colour, Brand Image, Weight of vehicle and stylish look are the variables which are the most factors for peace of mind with use of electric vehicle but on other hand Price of vehicle, Durability, availability of vehicle in the market, Service centre, Fuel station for charging the battery like some factors customers are nor feeling peace of mind and it may be a major reason having hesitation in mind for buying of electric vehicles.

Test Statistics

	Chi-Square	df	Asymp. Sig.
VAR00001	68.071[a]	3	.000
VAR00002	62.720[b]	2	.000
VAR00003	33.500[b]	2	.000
VAR00004	57.980[b]	2	.000
VAR00005	48.860[b]	2	.000
VAR00006	138.600[c]	4	.000
VAR00007	160.340[b]	2	.000
VAR00008	19.360[d]	1	.000
VAR00009	144.500[b]	2	.000
VAR00010	132.560[e]	3	.000
VAR00011	212.640[e]	3	.000
VAR00012	45.500[b]	2	.000
VAR00013	49.340[b]	2	.000
VAR00014	54.320[b]	2	.000
VAR00015	150.020[b]	2	.000
VAR00016	36.560[b]	2	.000
VAR00017	1.440[d]	1	.230
VAR00018	50.000[e]	3	.000
VAR00019	54.760[d]	1	.000
VAR00020	77.440[d]	1	.000
VAR00021	3.380[b]	2	.185
VAR00022	12.620[b]	2	.002

The variables given in SPSS solution are clearly mentioned in variable table.

The chi-Square table is reflecting result as significance less than (0.05) 'p' value (0.00) which is showing significant difference Except (Var 17) Stepney facility, (var 21) and Range covered by bike after charging completely it once.

It can be concluded that Null hypothesis (H_0) is rejected and "H_1 = "Each variable at each scale is not giving same level of peace of mind to the customer."

4 CONCLUSION OF THE STUDY

The research on comparative analysis of Peace of mind of customer after using petrol v/s electric powered vehicles as a perception here on the basis of overall work done concludes that customers are ready to buy electric vehicle but there are some points continuing the which they are taking back their steps like higher price of vehicle, less durability, lack of service centers and unavailability of fuel stations. So manufacturers are here advised to manufacture low priced vehicle and recommend to Government to allow handsome amount of subsidy to motivate electric vehicles to make a pollution free environment of country.

REFERENCES
1. Kotler Philip (2000), Marketing management text millennium edition.
2. Beri G.C (1998). Marketing Research Tata McGraw Hill New Delhi.
3. Survey of Indian Industry 2003. The Hindu.
4. Opinions of Other consumers during consumption matters", School of Marketing Working Paper.
5. Dellarocas (2003), the Impact of Online Opinion Forums on Competition and Marketing Strategies mimeo
6. Biyalogorsky, E. Gerstner, and B. Libai (2001), "Customer Referral Management: Optimal Reward Programs", Marketing Science.
7. Buttle (1998), "Word of Mouth: Understanding and Managing Referral Marketing", Journal of Strategic Marketing.
8. Bass (1969), "A new product growth model for consumer durables", Management Science.
9. Basuroy, S. Chatterjee and S. A. Ravid, (2003), "How critical are critical reviews? The Box office effects of film critics, star-power, and budgets", Journal of marketing.
10. Arndt (1967), "Role of product-related conversations in the diffusion of a new product" Journal of Marketing Research.

11. C. R. Kothari, "Research Methodology" Method & Techniques, New age international publisher, New Delhi- 2 Edition.
12. Naresh K. Malhotra, "Marketing Research" Latest Edition, New Delhi.
13. Schiffman, L. G. & LL Kanuk "Consumer Behavior" 8 Edition, New Delhi.
14. W. Boyd, Ralph Westfall, Stanley F. Stasch "Marketing Research Text & Cases" 7 Edition, authorized by Richard D. Irwin INC, U.S.A.
15. Keller, (2010)-Best Practice Cases in Branding, 3/e.
16. Johnson, (2010)"Sales Management", Mc Grew Hill.10th edition.
17. Wells(2010)-Advertisement : Principle and Practice, 7/e.
18. Jefkins (2010)-Advertising, 4/eEngel, et al, (2011)-Kleppner's Advertisement Procedure, 16/e.

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THE DIGITAL ACCOUNTANCY: CHALLENGES AND OPPORTUNITIES

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Abstract- Technology is reshaping the globe in the twenty-first century. It has an impact on nearly every facet of contemporary life, from individuals to communities, economics to culture. Professionals are continuously changing as a result of technological advancements, globalisation, and increased competition. This is not an exception in the field of accounting. Since its inception, accounting, as the language of business, has served every trade. The ever-evolving digital technologies are affecting the accounting profession in ways that have yet to be envisaged, prompting the author to investigate the main problems and intriguing prospects for the accountancy profession of the future. Despite the fact that the digital transformation of accounting is becoming more and more inevitable, many business owners and professionals are still unsure whether it is a challenge or an opportunity for them, what benefits it offers, or how it will shape the accounting profession in the coming years. This article was written in an attempt to offer a theoretical foundation for those who are or will be involved in the field of accounting in the future. The material in this article has been gathered, organised, and presented based on the most recent studies, survey reports, and researches done by various professional bodies, accounting specialists, and other well-known corporations across the world. According to the findings of the study, accounting professionals must deal with rapid technological advancements in order to stay consistent and relevant in the accounting industry by approaching challenges tactically, staying up-to-date with modern technologies, optimising and adapting current accounting softwares, being open to accept, and making the most of opportunities.

Keywords: Digital transformation, Technology, Accountancy Profession, Challenges, Opportunities.

1 INTRODUCTION

Accounting is a field that is undergoing tremendous transformation, owing in large part to technological advancements. As we approach the twenty-first century, sophisticated technological resources are altering a wide range of business practises, from how we finance, resource, and grow new and existing businesses to how we produce, buy, and sell products and services. Nothing is guaranteed in the future, and the unanticipated interactions between these technologies promise to be both fascinating and difficult. The way we consume information technology resources, exchange knowledge and experiences, and access goods and services is changing as technological trends converge.[1]. This is altering the way accounting and finance professionals interact and collaborate with other individuals, as well as forming new working patterns. Accounting professionals will be able to automate and de-skill time-consuming and repetitive labour as part of this digital revolution, allowing them to focus on higher-value work and solidifying their role as financial and business advisers. This article will provide readers with an overview of the exciting prospects available as well as the significant problems that must be addressed in order to remain relevant in the digital transformation era.
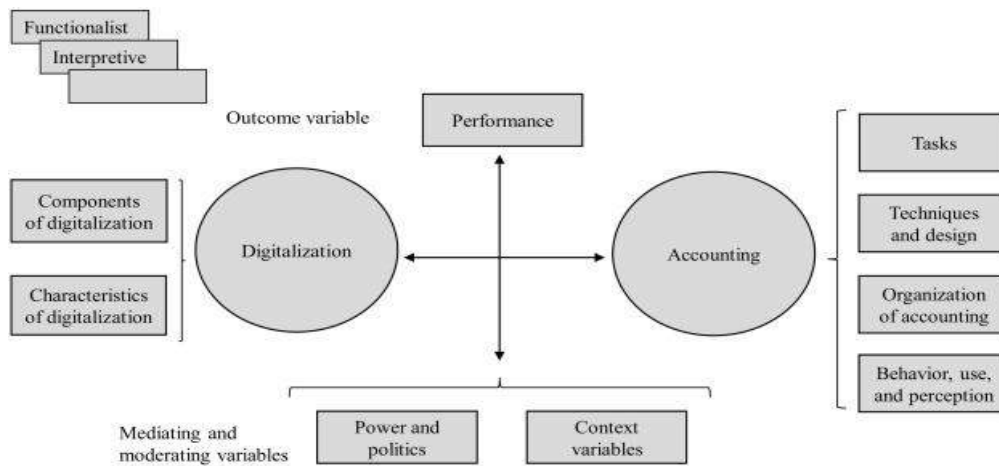
Fig. 01

2 METHODOLOGY OF THE STUDY

This study is qualitative in nature because it is mostly based on secondary data. These data were gathered from a variety of sources, including ACCA, INTUIIT, FORBES, IFAC, TECHTARGET, ICAEW, FORBES, AAEW, and related works from various researchers, as well as numerous other websites. Research findings from throughout the world were also used to complete the report.

2.1 Purposes of the Study

As with other occupations, the accounting profession is changing and evolving as a consequence of digital transformation and technology developments [source 2]. Some vocations are expected to vanish entirely, while others will expand, and new areas of professions will arise that we have never seen before. The following are the objectives of this research:

1. To comprehend the idea of digital transformation;
2. To learn about the new opportunities that digitalization has brought to the accounting profession
3. To realize the key emerging and converging technologies that may have an impact on the accounting profession in the future.
4. To highlight the technological difficulties that the accounting industry will face in the next years.
5. To offer some ideas for remaining responsive and relevant in the current era of digitalization in the accounting business.

3 CONCEPT OF DIGITAL TRANSFORMATION

The world economy is undergoing a digital revolution and dematerialization [2]. In today's world, technology advancements are impacting society and the economy in such a way that they are altering corporate practises and human lives. This digital revolution has ushered in a new era of information, triggering the fourth industrial revolution, often known as "Industry 4.0." (Schwab, 2017). It is primarily defined by the processing of extremely massive amounts of data, which is enabled by the creation of algorithms and mathematical models to support novel technical solutions. All these so platform economy, which has seen the development of global digital behemoths like Google, Amazon, Facebook, and Apple, as well as Uber, Airbnb, Alibaba, and others, is beginning to combine business processes. However, conventional accounting standards impede the accounting treatment of transactions created by these new actors.
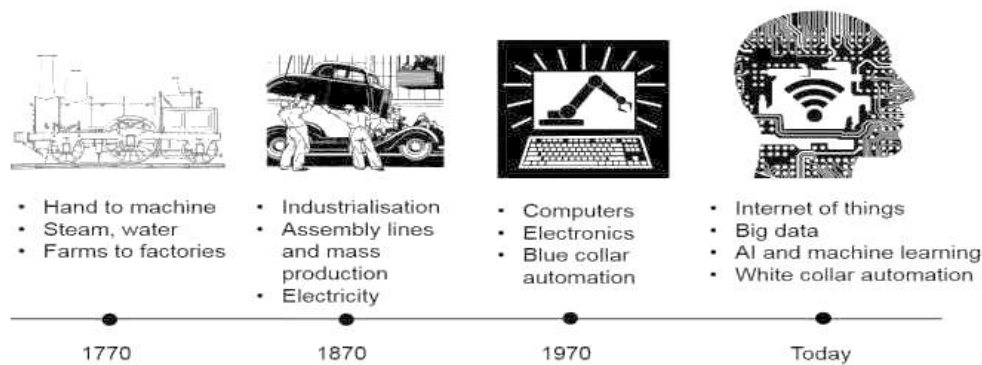
Fig. 02

Source- Digital transformation: The fourth industrial resolution [Bernard Marr's webinar]

"Massive advances in technology, such as data automation, block chain, and artificial intelligence, are ushering in what some are calling the 'Fourth Industrial Revolution,' while others (maybe more appropriately) are calling the 'Transformation Economy," according to Joe Woodard. [3]. 90% of all data has been produced in the last two years, according to Deloitte [4]. Robotics, artificial intelligence, block chain, nanotechnology, quantum computing, biotechnology, the internet of things, 3D printing, and autonomous cars are just a few of the sectors where this data revolution has resulted in the creation of revolutionary new technologies. This fast-paced environment has come to be known as the fourth industrial revolution as technologies continue to grow and disrupt.

4 ACCOUNTING TASKS THAT COULD BE ELIMINATED BY MACHINES

Automation will free up humans to do other things as a result of digital transformation, and automating accounting procedures will assist improve operations and cut expenses. The following are accounting activities that computers can perform if they are automated [5]:

- **Accounts payable/receivable processing**: AI-powered invoice management systems are currently available, which may make invoice processing considerably more efficient thanks to digital workflows. They can learn the proper accounting codes for each invoice.
- **Supplier onboarding:** Machines can screen new suppliers by verifying their credit ratings or tax information, and then set them up in the system without the need for human intervention. They can even ask portals for all the information they need.
- **Procurement:** Most businesses' procurement and purchasing procedures are paper-intensive and rely on disparate systems and files that are incompatible with one another. The procurement system will ultimately become paperless since machines can be linked via APIs and unstructured data may be analysed. Robots are great for tracking pricing changes across several vendors.
- **Audits:** With allowing a digital trail of when and by whom each file was viewed, digitalization of the audit process will assist to enhance its security. Auditors will be able to use digital files instead of scouring file cabinets for the paperwork needed during an audit. A more digital audit increases audit efficiency and accuracy, allowing for a full audit of a company's financial activities rather than simply a sample.
- **Closing procedure on a monthly/quarterly basis:** The sooner the statistics are obtained, the more time the company has to consider strategic options for what to do with them. Machines can aggregate and reconcile data from a variety of sources.
- **Expense management:** The accounting staff spends a lot of time reviewing and approving costs to ensure they are consistent with the organization's standards. Receipts can be examined, costs can be audited, and people can be notified if an infringement has occurred.
- **AI chatbots:** Chatbots are used to quickly answer frequent questions or requests

from consumers, such as the most recent account balances, when specific invoices are due, account status, and so on.

5 IMPACT OF DIGITALIZATION ON PRODUCTIVITY

Accounting technology has improved the accountant's capacity to understand and report data more quickly, efficiently, and effectively than ever before. The largest productivity gains of the digital era may be divided into four groups [6], They areasfollows:

- **E-Business:** Through the use of digital networks, team members may coordinate actions for internal management and integrate the client's information with the data of a financial professional. Intranets and Extranets are internal and external networks that may be used to distribute enterprise software. These technologies disseminate information via a single point of access, such as a Web interface, while ensuring the highest level of encryption security possible.
- **Cloud Computing: The main platform of the cloud computing experience is software-as-a-service (Saas)**. More and more companies are developing bespoke platforms to make data easier to access on a variety of mobile devices. It is increasingly essential to be able to access information at any time and from any location.
- **ERP (Enterprise Resource Planning) Systems:** ERP (Enterprise Resource Planning) Systems are software programmes that bring different departments of a company together in a collaborative environment. They disseminate information from a variety of sources and provide support for operations in different places. Data from many areas like as accounting, finance, marketing, human resources, and manufacturing is accessed through a single database and shared. ERP increases corporate performance by providing management with a 360-degree picture of how the company is operating in real time. This is a significant benefit in terms of being able to make key business choices with more precision, dependability, and speed.

- **Digital Technology Advancements:** The nature of digital accounting systems is defined by easily available and retrievable data via integrated systems, real-time reporting, and continuing development. New digital accounting systems are intended to meet the increasing demand for "info on demand." The major conduits for this process are smart phones, apps, and social media.

6 IMPACT OF TECHNOLOGICAL TRENDS ACCOUNTANCY PROFESSION

The following are the key developing and converging technologies [1] that may impact the accountancy profession in the future years, according to ACCA (Association of Chartered Certified Accountants):

- **Augmented and Virtual Reality (AR and VR):** By layering photos of the actual world with sensory information such as music, graphical overlays, video, and numerous other forms of data, augmented reality (AR) might improve our views of it. Nanotechnology is being utilised to create small items (less than a hundred millionth of a millimetre) that may enhance reality, such as contact lenses with overlays and a Braille keyboard with refreshable soft cells that will improve computer interface.
- **Artificial intelligence (AI):** Artificial intelligence (AI) is a term that refers to a computer or software that may exhibit behaviour that is similar to that of the human brain. In a variety of situations, accountants are increasingly relying on expert information embedded in software. Smart software is used by auditors to automate portions of the auditing process, and additional specialised programmes are available to assist with compliance in areas ranging from financial reporting to international tax.
- **Mobility:** Accountants are using mobile technology to increase productivity and efficiency, bring their companies closer to their clients, and remain in touch with them whether they are at work or on the road. Many mobile devices are being coupled with cloud services to enable access to specialised software and the accompanying business and financial data from anywhere, at any time.
- **Cloud System:** The cloud is being used by accountants and the organisations they work with and for in business, practise, and the third sector. Accounting systems

were among the first software to be made accessible online, and they (together with their related data) have now been joined by a rising number of business 'software as a service' (SaaS) offerings ranging from budgeting to spreadsheets. Using cloud-based infrastructure, such as computers and data storage, can give infinite resources with no upfront investment, maintenance, or IT knowledge.

- **Social Collaboration:** Social collaboration and the new opportunities it provides are reshaping accountants' work life. Crowd sourcing is being utilised to speed up and enhance product and service development, and crowd funding is putting start-ups and projects together with financial sources.
- **Digital Service Delivery:** Accountants are using digital services to provide resources and to access resources. Accountancy practicesare offering self-service features, such as online data vaults that clients can use to access statutory and management reports and othermaterial the firm has worked on. Banking, shopping, booking flights and more is being made more efficient for customers and more cost-effective for providers.
- **Big Data:** Accountants are utilising digital technologies to both supply and access resources. Clients can access statutory and management reports, as well as other information that the business has worked on, using self-service tools such as online data vaults.
- **Payment Systems:** Even entry-level accounting systems now automate connections with bank accounts, as e-commerce and e-banking functions are rapidly being incorporated into software. Consumers and companies are adopting services like Barclays (Pingit) and the start-up Square to use pre-paid smart cards and mobile phones as "electronic wallets." Mobile phones have become more affordable, allowing new businesses to enter the market and offer m-banking services in underdeveloped countries.
- **Cyber Security:** Even entry-level accounting systems now automate connections with bank accounts, as e-commerce and e-banking functions are rapidly being incorporated into software. Consumers and companies are adopting services like Barclays (Pingit) and the start-up Square to use pre-paid smart cards and mobile phones as "electronic wallets." Mobile phones have become more affordable, allowing new businesses to enter the market and offer m-banking services in underdeveloped countries.
- **Robotics:** A robot is a system that includes sensors, control systems, manipulators, power supply, and software to accomplish a job or sequence of tasks. Science fiction has instilled in us the idea of a physical body, and while many robots do have one, the rise of software agents known as "bots" has sparked discussion about what makes a robot.

Table 1: Key Effects of Digitalization on the Accounting Profession and Performing of Accounting Tasks

Area	Effect
Main digital solutions	Artificialintelligence Blockchain Cloud computing Bigdata
Performing accounting tasks	Automatization of routine, repetitive and structured tasks (e.g. invoicing, payroll) Non-routine and non-structured tasks will require human thinking and additional skills and knowledge.(e.g.interpreting and analysing financial information)
Education and training	Changes and modification of university programs Criticalthinking Problem solving Skills regarding the use of artificial intelligence Accounting engineering Interpersonal interaction and communication

7 FINDINGS AND DISCUSSION

Following are the major findings of the study:

- The accounting profession will see tremendous transformation and turnover during the next decade. The industry will be in a constant state of flux, necessitating

unprecedented levels of corporate agility and adaptability. As new market entrants, outsourcing, and automation displace accounting, audit, and tax experts, especially for routine and lower-value services, competition will heat up. Accounting and tax-related products and services will be offered by banks, other financial services businesses, software companies, and Internet organisations in growing numbers. The trend of financial outsourcing to low-cost countries will continue [8].

- Non-accountants, such as consulting and business advising organisations, will use new software and analytical tools to deliver new accounting-related services. These technologies will also make bookkeeping and tax preparation more affordable and straightforward, lowering demand for low-value accounting services [8].
- As an increasing number of customers operate beyond borders, accounting professionals will be required to learn new skills, information, and norms as a result of globalisation. As a result, practitioners will be expected to become knowledgeable in both GAAP and IFRS reporting requirements. Aside from the IFRS revisions, additional regulatory and legal obligations will continue to grow as governments at all levels want accounting experts to assist with compliance. Even accounting professionals who work with small firms will need to be familiar with international standards and laws as their clients extend their customer base [8].
- Due to competition, automation, and outsourcing, many accounting services now supplied by professionals – particularly low-value-added or readily automated activities like data entry, bookkeeping, and simple tax returns – may become less viable and even disappear [8].
- The Digital Generation, commonly known as Gen Y or Millennials, will reach adulthood in 2020, with the oldest reaching the age of 40. This generation, which was born between 1980 and 2000, is known for being early adopters of new technologies. Gen Yers are focused on their professions and their families, and they seek jobs that allow them to balance their professional and personal lives. In the business, politics, and education, women will assume greater leadership positions. [8].
- Client referrals and new clients will increasingly originate from online social networks, and social media will be utilised to develop business reputation and brand [9].

8 OPPORTUNITIES

Following are some of the specific opportunities for accounting professionals created by digitalization:
- There is potential in being able to perform audits in a more effective and efficient manner, such as by conducting numerous audits at the same time. It is almost difficult to audit more sophisticated financial instruments without the use of technology.
- Emerging technologies help small and medium-sized accounting companies to reach new and diverse industries and learn more about their existing and future clients, which provides an opportunity.
- It will change what services accountants offer and how deliver them. Apps and smart phones will be the newdeliverymechanismforfinancial reports.
- Emerging technologies may be an opportunity if the mentality is altered and all choices are properly evaluated in order to be ready to adapt to new technologies and do so successfully across all generations of employees.
- Data analysis tools and software will vastly expand the possibilities for providing analysis, performance management, and decision-support services to customers.
- Accounting professionals will have more possibilities to consult on technology. Consulting possibilities in data management, security, and privacy will be particularly significant.
- Mobile and anytime/anywhere technology will give tax and accounting professionals more flexibility in their work and customer engagements while maintaining high levels of client care.
- Accounting companies will need to create or find online marketing capabilities, and use their web presence to promote their talents, specialisations, and breadth.

9 CONCLUSION

- Accounting is without a doubt at the heart of all commercial actions carried out by a firm. Accounting experts are the ones who figure out and quantify the company's performance. Consumers and organisations are turning to accounting and tax experts for competitive strategies to traverse the global marketplace, not simply to create financial reports and tax returns, as a result of the digital transformation. As firms employ online access, real-time production, and mobile marketing to connect consumers and suppliers across borders, globalisation will become the standard. [9]

- Accounting is, without a doubt, at the core of all a company's commercial activities. Accounting professionals are in charge of calculating and quantifying the company's performance. As a result of the digital transition, consumers and businesses are looking to accounting and tax professionals for competitive strategies to navigate the global marketplace, rather than only to generate financial reports and tax returns. Globalisation will become the norm as companies use online access, real-time production, and mobile marketing to link customers and suppliers across boundaries.

- As accountants have a better understanding of the implications of software automation and the pace with which it will disrupt accounting professions, they have two options. The first is apprehension, as they question if they made the incorrect professional choice and should pursue something else. The second is to grab the chance for change and embrace automation's good and impending effects. This involves planning for less tiresome and more rewarding employment that will add greater value to their companies and clients – as well as to themselves [6]. To summarise, "digitalization of accounting has become a requirement rather than a choice."

REFERENCES

1. https://www.accaglobal.com/my/en/technical-activities/technicalresourcessearch /technology-trends.html, accessed on July10, 2019.
2. https://www.intechopen.com/books/accounting-and-corporate-reporting-today-and-tomorrow/the-future-of-accounting-profession-in-an-era-of-start-ups, accessed on September 7, 2019.
3. https://www.ifac.org/knowledge-gateway/preparing-future-readyprofessionals/discussion/profession-digital-age-accounting   accessed on May 3, 2019.
4. https://www.accountingtoday.com/news/the-accounting-professions-biggest-challenges, accessed on March 3, 2019.
5. https://www.icaew.com/technical/technology/finance-in-a-digital-world/digital-ransformation/digi, accessed on May 10, 2019.
6. https://www.forbes.com/sites/bernardmarr/2018/06/01/the-digital-transformation-of-accounting-and-finance artificial-intelligence- robots-and-chatbots/ accessed on March 3, 2019.
7. https://www.pcg-services.com/evolution-digital-accounting/, accessed on October 14, 2019.
8. https://icrunchdata.com/blog/594/the-disruptive-impact-of-the-digital-revolution-on-accounting/, accessed on November 12, 2019.
9. http://tax.thompsonreuters.com/blog/business/technology/accountingtrends-what   -will-new-accounting-clients-want-from-your-firm, accessed on September 16, 2019.
10. http://httpdownload.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit_corp_vision20200111 v5.pdf, accessed on September 6, 2019.

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