

DIGITALIZATION IMPACT ON ECONOMY

KISHOR KUMAR DASH



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PREFACE

The digital activities of business throughout the world is increasing with each passing day ,living a significant impact on the economy including Gross Domestic Product (GDP) per capital, Employment and Labour productivity. Therefore, it is extremely essential to measure the impact of digital technology on industry for the Government to track investments, quantify success, draft policies and regulations. Digitalization adds to economic growth through promotion of inclusion by interconnection of various businesses allowing international trade and overcoming the information barriers.

The technology driven economy increase the efficiency of a business by augmenting existing factor and utilization of capital and labour. In the current environment of sluggish global economy, digitalization can play an important role to spur economic growth & employment. Digitalization ,indeed is emerging as a new tool to build and sustain such absolute advantages .This book has focused on the need for industry, consumers and Government to foster digital eco-system.

ACKNOWLEDGEMENT

First and foremost, praises and thanks to God for his shower of blessings on me for successfully bringing out this book on “Digitalization Impact on Economy” at a time when the digital economy is developing rapidly worldwide. The new digital trends, such as cloud computing, mobile web services, smart grids and social media are radically changing the business landscape, reshaping the nature of works, the boundaries of enterprises & the responsibility of the business leaders .

About, 4.6 billions of people's are currently connected to the internet worldwide which is 59.05 percent of global population. The rapid roll out of the state technological infrastructure has triggered investment in digital India. India can create, USD 1 trillion of economic value using digital technology by 2025.

I would like to express my sincere gratitude to those authors who have contributed their valuable papers to this book .Also, express thanks to my family for their wholehearted support and my late parents for their eternal blessings which has always guided me to do the best in life.

Last but not least, I express my special thanks to the publisher for extending all timely support for publishing the book which will prove beneficial to the scholars, policy makers and academicians.

With Regards,

Mr. Kishor Kumar Dash, Ph.D. Scholar

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A STUDY ON CUSTOMER PERCEPTION TOWARDS SOCIAL MEDIA IN DEVELOPING A BRAND IMAGE POST COVID-19

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ABSTRACT

This exploratory studies examines how the COVID-19 pandemic caused will increase in purchasers' social media advertising behaviors withinside the India . Previous studies at the effect of a deadly disease has centered on conduct for preventive health, however, little interest has been given to the effect of a deadly disease on purchaser behaviors. To bridge this gap, the Consumer Decision-Making Model become used as a framework to analyze modifications in purchasers' social media behaviors as they preform numerous purchaser decision-making processes. More specifically, a questionnaire become used to acquire survey statistics from 327 India. purchasers. Analysis of Variance assessments have been executed to study suggest variations in purchasers' use of social media as a purchaser decision-making device. The findings confirmed that purchasers have elevated their usage of social media as a device for figuring out products, amassing statistics on products, comparing products, and making product purchases. Thus, the findings exhibit the developing significance of social media advertising because the COVID-19 pandemic began. Given that the COVID-19 pandemic is a international phenomenon, the findings possibly may be extrapolated throughout many nations. Suggestions are furnished to assist organizations undertake to modifications in purchasers' social media behaviours as they relate to the purchaser decision-making processes.

Key Word – social media, customer perception, brand image, purchase intension satisfaction.

INTRODUCTION

Early in 2020, the India began to experience a healthcare pandemic from a novel coronavirus commonly known as COVID-19. Previous research on the impact of a pandemic has focused on behavior for preventive health, however, little attention has been given to the impact of a pandemic on consumer behaviors. To bridge this gap, the Consumer Decision-Making Model was used as a framework to investigate changes in consumers' social media behaviors that have occurred since the COVID-19 pandemic was declared. Investigating the impact of this pandemic on consumers' social media marketing behaviors is important because recent findings indicate that the pandemic is having significant and structural impacts on consumers' purchase behaviors , as well as their decision-making processes , which could result in significant changes in marketing practices. More specifically, analyzed changes in India decision-making behaviors since the start of the COVID-19 pandemic and found that the COVID-19 pandemic altered consumers' product needs, shopping and purchasing behaviors, and post-purchase satisfaction levels. With public healthcare concerns and governmental COVID-19 pandemic mitigation policies, the role and impact of social media as a marketing tool stands to increase in importance because, at a time when social distancing is a common practice, social media offers avenues for consumers to interact with others without having physical contact. As such, COVID-19 will likely also result in shifts in consumers' use of social media during consumer behaviors. Therefore, businesses may find new opportunities to gain competitive advantage through their use of effective social media marketing strategies.

While research is sorely needed to understand the healthcare and macro-economic implications of COVID-19, marketing research is also needed to examine the impacts of COVID-19 on consumers' behaviors. For example, with restrictions on personal contact and other pandemic

mitigation policies, consumers may alter their decision-making behaviors, such as behaviors related to shopping and product acquisition, as well as their post-purchase behaviors.

COVID-19 is a recent phenomenon, therefore, little has been published of its impact on social media marketing behavior in the India .This paper explores the role that social media plays in the consumer decision-making process. The authors hypothesize that social media marketing behaviors have shifted due to the COVID-19 pandemic. The current research focused on the India . economy because it is the largest consumer spending economy in the world and the COVID-19 pandemic has significantly impacted Indian healthcare.

PROBLEM STATEMENT

Online marketing is the current trend today. People will continue to use online marketing for their business growth because online marketing is one of the easiest ways to market their product to the consumers. Advancement in the information technology through internet makes more people choosing online marketing as their purchasing method since it allows easy purchasing and shopping. People who invent online marketing need to have a different way or method to attract customer to buy their product. This happens because the customer has a different way to make judgements about the product they want to buy. Many things can contribute to the customer purchasing decisions. Whether that factor is relevant or not but it still depends on the customer itself depending on individual perception toward a product they choose. Brand image is reflected in the product itself and the brand image actually come through the customer perception about a product and service but the different customer may have their own perception and a lot of factors can be influenced to affect the brand image of the product to customer mind.

Besides that, different level of group or customer also will have a different level of opinion to evaluate what is the factor that can affect brand image toward customer purchasing. Different level of customer might have a different evaluation to make their own purchasing and set their own priority in purchasing habit. Working people may look for a financial part, for example, maybe they are more concern about pricing. Housewives may have their own factors to make purchasing, same as students. However, today, students can be considered as one of the biggest customers who makes online purchasing in online marketing, but a different type of student have their own judgement for making purchasing such as the price of the product, a brand of product and much more. It all depends on their attitude, lifestyle, the level of income and others. According to Hansen and Christensen (2007), the researchers' household behaviour and household purchase decisions have become an issue. The researcher also states that the continuation of the work on consumer expectations also contributed to the speculative of 'the powerful consumer'. This research statement shows that the consumer has their own perception and evaluation in determining their purchase decision toward a product they want to buy. Based on the researcher statements, it also shows that the customer has issues in making purchase decision because of their power in making decision depends on what the product has to offer them. The research question is an important part of conducted research and the research objective will be guided and presented as follows:

1. What are the brand image factors that enhance the students purchasing in online marketing?
2. What is the relationship between brand image factors and student purchasing in online marketing?

LITERATURE REVIEW

According to Achmad Yanu Alif Fianto (2014) Market place or value opposition is not restricted to provide purposeful attributes of the product itself but has been associated with a brand image which could create a unique brand image for its users, in particular within the service industry. There is influence of brand image on purchase behavior as well as identifying and analyzing the mediating role of brand trust in the relationship between brand image with purchase behavior. Brand image have a tremendous position in influencing the purchasing conduct and brand trust additionally grew to become out to have a mediating position, despite the fact that not absolutely in the courting among brand image with purchase behavior.

According to Yi Zhang (2015) The idea “brand image” has drawn significant interest from academics and practitioners because it changed into recommend, as it performed an vital role in advertising and marketing activities. although brand image was identified as the driving force of brand asset and brand overall performance, few research have elaborated on the relationship between brand image and brand equity. primarily based at the brand image theories, this examine reviewed extant studies about the impact of brand image on consumer from perspective of customer equity.

According to adesh padival (2019) The drastic increase within the usage of social media most of the people in India has created a brand new platform for promotion, that is, social media commercials. however, the effectiveness of these commercials has been interrogated through many. lower reputation of commercials has been one of the foremost challenges confronted by the marketers. Henceforth, it's far essential to recognize the crucial elements influencing the customers' mind-set towards social media commercials. Thus the factors influencing behavioral intention of the consumers concerning social media commercials. The constructs like company popularity, emotional enchantment, informativeness, creativity, irritation, and materialism were taken into consideration to have an effect on the mindset, which in flip encouraged the behavioral intention of consumers. So the customers' notion towards social media commercials and will assist the marketers in framing effective advertisement techniques.

According to Sukanya Sharma (2020) on this virtual generation, the net, and Social Media (SM) has had an intensive effect at the purchasing behavior of “costumers” The SM gives a platform in which “costumers” are exposed to the quality product with the quality price along with critiques and opinions about the products. So, we are able to turn our heads and study a brand in a way as if the brand is talking to us. Brands sincerely support the connection with customers and inspire buy intention. furthermore, SMMA has a robust application in growing a advertising and marketing strategy for business. It has turn out to be a significant device that collaborates with agencies and people. it is concluded that the “costumer”- brand dating does have a superb and statistically massive effect on consumers' purchase intention through SM.

According to Dr. M. Thirumagal Vijaya,(2019) understanding consumer's perception towards social media marketing has constantly been one of the goals of advertisers. advertisements which are successful in delivering its messages to its audiences can assist to promote and construct attention on the corporation's services. With the speedy improvement of information technology worldwide within the past decade, social media advertising and marketing are increasingly counting on various modes of interactive technology to market it and promote their products and services. moreover, the concept of executing a content material that is modern and entertaining ought to get purchasers to engage electronically in an effective manner. This effective characteristic can be visible as a destiny of advertising and can become extra figurative in consumers' minds than television advertising and marketing as a marketing.

.According to Fazlul Hoque, (2020) The growing use of the internet has opened a brand-new door to customers for on-line purchasing and sellers for marketing their merchandise or service thru individualized messages cost effectively through transferring the commercial enterprise platform from brick-and-mortar orientation to an online platform. Social media have added a brand-new interactive surroundings wherein consumers can communicate with a enterprise; share their fantastic and terrible experience with the other purchasers, trade thoughts which in the long run have an impact on the marketing decision of the organization and customer purchase intention similarly. hence, the marketers are connecting themselves in numerous social media which includes facebook, Myspace, Instagram, WeChat, imo, Skype, Line and others for engaging and interacting with more customers to serve better with the aid of understanding real needs. To understand the customer perception on buying thru fb, determinants motivating to purchase through fb or social media. On social media, the customers have been in various age group but most important segments of the purchaser had an age between 21-30 and 31-40 years.

According to Uttera Choudhary(2019) The idea of social media is top agenda for all of the enterprise firms nowadays. advertising and marketing Executives, Researchers and specialists all are trying very hard to discover the approaches wherein a brand could make maximum use of various social media platforms. The various factors related to social media which impacts the brand loyalty of the customers. The elements which have an effect on the loyalty degree of clients in the direction of their desired brand. those factors are: (1) Accessibility; (2) Informative; (3) brand image; (4) customer care services; (five) advertisements; (6) relationship constructing; (7) convenience; (eight) feedback. The belief of consumers toward exclusive social media practices used by entrepreneurs. extraordinary strategies can be design through social media for the brand image and brand loyalty.

RESEARCH METHODOLOGY

Scope of the study

This study is conducted in Maharashtra area only

Objectives of the study

1. To study the Change in consumer satisfaction while developing brand image through social media
2. To study the influence of various social media platforms in creating and adding value to the brand image
3. To study the Role of brand ambassadors in creating the initial branding of the product through social media

Hypothesis of the study

H01: There is no significant difference in the consumer satisfaction towards use of Different social media platforms in Post covid-19

H11: There is significant difference in the consumer satisfaction towards use of Different social media platforms in Post covid-19

H01: There is no significant difference in the consumer satisfaction towards use of Brand advocate in Post covid-19.

H11: There is significant difference in the consumer satisfaction towards use of Brand advocate in Post covid-19.

H01: There is no significant difference in the consumer satisfaction towards use of Brand ambassadors in Post covid-19.

H11: There is significant difference in the consumer satisfaction towards use of Brand ambassadors in Post covid-19.

Sample size

115 sample were selected for this study. people from various age group were the respondents of this study.

Sampling method

Under Simple Random sampling method were used for this study.

Statistical test used:

Following test are applied depending on hypothesis statement:

1. Correlation test is used as there are grouping variable.
2. one way ANOVA is used .

Data collection

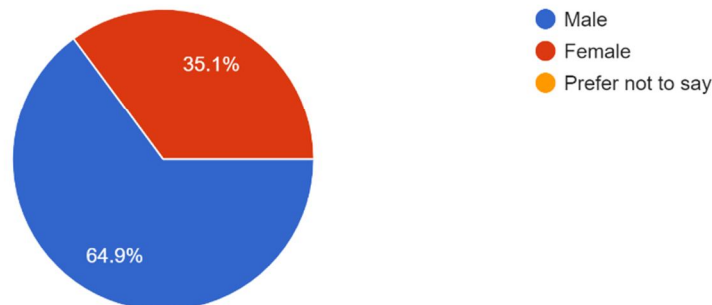
Primary data is used for this study.

Questionnaire were designed according to different variable.

DATA INTERPRETATION AND ANALYSIS

Gender

Gender
111 responses



Table

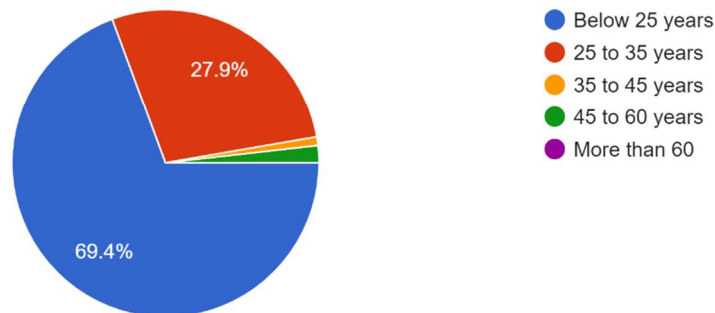
gender	Frequency
male	65
female	32
other	2

From the above, it can be seen that out of 111 respondents, 65 respondents are in male group 32 respondents are in the female group 2 respondents are in the other group..

Age

Age of respondent

111 responses

**Table**

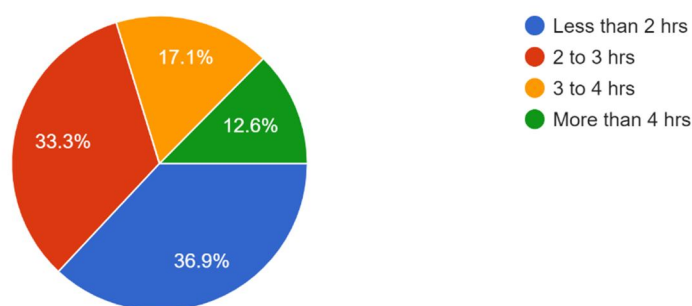
Age Group	Frequency
Below 25 years	69.4%
25-35	27.9%
35-45	2%
50 & Above	2%

From the above, it can be seen that out of 111 respondents, 69.4 respondents are in the age group of below 25, 27.9 respondents are in the age group of 25-35, 2 respondents are in the age group of 35-45, and 2 respondents are in the age group of 50 & above.

Time spent on Social media

How many hours per day do you spend on social media?

111 responses

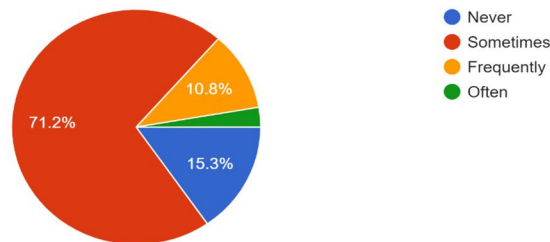
**Table**

hours	Frequency
< 2	36.9
2 to 3	33.3
3 to 4	17.1
4<	12.6

From the above, it can be seen that out of 111 respondents, 36.9 respondents are in the group of less than 2 hours, 33.3 respondents are in the group of 2-3, 17.1 respondents are in the group of 3-4, and 12.6 respondents are in the age group of more than 4

4.. Social media analysis

How often do you comment or share your view about the activities on social media?
111 responses



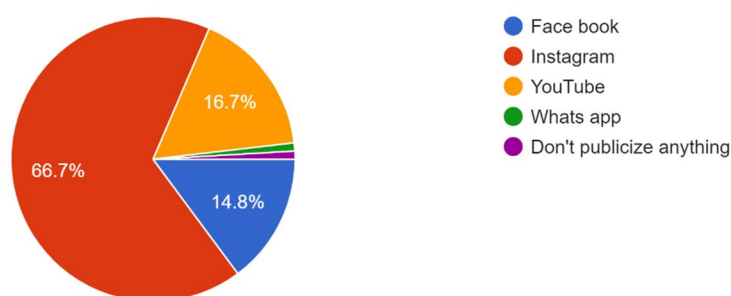
Table

variance	Frequency
never	15.3
sometimes	71.2
frequently	10.8
often	3.7

From the above, it can be seen that out of 111 respondents, 15.3 respondents are in the group of never, 71.2 respondents are in the group of sometimes, 10.8 respondents are in the group of frequently, and 3.7 respondents are in the group of often.

Platforms Of Social Media Used

How do you publicize a particular brand among the network on social media?
108 responses



Table

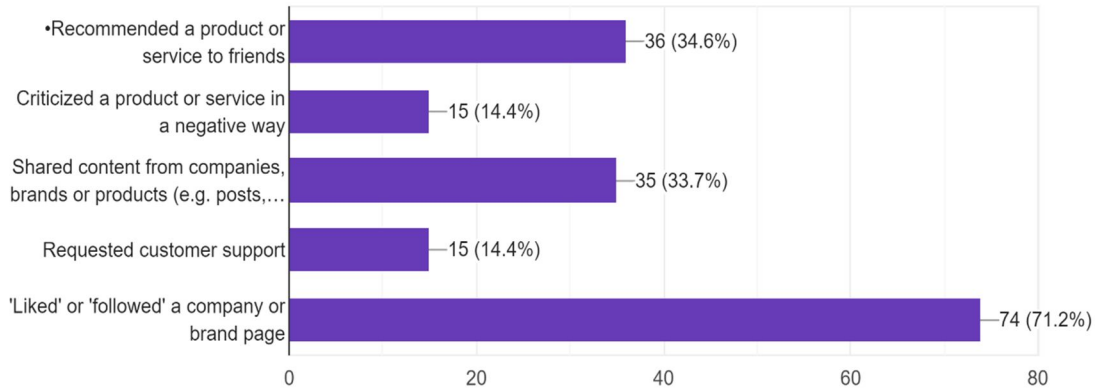
Social media	Frequency
Face book	14.8
Instagram	66.7
Youtube	16.7
whatsapp	1.2
nothing	0.2

From the above, it can be seen that out of 111 respondents, 14.8 respondents are in the group of facebook , 66.7 respondents are in the group of Instagram , 16.7 respondents are in the group of youtube, and 1.2 respondents are in the group of whatsapp rest 0.2 for no publicizing

Survey of 30 days

In the past 30 days, have you done the following activities on social media?

104 responses



From the above, it can be seen that out of 111 respondents, 34.6 % respondents are in the group of product recommendation from people , 14.4% respondents are in the group of negative publicity, 33.7 % respondents are in the group of shared content from companies , and 14.4 % respondents are in the group of customer support and lastly 71.2% fall under liked and following brand category .

Limitations of the Study

The study has few number of limitations although the results are interesting and re-enforce the past studies. Among the limitations of this study is the use of observation to the influence of brand image to purchase behavior and observe mediating role of brand trust to the relationship of brand image with purchase behavior at once. In the other side, the respondent of this research is the students of Islamic private universities while Islamic values itself is existed in broaden sector. Indeed, the results of this study is hardly generalized to other industry sector in the other sectors as well.

DATA INTERPRETATION AND ANALYSIS

Descriptive Analysis

Independent Variable				Dependent variable
Parameter s for Analysis	Social Media Platforms	Brand Ambassadors	Brand advocate (I.e., Brand Recommendation Through Social Media)	Consumer Satisfaction
Sum	484	463	454	492
Count	114	114	114	114
Minimum	1	1	1	1
Maximum	5	5	5	5
Range	4	4	4	4
Mean	4.245614035	4.061403509	3.98245614	4.315789474

Median	4	4	4	4
Mode	5	5	4	5
Standard Deviation	0.822505836	0.975894441	0.917495219	0.787131027
Sample Variance	0.682502717	0.960798013	0.849247011	0.625058221

The mean value of different Social Media Platforms is 4.24 and the mean of Brand Ambassadors is 4.06 and the average or mean value of Brand advocate (I.e., Brand Recommendation Through Social Media) Through Social Media is 3.98 and the mean of Dependent variable Consumer Satisfaction is 4.31. The standard deviation different Social Media Platforms is 0.82, Brand Ambassadors is 0.97, Brand advocate is 1.05, and the standard deviation is Consumer Satisfaction 0.78 also The Sample variance are for different Social Media Platforms is 0.68, Brand Ambassadors is 0.96, is 0.84, and the standard deviation is Brand advocate 0.62.

Inferential analysis

Correlations Analysis

Correlations

		platforms	Ambassadors	Recommondaction	Satisfaction
platforms	Pearson Correlation	1.000	.616	.604	.459
	Sig. (2-tailed)		.000	.000	.000
	N	115	115	115	115
Ambassadors	Pearson Correlation	.616	1.000	.489	.515
	Sig. (2-tailed)	.000		.000	.000
	N	115	115	115	115
Recommondaction	Pearson Correlation	.604	.489	1.000	.432
	Sig. (2-tailed)	.000	.000		.000
	N	115	115	115	115
Satisfaction	Pearson Correlation	.459	.515	.432	1.000
	Sig. (2-tailed)	.000	.000	.000	
	N	115	115	115	115

The correlation between Platforms (Social media platforms) and Ambassadors (Brand ambassadors) remains 0.616 which implies there is positive relationship between these two variables and conclude that strong correlation. The correlation between Platforms (Social media platforms) and brand recommendation (i.e., Brand advocate through social media) is 0.604 this is strong positive relationship between these variables. The correlation of Platforms (Social media platforms) and satisfaction (consumer satisfaction) is 0.459 this is moderate relationship but less positive than others variables the correlation between Ambassadors (Brand ambassadors) and brand recommendation (i.e., Brand advocate through social media) is positive 0.489. Between Ambassadors (Brand ambassadors) and satisfaction (consumer satisfaction) is 0.515 which implies there is positive relationship but less positive than the others variables brand recommendation (i.e., Brand advocate through social media) and (satisfaction) consumer satisfaction is Positively correlated and the value is 0.432. Correlation between Platforms (Social media platforms) and Platforms (Social media platforms) is equal 1 same for Ambassadors (Brand ambassadors) brand recommendation (i.e., Brand advocate through social media), and (satisfaction) consumer satisfaction correlation among themselves

Satisfaction By platforms

ANOVA					
Satisfaction towards Different Social media platforms					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.26	4	12.491	7.52	.0004
Within Groups	55.84	110	189.264		
Total	71.10	114			

Interpretation: The above table shows that there is change in the satisfaction of customers towards use of Different Social media platforms in Post covid-19 according to gender. Due to changes in satisfaction level of customers of Faculties towards use of Different Social media platforms in Post covid-19 according to Gender, the calculated p-value Qualification.

Due to changes in perception of customers towards use of Different Social media platforms in Post covid-19 according to Qualification, the calculated p-value (sig value) of F-test is 0.0004. It is less than standard p value 0.05 (5% level of significance). Therefore, F test is rejected. Hence null hypothesis is rejected and alternate hypothesis is accepted.

Conclusion: There is significant difference in the satisfaction level of customers of Faculties towards use of Different Social media platforms Post covid-19 according to Gender.

Satisfaction By Brand ambassadors

ANOVA					
Satisfaction towards Brand ambassadors					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	25.96	4	6.49	15.82	.0056
Within Groups	45.13	110	0.41		
Total	71.10	114			

Interpretation: The above table shows that there is change in the satisfaction of customers towards use of Brand ambassadors in Post covid-19 according to Gender. Due to changes in satisfaction level of customers of Faculties towards use of Brand ambassadors in Post covid-19 according to Gender, the calculated p-value Qualification.

Due to changes in perception of customers towards use of Brand ambassadors in Post covid-19 according to Qualification, the calculated p-value (sig value) of F-test is 0.0056. It is less than standard p value 0.05 (5% level of significance). Therefore, F test is rejected. Hence null hypothesis is rejected and alternate hypothesis is accepted.

Conclusion: There is significant difference in the satisfaction level of customers of Faculties towards use of Brand ambassador's Post covid-19 according to Gender.

Satisfaction By Brand advocate

ANOVA					
Satisfaction towards Brand advocate					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	16.91	4	4.49	8.58	.036
Within Groups	54.13	110	0.49		
Total	71.10	114			

Interpretation: The above table shows that there is change in the satisfaction of customers towards use of Brand advocate in Post covid-19 according to Gender. Due to changes in

satisfaction level of customers o towards use of Brand advocate in Post covid-19 according to Gender, the calculated p-value Qualification.

Due to changes in perception of customers towards use of Brand advocate in Post covid-19 according to Qualification, the calculated p-value (sig value) of F-test is 0.036 It is less than standard p value 0.05 (5% level of significance). Therefore, F test is rejected. Hence null hypothesis is rejected and alternate hypothesis is accepted.

Conclusion: There is significant difference in the satisfaction level of customers of Faculties towards use of Brand ambassador's Post covid-19 according to Gender.

CONCLUSION

It is concluded from the study that, during this Post covid-19 post (covid-19), the Brand image have the customer satisfaction for Different social media platforms, i.e., Communication on social media (post engagements, reactions), Brand advocate (i.e., brand recommendation through social media) and Brand ambassadors can add more variation they are creating significance difference at early stage post covid, etc

There isn't any doubt that social media community is influencing the Satisfaction Level of customers which shifted the clients from buying at marketplace or shopping center to e-buying at a few extents. These e-buying choices is decided via way of means of the employer elements, demographic elements of the clients and technological environment. Social media have opened a brand-new possibility for entrepreneurs to recognize the actual want of the clients and supply the goods or offerings assembly up the expectancy at most excellent level. On the alternative hand, clients declare that they may be exploited via way of means of presenting the replica of the well-known brand, charging an exceptionally better fee than the marketplace going fee and they may be now no longer refunded in case of dishonest via way of means of entrepreneurs. Sometimes it isn't always feasible to discover the markers who behavior commercial enterprise seasonally or occasionally. Since the clients opt for buying via social media networks, the policymakers must installation a few guidelines and rules for making sure the betterment of the clients and affordable income for the businessmen.

SUGGESTION

We suggest that In this digital era any organization must have social media account it should be maintain in such way that consumer should be attracted towards the product.

1. If company wants to develop brand image through social media at its initial stage customers satisfaction is important if customer is satisfied it will lead to Brand advocate (i.e., brand recommendation through social media)
2. There is an influence of various social media platforms (Facebook Twitter linked in what's app YouTube Instagram etc.) in creating and adding value to the brand image. Social media platform helps in communicating with the consumers and taking feedback from them about the product very easily
3. The Role of brand ambassadors in creating the initial branding of the product through social media

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**A STUDY ON PRECEDING CIRCUMSTANCES AND LOGIC RESULTS OF
ARTIFICIAL INTELLIGENCE AMONG THE SENIOR EXECUTIVES IN SELECTED
HUMAN RESOURCE COMPANIES IN MUMBAI CITY**

Dr. I. Azma

Assistant Professor, Department of Business Administration, The American College, Madurai –
625 002

“We must address, individually and collectively, moral and ethical issues raised by cutting-edge research in artificial intelligence and biotechnology, which will enable significant life extension, designer babies, and memory extraction.” - Klaus Schwab

ABSTRACT

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving. Human Resources (HR) have been experiencing significant changes thanks to the evolution of information technologies in the last two decades. Today, Artificial Intelligence (AI) is reshaping the way that companies manage their workforce and make HR plans, which increases productivity and employee engagement in general. Artificial intelligence (AI) refers to technology used to do a task that requires some level of intelligence to accomplish - in other words, a tool trained to do what a human can do. Core AI technologies provide better accuracy and stability to everyday processes using an algorithm that connects quality data with fast computation services. AI technologies offer significant opportunities to improve HR functions, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, access policies and procedures. Human resources senior executives have faith that merging AI into HR administration functions will benefit and improve the overall employee experience. This will provide more capacity, more time and budget, and more accurate information for decisive people management.

Keywords: Artificial Intelligence (AI), Human Resources (HR), Information Technologies, Employee Engagement, Algorithm, Self-Service Transactions, Talent Acquisition, Decisive People Management, etc,

INTRODUCTION AND DESIGN OF THE STUDY:

INTRODUCTION

Artificial intelligence is present in virtually every major industry from healthcare to advertising, transportation, finance, legal, education, and now also inside our workplaces. Most of the HR divisions or departments of our modern corporate have become process-driven ‘machines’ that manage people like assets, rather than unique human beings that require personalized attention. Instead, HR departments run top-down process-engineered ‘systems’ - to recruit large lumps of resources, handle payroll, organize annual appraisals, send simultaneous batches of employees to training, etc. - that leave little room for personalization, flexibility, and creativity. So, the key will be for HR to develop an AI and Automation Strategy that starts by analyzing what job roles, processes, and workflows will be re-skilled by AI. Technology is not only a key enabler in creating the best employee experience. With the correct readiness, HR senior executives can leverage these concepts to provide a culture of innovation. Going digital and embracing automation in the most efficient manner will certainly enhance the human performance of an organization.

ARTIFICIAL INTELLIGENCE

Today, AI has begun to infiltrate board rooms and engage the workforce. It is helping senior executives manage their time better and add strategic value to the business. It includes a range of capabilities that can solve several business problems. In fact, AI has the potential to make a tectonic shift in the efficiency and productivity of various industries by introducing full-scale automation for tedious, time-consuming tasks and augmenting various human capabilities and function. Many others are exploring ways of utilizing it to improve their productivity, ease and efficiency. The organizations already using AI have confirmed that it has resulted in a progressive transformation of their core processes such as manufacturing, marketing, human resources, etc. For HR processes, there has to be a change management strategy in place as well to deal with the workforce's emotional and work-related issues resulting from an organization's focus in this space. The initial AI pilots in HR technology need to be leveraged as examples of AI success within the HR sphere. This can be done by scaling them into initiatives that can impact the entire workforce. The purpose of AI adoption in HR tech is to improve the productivity and efficiency of HR so that it can meet its core objectives. Employee engagement and improved executive experience are at the heart of any successful HR operation.

NEED OF THE STUDY

Artificial intelligence has streamlined many human resources processes. These sophisticated computer programs excel at recognizing patterns, planning and adapting in ways that mimic human thought. Unlike people, however, who can grow tired or bored, or bring unconscious biases into their decisions, AI programs are fast, tireless and efficient. AI is increasingly being used to automate many HR processes, and it appears automation is going to pay off big time. AI has automated the HR business processes which were repetitive and time consuming for HR senior executives. The AI-powered software can analyze hundreds of job network sites by scouring through candidate's online presence via social media platform and predict how likely are they to accept the role if offered to them. The HR automation tools come equipped with an applicant tracking system, which runs on algorithms to reduce HR's talent acquisition and management task.

STATEMENT OF THE PROBLEM

Currently, human resource process is carried out mostly by human resource senior executives who personally sit and scan through profiles, online profiles and other sources to find candidates. Also they impart of payroll preparation, training and development, etc. As senior executives have limited abilities, keeping up with all the tasks that is necessary is not an easy job, and usually requires lots of dedicated time from every individual executive. The problems that have been identified are that there are human limitations, such as biases, preconceptions and time restraints, which can hinder how effective a recruitment process ends up being. This is a problem as it, in turn, can lead an organization to lose the better fit candidates for a job as well as monetary value. It has been identified that the methods of investigating technology-based hr functions are lacking and comes behind the current practice. Hence more in-depth empirical research must be conducted in the future with the regard of new technology allowing more flexibility and better access than before. Understand exactly where executive's digital strengths and gaps lie, and executive's opportunities to make progress.

According to Eva Wislow (2017), in the title of top ways to use AI in HR it was clearly stated that AI is reshaping the way that companies manage their work force and make the plans which increases productivity and employee engagement in general. Talent acquisition is main important thing, we can remove tons of stressful and monotonous work from hr managers namely talent acquisition software can scan, read and evaluate applicants and quickly eliminates 75% of them from the recruiting process .AI can plan, organize and can give so many training

programs to the newly joined employees through online courses and digital class rooms. AI can predicts the requirements of employees then retention will be more for the employees in the organization it plays a very important role in the organization because work cannot be done manually so with the help of artificial intelligence the work will be done easily.

REVIEW OF LITERATURE

According to Anupam Jauhari (2017), in their paper title how AI and machine learning will impact hr practices today. AI has becoming more and more important and reshaping the way companies hire and do each and every activity recruitment becomes easy for the practitioners because machine learning technology will make use of chatbot and proceed all the activities, AI will screen candidates and send the confirmation or rejection email to the candidates. According to the analysis of India report of deloitte 5th annual global human capital trends 53% of companies are ready to deploy digital tools while 22% have already deployed there tools. AI and machine learning are the current buzzwords in present days HR chatbots to work efficiently, actually hr managers will have many tasks to do they should be capable of using chatbot to get solutions .the major challenge hr manager face is about performance appraisal that means basing upon employees performance the performance appraisal will be decided and it can decide employees career path.

According to Severin Lemaignan (2017), Human-Robot Interaction (HRI) represents a challenge for AI. Even though every work done by humans physically, can done through AI. But emotional intelligence is not there for AI.As this is the major drawback of human-robot interaction become critical. Robots can only do the things which are pre instructed to them. They can't change their actions by their own as they are controlled by humans. It is a difficult task to impose the independent software modules, especially it is not only a technical challenge, but it is also an architectural challenge.

According to Barbara Van Pay (Sep 30, 2018), in this article how AI is reinventing HR it was clearly stated that all the organizations mostly looking for AI solutions for their business and they are scared of letting a non human entity handle the procedures of business. By using the AI in organization it can reduce the time consumed for filling and hiring the candidates who applied for the job ,through screening multiple candidates, gathers data they rank the candidates by considering other information like experience ,skill set etc., to find right person. After finding the perfect fit for the role next main part is interviewing, now a day's AI interviewing software such as hike vue, mya are used mostly. AI technology takes care from sourcing to interview which drastically reduces the recruitment timeline and help to hire right candidates with ability to perform in specific roles and make placements much easier and at faster rate.

According to Faiyaz Md.Iqbal (2018), in the paper title can AI change the way in which companies recruit, train, develop, and manage HR in work place. Already AI have significance in HR management but there is a necessity to enhance this technology in each and every organization it makes the work of HR manager or superiors easy for instance under armorist is an American company which manufactures footwear. So it receives nearly 30,000 resumes so in order to shortlist and select the candidates it will be very difficult for the superiors so they used this AI enabled technology called as hirevue to make the task easier by using this technology. Managers in the organization can conduct interviews to applicants with the help of some pre recorded questions so that candidates will attend interviews and there will be algorithms which are already coded to the system suit see how to select the candidates, on what bases they have to select according to the requirements of an organization this AI technology can be used to reduce employees turnover in the companies and definitely it will be the key era for managers.

According to Peter (2018), in the paper titled the impact of AI on HR function clearly shows that in near coming future AI is going to bring a drastic change in the way of implementing HR practices with the implementation of AI in an organization. It is true that several jobs may be affected but in reality it raises the productivity of an organization although some of the western companies are successful in integrating AI with some HR practices and became productive and others are still counting on the cost aspects and out of all the hr practices recruitment is the best function in integrating with AI from sourcing, screening the qualified applicants and finally it is the duty of the governments and the respective organizations to reshape, re skill and upgrading their work force to compete with these intelligent machines.

Prashant Srivastava (2018), in the paper title the impact of AI on strategic HR decisions making AI plays a important role in human resources management it mainly help us in manpower planning and productivity management actually it is very difficult to analyze the performance of an employee's manually so by using AI it can be done automatically and moreover recruitment becomes easy like maximum time which is spend by the HR manager on recruitment only so to reduce time this AI helps us a lot either it may be for middle management and senior management hiring decision which are taken by AI will be superior to the decisions taken manually. performance appraisal of employees or officials through AI there will be no discrimination as well as the decisions of the compensation will be done here by using fairly sophisticated algorithms thoroughly AI there will be better development in every organization.

According to Dr. Surbhi Jain (2018), in the paper HRM and AI shows that hr in the past used to focus on management of employees in organization but now slowly it shifted its focus to build an organization that adapts to the frequently changing environment because change in environment will affect the organization. The AI is recreating the organization in this digital world so the HR should re plan accordingly. AI is a practical exhibition by machines in close association with intelligence of humans. HR should train the employees about the new technologies in order for better future. Transparency has become standard in the world of HR employees can compare their salaries against those of similar jobs using some of the tools like salary. Company scale etc., there are many challenges in adapting AI in organization, HR experts should also prepare themselves in order to face the risks that arises like unemployment, inequity, racist robots, security etc., and AI lacks several feature of human common sense.

According to Sarah Fister Gale (2019), in the paper title AI is coming- and HR is not prepared. AI is emerging and hr managers should be prepared of how to use this technology all the future work will be done by AI so company's like IBM, PWC and deloitte they are done surveys on impact of AI on hr last 18 months and it is cleared that companies want to implement AI but they doesn't not consists employees with proper leadership to make it happen. IBM predict that 120 million workers in the world's 10 largest economics need to give training to workers regarding AI and if the companies didn't start training definitely they lose competitive edge regarding to development even if company want to establish AI but employees don't show interest to pull it off. 80% of employees in US and UK believe that having AI skills will be useful to them to get benefits to their company and 42% said that they are not that they do not believe that their HR departments can execute it. HRD plays an important role in every organization so it needs technologies like AI to be more competitive in the areas changing business environment and this starts with change in culture where details used to take decisions so that managers and the employee's of HR need to know about AI.

RESEARCH GAP

This review of previous studies discusses the AI, its causes and logic results and the coping strategies adopted by senior executives to manage the human resource management practices.

This review of previous studies discusses AI in the human resource management process among the senior executives and its causes and logic results in various organizations. The AI in the human resource management process among the senior executives is imbalance in the Indian context have been studied by a few researchers only in manufacturing sectors. But there is no exclusive study on human resource management practices among the senior executives in various human resource companies. Hence, the present study attempts to fill up the research gap.

OBJECTIVES OF THE STUDY

- To exhibit the socio-economic profile and social support of the senior executives in selected human resource companies in Mumbai city.
- To study the AI in human resource management practices among the senior executives in selected human resource companies.
- To find out the sources of AI used for human resource management practices for senior executives in selected human resource companies in Mumbai city.
- To examine the various logic results of AI in human resource management practices among the senior executives in selected human resource companies.
- To evaluate the impact of AI in human resource management practices among the senior executives in selected human resource companies.

RESEARCH DESIGN & RESEARCH METHODOLOGY

Research Type : Descriptive Research

Sampling Technique : Stratified Proportionate random Sampling

Sample Size : 305 Senior executives from selected Human Resource Practice Services in Mumbai city.

Data Collection Method : Data is collected through primary as well as secondary sources. Through, primary source the data is collected through interviews of key persons in the organisation and through personal discussion and filling of questionnaire from senior executives. Secondary sources consist of books, periodicals, newspapers and online resources.

The questionnaire was measured using 5 point Likert scale the value assigned was strongly disagree= '1' to strongly agree = '5' in order to measure the AI in human resource management practices among the senior executives in selected human resource companies.

DATA ANALYSIS, INTERPRETATION AND HYPOTHESIS TESTING:

Three hundred and five questionnaires were distributed to the senior executives falling under selected human resource companies in Bangalore. After eliminating the invalid questionnaires, 305 valid questionnaires were used for further analysis.

The statistical tools:

Tools like Mean, T-test, Analysis of Variance (ANOVA), Multiple Regression Analysis, Explanatory Factor Analysis (EFA), Adequacy Test, Factor Scores, Reliability Co-efficient, Confirmatory Factor Analysis (CFA), Communalities, Eigen Value and Factor Loading analysis.

Reliability Test

The research tool namely the questionnaire was tested for its reliability and consistency. The instrument was tested through Cronbach alpha analysis and the results was obtained dimension wise. The validity of the questionnaire proves to be 98% good and valid.

Correlation

The researcher has used the correlation to measures the strength and the direction of a relationship between two variables. It also called as Pearson product moment correlation coefficient.

Correlation between Discriminant validity among the DPI in preceding circumstances and logic results of AI in human resource management practices:

Variables	$\sqrt{R^2}$	Statistical Inference
Preceding circumstances of AI in human resource management practices	0.360**	P<0.01, Significant
Logic results of AI in human resource management practices	0.365**	P<0.01, Significant

** - Correlation is significant at 0.01 level.

H1 - There is a relation between Preceding circumstances of AI in human resource management practices.

Coefficient of correlation between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices, there is a positive correlation ($r=0.360$) between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices, hence H1 is accepted where there is a significant relationship between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices.

H2 - There is a relation between Logic results of AI in human resource management practices.

Coefficient of correlation between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices, there is a positive correlation ($r=0.365$) between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices, hence H2 is accepted where there is a significant relationship between Preceding circumstances of AI in human resource management practices and Logic results of AI in human resource management practices.

FINDINGS

- The significant difference among the group of senior executives is noticed in the case of all stages in AI in the process of human resource management practices. The significantly associated important profile variables regarding the view on AI in the process of human resource management practices are years of experience, family income, personal income, family size and occupational background.
- The significantly associating important profile variables with the factors among the senior executives is noticed AI in the process of human resource management practices are their personal income per month, family income per month, years of experience, occupational background and age of the senior executives.
- The highly possessed AI in the process of human resource management practices factors among the senior executives are lead nurturing and candidate screening in HR.

- The significantly associating profile variables with the level of AI in the process of human resource management practices among senior executives are their virtual assistants for self-services.
- The significantly and positively influencing dimensional human resource management practices inventory on the level of AI in the process of human resource management practices service deliver and intelligent surveys.
- The significantly and positively influencing important factors in AI in the process of human resource management practices among the senior executives are the personalised messaging and personalised communication.
- Among the senior executives, the significantly and positively influencing AI in the process of human resource management practices on the affective organizational commitment are efficiency in distributed computing and expanding the knowledge of advance signal processing techniques whereas among the senior executives, these are e-learning analytics, conversational interfaces and personalised learning pathways.
- The significantly and positively influencing AI in the process of human resource management practices factor on the ability to stay updated and grasp new concepts quickly among the senior executives are their perseveres and patience, innate curiosity and creativity.

Following preceding circumstances have been identified which logic results factors of AI in human resource management practices:

No.	TRANSFORMING THE AREAS OF AI IN HR	MAJOR IMPACT AREAS
1	AI in Recruitment	Candidate sourcing Lead nurturing Candidate screening Interviewing On boarding
2	AI in Human Capital Management (HCM) Viewing and updating human information	Performance management Workforce planning People analytics Virtual assistants for self-service/HR service delivery Career pathing Leadership and coaching
3	AI in Employee Engagement Talent Management	Intelligent surveys Real-time feedback platforms Rewards and recognition Personalized messaging and communication
4	AI in Employee Benefits Sentiment Analysis	Benefits personalization Benefits automation Benefits communication Benefits compliance
5	AI in Learning and Development (L&D) Team Training	Personalized learning pathways e-Learning analytics Conversational interfaces

RECOMMENDATIONS

- Talent gap: it can be expensive and hard to find properly educated or skilled people.
- Concern over privacy: confidential HR data must be accessed securely and available only to the authorized person.
- Ongoing maintenance: as with other innovative technologies, AI requires deep learning and regular review and updates.
- Integration capabilities: data availability is limited, due to the HR trend toward SAAS (Software as a Service).
- Limited proven applications: many products and services are feasible based on proof of concept only.
- Reshape the burden of shared service centre's and helps desks by performing HR transactions and providing answers for routine queries by the way of measuring return on investments.

LIMITATIONS

- The present study is confined in its scope to senior executives in AI in human resource management practices in Mumbai city.
- The variables related to many aspects that AI in human resource management processes is generated with the help of previous studies and also the view of experts.
- The outcomes of AI in human resource management process have been examined with the help of appropriate statistical tools which have their own limitations.

FUTURE SCOPE

Future research work may be extended to study of preceding circumstances and logic results of AI among the employees in selected human resource companies. Even in the human resource companies, a comparative study can be made on the human resource management process among the top level senior executives at the company or industry level promise. The various techniques of AI in human resource management process and the ways to enrich among women senior executives may be probed as a separate study in the near future. The various types of AI tools with the modern interview selection methods among the senior executives and their causes and logic results may be analyzed as a separate research work. There may be a possibility of a separate in-depth analysis AI on the impact of intrinsic motivation among senior executives and their human resource management process in various manufacturing industries.

CONCLUSION

AI-based HR applications have strong potential to raise executive productivity and help HR professionals become knowledgeable consultants that boost executive performance. HR applications empowered by AI have an ability to analyze, predict, diagnose and become more powerful and capable resources. As much as the HR technology landscape continues to be disrupted by AI, HR teams must find ways to balance these advancements with transparency. At the end of the day, artificial intelligence is not the end-all-be-all answer to every quandary HR finds itself in. The present study concludes that the preceding circumstances and logic results of artificial intelligence among the senior executives in selected human resource companies with their personal, family and organizational support, virtual assistants for self-service and intelligent surveys. The significantly AI influencing social support factors in human resource management practice are e-learning analytical and conversational

interfaces. The levels of AI strategies to maintain the human resource management practice process among the senior executives are higher among their counterparts. The productivity and profitability of the selected human resource companies may be increased only through cost reduction and effective utilization of human resources with the help of AI, since there is cut throat competition.

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ABSTRACT

This chapter emphasizes on the thrilling and Due to the developing trends connotation between digital marketing and artificial intelligence (AI). Even while propositioning, the methods of AI engagement in emerging applications. As a genuine outlet of Marketing science, digital marketing accomplished to generate value to the organizations and improve the engagement with the clienteles through electrical amenities. The arrival of technology has shaped a new modest arena for the digital marketing made rapid vagaries in digitalization. Marketing through the world make use of digital technology in order to improve the service level brought to their patron's competence in their commercial. In advertising AI show vital role through more intelligent search's engine, smarter ads, sophisticated content delivery, trusting on bots, continued learning, thwarting fraud and data breaches, image and voice recognition, sales forecast, language recognition, predictive customer service, customer segmentation, etc. Artificial intelligence enables businesses to gain a clear and precise understanding of their customers' needs, enhancing their sales and revenues.

Key word: Marketing, Digitalization, Artificial Intelligence, Customer efficiency and electronic services.

INTRODUCTION:

Artificial intelligence is a technology that enable computers or machines as intellectual as humans, able to perform activity is associated toward those performed similar to the human brain. in current scenario technology advances as well as artificial intelligence (AI) is being used in almost every aspect of life. It has been used in associated with digital marketing to make easier for the businesses reach the consumer at the right time. According to Jain (2020), "Marketers can process massive amounts of information, conduct customers expectation. It has been that ensure customer satisfaction with the help of AI" (Jain & Aggarwal, 2020). Advanced Analytics, machine learning, and customer insights specific to the sector are some of the techniques used in digital marketing utilizing AI. The use of the internet in India is increasing, which enhance new opportunities for business growth.

Modern artificial intelligence (AI) is a wide topic that utilizes advanced techniques to extract perspectives from massive amounts of data. The fundamental principle behind AI is to train machines to learn, purpose, and resolve issues that we deal with daily basis. The advent of machine learning in the early 20th century has accelerated AI development. This increase can be attributed to the hardware and processing capacity of machine learning techniques. Even though computational power expands in possibility, so does development in the field. AI's future could include aspects that will enable machines to learn and think more like humans (Lake et al. 2016). Adopting artificial intelligence (AI) at the organizational level could perhaps enhance the efficiency and productivity of critical decision making (Knight 2015). Despite the fact that studies show a various benefit to implement the changes in organizations. It also has additional challenges in adopting AI technologies (Chui and Malhotra 2018). One of the factors that cause behind the difficulty is organizations' lack of understanding where and how to integrate the AI. A further possible in organizations' failure is to principal component analysis at the business level in order to successfully implement the business strategy on AI adoption. Before determining where to integrate Technology at the enterprise level, it's indeed essential to consider the fundamental

factors involved. The purpose of this study is to perceive the employee perspective of AI in order to better understand the factors that can influence AI adoption at the enterprise level.

Digital Marketing:

Various digital marketing tactics and methods that include an electrical appliance or the online databases to demonstrate, advertise, or sell products or services, along with industries that have used internet channels to make them successful. Websites, social networking sites pages, targeted advertisements, and e - mails tend to hold current customers and attract new customers. To determine the critical role of artificial intelligence (AI) in digital marketing research, we must first analyze the current state of digital marketing scientific research and compare it to the business sector. Then we'll know how far digital marketing in academia tends to lag behind the advancement in the business sector.

Artificial Intelligence (AI) on Digital Marketing:

To understand how artificial intelligence (AI) appears to contribute in digital marketing techniques, we must first analyze the important sub-fields of artificial intelligence (AI). Following that, we examine whether any of those fields implement to digital marketing techniques one by one. This would demonstrate how artificial intelligence (AI) impacts digital marketing research. Aspects of the research of artificial intelligence (AI) have been discussed. Artificial Neural network have been used in brain modelling, time series prediction, and classification procedures, among many other things. Genetic algorithms, genetic programming procedures, and so on are examples of evolutionary computation. Object recognition, image conceptual understanding, as well as other image-processing procedures are examples of vision. Robotics is a phrase that relates to intelligent control, autonomous exploration processes, etc. Expert Systems encompass management information systems, instructional systems, and so on. Recognition system includes voice recognition, production process, etc. Machine translation referred to Planning, game play procedures, etc., are examples of planning. Data mining, decision tree learning, and other types of machine learning

Statement of the Problem

since business have increased in recent years as businesses have expanded, academic researchers have chosen to be hired by companies rather than digital marketing remain at or research centres. Predictably, the competence of AI research in the business sector through AI on digital marketing is much higher, which explains the spread of AI outside of universities and in technological products. A further major reason is that scientific researchers lack data, whereas the business sector obtains and stores billions of bytes of data per day, which would be sufficient to conduct their own research, whereas artificial intelligence (AI) scientists have nothing except a limited data to evolve their models. According to, marketing experts are having difficulty defining artificial intelligence (AI). Rather than saying 'machine learning,' 'data mining,' or 'predictive modelling,' they always say 'artificial intelligence' to describe data analysis, smart systems, data extraction, or keyword searches. Computer scientists, on the other hand.

Objectives of the study:

- To Identify the factors influencing the Artificial intelligence on digital Marketing
- To forecast & predict succeeding potential of artificial intelligence in future
- To analyze the impact of Artificial intelligence on Marketing world

Factors influencing Artificial Intelligence on digital Marketing :**Customized experience:**

Every customer appreciates personalized items, whether they are gifts, messages, or special offers. Every business aims to delight its customers by providing them with precisely whatever they want. It's indeed crucial to facilitate the collection of consumer information for this purpose, and also to invest in Artificial intelligence. Machine learning is used to analyse the customer behavioral patterns, which enables businesses to customize their own products as required.

Real-Time Reaction

Utilizing Artificial Intelligence in businesses helps to retain consumer's loyalty. Customers prefer services or products that help to address their issues in a timely manner. For example, AI Chatbots allow the user to provide a quick response and solution.

Some chatbots are endowed with sensory abilities including such touch or voice. Customers like this because it provides them the almost direct experience and they do not even feel like they're having conversations with a machine. These chatbots are available for 24/7 most of the times and this can also enhance the rate of customer satisfaction.

Customer Behavior Prediction:

Artificial intelligence not just personalizes the customer satisfaction, but it could also predict behavior of both, The existing and new customers. Artificial Intelligence can gather user information from across the internet by utilizing data management platforms (DMP). This is not focused on a single visit to your website. This will allow the company to personalize their services based on the needs of their customers, and also target potential customers and generate more effective marketing strategies. The procedure of AI collecting, assessing, evaluating, and interpreting the information is always evolving, and with time, the accuracy in this area will enable a business to predict their sales and also ROI and find success in their endeavors.

Increasing the Return on Investment:

Return on investment is an ability to perform image quality recognition, artificial intelligence aids in improving ROI. This, throughout turn, enhances the company's revenue. It moreover enables in the resolution of many security problems and ensures that payments are made as quickly and efficiently as possible. The machine learning technique is used to acknowledge a user's behavioral patterns, and then a personalized campaign is generated for the destination. AI drives business with personal information, which allows businesses to customize their products and services. It also helps in saving the business a lot of time and money that would have been spent on unengaged customers

Enhance the Search Sessions:

Technology had also advanced to the point where it has benefitted greatly users as well – they seem to be smarter! Users are looking for a variety of tools or applications that can provide them to high-quality products and services. As a consequence, businesses must integrate AI into their strategies. AI can be used to understand consumer behavioral patterns. These days, voice recognition is a must-have feature in their AI tools.

Advertising:

When it comes to promoting their products and services online or offline, businesses rely heavily on advertising. This seems to be an important factor and since it can be used to completely eradicate the majority of the manual labor. Customer data is extremely beneficial, particularly when it comes to providing unique advertisements. The AI tool evaluates all the data collected from customers and indicates their areas of interest. This provides a framework for a business's advertisements, allowing them to easily complement the desires of their prospective customers. This gives businesses an advantage over their competitors in the market.

Search Engine Optimization (SEO):

SEO implies to have one of the greatest possible editions of scientific. In terms of search engine marketing, or SEO, the large number of related scientific tends to work concern evolutionary computations, fuzzy intelligent systems, machine learning techniques, and web-crawlers for reading, collecting, and analyzing website data, with both the purpose of improving website page ranking positions in search engine results by integrating ranking factors via an intelligent learning model.

Social Media Marketing:

The number of research publications referring to social media marketing, that mostly examine behavior of customers, customer intentions, image understanding procedures, analyzing data from social media and use machine learning models as well as data mining techniques, exposes the field's slow progress. Digital Marketing, Content Creation, and Prescriptive Marketing: Scientific research that explores data extracted from blogs, websites, e-commerce sites, and social media through using data mining, specifically deals procedures, text mining, and machine learning based including such extractive summarization, expert systems, customer decision support systems, text analysis, and predictive analysis.

Pay-Per-Click (PPC) and Ad Targeting:

Machine learning is used extensively in scientific research for bidding and ad targeting through the use of optimized advertising models. It analyses criteria that allow one to assess the importance of the various factors on the probability of clicks and conversions. Machine Learning provide new information and reveal hidden trends.

Chatbots:

While compared towards other digital marketing methods, chatbot research has made digital marketing effective. From health care, education to digital counselling as well as insurance, there seems to be a significant ongoing research effort to build automated robotic simulation software that interact with humans by utilizing AI subfields such as decision support systems, neural networks, autonomous exploratory procedures, etc.

Semantic search:

The scientific research is far exceeded similar aspects of business sector that includes a high volume of scientific publications referring to search engines, information retrieval, world wide websites, data mining, social networking, internet, learning algorithms, machine learning, information analysis, natural language processing systems, query processing, information management, decision support systems, user interfaces web searches etc., which refers to web development. More than 2000 publications have been described in the web technologies and optimized versions. From web design and web development to web application, web services, mobile friendly websites and data representation, artificial intelligence (AI) is involved in an effort of optimizing procedures in web development.

Voice search:

Most research refers to voice search and digital marketing is infrequent and limited. However, in other scientific fields makes an impressive progress. Most important research referring to marketing includes personal voice assistant technologies and speech recognition providing flexible interaction technique where the user and the system act as equal participants having the ability to facilitate precise and unambiguous answers in web queries.

Applications of Artificial Intelligence in Digital Marketing:

Earlier Digital Marketers were reluctant regarding the usage of AI in Digital Marketing but with the growth of AI and its results of AI has proved that it will bring dynamic changes in the marketing world.

Generating Content:

Machines can now create content from scratch based on data fed in coding. These can be helpful to save time and resources. AI can write reports and news based on data and information. Automated Journalism is now used by many leading news giants like BBC news, The New York Times, Washington Posts and more. Also, Facebook uses AI to remove fake news.

Product Recommendation and Content Curation:

Not just creating content but helping recommending products and services based on the user's search, interest and behavior. Artificial intelligence can rightfully understand the behavior of the targeted audience and what is better than finding the right products or services that you are already looking at. Netflix recommends you content based on your interest. Artificial Intelligence technology is commonly used to make personalized content recommendations that the user may find interesting, such as the if people buy X product, they might like Y product too, similar products just like Amazon.

Use of AI Chatbots:

We are aware of automated responses used by businesses to solve customer queries and also used in data collection, keeping the audience updated about products and services. They can serve clients 24/7 and retain their data for future use. Also, the applications of chatbots are huge and the amalgamation of Chatbots with Artificial Intelligence and Machine is the new game changer.

Web Design

Without the help of a programmer or a designer, you can still have your website through the use of Grid, that uses Artificial Intelligence to do the work for you based on the information provided like images, text, calls-to-action, etc. they can make the website look professional in much less time and at affordable price.

Predictive Analysis:

Artificial Intelligence uses data to make probable future projections. Predictive analysis is just the use of data, statistical algorithms, and machine learning.

Digital Advertising:

Digital Advertising is widely using Artificial Intelligence to ensure maximum success, it is being used across platforms like Facebook, Google, Instagram to provide the best possible experience. Analyzing user information like gender, age, interest, and other aspects to show them relevant ads. With the help of AI technology, marketers can spot micro trends and even predict trends. They can then make strategic decisions as a result; brands can reduce digital advertising waste and ensure that their spend delivers the best possible results.

Online Search engine:

The way of searching content has changed and marketers will need to create and change content accordingly. New innovations include Voice Search and Google's algorithm and other AI advances. Other innovations include Amazon Echo, Apple's Siri, Microsoft's Cortana, and Google Home where they can perform searches just by voice command or pressing a button.

Email Marketing:

Brands are customizing emails to reach their target audience with the power of AI. They can now personalize content based on customer behavior and preferences. Machine learning or automatic learning can now determine the best time and days of the week to contact the user, the recommended frequency through analyzing millions of data. Now they can understand which content catches most attention and which subject and titles get more click.

Future Artificial Intelligence on Digital Marketing:

In future, marketers can expect the following impacts from artificial intelligence on digital marketing

Smarter searches:

As technology solutions become wiser and more perfect, it is essential to mention that the public's requirements become more sophisticated. People can find what they need quickly thanks to social media and fast search engines like Google. Artificial intelligence and big data can analyze these search models and assist marketers in identifying the key areas where they should concentrate their efforts.

Smarter Ads:

Marketers are still looking to attract customers with smart advertisements today, but using artificial intelligence allows them to do so faster and more efficiently. Online ads are becoming smarter and more effective as a result of big data. For human solutions, artificial intelligence can delve deeper into data, social networks, Profiles as well as other online content.

Relying on Bots:

A further area where artificial intelligence can play a vital role in the evolution is consumer care and retention. Conversation functions and other direct-to-consumer engagement will be handled by artificial intelligence bots very soon. Businesses will save time for employees and cut costs in this manner. The artificial intelligence bots will also have access to the entire internet's information and search history, allowing them to outperform humans.

Continuous Learning:

Using artificial intelligence, it will not only reveal some hidden data, but it will also instruct them and integrate them in to the new promotion strategy, as well as optimize the messages to the most relevant users. Artificial intelligence solutions will become more intelligent as well as effective over time, promoting real-time decision making.

Research methodology:

The present research study was descriptive and empirical in nature for this study empirical analysis used which is based on a quantitative approach to interpret the link between the variables such as Artificial Intelligence, Technology, social networking, profit maximization and Decision Making through the research instrument. Both primary data (through an online questionnaire to collect demographic information) and secondary data (journal articles, publications and other sources) have been used. Convenience sampling method were used to filter participants, which are digital marketing customers. The data collected were subjected to pilot study to explore the reliability and validity of the instrument and Cronbach's Alpha Reliability Coefficient value of 0.899 proves that the scale is more consistent and highly reliable in nature. Questionnaires were distributed to 200 respondents, and only 170 completely concise questionnaires were returned by the respondents. Structured Questionnaires with three different sections were finalized for the survey method among the digital marketing customers in the Chennai city. Section one deals with the personal profile of the respondent such as, age, gender, marital status, educational qualification, designation of employees, gross annual income

experience of consumers is measured in the appropriate nominal and interval scales. The responses of the participants were collected on the basis of 5-point Likert's scale applied for section 2 and 3 which consists of ten questions regarding perception of consumer regarding Artificial Intelligence variables. Due to the emerging trends of AI application in the digital marketing, the aim of this paper is to review the AI implementation in the field of digital marketing. The goal of the research is to assess the scope of AI application with digital marketing (voice, text, image recognition, decision-making, technology and robots) find application in marketing; (The first step was a focus on review the marketing portals (www.marketingweek.com, www.adweek.com, www.warc.com) to gather AI application in marketing.

Particular	Items	Frequency (n=170)	Percentage
Gender	Male	69	40.6
	Female	101	59.4
Age	30 and below	74	43.52
	31-40	63	37.05
	41-50	20	11.76
	50 and above	13	7.64

Education Qualification	Graduation in Arts Science	45	26.47
	Engineering Technology	25	14.7
	PG- Arts PG-Science	37	21.7
	PG- Engineering PG- Technology	31	18.2
		25	14.7
		13	7.64
		8	4.7
Experience	Below – 5Years	6	3.5
	5 to 10 years	75	44.11
	11 to 20 years	52	30.58
	Above 20 years	30	17.64
Gross Income	5lakhs and below	13	7.64
	5 to 10 lakhs	84	49.411
	Above 10 lakhs	53	31.17
		33	19.41

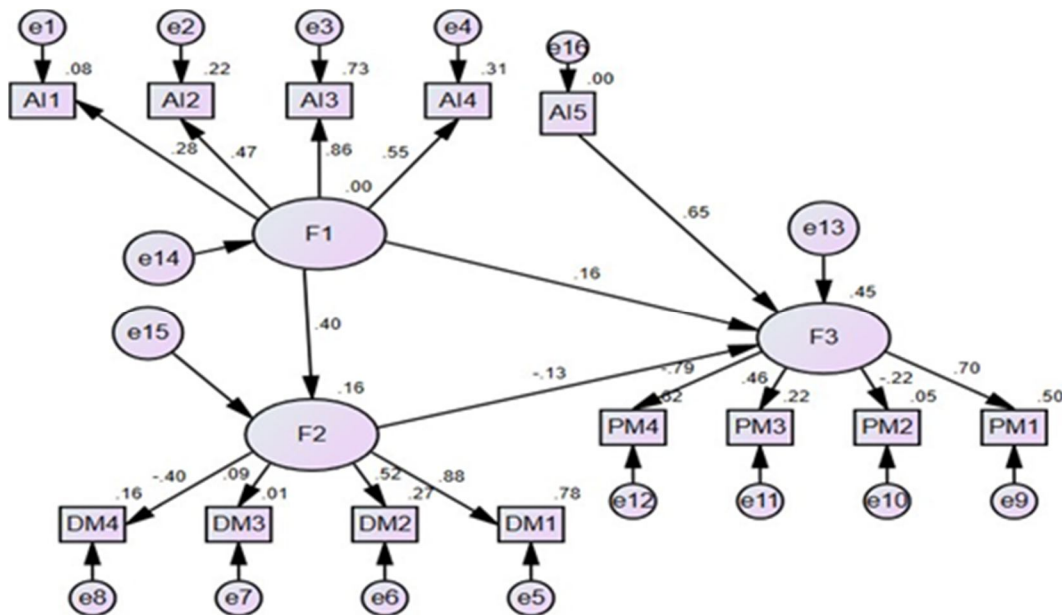
The table 1 state that the personal profile of the respondents. The majority of the respondents are female 59.4%. The age group of the major respondents are 30 and below are 74%. The major respondents were graduate in Arts 45%. The majority of the respondent's gross income is 5lakhs and below are 84%.

The Structural Model:

The SEM technique was used to examine the structural model so the effects among the four latent constructs were tested. The model included 15 items describing 4 latent constructs: Artificial Intelligence, Digital Marketing, Profit Maximization, and social networking. The various goodness-of-fit statistics are shown in Table.2. and present a good fit between the data and the proposed measurement model. The goodness-of-fit value of 0.90 shows that the measurement model has a good fit with the data.

Fit indices	Recommended value	Value
χ^2	N/A	15.40
d.f.	N/A	27
$\chi^2/\text{d.f.}$	≤ 3.00	1.57
Goodness of fit index (GFI)	≥ 0.9	0.90

Normed fit index (NFI)	≥ 0.9	0.91
Non-normed fit index (NNFI)	≥ 0.9	0.95
Comparative fit index (CFI)	≥ 0.9	0.96
Root Mean Square Error of Approximation (RMSEA)	≤ 0.05	0.035



Hypotheses:

H1. Artificial Intelligence has a direct effect on Digital Marketing.

The data indicates that Artificial Intelligence has a direct effect on Digital Marketing (H1: $\beta = -0.12$, $p < 0.05$). Hence the hypothesis is accepted.

H2. Technology has direct effect on Digital Marketing.

The data indicates that Technology has a direct effect on Digital Marketing (H2: $\beta = -0.62$, $p < 0.05$). Hence the hypothesis is accepted.

H2b. Social networking has a direct effect on Digital Marketing.

The data indicates that social networking has direct effect on Digital Marketing. (H3: $\beta = -0.07$, $p < 0.05$). Hence the hypothesis is accepted.

CONCLUSION:

Artificial intelligence is already transforming the business technological landscape through big data, machine learning, and perfect solutions. Companies alter their business practices to become more responsive, productive, and competitive. Technological advancements have

always created new marketing opportunities. Just as the introduction of television heralded a new phase of truly mass advertising and attain, and the Internet and mobile phones heralded a new level of targeting and background, artificial intelligence will alter how people interact to information, technology, brands and services.

Artificial Intelligence obtain marketers to realize potential personalization and relevance. Through the platforms via Search engines, Facebook, YouTube, Google, reach billions of people in day today life and with digital ad platforms, it achieves communication at scale. Determined combined with a customization possible through artificial intelligence means that companies will soon be able to tailor personalized campaigns in real time. The world of the future is in the application of Artificial Intelligence.

We must recognize that incorporating AI into any business does not imply that humans are no longer needed in the processes. AI is a technology that simply simplifies many time-consuming and complicated processes, and save businesses a significant amount of money and, more importantly, time. AI-powered tools are quite dependable and accurate, and they can be relied on for a quick solution. It enables a company to create a plan rapidly and effortlessly. These days AI has a lot of potential in digital marketing. It connects businesses with potential customers. It greatly improves a company's understanding of its existing and potential customers. This assists organizations in developing products and services that meet the needs of their customers.

DIGITAL ECONOMY: CHALLENGES AND OPPORTUNITY**Dr. Radha Jerry Louis**

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ABSTRACT

This article covers the detail of the economy from inception to the latest developments in the economy and its opportunities and challenges. The detailed information about gradual evolving of the economies. The author intends to cover the detailed step by step progression that the economies have undergone, the digital economy and its opportunities and challenges over a period of time. In modern times it is hard to believe that we ever had the economy that stood with trade that has been conventional in nature. In the years to come and the acceleration of technological adaptation, we would be pushed to be part of the digital world and adapt to a variety of technical jargons and gel with the progression. The world is becoming smaller and this is the hard fact of today's time. This is what we refer as Survival of the fittest. The one who can adapt will sustain.

Keywords: gradual evolving, progression, conventional, technological adaptation.

OBJECTIVES OF THE STUDY

To study the progression from conventional format to the latest digital adaptations

To understand and predict the challenges and opportunities in the digital economy

METHODOLOGY

This article is a literature review paper.

Research Design : The objective of this research is to study the progression from conventional format to the latest digital adaptations and to understand and predict the challenges and opportunities in the digital economy

Data: Data collected is from secondary sources.

Parameters incorporated in the study:

1. conventional format to the latest digital adaptations
2. The challenges
3. Sectors that have benefited
4. understand and predict the challenges and opportunities in the digital economy

LITERATURE REVIEW**1. Conventional format to the latest digital adaptations**

An economy has been understood as operations of a country's money supply, commercial activities that it undertakes and the industry. This takes into consideration that the resources are carefully utilised and not wasted. The production and consumption of goods are used to fulfil the needs of the people living in an economy. The word economy is Greek and means household management. The area Economics was touched on by philosophers in ancient Greece but modern study of economics has begun in 18th century Europe, particularly in Scotland and France. (google.com)

The digital economy is the activity that results from billions of everyday online connections among people, businesses, devices, data and processes. This is also referred as economy that is based on digital computing technologies and perceived as conducting business through markets

based on the internet and World Wide Web. It is also referred as the Internet Economy, New Economy or Web Economy (google.com w.)

Scope of the digital economy – It is believed that the digital economy is worth US \$11.5 trillion globally, which is equivalent to 15.5 % of global GDP and that has grown two and half times faster than global GDP over the past 15 years almost doubling since year 2000 (www.oxfordeconomics.com)

The top three digital risers in the G20 have been China followed by Saudi Arabia and Brazil. India, Japan and Germany came last. (www.weforum.org)

The Digital Intelligence index ranks Singapore as one of the strongest digital economies of 2020, alongside Hongkong and South Korea. Now more than ever digital capabilities are essential to ensure country's growth.

We are at the dawn of the fourth industrial revolution, which will bring digital, biological and physical technologies in new and powerful combinations. Globalisation, speed, Innovation, New business models, Digitised organizations are some of the characteristics that are prominent in today's era. Organizations developing prototypes of products digitally first and then approving the same for production. This is saving them from the rework effort. We can call this as an effort towards digitised products.

The transactions that used to be in a conventional manner are no longer in fashion. We have digitised financial transactions. Even the durables and appliances widely used in households are better versions of what existed few decades ago. We have the washing machines with the inbuilt intelligence system that has the ability to decide the water level and quantity of detergent required to clean the dirty laundry. This is the fuzzy logic.

We have e-business and e-commerce widely used terms. Virtual organizations are the newer format in which the organizations will operate.

Disruptions that can be prominent due to digital adaptations and may affect many businesses in the years to come. For example – Travel and tourism industry, The tax software, Print Media, Translation, Office assistants, Booksellers, Financial advisors and recruiters. (investopedia.com)

2. The challenges :

1. Unemployment : While restructuring and reallocating, ICT's could lead to greater unemployment.
2. Financial literacy : Having a bank account is an advantage and more number of people enrolling for the same is a good sign, how to operate the same is a challenge.
3. Electricity : To manage data, technical aspects, devices, machines and gadgets would be required. The substitution of electricity with solar is an option. One has to consider that in some or the other way we will be over consuming and disturbing the environmental balance.
4. Security : Data needs to be stored. A security system has to be in place to avoid hackers getting interested in accessing the same.
5. Adaptability : There have been times that the banking industry had launched ATMs. It has taken time for the users to adapt and accept the technology.

3. Sectors that have benefited :

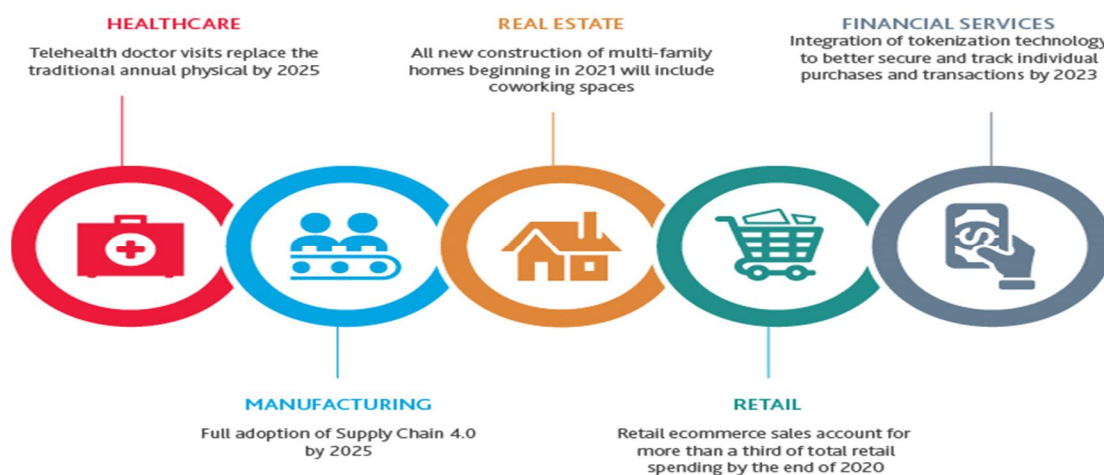
Healthcare : Telehealth doctor visits will be replacing the traditional annual physical in the 2025.

Manufacturing : Full adoption of supply chain 4.0 by 2025.

Real Estate : All new construction of multifamily homes beginning in 2021 will include coworking spaces.

Retail : Retail e-commerce sales account for more than a third of total retail spending by the end of 2020.

Financial Services : Integration of tokenization technology to better secure and track individual purchases and transactions by 2023.



Source : Bdo.com

4. Opportunities and challenges in the digital economy

1. Environment in a bigger picture : With all the monotonous transactions in a typical office atmosphere getting in to digital platforms, computers, devices, cloud and the access to the same is connected with the mobile phones and wearables. It is going to be the tomorrow's reality. This is going to eliminate the need for having print out taken for the day to day functioning. In fact, whether an office in a traditional format is required is going to be the question to be answered in the years to come with the penetration of digital formats.
2. Fraudulent practices : When e-commerce, banking and financial services, tax filing services and many others have shifted online. There is limited or no scope for those who engage in fraudulent practices. This is advocating for the process transparency and better convenience and connectivity for the customers.
3. Effective Administration : Going digital is advantageous as it is going to help administrators to understand the issues where attention is required and eliminate the non-value added steps from their processes. The data will also be helpful to predict a pattern and trends that could be useful and provide insights for the system.
4. Education and Skills : Accessing and enrolling for education and upskilling programs is possible only because of digital economy initiatives. Teaching learning has undergone a lot of transformation and will continue to happen.

Challenges

1. Inadequate access to the latest technology, infrastructure and low computer literacy are the facts in case of developing countries. India is a developing country and will have to work on these areas to be the leader in digital acceptance.
2. Broadband is an essential digital infrastructure. This has been progressive in times of pandemic where there is no choice left with the consumer but to have one.
3. New digital technologies can reduce competition. This can even transform the competitive environment with impact on social and economic activities.
4. Security and privacy : There has to be a concrete system to manage the scale of digital security to build and maintain trust.
5. Digital technologies are expensive to invest and Small and medium organizations lack the necessary skills and know how and the financial resources to invest in digital technologies.
6. High capital expenditure is one of the main barrier to the deployment of digital infrastructure.
7. Low rates of return in the rural areas : The lower number of potential subscribers sometimes higher costs of deploying infrastructure over greater distances.
8. Lack of accurate data with the government : it is difficult to predict traffic growth and the required capacity and the challenges in assessing the returns. There is a lack of government collected statistics on the data traffic flows within and between countries. It is acknowledged that markets need information to work properly and better information about the use of digital infrastructure would enable more informed investment decisions for all the stakeholders. (oecd.org)

Challenges and opportunities in the digital economy

1. Digitalization has the potential to accelerate the economy in various fronts. This is justified with the adaptation of digitalization in various sectors. It has the potential of overcoming some of the market failures that limit the financing of innovative businesses and increase the SME's access to a range of financial instruments.
2. The emergence of FinTech combining technology and innovative business models can enhance the risk assessment and credit rating and financing of small businesses at reasonable costs.
3. Digitalization has also resulted new forms of external funding with the most prominent being crowdfunding. Crowdfunding is defined as raising of external finance through web platforms from a larger audience than only specialised investors.
4. Regulation is a problem. Competition, Consumer protection, quality and safety standards, global governance of digital flows. (Domenech, 2015)
5. Net neutrality and cybersecurity
6. India too has taken a leap to offer various services to its citizens electronically by improved online infrastructure and by increasing internet connectivity or making the country empowered in the field of technology in 2015. India looks forward to enable automation, increase data quality, facilitate education, collect and structure data so that smarter technology can be applied.

CONCLUSION

The digitalization effort has helped economies to put a system to the volumes that they are handling in various sectors. Companies are predicted to spend huge on necessary digital transformations considering the same as an investment to serve the customer better. This is further accelerated in these pandemic times as most business whether small or medium scale or massive are shifting their focus to digital efforts. Data that is being handled through these digital platforms does make business sense.

Considering the challenges and opportunities in Digital economy, one can conclude that the future businesses will be technology integrated and driven. Human intervention will be integrated intelligently to make sense. Though, security, infrastructure, usability, literacy remain the issues that need to be handled. This is being tackled well with the men and machine integration and intelligence. In the next few decades the overall accelerated technological world will see new set of challenges that are prima facie seen as if could be tackled. It is assumed that those inventing, using and advocating the digital technologies will come up with various systematic ways of having a security system which is robust.

Scope for further research:

Limited objectives have been framed to be part of the study. The scope has been limited to challenges and opportunities in the digital economy.

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CASHLESS ECONOMY – A STEP TOWARDS DIGITAL REVOLUTION**Abdul Muntakim Khan**Assistant Professor, Department of MBA, Nalanda Institute of Technology (NIT),
Bhubaneswar, Odisha, India – 751001**Dr. Manoj Kumar Sahoo**Professor, Department of MBA, Nalanda Institute of Technology (NIT), Bhubaneswar, Odisha,
India – 751001**ABSTRACT**

In India, most of the payments are made in terms of liquidity cash when there is a requirement of any financial transaction. India to be a developed country it should go for cashless transactions. In the meantime, we must see significant changes in payment methods. Due to the ongoing level of technology infrastructure and policy changes, the number of payment methods has increased over the period. A cashless economy is the future of the Indian economy in which there will be no physical cash flow. All payments will be made and received in electronic mode. The cashless economy has become very popular after demonetisation. Facilitating financial mobility is a major digital motivation. It is safer and easier to do online while traveling, in the event of medical emergencies, during peak working hours, and busy schedules. But because we are not involved in digital payments, we are more likely to fall into the trap of identity theft. Even experts are faced with many instances of online fraud and data theft is a major threat. Another weak link in the inadequate grievance redressal mechanism to deal with this scam. The current paper is an attempt to learn the concept of a cashless economy by looking more closely at the pros and cons of digital payments. This study also helps to determine the factors that affect the perception of the citizen towards the digital economy and the benefits of using alternative payment methods.

Keywords: Cashless Transaction, Cashless Economy, Digital Economy, Electronic Payment

INTRODUCTION:

The magical word “Cash,” has stuck in the mind of every Indian citizen. In today’s world, all Indian customers should have the option to pay electronically, using mobile devices, laptops, and more, and it is important to develop the country as a cashless economy technologically. In recent years the structure of the payment system has changed with the development of technology. For example, in developed countries like the USA, UK, etc., cash withdrawals have decreased and there are non-cash tools such as cheques, debit/credit cards, etc. replaced. For a long time, the name cashless has been a topic of interest to officials, scholars, and researchers worldwide. The transition to a cashless economy is a global problem. A cashless economy is when a financial transaction is not made in terms of notes, coins, or cash. A cashless economy is a group of jobs; it is not necessary to transport cash in a literal way as an exchange but through credit or debit or electronic cards. It does not mean total financial ruin but simply transforms the economy into a place that reduces real spending by providing alternative payment methods. According to the 2016 Global Payments Report, the number of non-cash payments worldwide is growing and more than 90% of activities are cashless in most developed countries (Patel and Amin, 2012). Therefore, this technological shift has spread to cashless payment platforms or the financially disadvantaged community.

Indians are fourth in the world to spend cash. The level of money in GDP is the highest, i.e. 12.42% in India. The average amount of cash transactions on personal use in India is 20 %,

while card transactions account for 4% of personal expenses. Because most people are illiterate, they are poor, have few transactions, and have few banking habits. For those, cash is a very simple, easy, trouble-free option. Payment is fast and does not involve a mediator. There are no additional costs for using cash as there is the use of bank/credit cards. Even in less developed countries, such as France and the Netherlands, money costs 40% or more of all consumer goods. Poor economies tend to have lower corruption and lower black money. Almost all countries are looking at a cashless economy, and more countries have made significant progress. It is just a global trend that India is trying to achieve.

India is an economy whose currency is distributed at Rs. 17.97 lakh crore (trillion) since November 2016 and with an annual growth of population rate is about 1.2% per annum and demand for capital will increase. With a total of 1.34 billion people in this country and only 3% to 4%. Paying taxes is a matter of concern. It is observed that each year the Government is incurring approximately 1.7% of real GDP as a cost of cash and sacrificed tax revenues from the 'shadow economy' which accounts for 3.2% of GDP.

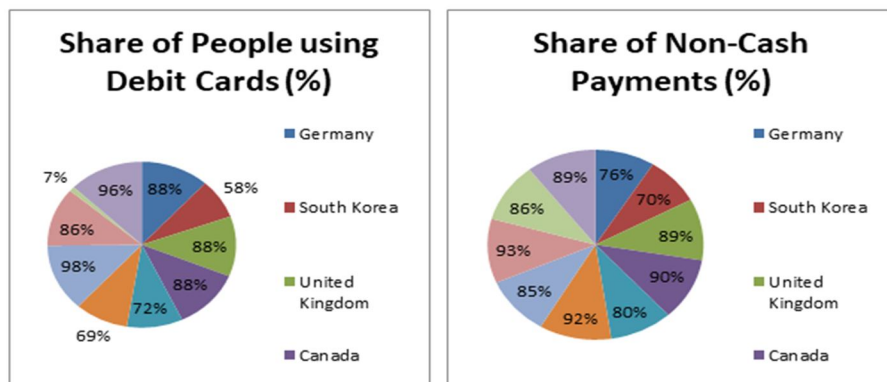
The Cashless Global Economy Scenario:

As per the survey conducted by CNBC (Consumer News and Business Channel), most of the cashless countries are spending their expenditures by using digital platforms or debit cards. The data is given below.

Table No: 1 Share of Non-Cash Payments and Debit Cards Usage

Sl. No	Name of the country	Share of non-cash payments (%)	Share of people using debit cards (%)
1	Germany	76	88
2	South Korea	70	58
3	United Kingdom	89	88
4	Canada	90	88
5	United States of America (USA)	80	72
6	France	92	69
7	Netherlands	85	98
8	Belgium	93	86
9	Australia	86	07
10	Sweden	89	96

Source: CNBC



The decision of the government and policymakers is crucial for a successful transition to a cash-strapped economy as seen in the US, Germany, and China. Barriers to implementation should be overcome by periodic policy changes. Newly established countries including Hong Kong (1997), Nigeria (2012), and India (2016) have used different approaches in this regard. Critics such as Paul Richard fear that a cashless economy will give the Government more control (and often unwanted) control over individual purchases, spending habits, and business support. Too much information could jeopardize the privacy of citizens and endanger their safety. For example, implanting a human right biopsy (US) and photographing biometric information (Aadhar, India) are examples of how additional information is captured in the form of cashless economies.

REVIEW OF LITERATURES:

The literature review outlines the way for a perfect knowledge of the research areas that have already been developed and provides insight into potential areas for discussion. With this in mind, an attempt has been made to summarize the work done on the cashless economy. A review of some of the key studies is outlined below.

Balachandher, Santhan, and Norazlin (2000) studied electronic banking in Malaysia and found that ATMs are a widely accepted and widely used station. According to Woodford (2003), a non-monetary economy is defined as one that does not take on a conflict of interest that can be reduced by using cash balances and therefore provides a reason to maintain such balances even when earning a monetary value. come back. In a cash-strapped economy, the amount of money in your wallet is almost insignificant. Marco and Bandiera (2004) argue that the increasing use of cash-strapped banking tools strengthens monetary policy efficiency and that the current level of e-money use does not threaten the stability of the financial system. However, it concludes that major banks may lose control of monetary policy if the government does not manage monetary policy properly. According to CBN (2011), there is a positive correlation between efficient modern payment systems with economic growth. In the growth of the global economy, digital currency plays important role in transactions in business, consumer, and government finance worldwide. About 25% of consumer spending worldwide came from some form of a payment card, up from 16% in 2003. Patel and Amin (2012) discussed in their research paper that presently plastic money is an inevitable part of transactions in any transaction and which make life easier. With plastic money, it can be easier to control money laundering and the efficient use of the financial system. Tawade (2017) investigated the future trends and the impact of inflation on the Indian economy. After conducting research it became clear that the Government of India should take further steps to make India digital and payment methods should be made more secure and risk-free. Saranya and Rajani (2018) studied the behavioral changes of a person to become economically sound. The study found that many people have moved or are looking for countries with cashless but India still has a long way to go with cashless transactions. Teoh, Chong, Lin, and Chua (2013) defined ePayment as any electronic transfer of payment from payer to the payee through ePayment that allows those customers to remote access their bank account and transactions over the electronic network.

RESEARCH METHODOLOGY:

The study is based on secondary sources of data/information. Different books, journals, newspapers, and relevant websites have been consulted to make the study an effective one.

OBJECTIVES OF THE STUDY:

1. To study the concept of a cashless economy.
2. To understand the factors influencing the customers, moving towards a cashless economy.

3. To know the modes of cashless transactions.
4. To know the benefit and challenges of a cashless economy.

Concept of Cashless Transactions

The term “cashless economy” was introduced with the completion of demonetisation of 500 and 1000 rupee notes in India after November 2016. The history of geographical division in India compared to other developing countries was quickly reviewed by media reports. They recorded that about 80% of the money spent was based on physical flow, which opened the door to problems such as corruption, black money, and terrorist financing. These are cashless issues, which means that there is less money to spend and all other activities are done through various electronic transactions (Adil & Hatekar, 2020). India's dream of no money has been welcomed by everyone. The vision, that is, has its advantages and disadvantages in its application, as India may face difficulties in both cases. The reason for establishing a cash-strapped economy began after the Indians' demonstration, about plans and impact the following year after November 2016. Proper participation of all is needed to achieve the desired goals. Following that step, tax revenue increased because there was no way to escape. All of this was aimed at promoting online payment methods for the successful flow of the Indian economy. The process has begun and there will be many other opportunities to achieve the goal of Digital India (Khurana, 2017).

According to the Indian government, the cashless policy creates more power in the industry, leading to more jobs and less money laundering. Now, most of the money will be saved in customers' bank accounts. They will have less money in their hands, forcing them to disclose their direct income so that income tax fraud is greatly reduced. It will also reduce monetary fraud and will lead to the detention of foreign investors in the country as this payment method is protected (Grimes, 2003). When this step was introduced in other countries, it was the right step in the right direction. It was thought to have pushed the modernization of the new payment system. Increasing the number of banks reduces transaction costs and reduces the higher security of financial transactions. This bank helps to create a more manageable platform for consumer communication in the industry. Financial risk is also an important factor in pressuring the digital channel to develop a monetary economy. Indians have used electronic payment methods for many years; however, the retail sector remains highly dependent on revenue generation.

Factors Influencing Towards Cashless Economy:

Various factors influence consumers in a low-income society. In India, one of the most important factors is the government's influence on consumers of low-income jobs. Both private and public banks promote free transactions and assist their customers by providing mobile banking and residual banking services. Consumers can monitor, negotiate, pay, charge, book, etc., with the help of a portfolio. Apart from all these discounts, markets, refunds, 24 × 7 access, and other services attract buyers to cashless trading. Based on the results of a KPMG study, some of the factors that contribute to the use of digital payments are easy payment, payment tracking, and easy-to-navigate navigation. Mahor, N. (2017) found that information technology, payment willingness, social influence, and a comfortable payment environment, be it cash or non-cash sales, have an impact.

Advantages of Cashless Economy

A cashless economy reduces the cost of banking services. It also develops monetary policy to control inflation and boost economic growth in our country. Another good thing about a cashless economy is that it does not encourage money laundering and other money-related crimes. The details of the benefits are discussed below.

☐ **Convenience**

Going for financial transactions is probably the biggest motivation for digital entry. No more cash, plastic cards, or even ATM withdrawals. It is also a safe and easy way to spend money on travel and in an emergency like hospitals. One is free to do transact anytime and anywhere. It is not necessary to be physically present to do things and it is not necessary to work during work hours only. The benefits are huge, practical, and easy.

☐ **Discounts**

One of the incentives is the recent waiver of service tax on purchasing cards up to Rs 2,000

provided by the government to promote digital trade. This is followed by a series of free cuts and articles. It is a good time to increase savings when someone helps with it. For example, a 0.75% discount on digital fuel purchases means that the Delhi petrol price of 63.47 a liter of Rs could be reduced to 62.99 / l for a digital fee. Similarly, it can reduce costs if you save train tickets, highway tolls, or buy insurance. In addition, the offer of discounts and discounts on mobile wallets such as Paytm, as well as rewards and benefits of loyalty to existing and credit card stores may help to improve cash flow.

☐ **Tracking expenditure**

It is easy to keep track of how much money you spend when everything you do is recorded. It will also help with the introduction of income tax and, in hindsight, make it easier for people to define their expenses. Apart from taxes, it will also have a positive impact on budget formation.

☐ **Budget discipline**

A written record will help keep track of people's spending and lead to better budgeting. Various apps and tools will help people analyze their usage patterns and get better information in a few years. Controlled expenditure can also lead to higher investments. If the same amount of money does not go back into circulation and people continue to use mobile wallets and cards, the latte feature may decrease. This means that Rs 10 spent on sweets or chips, or a regular cup of office coffee may be good as you will be short on loose exchanges and small cash notes. Budget leaks and unforeseen expenses are less likely to go into your budget at the end of the month.

☐ **Lower risk**

If it is stolen, it is easy to block a credit card or mobile wallet remotely, but your money cannot be recovered. In that sense, the digital option offers limited security. This is especially true when traveling, especially abroad, when losing money can be a major distraction. In addition, if future cards are developed to use a biometric ID (fingerprints, eye scanning, etc.), it can be very difficult to copy, making it a very safe option.

☐ **Small gains**

It may not be very profitable, but if you do not have the money, it may be easier to keep it safe for borrowers. What's more, is that you can pay the exact amount without having to worry about not changing or getting it from customers.

Modes of Digital Payment Methods in India**1. Debit Cards and Cards**

Debit and credit cards are accepted as cashless. Many consider the debit card to be more secure because you are negotiating money in your account. The danger with a credit card is overspending. Debit and credit cards can be used to make online purchases in addition to the store counter.

2. Cheques and Demand Drafts

Checking is one of the safest and oldest forms of cashless payment. A check is issued to a person or business for a certain amount. This check is deposited in the recipient's bank, and the cash is received by the payment processed by the mortgage. A draft claim is safer than a check because it cannot be repeated or ignored, unlike a check. The LL is signed by the bank to ensure that sufficient funds are available for the successful operation. The disadvantage of checking with DD is that it is time-consuming as one has to visit the bank and wait for the check or DD to be issued.

3. Net Banking

Net Banking is another use of your debit or credit card. The user must log in to his or her bank account to allow payment. Net Banking gives you the ability to do something even if you have lost or lost your bank card. You can use an online bank to make payments for services, buy goods and services online, or send and receive money.

4. NEFT & RTGS

Electronic Funds Electronic Transfer and Real-Time Gross Settlement electronic payment systems allow for easy transfer of funds between bank accounts. Both centers are maintained by the RBI (Reserve Bank of India). The resources can only be used to transfer money within India. The RTGS transfer window is from 8 a.m. to 4.30 pm during the day and banking days. NEFT arrangements take place in rescheduled sessions between 8 am and 7 pm on banking business days. There is no 'stop payment' command system for any system and payments made cannot be waived.

5. IMPS

IMPS, which means Instant Payment Service, is a service established by the National Payment Corporation of India. The condition of using IMPS services is that the user must register for mobile banking. Once registered, the user can use the IMPS service even through online banking. Money can be sent or received 24 * 7, and there is no time limit for the transaction. IMPS can be done using MMID (Mobile Identifier) or IFSC code and bank account number. The advantage of IMPS over NEFT and RTGS is that it is readily available.

6. UPI applications

UPI stands for Unity Payment Interfaces. UPI has changed the way we negotiate. At the core of the UPI, the operation is the fact that our mobile numbers are registered with our banks and linked to our accounts. The virtual payment address helps to send or receive money without entering any bank-related information. Merchants will need to have a current account to receive UPI payments. Currently, the most popular UPI applications are BHIM, PhonePe, Google Pay / Tez, ICICI Pocket, and SBI Pay.

7. Mobile Wallet

Mobile wallet is now an easy way to make cashless payments. Once you have your money in your wallet, you can use it wherever it is accepted. Paytm is a very popular wallet. The disadvantage of the portfolio is that it is not connected to your account. Once you have uploaded money to your mobile wallet, you can only use it with a merchant who receives payment through that app.

8. USSD

Unstructured Supplementary Service Data is a free option for those who do not own a smartphone or tablet. It works offline unlike other digital payment services. It is a type of mobile banking and you need to dial * 99 # to use the service. The service is similar to the

IMPS service and uses MMID with the phone number or IFSC code with the account number to make the operation a success.

9. ECS

ECS stands for Electronic Clearance Service. It is an easy way to make bulk payments, especially on your services, to pay equal monthly installments, and for financial institutions to issue payments such as pensions, salaries, or interest rates. ECS can be used for both debit and credit services. Your bank must be authorized to make withdrawals or periodic loans. It is a safe bet as instructions can be given about the maximum amount of deductions, the duration of the mandate, or the purpose of the transaction.

10. QR codes

QR codes are an extension of mobile wallet payment services. All you have to do is scan the merchant service code to complete your transaction. This will require a smart device with a camera and a scanner. Digital communication is a quick and hassle-free way.

Challenges in Making India a cashless economy

Most people are outside of the Net Banking industry such as using credit or debit cards, mobile phone trading, and using the Internet to pay off debts, which they cannot rely on to reduce costs. Second, about 90% of the workforce, which produces about half of the country's gross domestic product, works in rural areas, which will not be easy for the industry to make money. There is a common sense of currency trading in India. Retailers prefer not to keep records to avoid taxes and cash payments being right for consumers. Although cashless sales have increased in recent years, real change will depend on several factors such as awareness, technological advancement, and government intervention. For example, a wallet has seen huge withdrawals, and large numbers of Indians can move from cash to mobile wallets. The availability and quality of the communication network will play an important role. Even in big cities, people have difficulty paying electronically because of poor network coverage. Service providers will continue to need to invest in technology to improve security and simplification of operations. People will change only if it is easy, secure, and safe to do low-paying jobs. The government will also have to play its role. It will be necessary to find ways to encourage non-financial transactions and not to encourage payments. Difficulty in changing people's attitudes and attitudes by switching to digital payments. India is the largest small retailer. They do not have enough resources to invest in electronic payment infrastructure

CONCLUSION:

The study concludes that India has a long way to go for becoming a cashless economy. People are still lacking confidence and trust when using digital methods of payment. To make India a digital economy significant developments are needed in the infrastructure sector to achieve the long awaiting dream of digital India. At the same time, India's low-income future is promised as the people's response to this government's initiative and its support is a clear indication that a change in government is likely to succeed. The Prime Minister's move to promote digital payments will strongly support the country's ongoing cash-generating efforts to resolve digital payments. This will not only help millions of Indians to overcome the difficulties of spending money but will also serve as an important step in moving India forward as a truly cashless economy. India hopes to establish a cleaner and more transparent digital economy that will lead to better foreign investment, boost economic growth, and stimulate the country to the next.

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TRANSFORMING INDIA AS CASHLESS ECONOMY**Dr. B. Kanammai**Associate Professor, School of Commerce, KPR College of Arts Science and Research,
Avinashi Road, Arasur, Coimbatore**ABSTRACT**

To make India a digitalised frugality, during the Union Budget 2019-20, the Finance Minister had stated that 2% tax deducted at source will be assessed on cash withdrawals that exceed Rs.1 crore in a year from the bank account to weaken the routine business payments through cash deals. The government had also stated that the businesses with an periodic development of over Rs.50 crores can offer low-cost digital modes of payments and no charges or Merchant Discount Rate will be exacted on them or their habitue. This is a noteworthy move by the government of India to incentivize people to acclimatize to the arising cashless frugality.

Converting the cash-dependent India into a cashless frugality is experimenting to a great challenge for the Indian government given the size of the informal sector within the Indian frugality. It is estimated that nearly 90% of all deals in the Indian frugality is dependent on cash. This is due to the large informal sector that employs 90% of the pool. India cannot come cashless unless this mammoth sector adapts to the digital payments. Incentivizing the people alone is not sufficient. The government needs to develop the supporting architectures and technologies for India to come a cashless frugality while also furnishing mindfulness to its people.

Conventionally, India has been a cash based frugality. Government's stride to arrest all tainted money, tacit assets and recent Covid pandemic has made demand for contactless payments and improved the cashless transactions. The true path for the digitalised frugality was laid down in 2016 by the execution of demonetisation.

A real digitalised society is immediate and imminent. Various countries such as Singapore, Hongkong, Sweden had initiated the journey quickly. However, most of these quick initiatives were pointed around plastic money that appears in various forms namely debit and credit cards, prepaid cards, and store cards. The focus was to increase the money transactions through digital means and reduce or reject the flow of hard cash in the economy.

Key Words: frugality, habitue, acclimatize, Incentivizing, digital

INTRODUCTION

The former issuers of coins in the world are the Ancient Indians along with Chinese and Lydians from the Middle East. The earlier Indian coins were minted in the 6th Century BC, which is adjacent to 3,000 years ago. A period of thousand years that have turned since currency first came into use, the way Indians use money has underwent various conversions. A year of demonetization has shown how there has been a forcing towards a digital economy, but the affection for cash refuses to fade and India's digitalised frugality has yet to be fully realized.

MoneyTransfers.com analyzed the latest data from YouGov, to discover which countries in the world would most be in favor of a cashless society and found that India is the country most in favor of a cashless society as 79% of Indians believe going cashless would have a positive impact on their country. Malaysia (65%), UAE (63%), and Indonesia (63%) are among the other countries where over 60% of citizens would welcome their respective countries transitioning to just electronic payments. Interestingly, just 24% of Americans think going entirely cash-free would be a good thing for their country.

India's cashless revolution

The Covid-19 pandemic fueled a massive shift towards moneyless transactions in India fine tuned with the prime minister's vision of a Digitalised India. The vision got a big boost in the field of money transactions with the government's demonetization moved four years back. Later on there has been a gradual increase in tools and solutions available in the e-payments sectors. The Indian consumer has the choice of e-wallets, United Payments Interface (UPI) systems, Unstructured Supplementary Service Data (USSD) services, and more, to transact financially online.

According to the National Payments Corporation of India (NPCI) data, payments on UPI in June 2020 crossed an all-time high of 1.34 billion in terms of volume with sales transactions worth nearly Rs 2.62 lakh crore. MobiKwik, an online UPI application earned around six million, new users, during the lockdown in April and May 2020.

India is the first country using mobile, with hundreds of thousands of fresh users accessing to the internet every month. Recently estimated at 574 million, the number of monthly based active internet users has increased to 24% comparing to that of 2019, indicating an overall penetration of 41% last year., according to the ICUBETM report. This allows banks to provide net-banking and mobile-banking facilities to customers.

After demonetization, even traditional banks insisted their own customers to make payments digitally from their own respective bank accounts. As the natural step starts from here, other players started to encourage cashless transactions for individuals and businesses alike.

In fact India undoubtedly has the most advanced real-time payments system globally, and pre-pandemic numbers exhibit the exponential growth. Findings from ACI's global report, "Prime Time for Real-Time," indicate that real-time payments in India will grow at 23.4 percent annually for the next five years as it seeks to lead the world in overall real-time payments volumes. At the same time, transaction volume is set to grow from 15.3 billion (present-day) to 52.8 billion.



With a combination of centrally driven initiatives, emerging payment instruments such as UPI, prepaid cards, NCMC mobility cards, Bharat QR code, Fastag, and more, consumers are interested to follow comfortable alternatives for paying digitally. Although consumer expending all over the industries namely travel, fuel, retail, and entertainment took an increase in the last few months, a more cautious lifestyle – attracted by the government's call to retain indoors and see a more "cashless" way of life – led many new users and inexperienced internet users to

accept digital payments, including for utility bill payments, mobile recharge, grocery, pharmacy, and other essentials.

Fintech to the rescue

Reports are highlighting that these days, a lot of the fintech players are working with neighbourhood grocery stores, where merchants can send an SMS with a UPI payment link to customers, who can opt for deliveries with the added flexibility to pay for their purchases from the comfort of their homes.

The recent announcement of WhatsApp Pay collaboration with Jio has the potential to revolutionize the payments space as purchasing through WhatsApp chat will be simple and a key driver for customers to make in-app transactions. Payment innovations, alliances, and partnerships like these will enable the larger ecosystem while helping to respond to new challenges we face.

The Indian government's persistent desire to make its population to become cashless by all ways and means unfortunately has a particularly adverse effect on those that already have very little to their name: the poor and countryside populations. Indeed, as stated by a private bank executive requesting to speak on condition of anonymity, "The government and the RBI need to realise that cash rules and so people need ATMs and bank branches, and they can't wish cash away only because they want to. Therefore, these things need to be carefully planned to avoid negative impact on the industry."

India just recently get up from a cash crisis after rumours of bank closures made people to rush to store their earnings away. It now happens that same scenario is about to flash for a new set of reasons. According to Quartz, "adjusting all the 200,000-odd ATMs in India to the new notes will take around a year and cost over Rs100 crore (\$14.5 million)" in a country where ATM access is already scarce, equal to one cash machine per 5,500 Indians compared to Canada where that number equals 545: this could mean to beginning of yet another crisis.

By numerous measures, India is well on its way to become a digitalised advanced country. Lured by the reduced cost and increased availability of smartphones and high-speed connectivity, India was the world's largest and fastest-growing bases of digital consumers and is digitizing faster than many mature and emerging economies.

India had 560 million internet subscribers in September 2018, second only to China. Digital services are growing in parallel. Indians download more apps—12.3 billion in 2018—than any country except China and spend more time on social media—an average of 17 hours a week—than social media users in China and the United States. The share of Indian adults with at least one digital financial account has more than doubled since 2011, to 80 percent, thanks in large part to the government's mass financial-inclusion program, Jan-Dhan Yojana.

To put this digital growth in context, we analyzed 17 mature and emerging economies across 30 dimensions of digital adoption since 2014 and found that India is digitizing faster than all but one other country in the study, Indonesia. Our Country Digital Adoption Index covers three elements: digital foundation (cost, speed, and reliability of internet service); digital reach (number of mobile devices, app downloads, and data consumption), and digital value, (how much consumers engage online by chatting, tweeting, shopping, or streaming). India's score rose by 90 percent since 2014. In absolute terms, its score is low—32 on a scale of 100—so there remains ample room to grow.

Public- and private-sector actions have driven digital growth so far. The public sector has been a strong catalyst for India's rapid digitization. The government's efforts to ramp up Aadhaar, the

national biometric digital identity program, has played a major role. Aadhaar has enrolled 1.2 billion people since it was introduced in 2009, making it the single largest digital ID program in the world, hastening the spread of other digital services. For example, almost 870 million bank accounts were linked to Aadhaar by February 2018, compared with 399 million in April 2017 and 56 million in January 2014. Likewise, the Goods and Services Tax Network, established in 2013, brings all transactions of about 10.3 million indirect tax-paying businesses onto one digital platform, creating a powerful incentive for businesses to digitize their operations.

At the same time, private sector innovation has helped bring internet-enabled services to millions of consumers and made online usage more accessible. For example, Reliance Jio's strategy of combo virtually free smartphones with mobile-service subscriptions has driven innovation and competitive pricing. Data costs have drop down by more than 95 percent since 2013 and fixed-line download speeds quadrupled between 2014 and 2017. As a result, mobile data consumption per user grew by 152 percent annually—more than twice the rates in the United States and China.

Global and local digital businesses have given importance to India and bringing services for its own consumers and different operating conditions. Media companies are making content available in India's 22 official languages. And by tailoring its mobile payments and commerce platform to India's market, Alibaba-backed Paytm has registered more than 100 million electronic "Know Your Customer"-compliant mobile wallet users and nine million merchants.

The tremendous growth helps India's poorer states to narrow the digital gap with wealthier states. poor-income states like Uttar Pradesh and Jharkhand are broadening internet facilities namely base tower stations and increasing the penetration of internet services to new customers faster than wealthier states. Uttar Pradesh alone added close to 36 million internet subscribers between 2014 and 2018. Ordinary Indians in many parts of the country - including small towns and rural areas - can now read the news online, order food delivery via a phone app, video chat with friends (Indians log 50 million video-calling minutes a day on WhatsApp), shop at a online retailer, send money to a family member using their phone, or watch a movie streamed to a handheld device.

Despite these advances, India has plenty of room to grow. Only about 40 percent of the populace has an internet subscription. While many people have digital bank accounts, 90 percent of all retail transactions in India, by volume, are still made with cash. E-commerce revenue is growing by more than 25 to 30 percent per year, yet only 5 percent of trade in India is done online, compared with 15 percent in China in 2015. Looking ahead, India's digital consumers are poised for robust growth.

More than 600 large and small companies in India to gauge the level of digitization in various sectors as well as the underlying traits, activities, and mind-sets that drive digitization at the firm level. Based on each company's answers to score its level of digitization and then ranked them in the MGI India Firm Digitization Index. Companies in the top quartile, which characterized as digital leaders, had an average score of 58.2 (relative to a maximum potential value of 100), while those in the bottom quartile, the digital laggards, averaged 33.2. The median score was 46.2. A higher score indicates that the company is using digital in its day-to-day operations more extensively (implementing CRM systems, accepting digital modes of payments, etc.) and in a more organized manner (having separate analytics team, centralized digital organization, etc.) than the ones with lower scores. Our survey found that, on average, leaders outscored others by 70 percent on strategy, 40 percent on organization, and 31 percent on capabilities.

Differences within sectors are higher than those across sectors. While some sectors have more digital leaders than others, top-quartile companies are found in all sectors—even those considered resistant to technology, such as farming or construction. Conversely, sectors with more leaders, such as information and communication technology, still have companies in the bottom quartile.

However, India's digital leaders generally do share common traits in terms of the following areas:

Digital Strategy: Leaders are 30 percent more likely than bottom-quartile companies to fully integrate digital and global strategies and 2.3 times more likely to sell on e-commerce platforms. Leaders are 3.5 times more likely to say digital disruptions led them to change core operations and 40 percent more likely to say digital is a top priority for investment.

Digital Organization: Leaders are 14.5 times more likely than bottom-quartile companies to centralize digital management, and five times more likely to have a stand-alone, properly staffed analytics team. Top-quartile firms are also 70 percent more likely than bottom-quartile firms to say their CEO is “supportive and directly engaged” in digital initiatives.

Digital Capabilities: Leaders are 2.6 times more likely than bottom-quartile firms to use digital tools to manage customer relationships and 2.5 times more likely to use digital tools to coordinate the management of their core business operations.

The gap between digital leaders and other firms is not insurmountable. In some cases, even when the gap is large, lagging companies may be able to begin closing it by digitizing in small, relatively simple ways. Social media marketing is a good example. While bottom-quartile firms are much less likely than leaders to use social media, e-commerce, or listing platforms, each of these channels is cheap and easily accessible and there is little to stop a business owner with a high-speed internet connection and a smartphone from taking advantage of them.

For now, large companies (defined in our survey as having revenue greater than 5 billion rupees, or about \$70 million) are more likely to have the financial resources and expertise needed to invest in some advanced technologies, such as artificial intelligence and the Internet of Things. But growing high-speed internet connectivity and falling data costs may soon make some of these technologies available to small-business owners and even sole proprietors.

Indeed, our survey found small businesses are ahead of big companies in terms of accepting digital payments: 94 percent accept payment by debit or credit card, compared with only 79 percent of big companies; for digital wallets the difference was 78 percent versus 49 percent.

Our survey found 70 percent of small businesses use their own websites to reach clients, compared with 82 percent of big companies. Small businesses are less likely than big companies to buy display ads on the web (37 percent versus 66 percent), but they are ahead of big companies in connecting with customers via social media, and more likely to use search-engine optimization. More than 60 percent of the small firms surveyed use LinkedIn to hire talent, and about half believe that most of their employees today need basic digital skills. While only 51 percent of smaller firms said they “extensively” sell goods and services on their websites (compared with 73 percent of big businesses), small businesses use e-commerce platforms and other digital sales channels just as much as large firms and are equally likely to receive orders through digital means like WhatsApp.

Companies that innovate and digitize rapidly will be better placed to take advantage of India's large, connected market, which could include up to 700 million smartphone users and 840

million internet users by 2023. In the context of rapidly improving technology and falling data costs, technology-enabled business models could become pervasive over the next decade. That will likely create significant economic value.

We consider economic impact in three broad areas. First are core digital sectors, such as IT-BPM, digital communications, and electronics manufacturing. Second are newly digitizing sectors such as financial services, agriculture, healthcare, logistics, and manufacturing, which are not traditionally considered part of India's digital economy but have the potential to rapidly adopt new technologies. Third are government services and labor markets, which can use digital technologies in new ways. D

India's core digital sectors accounted for about \$170 billion -or 7 percent - of GDP in 2017–18. This comprises value added from core digital sectors: \$115 billion from IT-BPM, \$45 billion from digital communications, and \$10 billion from electronics manufacturing. Based on industry revenue, cost structures, and growth trends, we estimate these sectors could grow significantly faster than GDP: value-added contribution in 2025 could range from \$205 billion to \$250 billion for IT-BPM, from \$100 billion to \$130 billion for electronics manufacturing, and \$50 billion to \$55 billion for digital communications. The total, between \$355 billion and \$435 billion, may account for 8 to 10 percent of India's 2025 GDP.

Newly digitizing sectors are already creating added value

Alongside these already digitized sectors, India stands to create more value if it can nurture new and emerging digital ecosystems in sectors such as agriculture, education, energy, financial services, healthcare, and logistics. The benefits of digital applications in each of these newly digitizing sectors are already visible. For example, in logistics, tracking vehicles in real time has enabled shippers to reduce fleet turnaround time by 50 to 70 percent. Similarly, digitized supply chains help companies reduce their inventory by up to 20 percent. Farmers can cut the cost of growing crops by 15 to 20 percent using data on soil conditions that enables them to minimize the use of fertilizers and other inputs.

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CHALLENGES OF DIGITAL ECONOMY REGARDING PROS & CONS FOR THE PEOPLE

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ABSTRACT

In this article, the situation of economy is discussed regarding digitalization era. In which, it is discussed that what benefits of digital economy to the human beings of latest era. This article presents the pros and cons of the digitalization regarding business and transaction structure. In this, the different advantages of digitalization of economy and the disadvantages are its opposite effects are also discussed briefly. Furthermore, in this it is discussed that how many new sectors for jobs and unemployed persons have been created by using internet technology. And the due to digital technology, now distances are shortened and now the people are connected with another but the privacy and the hacking of data are become new ways and new challenges. But for record, it became easy to librarianships to keep record and similarly financial transactions have been easy. Now there is no need to keep large amount of money or bags of money to businessmen while they are travelling from one place to the other. Similarly, for women and the persons who are handicapped they can do their work or business while sitting at home. They can earn money for their livelihood without any kind of problems. In short, if any kinds of problems and issues are emerged, from these problems and issues, it may be observed that mostly things are because of carelessness and wrong use of digital technology and deception involved directly or indirectly, otherwise transparency and comforts of digitalization is providing people corruption free atmosphere.

Key Words: Traditional Economy; Digital economy; computer technology; jobs; new chances of earnings; challenges.

INTRODUCTION

Digital economy which started from America & Britain, it has reached directly or indirectly in all the countries of the world without considering the status of countries whether these are developed or developing or under developed. Presently, President of United States (former) Trump and Bill Gates are those personalities, which are playing its role regarding informational and digital technology. No doubt, it is considered that digital economy of the world still is in its stage of infancy in most of the global world. This is because as still significant amount of economic growth & income opportunities for its all people are still away from them. But no doubt, in saying that every coming time gives witness about new digital techniques in the world.

Objectives of Research

Some areas under:

- 1-To know about digital technology and its uses;
- 2-To differentiate digital Economy from traditional economy;
- 3-To discuss advantages and disadvantages of digital technology;
- 4-To know about the societal drawbacks of the digital technology;
- 5-To know about the individual drawbacks of the Digitalization;
- 6-To know the benefits of digital Economy;

7-To discuss the impacts of digital technology on people and the economy;

Limitation of Research

This research is confined to uses and abuses of digital economy rather than discussing the historical background and its typology.

Discussion

Before discussing it is considered well to define the word digital economy to give further detail so, it defined as under:

Digital Economy

Digital economy is that economy which refers to an economy based on digital and computing techniques. (Editor, 2020) Now, all the personal and organizational things are transformed from traditional to digital ways. So, in economy effects of digital technology might be seen in the modern world. And it is crucial for survival of modern era. Furthermore, it is mandatory for a nation or country who wants to lead the nations, for her, it is mandatory he should adopt such measures by which, inhabitants become expert in digitalization and promote the status and standard of the living of the people.

Transition to digital economy is in progress. From media, cars, health, agriculture and industry, the whole economy is now depends upon new ways and techniques, so new rules are required for new technologies. (Niclos Colin & Augustine Lardier, 2015) The fact about the digitalization is that still there are many sectors which are behind regarding informational technology. The need of time demands to transform but it is not easy for developing or poor countries because of financial problems. As in developing countries, still there are such people living who have food problems and lack of basic needs. Therefore, after fulfilling their basic needs, they can think about other things.

Modern Trends in Innovations

The role of human capital in the formation of digital economy has been revealed with rational attitudes.(R. M. Ustaev, V. N. Parakhina. c & et.al, 2019) In the developed world, and by the economists, it is considered that human capital is that thing which has a greater rate of return than any other investment of the world. This is why developed countries are spending their wealth and resources on the human because of these they are developed and because of development they are investing money on human capital. And in result, the experts of developed countries are preparing new things and innovations by which the developed countries are not only leading the world wide organizations but they are able to impose restriction on the countries which do not follow their guidelines. It is necessary that developing countries need not to copy the developed world but they have to adopt policies of the developed according to their available resources and infrastructure.

The fact is that in the digital economy, new trends of business and earnings are becoming popular. No one can sustain in life properly without knowing these trends of digital. (Monica Dr. 2022) This is why, everything in the world is changing and is changeable and will be change. So, only those will survive who will walk with the requirements of time. Otherwise, they will be considered as backward in the rest world. The matter is to adopt latest techniques and to adopt rigid attitude regarding modern techniques but the attitude must be adopted according to the requirement of time and to keep away from the opposite factors and impacts if they want to survive in a successful life. Modern techniques will have to adopt but living in their own culture and civilization within available resources.

Now, it is better to discuss the benefits of digital technology on the economy. These are presented in a very brief manner so that discussed might not cross the limits of topic of discussion.

Benefits of Digital Economy: The benefits of digital economy are as under:

- a. **Improves public service;** It is fact that due to digital techniques, now services in the different sectors have been improved. Now in sitting home or their offices, one can get information about the other sectors of the country. Now in the departments, there is no need to buy almiras or cupboards for keep record in registers. But now, in a single computer you may keep record and it will be accessible to those who are keeping records with password.
- b. **Transparency;** Now the corruption and wrong doings and wrong things can be easily pointed out. Now the process of transparency is known to everyone through the usage of digital technology.
- c. **Rise in e-commerce;** Rather than traditional process, in digital world, e-commerce has been emerged and became popular in the countries of the world.
- d. **Expands business opportunities;** Through the digital and informational technology, business opportunities have been increased, now people can do work remaining at homes.
- e. **Digital delivery of goods and services;** Through the information technology, now conversation and communication is just on the one click away, you may contact to everyone without considering the territory but you must be attached with internet services, you may talk send their messages through written and the spoken words while you may send your message in other language also through Google translator.
- f. **Contribute to economic growth;** Due to digital and information technology, new sectors of economy are developing and new jobs and new kind of works are being popular in the economy. This is enhancing the individual life style and incomes also. Collectively, the standard of living is also being improved. In the present era, now whether the country is developing or developed, one can using new types of techniques and creating new types of jobs in private and public sectors.
- g. **Creates new job opportunities.** In informational technology now, it has become easier to increase their incomes by doing works while remaining at home. Now women and those have just knowledge to use mobile and composing or posting other videos on social media or on other apps or software's, these types of works are done without paying any kind of taxes as their income is not mentioned and their source is not vivid or declared. (Editor, 2020)

Advantages & Disadvantages (Pros & Cons) of Digitalization Techniques

Advantages are as under:

1. Best Communication;
2. Better education;
3. Benefits to everyone;
4. Easier life;
5. Different jobs;
6. Advancement & improvement;

7. Saves time;
8. Reduced costs for business;
9. Benefits for developing countries;
10. Lower barriers to economy;
11. Greater flexibility.

Disadvantages are as under:

1. Problems to purchase for poor;
2. Devices rely on electricity;
3. Radiation harms to health;
4. Can be used in a wrong ways;
5. Reliance on technology;
6. Monopoly power to tech giants;
7. Less community;
8. Addictive nature of technology;
9. Privacy issues;
10. Disruption to traditional economy;
11. By passing the labor laws. (Editor, 2021)

Besides, many times of disadvantages, no one, deny from the usefulness of modern digital technology that has changed human life. By which, now, persons can do transactions and view his record while sitting in any place where internet and modern technology and equipment to use this technology is available. If there are cons and disadvantages, these are because of wrong use of technology or due to carelessness about their privacy or any domestic problems that are because become addictive in using the modern techniques. So, it is the need of time that individual has to take his step consciously and speak the words carefully, may his speaking words create problems in future or these may be used against him when some is recording his voice or capturing videos when he was going prohibited place or any other place by which, he has to face problems on the base of this record. So, now the situation has become critical and sensitive because on base of record of digital technology, now cyber crimes wing can takes action.

The challenges facing the state in the new digital economy in the state are as under:

- a. **New unseen customers;** In the digital transactions or buying and selling techniques, it is obvious that no one have seen the buyers and buyers have not known to the sellers from whom, they buying the selling. In such transaction, hundred percent depends upon the purity and honesty for long-term business.
- b. **New technological techniques;** In internet technology & digital technology, such things are being done that are not possible even un-imaginable in the past periods. So, now that business will be become familiar and popular who walk with this technology or adopt these modern equipments.

- c. **New unseen sellers in the market;** Due to unfamiliarity about the businessmen and sellers, now only thing that will encourage the buyers to their products is the transparency and quality otherwise or besides opposite than mentioned qualities, one can buy only one time to unknown buyers, if they find it faulty or defective, next time, buyers will avoid from this sellers and his things from purchasing.
- d. **New global threats;** In the latest era, only those businesses are popular or earning who are producing goods with the consumers' demands and requirements? Similarly those will adopt changing with the passage of time there business will run in the time of future too.
- e. **New Business techniques;** Due to informational technology, now the challenges have to face in every fields of life and different sectors of the societies also. Therefore, rulings and conditions are being imposed regarding internet and mobile using during work places to avoid from issues and minimize the problems.
- f. **New atmosphere of competition;** In the present era, due to increase in populations and due to competitions, every sector and department and every business man tries to maximize prophet by increasing sales and attracting consumers and want to have supremacy over the rivals of his business. Similarly, according to individual point of view, now everyone consumer wants to maximize utility with paying minimum cost or price of goods. Therefore, competitive atmosphere will have to face for success in the digital life.
- g. **New rules & regulations;** Now, the traditional record and traditional techniques in every sectors are considered just post dated cheque. If anyone want success and want to sustain in the modern world, then new rules and regulation will have to follow for survival in the digital era.
- h. **New types of frauds and crimes.** In the digital era, the structure of crimes and situations of crimes have been modified than tradition era crimes. Therefore, now secrecy becomes mandatory and if someone has not keep secret his personal information also then there are chances of loss not in future only but in near present time. So, by talking and keeping things secret, one has to keep his codes and passwords secrets if wants safety and solidarity. (Josep Musters, 2015)

Comparison of Traditional Economy versus Digital Economy

1-In the traditional Economy, factories are established while in the digital economy data centers are established.

2-In the traditional economy, street shops are established while in the digital economy internet websites are prepared.

3- In the traditional economy, newspaper ads are used for publicity while in the digital economy; social media is used for publicity.

4-In the traditional economy, goods are shifted from one place to another through transport and vehicles but in the digital economy, sales are done through electronic devices.

5- In the traditional economy banks are used for transactions while in the digital economy, digital banking is made through mobile banking while sitting at homes.

6-In the traditional economy, schools and textbooks are basic sources while in the digital economy, electronic learning and electronic books are its basic sources.

7-In traditional economy, one has to remain commute from nine to five at evening while in digital economy, no need to go out from its homes.

8- In the traditional economy, real estate has to be set up while in the digital economy domain ownerships are sufficient.

9- In the traditional economy, cash is a compulsory thing for purchasing but in the digital economy, there is no need to keep cash physically. Credit card is sufficient for purchasing.

10- In the traditional economy, labor and capital are compulsory things but in the digital economy, automation and all is sufficient.

11- In the traditional economy, construction is done but in the digital economy, websites are developed.

12- Traditional economy may be considered analog while digital economy may be considered.

13-Traditional economy centralized while digital economy is decentralized.

14-In the traditional economy, relations are focused but in the digital economy, no need for relations, even unknown transactions are done.

15-In the traditional economy, at local level transactions are done while in the digital economy globally transactions are done.

16- Traditional economy may be considered as industrial while digital economy is considered as informational.

17-Traditional economy is asset based while digital economy is derivative based.

Digital Economy is useful but technology in education is not useful at all

Some unfavorable points regarding technology in education are as under:

1-when children are using the internet on mobile or on computers, monitoring is required, otherwise there will be problems for them.

2-Due to the internet and technology in education, children's social activities become less as they are stuck on digital games all the time.

3-Due to use of technology, children's health problems and eyesight problems have emerged.

4-Due to digital technology, sometimes, uncontrolled, unnecessary and infiltrated information is posted on social media. Due to this, many people become double minded regarding their knowledge whether this is true or fake.

5-Due to the use of technology, now students want to remain alone.

6- In the digital era, students' reading habits have decreased. Now they want to read online material without considering its authenticity and validity.

7- In education, use of technology is time consuming and distracting.

8-Use of Technology in education is very expensive especially in developing countries and for the poor people.

9- Technology is not accessible to everyone in developing countries where people are still deprived of food and pure drinking water in many villages. .

Opportunities of Digital Economy: These are as under:

I. Digitalization of the countries of the world: Now in the world, there are such countries that have made mutual programs regarding digital information and cooperation in different

sectors. Now through digital technology, one country can help the other country through digital equipments.

- II. Digitalization of work:** No doubt, in present era, no one can remain unfamiliar and ignored from digital technology. But in the coming days only those will survive their business and jobs that will have ability to use modern techniques and equipments otherwise there will be problem for their work as well as for the country too. So it is necessary that such institutions and training centers must be established in which digital courses and training must be provide. This thing will increase the capability of people and in this way unemployment problem will be solved.
- III. Further process in the digital jobs:** In the next days, it is expected that new jobs will not be as are present era as due to latest technologies, there will be new techniques required for the different sectors of the country. Similarly, to sustain in the world of digital technology, having such technology and having the knowledge regarding digital is mandatory otherwise, unfamiliar countries will not develop as well as these cannot defend their countries in a proper and suitable way.

Concluding Remarks

In nutshell, it may be stated that there are many benefits of digital economy for human being. But the truth is that now the privacy of developing countries is not be considered safe as the developing countries are using the technology and internet of developed world, so they may know and copy of secret information of developing countries which does not remain secret because through the internet and digital technology, they have access to every individual who is using internet or have online record in the country. But the fact is that now due to digital technology, now business atmosphere has changed and due to internet and digital technology, there are new jobs and ways of earning are being adopted without thinking its authenticity and validity. Now due to digital technology, you can buy everything you want and similarly you can sell everything through digital technology. You do not need to go banks while you can send money through online sources. But the problem is that there should be new ruling for the digital frauds regarding economy or other online services. Similarly fake things and such things that disturb person's privacy and personal data or hacking, all these must be banned or on doing illegal action or fake identity using must be banned through financial penalty or punishment so that fair dealings and authenticity of digitalization might be enhanced. Furthermore, such measures must be adopted so that no one could use fake identity because mostly criminals or wrong doers threat others or deceive other or hijack or hacks other data or account without showing their original identity to avoid from laws, rules and regulations and from the people's eyes. Therefore, the persons who are using fake id or wrong ids must be imposed penalty for better internet atmosphere. In short, it may be stated, in near future, it will be implemented more transparency regarding online and internet issues. So, the hopeful situation is that very next days will be brighter regarding digital information than present era.

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ABOUT THE BOOK

This book introduces to an assembling of real life chapters on impact of digitalization on Economy all across the world. Digitalization- mass adoption of connected digital services by consumers, enterprises and Government's has emerged in recent years as a key economic driver that accelerated growth and facilitated job creation. In the current environment of a sluggish global economy, fast-paced technological revolution has resulted in flourishing of computerized economy, thereby assisting the policymakers to spur economic growth and employment. The different chapters of this book emphasize on various aspects of digitalization that has a primary and secondary impact on Indian Economy. The chapters of the book are easily accessible and contribute insightful information for researcher's, academicians and scholars.



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