ISSN No. (Online): 2581-7515

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Volume 3, Issue 2, Jul-Dec 2020

CONTENTS

RESEARCH PAPERS

FEATURED ARTICLES

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Innovation in Indian Banking Sector

Jatinder Kaur*

Abstract: ***In an economylike India where the population has reached to 1200 million and out of this 500 millionare dealing with banksin every single day, in such country there was an urgent need to ensure financial inclusion and greater transparency in banking sector and this need was fulfilled by adopting technologyand innovation in working system of banks . In order to bring this innovation theIndian banking sector is going through a vital change from all its verticals and this transformation not only leads to drastic change in bank's approach towards its customers but also lead to vigorously information and technological change of banking products too.As far as the evolution of innovation in Indian banking sector is consider it can be track from 1990s with the introduction of LPG policy in India and the adoption of this policy entirely changed the way of banking. Beginning of 21st century has significantly marked a growth in Indian banking system.Innovation in banking sector got a boost with the generation of private and foreign banks which lead to activation of technological sophistication in every banking transaction.***

Technology innovation brought fundamental shift in the functioning of banks in India both internally and externally as it enables banks to provide better customer services. After the adoption of Technology by Indian banking sector India emerges as one of the youngest but most powerful country of the global village and boost up the FDI from all parts of words to India.Innovation in banking also leads toRe-Engineering of Business Process and tackle issues like, how to deliver best products and services to customers, how to design an appropriate organizational model to fully capture the benefits of technology, what all steps can be taken to change the business process, moreover how to use technology for deriving economies of scale, what all means are available to attain cost efficiencies and which all efforts are needed to create a customer - centric operation model. The key advantages of adopting Technology resolutions in the fields of banking arefaster, accurate andefficient analysis data and information, speed up the decision makingprocess and one of the most recently example of this IT innovation in banking is ATMs.as these IT innovationhas transformed the outline of front offices in bank branches now customersare no longer required to visit branches for their day to day banking dealings like cash deposits, withdrawals, cheque collection, balance enquiry etc, moreover this has also led tocutback thebranch banking transaction costs nearly by ten times.significance ofIT not only end here itplayed a vital role in strengthening the banking networks as one of the accurate example of it can be seeing that banks coming together to share ATM Networks. The diverse innovations thattook place in Indian banking sector are ECS, RTGS, EFT, NEFT, ATM, Retail banking, Debit and Credit cards, free advisory services, online banking, mobile banking and many more value added product and servers.

Keywords: Innovative Banking, Technological Changes, Indian Banking sector

1. INTRODUCTION

Indian Banking has been through a long expedition as it has witnessed a number of changes.The financial expansion in Indian banking industry occurred after the nationalisation of 14 major scheduled banks in July, 1969 and 6 banks in April, 1980. In the 1990s, the Indianbanking sector sited greater emphasis on technology and innovation. At present Indian banking sector is most capitalised and well-regulatedsector.currently there are 27 public sector banks in India out of which 20 are nationalised banks and 6 are SBI and its associate banks, and remaining two banks are BharatiyaMahila Bank, which are categorised as other public sector banks, there are25 private sector banks, 43 foreign banks, 56 regional rural banks, 1, 589 urban cooperative banks and 93, 550 rural cooperative banks. Central bank granted approval to 11 payments banks and 10 small finance banks in FY 2015-16. **According to AEP "Banking Sector in Emerging Economies" reportIndia at fourth ranks in terms of income ratios and at sixth rank in its cost ratios and profitability ratios.** The future of Indian bank looks not only exhilarating but also transformative. India's banking sector could become the **fifth largest banking sector in the world by 2020** and the **third largest by 2025**. In future, technology will make the engagement with banks more multi-dimensional that will prolong to develop and enlarge banking services. As in this of era technology and innovation therefore Banks are getting advanced so that they can provide better quality of services at greater speed to their users. Internet banking and mobile banking is one of the most prominent examples of use of technology in Indian banking sector at a rapidly rate in order to make banking transaction convenient and easily accessible for all customers even though they are at different places. The innovation Indian banks has not only stopped at this only it also includes some new concept also which came into existing like multi- channels, ATMs, credit cards, debit cards, telephone/mobile banking, internet banking, call centres, etc.

**Assistant Professor, Department of Management Studies, B.M Institute of Engineering & Technology, Sonepat, Haryana, India, jeetu.jazz@gmail.com*

After all this innovation reform the Indian banking segment is redefined from a mere financial mediator to various financial service that to under one roof acting like a financial hypermarket. But all this technological innovation created an intense competition among the banks and has redefined the concept of the entire banking system. The banks are searching for new ways not only to attract but also to retain the customers and gain competitive advantage over their competitors.

2. FINANCIAL INNOVATION

Financial innovation act as a key of survival for banks in current banking environment. The importance of financial innovation is widely recognized. Numerous leading scholars, including Miller (1986) and Merton (1992), have highlighted the significance of products and services in the financial sector. Innovative ideas are visible in diverse industries and that too in different forms. One of the most commonly seen example of innovation is product development that has been used by banks very commonly nowadays. Right from the commencement stage of financial transformation innovations have been playing vital role in curtailing financial exclusions and improving the ways banking services are rendered to people. Financial innovation is one of the most commonly used banking terminologies. These are used in order to describe any change in the scale, scope and delivery of financial services. The freedom given to financial service industry boostup the competition among investment banking and this undoubtedly led to rise in the ability of banks to design new products, develop better process, and implement more effective solution for increasingly complex financial problems. These financial innovations are outcome of number of Government regulations, tax policies, globalization, liberalization, privatization, global integration.In simple words financial innovation is the process bywhich all financial institutions existing in financial markets add value to their existing plain vanilla products in order to satisfy the user needs in best possible manner. According famous definition of John Finnerty, "Financial Innovation involves the design, the development, and the implementation of innovative financial instruments and processes, and the formulation of creative solutions to problems in finance". The listof these various innovations in banking and financial sector are ECS, RTGS, EFT, NEFT, ATM, Retail Banking, Debit & Credit cards, free advisory services, payments of utility bills, fund transfers, internet banking, telephone banking, mobile banking, selling insurance products, issue of free cheque books, travel cheques and many more value added services which reduce the customers efforts in paying cash to different parties. This also created an intense competition among the banks as result this banking sector are trying to redefined the concept of the entire banking system. The banks are looking for new methods to attract and to retain the customers and gain competitive advantage over their competitors. The banks like other business organizations are developing innovative sales techniques and advanced marketing tools to gain supremacy. The main force behind this innovation in banking sector is rapidly changing customer needs and prospect. In this era of internet and speed no Customers want to waste his time while wait in long queues and spend hours in banking transactions. This change in customer attitude act as a catalyst which leads to speedup innovation in banking sector and outcome of this technological innovation like ATMs, Mobile phone and net banking came into existence. With the emergence of universal banking, banks aim of provide all banking product under one room get accomplished.While banks are determined to strengthen customer relationship and move towards 'relationship banking', customers are increasingly moving away from the limitations of traditional branch banking and in the hunt for the convenience form of electronic banking. Information technology and the communications networking systems have revolutionary innovation the working of banks and financial entities all over the world.

3. LITERATURE REVIEW

The following is brief review of literature done by different researchers worldwide in the area of innovation in Indian banking sector.

Merton (1992) in their research gave anew term to innovations done in banking sector i.e. "Financial innovations" and highlighted key advantages of theseinnovations which are related to low cost of capital, reduce financial risks, improve financial intermediation, and lead to customer welfare enhancing.He also focused on how innovation help in improving main functioning ofbanking system i.e. to facilitate the distribution and consumption of economic resources in an uncertain environmentin his research. **Avasthi & Sharma (2000-01)** have emphasiseson technological advancement that has lead to change the face of banking business in their study. The researcher also told about Technology malformed specially regarding the delivery channels of banks in retail banking sector, he also explored the various challenges that banking industry is facing in its initial face. **B. Janki (2002)** research bring into light that how technology is affecting the employee'sproductivity. The research also highlights the desperate need of technological innovation in India particularly in public sector banks in order to improve their operating efficiency and customer services. Therefore technology are done more in area of customer services, develop new products, strengthen risk management etc. the study concludes that technology innovation is the only tool to achieve the goals of sustainable development of an economy. **Arora (2003)** in his research has put focus on the consequence of bank transformation. Technology innovation has a definitive role in facilitating transactions in the banking sector and the impact of this innovation implementation in banking sector has come up with new products and services. **Rishi and Saxena (2004)**

have also given his contribution by doing research on Technological innovations. Study acknowledged that technological innovations in the banking sector in industrialized countries have been shown to increase productivity of banking industry around the world.According to **Merton and Bodie 2005** research financial innovation as a supportive tool inensuring smooth execution and improves the overall efficiency of the system by minimizing cost and reducing risk. It is not wrong to say that financial innovation has been a central vigour for driving the financial system toward greater economic competence. **Mittal, R.K. & Dhingra, S (2006)** studied the role of technology in banking sector. They analyzed investment scenario in technology by Indian banks but this study at sametime put light on the various aspects which was prevailing in banking sector before the introduction of Information Technology Act and also tell about what all problems were faced by banks in Indian banks when technology was very low. Padhy, K.C. 2007research put light on the impact of technology development in the banking system and he also highlights the future of Indian banking sector. His research also put light on the core competencies that today banks are facing and also stated various factors that provide comparative advantages to one bank over other.In nutshell, study reviews that the banking industries itself adopted various innovative schemes for furtherance of their business and to attract and retain more and more customers. **Hua G. (2009)** research mainly investigates the online banking recognition in China by conducting an experiment to investigate whatis user's perception towards online banking, do customer feel ease and secure while doing online financial transaction on bank website. **Jalan, B. (2010)** in his research mainly focused on all the IT evolution that has changed the entire banking industry. Perhaps there is no other sector that has been affected by advances in technology as much as banking & finance sector has. It has the most important factor for dealing with the rising competition & the rapid explosion of financial innovations.

4. OBJECTIVE OF THE STUDY

1. Brief description evolution of Indian banking sector.
2. The purpose of the study is to emphasize the new financial innovations in the Indian banking sector.
3. To study the challenges faced by Indian banks in the changing scenario.

5. RESEARCH METHODOLOGY

The study is done in order to make an estimation of the current position of the Indian Banking sector. The entire paper is based on the secondary sources of data viz. the various websites, academic journals, etc.

6. EVOLUTION OF BANKING IN INDIA

The evolution of Indian banking sector can be divided in 3 Phases. They are as mentioned below:

PHASE I: (EARLY PHASE FROM 1786 TO 1969 OF INDIAN BANKS)

The birth of Indian banking sector can be trace from the year 1786 when first Indian bankname as "General Bank of India"was set up, in thiscontinuation the second bank which came into existence in same year was"Bengal Bank". Later on after the invasion of East India Company in India Bank of Bengal (1806)flourished most rapidly and many new bank came into existence as independent units they were Bank of Bombay (1840) and Bank of Madras (1843) as these banks were as Presidency Banks. In the year 1921 the threebanks were amalgamatedand Imperial Bank of India came into existence and his further started to work as private shareholders banks with mostly Europeans shareholders. Allahabad Bank was the firstbank that was established as absolutely by Indiansin 1865. In 1894 Then Punjab National Bank Ltd. wasset up as 2nd wholly Indian bank with headquarters at Lahore. Between 1885 and 1913 large number of banks were set up namely as Bank of India, Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore. till 1932 the functioning of all these banks were virtually beingregulated by the Imperial Bank of India, which was established in 1921 by merging three Presidency banks.But with increase in number of banks a need of another regulatory body was felt in order to speed up the growth and development of banks all over economy equally as result of this necessary the Reserve Bank of India was established via the RBI Act of 1934 as the banker to the central government. RBI launched its operations from April 1, 1935. Its headquarters were in Kolkata in the beginning, but later on it was shifted to Shahid Bhagat Singh Marg, Mumbai in 1937. Itwas mainly a commercial bank but also served as banker to the government to some extent.The overall regulation of banking in India was vested with the Reserve Bank of India as the Central Banking Authority. But the limitation of 1stphase of banking was that the public of that era had very less confidence in the banks, instead doing saving in banks the Postal department was considered safer for saving.

Phase II: (Nationalization of Indian Banks-up to 1991, prior to Indian banking sector Reforms.) major steps takenby Indian Government after Independence that change picture the entireIndian Banking Sector. The major change in Indian banking sector arrived with nationalization ofthe Imperial Bank of India in 1955. This extensively spread the banking facilities to all rural and semi urban areas. The second phase of change in Indian baking arises when State Bank of India was declared as a chief intermediary of Reserve Bank of India, moreover it started acting as the knobfor Indian banking

transactions of the Union and State Governments all over the country. Later on all 7 subsidiary banks of State Bank of India were nationalized on 19th July, 1959. The last change of second phase of banking sector was nationalization of14 major commercial banks in the country because of efforts of the Prime Minister of India, Mrs. Indira Gandhi. 6 more banks got nationalization in the second phase ofreforms carried out inIndian Banking sector. This all reforms brought 80% of the India banking segment under Government ownership and this lead to increase the public's faith on public sector banks and because of nationalization sustainability of banking system increased to large extend.

Phase III: (Indian Banking System with the advent of Indian Financial and Banking Sector Reforms after 1991)

With the introduction of LPG policy in India in1991, committee was setup in order to properly implement this liberalization policy in all banks the committee was formed under the chairmanship of M.Narasimham and name given to this committee was Narasimham committee. In this phasemany new products and facilities came into existence in the banking sector e and all necessary measures were taken by government in order to provide best services to the customers. As the result of this various financial innovation took place in banking sector and new ways of banking in the form of Mobile banking and internet banking came into existence during this phase. This all changes the entire scenario of Indian banking sector in just 2 decays and made banking services very convenient, speedy, transparent and accurate for customers.

Innovations in Indian Banking Sector The Innovations in the banking sector have been categorized into three broad categories viz.

i. Types of innovative Banking

a. E-Banking
b. Core Banking
c. Corporate Banking
d. Investment Banking
e. Rural Banking
f. NRI Banking
g. Retail Banking

ii. Types of product & services

a. Total branch automation
b. Any branch banking
c. Demat Service
d. Microfinance
e. Plastic money
f. Mobile Banking

iii. Electronic systems

a. ATM
b. RTGS
c. FINACLE

7. TYPES OF INNOVATIVE BANKING

a. E-Banking

Traditional methodsused by banking sector in order to provide services to their customers include physical presence of account holder in branches of banks but after the internet innovation in banking sector e-banking came intouse as the consequences of this the deliveryof traditional banking services sector become convenient and speedy. After the introduction of e-banking to their customers, such as opening accounts, transferring funds and electronic bill payment became very easy and quick. E-banking can be offered in two main methods. In first, a bank with physical offices can also create an online site and offer e-banking services to its customers in addition to the regular channel. Normally, e-banking is provided without charging any extra charges to customers. Therefore more Customers are attracted by the convenience of e-banking through the Internet, and in turn, banks can operate more efficiently when customers perform transactions by themselves rather than going to a branch and dealing with a branch representatives. E-banking services are delivered to customers through the Internet and the web using **Hypertext Markup Language (HTML).**

b. Core Banking

Earlier core banking rotated around basic account management, information regarding customers and account details only. Today's core banking deals in totality and has many features viz. 360 degreecustomer view, new products origination, banking channels, Banking analytics, security control, etc

c. Corporate Banking

That aspect of banking which deals with corporate customers is known as corporate banking. It is the main source of profit for many of the banks; however it is also the source of regular write-downs for loans that have soured. The corporate banking segment deals with a range of clientele viz. small to mid-sized local businesses to large conglomerates with billions in sales and offices across the country, offering products and services like Loans and other credit products, Treasury and cash management services, Equipment lending, Trade finance, etc.

d. Investment Banking

This division of banking is related to the creation of capital for other companies, governments and other entities. They underwrite new debt and equity securities for all types of corporations, aid in the sale of securities, and this also help companies to do mergers and acquisitions, reorganizations and broker trades for both government institutions and private investors. Investment banks also provide guidance to issuers regarding the issue and placement of stock. The Investment banks help corporations, governments and other groups to plan and manage large projects, saving their client time and money by identifying risks associated with the project.

e. Rural banking

Rural Bank can be defined as rural financial institution/ cooperative/ community bank or deposit taking MFI that provides customized financial services to rural communities. It traditionally used to serves the financial needs of the people basically living in rural areas the main aim of developing rural bank was to help rural people to improve their living standard and provide them loan facility for agricultural purpose as large ratio customers in these banks are mainly of farmers or owner of small scale industries. Unlike urban areas banks rural banks was having large number of relatively small and specialized customer. These banks were set up on the recommendations ofNarasimham Working Group during the tenure of Prime Minister Indira Gandhi's government with a view of developing rural are.

f. NRI Banking

This facility is designed in order to serve baking need of NRI which are spread over the globe. the various type of account facilities provided by the NRI banking are NRE (Non Resident External Account) NRO (Non Resident Ordinary Account) FCNR (Foreign Currency Non Resident Account). NRE was formed in 1970 by Government of India in order to provide facilities like remittances, savings, earnings, investments and repatriations to NRIs this account was governed by exchange control regulations stated in FEMA Act.

g. Retail banking

The second name given to the retail bankingis Consumer Banking. As the name suggest these banks offer various services more to individual customersin comparison of than to companies, corporations or other banks. The services offered by these banks are savings and transactional accounts, mortgages, personal loans, debit cards, and credit cards.

8. TYPES OF PRODUCT & SERVICES

a. Total branch automation

The introduction of IT in banks has made banking concept totallyautomatic and this has speeds up the transactions accuracy. Banking automation mainly refers to the reduction of human intervention in banking system in order to bring more accuracy and to eliminate biasness fro entire banking system.

b. Any Branch Banking

Any Branch Banking (ABB) is other facility given by banks to their customers so that they can operate their bank accounts from any of the other network branches of same bank. The branch where the customer maintains his account is known as the base branch and the branch from where he carries out his day to day transactions is referred as the remote branch. The facilities available under this banking system are cash withdrawal & cash deposits, account statement, facility to issue multi- city cheques fund transfer, balance enquiry, purchase of demand drafts, pay order, repayment of loan account, etc.

c. DEMATService

DEMAT Account stands for dematerialized account is mainly related to investment, purchase and sale of shares and other financial assets. In DEMAT account the securities are held in electronically form and this has eliminated the need of holding physical paper certificate as evidence of the investment in share or any other tool.Theavailability of DEMAT has bought sale and purchase of the sharesto new height as it has eliminated the need of brokers in every steps. It offers secure and convenient way to keep track of the securities and investment over a period of time without the hassle of handling physical documents. It provides facility of online trading.

d. Microfinance

Microfinance is the bank for those who have low income and don't haveany permanent access over money. Itwas made in order to improve condition of people who are too poor to be served by regular banks, microcredit or microfinance provide banking services to unbankables like providing them facility like savings, providing them small loans, other small amount insurance facilities. In simple word micro bank are the bank for people with less money.

e. Plastic money

Plastic money is also known as polymer money it is a general term given to all type of bank card which include debit card, credit card, smart card.Moreover it isone of the best alternatives to the cash or currency as it is convenient to carry and handle and act as most convenient mode of payment for goods and services. These cards were introduced in 1950s and are now hasbecome an essential source for payment special during demonetisation period in India and along with this it has successfully reduces the risk of handling a huge amount of cash.

f. Mobile Banking

IT innovation in banking sector gave birth to most frequently used service called as Mobile banking. It is a service which is nowadays is almost provided by every bank to its customers that allow them to conduct a range of financial transactions in remote areas also by just using a mobile device such as a mobile phone or tablet and using software, usually called an app, provided by the bank. This service is usually available on a 24×7 basis. The different types of financial transactions that a customer may transact through mobile banking are obtaining account balances, getting list of latest transactions, electronic payments ofbill, and funds transfers among the customer's or another's accounts. Some even enable copies of statements to be downloaded. One the major advantage of mobile banking from bank's point of view is that it reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. In simple word mobile banking is a form of banking that travel with you and provides you with the facility to operate your banking account from any place, at any time and in any condition.

9. ELECTRONIC SYSTEMS

a. ATM

ATM stands for "Automatic teller machine" it is one of the most widely use electronic channel of banking sector.Its working is controlled by computer through this customers can make withdrawals, check theiraccount balance and know they can even deposit their money into their account that to without going to bank and this become possible only through ATM. with the increase in demand of customer towards use of ATM now these are available within bank premises and even anywhere outside the bank premises. In order to meet customer demand for ATM the banks has increased their dispersion further with the total number of ATMs and finally it has reached to 0.18 million in 2015.

ATM & Card Statistics for December 2015 shows that

Total No. of ATM's are:

On-site: 97, 793

Off-site: 95, 975

b. RTGS

RTGS stand for Real-time gross settlement systems it an electronic method of fund transfer.In this funds transfertakes place from one bank to another on a "real time" and on "gross" basis. Know the question arises what is real rime and gross settlement.Here the words 'Real Time' mean the process of instructions that are executed at the time funds are received, rather than at some later time. On the other hand "Gross Settlement" refers to the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis) i.e. transaction is settled on one to one basis without bundling or netting with any other transaction

RTG is one of the most popular and fastest possible money transfers system which include the banking channel. The time taken for effecting funds transfer from one account to another is normally not more than 2 hours. The only disadvantage of thismethod is that if it is Once processed, payments are final then they are irrevocable. RTGS is used for high-value transactions that require immediate clearing. In some countries the RTGS systems may be the only way to get same day cleared funds and so may be used when payments need to be settled on urgent base.

c. FINACLE

This system provides the holistic and integrated transformation approach, complete with solutions and services.Finacle solutions addresses the requirements of retail, corporate and universal banking worldwide like: Core banking solution, E-banking solution, Mobile banking solution Wealth management, CRM requirements, etc

10. CONCLUSION

After number of technological innovation the entire Indian banking sector it emerged as a very firm banking industry in entire world not only in terms of capital but also in term of making and retaining customers. The Indian banking sector came to a position where it gives global competition to other banks of worldin terms of higher productivity and efficiency in services.. The focus has now been shifted from product to customer. The one of the major aspect in development of Indian banking industry is Private Sector Banks of India as act as catalyst to ignite the fire of competition in the nation as the result of which immense progress can be witnessing in both public and private sector banks.Innovation covert Indian banking into the leaders of Internet banking, mobile banking, phone banking, ATMs.

Information Technology only the tool which re-defined and re-engineered banking system and gave it face that today banking sector is having, the use of these IT reform make it very clear that the future of banking will be more sophisticated and standard of services to the customers will be at continuous be improved with new innovations in product and process. Thus, it is correct to say that innovation has led to "conventional banking to convenience banking" and "mass banking to class banking" especially in developing economy like India.

REFERENCES

[1] Andrade, C "Banking products and services" in Indian institute of banking and Finance, Mumbai.

[2] Aruna R. Shet ― Technological Innovations in Indian Banking Sector‖ International Journal of Scientific Engineering and Research (IJSER), ISSN (Online): 2347-3878

[3] Avasthi G P M (2000-01), "Information Technology in Banking: Challenges for Regulators", Prajnan, Vol. XXIX, No. 4, pp. 3 – 17

[4] . B.P.Gupta, V.K.Vashistha, H.R.Swami, Banking and Finance, Ramesh Book Depot, Jaipur-New Delhi (2008).

[5] Banking Law and Practice by P N Varshney, Sultan Chand & Sons, New Delhi

[6] Dadabhoy K. Bakhtiar (2013) "Barons of Banking" Random House.

[7] Various issues of Business Week, The Economist, Business Today, The Economic Times and Financial Express.

[8] http://www.moneycontrol.com/news/press-release/reporttrendprogressbankingindia-2010-11_617218.html

[9] Reddy, Y. V. 2005. "Banking Sector Reforms in India: An Overview." RBI Bulletin. June.

[10] Repot on Trend and Progress of Banking Sector in India http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0RTP21112013_F.pdf

[11] Report on Trend and Progress of Banking in India 2014-15

[12] Sethi Jyotsna, Bhatia Nishwan (2012) "Elements of Banking and Insurance" New Delhi, PHI Learning Pvt. Ltd

[13] Shastri, R.V. (2003), "Recent Trends in Banking Industry: IT Emergence", Analyst, (March), pp. 45-46.

[14] Shekhar K C, Shekhar Lekshmy (2013) "Banking: Theory and Practice" Noida, Vikas Publishing House Pvt. Ltd

[15] .A. Surendra Kumar1, Dr. D. Venkatrama Raju ―A Study on Banking Services of New Generation Banking‖ International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064 Suresh Padmalatha, Paul Justin (2010) "Management of Banking and Financial System" Singapore, Pearson Education Singapore Pvt. Ltd

[16] http:/www.rbi.org.in

[17] www.rbi.org.in

[18] http://www.techworld.com/picture-gallery/personal- tech/9-technologies-that-can-change-way-we-save- 3593548/ Yogini Nerkar ―Banking Industry in India: Innovations and Challenges‖ ASM's INTERNATIONAL E-Journal on Ongoing Research in Management and IT, E-ISSN- 2320-0065

[19] http://economictimes.indiatimes.com/industry/banking/finance/banking/icici-bank-introduces-software robotics/articleshow/54258671.cms

[20] http://perspectives.icicibank.com/augmented-reality-in-the-world-of-banking

[21] https://www.cryptocoinsnews.com/cryptocurrency/

[22] www.livemint.com.

Mathematical Analysis to Fight COVID-19 Pandemic

Abdullah Mir*, Harish Singh, Nikita Malik*****

***Abstract:** The outbreak of COVID-19 (Corona Virus Disease of 2019) has claimed numerous lives worldwide and there is an urgent need to find solutions to deal with the pandemic situation. Towards this, mathematical modeling can be utilized to help calculate and predict the pandemic curve by considering different parameters that contribute in the transmissibility of the contagious infection, such that it can be controlled. One such metric that can prove to be useful is R_0-basic reproduction number, the calculation for which has been modeled for COVID-19 in this paper. The significance, calculations and the conditions measured by this metric are discussed, along with the various tips for prevention of catching the infectious disease. This directly relates to gauging the contagiousness and thus supporting the various solutions proposed towards dealing with the COVID-19 pandemic.*

***Keywords and Phrases:** Basic Reproduction Number, COVID-19, Infectious Disease Transmission, Mathematical Modeling, Pandemic, R_0*

1. INTRODUCTION

The study and analysis of diseases' and health conditions' determining factors and patterns of distributions in defined populations is termed as 'Epidemiology'. This lays the foundation for public health by identifying risks and targets for shaping the policy decisions and practices towards preventive healthcare.To take measures for controlling the spread of infections, along with getting a better understanding of the diseases' epidemiological prototypes, it is effective to mathematically formulatethe disease models. This mathematical modeling can help in estimating the diseases' point of origin and finishing time of its spread, allowing proper decisions regarding control/prevention steps to be taken [1].

A scholar had earlier tried to explain the non-abstract application of singularities of a complex valued function by taking the example of a nuclear bomb attack in which finding the singularities of the bomb's wave or destruction function could help save lives. In mathematics, singularity of a function refers to a point at which the function behaves in contrast to its normal behavior. His argument was ignored at the time considering it as not practical to sit back and calculate for function values in such times of crisis; but taking the case of COVID-19 pandemic situation that the world is in today, the approach is valid and quite relevant, as the infected people are the singularities of the normal life function in this case [2]. This goes on to show that mathematics, 'the queen of all sciences' can be applied to look for solutions in any given problem.

Towards the end of 2019, the COVID-19 virus began to rapidly spread across the world.The severity of the virus and its spread created an alarming situation, leading to a global pandemic. So, for increasing the awareness about the situation, it became necessary to have real-world epidemiological data on the disease [1].

Mathematical modeling and analysis has been leading the front ever since the COVID-19 pandemic broke out. It is the application of mathematics that has found its way in time to time representation of the increasing count of number of infections and thus predicting the pandemic curve. Different parameters showing different levels of involvements are made use of to get better results. Since early 2020, there have been ongoing works estimating the epidemiological parameters, transmission rates and predictions for COVID-19 infections [3].

In this paper, a mathematical metric, called as the basic reproduction number/rate/ratio (R_0) is modeled to describe the transmissibility of the infectious disease of COVID-19. R_0 has been widely adopted for use by epidemiologists as it serves to be very useful in calculations for controlling and predicting the diseases' transmission. Thisdirectly relates to the current problem ofrising COVID-19 infected personsand can be used to propound solutions for dealing with the prevailingpandemic.

2. MATHEMATICAL ANALYSIS OF COVID-19

The whole world is facing crisis owing to the COVID-19 pandemic, which originated in December 2019 in Wuhan and has claimed millions of lives so far. It is essential to recognize its transmission and spread in order to understand its impact. The disease has been considered to be relative of the SARS (severe acute respiratory syndrome). It is unclear what the source of the disease has been and whether a peak has already

**Senior Assistant Professor, Department of Mathematics, University of Kashmir, Hazratbal, Srinagar, India, drabmir@yahoo.com*
***Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, harishsingh@msi-ggsip.org*
****Assistant Professor, Department of Computer Applications, Maharaja Surajmal Institute, New Delhi, India, nikitamalik@msi-ggsip.org*

been reached since modern mathematics is based on collaboration and COVID-19 has made that aspect quite difficult. To explore the impact and nature of the transmission, along with prediction of repercussions and future trajectory, mathematical sciences play a vital role. The forecasting of diseases' progression under the effect of intervening health measures can be understood using basic mathematical models by researchers. As the models' complexity grows, questions pertaining to allocation of resources and implementing policies (such as lockdown) can be effectively answered. A mathematical concept- Stochastic process, is one way of studying this spread and with time, analyzing random happenings. Basic calculus can be applied to this process to get a set of differential equations for studying the disease's susceptibility rate in a given population. From there, statistical techniques employing statistics for finding the disease's probability to spread can be developed [4].

These computational equations do not directly equate to health and safety policies, but they offer models which, based on the available data, provide best educated estimates of what might happen in various scenarios. Therefore, through these processes and mathematical models that are built on statistics, calculus and probability, we are not left guessing and have measures which help policy makers get insightabout what strategies around COVID-19 to implement and what effect they will have in the real world. Based on the examined effects of COVID-19, it is too early to sayhow it will influence the new mathematical results' flow, but given the nature of modern mathematics which values social interaction a lot, changes are unavoidable [5].

3. ASSESSING CONTAGIOUS INFECTIONS

A mathematical metric that is widely used for assessing the contagiousness of infections or diseases is R_0 (read as R naught)- the basic reproduction number or ratio or rate. As a disease is transmitted to new people, it is said to have reproduced itself. Using R_0 value, the average number of persons that are susceptible to contracting that disease from someone already infected can be known. This applies specifically to populations which have previously not been vaccinated and are infection-free [6]. For instance, an R_0 value of 10 for a disease would mean that the person having this disease will transmit and infect an average of 10 more people, and this process of replication of disease will continue if there's no person immune to it or vaccinated against it in the community. Therefore, the R_0 value of a disease applies only when no one has had the disease before or been vaccinated against it, and there's no control over its spread, making everyone in the population completely vulnerable to it. Owing to the advances in medicine and healthcare, it is rare to find such combination of conditions for a disease nowadays. As compared to the deadly diseases in the past, most diseases can now be contained, and also cured. For example, the worldwide outbreak of swine flu in 1918 that claimed over 50 million lives was estimated to have R_0 value between 1.4 and 2.8, but when this flu or H1N1 virus broke out in 2009 again, the R_0 value was estimated between1.4 and 1.6 by researchers, and the available vaccines and antiviral drugs made this less fatal [7].

Based on the R_0value, there exist three possibilities of whether the infection/ disease will be potentially transmitted or declined[7]:

- For R_0 value less than 1, every existing infection leads to less than one new infection, which indicates that the disease will decline and eventually die out.
- For R_0 value equal to 1, every existing infection leads toone new infection, which indicates that the disease is stable and will stay alive but not lead to an epidemic.
- For R_0 value more than 1, every existing infection leads to more than one new infection, which indicates that the disease will spread among people and may lead to an epidemic.

4. COVID-19 R_0

According to Emerging Infectious Diseases' online published study, the R_0value for COVID-19 has been calculated as a median of 5.7, which is almost double the earlier estimated value of 2.2 to 2.7; rightly declaring it is as a pandemic. This value of 5.7 indicates that a COVID-19 infected person can transmit the virus to potentially 5-6 persons.Researchers arrived at this value based on the data from Wuhan, China, where the original outbreak happened, and using parameters like the time elapsed between exposure to virus and showing of symptoms- virus incubation period (4.2 days).Also, time duration of 2-3 days was estimated as the doubling time of the virus spread and the time it takes for the related cases' hospitalizations and deaths to double.Shorter this time duration, faster is the pace at which the virus infection is spreading. Given the R_0 value estimate, 82% of the population, at the very least, needs to get immunized to COVID-19 such that its transmission gets controlled [6][7]. Studies suggest that the transmission of the disease can be stopped through vaccinations, herd immunity, quarantining, active monitoring of infected people and measures to ensure physical distancing.

4.1 Calculation of $R_0$of Diseases

In epidemiology, factors that are considered for calculating a disease's R_0 value are [7]:

- Infective period: The time period from the onset of symptoms till they stop showing is referred to as the infectious period. Some diseases are more contagious than others, like the flu in infected persons can stay for more

than a week, and for even longer durations in children.The longer a disease's infective period is, the more likely it is that aninfected person can spread it to other people, and the more it will contribute towards a higher value of R_0.

- Contact rate: For a given susceptible population, a disease's effective contact rate is the effective contacts per unit time. If a person who has contracted a contagious disease stays quarantined, the disease's transmission will be slow. The more a person infected with a contagious disease comes in contact with people, who are not vaccinated or infected, the more is the contact rate of that disease, and the more it will contribute to a higher value of R_0.
- Mode of transmission: Diseases can spread through indirect means like suspended air particles, vectors or inanimate objects, or through direct means like droplet spread or direct contact. Those diseases that travel through air are the ones that most easily transmit and spread, such as the flu. On the other hand, diseases that require bodily fluids for transmission aren't easily contracted. So, illnesses that are airborne and don't need direct physical contact to transmit spreadmore and have a higher value of R_0.

Figure 1 illustrates in increasing order of estimated R_0 value, the commonly known diseases.

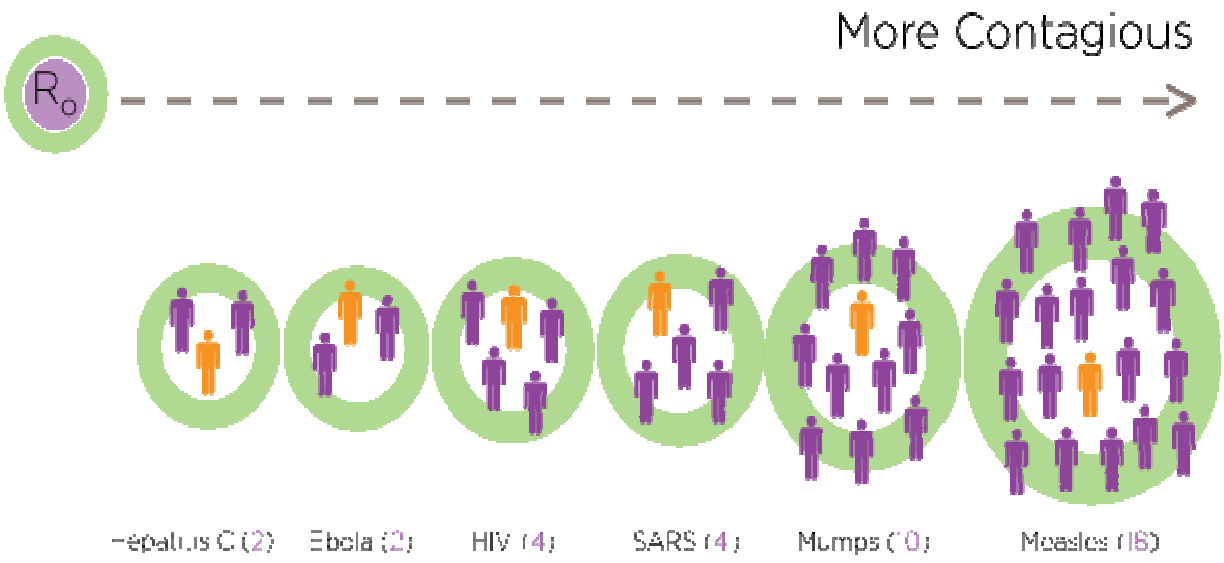


Fig. 1. Increasing infectiousness and R_0 values of diseases [7]

4.2 Conditions Measured by R_0

The R_0 value is not a bacteria or virus caused infectious diseases' intrinsic property and is rather determined by various biological as well as non-biological factors. Simply put, R_0 can be defined to be directly proportional to the average contact rate and the infective period, as shown through equation 1.

$$R_0 = \tau \times c \times d \quad (1)$$

where τ represents the transmissibility, that is the probability of infection spread on contact between an infected and a susceptible person, c is the average effective contact rate, and d isthe infectiousness duration[2].

The model and symbols used are part of differential equation field of mathematics [4], which is beyond the scope of this paper. The numeric value of R_0 can be fixed at 1 and according to the law of Trichotomy, three cases can arise for real analysis:(i) $R_0 = 1$ (ii) $R_0 < 1$ (iii) $R_0 > 1$.

Taking two particular values of $R_0$for thecase (iii), vitality of its process can be interpreted- the value 2 for R_0 of disease can be put numerically as a progression 2, 4, 8, 16, 32, 64… and for the R_0 value 3, the pattern will be 3, 9, 27, 71, 213,

639…which shows that even a slight increase in the R_0 value can blow up the process.

The highest R_0 value of 5.7 was initially attained in Wuhan, China where the COVID-19 virus originated. In India, this R_0 value is calculated weekly by IMSC (Institute of Mathematical Sciences), Chennai. It was alarmingly high and fluctuating in the initial days of the pandemic, followed by a downward trend because of the imposed lockdown, and since its lifting also (unlocking), has maintained a value of less than 1.5 and not much higher [8].The success of the nationwide lockdown in containing the spread of COVID-19 pandemic and its role in the subsequent decrease of R_0 value in the country has been shown in [9].Figure 2 below shows the decline in R_0 value across India.

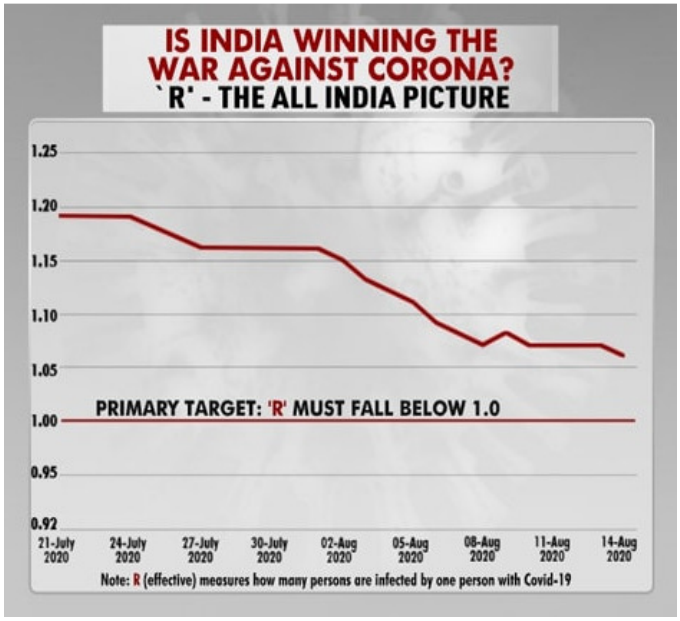


Fig. 2. Average R_0 value in India [8]

So far so good, the curve seems to be flattening. However, the war against COVID-19 is still on and there is no room for complacency; we still need to beware of any new spikes in the curve [8].

4.3 Prevention Tips

Research is ongoing to find cures for various conditions, including the COVID-19, and it is unlikely that infectious diseases will disappear anytime soon. Following are some of the steps that can be followed tohelp in preventing contagious diseases' spread [7]:

- Make yourself aware about the transmission of differentcontagious diseases.
- Ask for vaccinations of different diseases and stay up to date with your routine vaccinations.
- Learn from your doctor about what steps must be ensured on an individual level for stopping further spread of infection.
- Observe physical distancing and maintain hygiene.

4.4 Is R_0measure enough?

At the beginning of any epidemic, it is difficult to get an accurate estimate of R_0because it involves determination of a virus's biological characteristics as well as understanding the rate of contact among people This leads to modellers making assumptions of factors such as the human movement, which limits the precision of the models and hence the generated predictions' accuracy. This uncertainty around R_0 makes some modellers believe it to be a poorly measured metric which is not enough because it can influence and misplace public health actions.Epidemiologists define a slightly different form of the reproductive number R, called the effective reproductive number, represented by R_e. Once the virus is no longer in its initial stages and becomes more common, and measures surrounding public health have commenced, $R_e$captures the transmissions to gauge whether these initiatives are effectively working towards reducing the viral spread or not.This flexible and context-dependent nature of R_e value provides help in getting a more accurate assessment of the contagious disease [10].

5. CONCLUSION

There is continuous advancement in medical science, but contagious diseases are a long way from just vanishing. The corona virus disease of 2019 continues to spread throughout the world, but at comparatively lower rates now. The basic reproduction number value provides a calculation which is helpful in predicting and assisting to control its transmission. It is not the disease's intrinsic property and is determined by various non-biological and biological factors too.Through this paper, the infectiousness and transmissibility of COVD-19 has been gauged, i.e., how the $R_0$is calculated and what all it measures has been explained. Few tips for prevention of contagious diseases, along with possible metric form for accurate estimations of infectiousness are also discussed since there is an on-going battle against COVID-19 worldwide unless the vaccines arrive.

REFERENCES

[1] Pal, D., Ghosh, D., Santra, P. K., & Mahapatra, G. S. (2020). Mathematical Analysis of a COVID-19 Epidemic Model by using Data Driven Epidemiological Parameters of Diseases Spread in India. *medRxiv*.

[2] Lone, N. (2020, April 20). *A Mathematical approach to fight the Pandemic*. Retrieved from greaterkashmir.com:

https://www.greaterkashmir.com/news/opinion/a-mathematical-approach-to-fight-the-pandemic/

[3] Read, J. M., Bridgen, J. R., Cummings, D. A., Ho, A., & Jewell, C. P. (2020). Novel coronavirus 2019-nCoV: early estimation of epidemiological parameters and epidemic predictions. *MedRxiv*.

[4] Apostol, T. M. (1967). One-variable calculus, with an introduction to linear algebra. MA: Blaisdell.

[5] Rashid, A. (2020, June 12). *Mathematical analysis of Covid-19*. Retrieved from risingkashmir.com: www.risingkashmir.com/news/mathematical-analysis-of-COVID-19.

[6] Delamater, P. L., Street, E. J., Leslie, T. F., Yang, Y. T., & Jacobsen, K. H. (2019). Complexity of the basic reproduction number (R0). *Emerging infectious diseases*, *25*(1), 1.

[7] Ramirez, V. B., & Biggers, A. (2020). What is R0? Gauging contagious infections. *Healthline*.

[8] NDTV News Desk (2020, August 17). *Is India Winning The Coronavirus War? The 'R' Factor*. Retrieved from: https://www.ndtv.com/india-news/is-india-winning-the-coronavirus-war-the-r-factor-2280828

[9] Chhabra, M., & Agrawal, T. (2020). A comprehensive analysis of R0 with different lockdown phase during covid-19 in India. *medRxiv*.

[10] Zimmer, K. (2020, July 13). *Why R0 is problematic for predicting covid-19 spread.* Retrieved from thescientist.com: https://www.the-scientist.com/features/why-r0-is-problematic-for-predicting-covid-19-spread-67690

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Value Education – in the Present Scenario

Jatinder Kaur*

Abstract: Nowadays it has been noticed that Education system has taken the wrong turn and this is the problem faced by all countries including India too. No single person is responsible for this situation. Parents have failed to bring up their children properly. The nation's leaders do not set them a good example. Even teachers have failed in their responsibilities. The student of today is concerned with acquiring wealth, strength and position, but not good qualities. Education is meant to enable one to acquire what are good qualities. Education is not intended merely to stuff the brain with information. It has to transform the heart and make it pure. This sacred truth has been forgotten. When we have exemplary parents, exemplary leaders and ideal teachers, students will be ideal students, who are selfless, pure-hearted and innocent by nature, are being dragged into politics, their minds are getting fill with bitterness and hatred and their hearts are getting polluted.

Keyword: Education system, information, responsibilities

1. INTRODUCTION

Value Education is need of the hour as mankind is passing through a crisis. The tremendous emphasis on the scientific and mechanical ways of life is fast reducing man to the status of a machine. Moral and religious values are being undermined. The fundamental principles of civilization are being ignored. Conflicts of ideas, manners and habits are pervading the atmosphere. Disregard for everything old is the fashion of the day. At this situation, the solutions of all these social and global evils are through value education. Emphasis should be laid on such education through which moral values can be developed among the students so that they can conduct their life morally. They can decide what is right or wrong; what is good or evil; what is justice or injustice. If we can make a student as a good human being, the development of moral values within him is the prior task of education. They are the foundation of human existence. They make our life meaningful. Due to dearth of values in the present generation the curriculum must give prominence to value education. Value education has never been out of style. It is very relevant in almost all the fields concerning human activity. We have outstanding doctors who are in to organ robbery, brilliant engineers whose bridges collapses soon after their bills are passed and accountants who rob government treasury by manipulation, civil servants who rule as emperors, politicians with fake promises. All of them are the best educated and trained but their intellectual dishonesty is horrifying. Hence, the need of development of moral values is very significant.

Dr. A. P. J. Abdul Kalam, our honorable president in his book "India2020: A Vision of the New Millennium' has rightly remarked that "If you are a teacher in whatever capacity, you have a very special role to play because more than anybody else it is you who are shaping the future generation. A teacher has a higher responsibility as compared to other professionals as students look upon the teacher as an embodiment of perfection. Education has become a business today. This has changed the outlook of the students as well as the parents and it has further resulted in deterioration of respect for teachers and all those who are a part and parcel of education system. Gautama Buddha has rightly preached "Desire is the root cause of Evil". Students are told not to fulfill their desires by improper ways, by adhering to immoral activities. The present paper is an attempt to state the importance of value education in the present education system so that the future generations will nourish high ideals and values to contribute in the development of the society and the role of a teacher in imparting values. Keywords: Value Education, Role of Teacher, Present Education System.

2. VALUE EDUCATION CONCEPT

Education is essential for all round development of a child. Education has always been linked with society. It has both a personal and social dimension, and like the two sides of same coin, they are inseparable. According to Gandhi, real education does not consist in packing the brain with information, facts and figures or in passing examinations by reading prescribed number of books, but by developing right character. National Policy on Education (1986) says, "In a culturally plural society, education should foster universal and eternal values oriented towards the utility and the integration of people." Such capital value education should help eliminate religious fanaticism, violence, superstition and fatalism. Besides, Value Education has a profound positive content based on our heritage, national goals and universal perception. Today we are living in a world of paradox; on the one hand, science and technology are advancing very fast while, on the other hand, most societies are facing problems of alcohol and drug abuse, mental illness, stress, crime etc. Therefore value should be introduced at the school level. If we want to develop values

*Research Scholar, MMIM, Maharishi Markandeshwar (Deemed to be) University, Mullana, Ambala, India
jeetu.jazz@gmail.com

among our students we have to develop values among our teachers.

3. NEEDED OF VALUE EDUCATION

Some important needs of value education have been mentioned below:

1. Preparing Our Children for Future Roles in Society: Knowledge gained in school is only one goal of education. The primary goals of education should be enabling students to gain knowledge and moral values. Our kids will need both in preparing themselves to be good parents and citizens in society.

2. Many Parents Aren't Teaching Moral Values: If all parents were teaching their children moral values in the home, it would not be necessary for the schools to do this work. The sad fact is that a lot of kids are not learning from their parents the difference between right and wrong. This is because most mothers and fathers in their busy work days spend only a few hours with their children. In many families there is only one parent and no other role models for kids to follow:

3. There is Too Much Violence and Dishonesty in Society: Every day students are exposed to violence, dishonesty, and other social problems in the media and the real world. How many times have we heard about school shootings? What about other times when students are caught cheating on exams? Then, too, we read about bullying in school and fights between gangs. If moral values were taught in schools, we would have fewer of these problems

4. To Counter Bad Influences in Society: Unfortunately, many of the role models of young people are setting bad examples. These bad examples range from sexual promiscuity, degrading of women, advocacy of violence, and the condoning of dishonesty in order to succeed.

5. Moral Values Will Stick with You for Life: The significant of moral values in our life is very important. Moral values teach us what is right or wrong. Thus, we can conduct our life in a right direction. We can understand what is good or evil. This type of learning helps us to conduct our life morally in this world.

4. OBJECTIVES

The paper tries to explain the value education concept.

The paper also highlights the need of value education.

This paper also states the role of teacher in imparting value education.

5. RESEARCH METHDOLOGY

The research is exploratory in nature; it focuses on Literature review, News Papers, Journals, websites and the other reliable sources.

Role of Teachers in Imparting Value Education

Ordinary Teachers can bring about extraordinary transformation in the society. A teacher should practice what he preaches. Teachers are a role-model for the students. Their actions convey more than their words. Students learn values from what the teachers are rather than from what they say. Teacher makes a maximum impact on the personality of a student in the formative years. Students imbibe virtues and vices knowingly and unknowingly from theses role models. Teachers demonstrate the appropriate behavior of their students by their actions. Teachers must have healthy attitude and should possess rich values. Teaching is all about attitude-positive/ negative towards their job of imparting quality education. Teacher should act as a friend, philosopher and guide. A teacher is not only a source of information but is also a mentor and guardian. For this teacher must respect the teaching profession, love her subjects and students, Students will seek inspiration from teachers who have high self-esteem. A decade back or so the role of a teacher was limited to being a source of information. But today this place is shared by books, coaching classes, multimedia technology etc. So the role of a teacher is marginalized. Role of a teacher has increased manifold. In modern times we are experiencing transition. A teacher can maintain values and nurture them. A teacher has an immense potential of bringing about a sea change in the society by demonstrating essential values of head and heart. Teacher can impart values in students by giving them instructions through discussion, experimentation and lectures and by the following mentioned ways:

- Teachers can maintain a case-study register to closely observe the students and note down the positive and negative traits of their personality.
- By organizing cultural and sports events values like team spirit, sharing, spirit of cooperation, patience, courtesy etc can be imparted.
- National and religious festivals must be celebrated to foster a feeling of homogeneity.
- "Thought for the Day" should be employed in assemblies. Moral thoughts trigger in them moral thinking.
- Teachers should give importance to cooperative learning.

- Skits, role plays propagating moral values can be performed by students under the guidance of teacher.
- Teacher must tell the students to go to the libraries- the treasure house of knowledge. Classics available in the library are morally rich and inspiring.
- Teacher must explain the students the importance of meditation& yoga practices for realization or the attainment of oneness with God.
- Every day a Teacher must spent at least 5 minutes on moral lecturing.
- Impart knowledge of foreign languages to make them know different cultures.
- Organize games, excursions, visits to places of historical importance. Club activities like nature club, literary club, wildlife prevention club, social service camps, blood donation etc.
- Suicidal tendencies in students should be curbed. They must be prepared by the teacher to face the challenges of life fearlessly and with courage.

The most important agent for building the character of the student is a teacher. Swami Vivekananda says that "character is nothing but a bundle of habits formed through repeated acts. It comes through "Samskaras" or past impressions. Character building can change the nation. As strong foundation is required for a strong building, strong character is required for nation-building.

6. CONCLUSION

When a problem arises, it needs to be recognized, addressed and resolved. Instead of blaming people or institutions for the results of a lack of morality in schools, we should focus our efforts on finding ways of successfully implementing character education into schools. Changes have to occur in parents, legislators, communities, and the media and educational system so that children are taught how to behave. Actualizing character education programs into schools is necessary in order to overcome this nation's crisis of character. Thus Teachers play an important role in the nation building by character building of the students. The best and the greatest profession in the world is that of a teacher, because the future of a nation depends upon the type of teachers who shape the future generations. Every teacher plays the most important role in shaping the students as enlightened citizen. Swami Vivekananda words should not be forgotten by the teachers- "Arise, Awake and Stop not till the goal are achieved"..

REFERENCES

[1] Jyotirmayananda, Swami (2000) [1986], Vivekananda: His Gospel of Man-Making with a garland of tributes and a chronicle of his life and times, with pictures(4thed.), Chennai, India Swami Jyotirmayananda, p. 960, ISBN 81- 85304-66-1.

[2] Von Dense, Christian D. (1999), Philosophers and Religious Leaders, Greenwood Publishing Group Prabhananda, Swami (June 2003), "Profiles of famous educators: Swami Vivekananda", Prospects (Netherlands: Springer) XXXIII (2): 231–245.

[3] Rolland, Romain (2008), The Life of Vivekananda and the Universal Gospel (24 ed.), Advaita Ashrama, p. 328, ISBN 978-81-85301-01-3

[4] Badrinath, Chaturvedi (2006), Swami Vivekananda The Living Vedanta, New York: Penguin, ISBN 0-14-306209- 3.

[5] Brannon, D. (2008). Character education - a joint responsibility. Education Digest, 73, pp. 56-60. Retrieved November 7, 2008, from Professional Development Collection Database.

[6] Britzman, M.J. (2005). Improving our moral landscape via character education: an opportunity for school counselor leadership. Professional School Counseling, 8. Retrieved November 7, 2008, from Academic One Filed database.

[7] Swami Nikhilesh warananda, Teacher- As A Torch-Bearer of Change.

[8] Prof. Prasad Krishna, Education in Values- Strategies and Challenges for Value Education.

[9] Pamela Yousuf, Imparting Value Education.

[10] Jyoti Kumta, Value Education: What can be done?

[11] www.educationhp.org/education-board-2013/ chapter 9.pdf. at: www.sssieducare.org/valueeducation

[12] Wood, J. (2012). Character Building Improves Quality of Education..

Society 4.0: A Connected World in Flux

Chetna Grewal*, Pooja Dabas**

1. INTRODUCTION

The Forth Industrial Revolution (4IR) delineated by the convergence of a cluster of technologies segregating across the physical, digital and biological worlds- machine learning, artificial intelligence, advanced robotics and autonomous transport, cloud computing and the IoTs among others is expected to extensively transfigure the future of work. It will change employment and the nature of work. It is likely to escalate forces of corporatization as, arguably, only large corporates will have the data literacy, computing power and connections to generate the data used to report on and automatedly organize the digital economy. This leaves civil society and potentially the achievement of 'a good society' vulnerable.[1] Artificial Intelligence, Big data and Internet of Things work together to formalize a society that is coined as Society 4.0. The Society 4.0 comprises the human, social and cultural implications of emerging technologies like artificial intelligence, biotechnology and autonomous systems.

The use of AI and digitalization will change the world and we as human need to think mindfully the social outcomes to ensure that digitalization should have positive impact on society enabling to solve the problems around energy, communications and transport.

Big Data is "things one can do at a large scale that cannot be done at a smaller one, to extract new insights or create new forms of value, in ways that change markets, organizations, the relationship between citizens and governments, and more" (Mayor-Schonberger & Cukier, 2013, p.6). Chui, Loffler, and Roberts (2010) define the Internet of Things (IoT) as "sensors and actuators embedded in physical objects- from roadways to pacemakers-[that] are linked through wired and wireless networks, often using the same Internet Protocol (IP) that connects the Internet". IoT captures data that AI can organize into big data. This paper will look at the impact of Society 4.0 on human generation, organizations and the nature of work and the ability of the businesses to be future ready for the automation of the work that humans have done. The first section will look at the change in nature of jobs because of advent of Society 4.0 and change in the nature and the type of job and infrastructural requirements to absorb the change, the second section will look at the affect of Society 4.0 on technological adaptability by the way of living. The third section will discuss about the smooth transition of Society 4.0 to Society 5.0.

2. LITERATURE REVIEW

In combination, AI, big data and IoT provide instant, detailed information about current and potential customers' needs and preferences that then feeds new product ideas. They produced robots that can replace humans in manufacturing, restaurants, retail and banking. They produced IBM's Watson that can sift through millions of pages of research in seconds to provide doctors information about diagnosis and treatment options that will result in better, mor affordable healthcare (Kaplan, 2015), and Google's Deep Mind program that can read lips more accurately than human lip readers (Chui, George, & Miremadi, 2017, p.1). In finance, "Automated trading algorithms are now responsible for nearly two-thirds of stock market trades" (Ford, 2015). In customer service, Amazon is piloting Echo Look that will have a camera and microphone and will give you feedback on how items of clothing look on you. In products, 3D printing is printing a toupee that is a biomaterial scalp prosthetic that matches skin and hair color plus hair curl and thickness. Chui et al. (2016) argue that today's technologies could "automate 45 percent of the activities people are paid to perform" and "about 60 percent of all occupations could see 30 percent or more of their constituent activities automated, again with technologies today". [2]

Advanced digital technology is already used in manufacturing, but with industry 4.0. It will transform production. It will lead to greater efficiencies and change traditional production relationships among suppliers, produces and customers- as well as between human and machine.

The 'Future of Jobs in India- A 2022 Perspective' report provides a vision of change I the Indian job market over the next few years. It identified three primary forces behind the current disruption: globalization, adoption of exponential technologies by Indian industry and demographic changes. The interplay of these three primary forces is giving rise to a range of twelve mega trends which are shaping the future of jobs in

** Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, Delhi, India, chetnagrewal@msi-ggsip.org*
***Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, Delhi, India, poojadabas@msi-ggsip.org*

India. The survey responses indicated rising middle class, creation of highly optimized supply chain and launch of smart connected products and services the top mega trends significantly impacting the job landscape in India.[3]

Recent studies estimate automation potential in India ranging between 52 and 62 per cent, based on the task content of various occupations (McKinsey & Company, 2017) [4]. The impact of automation on jobs could be even greater if considered in terms of skill levels. The NSSO data reveals that less than 20 per cent of the population is engaged in high-skill occupations that typically require advanced analytical skills and are thus less vulnerable to the impacts of automation (Social Science Research Network, 2017) [5].

The dynamic advances in technology paired with all types of cross sector innovations, is creating increasing concern about the possible adverse society impact, such as increasing inequality, and the diminishing of jobs. While we cannot be truly sure about the consequences and the type of society that will arise from complicated changes to the work of work, we can touch on some significant trends. This can be countered by adopting the concept of Society 5.0, which will emerge with three major elements as a core conspectus-intelligent device, intelligent system and intelligent automation-fully merge with the physical world in cooperation with human intelligence. The term "automation" describes autonomous robots as intelligent agents collaborating with humans at the same time in the same workforce. Trust and reliability between these two parties will achieve promising efficiency, flawless production, minimum waste and customizable manufacturing.[6]

3. AUTOMATION AND FUTURE OF HUMAN WORK

The intensity of Automation technologies displacing workers will depend on the rate of their development and adoption, economic growth, and growth in demand for work. As it results in receding in some occupations- 60percent of occupations have at least 30% of constituent work activities. By 2030, the proportion of work actually displaced will likely to be reduced as a result of technical, economic and social factors that affect adoption. With improvement in technology, advanced economies are more affected by automation than developing ones, reflecting increase in wage rates and hence automation in economic incentives. Even with automation, the demand for work and the workforce could increase as economies grow, proportionally fueled by productivity growth empowered by technological advancement. Uprising incomes and consumption specifically in developing economies, improving healthcare for aging societies, investment in infrastructure and energy, and other trends will induce demand for work that could help cease the displacement of workers and additional investment. Major transitions are expected in the scale and nature ofwork in the field of agriculture and manufacturing. According to Mckinsey report 2017, "By 2030, 75million to 375million workers (3 to 14% of the global workforce) will need to switch occupational categories. Moreover, all workers need to adapt, as their occupations evolve alongside increasingly capable machines." The adaptation to the nature of work will require higher educational attainment that results in high-level cognitive capabilities that are hard to automate.

Getting India ready for the future jobs

- Workers with the lowest levels of educational attainment are at greater risk: -

  Exhibit E10, "Employers' opportunities and challenges depend on company footprint and workforce characteristics." Source: Mckinsey Global Institute analysis.

  Connecting workers with opportunities, a central challenge in the automation age will be connecting millions of displaced workers to new, growing jobs. Some may need to change jobs within the same company, and employers would provide the necessary training in these situations. But many workers may need to switch employers or make even bigger moves to different occupations in new locations.

  In a more technology-driven world, job-matching efforts can be aided by a range of new digital tools and should run on easily accessible digital platforms. New online tools can access an individual skill, suggest appropriate career choices, and clarify which jobs are in demand and the credentials needed to obtain them. Many efforts are underway to centralize and standardize information on skills, job porting and credentials.

  Local business leaders, policy makers and educators will need to work together to chart a new course.

- Reskilling and upskilling of Workforce: -

  Automation means that the industry skill requirement is constantly evolving. Older skills are becoming redundant and are being replaced with new tech-driven skills. Being a professional in today's business ecosystem is, thus, an iterative process of learning, unlearning and re-learning. As new and higher-level skills are in demand, including not only digital skills but also critical thinking, creativity and socio-emotional skills. The old model of front-loading education early in life needs to give way to lifelong learning.

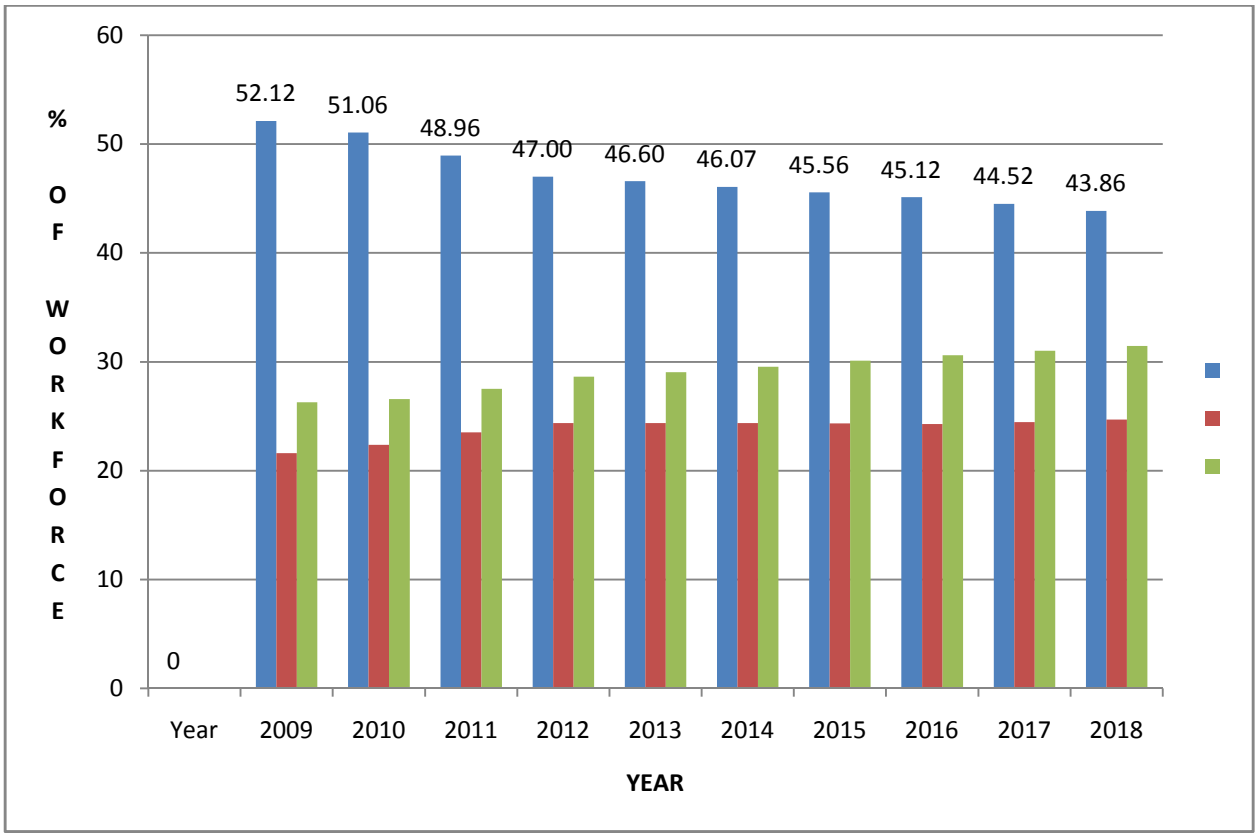
  Employers will be the natural providers of training and continuous learning opportunities for many workers. Many workers who need to switch employers or change occupation will need training options outside the workplace. Industry-specific training programs delivered through local educational institutions that result in job placements.

- Formulating customized economic development strategies: -

  Indian economy faces economic development issues that need to be solved at the local and regional level. Preference may vary across different community segments and hence required more tailor's strategies. For metro cities and high-growth hubs requires connecting disadvantaged populations with new opportunities, adding affordable housing, and improving transportation. The communities in the mixed middle segment need to accelerate economic growth and focus on entrepreneurship and skills development. Rural places lack the economic base or the inflows of investment or people to create new jobs. Lack of economic activity can not be addressed by workforce retraining. Each community will have to take inventory of its assets, such as available industrial space, natural attractions, local universities, and specialized workforce skills. This can act as a basis of an economic development plan built around growth engine industry that can create jobs and deluge effects. The next step in the chain is attracting investment, subsidies and tax incentives can act as tools if used wisely under of a business care.

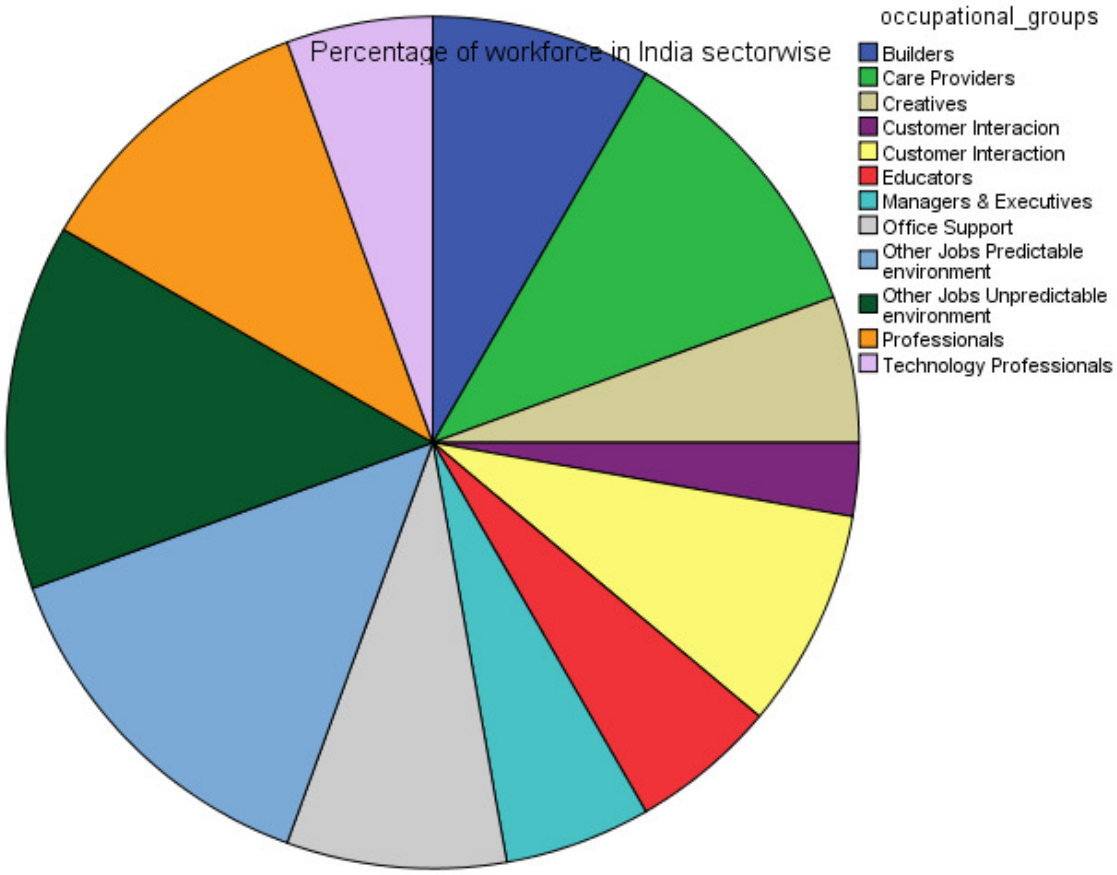
- Supporting workers' in transition: -

  In era of technological change, India need to look at advancing and powering the social safety net to support people transitioning between jobs. Supporting people looking for transition by longer and more flexible income support programs during periods of unemployment, relocation assistance, training grants and earned income tax credits. Portable benefits attached to the worker rather than the employer may offer stability to people, need to switch between opportunities and geographies. Omni-present benefits for full-time, part-time, and independent worker, could be prorated so that contributions are tied to hours worked for different employers.



Source: www.statista.com

Maximum workforce is employed in other jobs with predictable environment and other jobs with unpredictable environment and customer interaction.Indian workforce working in agriculture is declining overtime .Millions of workers have indeed left farm jobs for non-farm jobs, and the pace of this transition seems to have picked up since the mid-2000s , When the economy's growth engine also picked up pace. Growth in industrial sector is almost stagnant but service sector is showing an upward moment holding a promise to open new promising areas for future growth.



Source: US Bureau of Labor Statistics; Mckinsey Global Institute analysis

The potential impact of automation on employment varies by occupation and sector. Activities most susceptible to automation include physical ones in predicable environments, such as operating machinery and preparing fast food. Collecting and processing data are two other categories of activity that can increasingly be done better and faster with machines. This could displace large amounts of labor, for instance in mortgage origination, para legal work, accounting, and back-office transaction processing. In future few takes will be automated, employment in these occupations may not decline, but rather workers may perform new tasks.

% change(+/-) step -up Labour demand, Mid point automation	Occupational Categories	Occupational Groups
>=100	Doctor	Care Providers
>=100	Nurses, physicians assistants and pharmacist	
>=100	Childcare worker	
50 to 99	Community &School worker	
>=100	School Teacher	Educators
>=100	education support worker	

% change(+/-) step -up Labour demand, Mid point automation	Occupational Categories	Occupational Groups
50 to 99	Executives	Managers & Executives
50 to 99	Managers	
25 to 49	Accounts managers	
50 to 99	Engineers	Professionals
25 to 49	scientists & academics	
-15 to -24	Legal support workers	
>=100	computer engineer	
50 to 99	computer specialists	Technology Professionals
50 to 99	Architects, Surveyors and cartographere	
>=100	Construction Workers	Builders
25 to 49	Crane and tower operators	
50 to 99	Artist and designers	
50 to 99	Entertainers/Media	Creatives
>=100	Personal care workers	
>=100	Food serving workers	Customer Interacion
25 to 49	Sales workers	
5 to 24	hotel & travel workers	
50 to 99	computer support worker	
5 to 24	financial worker	Office Support
25 to 49	administrative Assistant	
25 to 49	production worker	
5 to 24	material moving machine operators	
-5 to -14	Agricultural graders & equipment operators	Other Jobs
5 to 24	Food Preparation workers	Predictable environment
5 to 24	General mechanics	
>=100	Specialized mechanics and repair	
5 to 24	Emergency first responders	
25 to 49	machinery installation & repair worker	Other Jobs
-5 to -14	Agricultural field worker	Unpredictable environment
50 to 99	Building and grounds cleaner	

Automation will have a lesser effect on jobs that involve managing people, applying expertise and those involving social interaction, as behavioral human element plays its cognitive role and machines are unable to match human performance for now. Jobs in unpredictable environments-occupations such as gardeners, plumber or providers of child-and- elder-care will also generally see less automation by 2030. These type of jobs are difficult to automate technically and often command relatively lower wages, which makes automation a less attractive business proportion.

4. TRANSITION OF SOCIETY 4.0 TO SOCIETY 5.0

Society 5.0 or the road to the super-smart society turned out to be paved with an important role for technologies in areas such as IoT, AI, cyber physical systems, VR/AR, Big Data but it's

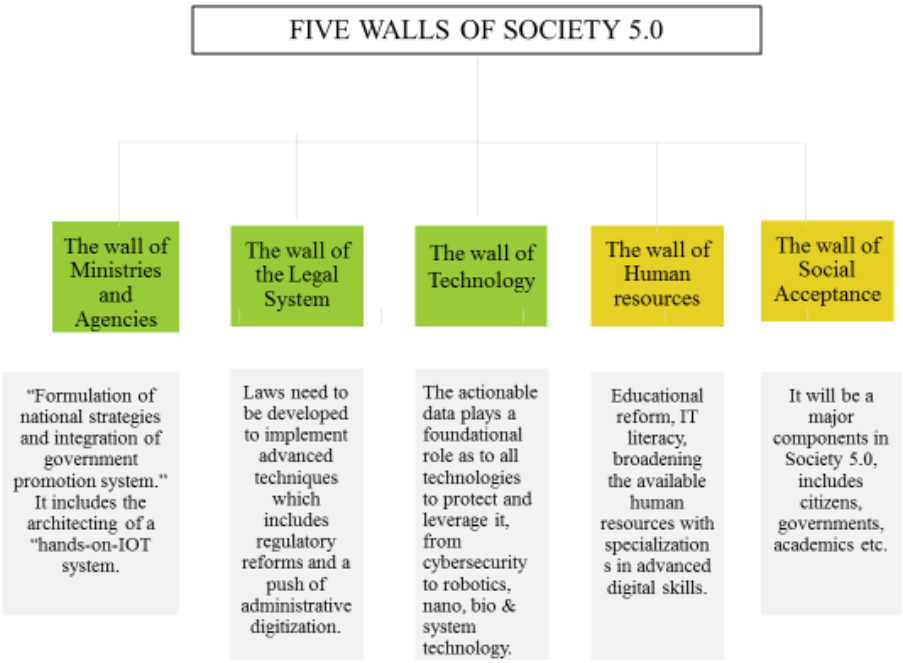
not just about technologies. Society 5.0 concept is to "promote an increase of job mobility to create an environment where diversified and flexible way of working can be accepted and each and every person can play a lively part." (keidanren outline)

Society 5.0 is an idea that been developed mainly in Japan. It is about promoting user-friendly technologies for the daily living and a better human-machine interfaces. Better the seamless integration of human and machine, the better the ability to adopt technical innovation. Policy makers can encourage companies to provide more training for next-generation manufacturing technicians to make a smooth transformation from one technology to another.

We are still in early stages of a major revolution in the place of work in our social lives, and it will take a long time for our societies to understand, let alone embrace the new meanings that will emerge from future social realities.

The evolutionary aspect of the society 5.0 concept as introduced in the 5th Science & Technology Basic plan of Japan- source keidanren paper.

The five walls to 'break through' in moving to Society 5.0



5. CONCLUSION

This paper examined the latest research on the dynamic workforce and future profession which acknowledged that automation will metamorphose the workplace in ways difficult to imagine. Entirely new jobs will come into the picture based on changing needs of human society and automation in most areas of human activity, some classic jobs that need basic human skills will resolute into the future. Government and business leaders will be liable to form customized policy framework with penetrating strategies, mainly reforming the educational system for the future, to adopt new reforms relating to transition to new digital age, i.e, Society 4.0 or transition of Society 4.0 to 5.0.

REFERENCES

[1] Swinburne.edu.au/research-institutes/social-innovation/society-4/

[2] Kathleen M Wilburn, St. Edward; Lt. Ralph Wilburn University," The impact of technology on business and society", ISSN: 1931-0277, Global Journal of Business Research, 2018.

[3] Ficci.in>spdocument>future-of-Jobs-in-India 2.0

[4] Mckinsey and Company report, 2017.

[5] Social Science Research Network report, 2017.

[6] Concept Paper: Industry 5.0- A Human-Centric Solution, Saeid Nahanvandi, Instutute fo intelligent Systems Research and innovation, Deakin University, Wayrn Ponds 3216, Australia Saeid.nahavandi, 2019.

[7] Mckinsey Global Institute, "Digital India: Technology to transform a connected nation"report, March 2019.

Online Teaching Paradigm Shift during Covid: Blessing or Blight?

Deepanshi Bhambri*

Abstract: In country like India, right to education is one of the fundamental right for all. The introduction of online education having features like robustness has given a scalable pathway to exhibit education during the global pandemic 2020. Keeping in view that learning being an impeccable virtue of life should continue to manifest. This article aims at focusing on the need of emergence of online teaching in parallel to addressing the benefits of the same. It also entails the efforts taken by the government in launching various educational programs to inculcate and preserve the belief of human in gaining knowledge according to the changing era's. The paper also discusses the moderations introduced in the domain of educators and finally concludes by stating the gaps of the online education which yet needs to be taken care.

Keywords: Virtual, Pedagogy, Pandemic, Covid-19.

1. INTRODUCTION

The world came to standstill with a corona virus spreading at deadly rate in all the countries. The world of education faced a completely new picture, painted with the idea of online learning during the global pandemic of 2020.The vision of people getting crowded at a certain place for any means started appearing like a dream after the outbreak of the corona virus. The educators across the globe were forced to shift to the online mode of education keeping behind the traditional classroom teaching.

Before the Covid pandemic the efforts have always been towards combining the technological advancements with the classroom teaching to enhance the learning environment and pedagogical practices and to make the teaching experience more interactive and skill based for the learners. However, keeping in view the spread the deadly virus, online education has been a great support to prevent the wheel of education from stopping. Online education in the past few months have dealt with many critics and rewards. There exists both sections of the society who has been immensely benefitted with the new process of transformation in the education during the pandemic. While on the other hand there are those who have felt left behind in the situation of the crisis. In a country like India where education is considered as a fundamental right of every citizen of the country and a key to open the locks of equitable and universal access to all the doors of social, mental, economical, professional development of an individual of the country, it is necessary to determine whether the online education can be considered as an alternative in the time of crisis when the face to face online education is not possible in future.

2. METHODOLOGY

The study attempts to explain the effect of the covid-19 on the educator sector in the country India. It emphasis on the role of the virtual learning in ensuring the continuity of the education during the corona crisis and discusses the advantages and disadvantages of the virtual learning in the same regard. For this purpose the information is collected from various government websites, internet, e-newspaper, secondary data, self-observation and discovery.

3. RESULTS AND DISCUSSIONS

In order to access the desired situation and to decide upon the future course of action it is crucial to evaluate the areas where online education has helped to reach the desired outcome in the past few months and also to discuss the reasons which are causing a learning gap in the context of the pedagogical delivery through online education in the recent scenario mainly in the respect of the school teaching.

Tracing from the start, the birth of the online education in India took place in the form of the printing press which was considered as the first technology which made the spread of education and knowledge easy and faster. Six centuries later, the introduction of the Educomp smart classes helped in the removal of the dependence of the education on the books completely and the introduction of the multimedia content to float inside the classrooms and radical change in the traditional methods of teaching such as now the teachers could give the examples of the 3-D representation of the abstract concepts in the classroom. Also, teachers could show various videos, pictures, movies and make the content delivery and learning interactive for the students. Taking into consideration the contemporary digital India concept education accounts a major part of it.

More and more efforts are being taken by the government to strengthen the roots of online education in India such as

*Academician, deepanshi.bhambri807@gmail.com

various learning platforms like DIKSHA, SWAYAM; CIET has been developed by the government. Recently with the coming of the new education policy into force on 29th July 2020, throwing light on the recent trends of the developments taken by the government such as the development of National Education Technology Forum (NETF), an autonomous body which is created to provide a platform for the free exchange of Ideas [5].To enhance the technology based idea for the enhancement of learning, assessment, planning, administering for the schools and higher education.

Hence, since decades the government has been making efforts to enhance the online mode of learning. As a result of this during the lockdown when the students were far apart from their physical classrooms, their learning didn't stop as the educational institutions with the help of the power point presentations, assignments, worksheets, quizzes etc kept the learning going on for the students.

A. Positive Influence on The Students:

Fig. 1. Pie chart representing the Positive impacts on the students

- ***Removing Place Rigidity***

One of the biggest advantage of online education is that it can accessed anytime from any place which made it the biggest support during the phase of the covid crisis when the traditional classroom teaching with so many kids assembling at one place couldn't possibly take place. This feature of online learning provided the possibility for the teachers and the kids to interact with each other from the due comforts of their homes breaking down all the constraints of geographical boundaries.

Along with that, now the teachers are not only dependent upon the availability of the classroom aids to teach to the students. Even after the availability of the smart boards in the majority of the school, sometimes due to the limitations of the availability of the resources in the classroom like internet it was often difficult for the teachers to access the resources and make them a part of the classroom teaching.

However, with the availability of the internet and the various other online platforms and easy storage and accessibility of the data, resources can be deployed by the teachers from any platform, links to the various learning sites could be easily shared and freely the information could be shared with the students.

The new academic session of 2019-2020 in the schools started with a complete paper less mode of the learning for the kids. The software's like Snap Homework, Microsoft teams, Google Meet, zoom etc has enabled the classroom teaching to take place through the online mode. The ongoing academic session in the schools completely dependent on the online mode of teaching has been shadowing different influences on the different sections of the society.

- ***Enhancing Self Paced Learning***

Online education enabled the kids to learn at their own place as they could easily record the videos and the classes, save the power point presentations and the attached multimedia and could easily review them whenever they faced any doubt. There is no need for any hustle or to be bounded by the timing of the class. The students can take their time to complete the online quizzes and complete the assignments at their own pace. It also helps in developing or enhancing the skill of self-study and discovery among the kids. They feel excited about the easy accessibility of learning resources at the comforts of their homes.

In addition to the academics some students are not tech savvy due to many reasons or still find comfort in the traditional learning mechanism. This virtual mode of learning will bridge the technical gap for them and help them to become technical friendly.

- ***Ensuring Continuity***

At the time of the lockdown when continuing school education seemed like a dream, the learning through the online education platforms and the availability of the learning platforms helped to keep the wheel of education keep moving. The academic session could still go on however with a new set of guidelines and a new interface for the students. Central government has launched the PM E-Vidya platform with 12 new DTH channels one for each class to reach out to all strata's of the society. The gap in education in the absence of the virtual learning mode in the present situation would have left students aimless, directionless and would have diminished their learning and growth.

We have no idea till when covid is going to be a part of our lives, in such cases ensuring continuity is not only necessary but needful to keep learning as a routine of the children's lifestyle to ensure that the problems like depression, anxiety, aimlessness, random and negative thoughts do not reach to our kids and even in such gloomy times our kids could have strong mental health.

- ***Technological advancement of learners***

The online learning helped the students to become tech savvy as now in order to participate in the learning process they have to come into contact with the learning softwares and gain computing skills apart from gaming and entertainment in the past days. As earlier most of the kids used the smart phones and laptops to play games, listen to music or for other entertainment purpose but online education has made virtual

learning a part of children lives. Earlier for kids learning stopped with the closing of the books and learning was limited to pages of the book content. But now the definition of learning has altogether changed to the better. Kids now have explored the other dimensions of learning and virtual learning has become a habit or an everyday part of their lives preparing them for a better future.

- ***Interactive Classrooms***

The regular chalk-duster has taken a back seat during the lockdown. The teachers now have to depend totally on the videos, quizzes, PPT's to deliver the content to the student which has made the learning interactive and more skill based for the students. Giving an example earlier the kids were going through the traditional pen paper test but now they are given the exams by submitting their responses through the Google forms, the kids who earlier were writing long answers are now giving multiple choice answers to concept based multiple choice questions. The responses checked by the Google forms give instant response and allot marks to the kids without any delays. This new learning environment is very good for the development of the learners. Also, for the teachers the workload has reduced in the form of reduced checking work.

- ***Dependence On books***

With the coming up of the paperless learning the dependence on the textbooks have reduced. The students are now using more videos, E-books, learning platforms like- Byjus, white hat Jr etc for the learning of the content matter. Now students can learn the same concept from multiple sources enabling the students to have a broader set of mind frame and enhancing the learning environment for the learners. Subjects like social science, students could now learn them through the video, have better understanding from the pictures of the various concepts like burials, soil types, types of forests etc. These practices have made the learning environment more interactive, skill based and dynamic for the learners.

- ***Students becoming independent***

Students are now becoming independent learning with the browsing of the open source learning material freely available which in turn is helping them to choose the content according to their learning needs and suitability. They don't have to depend upon the coaching centres as the only available help, rather they could freely access learning resources and guidance on the single click of the mouse and can study from the educator present at any place.

- ***Preserving of Information***

Learners as well as teachers could easily save the learning material and could easily revisit anytime from anywhere according their own individual needs and learning requirements. Like the traditional classroom teaching students don't have to suffer if they are not able to end the class for any reason as the recorded classes, links, videos could be easily shared and circulated among the kids[1].

This in-turn has also enhanced the self-paced learning among the kids as they could learn easily from the recorded videos, could pause them and revisit them whenever there is some confusion or lack of understanding of a particular concept acting as digital book for the learners.

- ***Diversity***

With the learning platform going global, for a single concept students can access hundreds of the videos. With the availability of the diverse resources, the dependence of the students on the traditional teaching has reduced. Rather than the paper pen test the mode of evaluation and assessment have changed. Even the choices of the questions for assessment are shifted to multiple choice questions than long answers making learning more concepts oriented.

B. Positive influence on teachers

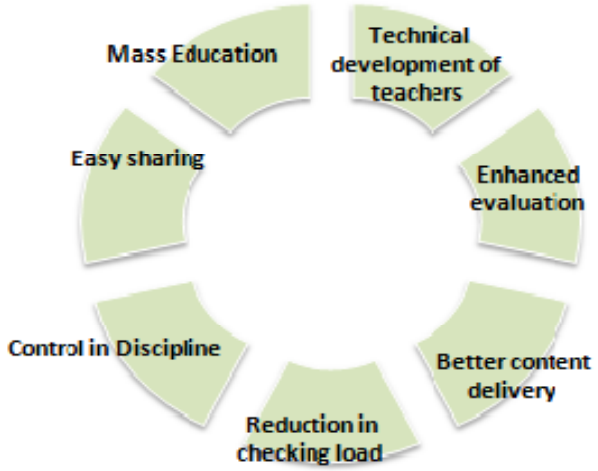


Fig. 2. Pie chart representing the Positive impacts on the teachers.

- ***Technical development of teachers***

With the total dependence on the online teaching, the teachers are also engaging themselves in learning the new educational software's, browsing the educational content, learning new tools for the online educational assessment and evaluation. This enabled the teachers to enhance their technical skills even when they were hesitant to. The elimination of the tremendous checking work provided the teachers the ability to make time for the same. Also, to enhance the skill set in the changing times schools are also running many online courses and workshop to enhance the skill set of their teachers making

them technologically sound. This has made the schools realize that being digitally skilled in the need of the future education era and also an essential requirement for the appointment of the teachers in the future.

- ***Enhanced evaluation***

The scope for errors always exists. However, the automatic evaluation of the answers in the Google forms has helped in reducing the checking errors of the large manuscript by the teachers. Without the fear of abundance of checking work teachers can now conduct more tests and have better assessment of the learning content. This will not only ensure better results but also ensure that the students are able to receive the learning of the content without any biasness.

- ***Better content delivery***

Teachers are now able to enhance the learning experience for the learners as now they could use the easily available videos, pictures etc with the learners. Teachers now don't have to depend only on the books. Teaching with the help of power point presentations help the teachers to use specific and important content from the books which help the learners to learn in an effective as well as efficient manner. Unlike normal classroom teaching, teachers could spend more time in explanation than dictating notes which can now be easily shared and circulated. The power point presentations can be recorded and saved without any need for hustle and can be reviewed by the learners as per their own convenience.

- ***Reduction in checking load***

With virtual notes, power point presentations, electronic evaluation and electronic report cards the checking work of the teachers have tremendously reduced which usually was considered as a time consuming work for the teachers. Now, they could spend more time and energy in improving the teaching –learning experience by including more content related videos, pictures, live examples, quizzes etc.

- ***Control in Discipline***

Discipline problem can now be managed in a better manner over the online teaching. The availability of features like mute buttons, hand raise etc helps in controlling the volumes and disturbances over the online teaching. Teachers do not have to repeatedly ask the kids to keep quiet in turn leading to more focused and smooth teaching process.

- ***Easy sharing***

Without any hustle the learning content could easily be sourced, created, shared and accessed at the comforts of the home both by the learners as well as teachers. This helps the learners as well as the teachers to keep a record of how much has been taught and from where to start the next day. If a child is not able to attend the class, the parents could easy catch up from the next day by revisiting the online recorded class of the missed lecture.

- ***Mass Education***

In a traditionally classroom teaching, the teacher has to keep a check and a limit over the number of the students who can attend the classes. Teachers can easily reach out to a larger number of people as compared to those in a physical classroom.

Hence, it could be easily understood from the above discussion that the online mode of education has acted as a strong pillar in ensuring the continuity of learning during the time of corona crisis. However, since it has been for the first time that the mode of education has only been virtual and hence in adapting and carrying out the virtual learning many learning gaps and concerns have come out on the surface which to many extents are stopping the virtual learning to become an independent source of learning reality for many.

C. Learning gaps with virtual education

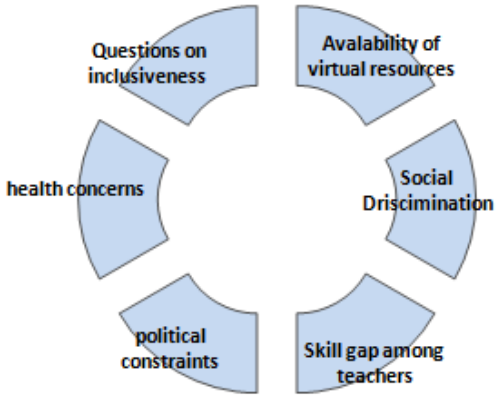


Fig. 3. Pie chart representing the pitalls

- ***Availability***

Before online education comes to rescue it is important to determine that do we all have the facilities available for it. About three-fourth of the students in India do not have the access to the internet services according to the 2017-2018 NSO survey [3]. For the online education to serve its purpose it's very important to ensure the availability of the internet, electronic gadgets like laptops, smart phones, or even radio or TV.

In a country like India where poverty is such a big issue it is very difficult to ensure that if we teach only through the

electronic medium in such time of crisis, are we able to reach to all the students in the different areas of the world. Statistically, only 23.8 percent of the households of students in India have internet access and in urban areas, 42 percent of households have access to the internet as compared to 14.9 percent in rural areas raising the argument that online education is serving the needs of the chosen [4]. Such situation raises question on the availability of the equal educational opportunities for all the students. Not only the students the teachers who are not financially sound could not make the necessary arrangements for all successful delivery of the content through virtual mode. Hence, it is important for the government to intervene and ensure that no one is left out and all get equal opportunities to learn.

- ***Social discrimination***

In India, students have been facing social barriers from a long time ago. The discrimination on the basis the basis of the gender and economic condition is worse of all. In rural areas the girls are expected to do the household work in the morning rather than studying and the boys are considered to work on the farmlands than to study. Also, in cases of opportunity to study in conservative families boys are still given the first place and the continuity of girls getting education still gets paralyzed in such situation. Moreover, in many places girls are not allowed to watch the educational programmers.

- ***Skill Gap***

In the Indian schools, teachers are mostly hired on the basis of their educational degrees and not primarily on their technical knowledge or capabilities. At the time of immediate onset of the lockdown there was a situation of hustle and the schools were technically not prepared to handle such a situation.

In such scenario where the teachers are hired from more than 30 years are not very acquaint with the new educational technology. The senior teachers still feel comfortable in teaching the students with the help of chalk and duster than power point presentations. Hence, it is very important that the teachers are given regular trainings and also should be made sure that even in the normal times they make the use of technological tools so that virtual learning is not out of practice. At the times of hiring computer literacy should be made eligibility criteria so that the teachers in the future are fully skilled and technically ready to handle such crisis.

The technical unpreparedness on the part of the school cause a financial jolt to the schools itself. The parents were not satisfied with the quality of virtual teaching and were hence not willing to pay the school fees. Thus, learning from the pandemic and realizing the virtual learning as a rescue, it should be made sure that schools keep themselves prepared so that the quality of education does not suffer.

- ***Political constraints***

In India parents consider physical presence of the children in the school as an assurance that the kid is learning. Taking the same concept into account, the parents were not ready to pay the school fees as they didn't considered virtual education as the real education and also were not satisfied with the quality of the online education transacted by the schools. In such a situation school administration, political leaders, administration was only giving importance to the fees without focusing on improving the quality of education or addressing the issue in the right manner.

- ***Health concerns***

When the complete dependence over the virtual mode of learning resulting into complete dependence over electronic gadgets like mobiles and laptops the screen time was for the kids have really gone up leading to eye related problems, restlessness, anxiety, headaches among the kids.[2] Considering the same the classes for the kids below class 3 stood cancelled. However, in such situation there is need to search for a better alternative. With the kids being caught up at homes, the physical activities of the kids is totally zero affecting their physical, mental and emotional health.

- ***Question on inclusiveness***

In order to facilitate inclusive education, each class had 25% of the students from the economically weaker section. Now, during the online classes these students are the most vulnerable as they do not have the access to smart phones, laptops or even the basic electricity service throughout the day. Thus, it is important that schools prepare and create some special arrangements for such kids by extending financial support or personalized attention by the teachers. Also, arrangements should also be made for the children with the special needs as they also need personal and special attention by the teachers. Thus, for the virtual learning to become a reality or a complete rescue for the face to face learning in the future these issues needs to be addressed.

4. CONCLUSION

We can clearly conclude that online education has played a big role in ensuring the continuity of knowledge sharing at the times of crisis. However, we could not consider online education as a complete replica for face to face teaching. In order to ensure that the quality of education does not suffer, we need to address the issues such as availability of resources for all the people so that the benefit from the education could reach to all. The poor, economically weaker section, disabled is not marginalized ensuring the right to education for all. Till this basic feature is not achieved, virtual learning cannot become a reality in the true spirit. The discrimination and the attitude change are truly very important to be bought in the

society. The most important aspect is to learn and the learning through the virtual platform is equally as important as the learning from face to face, no doubt the quality can always be improved with the dynamic technological advancement.

Once, we accept virtual and distance education as equal to face to face learning for it to achieve its true recognition. Also, the schools need to enhance skill set of the existing teachers through the continuous workshops and trainings acquainting them with the new softwares. Also, in the future teachers should encourage the submission of the assignments through the digital platforms like Google classroom etc so that even during the normal times kids are comfortable with the use of the technology. Schools should conduct workshops for the students in the future over the digital platforms and especially during the summer holidays, students are encouraged to submit their projects including videos, presentations over the virtual platform. This will not only ensure the gradual improvement in the quality of virtual education but also incorporate virtual learning as a part of everyday lives of the future kids so that at times if face to face education cannot take place switching over virtual learning is not accompanied with sudden hustle and confusion.

To ensure that the future teachers and academicians are thoroughly skilled to incorporate the virtual learning as part of our everyday lives, Government and more private institutions should work on enhancing the capacity building workshops to upgrade the skills of the teachers with which the quality of education could enhance. Also, in order to protect the kids from the adverse effects of sedentary lifestyle and increased screen time there is a need to increase awareness on the indoor physical activities like yoga, painting, aerobics which can benefit the kids and address the health issues.

Once, the following issues are addressed we can easily consider virtual learning as a reliable and dependable form of education even in the future when our world is free from the pandemic and making the dream of digital India a reality.

REFERENCES

[1] Jena, P. K. (20020). Online Learning during Lockdown PERIOD for COVID-19 in India. Editorial Board, 9(5), 82

[2] Jadhav, V. R., Bagul, T. D., & Aswale, S. R. COVID-19 Era: Students' Role to Look at Problems in Education System during Lockdown Issues in Maharashtra, India.

[3] Hindustan Times. 2020. Issues Facing Online Education. [online] Available at: <https://www.hindustantimes.com/india-news/issues-facing-online-education/story-SaG9rbmlRjRnALWqPspjII.html> [Accessed 2 October 2020].

[4] Statecraft. 2020. The Challenge Of (Online) Education In India During The COVID-19 Pandemic. [online] Available at: <https://www.statecraft.co.in/article/the-challenge-of-online-education-in-india-during-the-covid-19-pandemic> [Accessed 15 September 2020].

[5] Aithal, S., & Aithal, S. (2020).Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives.

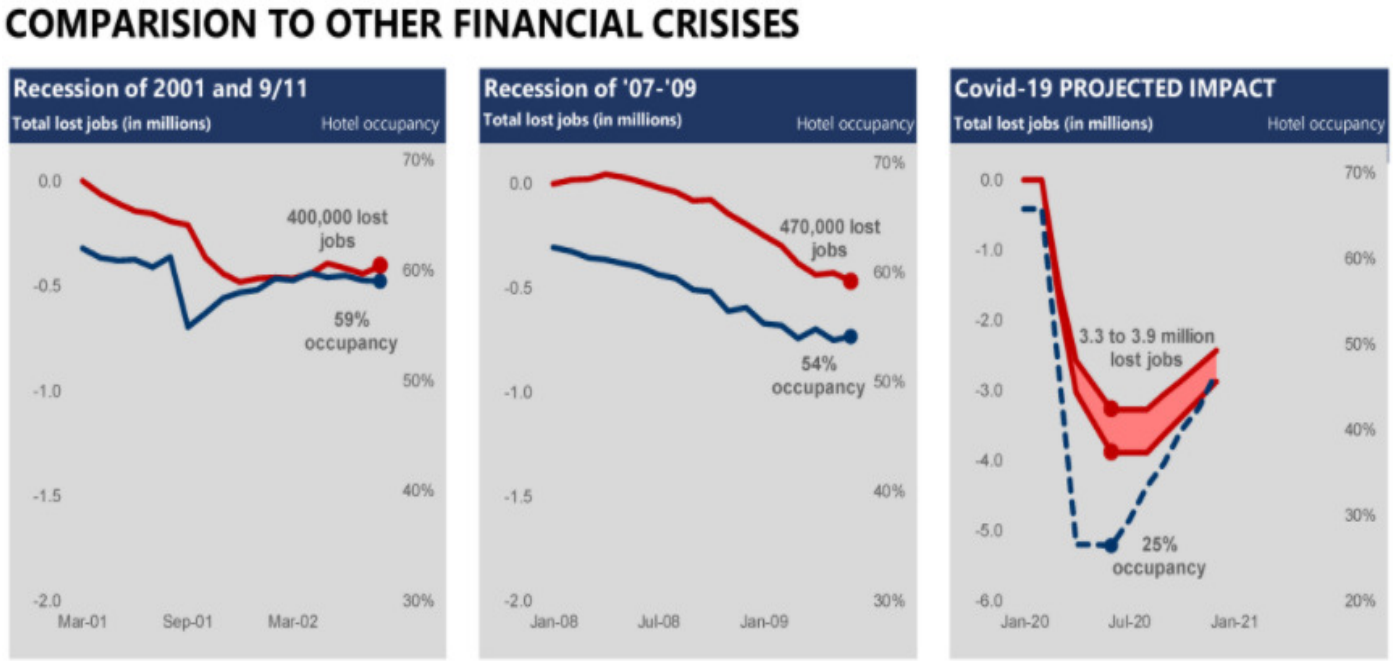
Impact of Covid-19 on Hospitality Industry

Dr. Asha Chaudhary*

Abstract: The COVID-19 disease began at the end of 2019 and started threatening the health and lives people. It is highly contagious and causing severe health issues. Government has declared the scenario as a public health emergency and also adopted stringent measures to stop the spread of disease and contain the same. The measures adopted by government resulted in a severe drop in foreign and domestic travel, across tourism and business traveller sections. This paper has made an attempt to explore the affect of COVID-19 on Hospitality Industry in India. The data has been collection through online questionnaire. The finding indicated that the industry is badly hit by the COVID-19 pandemic.

1. INTRODUCTION

The COVID-19 disease emerged at the end of 2019 and started threatening the health and lives of people. It is a contagiousdisease with the possibility of causing severe health issues.This disease has speedily affected the country. Government has declared the scenario as a public health emergency and also adopted stringent measures to stop the spread of disease and contain the same.The measures adopted by government resulted in a severe dip in foreign and domestic travel.The COVID-19 disease has now achieved pandemic status. In COVID-19, India's hotel and hospitality industry's business has droppedharshly in the first quarter of 2020 and in the third week of March 2020, hotels' sector viewed a drop of more than 65% . Due to this COVID-19 deadly pandemic the Hotel and Hospitality Industry revenue is impacted badly. The coronavirus pandemic has given a crippling blow Hospitality Industry.



Source:https://www.ahla.com/covid-19s-impact-hotel-industry

The impact of COVID-19 can be harsh if it is not contained immediately. According to the World Travel and Tourism Council, "COVID-19 pandemic scenario could takeaway 50 million employmentsacross the world in travel and tourism industry and Asia, among all continents, is anticipated to be the worst impacted ".

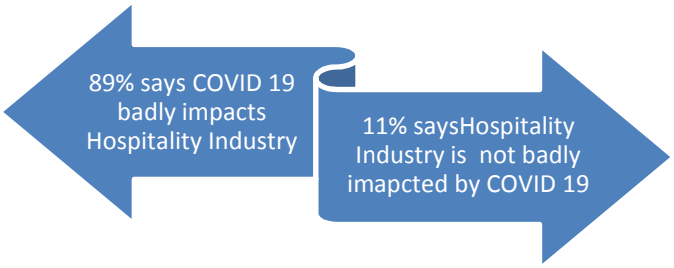
**Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, ashachaudhary@msi-ggsip.org*

2. OBJECTIVE OF THE STUDY

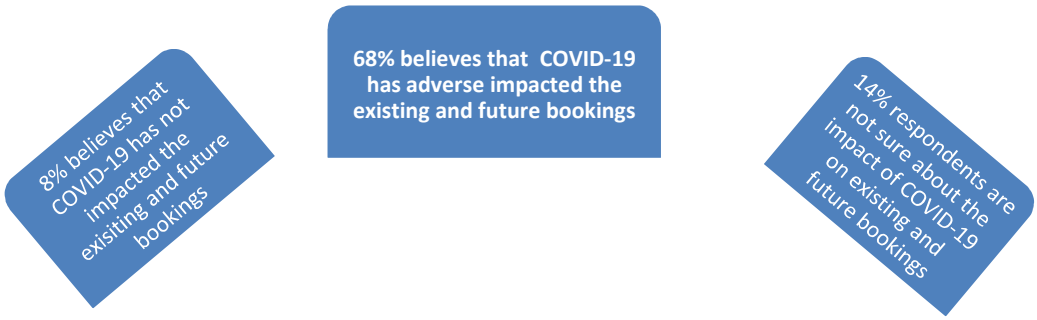
The present paper tries to study the impact of COVID-19 on Hospitality Industry. For the same the data has been collected through the structured questionnaire through online.

3. ANALYSIS OF THE STUDY

- The research paper collected response on the "Impact of COVID-19 on Hospitality Industry". From the analysis of the data collected it was interpreted that the Hospitality Industry is badly affected by the COVID-19 pandemic. COVID-19 outbreak resulted in a harsh dip in foreign and domestic travel. Due to pandemic, mandatory lockdown implemented resulting in almost no movement of people.

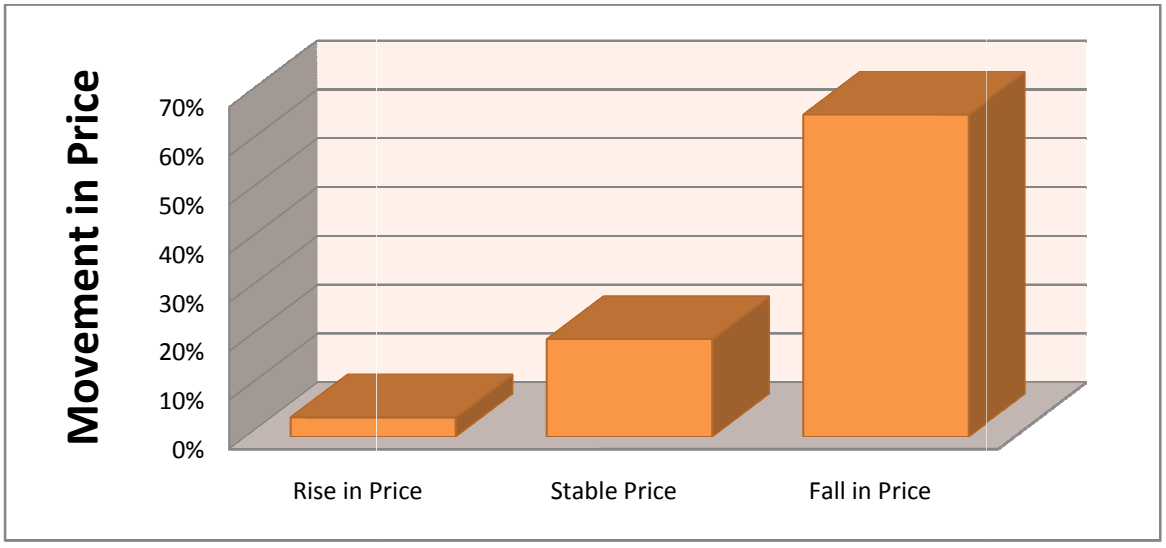


- The present research collected data on "Impression of COVID-19 on existing and future bookings



After analyzing the data it was concluded that 68% of the respondents believe that COVID-19 has affected the existing and future bookings of hospitality Industry. COVID-19 is highly contagious disease which spreads very quickly. Therefore government has issued guidelines and people taking precautions by not travelling or staying at hostels which is at high risk.

- Data collected on "Extend to which Price of bookings have been affected due to COVID-19"



After analysing the data it was concluded that due to COVID-19 break out and lockdowns there is fall in demand for hotel stays. Due to this hospitality industry is facing loses. In order to survive, hospitality industry is lowering the price after the unlock scenario so as to attract people.

- Data collected on "Time needed to come back in Business".

After analyzing the data it was found that majority respondents believe that Hospitality Industry would take more than 9 Months to come back in Business. The data collected and analysed indicate that COVID-19 will have a very long impact on Hospitality Industry.

4. RECOMMENDATION

Hospitality Industry should proactively take precautionary steps to cope with the COVID-19 impact like device a subtle digital and social media marketing approach in order to hold mindshare of clienteles, Develop and sustain communication channels with important clients, remain in discussion with relevant local government authorities, ensure proper hygiene and proper sanitaization, proper social distancing and use of mask. In this new normal, Hospitality Industry has to adapt with the change in the environment and follow the new normal in order to be back in progressive stage.

REFERENCES

[1] Menegaki, A.N. Hedging Feasibility Perspectives against the COVID-19 for the International Tourism Sector. 2020. Preprints 202004.0536.v1. Preprints. Available online: https://www.preprints.org/manuscript/202004. 0536/v1.

[2] Nazneen, S.; Hong, X.; Ud Din, N. COVID-19 Crises and Tourist Travel Risk Perceptions. 2020. ssrn.3592321. SSRN. Available online: https://papers.ssrn.com/sol3 /papers.cfm? abstract_id=3592321.

[3] Centeno, R.S.; Marquez, J.P. How much did the Tourism Industry Lost? Estimating Earning Loss of Tourism in the Philippines. arXiv 2020, arXiv:2004.09952. Available online: https://arxiv.org/abs/2004.09952

[4] Priyadarshini, I. A Survey on some of the Global Effects of the COVID-19 Pandemic. 2020. rs.3.rs-20842/v1. Research Square. Available online: https://www.researchsquare.com/article/rs-20842/v1 .

[5] Jain, S. Effect of COVID-19 on Restaurant Industry–How to Cope With Changing Demand. 2020. ssrn.3577764. SSRN. Available online: https://papers.ssrn.com/sol3/papers.cfm? abstract_id=3577764 (accessed on 21 April 2020).

[6] Jain, S. Would Hotel Industry Have to Redo the Rooms/Housekeeping Standards Post COVID? Instilling Greater Confidence to Bring Back the Customers. 2020. ssrn. 3587897. SSRN. Available online: https: //papers.ssrn.com/sol3/ papers.cfm? abstract_id=3587897 (accessed on 30 April 2020).

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Financial Inclusion in India: Opportunities and Challenges

Manjida Ahmed*, Dr. Rashmi Singel**

Abstract: Financial inclusion is increasingly being recognised world over as a key driver of economic growth and poverty alleviation. Access to formal finance can boost job creation, reduce vulnerability to economic shocks and increase investment in human capital. At a macro level, greater financial inclusion can support sustainable and inclusive socio-economic growth for all.Financial inclusion means the participation of poor people in accessing financial products and services such as savings, pension, credit, payment account etc.The economic growth and welfare of a nation depends upon accessibility of people to financial services. An all-inclusive financial system is essential because it enhances efficiency and welfare by providing scope for secure and safe saving practices and by facilitating a wide range of efficient financial services.The present study will focus on the progress, challenges and opportunities of financial inclusion in India.

Keywords: Financial Inclusion, Financial Services, Banking Sector, Financial Inclusion Plan (FIP), Financial Literacy

1. INTRODUCTION

Financial inclusion is increasingly being recognised world over as a key driver of economic growth and poverty alleviation. Access to formal finance can boost job creation, reduce vulnerability to economic shocks and increase investment in human capital. At a macro level, greater financial inclusion can support sustainable and inclusive socio-economic growth for all.To achieve the above objectives in a co-ordinated and time-bound manner, formulation of a National Strategy for Financial Inclusion (NSFI) is essential. Globally, the adoption of the National Financial Inclusion Strategy (NFIS) has been accelerated significantly in the past decade.Financial inclusion means the participation of poor people in accessing financial products and services such as savings, pension, credit, payment account etc. "financial inclusion refers to universal access to wide range of financial services such as insurance and equity products.", (planning commission 2009). Starting from 2005, the Reserve Bank of India (RBI) and the Government have been making efforts to increase financial inclusion. SHG bank linkage program, use of business correspondents, know your customer norms, electronic benefit transfer. Use of mobile banking, expansion of bank branches and ATMs, financial literacy have played significant role in increasing financial inclusion. Improvement in Information Technology helps banks in reducing their cost and to increase customer reachability. As per the census 2011, 85895 bank branches were opened in public sector banks as on 2015, 125857 bank branches in scheduled commercial banks. With the help of information technology banks offer various solutions like mobile banking, e-wallets and virtual cards.

2. LITERATURE REVIEW

Varun K.V and Sabik K. studies the opportunities and challenges of financial inclusion in India and the initiatives and guidelines for financial inclusion. The banks need to deploy new technologies and create financially viable models to take forward the process of financial inclusion in an effective manner.According to S. Mahendra Dev financial inclusion is important for improving the living conditions of poor farmers, rural non-farm enterprise and other vulnerable groups. Financial institutions should look at inclusion both as a business opportunity and social responsibility. The role of self-help groups movement and microfinance institutions is important to improve financial inclusion.Gradamsetty Sai Arun, describes as inclusive growthis necessary to pull millions of Indians out of poverty. The study discusses and analyses various initiatives by the government, RBI, banks and role played by ICT. Poonam Archana Chaudhary studies financial inclusion through banking services which includes savings and loans, number of accounts, number of offices, KCC and ATMs etc. Three determinants have been taken to show district wise decadal financial inclusiveness for the year 2006and 2016.Dr. A. S. Ramasastrireveals in his study that, in the past decade, disruptive technologies have shrunk the world leading to location agnostic production and consumption of services. This has transformed the banking industry to a great extent, altering the way the business is conducted. Banks have created digital infrastructure to offer various solutions like mobile banking, e-wallets, virtual cards for successfully fulfilling the changing needs of the modern-day customer. Wholesale banking is also catching on this trend designing and

***Assistant Professor, School of Management and Commerce, K.R. Mangalam University, Gurugram, rashmicharujain@gmail.com*
***Assistant Professor, School of Management and Commerce, K.R. Mangalam University, Gurugram, Haryana, India, rashmicharujain@gmail.com*

delivering the right mix of products and services to corporate customers, harnessing digital technologies.Angella Faith Lapukeni This paper looks at an overview of financial inclusion globally and in Africa discuss the impact of ICT on reaching individuals who were otherwise financially excluded, mainly through mobile payments. Trend analysis shows a faster growth in mobile telephone subscription than financial inclusion through mobile financial services. This paper also discusses the opportunity costs of possible ICT both at microeconomics and macroeconomic level and concludes with possible recommendations for policy in leveraging ICT for increase financial inclusion.

3. RESEARCH OBJECTIVE

1. To understand the opportunities and challenges of financial inclusion in India.

2. To study the initiatives taken by Reserve Bank of India (RBI) for growth of financial inclusion in India.

4. RESEARCH METHODOLOGY

The study is based on secondary data. Data and information have been collected with the help of magazines, websites, journals, RBI bulletins , reports by Government of India, Ministry of Finance, NABARD reports, and other sources.

5. FINANCIAL INCLUSION

Financial inclusion leads to economic and social development of economy. It helps in reduction in income equalities, helpful in implementing various schemes provided by the government to the underprivileged people like social security schemes (old age pension etc.). Financial inclusion helps in increasing growth of economy, reduction in poverty. By financial inclusion subsidies provided by govt. are directly distributed by crediting bank account of targeted beneficiary than indirect distribution of subsidies. Access to financial services not only opens doors for families, collectively it develops entire communities and can help in drive economy. Financial inclusion is about to adopt the ability and tools to manage and save their money and strengthen people communities with the skills and knowledge to make the right financial decision.Involving in financial services and products gives people an opportunity to start and grow business through microfinancing schemes. Financial inclusion makes people being able to invest in the education for betterment of their children, to handle uncertainties that require unexpected payment or financial shocks. It promotes investment within communities, provide jobs and equality in community and within families. Financial Inclusion is helpful in reducing the loopholes in public subsidies and schemes as they can be transferred directly into the beneficiary's accounts.

6. OPPORTUNITIES OF FINANCIAL INCLUSION IN INDIA

- Financial inclusion will not only provide safe savings but also offer many allied services like insurance coverage, entrepreneurial loans, payment and settlement facilities etc.
- With an increase in business opportunities, national income of our country will also increase, which in turn results in increased GDP.
- Financial access will also attract global market players in our country that will result in increasing business and employment opportunities.
- with the help of KYC norms and UID financial inclusion process speeds up the banking process which reduces the cash and non-cash costs to both banks and customers.
- By fostering financial inclusion and encouraging saving habits can also provide provides funds for searching more productive sources of employment by providing access to easy finance and banking services to even in rural areas.
- With the help of financial inclusion concept, by saving small amounts over time, poor people can arrange funding for the lump investment needed in businesses like for purchasing equipment's or buying goods at a wholesale price.
- Electronic benefit transfer (EBT): With the help of EBT and information and communication technologies, banks can transfer social benefits electronically to the bank account of the beneficiary and can deliver government benefits at the doorstep of beneficiaries, thus reducing dependence on cash and lowering transaction costs.
- For achieving commercially sustainable universal access, banking systems will be updated to new technologies like EBT to ensure the availability of financial services to all sections at reduced cost and enhanced benefits like makes banking convenient which ensures being able to transact near where they live and work and ensuring trust among the peoples that they are putting their money with such organizations that seem to care for them and who they feel are going to be there for them when they need them the most.
- Financial inclusion provides opportunities to the banking sector to cut across various strata of society, regions, gender, and income and encourage the public to embrace banking habit. Reserve Bank of India has intervened for the success of financial inclusion by introducing various enactments, financial literacy drives, leveraging technology etc.

- Financial inclusion will help the poor in meeting various needs with the help of a wide range of financial services which are readily available and affordable also. Financial services will provide tools which will help in providing easy financing facilities in many fields like microenterprises' investments in new production technologies, helping in farmers' purchasing productivity-enhancing inputs such as fertilizers, laborers' search for better job opportunities, or children's education and to mitigating people's exposure to large Lifecycle events or unpredictable risks.

Thus, financial inclusion offers plenty of opportunities for growth and development in India.

7. CHALLENGES IN ACHIEVING FINANCIAL INCLUSION

Financial services are used only by a section of the population, the excluded sections are rural, poor areas where it is difficult to provide these financial services which is mainly relying on informal sector (moneylenders etc.) for availing finance that is usually at exorbitant rates. The main challenge of financial inclusion is to include the rural and poor people in the coverage area.

- Financial Illiteracy is also one of the challenges in the area of financial inclusion. Lack of basic education prevents the people to have an access from financial services.
- Poor living even in urban areas does not fully utilize the financial services as they find them costly and unaffordable which deter the poor from accessing them.
- Another challenge in the area of financial inclusion is that access to formal financial services requires various documents of proof regarding persons' identity, income, birth certificates, etc. But poor peoplegenerally lack these documents and thus are devoid of these services.
- Poor and rural sections may sometimes subscribe these financial services initially but may not use them as active as others due to high distance between the bank and residence, poor infrastructure etc.
- Low income level is another challenging area in the process of financial inclusion because they think banks provides services only to rich class.
- Due to difficulty in understanding formal languages, various documents and many formalities in banking procedure people are not comfortable in using financial services.
- Many people who live in remote localities find it difficult to reach the areas where banks are generally situated.
- Many people, who lack basic knowledge and education, do not know the importance of financial products like insurance, finance, bank accounts, cheque facilities etc is also the challenge in the implementation of financial inclusion.
- Many financial institutions not able to justify on commercial grounds the establishment of broad-based infrastructure to serve poor households so they sometimes pull back to their physical presence in rural or poor areas and also place some restrictions to discourage the custom of poor people (e.g. high minimum account balances). As a result, they also pass the access cost on to customers, who had to travel to distant branches and face long queuing time. As a result, many poor people reject financial institutions that serve the middle and upper classes.

8. RBI INITIATIVES

1. **Financial Inclusion Plans (FIPs)** In order to have a planned and structured approach to financial inclusion, banks have been advised to prepare Board-approved Financial Inclusion Plans (FIPs). These FIPs capture banks' achievements on various parameters such as the number of outlets (branches and BCs), Basic Savings Bank Deposit Accounts (BSBDAs), overdraft facilities, KCCs and General Credit Card (GCC) accounts and transactions in ICT-BC accounts.

2. **National Strategy for Financial Inclusion.** In order to systematically accelerate the level of financial inclusion in the country in a sustainable manner, the National Strategy for Financial Inclusion has been prepared under the aegis of the FIAC and is based on the inputs and suggestions from the Government of India and other financial sector regulators

3. **Penetration of Banking Services:** The Reserve Bank has taken several steps to provide banking facilities in the unbanked villages in the country. The use of information technology (IT) and intermediaries has made it possible to increase outreach, scale and depth of banking services at an affordable cost.

4. **'Train the Trainers' Programme for Capacity Building of Business Correspondents** To build the capacity and skills of Business Correspondents (BCs), for effectively delivering financial services at the grass-root level, a two-tier 'train the trainers' programme, 'Skill Upgradation for Performance of Resources – BCs' (SUPER-B) was designed by the Department.

5. **Setting up of National Centre for Financial Education (NCFE):** The NCFE has been set up under Section 8 of

the Companies Act, 2013 as per the directions of the Financial Stability and Development Council – Sub Committee (FSDC-SC) by RBI, SEBI, IRDAI and PFRDA. The NCFE continued its focus on promoting financial education across India for all sections of the population under the aegis of the National Strategy for Financial Education for creating financial awareness and empowerment through financial education campaigns across the country in the form of seminars, workshops, conclaves, trainings, programmes, campaigns, etc.

6. **Financial literacy Camps.** Financial literacy is crucial for imparting efficacy to the financial inclusion initiatives of the Reserve Bank. In this direction, a number of new initiatives were undertaken.

Financial Inclusion Plan: A Progress report

Particulars	End-March 2010	End- March 2018	End-March 2019*
Banking Outlets in Villages - Branches	33,378	50,805	52,489
Banking Outlets in Villages > 2000-BCs	8,390	100,802	130,687
Banking Outlets in Villages < 2000- BCs	25,784	414,515	410,442
Total Banking Outlets in Villages – BCs	34,174	515,317	541,129
Banking Outlets in Villages- Other Modes	142	3,425	3,537
Banking outlets in villages - total	67,694	569,547	597,155
Urban locations covered through BCs$	447	142,959	447,170
BSBDA - through branches (No. in Million)	60	247	255
BSBDA - through branches (Amt. in Billion 44	731	878	
BSBDA - Through BCs (No. in Million)	13	289	319
BSBDA - Through BCs (Amt. in Billion)	11	391	532
BSBDA - Total (No. in Million)	73	536	574
BSBDA - Total (Amt. in Billion)	55	1,121	1,410
OD facility availed in BSBDAs (No. in million)	0.2	6	6
OD facility availed in BSBDAs (Amt. in Billion 0.1	4	4	
KCC - Total (No. in Million)	24	46	49
KCC - Total (Amt. in Billion)	1,240	6,096	6,680
GCC - Total (No. in Million)	1	12	12
GCC - Total (Amt. in Billion)	35	1,498	1,745
ICT-A/Cs-BC-Total transactions (Number in million)#	27	1,489	2,094
ICT-A/Cs-BC-Total Transaction (Amount in billion)#	7	4	5.884
*: Provisional. $: Out of 447,170 outlets, It is reported that 388,868 outlets provide limited services like only remittances or sourcing of loans, etc. #: Transactions during the financial year. Source: As reported by banks			

Source: RBI Report

9. CONCLUSION

The concept of financial inclusion has gained substantial importance in the Indian context. For achieving the financial inclusion people need to have basic financial literacy, financial skills, product knowledge and understanding. Bank nationalization was the first step towards financial inclusion in India. Regional rural banks are created to take the banking and financial services to the rural people.Rapid increase is seen in the progress of banking technologies. Bringing the financial inclusion to rural population can be easily achieved if done with the help of ICT (Information and Communication Technology), creating digital infrastructure to offer various solutions like mobile banking, e-wallets, virtual cards.RBI and

Govt. of India are taking various initiatives to penetrate banking services in rural areas.

REFRENCES

[1] Sundaram, N., Sriram, M. M., &Kannaiahc, D. (2016). A comprehensive reach of financial inclusion by ICT: An investigation in select districts of Tamil Nadu. *International Journal of Applied Engineering Research*, *11*(1), 353-8.

[2] Dev, S. M. (2006). Financial inclusion: Issues and challenges. *Economic and political weekly*, 4310-4313.

[3] Rachana, T. (2011). Financial inclusion and performance of rural co-operative banks in Gujarat. *Research Journal of Finance and Accounting*, *2*(6).

[4] Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R., Ram, K., ... & Kumar, U. (2014). Financial inclusion in India: Select issues.

[5] Lapukeni, A. F. (2015). Financial Inclusion and the Impact of ICT: An Overview. *American Journal of Economics*, *5*(5), 495-500.Volume 17, Issue 5.Ver. I (May. 2015), PP 80-84 www.iosrjournals.org, Dr. G. Tulasi Rao.

[6] Arun, G. S. (2013). Understanding financial inclusion in india and role of ICT in ICT. *International Journal of Innovative Research and Development*, *2*(12).

[7] Dev, S. M. (2006). Financial inclusion: Issues and challenges. *Economic and political weekly*, 4310-4313.

[8] Singh, S. N., Dubey, O. P., Deep, K., & Prasad, A. (2014). Role of Information Technology in Financial Inclusion. In *Proceedings of the Third International Conference on Soft Computing for Problem Solving* (pp. 495-502). Springer, New Delhi.

[9] Government of India, Ministry of Finance, Department of Financial services. Overview and Progress on Financial Inclusion.

[10] Gupta, S. K. (2011). Financial Inclusion-IT as enabler. *Reserve Bank of India Occasional Papers*, *32*(2), 129.

[11] Chibba, M. (2009). Financial inclusion, poverty reduction and the millennium development goals. *The European Journal of Development Research*, *21*(2), 213-230.

[12] Diniz, E., Birochi, R., &Pozzebon, M. (2012). Triggers and barriers to financial inclusion: The use of ICT-based branchless banking in an Amazon county. *Electronic Commerce Research and Applications*, *11*(5), 484-494.

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Portfolio Management – A Guide to Investors

Dr. Shailza*

Abstract: ***The current study shows the depositors to construct the collection of different investments as the investment must include many diverse alternatives -- that is, deciding what other stocks, bonds, or other monetary tools to buy; when to buy; what and when to sell; and so forth. Making such selection is an outline of management. The organization of a portfolio is goal-driven by buying other stocks, bonds, mutual funds, or other funds as the goal of a saver is to raise the portfolio value by selecting funds that they believe will go up in price. The study goes further on with the target of making an investment from diverse investors perspective and also to identify the base after making such an investment in executing the needs of the depositors. Also, the study rules out the depth understanding of portfolio organization for the investors. The information was gathered from 100 investors based on the following criteria which contains young Generation Opinion including college students, Servicemen working in government organizations & private organizations, Professionals who includes doctors, lawyers, teachers and also from public who already have investment in Portfolio Management. Results of analysis discloses Portfolio management or investment helps investors in useful and proficient management of their venture to achieve their ambitions. Most of the investors are concerned in investing in dissimilar mutual funds with highest returns. The study also tackles the different types of hazards associated with portfolio management.***

Keywords: Portfolio, Management, Investment, Mutual Funds.

1. INTRODUCTION

Stock exchange roles square measure peculiar in nature and most of the Investors take into account themselves insecure in running their investment within the exchange as a result of it's tough for an individual to call corporations that have development projections for investment. additional because of volatile nature of the markets, it needs constant shuffling of portfolios to urge the foremost out of from the expansion opportunities. Even once characteristic the expansion familiarised corporations and their securities, the commerce practices are sophisticated, creating it's not a simple task for depositors to exchange all exchange and follow abreast of post commerce job work. Investors prefer to embrace teams of securities to a definite quantity than single security that provide the larger anticipated returns. They believe that a mix of securities control along can provides a helpful result if they're sorted in a very manner to secure higher come back once taking into thought the chance part. that's why good speculation steerage through portfolio oversight checks will facilitate the investors to form a pointy and educated selection among different investment opportunities while not the priority of post commerce hassles.

From The Rational Edge: the primary in a very pioneering series of articles on portfolio management, this introduction expresses IBM's read purpose concerning the institutions and conditions of portfolio management, and discusses thoughts and resources that hold and change effective portfolio management practices. a decent thanks to begin acceptive what portfolio organization is (and is not) is also to outline the term portfolio. in a very business surroundings, we will look to the open-end fund trade to convey rationalization the terms origins. Morgan Stanley's wordbook of medium of exchange Terms proposes the subsequent explanation: "If you own over one security, you've got associate degree investment portfolio. You build the portfolio by shopping for further stocks, bonds, mutual funds, or different investments. Your goal is to extend the portfolio price by choosing investments that you simply view can go up in value.

According to trendy portfolio theory, one will scale back his/her venture hazard by making a distributed cluster that contains ample separated varieties, or classes, of securities so a minimum of a number of them could fabricate robust takings in any economic surroundings.

2. BASIC IDEAS FOR PORTFOLIO MANAGEMENT

Now that we have a tendency to perceive a number of the fundamental dynamics and inherent challenges organizations face in death penalty a business strategy via supporting initiatives, let's explore some basic concepts and parts of portfolio management practices.

1. First, we will currently introduce a definition of portfolio that relates additional on to the context of our preceding discussion. Within the IBM read, a portfolio is: one in all variety of mechanisms, created to actualize vital components within the Enterprise Business Strategy. It contains a specific, approved, and incessantly evolving, assortment of Initiatives that are aligned with the organizing component of the Portfolio, and, that

**Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, shailzadutt@msi-ggsip.org*

contribute to the action of goals or goal parts known within the Enterprise Business Strategy. The idea for constructing a portfolio ought to mirror the enterprises specific desires.

2. A portfolio makeup identifies and includes variety of portfolios. This makeup, just like the portfolios inside it, ought to aspect with major designing and results boundaries, and with business parts. If you have got a product-oriented portfolio constitution, for instance, then you'd have a split portfolio for every major product or product cluster. Every portfolio would contain all the concepts that facilitate that specific product or product cluster contribute to the success of the enterprise business manoeuvre.

3. This is a brand new role for organizations that embrace a portfolio management approach. A portfolio administrator is answerable for continued oversight of the contents inside a portfolio. If you have got many portfolios inside your portfolio construction, then you may possible to wish a portfolio government for every one. The responsibilities (and authority) can vary ranging from one organization to a different, however the fundamentals ar as follows: • One portfolio manager overseas one portfolio. • The portfolio manager provides daily oversight. • The portfolio manager sporadically reviews the performance of, and conformity to expectations for, initiatives inside the portfolio. • The portfolio manager ensures that information is collected and analyzed concerning every of the initiatives within the portfolio. • The portfolio manager permits periodic higher cognitive process concerning the long run direction of individual initiatives.

4. As initiatives are dead, the organization ought to conduct periodic reviews of actual versus planned performance and conformity to original expectations. Typically, organization managers specify the frequency and contents for these periodic reviews, and individual portfolio managers supervise their designing and execution. The reviews ought to be three-d, as well as each plan of action components (e.g. adherence to set up, budget, and resource allocation) and strategic components (e.g., support for business strategy goals and delivery of expected structure benefits). a major side of oversight is setting multiple call points for every initiative, so managers will sporadically value information and judge whether or not to continue the work. These "continue/change/discontinue" choices ought to be driven by associate understanding (developed via the periodic reviews) of a given initiatives continued price, expected edges, and strategic contribution, creating these choices at multiple points within the initiatives lifecycle helps to confirm that managers can frequently examine and assess ever-changing internal and external circumstances, needs, and performance.

3. OBJECTIVES OF THE STUDY

1. To grasp the attention regarding Portfolio management among completely different cluster of investors.
2. To grasp the target behind creating associate degree investment from completely different investors read point.
3. To descibe the explanations behind creating such associate degree investment and therefore the wants it helps in fulfilling.
4. To grasp the typical time horizon for creating a profitable investment.
5. To review and analyze the attention level of investors about Portfolio Management.
6. To induce exhaustive information of portfolio management.
7. To investigate completely different portfolios with their professionals and cons
8. To investigate investors selection whereas choosing a selected portfolio.
9. To investigate the market and creating portfolios for various investors cluster according to their wants and objectives.
10. To seek out out the typical category of risk most popular by completely different investors.
11. To investigate investors perspective towards fluctuations within the worth of your portfolios.
12. To grasp the impact of Market on varied Portfolio Management theme.
13. To live the satisfaction level of investors concerning PMS.
14. To grasp the PMS performance and satisfaction level within the gift market.

4. RESEARCH METHODOLOGY

Research is associate degree art of scientific investigation. The word analysis refers to finding the reality about one thing through a scientific study. In different words analysis may be a scientific and systematic look for pertinent data on a particular topic.

5. RESEARCH STYLE

This analysis is searching and conclusive in nature as a result of it aims to gather the info about the that means of portfolio management from investors purpose of read. The analysis

approach used is survey primarily based and therefore the analysis is basically supported the first information.

6. RESEARCH INSTRUMENT

Structured questionnaire

7. METHODOLOGY

To fulfill any task, it's necessary to follow a scientific methodology. The methodology adopted for finding out the target of the project was measure the varied investors. Direct Personal Interview methodology with the assistance of structured form was adopted for assortment of Primary information. Secondary information has been collected through the varied sample information on the market on the net.

Sample Size

A sample size of a hundred investors was chosen to fulfill objectives.

The choice of sample was supported the subsequent criteria:-

• Young Generation Opinion together with school students. • Servicemen operating in government organizations & personal organizations. • Professionals includes doctors, lawyers, academics etc • folks that have already got investment in Portfolio Management.

POPULATION - Delhi NCR SOURCE OF INFORMATION: The relevant information within the material was collected by exploitation 2 main ways i.e. Primary information and Secondary information. 1) **PRIMARY information** – Primary information is that the information that is employed or collected for the first time and it's not employed by anyone within the past. Questionnaire –This methodology of information assortment is sort of widespread, notably in case of huge enquiries. Here in our analysis we tend to set sixteen straightforward queries and requested the respondents to answer these queries with correct data. 2) **SECONDARY information -** Secondary information is that the information that is offered in the readymade kind and that has already been employed by people for varied functions i.e. it refers to it information that have already been collected by some other person, earlier this time. The sources of secondary information ar newspaper, Internet, Websites of SEBI, Journals and different printed documents.

8. LIMITATIONS OF THE STUDY

Due to constraints of your time and resources the study is probably going to suffer from bound limitations. Some of them are mentioned below in order that the findings of the study are understood within the proper way.

- This data provided within the study is up to this point with reference to study.
- Analysis was restricted to some location of the Delhi.
- Gap between understanding of investigator and users.
- Some respondents were hesitant to reveal data regarding their finances.
- The data given by the respondents can be biased as a result of a number of them¬ won't have an interest in providing the proper data.
- Interpretation of the analysis differs from person to person and their thinking.

Top of Form

Bottom of Form

Top of Form

9. REVIEW OF LITERATURE

As per definition of SEBI, **PORTFOLIO** means "a collection of securities owned by an Investor." It represents the total holdings of securities belonging to any person. It comprises of different types of assets and securities.

PORTFOLIO MANAGEMENT refers to the management or administration of the portfolio of securities to protect and enhance the value of the underlying investment. It is the management of various securities and other assets, to meet specified investments goals for the benefits of the investors. It also helps in reducing the risk without sacrificing returns.

HARRY MARKOWITZ in his paper 'portfolio selection' (published in 1952 by the journal of finance) stated the theory **Modern portfolio theory (MPT)** refers to the theory of investment that seeks to maximize the expected return of portfolio at a given level of risk. Similarly it also attempts to diminish risk for a given level of return expected. To achieve this, portfolio manager choose the proportions of different assets in a portfolio carefully. The modern portfolio theory is extensively used for practice in the financial industry, however basic assumptions of this theory has faced certain challenges in fields like behavioral economics.

Modern Portfolio theory (MPT) presents the concept of diversification in investing by using mathematical formulation. It aims to select a collection of investment assets which has lower risk than any individual asset. It can be observed spontaneously as dynamic market conditions cause changes in value of different types of assets in conflicting ways. The prices in the bond market may fall independently from prices in the stocks market, thus there is overall lower risk in a collection of both bond and stocks assets as compared to

individual asset. Moreover, the diversification reduces the risk even if cases where assets' returns are positively correlated.

In technical terms, a Modern Portfolio theory (MPT) represents the return of asset as a normally distributed function or as an elliptically distributed random variable where risk is defined as the standard deviation of return. According to MPT, the return of a portfolio is equivalent to the weighted combination of the assets' returns because the portfolio is modeled as a weighted combination of assets. MPT aims to reduce the total variance of the return of portfolio by combining various assets whose returns are negatively correlated or not positively correlated. MPT assumes that the markets are competent and investors are logical.

10. INVESTMENT PORTFOLIO MANAGEMENT AND PORTFOLIO THEORY

Portfolio theory is an investment approach developed by University of Chicago economist Harry M. Markowitz (1927 -), who won a Nobel Prize in economics in 1990. Portfolio theory allows investors to estimate both the expected risks and returns, as measured statistically, for their investment portfolios.

Markowitz described how to combine assets into efficiently diversified portfolios. It was his position that a portfolios risk could be reduced and the expected rate of return could be improved if investments having dissimilar price movements were combined. In other words, Markowitz explained how to best assemble a diversified portfolio and proved that such a portfolio would likely do well.

There are two types of Portfolio Strategies:

A. Passive Portfolio Strategy: A strategy that involves minimal expectation input, and instead relies on diversification to match the performance of some market index.

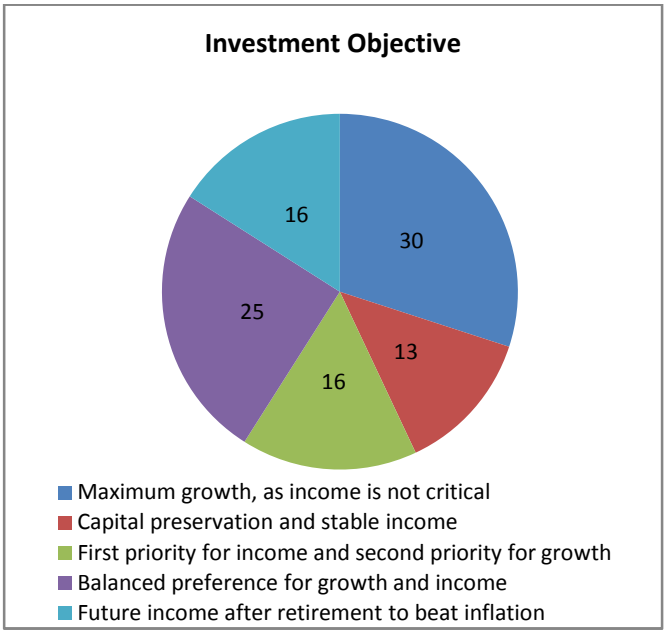
B. Active Portfolio Strategy: A strategy that uses available information and forecasting techniques to seek a better performance than a portfolio that is simply diversified broadly.

11. ANALYSIS AND INTERPRETATION

Analysis and Interpretation

1) What is your investment objective?

Investment Objective	No. of Respondents
Maximum growth, as income is not critical	30
Capital preservation and stable income	13
First priority for income and second priority for growth	16
Balanced preference for growth and income	25
Future income after retirement to beat inflation	16

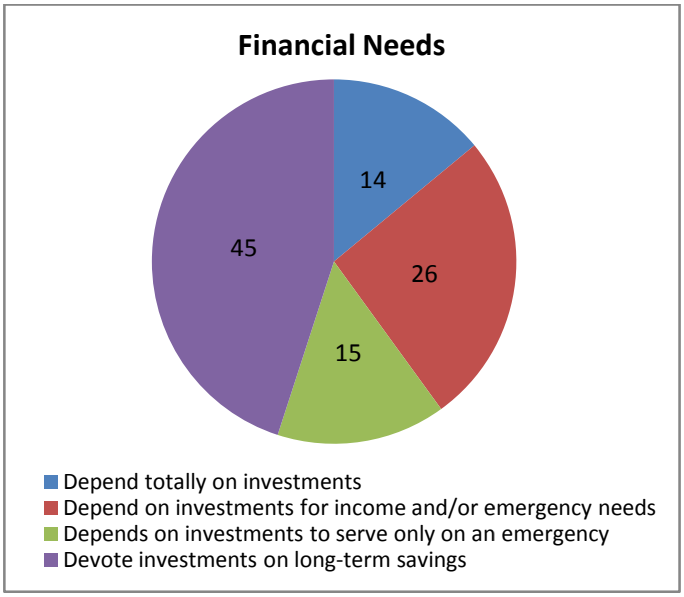


Analysis and Interpretation

From the survey we had observed that the main objective of investor's is to have Maximum Growth, as income is not a critical factor for them. Around 30% of the investor's main objective is Maximum growth and 25% of the investors prefer Balanced preference for growth and income as their investment objective. People of higher age group have selected Future income after retirement to beat inflation as their main investment objective.

How would you describe your financial needs?

Depend totally on investments	14
Depend on investments for income and/or emergency needs	26
Depends on investments to serve only on an emergency	15
Devote investments on long-term savings	45

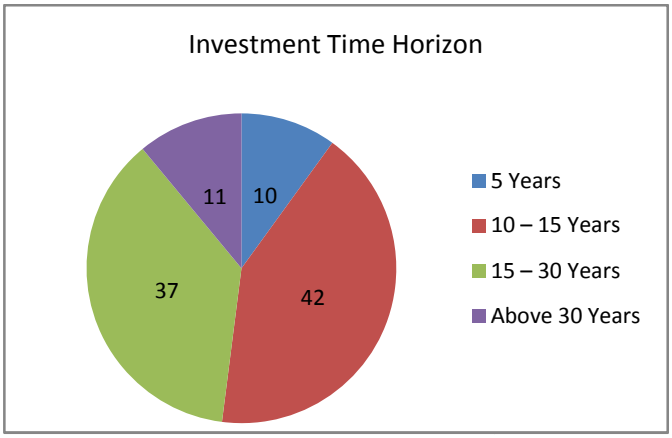


Analysis and Interpretation –

According to my research, 45% of the investors devote their investments on long term savings. The general need to today's investors is to secure their future and for that they devote a major part of their savings in long term investments. Apart from this 26% investors depends on investments for their income and/or emergency needs, 15% of the investors devote their investments which serve financial needs only in case of an emergency and rest 14% depends totally on investments for their financial needs.

1) What is your investment time horizon?

Investment Time Horizon	No. of Respondents
5 Years	10
10 – 15 Years	42
15 – 30 Years	37
Above 30 Years	11

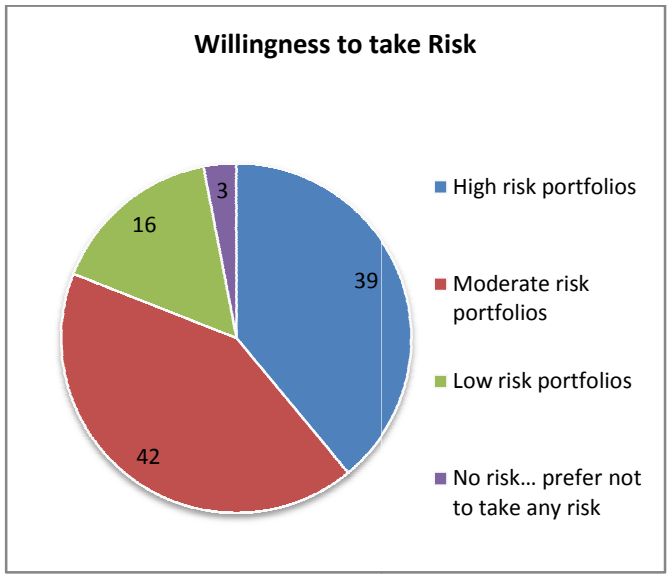


12. ANALYSIS AND INTERPRETATION

It was observed that the Average Investment Time Horizon of all the investors lies in the group of 10 – 15 years. Around 42% investor's time horizon for investment purpose with regard to their age is 10 – 15 Years. Only 10% of the investor's time horizon is of 5 Years, they are generally the new investors with limited knowledge of the market. They belong to the age group of 20-30. Also according to my field of survey there are only 11% investors whose Investment time horizon is above 30 years.

2) What is your willingness to take risk?

Willingness to take Risk	No. of respondents
High risk portfolios	39
Moderate risk portfolios	42
Low risk portfolios	16
No risk… prefer not to take any risk	3

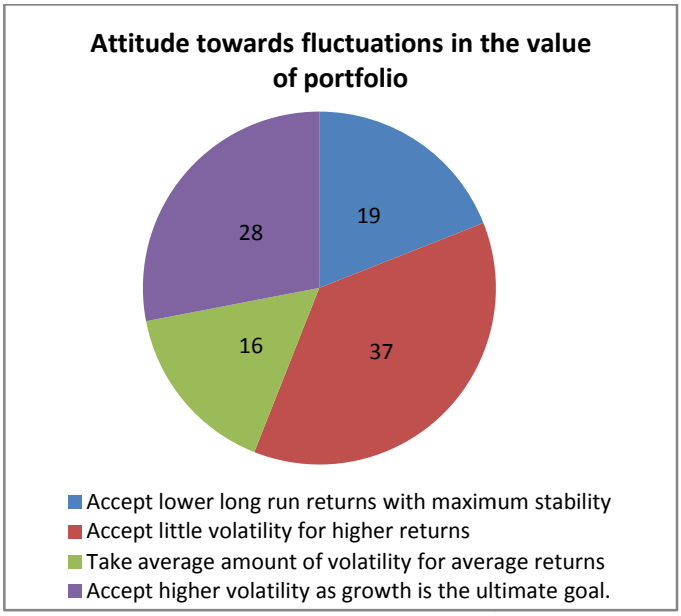


Analysis and Interpretation

From the above analysis we can say that 42% of the investors prefer Moderate Risk Portfolios as there is moderate risk associated with them which ensures some constant returns even in worst situations. Only 39% of the investors prefer High Risk Portfolios, they are ready to take high risk for getting maximum returns and growth of their investments. Only those players who have proper knowledge of market situations and an experience of at least 10 years can turn these high risk portfolios into opportunities for growth.

3) What is your attitude towards fluctuations in the value of your portfolios?

Attitude towards fluctuations in the value of portfolio	No. investors attitude
Accept lower long run returns with maximum stability	19
Accept little volatility for higher returns	37
Take average amount of volatility for average returns	16
Accept higher volatility as growth is the ultimate goal.	28

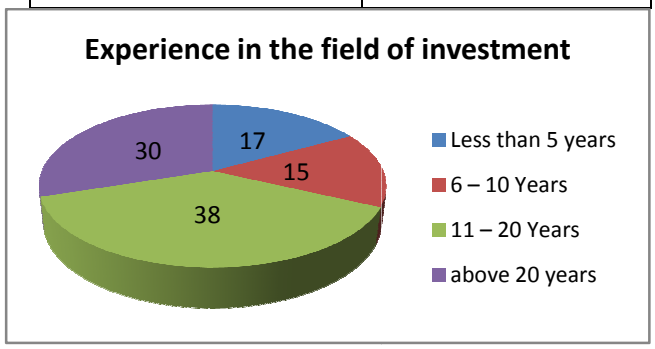


Analysis and Interpretation –

According to my research majority of the investors prefer to accept little volatility for higher returns and they account for 37%. These are the safe players in the market who wants higher returns, but prefer to take limited risk for that. Only 28% investors accept higher volatility as growth is the ultimate goal for them.

4) What is your experience in the field of investments?

Experience in the field of investment	No. of Respondents
Less than 5 years	17
6 – 10 Years	15
11 – 20 Years	38
above 20 years	30

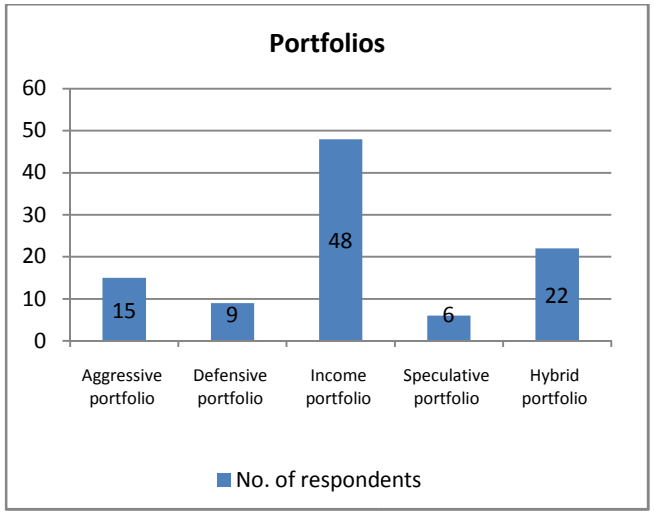


Analysis and Interpretation –

According to the data collected 38% of the investors have an experience of 11-20 Years in the field of investment. They belong to those people who have major investments with an overall asset size of near about 2.5lacs. Around 30% of the investors have experience of above 20 years and their asset size is of above 2.5lacs. Their major investments are in the Mutual Funds, Stock Market (Equities) and insurance policies. To manage all these different schemes they are advised Portfolio Management.

In which of the following portfolios have you invested?

Portfolios	No. of respondents
Aggressive portfolio	15
Defensive portfolio	9
Income portfolio	48
Speculative portfolio	6
Hybrid portfolio	22

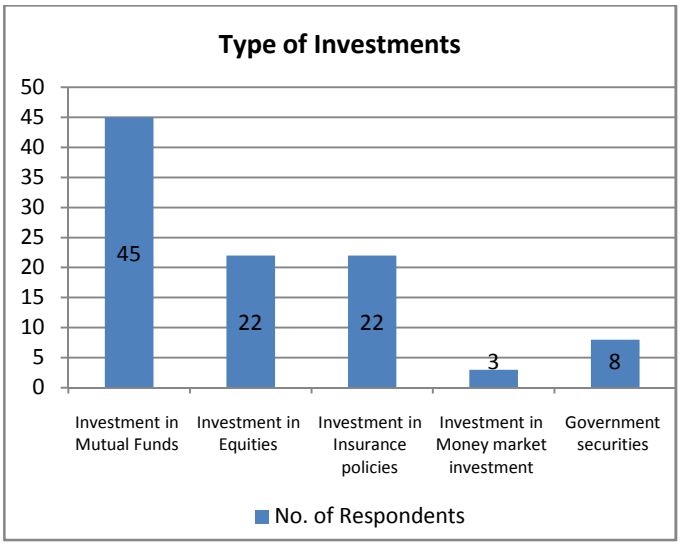


Analysis and Interpretation –

From the above bar graph it can be observed that majority of the investor's have invested their money in Income Portfolio i.e. they account for 48% out of total respondents. Investors prefer to invest in income portfolio because it focuses on making money through dividends or other types of distributions to stakeholders. These companies are somewhat like the safe defensive stocks but should offer higher yields. An income portfolio should generate positive cash flow as compared to other portfolios. The riskier of all portfolios are Aggressive and Defensive Portfolios.

5) Which type of investments have you invested?

Type of Investments	No. of Respondents
Investment in Mutual Funds	45
Investment in Equities	22
Investment in Insurance policies	22
Investment in Money market investment	3
Government securities	8

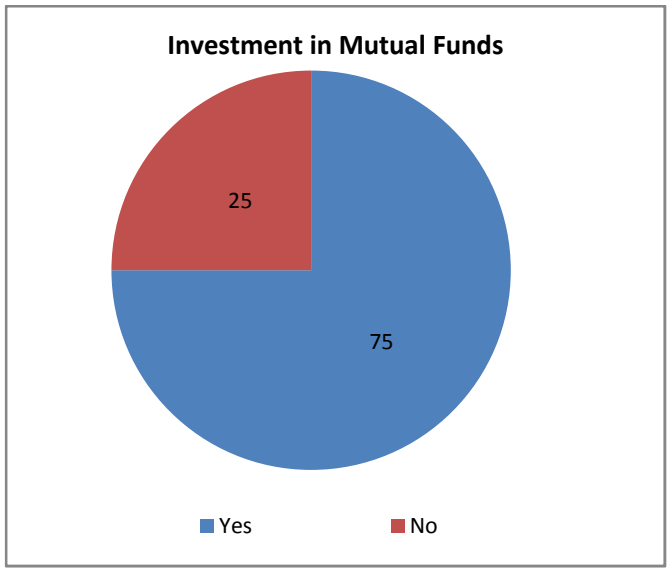


Analysis and Interpretation –

According to the survey, 45% of the investors have invested in Mutual Funds. Around 22% of investors have invested in Equities (Stock Market) and Insurance policies. Rest 8% have invested in Government Securities and only 3% of investors have invested in Money Market Securities. This chart depicts the distribution of savings of an investor in different sectors. This data helps Portfolio Manager in knowing our investment pattern and deciding the perfect mix of securities in perfect ratio to be combined in a single portfolio which helps in managing the assets of investor in a better and efficient way. This task is generally done by knowledgeable and experienced portfolio managers and they charge fees for such services.

9) Have you ever invested in mutual funds?

Investment in Mutual Funds	No. of Respondents
Yes	75
No	25



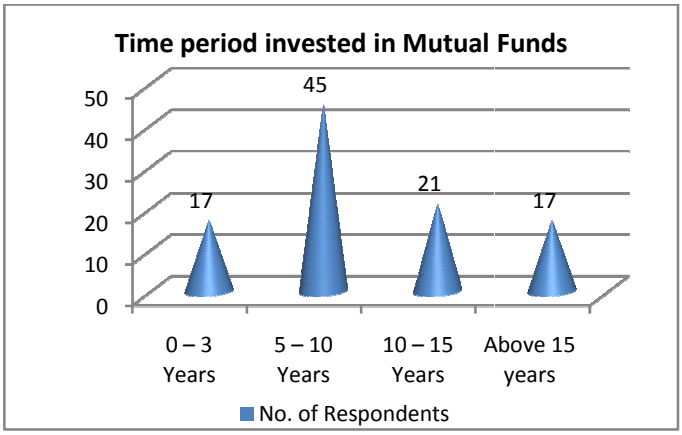
Analysis and Interpretation –

Around 75% of the Investors have invested in Mutual Funds and they are satisfied with their investments. This 75% shows the level of awareness and growing trust of people in the Mutual Fund sector. Now with the help of so many technologies people share information and get awareness about new innovations and changes. These technologies can also be used to make a large mass of people aware about Portfolio Management and its benefits.

The only reason why portfolio management is not so much recognized is because of its reach to the layman.

10) For how long you have been investing in mutual funds?

Time period invested in Mutual Funds	No. of Respondents
0 – 3 Years	17
5 – 10 Years	45
10 – 15 Years	21
Above 15 years	17

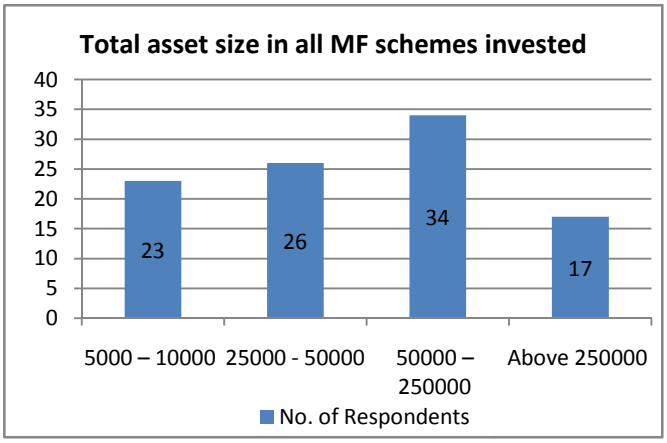


Analysis and Interpretation –

From the above data we can say that out of total respondents 45% of them have invested in mutual funds for the time period of 5 – 10 years. Nearly 21% of them have invested in mutual funds for 10 – 15 years. Those who have initially made an investment come in the category of 0 – 3 years and account for 17% from the data. The investors who are game players in this sector have a lot of investments in mutual funds through lump sums and SIPs and have an asset size of 2.5 lacs and above. These types of people generally belong to last category of investors who have invested in mutual funds from past 15 years and above.

11) What is your total asset size in all mutual fund schemes that you have invested?

Total asset size in all MF schemes invested	No. of Respondents
5000 – 10000	23
25000 - 50000	26
50000 – 250000	34
Above 250000	17

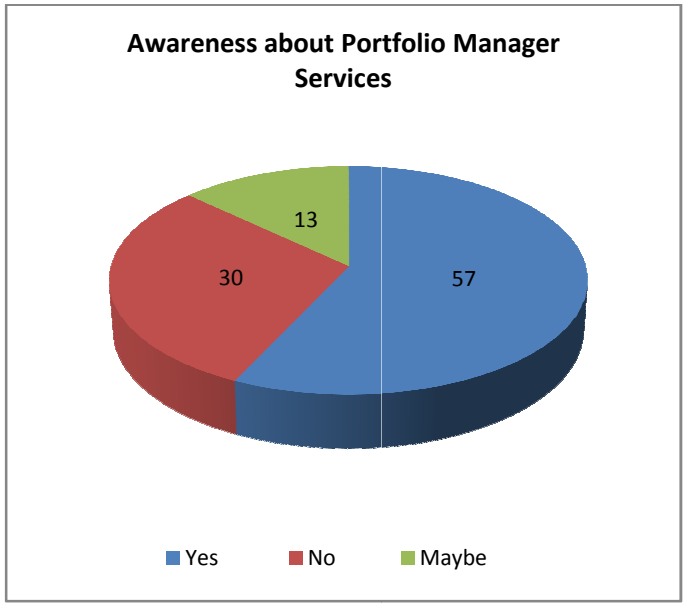


Analysis and Interpretation –

According to the data 34% investors who have invested in Mutual Funds come under the bracket of 50000 – 250000. They are those people who have knowledge about Mutual funds but prefer to take lower or moderate risk. Only 17% of total investors come under the bracket of asset size of above 250000. They are those investors who have complete knowledge of Mutual funds and are in this field for the past 15 years and more.

12) Are you aware about services offered by Portfolio Manager?

Awareness about Portfolio Manager Services	No. of Respondents
Yes	57
No	30
Maybe	13

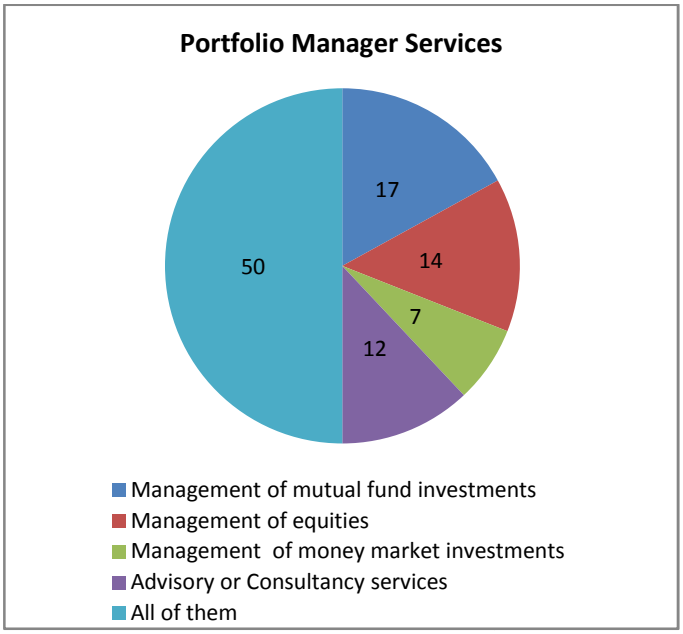


Analysis and Interpretation –

Only 57% of the total investors surveyed are aware about Portfolio Manager Services. There are some people who are not sure about whether know all Portfolio manager services and they account for 13% of total investors. Rest 30% investors are still unaware about portfolio manager services. This shows the need for conducting seminars and free lectures about portfolio management to make the general public aware about the same and also to let them know its benefits over others.

13) If yes, what type of services are you aware of?

Portfolio Manager Services	No. of Respondents aware
Management of mutual fund investments	17
Management of equities	14
Management of money market investments	7
Advisory or Consultancy services	12
All of them	50

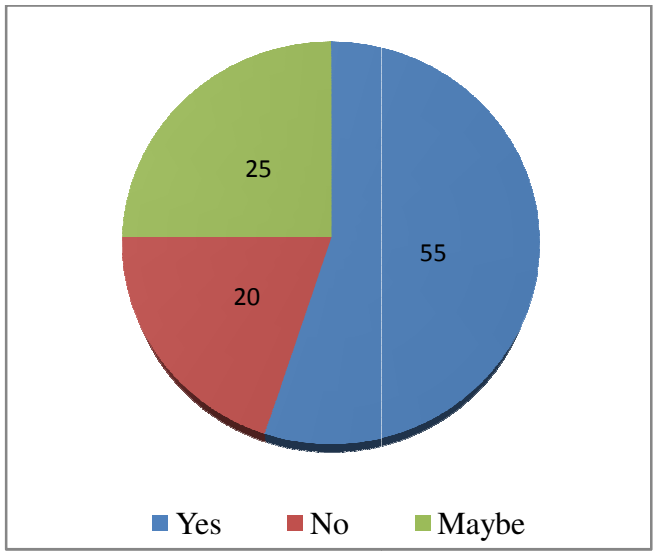


Analysis and Interpretation –

According to the above mentioned data only 17% of investors are aware about Mutual Fund management services. 14% investors are aware about Management of Equities (Stock market). 12% of the investors are aware about Advisory and consultancy services of portfolio manager. Only 7% investors out of total are aware about management of money market services offered by portfolio manager. At last half of the people i.e. 50% of the investors are aware about all these services offered by portfolio managers.

14) Would you want to hire a portfolio manager at present or in future?

Yes	55
No	20
Maybe	25

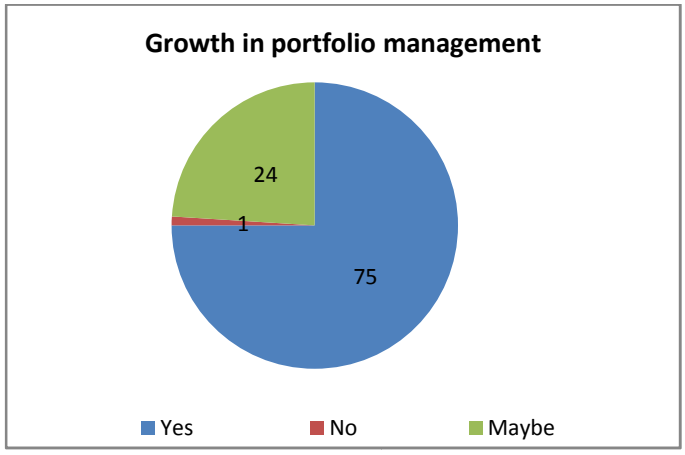


Analysis and Interpretation –

From the data we can say that 55% of the respondents replied with Yes that they would like to hire a Portfolio manager in present or in future. 20% of the respondents replied with straight No, maybe they can manage their portfolio on their own. Rest 20% of the respondents replied with Maybe, because they aren't sure about this. They need little more knowledge and gets their doubts cleared by a portfolio manager to make a better decision.

15) Do you think there will be growth in portfolio management in future?

Growth in portfolio management	No. of Respondents
Yes	75
No	1
Maybe	24



Analysis and Interpretation –

According to the data collected, 75% of the respondents are of the view that there will be growth in portfolio management in future, except 1% saying a No. Rest 24% are not sure about this.

13. FINDINGS OF THE STUDY

- All respondents surveyed are investors which means all of them have made some investments either in Equities, MF or Insurance Policies or through G –sec.
- Out of total investors surveyed, 40% of them are female. This shows that females are equally aware about various schemes to invest & grow their money.
- The majority of the investors from whom we have received replies belong to the age group of 30-40. As they are the ones who are more serious about their money and its use. They are at that age where they want to secure their present and future needs.
- The main objective while making an investment is to get maximum growth, as income is not critical. Though answer to this differs from age group.
- Those investors who are in there 40s want to secure their future and so their main objective while making an investment will be capital preservation and stable income.
- Majority of the respondents have described their financial needs by devoting savings to long term investments.
- Investment time horizon means the time period for which you are ready to make an investment. It differs according to the age, savings, needs etc of the investors. According to the survey, 42% of the respondents are willing to invest their money/savings for 10-15 years.
- Generally, people prefer to take only Moderate risk portfolios to face less changes of loss. But in order to earn higher returns, you need to invest your money High risk portfolios. Though risk is very high but chances of returns are higher than the rate to risk.
- Investor's attitude towards fluctuations in the value of portfolio describes their capability to take risk. According to the survey, it can be found out that 37% investors prefer to accept little volatility for higher returns.
- Out of the total people surveyed, 30% of the respondents have an experience of above 20 years in the field of investment.
- Around 15% of the investors have invested in Aggressive portfolios and 9% in Defensive Portfolios. These are the two risky portfolios to invest n as they change drastically with changes in market.
- According to the data collected, 75% of the respondents have invested in Mutual Fund Schemes of Portfolio management.

14. CONCLUSION

With the help of given project I got an in-depth knowledge about the working of portfolio management. Also I got an insight as too how to invest in portfolio management, which scheme provide better returns as compared to other and who are the portfolio management players in the Indian market.

It can be concluded from the project that future of portfolio management is bright provided proper regulations prevail and investor's needs are satisfied by providing variety of schemes. The interest of investors is protected by SEBI. Portfolio management is governed by SEBI Act.

After the overall study about each and every aspect of this topic it shows that portfolio management is a dynamic and flexible concept which involves regular and systematic analysis, proper management, judgment, and actions and also that the service which was not so popular earlier as other services has become a booming sector as on today and is yet to gain more importance and popularity in future as people are slowly and steadily coming to know about this concept and its importance.

It also helps both an individual the investor and FII to manage their portfolio by expert portfolio managers. It protects the investor's portfolio of funds very crucially.

Portfolio management service is very important and effective investment tool as on today for managing investible funds with a surety to secure it. As and how development is done every sector will gain its place in this world of investment.

15. RECOMMENDATIONS

Investors Alerts

Do's:

- Only intermediaries having specific SEBI registration for rendering Portfolio management services can offer portfolio management services
- Investors should make sure that they are dealing with SEBI authorized portfolio manager.
- Investors must obtain a disclosure document from the portfolio manager broadly covering manner and quantum of fee payable by the clients, portfolio risks, performance of the portfolio manager etc.

- Investors must check whether the portfolio manager has a necessary infrastructure to effectively service their requirements.
- Investors must enter into an agreement with the portfolio manager.
- Investors should make sure that they receive a periodical report on their portfolio as per the agreed terms.
- Investors must make sure that portfolio manager has got the respective portfolio account by an independent charted accountant every year and that the certificate given by the charted accountant is given to an investor by the portfolio manager.
- In case of complaints, the investors must approach the authorities for redressal in a timely manner.
- Don'ts
- Investors should not deal with unregistered portfolio managers.
- They should not hesitate to approach the authorities for redresser of the grievances.
- They should not invest unless they have understood the details of the scheme including risks involved.
- Should not invest without verifying the background and performance of the portfolio manager.
- The promise of guaranteed returns should not influence the investors.

BIBLOGRAPHY

LINK's

- https://www.investopedia.com/terms/p/portfoliomanagement.asp
- https://efinancemanagement.com/investment-decisions/portfolio-management
- http://www.portfoliomanagement.in/portfolio-management-theory.html
- https://www.sebi.gov.in/
- https://docs.google.com/forms/d/e/1FAIpQLSe7w7MISWJDH_i00OvlOcMs1JYLFEVChRgU4FZqixtVc345Hw/viewform?usp=sf_link.

REFERENCE BOOKS

[1] Chandra Prasanna – Security Analysis and Portfolio Management.
[2] V.A. Adadani- Security Analysis and Portfolio Management.
[3] V. Gangadhar- Security Analysis and Portfolio Management.
[4] NISM Book

ANNEXURE – Questionnaire

QUESTIONNAIRE – 100 surveys

(To be filled by investors between the age group of 20-50)

Name -

Mobile No. - Email Id-

Age - Sex - Occupation -

Marital status - Dependents -

Annual Income - Monthly Saving –

1. What is your investment objective?
   - Maximum growth, as income is not critical.
   - Capital preservation and stable income
   - First priority for income and second priority for growth
   - Balanced preference for growth and income
   - Future income after retirement to beat inflation.

2. How would you describe your financial needs?
    - Depend totally on investments
    - Depend on investments for income and/or emergency needs
    - Depends on investments to serve only on an emergency
    - Devote investments on long-term savings.
3. What is your investment time horizon?
    - 5 years
    - 10 -15 years
    - 15 – 30 years
    - above 30 years
4. What is your willingness to take risk?
    - High risk portfolios
    - Moderate risk portfolios
    - Low risk portfolios
    - No risk… prefer not to take any risk
    5. What is your attitude towards fluctuations in the value of your portfolios?
    - Accept lower long run returns with maximum stability
    - Accept little volatility for higher returns
    - Take average amount of volatility for average returns
    - Accept higher volatility as growth is the ultimate goal.
6. What is your experience in the field of investments?
    - Less than 5 years
    - 6-10 years
    - 11-20years
    - above 20 years
7. In which of the following portfolios have you invested?
    - Aggressive portfolio
    - Defensive portfolio
    - Income portfolio
    - Speculative portfolio
    - Hybrid portfolio
8. Which type of investments have you invested?
    - Investment in Mutual Funds
    - Investment in Equities
    - Investment in Insurance policies
    - investment in Money market investment
    - Government securities

9. Have you ever invested in mutual funds?
    - yes
    - no
10. For how long you have been investing in mutual funds?
    - 0-3 years
    - 5-10 years
    - 10-15 years
    - above 15 years
11. What is your total asset size in all mutual fund schemes that you have invested?
    - 5000 - 10000
    - 25000-50000
    - 50000 - 250000
    - above 250000
12. Are you aware about services offered by Portfolio Manager?
    - Yes
    - No
    - Maybe
13. If yes, what type of services are you aware of?
    - Management of mutual fund investments
    - Management of equities
    - Management of money market investments
    - Advisory or Consultancy services
    - All of them
14. Would you want to hire a portfolio manager at present or in future?
    - Yes
    - No
    - Maybe
15. Do you think there will be growth in portfolio management in future?
    - Yes
    - No
    - Maybe
16. Describe your asset management needs?

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Labour Law Reforms a Critical Analysis

Paramveer Singh*, Dr. Vijay Dahiya**

Abstract: ***On 28th September 2020, the Hon'ble President of India gave assent to three Labour Codes viz The Code on Social Security 2020, The Industrial Relations Code 2020 and The Occupational Safety, Health and Working Conditions Code, 2020 which subsumes the existing 29 central laws. The present labour laws have become somewhat obsolete and there was an utmost need of the labour reforms to bring uniformity among labour laws and halt the oppression and exploitation working sector and also by removing Inspector Raj to enable employers to focus on the business activity rather than to get entangled in cumbersome compliance of legal formalities. This paper is based on labour law reforms related to the compression of 44 labour laws into four codes. Government recently tabled the bill "The code of wages, 2020, Occupational safety and Health and working conditions code 2020 with an objective to simplify and labour regulation. It contains few important highlights of the three new labour codes and it gives a gist about how the new labour codes will redecorate the existing labour laws and its benefits to the workmen of the country.***

Keyword: Labour Law, Retrenchment, Enforcement, Social Security.

1. INTRODUCTION

The Constitution of India gives a series of fundamental rights particularly Equality at work and decent working conditions. The main aim of the labour reforms is for employment generation and protection of worker rights. It is a challenging job in country like India where the power rest in the hands of employer and the country is governed by numerous Central and state laws. Labour Laws is a subject of concurrent list thus both Central and States Government can frame laws. We have 40 central labour laws and more than hundred state laws. There are numerous labour laws which were enacted during the British period and are still in operation. British rule had different philosophy, aims and motives while framing these acts. After independence the scenario and situation changed and also the approach to the labour legislation. The idea of societal righteousness and welfare state as preserved in the Constitution of India became the leading ideology for the framing of labour legislation (Thakur 2007). Constitution directed to the states legislation that it is the duty to make effective provisions for safeguarding public support in the matter of unemployment, old age sickness, disablement and other cases of underserved want (Patola et al., 2007). With the pace of time the objectives and methods of earning livelihood changes but rules remains either static or adhoc incremental and slowly became obsolete outdated and irrelevant. After liberalization of 1991 the situation become more grim, management became more aggressive and powerful towards the workers and trade unions. There was many fold growth in economy but the good quality of jobs, better working condition and social security hardly found any place in industries resulting exploitation of workers, low-paid jobs, contract jobs without social security. So, Labour laws reforms is the at most demand of the economy.

2. OBJECTIVES OF LABOUR REFORMS

Without compromising the interest of the labours steps are required for increasing production and employment opportunities in the economy India's labour laws are obsolete outdated and too many also contradictory and adversely administered. Removal of multiplicity of definitions and authorities leading to compliance without compromising social security and wage unity of the workmen. To make the laws easily accessible by the stakeholders and focus on women participation in labour force and address gender biases in wages.

3. ISSUES BEFORE THE COMMISSION

It is observed by the second national Law commission on labour reforms that the present laws regarding labour are obsolete, complicated and inconsistent bearing number of definitions of the same subject at different situations.The Commission was of the opinion that simplification and codification in labour laws will bring transparency and uniformity. In certain areas like occupational safety social security and definition of contractor could not be codified. With great efforts to commission the 40 central laws regarding labour laws has been comprehended, The four codes has replaced 29 existing laws.

**Assistant Professor, Department of Business Administration, Maharaja Surajmal Instititue, New Delhi, India, paramveersingh@msi-ggsip.org*
***Associate Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, vijaydahiya@msi-ggsip.org*

TABLE 1: The following existing Acts related to Safety, Health and Working condition are comprehended under Occupational Safety, Health and Working conditions Code 2020

Labour Codes	Comprehended Acts
"Code on Wages, 2020"	• Payment of Wages Act, 1936; • Minimum Wages Act, 1948; • Payment of Bonus Act, 1965; and • Equal Remuneration Act, 1976
"Occupational Safety, Health and Working Conditions Code, 2020"	• Factories Act, 1948; • Mines Act, 1952; • Dock Workers (Safety, Health and Welfare) Act, 1986; • Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996; • Plantations Labour Act, 1951; • Contract Labour (Regulation and Abolition) Act, 1970; • Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979; • Working Journalist and other Newspaper Employees (Conditions of Service and Miscellaneous Provision) Act, 1955; • Working Journalist (Fixation of Rates of Wages) Act, 1958; • Motor Transport Workers Act, 1961; • Sales Promotion Employees (Condition of Service) Act, 1976; • Beedi and Cigar Workers (Conditions of Employment) Act, 1966; and • Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981
Industrial Relations Code, 2020	• Trade Unions Act, 1926; • Industrial Employment (Standing Orders) Act, 1946, and • Industrial Disputes Act, 1947
Code on Social Security, 2020	• Employees' Provident Funds and Miscellaneous Provisions Act, 1952; • Employees' State Insurance Act, 1948; • Employees' Compensation Act, 1923; • Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959; • Maternity Benefit Act, 1961; • Payment of Gratuity Act, 1972; • Cine-workers Welfare Fund Act, 1981; • Building and Other Construction Workers' Welfare Cess Act, 1996; and • Unorganised Workers Social Security Act, 2008

Sources: Existing Labour Acts; Labour Codes;

TABLE 2: These are certain Central Labour laws which could not embraced under new labour codes:

Name	Coverage
Labour Laws (Simplification of Procedure for Furnishing Returns and Maintaining Registers by Certain Establishments) Act, 1988	Allows establishments with up to 19 workers and up to 40 workers to submit combined annual returns and unified registers under 16 central laws (covering wages, factories and contract labour)
Apprentices Act, 1961	Provides for the regulation of training of apprentices.
Bonded Labour System (Abolition) Act, 1976	Provides for the abolition of the bonded labour system.
Child and Adolescent Labour (Prohibition and Regulation) Act 1986	Prohibits employment of children (below 14 years) in all occupations and of adolescents (14-17 years) in hazardous occupations and processes.
Public Liability Insurance Act 1991	Makes provisions for public liability insurance to provide relief to persons affected by accidents which

Name	Coverage
	occurred while handling any hazardous substance.
Dock Workers (Regulation of Employment) Act 1948	Makes provisions for framing a scheme for regulating the employment of dock workers. Sets up a Board to administer the scheme.
Dock Workers (Regulation of Employment) (Inapplicability to Major Ports) Act 1997	Provides for inapplicability of the Dock Workers (Regulation of Employment) Act, 1948 to dock workers of major ports in India.
Coal Mines Provident Fund and Miscellaneous Provisions Act, 1948	Makes provisions for framing provident fund, pension, deposit linked-Insurance and bonus schemes for persons employed in coal mines.
Provident Funds Act, 1925	Deals with provident funds primarily relating to the government, local authorities, Railways and certain other institutions.
Seamen's Provident Fund Act, 1966	Makes provisions for framing a provident fund scheme for seamen.
Sexual Harassment at Workplace Act, 2013	Creates a process to redress complaints of sexual harassment at the workplace.
Boilers Act, 1923	Regulates the manufacture and use of steam boilers.
Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993	Prohibits employment of manual scavengers for certain activities. Regulates construction and maintenance of water seal latrines.
Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013	Prohibits employment of manual scavengers, manual cleaning of sewers and septic tanks without protective equipment, and construction of insanitary latrines.

Sources: Existing Central Acts

4. JOB CREATION WHILE SAFEGUARDING THE WORKERS INTEREST

National statistics commission government of India conducted 6th Economic Survey in 2013–2014, according to which there are 5.9 crore industries in India which is giving employment to more than 13.1 people. Out of this 5.9 crore establishment the 28% hired only at least one worker. The priority to labour regulation is to safeguard the workers interest while creating job facilities and also to safeguard the employer interest for better quality of product and growth of the establishment. The main cause of establishment being in a small size in India is because of difficult exit process, high administrative and, labour laws compliance. An annual survey of industries conducted in 2017-18 indicated that 47% industries are employing less than 20 workers and contribute to economy only 5% of total employment and 4% of production [4][5][6][8].

TABLE 3: Attributes of registered factories by workers size Annual Survey of Industries 2017–2018

Attributes/Workers Employed	0-19	20-99	100-499	500-4999	At least 5000
Number of establishments %	47.1%	33.8%	14.3%	4.4%	0.3%
Capital Employed %	3.5%	8.2%	19.6%	44.7%	24.1%
Employment %	5.0%	18.4%	32.1%	35.9%	8.6%
Production %	4.1%	15.3%	25.8%	40.1%	14.6%
Net Contribution %	2.2%	11.7%	25.0%	47.5%	13.6%

Sources: Annual Survey of Industries (2017-18); PRS

It is evident from this table3 that because of rigid exit policy the business houses have comprehensively employ contract labourers. The percentage of of contract labour has augmented from 10% whereas the percentage of regular or directly hired worker has reduced 10% over the same timeframe (2004 -05 to 2017-18) according to annual survey of industries report The meachnism of enforcement of labour laws is toothless in India and enabled to protect exploitation. The basic reason is "inspector Raj"unethical practice adopted by establishment and meager quantum for violators and defaulters. The mechanism of collective bargaining is very poor and ineffective. Trade unions are ineffective because recognition rests in the hands of employer.[5][6][8]

The growth of economy and job creation depends upon several key factors like infrastructure development, availability of skilled manpower and technology. The current labour laws could not serve the purpose of their stakeholders so the committee has made certain recommendations.

5. REFORMED MADE BY COMMISSION

Threshold-based coverage: The limit is 10 or more workers in most of the labour laws will apply to the organisation with a view to reduce compliance burden. The minimum basic support related to wages, working condition and social security

should apply to all organisation or establishment irrespective of threshold-based coverage.

Enforceability of labour laws: Enforceability was ineffective because of poor enforcement machinery meager penalties and "inspector raj mechanism" and multiplicity of labour laws, the code has address some of these aspects but not all.

Adoc/ casual /contract labour: Contract and casual labourers have been deprived of basic shields and minimum wages. The code is not able to tackle these problems.

Collective bargaining mechanism: In an organisation there are several trade unions which are registered under registered trade union act but the recognition is given by the management.It is discretionary for management. The industrial relations code has not made any provisions for recognition of trade unions.[7]

Grey areas: The reforma re silent on social security schemes, health and safety standards.

TABLE 4: Comparative study of IDA provisions and New Provisions under code

Feature	Existing Provisions	New Provisions under code
Prior Approval from Authority	• Required for lay-offs, closure and retrenchment in establishments employing 100 or more workers.	• Not required for lay-offs and retrenchment. • Required for closure in establishments employing 300 or more workers
No Due Certificate	• Not required	• Mandatory
Notice Period	• Thirty days notice period	• Sixty days notice period
Awards Settlement	• Compensation15daysWages/Salary(for closure and retrenchment) puposes. • 50% of wages for lay offs	• whether enterprise is profitable or loss making: • Closure for establishments employing more than 100 workers: 30 days (for sick enterprises with three years' losses and filed for bankruptcy/winding up) and 45 days (for profit making enterprises) • Retrenchment for establishments employing more than 100 workers: 45 days (for sick enterprises looking to become viable by retrenching) and 60 days (for profit making one enterprises) • 50% of above to be paid for enterprises employing 100 or less workers. • 50% of wages for lay-offs. Government approval to be obtained in establishments employing 300 or more workers if lay-off exceeds one month.

Sources: Industrial Disputes Act, 1947; 2nd NCL Report;

From the table4; One can easily conclude that the reforms are more favorable for employers than workmen. Reforms has raised the minimum threshold limit of workers employed in an organization. It means more and more establishments will be out of the grip of the labour codes and are free to take their own decisions resulting exploitation of the workers. The compensation provisions are further categorized under profit and loss making organizations. The compensation for layoff, retrenchment and closure are different for different types of organizations. This kind of categorization is favoring the employer rather than workmen and it will leads to unemployment and the motives of the reforms are defeated

6. WHAT MORE COULD HAVE BEEN DONE

The standing committee on labour recommended that the code on social security must expand to the various other establishments such as agriculture and create a separate fund for interstate migrant workers, unemployment insurance for unorganised worker.Also suggest that peaceful resolution of disputes must be promoted through labour courts and appellate bodies. In respect of protection of rights of fixed term and adoc, contract workers and to prevent their over exploitation

the committee suggest that there should be certain maximum limit to use adhoc workers, contract workers to the total regular workers in core activities .To counter the bargaining process in unorganized sector the committee recommended that specific provisions may be made for the unorganised sector workers to form trade unions without having ceiling of employed workers.

7. WAY FORWARD

The commission has made an excellent work of labour reforms and try to remove all the anomalies which he think can be remove. Now it is on the states how they implement the recommendations and reduce the regulatory burden. further state needs to have dialogue with various stakeholders for the implementation of new rules. it is also expected from the authorities that they ensure implementation with honesty and integrity then only country will be able to achieve the desired results of economic growth in true sense.

REFERENCES

[1] List of Central Labour Laws under Ministry of Labour and Employment Ministry of Labour and Employment.

[2] Report of the National Commission on Labour, Ministry of Labour and Employment, 2002, http://www.prsindia.org/uploads/media/1237548159/NLCII-report.pdf.

[3] Report No. 4: Occupational Safety, Health and Working Conditions Code, 2019", Standing Committee on Labour, Lok Sabha, February 11, 2020; Report No. 8: "Industrial Relations Code, 2019", Standing Committee on Labour, Lok Sabha, April 23, 2020; Report No. 9: "Code on Social Security, 2019", Standing Committee on Labour, Lok Sabha, July 31, 2020.

[4] Highlights of the Sixth Economic Census, 2013-14, National Statistics Commission, Government of India.

[5] "Structural Changes in India's labour markets", Chapter 10, Economic Survey 2015-16.

[6] "Summary of results for factory sector", Annual Survey of Industries (2017-18), Ministry of Statistics and Programme Implementation.

[7] Annual Survey of Industries (2004-05), Ministry of Statistics and Programme Implementation.

[8] Volume I, Annual Survey of Industries (2017-18), Ministry of Statistics and Programme Implementation.

[9] "Reorienting policies for MSME growth", Economic Survey 2018-19.

[10] Periodic Labour Force Survey Report (2018-19), Ministry of Statistics and Programme Implementation, June 2020.

[11] India Country Profile 2014, Enterprise Survey, World Bank.

[12] Papola, T. S (2007), "Employment in the Development Agenda: Economic and Social Policies, " Discussion Paper DP/ 170/2007, International Institute for Labour Studies, Geneva.

[13] Thakur, C.P. (2007), Labour Policy and Legal Framework in India: A Review, Institute for Studies in Industrial Development, NewDelhi.

Effectiveness of ICT in Education Quality Assurance: A Theoretical Perspective

Dr. Supriya Choudhary*

Abstract: Education is an endeavor that is socially focused. Quality education is correlated with a high degree of personal interaction with learners through strong teachers. ICT has become an integral part of today's teaching and learning process, as the world rushes into digital media and information.Information and Communication Technologies are progressively becoming acrucial part of theeducation system. Education in Information and Communications Technology (ICT) is essentially the initiative of our society to impart useful knowledge and skills to its current and developing people about computing and communication devices, software that runs them, applications that run on them, and systems designed with them.This research paper aims to understandthe significance of ICT in education to enhancethe teaching and learning process.The use of ICT in education improves the classroom teaching-learning process, provides e-learning, and preparesthe next generation for future lives and careers. Three fundamental aspects of education play a role in ICT: access, quality, and cost. It has advanced awareness through the growth and expansion of access to education, enhancing education quality, reducing prices, and extending education to remote areas through interactive, e-learning, online, and distance learning.The usage and implementation of ICTs in academics positively impactteaching, learning, and research. Students get motivation when learning actions are stimulating, reliable, engaging, and multi-disciplinary.This paper highlights the need, initiatives, and challenges of ICT in education, its limitations, and challenges to education systems.

KeywWords: Digital media, ICT, e-learning, education system, teaching, research.

1. INTRODUCTION

Education is an essential requirement for the welfare of individuals and society. Quality education assists in the country's empowerment. The use of technology is one of the effective and efficient ways to increase the learner's knowledge. ICT (Information Communication Technologies), including all technologies for manipulating and communicating information (Swati Desai, 2010). Information and Communication Technologies has developed asan integral part of one's life. From tourism to banking, all segments depend heavily on ICT for carrying out their activities and businesses. A study produced by the National Institute of Multimedia Education in Japan showed that an increase in student exposure to ICT education through curriculum integration has a significant and positive impact on student performance, particularly in terms of comprehension, practical skill, presentation, and skill knowledge. The comprehensive description of ICT comprises mobile phones, television, the Internet, computers, radio, and satellite. ICT can be classified into two groups; *traditional ICT* (television, radio) and the *new ICTs* (Internet and telecommunications). *Learning through new ICTs is also known as e-learning.* Information and communication technology (ICT) is a crucial part of the modern world. It is an energy that hasmany aspects of the way we live anda means of capturing, processing, storing, and communicating electronically. According to UNESCO: ICT is a specialized, systematic, engineering discipline and management techniqueused in handling information in combination withsocial, economic, and cultural aspects. Proper use of ICT will alter and modify the entire teaching-learning process, leading to a paradigm shift in content and teaching methodology. The method of learning has evolved a lot over time in this age of technology and science. From notebooks to tablets, computers to laptops, blackboards to smart boards, technology and science are everywhere.

Fig. 1. Role of ICT in education

India has the third-largest education system globally, with more than 500 universities and about 30, 000 schools, next to only the USA and China. To implement ICT-enabled education in such an extensive framework, for different courses, including its multilingual conversion, capacity building for teachers and students in ICT skills and state-of-the-art infrastructure, as well as networking and internet connectivity through a virtual private network (VPN) /

**Associate Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, supriyachoudhary@msi-ggsip.org*

broadband connectivity, high-quality multimedia enriched content in different disciplines must be available. ICT enables teaching, study, and learning processes to be transformed at all levels. It empowers teachers and students, rendering valuable contributions to the brotherhood of education.

In general terms, the role of the use of ICT in education can be categorized as:

1. **ICT as an object.** It relates to learning about ICT. According to the aim, purpose, and field of applicability, ICT has been organized into different courses. What is being taught often relies on the form of education and the level of the learners. Education trains students to use ICT in the fields of education, future work, and social life. Computer science, Information Technology, data communications, software engineering, information systems management, mobile computing, computer engineering, among many others, are some of the disciplines. In turn, this has led to ICT careers, both in the education sector and in the industry. In other fields of use, ICT as an entity is a crucial driver for the benefit of ICT.

2. **ICT in education as a tool.** ICT is used as a tool in most situations, such as when performing tasks, gathering data and documents, communicating, and conducting research. ICT is usually used separately from the subject matter. In modern higher learning institutions, the conventional form of paperwork is no longer performed with coursework, assignments, and other work. They are completed and submitted electronically.

3. **ICT as a teaching and learning tool.** The way that education is delivered has beentransformed by ICT. It is the means by which teachers can teach, and learners can learn as a platform for teaching and educating themselves. Computer-assisted learning, internet learning, computer courses, online training, distance learning, eLearning, virtual learning, interactive training are several different styles in which ICT has been considered a medium for teaching and learning.

4. ICT is used as a record-keeping and management method, such as the planning and printing of examination papers, compilation of test results, schedule, course fees, and maintaining attendance records.

2. OBJECTIVES OF THE STUDY

To understand the conceptual framework of ICT education in India.

1. To study the need and the rationale of ICT in India.
2. To identify the significant ICT initiatives taken in education.
3. Identificationof the problems faced by the implementation of education facilitated by
4. ICT in India.
5. To suggest and offer new options or paths forward.

3. LITERATURE REVIEW

Nidhi Phutela and Sunita Dwivedi (2019) reveal that the government takes many initiatives to develop and improve this platform. Students are also not wholly persuaded of the possible benefits of e-learning, despite the government's efforts. Besides, these platforms have misled students about the reason for which ICT should be selected. The authors have established managerial implications for educators, students, and educational institutions.

S. M. Tariq Zafar (2019) study concludes that the human search for information has significantly increased due to ICT. A tiny village with better living conditions has become the planet. Only by joint, cohesive, and multi-level efforts can teaching with educational ICT increase students' active learning. Rapid technological advances suggest that the future role of educational ICT will expand enormously in education.

Debarun Chakraborty, Soumya Kanti Dhara & Adrinil Santra (2018) summarizes in their study that ICT centers lead to a change of the educators' job during the time spent on advanced technology. Classroom instructions, different abilities, and knowledge of the instructors would lead them to use virtual aides to understand and utilize electronic media. It tends to infer that ICT instructing can support a few procedures identified with educating and learning through data transmission and information assistance. ICT makes the educating and learning process less demanding on the record of being broad and orderly. In this manner, fundamental abilities can be utilized to take additional profit of the same.

Singh (2017) expressed that globally, everyone acknowledged that instruction is the tremendous impetus behind any country's social and financial improvement. Its entrance and reasonableness for everyone have now been made possible by ICT. Yet, at the same time, a great deal needs to be done to accomplish the coveted level of IT selection in higher training. The utilization of ICT has upgraded independentlearning. The teaching network will enter the most distant areas, and students can gain from any edge of the globe.

Gallego et al. **(2014)** report, which argues that a country needs to introduce ICT policies and regulations that must be

consistent and vigorous at all levels to enhance the standard of education effectively.

According to a study released by the Institute of Statistics of the United Nations Educational, Scientific and Cultural Organization **(UNESCO) 2013**, governments and university administrations worldwide have invested extensively in implementing information technology in their education systems. Overall, several attempts have been made, both theoretical and empirical, in an effort to determine the effect of ICT adoption on the education system.

Solar et al. (2013) have argued the implementation of ICT increases the quality of learning and improves the quality of education.

Learning of education can be classified into three typesas a result of ICT:

1. E-Learning:

E-Learning or Electronic Learning, also known as online learning, is a universal term used to refer to computer-enhanced knowledge provided with the help of distance education. It overcomes timing, attendance, and travel difficulties. E-learning has the following advantages-

1. It helps to eradicate time and regional obstacles for both learners and teachers in education.
2. ICT leads to the enhancement of group collaboration.
3. Students and teachers can use new educational tools.
4. ICT helps in providing speedy dissemination of education to target disadvantaged groups.
5. It provides an amalgamation of education while juggling work and family life.
6. It strengthens the global dimension of educational services.

2. Blended Learning:

It refers to a situation where diverse delivery methods of education are unitedin delivering a particular course. It may include:

Face-to-face learning refers to learning in a typical classroom environment where a faculty member provides a community of learners with the guidance, which involves lectures, seminars, presentations, tutoring, meeting, and much more.

Self-paced learning provides the opportunity to learn according to the availability of the own time and space of learners; it takes place in several ways, such as: reading individual chapters from the textbook, reviewing course material delivered by a web-based or CD-based course, attending pre-recorded classes or sessions, reading articles submitted by the faculty member, working on assignments and projects, and searching and browsingthe Internet.

Online Collaborative learning involves interaction between learners and faculty members through the web; this interaction may take place in one of the following modes:

a. ***Synchronous interaction*:** Synchronous means 'simultaneously'; it includes communicating in real-time through the web with a faculty member and other learners using technology such as virtual classrooms and chat rooms.

b. ***Asynchronous interaction*:** Asynchronous means 'not at the same time'; it allows learners to communicate, such as sharing via e-mail, with their peers and faculty members at their convenience.

3. Distance Learning

The presence of open and distance learning facilities is on the rise to expand access to higher education and boost its reach to the most remote parts of the world. Distance Learning refers to the education system in which students function independently at home or in the office and communicate through e-mail, electronic forums, video conferencing, chat rooms, instant messaging, and other types of computer-based communication with faculty and other students. A computer-based training (CBT) framework and communications tools to build a critical classroom are included in many distance learning programs.

Educational ICT tools can be divided into three categories: Input source, Output source, and Others, as shown in figure 2.

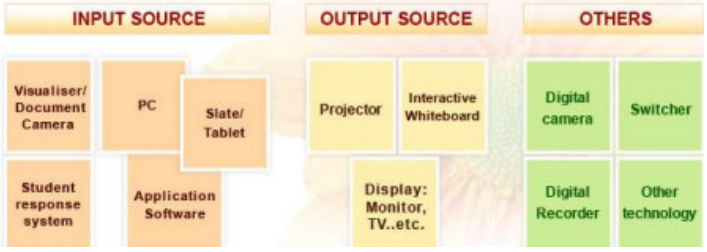


Fig. 2. ICT Educational tools

4. NEED AND RATIONALE OF ICT IN EDUCATION

ICT is student-driven and subsequently achieves the dynamic inclusion of understudies in the learning cycle. ICT is a

combination of correspondence, PC, and substance advance. It has pulled in the scholarly world, business, government, and networks to utilize creative, productive recommendations.To compete in a globally competitive environment, a highly skilled andtalented workforce with the ability and skillsets in applying ICT is unavoidable for every country's are capable of innovating, accelerating, enriching and deepening skills, inspiring and educating students, helping to connect school experience to job practices, creating economic viability for staff tomorrow, and enhancing school teaching and support.In diverse socio-economic and cultural contexts, a significant number of students can use ICT, including those to whom education was previously noteasily accessible, promote learning, and expose students to the technical skillsrequired for many occupations. By being part of a professional workforce and promoting social mobility, policymakers agree that ICT in education can help students succeed in the global economy. Personalized learning has been made accessible to larger audiences by the advent of educational technology and interactive content creation tools.To equip students with the necessary ICT skills, ICT modules are created, allowing students to use the knowledge and skills to build and improve the creative projects based on the 6-E ICT framework, as shown in Figure 3.

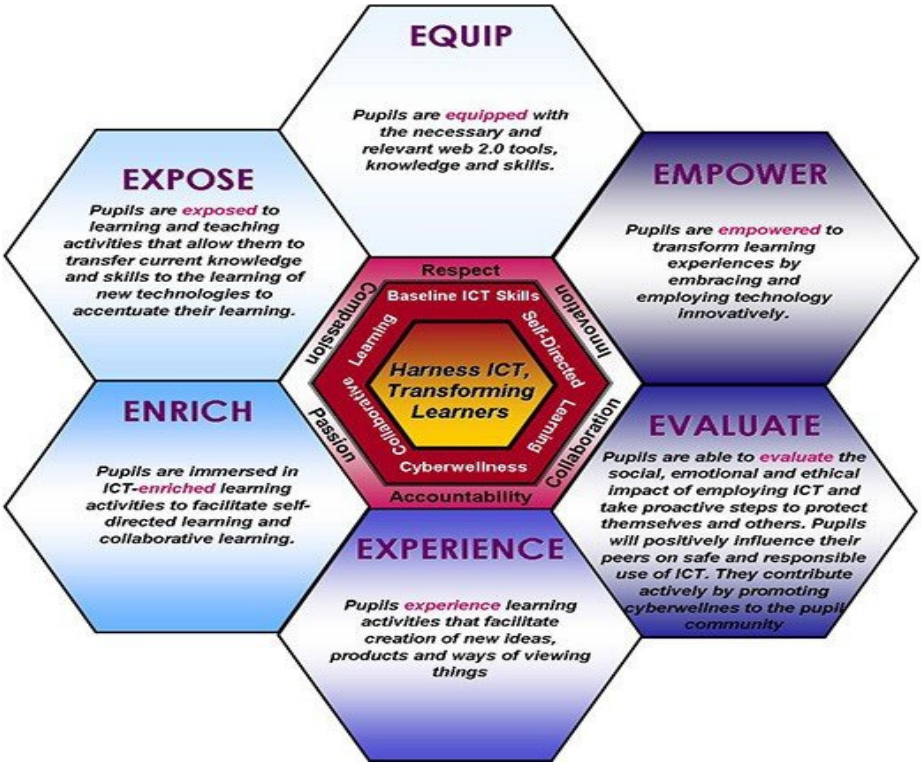


Fig. 3: 6-E Approach framework of ICT

There are a few points of interest in ICTs in education due to exploration and observational evidence:

- In an engaging and attractive form, ICTs should present material.
- ICTs support teachers in documenting and constantly tracking each student's progress.
- ICTs encourage each learner to deliver personalized educational materials.
- It may create virtual social networks between various educational institutions, student teams, or teachers.
- ICTs help learning-to-learn abilities and skills.
- To reach numerous students with MOOCs(Massive Open Online Courses)
- Helps to reduce expenditures and save time associated with information distribution and repetitive tasks automation.
- ICT strengthens organizations' administration to increase the consistency and reliability of service delivery.

The latest developments in ICTs (mobile tools, cloud solutions, etc.) allow continuous learning processes to be applied in various learning contexts and provide students with on-demand support.

ICT Ranking Of India

Cell phones are playing a significant role in the world in enhancing ICT connectivity. In terms of numbers, India's attempts to capitalize on the revolution in information and communication technology are based on the latest country rankings and related data published by the International Telecommunication Union. An ICT Development Index is the basis for the ranking (IDI). In terms of development in information and communication technology (ICT), India was ranked 121st out of 157 countries in a newly released study by the International Telecommunication Union (ITU), which makes an annual evaluation based on a broad range of criteria and results. In the wake of the Broadband Commission for Digital Growth, India is ranked 145th out of almost 200 countries in terms of the percentage of people using the Internet in a recent survey and 106th in the case of mobile broadband penetration.

5. MAJOR ICT INITIATIVES, POLICIES, AND PLANS IN EDUCATION

The activity of ICT Policy in instruction is driven by the exceptional capability of ICT for upgrading and improving the education quality. This approach gives rules to help the States advance ICT in education training inside a public arrangement structure.The Government of India has reported 2010-2020 as the time of development with a specific spotlight on ICT empowered educating and getting ICT abilities for students. Several initiatives in the recent past portrayed the significant role ICT plays in higher education development. India has taken important initiatives in delivering content and the promotion of education through information and communication technologies.

Following theUGC country-wise classroom initiative, education programs on ***GyanDarshan*** launched in 2002 and on ***Doordarshan*** national channel for school kids, university students, and adults are broadcasted every day. ***GyanVani*** was another critical step with broadcast programs contributed by an institution such as IGNOU and IITs. **E-Gyankosh,** which aims at preserving digital learning resources, is anawareness scheme initiated by IGNOU in 2005, and almost 95% of IGNOU's material has been digitalized. The national program for technology-enhanced Learning ***(NPTEL),*** launched in 2001, is another joint initiative of IITs and IISC, which educate through technology. *Sristi,* the Sustainable Technologies, and Organizations Research and Initiatives Society promotes the use of ICT to improve grassroots inventors, innovators, and entrepreneurs interested in protecting biodiversity and creatingeco-friendly solutions to local problems.

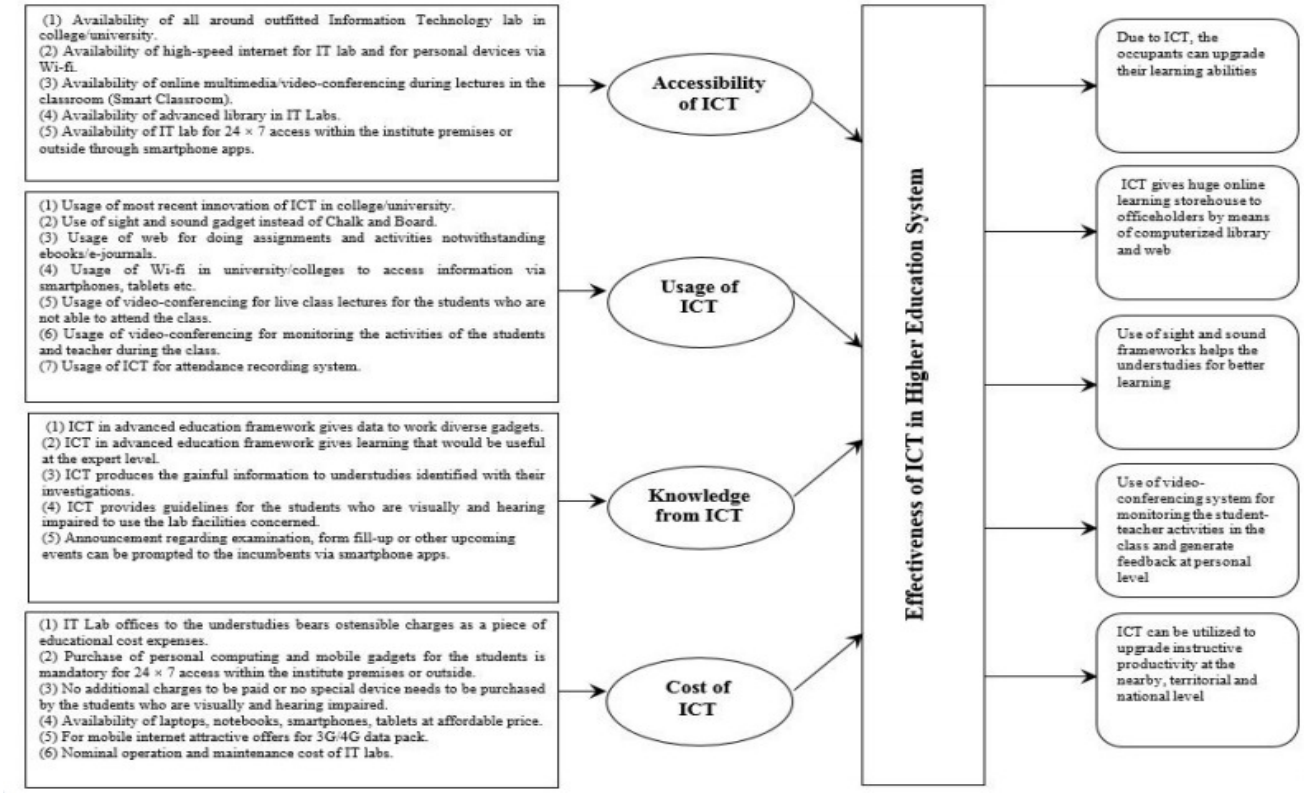


Fig. 4. ICT Effectiveness in Higher Education System

Important initiatives taken in the range of provisional instruction includes:

1. Schemes for computer education for educators and students Via IT buses, mobile classrooms
2. E-Learning centers and kiosks for developing social and financial online education modification of rural society.
3. Group Tele-focuses on ICT learning problems beyond a proper school environment to resolve.
4. Global honor in the educational learning measure for teachers using ICT in schools
5. Creation of an Education Strategy for IT
6. Infosys' groundbreaking Rural Reach Program for the provision of direct ICT knowledge to children in villages in grades 5-10
7. ICT events for higher study, such as E-Gyankosh, GyanDarshan, GyanVani, and other distance education services.

GOVT'S POLICIES & PLANS: INDIA'S PROMOTION OF ICT IN EDUCATION

1. **SWAYAM PROJECT:** The Union Cabinet, chaired by Prime Minister Shri NarendraModi, today approved the signing of a Joint Declaration of Intent between the Department of Human Resources Development (MHRD) and the United States of America. Department of State for Higher Education Cooperation for the Study of Webs of Active-earning for Young Aspiring Minds (SWAYAM), an online education program. The new Indo-US Online Education Partnership (IUPOE) program includes a framework that enables the top US universities (top 100 in the global ranking) to build and share online postgraduate courses (and related assets) on the SWAYAM Indian platform. The SWAYAM platform server located in India as part of the cooperation, and US universities will offer SWAYAM platform-certified postgraduate academic programs. The cooperation program will be integrated to strengthen the National Mission on Education through ICT (NMEICT) in India.

2. **AAKASH PROJECT:** In India, the government has begun distributing TAB and LAPTOPS to students to facilitate ICT education. The Aakash project in India, before Turkey and Thailand, excited the imagination of many proponents of placing vast numbers of tablet computers in the hands of students in a developing world. In the "Made in India" initiative, the aspiration to build a prototype "Simputer" machine was first reflected.Aakash, a.k.aUbislate, promoted by the Government of India as part of an initiative to connect 25, 000 colleges and 400 universities in an e-learning program, is an Android-based tablet computer. The tablet runs on Android 2.2 (Froyo) and comes with an 800x480 resolution, 7-inch resistive touch screen, and 350 grams. The tablet has 256 MB of RAM, a 32 GB memory slot that can be extended, and two USB ports.

6. CHALLENGES AND OBSTACLES IN IMPLEMENTATION OF ICT ENABLED EDUCATION

While ICT can significantly improve the country's education system, it is not the case in developing countries. Prerequisite for the provision of ICT-based education in rural areas unique to their skills set-up and for the implementation of policies to facilitate broad access to learning and ICT-based skills provision of broad-based ICT-based formal education. The introduction of ICT education in schools and educational institutions is facing several problems and challenges.ICT-related issues and concerns are intensified in schools located in remote villages and rural areas. In rural schools, the implementation of ICT faces challenges in the form of barriers. Internal obstacles, as shown in figure 1related to ICT adoption in rural areas include:

1. The shortage of qualified teachers with a lack of experience and skills is a significant obstacle to the use of ICT in rural education. Furthermore, there is hardly any quality training offered regularly to teachers engaged in ICT education.
2. There are several barriers/obstacles that teachers experience in the use of ICT in their classrooms. These include technical problems, lack of trust amongst teachers, inadequate organizational support, the scarcity of time, lack of resource access, poor fit with the curriculum, scarce training opportunities, and insufficient information about incorporating ICT in lessons.
3. The most significant obstacles were the lack of computers, the lack of classroom time for students to use computers, and the lack of free time for learning. Other considerations include insufficient preparation and lack of professional development services for technology adoption.
4. The lack of technical skills, scarcity of software, inadequate funds, and time shortage were also significant barriers to technology use.
5. Unfavorable organizational culture, poor attitudes and beliefs, educational organizations, and school governance fail to recognize the importance and seriousness of ICT

in improving education. Teachers' views and perspectives are also orthodox. They are unaware, rigid, and not able to adjust to the transition.

6. Owing to lack of time, teachers are overburdened with more tasks than teaching. They will need to teach various subjects/courses along with the use of technology. They do not have the time to plan, build, and implement technology into teaching and learning. Teachers need time to interact with other teachers to learn how to use hardware and software while keeping themselves up to date with the new technologies.

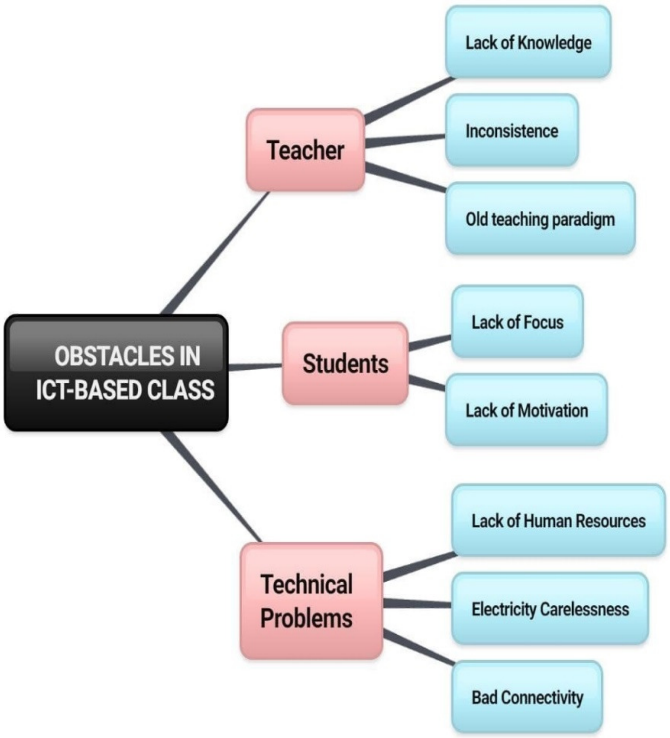


Fig. 5. Obstacles in Implementation of ICT Enabled Education

7. Maintenance and modifications of ICT facilities are subject to minimal financial resources in rural schools. Financial restrictions often limit government initiatives. ICT programs in rural schools are not viable. As government or private sector phase-out programs are implemented, students are provided with equipment maintenance. Students with low economic backgrounds are often unable to finance repairs and computer equipment costs.

8. A large percentage of educational software developed on the world market is available in English. The majority of the content available online is in English. In most developing countries, English language proficiency is not high, particularly in rural areas, which is becoming a severe barrier to maximizing ICT's educational benefits.

9. Deficiencies include the lack of computers and computer-related tools, such as projectors, scanners, printers, etc., in rural government schools. The proportion of computers per pupil is inadequate, and there are also fewer private schools in these regions. The improper combination of ICT services has resulted in decreased technology diffusion and insufficient comprehension of ICT in educational institutions.

10. Even the critical ICT equipment and computers owned by rural schools are untrustworthy and unpredictable. Schools do not have new hardware and software available. Old and outdated equipment is a significant barrier to the implementation and application of ICT.

11. Lack of technological assistance for rural schools faces specializedexpertise, lack of ICT service centers, andthe absence of trained technical employees. For the continued sustainability of ICT use in a given school, technical support specialists are indispensable. Without on-site technical support, effort, resources, and time may be lost due to technical breakdowns. The lack of timely technical support has been a significant obstacle to optimizing computer use in schools.

12. Resource-related problems and rural schools generally face difficulties, accessing ICT-related resources such as uninterrupted electricity, infrastructure support additional resources such asscanners, projectors, multimedia, smart boards, etc.The Internet is required in the majorityof ruralschools as it is an integral component of ICT.Many schools cannot pay the high fees charged by internet providers, and even where the Internet exists, slow or inconsistent connectivity destroys the very essence and effect of ICT.

13. Cultural and social factors inherent in these areas, lack of action by community leaders, corruption, and burglary are other external factors that hinder ICT use in rural schools.

14. Educators, nearly older teachers relative to younger ones, are hesitant to apply ICT in their subject matter. Teachers must also update their knowledge and skills as a result of curriculum and technology changes.

15. Lack of motivation, lack of trust, lack of resources, lack of qualified human resources, weak ICT infrastructure, low accessibility, lack of knowledge, insufficient maintenance of hardware and software power

interruptions are other difficulties related to using ICT in education.

Because of these limitations, teachers are inadequately challenged and encouraged to build powerful learning environments and personally direct students in their learning processes.

7. RECOMMENDATIONS AND RESOLUTIONS OF APPLYING ICT FOR LEARNING

The lack of criteria for assessing education quality is one of the significant problems facing quality management in education. To determine the quality of education, all accreditation bodies such as the NBA, NAAC AICTE, CBSE, and other authorities must sit together and circulate a standard set of criteria. The creation of ICT has altered the epicenter of knowledge, and students are thus more educated than the teacher in certain instances. To a great extent, ICT allowed distance education can resolve this question. The absence of qualified teachers to enable proficient use of ICT is one of the critical barriers. Many educators are not able to first incorporate emerging technology to themselves and then to their students.

Teachers often need to upgrade their abilities and skills according to curriculum and technological changes; otherwise, it's just a computer lab apart from the conventional educational process. The implementation of modern technology in the teaching-learning phase has been limited and inconsistent, although computers came to Indian classrooms in 1984-85.It might not be feasible for the rural community to pay a hefty sum to use such ICT tools for education. Initial thought based on technology is one of the critical challenges in implementing ICT in education.

Also, ICT hardware and software are not intended for educational purposes but for general purposes. Only a specific subject such as IT or ICT is available, as per the latest practice. There is a need to have basic knowledge of computers and IT to use different ICT resources for teaching and learning. Computer teachers alone will not be able to accomplish this vital role of becoming agents of change.The screen can be split in half vertically to address the infrastructure issues for providing ICT education in schools. Two sets of applications can be viewed and used simultaneously by two users (students). Designing learning materials for delivery on accessible ICT instruments, including mobile devices, is a significant challenge faced by educators and trainers.

The tools for learning should be in manageable chunks, and multimedia should be included. The use of learning objects in mobile distribution has many benefits, including being reused and modified without impacting other learning items. Learners can store the information at any time for remote access in an electronic archive. Barriers include expensive support infrastructure, costly and time-consuming production of online material, consistency, the validity of online material, lack of flexibility in the study material already prepared.

A lot of knowledge available online can dissuade learning from students. In the absence of classroom learning, students may feel alienated. Through using computer applications for the development of teaching and learning curricula, study and extension, governance and leadership, infrastructure services, and the use of the expert system to recommend intelligent decisions for top management, universities and schools may use computer programs at different levels of quality criteria to monitor, manage and impose strict discipline on campuses.

8. CONCLUSION

Information and Communication Technology is a policy of growth for both developed and developing nations. Through access to people and awareness building, ICT brings incredible social improvements and provides vulnerable people with adequate opportunities by giving them access to markets, health, and education.ICT is not only related to computers, the Internet, or telecommunications, but it is a combination of various electronic tools that facilitate the processing and communication of information, including transmission and display functions. Information and communication technology is regarded as an efficient method for the advancement of education.Among many academic practices, ICT plays a vital role as a powerful agent for change, i.e., conducting an online exam, paying online fees, accessing online books and journals.Thus, ICT improves the teaching-learning process in higher education, providing online learning facilities for thousands of learners who cannot benefit from higher education due to several controls, such as cost, time and geographical location, etc.Enabling ICT in education and the use of technology in education provides a learning atmosphere that is easy to navigate, where knowledge transmission is simpler and faster. For institutions, particularly in countries like ours, ICT is the direction to take, as our growth is directly linked to technology, and education is no exception.Ensuring the standard of education of its students will decide if the institution can step forward or perish.

REFERENCES

[1] Anu Sharma, Kapil Gandhar, and Seema, (2011). 'Role of ICT in the Process of Teaching and Learning.Journal of Education and Practice', Vol. 2, No 5, pp.1-6.

[2] Balanskat, A., Blamire, R. &Kefala, S. (2006). 'The ICTImpact Report: A Review of Studies of ICT Impact onschools in Europe.'

[3] D. Castillo-Merino and E. Serradell-Lopez (2014), "An analysis of the determinants of students' performance in e-learning," Computers in Human Behavior, Vol. 30, pp. 476–484.

[4] Rachna Tyagi, Rajendra Singh (2015). "Status of ICT In Education and Support of Govt. of India", International Journal of Engineering Research and General Science, Vol. 3, Issue 1, January-February, ISSN 2091-2730.

[5] Debarun Chakraborty, Soumya Kanti Dhara, and Adrinil Santra (2018). 'Effectiveness of ICT in Strengthening the Process of Higher Education System in India, ' Amity Journal of Management Research, Volume 3, Issue 1, pp.40-53.

[6] J. M. Gallego, L. H. Gutierrez, and S. H. Lee (2014). "A firm-level analysis of ICT adoption in an emerging economy: evidence from the Colombian manufacturing industries, " Industrial and Corporate Change, vol. 24, no. 1, pp. 191–221.

[7] Kundu Arnab et al. (2018), Rationale of ICT in Higher Education, IJSRR, Volume 7, Issue 2, April- June, pg. 345.

[8] M. Solar, J. Sabattin, and V. Parada (2013), "A maturity model for assessing the use of ICT in school education, " Educational Technology & Society, vol. 16, no. 1, pp. 206–218.

[9] Phutela, Nidhi, and Dwivedi, Sunita (2019). 'Impact of ICT in Education: Students' Perspective.' Proceedings of International Conference on Digital Pedagogies (ICDP), May 2019.

[10] Singh, C. S. (2017), 'Impact of Information and Communication Technology on Higher Education in India, ' International Journal of Information Research and Review, 4(12), 4912-4916.

[11] S. M. Tariq Zafar (2019). 'Role of Information Communication Technology (ICT) in Education and its Relative Impact, 'International Journal of Engineering Research & Technology, ISSN (Online): 2278-0181, Volume 7, Issue 4, pg. 1-10.

[12] Swati Desai (2010), 'Role of Information Communication Technologies in Education.' Proceedings of the 4th National Conference; INDIA. Computing for Nation Development.

[13] Zhang, P. & Aikman, S. (2007). 'Attitudes in ICT Acceptance and Use, Human-Computer Interaction: Interactiondesign and usability, pg. 1021- 1030.

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Role of Women in Agricultural and Rural Development Citation Analysis Report

Arti Malik*

Abstract: The purpose of this paper is to identify the Research and growth in particular research where the role of women in agricultural and rural development are analyzed with the help of citation analysis. The approach is used here to analyse the growth of particular research with the help of Bibliometric Analysis. Different analysis methods are used for analyzing the literature of Review; Bibliometric Analysis is one method of analyzing the growth and citation of research and identifying the leading journal in particular research.

Keywords: Bibliometric Analysis, Agricultural Development, Rural Development, Citation Analysis

1. INTRODUCTION

Women play an essential role in agricultural growth as well as in livestock keeping. About 2/3 of livestock keepers in rural areas depend on livestock income (FAO, 2011). Female farmers have an important place in agriculture and rural growth, but they are not significantly recorded. According to a statistical report, 1/3 of agricultural holdings belong to a female farmer. In Kenya, women constitute 85 percent of the rural population (Gundu Shibanda & Ingado Seru, 2002). In India, Women are actively involved with husband in agricultural activities and rural activities. In Countries like Vietnam, the female has an essential impact in the rural economy, but they are constrained by societal prejudices and limited educational opportunities (Kraus & Westhead, 2020). Women agricultural cooperatives have an important role in the growth of women entrepreneurs in rural areas like Turkey (Sefer, n.d.)

2. OBJECTIVE OF RESEARCH

The research objective is to identify the work of authors and analyze their contribution in particular areas.

- There are the following objectives of Research
- To identify the most important journal
- To find out the most important journals and disciples
- To find out the experts in particular research
- To give recommendation of important articles in particular research field

3. RESEARCH METHODOLOGY

Bibliometric analysis is used to identify the work of scholars and researchers. It is a technique to identify influential authors and their contribution to the field of research. Bibliometric method is a scientific mapping of all researchers' work with the help of different software tools like Vosviewer, Biblioshiny, Bibexcel, etc. Here Biblioshiny is used for citation analysis in a particular area. A Literature review is a five-step process that starts from scanning to making notes, structuring the literature review, writing the literature review and building a bibliography(Rowley & Slack, 2004).Here we are using a structured methodology for analyzing the data.

3.1 Search terms

This is the first step for bibliometric analysis where accurate search terms are selected for analysis purpose. The first search term "Role of women" AND "Agricultural growth" AND "Rural development OR Growth" are chosen to analyze the data to find out the data. Web of Science Database is selected for analysis purposes. Web of science database is selected for its vast availability of authentic Research work.

Keyword	Number of articles
TOPIC: (("Role of Women") AND ("Agircultural Growth" OR "Rural Development")) *Indexes=SCI-EXPANDED, SSCI, A&HCI Timespan=All years*	13
TOPIC: (role of women in agricultural and rural development) *Indexes=SCI-EXPANDED, SSCI, A&HCI Timespan=All years*	66
TOPIC: (("women") AND ("agricultural growth" OR "agricultural development" OR "Rural Devleopment" Or "Rural Growth")) *Indexes=SCI-EXPANDED, SSCI, A&HCI Timespan=All years*	101
TOPIC: (("women") AND ("agricultural	101

*Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, artimalik@msi-ggsip.org

Keyword	Number of articles
growth" OR "agricultural development" OR "Rural Devleopment" Or "Rural Growth")) *Indexes = SCI-EXPANDED, SSCI, A&HCI Timespan = All years*	
TOPIC: (("women") AND ("agricultural growth" OR "agricultural development" OR "Rural Devleopment" Or "Rural Growth")) **Refined by: LANGUAGES:** (ENGLISH) *Indexes=SCI-EXPANDED, SSCI, A&HCI Timespan=All years*	101

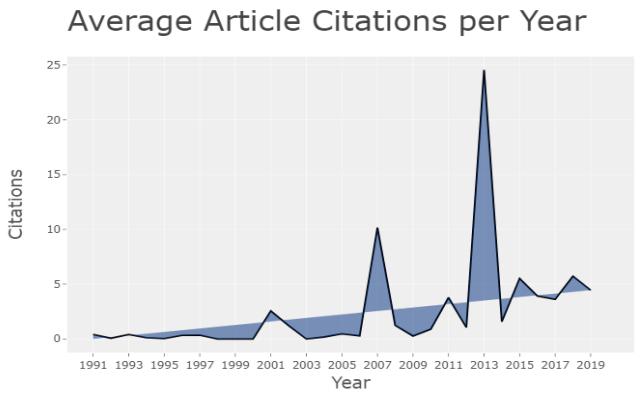
3.2 Analysis of Search terms

This is the next step after finding the articles. All articles which are not related to topic are excluded and only English paper articles are considered. During this phase, exclusion and inclusion criteria of articles are selected.

4. BIBLIOMETRIC ANALYSIS

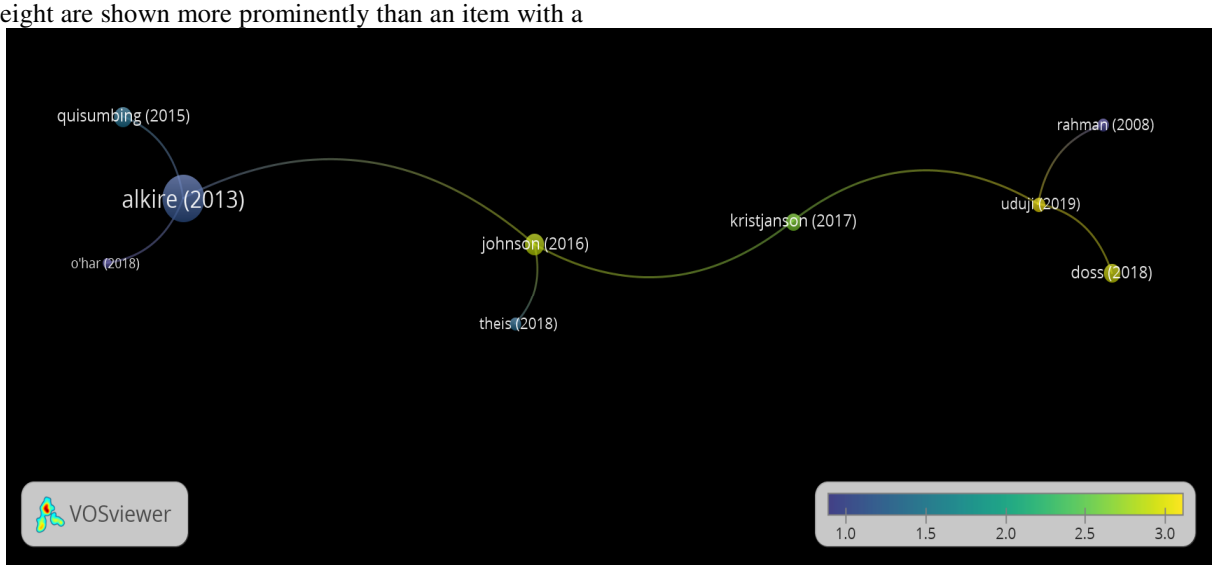
Packages like Vos Viewer, Biblioshiny, Bibexcel, etc. are available for analysis of data. Data is taken from the Web of Science. The data from Web of science is saved as a plain text (June, 2009) and analysis is done with the help of Biblioshiny, R studio package & Vos viewer. Vos viewer can be used to construct a network by citation. In Vos Viewer, items with higher weight are shown more prominently than an item with a lower weight. Here we are covering one type of Biblioshiny i.e., citation analysis. Citation analysis is done to analyze the most significant journal or publication (Kraus & Westhead, 2020). Our objective through this article is a performance analysis and science mapping (Kraus & Westhead, 2020)

Average Article Citations per year



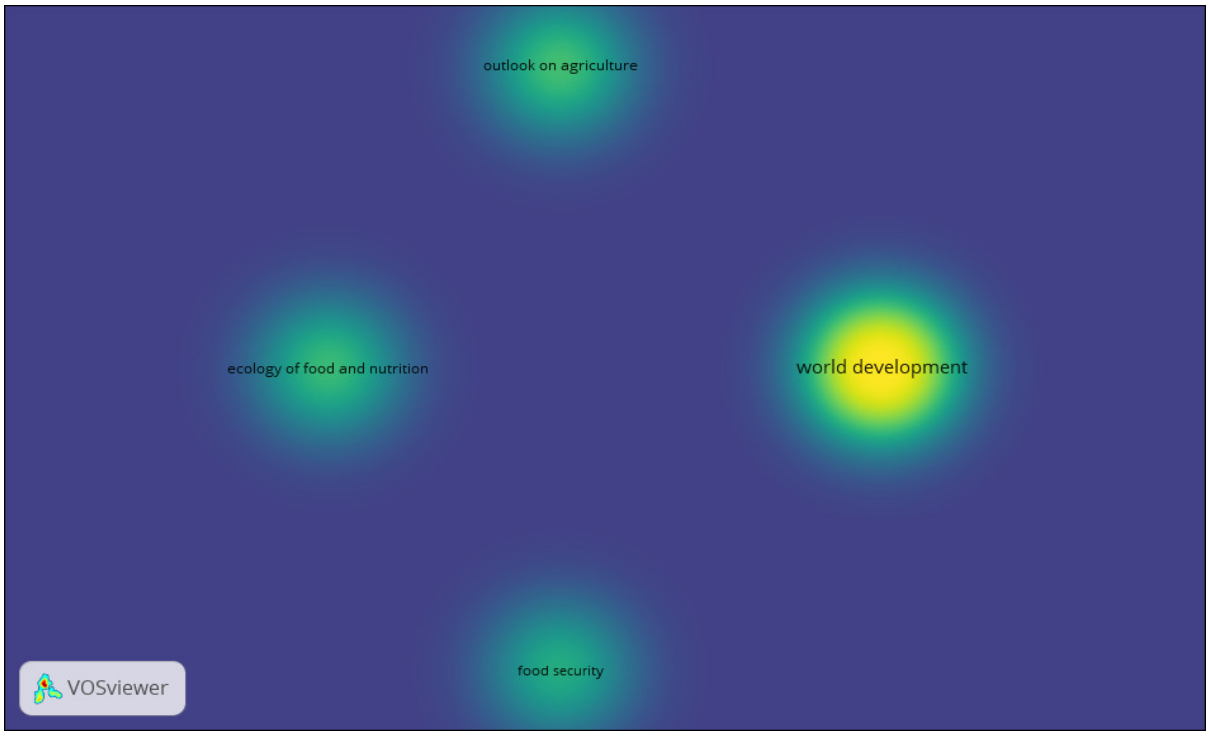
4.1 Citation on the basis of documents

For Citation analysis minimum number of citation of a document are taken 10.Out of 76 documents, 32 meet the threshold of minimum 10 citation. Highest number of citation are of alkire (2013) i.e. 635. Largest set of connected items are 9 only.The distance between two article describe relatedness.



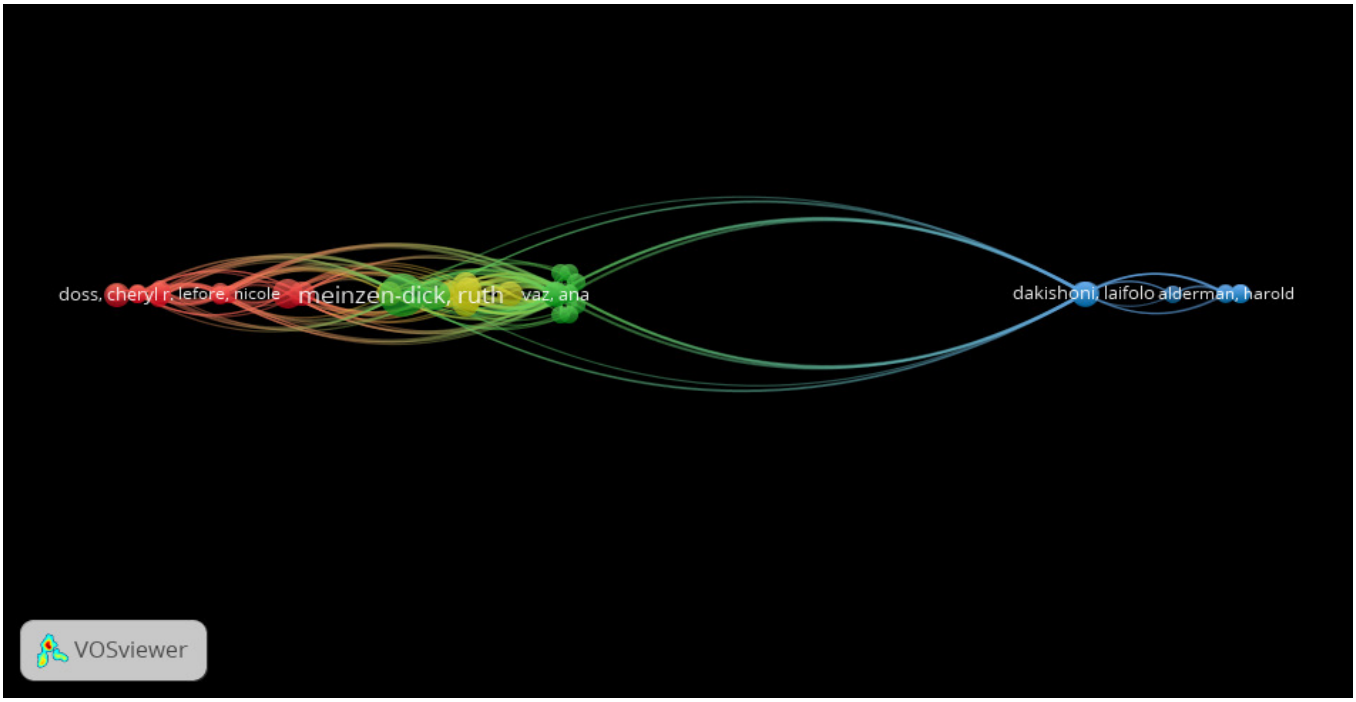
4.2 Citation based on the basis of source

Minimum numbers of documents of a source are taken 3 and minimum numbers of citations of a source are 10. Out of total 52 sources, 5 meet the thresholds. For each of the 5 sources, the total strength of the citation links with other sources will be calculated. The sources with the greatest link strength will be selected. World development has total documents are 8 followed by outlook on agriculture with total 4 articles and minimum number of citations are 300. Total link strength is 2



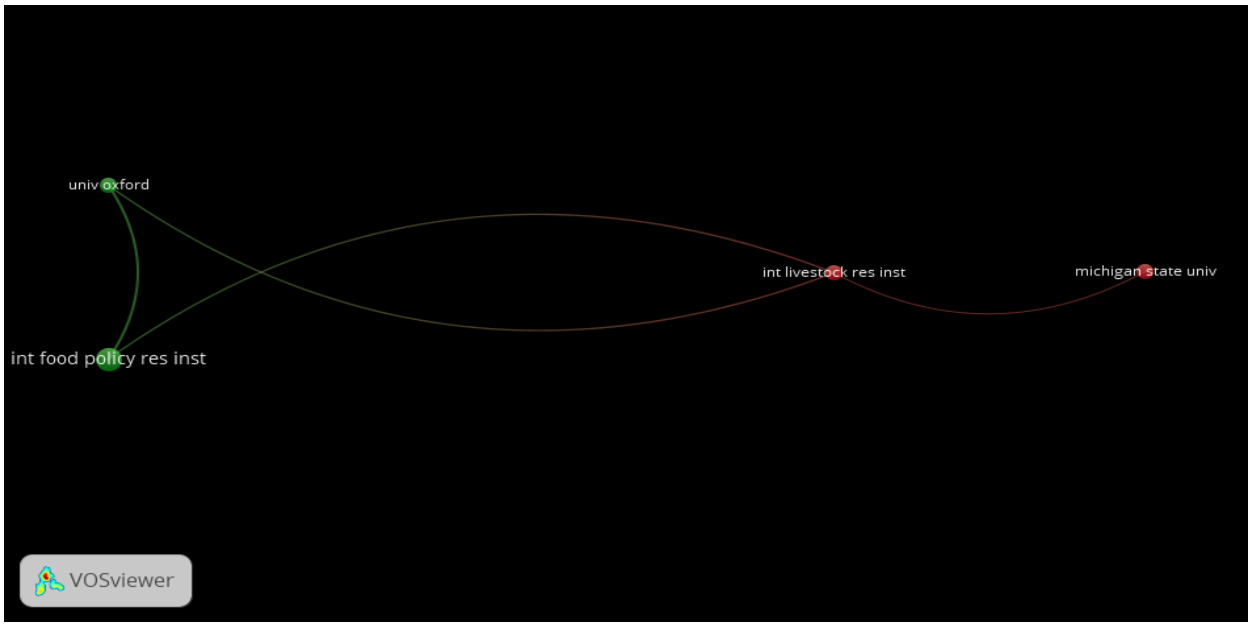
4.3 Citation-Unit of analysis (Authors)

During citation analysis based on the authors, documents with a large number of authors are not ignored. Minimum numbers of documents of an author are taken one and minimum numbers of citations of an author are 10. Of the total 292 authors, 114 meet the thresholds. Meinzen-dick have total citations 342 and documents are 6. Total link strength is 77. Some of documents are not connected, therefore 48 documents are taken for analysis purpose.



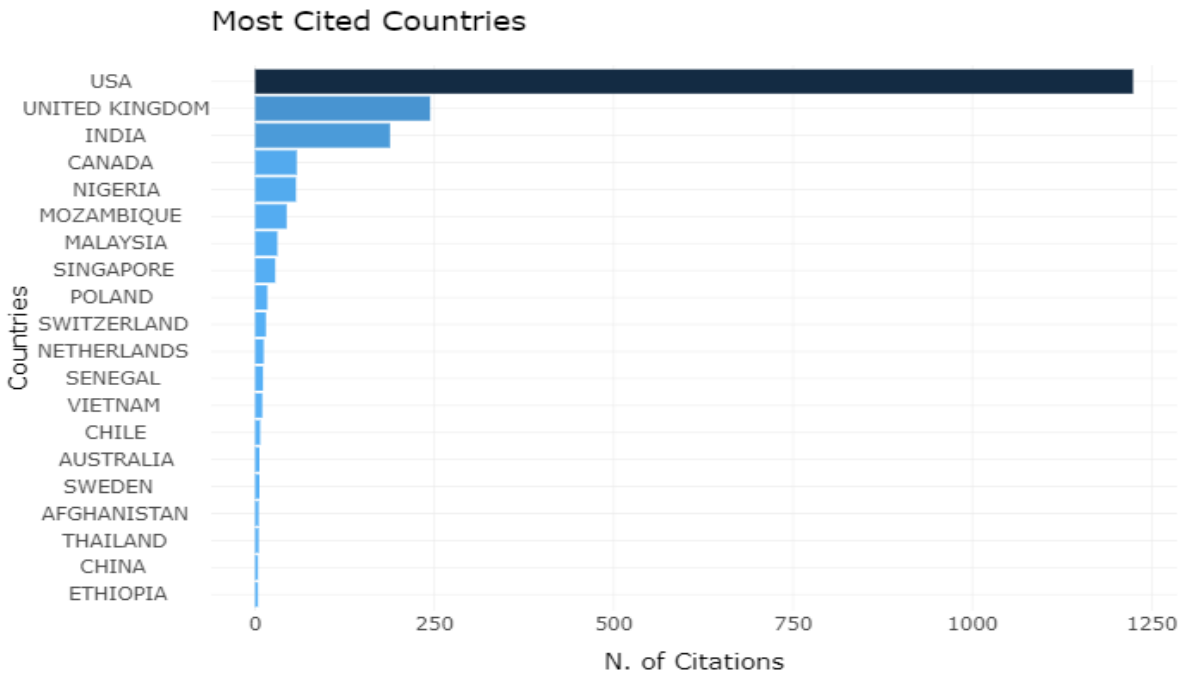
4.4 Citation-unit of analysis (Organisation)

Minimum numbers of documents of an organization are taken 4. Out of total 125 organizations, 4 meet the thresholds. The organisation with greatest link strength is selected. Total 4 organizations are selected.int food policy res inst has largest total citations 1030 and documents 9 and total link strength is 7.



4.5 Citation-Unit of analysis Country

USA country has total citations are 1224 and average article citations are 42.2 followed by United Kingdom with total citations are 244 with average article citations are 48.8



5. RESULTS AND DISCUSSION

The most important documents based on citation analysis is Alkire S, 2013. With a total 8 Local and 205 Global citations, World Dev is the most significant source collecting articles related to the study. The most important source is World Dev, with articles 139 followed by J Nutr with articles 37. The most cited country is USA with total citations 1224 with average total citations are 42.2. Citation analysis is necessary for future researchers to determine the growth of particular research and the most influential author and journal in a specific field. One limitation of citation analysis is that it gives importance to more cited articles and articles that are oldest have more weightage than new articles.

6. CONCLUSION

The role of women in agricultural and rural development is significant. Through citation analysis, it is clear that there is significantly less research in a particular field. Researchers can use work in this particular research area and can explore new things. Citation Analysis is necessary to know the important source, journals and authors in a particular area. Here a limited area of Bibliometric analysis is considered i.e., citation analysis. Future researchers can explore other area of Bibliometric analysis.

REFERENCES

[1] Faber Frandsen, T. (n.d.). *Journal interaction A bibliometric analysis of economics journals*. https://doi.org/10.1108/00220410510598544

[2] Giannakis, M. (n.d.). *The intellectual structure of the supply chain management discipline A citation and social network analysis*. https://doi.org/10.1108/17410391211204392

[3] Gundu Shibanda, G., & Ingado Seru, J. (2002). Human resource strategy for Kenyan women smallholders. *Women in Management Review*, *17*(6), 285–296. https://doi.org/10.1108/09649420210441932

[4] Kraus, S., Filser, M., Eggers, F., Hills, G. E., & Hultman, C. M. (2012). The entrepreneurial marketing domain: a citation and co-citation analysis. *Journal of Research in Marketing and Entrepreneurship*, *14* (1), 1471–5201. https://doi.org/10.1108/14715201211246698

[5] Kraus, S., Li, H., Kang, Q., Westhead, P., & Tiberius, V. (n.d.). *The sharing economy: a bibliometric analysis of the state-of-the-art*. https://doi.org/10.1108/IJEBR-06-2020-0438

[6] Kraus, S., & Westhead, P. (2020). *The sharing economy : a bibliometric analysis of the*. *26*(8), 1769–1786. https://doi.org/10.1108/IJEBR-06-2020-0438

[7] Liu, M. (n.d.). *Progress in Documentation the Complexities of Citation Practice: A Review of Citation Studies*.

[8] Nebelong-Bonnevie, E., & Faber Frandsen, T. (n.d.). *Journal citation identity and journal citation image: a portrait of the Journal of Documentation*. https://doi.org/10.1108/00220410610642039

[9] Nguyen, C., Frederick, H., & Nguyen, H. (n.d.). *Female entrepreneurship in rural Vietnam: an exploratory study*. https://doi.org/10.1108/IJGE-04-2013-0034

[10] Nusair, K., & Nikhashemi, S. R. (2019). A bibliometric analysis of social media in hospitality and tourism research. *International Journal of Contemporary Hospitality Management*, *31*(7), 2691–2719. https://doi.org/10.1108/IJCHM-06-2018-0489

[11] Rowley, J., & Slack, F. (2004). *Conducting a Literature Review*. *27*(6), 31–39.

[12] Saha, V., Mani, V., & Goyal, P. (n.d.). *Emerging trends in the literature of value co-creation: a bibliometric analysis*. https://doi.org/10.1108/BIJ-07-2019-0342

[13] Sefer, B. K. (n.d.). *A gender-and class-sensitive explanatory model for rural women entrepreneurship in Turkey*. https://doi.org/10.1108/IJGE-07-2019-0113

[14] Wang, F., Jayroe, T. J., Qiu, J., & Yu, H. (2014). Analysis on research activity and impact of authors in Chinese information science based on citation relationship. *Journal of Documentation*, *70* (3), 461–477. https://doi.org/10.1108/JD-03-2012-0030

[15] Wang, Q., Polyu, H. K., Kong, H., & Ngai, E. W. T. (n.d.). *Event study methodology in business research: a bibliometric analysis*. https://doi.org/10.1108/IMDS-12-2019-0671

[16] Xiao, H., Wang, Y., Li, W., & Ma, Z. (2005). *Intellectual structure of research in business ethics A citation and co-citation analysis on Business Ethics Quarterly*. https://doi.org/10.1108/NBRI-10-2016-0035

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Elementary Education in India: Understanding a Subsist Education Structure

Dr. Abheyender Singh*, Dr. Vijay Dahiya**

Abstract: Elementary education has a decisiveresponsibility during the formative years of a youngster. Theknowledge moralsand values imparted to offspring at this stage shape their personality and etiquette as they grow into adulthood and it becomes a part of their being. Hence, it is essential that the knowledge imparted to them through elementary education is apt as for their age since, it has far reaching consequences. The aim of this paper is to present a detailed picture about the current status of elementary education in India. The second section of the text presents the figures regarding the current state of elementary education in India. The third section explores the programmes and schemes introduced by the government to achieve the aim of "schooling for all". Additionally, in the fourth section of the paper a comprehensive review of the problems facing elementary education is conducted and suggestions to overcome those are presented. It is hoped that this paper informs academicians, researchers or any curious learners about how far India has come, what lies ahead of us and how we can reach there.

Keywords: Decisive, Formative, Curious, Etiquette, offspring

1. INTRODUCTION

Elementary education is the first junctureof formal education, commencement at age of 6 and ending at age of 14. It plays a crucial role in determining a person's economic and social empowerment. It is also an important determinant of development and a prime indicator of HDI. Elementary education is the most important type of education provided because it forms a basis or a foundation on which higher education works upon and enhances further. During these formative years of a child, the curriculum lays aprominence onarithmetic skills, writing skills and reading skills, basics ofscience and social studies. Moral values and ethics are also inculcated in children, so that they grow up to be responsible and law abiding citizens, since the things taught at this stage go a long way in shaping the personality of individuals. Education Act, 2009 came instrength in April 2010. It provides guarantee of education, at no cost and necessary toevery teentill the age of 14 (fourteen). After this monumental act was passed, some cataclysmic changes were observed. The numbers sure did increase but moreover, a change in the mind-set of people was observed and there was an amplified public craving for the fruitful schooling. Due to the continued efforts by the government, the aim for "schooling for all" has been accomplished to a great extent which is indicated by the numbers in the next section.

(A) Understand figures and facts

In 2010, the nation accomplished a memorable achievement when (RTE) Act, 2009 and Article 21-A enforced on 1st April 2010. The authorization of Article 21-A and the RTE Act was a ice-breaking step in nation's battle for universalising of elementary education. The RTE Act 2009 givescertainty, impartial and obliging provisions of comprehensive elementary education for each and every one. The following statistics show how far we have come in the journey of universalizing elementary education and how far is still needed to go.

(A) Facts regarding quantitative aspects

1. Budget allocation The Union Budget for the Ministry of Human Resource Development for the next financial year 20120-21 increased by just 4.69 percent – the smallest increase since 2015. The two departments of MHRD namely- Higher Education and School Education and Literacy received a combined allocation of Rs 99,300 crore for the 2020-21 financial year. This is an increase of only Rs 4,446.36 crore.
2. Number of educational institutions A substantial increase can be seen in the number of educational institutions since independence. During the period In between 1950 to 2016 the number of Primary Schools has been increased by 4.5 times (9, 40,546 Primary Schools) and Upper Primary Schools was increased by 31.5 times (4, 29,624 Upper Primary Schools).
3. Ggross enrollment ratio at the Primary school (classes' I-V) was 42.6% in 1950-51 has increased 99.2% in 2015-

**Assistant Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, abheyendrasingh@msi-ggsip.org*
***Associate Professor, Department of Business Administration, Maharaja Surajmal Institute, New Delhi, India, vijaydahiya@msi-ggsip.org*

16, and Upper Primary school level was increased from 12.7% to 92.8% Since 2007.

4. Gender parity index at Primary level was increased from 0.41(1950-51) to 1.03(2015-16), and 0.22% to 1.10% in case of Class VI-VIII. GPI level of Class I-VIII has increased from 0.31 to 1.05%. GPI of SC students for Classes I to V In 2015- 16 and VI to VIII 1.03 and 1.10 respectively, for Schedule tribe students for Classes I-V and VI-VIII GPI was 0.98 and 1.03 respectively. This is an indicator that the mind-set of people is beginning to change towards education in general and more specifically towards education of the girl child.

5. Dropout rates at the Primary level stand at 4.13% (Boys- 4.36; Girls- 3.88) Dropout rate at the Upper Primary level stand at 4.03% for 2014-15 (Boys- 3.49; Girls- 4.60) The major reasons for dropout are as follows:

6. Number of teachers has increased from 5.38 to 26.06lakh in 2015-16in Primary schools. The number of teachers in Upper Primary school level has increased from 0.86 to 26.12 lakhs in 2015-16.

7. PUPIL TEACHER RATIO During 2015-16, the PTR was 23 and 17 for Primary and Upper Primary schools respectively. To put it in perspective, in 1980-81 the PTR was 38 and 33 for Primary and Upper Primary schools respectively.

(B) Facts regarding qualitative aspects

Reading the ASER reading test assesses the learning level of a child in terms of a few parameters which are described as below: At Std I and IIa child of difficultly can read letters, words, a simple paragraph or a 'story'. In Standard III: the % of pupil who are able to read at Std II level, has been climbing over the past years and the percentage for the same changed from 21.6% to 23.6% (2013) and 25.1% (2016), 27.2% (2018). Std V: Approx 50% of the students who were enrolled in Std 5can read Std 2text book and this figure was increased 47.9% to 50.3% in 2018. Std VIII: In year 2018 Data ofASER tells that, the students enrolled in Std VIII, approximataly 73% students can read a text book of Std 2. The ASER arithmetic test tells the learning level of a child in terms of a few parameters which are described as below: a child can acknowledge numbers 1 to 9 and 10 to 99, can solve a problem of two-digit subtraction, appropriately solve a algebraic3 figure by 1figure division problem. Std III: The % of students enrolled in Std III who can solve subtractionnot much improved by 27.6 % (2016) in 201828.1%. This number was changed for government school students; by slight change (.6%) 20.3% (2016) to 20.9% in 2018. Std V: The % of students were enrolled were able to solve division problem slightly changed by 1.8% from 26% (2016) to 27.8 %(2018). Std VIII: The performance of Std VIII students those were enrolled can solve basic arithmetic problems has not altered much.

Programs and schemes

India is a youthful nation as 27% population is lying in between 0-14age group. In order for a country and its individuals to prosper, Elementary education is the most important step, which determines the trajectory of the nation and its individuals. Achieving the goal of universalisation of elementary education, becomes a daunting task in the Indian context. Hence, the government has started numerous projects and programs, each focusing to remove the barriers existing between India and the goal of UEE. In the National Policy of Education, the government has ensuredimpartial education for everyone. The majoraspire of these schemes is to improve quality, impartial, social justice and also to improve the basic quality of education. Indian government launched these schemes for elementary education in India.

1. RTE2009 (Right to Education) enacted on1/04/2010. RTE made education a fundamental right for everyone in-between 6 and 14 years age. It bounds every elementary school follow the basic norms for elementary education in the nation. Thus, every child got right to be given free and necessarybasic education. The RTE act also provides assurance that makes surety the child receives the benefit of sustainable progress, building potential, knowledge, ability, skills etc. It makes provision for the appointment of teachers, who are appropriately trained in their profession. All this ultimately leads to the attainment of UEE and raises the standard of basic Education in India.

2. (SSA) Sarva Shiksha Abhiyan-2001, This program was probably one of the biggest project undertakings in India. SSA is a program for the kids aged 6-14 which helps them in receiving Elementary Education. It is a centrally sponsored scheme and covers the whole nation and works in association with local and state governments to implement RTE. It incorporates children from every social class and works towards achieving the objective of UEE. Its interventions include: (I) Construction of new schools. (II) Special training for children who are out of mainstream school. (III) SSA has a provision for residential amenities in remote areas and low density populated or hilly and densely forested areas. SSA is running approx 826 inhabited institutions with a capacity of approx 90, 855 children till date. (IV) Escort facilities for children between their homes and school premises. (v) Girls education: RTE-SSA emphasis on girls education and children belonging to weaker sections or disadvantaged groups. The general expectations under SSA apply to all girls belonging to weaker sections and

disadvantaged groups, these include ensuring availability of textbooks, uniforms, etc.

3. Midday Meal Programme is also known as "Nutritional Support to Primary Education". In 1995 this scheme was came in force for nutritional support to the students studying in elementary schools. In 2008-09, seeing its efficacy, it was extensive to consist of Upper Primary school pupil and the Scheme was rehabilitated as 'Mid-Day Meal' for pupil in Schools.Main objective of this scheme was to eliminate hunger of students and to provide anmotivation to increase attendance and enrolment in schools. It is also helpful to reduce improper and inadequate nutrition among children. It also helpful to empowered women socially and economically as it creates employment opportunities for them.

4. National Program of Education for Girls at Elementary Education came in force in July 2003 and this program is a major component of SSA. It has been initiated by the Govt. of India to reach girls; especially those are not enrolled school. The NPEGEE gives additional support to the mechanisms of SSA for civilizing the education among girls. A few objectives that go under this plan include the improvement of learning materials, gender sensitization of instructors, arrangements like stationary, uniforms, and exercise manuals, workbook etc. The main agenda of this program is to break sexual generalizations/stereotypes and ensure that ladies get the same learning opportunities as their male counterparts. The plan is prepared forEBBs (educationally backward blocks) where thefeminineerudite is lesser than nationwidestandardand sexual characteristics gap is higher than national average; isslightest 5% SC/ST inhabitants andfeminineerudite is below 10%; in urban slums. Approximately25, 537 ECCE centers, 35, 254 model cluster schoolsopened, and in the 24 States approx 3272 EBBs have been covered under the Scheme, around, approximately 1.85 lacs teachers weretrained on GS(gender sensitization) and 24, 394 additional classrooms was constructed and remedial teaching is organized for 9.67 lakh girls (upto 31st December 2007).

5. KGBV (Kasturba Gandhi Balika Vidyalaya) scheme - 2004, the main motive of KGBV scheme is to set up residential schools for girls belongs to remote areas (minority communities, SC, ST, OBC Muslim and BPL girls) at the upper primary level, girls from disadvantaged groups can access quality education with ease. Kasturba Gandhi Balika Vidyalaya set up in where schools are far from residence, girls who are not capable to go toschools regular basis, nomadic populations in remote areas, 10+ age girlsthose are dropout from primary school level and security of girls is a challenge. They provide 75% reservation for girls belongs to OBC/ST/SC and minorities and 25% to girls belongs to BPL family. Till date, 3609 KGBVs are sanctioned/ recognized by Indian Government, and 3600 KGBVs are functional (Le. 99.75) and 3, 66, 756 girls are enrolled in them.

6. BetiBachao, BetiPadhao 2015 comes under the Ministry of Woman and Child Development, and is one of the key and most eminent central govt. schemes for teenager girl child. The majortarget of this govt. scheme was primarily toprotect girls children from female feticide alsoendow withsupport for eminence education, stopping the practice of discrimination and gender-determination tests. The BBBP scheme ensures the shelter to girls and spreadsattentivenessamong girl children and are also nowhere beneath their male counterparts and hence should not be treated as such. They should rather be treated as equals and be given the same opportunities as boys.

7. Swachh Vidyalaya Under SSA, the prerequisite of school infrastructural amenities includingdrinking water, clean toilets are based on need is reflected in their yearly Work Plan & Budget. All fresh schools opened with the help of SSA having amenities separate toilets for girls and boys. However, many of the schools which were constructed earlier still lack the basic facility of toilets (mostly girl toilets). This compels girls to leave the schools midway. The Department of School Education launched the Swachh Vidyalaya Initiative under which 4, 17, 796 toilets constructed or functional in 261400 schools, which ensures good hygiene and also helps in the retention of students.

8. Infrastructure Development in Minority Institutes Scheme was come in effect to develop the basics in Private Aided/self financedschools, Institutions to provide excellence education to minority kids. The scheme would facilitate education of minorities by infrastructural improvement. They might be able to gain education like the rest communities. This plan covers the whole nation state, preference will be given to(private aided/Govt./self financed) schools, minority institutions located in, blocks and districts having a minority people above 20%..

2. PROBLEMS AND SOLUTIONS

India is a youthful nation and this young population is our future demographic dividend, it is of utmost importance that they are facilitating quality education. In order to spread quality education across India, it is important to note the pitfalls or the shortcomings in the current system and address those by appropriate interventions. This section analyses the

issues with Elementary education in India, which are stumbling blocks in providing accessible, affordable and quality education to its citizens. At the same time, it suggests the changes which can be implemented and some of the remedial solutions which have already been put in place by the government.

1. Accessibility of adequate infrastructural services in school have considerable impact on students since it is an centralsignthat, schools haveencouraging learning environment for offspring. Several researches link the availability of infrastructural facilities of school and school effectiveness, some of themalso indicates that helpful managementorganizationor schools can develop the excellence of educational services. Proper infrastructure also motivates teachers who are then able to provide effective learning to their students. These have brought a significant improvement in certain areas: 89.18% of all elementary schools are connected with all weather roads. 99.5% have school buildings 89% have functional water facilities 87.08% have functional girls toilet (albeit still less, it has improved manifold) Problems Studies have pointed out that the infrastructure in remote and rural areas is far from satisfactory. Approx12.5 % upper primary and 6.7% primary schools have entire pukka building in remote areas which indicates that basic infrastructure is not up to the mark these regions. As per DISE data, classrooms in private/aided and self financed schools are superior situation than govt. schools. The higher proportion of government schools requires major maintenance. Data figures show that 41% of schools are still devoid of electricity and just a meager of 25.23 has computer facilities. These figures are disheartening to say the least what can be done for the improvement of infrastructural facilities? In remote and rural areas, the need for proper infrastructural facilities should be paid due attention to because, if they are not improved, the socio-economic divide between the backward communities living in these areas and rest of the nation will increase. States and local bodies should collect data of schools in their areas and then work accordingly to improve the prevalent condition. Also, just the provision of facilities alone is not enough. Emphasis should also be laid on timely and adequate maintenance of these facilities by the school management. The reason for school grants not being used judiciously in many schools is corruption. A lot of the money from these grants rather than being utilized for improving infrastructural facilities goes into the pockets of a few. Such bottlenecks should be identified and addressed and the defaulters be punished. This should happen at the State level and should also be monitored by the Centre. Even in the 21st century, none of the 21st century facilities can be seen at most schools. Electricity is essential for classrooms to ensure that the students focus on their education and development and not on any other distractions. Computer availability is one of the most important facilities in today's world. In an age where data is knowledge, where most of the work is done by means of a computer, we're keeping children devoid of computer education. This should be corrected at the earliest and a specified scheme should be developed to ensure that practical computer education is imparted to every child. This will automatically fix the electricity issue as well.

2. Full equity and inclusion Education is arguably one of the greatest tools for achieving equality and social justice. Equitable education is basic to accomplishing a comprehensive and an impartial civilization in which each resident hasoption to reverie. Unfortunately, there exist a host of inequalities pertaining to gender, social and economic status and special needs in our nation. Such social cleavages often amplify the gap in quality and hence productivity and hold the nation and its citizens back from growth, prosperity, and progress. Poverty is one of the major factors in both elimination and favoritism. Poor families thrash about to send their offspring to school and they do since they have fewer resources at home to be able to help their children in this endeavor. A lot of children from poor households are also excluded because, they have to work in order to have food on the table at the end of the day. Thus, many children are excluded because they are stuck in an endless maze of poverty. There is also a lack of quality infrastructure, functional and secure toilets, good libraries, laboratories, learning supplies and drinking water in inferior areasschools. Another factor which leads to exclusion and discrimination are social mores and biases foreg.some communities still deem that girls not need any prescribed education. The evaluated values of Gender Parity Index show the expanding trends of female participation at all levels. However, this doesn't remain constant when the index is determined based on school management. In some states, feminine enrollment is higher than males in government schools but, this upturned about private schools. Parents appear to have an inclination towards private schools for the boy child. This shows a serious case of gender based inequality. Children form such disadvantaged communities face discrimination in the form of: differential classroom seating based on caste, wherein they're made to sit at the back; sexual and mental abuse; being made to eat from separate utensils; negative stereotypes and teacher perceptions etc. What can be done to provide full equal and inclusive education in schools? Government programmes like distribution of bi-cycles, providing transport facilities at a concessional rate for students, introducing online courses are being implemented effectively in the states/UTs to increase accessibility even

to the students from a poor socio-economic background. The policies or schemes running in past years must be strengthened and transformed for the underprivileged groups. Also, certain regions with large populations in the country from URGs should be declared as SEZs (Special Education Zones) where government policies and schemes are implemented, to the utmost extent. For the households, wherein the children are employed not by choice but by helplessness, it is essential to link up microcosmic realities of life with macrocosmic policies to realize rights in a meaningful way. They won't be able to find a way out of the maze unless their basic needs are met i.e. education has to be linked up with food security, right to health, right to livelihood, employment and other social security measures. This is being done through government schemesProgramlike NPEGEL, (Kasturba Gandhi Balika Vidyalaya) KGBV, BetiBachao, BetiPadhao which focus specifically on the girl child and schools should offer a safe atmosphere for young minds to boom. The role of guardians, teachers and peers becomes very significant to eliminate the mores of caste based discrimination. The children being discriminated against need safe space and individual attention care to grow, a personal long term support which comes from the teachers. A change in mind-set needs to take place across the classrooms. A strict action also needs to be taken against the facilitators of this problem.

3. Eliminate Drop Out ratio is one of the maintargets of schooling system aguarantee that children are enrolled and attending school properly. Dropout of students has a huge financial ramification which affects labor market, economic performance and social progress of a country. It is not only financial constraints and engagement of children in domestic/economic activities which forces them to dropout, but lack of interest in education also plays a major role. Thus ensuring adequate availability of educational facilities is necessary but not sufficient to ensure retention of students. Most schools also don't provide educational and vocational counseling to their students. As per U-DISE, the (GER) Gross Enrolment Ratio for Grades 1-5 in 2016- 2017 was 95.1% for Grades 6-8 Gross enrollment Ratio was 90.7%. A big quantity of enrolled students drops out after Grade 5, after Grade 8 mainly. This might be due to negligence in teaching during their formative years, which they're unable to cope with and subsequently, the burden keeps piling up, making them dropout eventually. Presence of adequate infrastructural facilities also plays a role in the retention of children. Mainly girl students drop out due to lack of toilet amenities in schools. In dropout rates Social, economical and cultural issues also play a foremost role. For e.g. some children are not sent to school due tounsafe practices like child marriage, gender discrimination, child labor etc. Lack of sanitation and unhealthy habits make kids prone to chronic illnesses and this also prevents them from attending classes consistently. Many might even be subjected to discrimination or harassment on the basis of their caste and might prefer to dropout. Some children dropout, just because of they do not find appealing or constructive school. This reason is the second most popular (after the reason of 'being engaged in domestic/economic activities') for dropping out of students. What can be done to ensure student retention? Those students who have fallen behind and are unable to cope up with the ongoing teaching need to be monitored closely by their respective teachers and should be given individual assistance. Such students can be identified by tracking their attendance as well. Valuable and ample infrastructure should be provided to all students to access safe and engage school education. This could be achieved by improvement and enlarging the existing schools, building additional eminence schools in remote areas, building of libraries and toilets to attend a quality school and receive quality education. Roads should be enhanced and adequate measures for transport should be taken like providing bicycles, organizing walking groups, arranging for paid walking escorts, or buses to ensure full accessibility to schools. Suitable precautions should be taken by all schools and their managements to ensure the safety of students specially girls students, building safe infrastructure, recruitment of defensestaff (guards) (mainly female security staff), maintainassociations with local police, arrangerealisticmechanism for students in case of harassment or other situations. One also needs to take a hard look at the curriculum as well to ensure that it's relevant and interesting. It is important to upgrade along with the world. Technology needs to be inculcated at a large extent in the classrooms and other means of learning other than the textbook way should be encouraged to make learning a fun process.

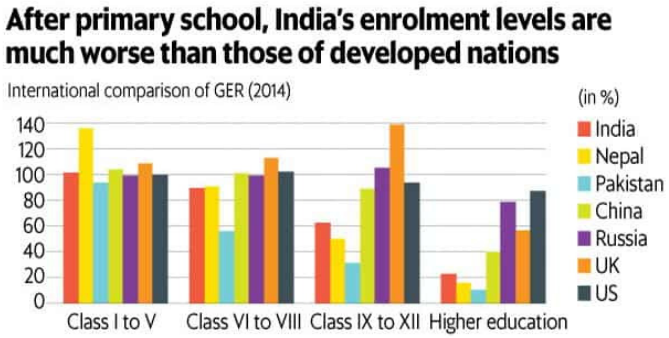


Fig. 1.

Source: - https://www.livemint.com/Education/k1ANVHwheaCFWCupY3jkFP/Trends-in-school-enrolment-and-dropout-levels.html

4. Teachers and teacher education it has been rightly said, "Teaching is the profession that creates all other professions" Teachers shape children's futures, the potential of our nation. Thus, creating anerudite and prosperous society is in the hands of teachers. It is because of this fact that teachers were greatly revered in ancient India. Todaythe status of the teacher and the quality of teaching has convex. The quality training, recruitment, service environment, and empowerment of teachers are not up to the mark; consequently this has great impact on teaching principles. Problems acquires a large section of teaching, even higher educational institutes are not providing a superioredification. No regard is given to the quality of teaching being provided in such colleges. Ones not even meeting the bare minimum requirements are being handed out degrees. It would be safe to say that in such colleges, degrees are essentially available for a price. At present teacher conscription is based on in black and white examinations such as (TET)Teacher Eligibility Test. This has modestassociation with teaching ability and the exploitation of teachers affecting teaching. Many schools face the problem of shortage of teachers therefore, in many cases, a mathematics teacher may be asked to teach Hindi, or a history teacher asked to teachscience. Massschoolsdoes not have music or art faculty. Teachers are subjected to unpredictable transfers. Losing teachers suddenly can have a negative effect on students pertaining to their psychology and education. In few schools lack of harmless drinking water, operational toilets and electricity are infrastructural deficiencies are the main issue. What can be done to ensure quality teaching and highly qualified teachers in the country? Colleges that provide teacher training need to be assessed carefully and their malpractices need to be addressed. Focus of these colleges should be on imparting relevant and quality training which will help the enrolled students become good teachers in the future. Unqualified and untrained teachers are also one of the toughest and biggest issue infornt of us (Figure 2). Teacher recruitment, should not only be based on written examinations but, other assessment methods which show the competency of teachers in dealing with children should also be looked at. The RTE ACT 2009 says that the vacancies of teachers in the school shouldn't surpass 10% of its sanctioned strength. To satisfy the standards of RTE Act, during 2015-16, 4 lakh instructors were required at the elementary level. Considering the high number of surplus educators in less enrolled schools (consolidated strength of 6, 36, 861), is the setback. These methods need to be looked at proactively to address the problem of shortage of teachers. This might be because of the lack of infrastructural facilities in schools which make them feel uneasy about working there. Thus, adequate infrastructural facilities need to be developed quickly. The curriculum load is a lot both for teachers and students. Thus, the curriculum needs to be relaxed and revised to include relevant information. Methods of teaching other than the traditional textbook method need to be implemented to teach students since they make education more engaging and easier to understand. Thus, consequently the number of students falling behind will decrease significantly.

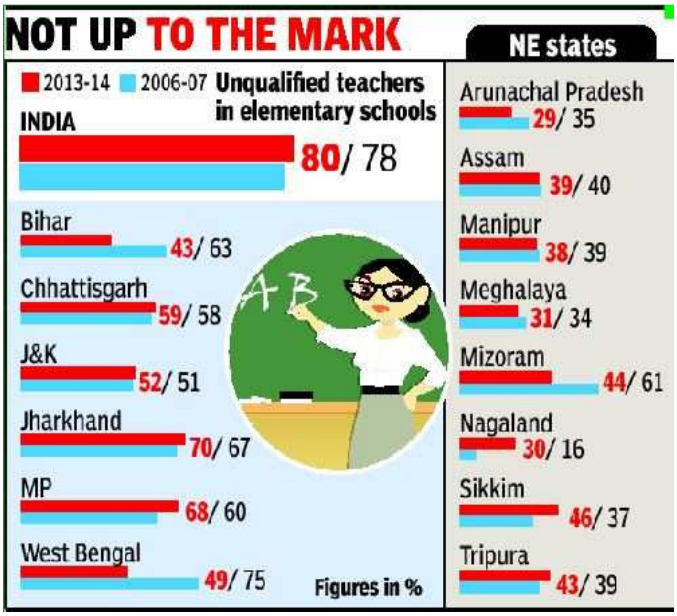


Fig. 2.

Source:https://timesofindia.indiatimes.com/india/1-in-5-primary-teachers-unqualified/articleshow/46809604.cms

5. Lack of emphasis on sports the basics for sports education starts at the school level. Sports education has been made a compulsory subject however, not much is being done at the school level to realise the goal of imparting sports education. This is the reason why still, most schools don't have the required sports infrastructure in place. In India, just 59.79% of all elementary schools have the facility of a playground, which is the most basic need. A finding states that children's physical activity levels are directly proportional to the opportunities they have to be active. It is also a known fact that sports inculcate the qualities of leadership, team work, discipline, honesty etc. among children. With the leading population under the age of 25, India is the youngest country. Yet it lacks significantly in the sports front. Hence, immediate changes are needed to ensure that sports are given due importance in the education system. For this, it is important to first know the issues which are to be addressed. Lacks of amenities in schools– Many schools are still not operational with amenities like playground, tools, capable coaches etc. There should also

be a scientific approach which should be followed while imparting sports education. Neither the parents nor the school authorities take sports seriously. They just think that it's a distraction to academics. Unqualified sports coaches- As mentioned above, only every 2 out of 10 schools have a qualified sports education teacher. In most other schools, the other subject teachers are assigned the task of imparting sports and physical education to students. Availability of sports equipment- Most of the schools don't have sports equipment. Even if they do, it is restricted to a few sports and oftentimes even that is old. Unpleasant allocation of sports budget. What measures can be adopted to ensure adequate emphasis on sports in schools? Immediate action should be taken to provide the sports infrastructure which is lacking in most schools. More funds should be provided to ensure that this is done. Also, strict action should be taken against the administration if it misuses these allocated funds and an effective structure should be put in place to oversee it. During PTM's or any such conventions, the guardians should be sat down and explained the importance of sports in nurturing of children. Schools also need to change their mind-set. Schools can influence the physical activity behaviors of their students through various other things apart from physical education like recess periods, physical activity etc. Break in between regular teaching increases the focus of students and they're able to retain well. We lack severely in the amount of trained coaches in schools. In private schools, there are a multitude of coaches each for a different sport yet most of the government schools don't even have one. This need is fulfilled by teachers of other subjects which is clearly not the same as having a trained coach. Most of the trained coaches prefer private schools because they provide good pay. To ensure that all children are imparted with physical education, it is necessary for government to increase the pay scale of coaches. Also, efforts should be made towards increasing the training of coaches so as to meet the shortfall. Samagra Shiksha Abhiyan support school sports through many ways, one of which is by providing sports equipment to all schools.Scheme'Khelo India' is very popular to bolster sports in the nation. The government needs to come up with more of such innovative schemes and increase the budget allocation for sports as is done in other nations which perform well at the international level. Till that happens, not much can be expected from the existent infrastructure because wants don't give results but actions do. In this case, a proactive action needs to be taken by the government.

6. Quality of Education, after the implementation of RTE in 2010, quantitative aspects took the centre stage. These numbers indicated the improvement in accessibility and equity of education. However, despite the progress, issues faced by today's education system, among them one in which pupil are not prepared as per their potential. Over 5 crore children fall behind in this endeavour. Inrecent educational system, once a studentgo down they tend to retain flat learning due to negligence of teacher and the subsequent burden of the future curriculum. 50% of students in fifth standard cannot read a paragraph from class two textbook and nearly 75% of students of the same class does not have knowledge to divide a three digit number with one digit number. This clearly shows how far behind we have fallen in terms of quality of education. In the view of that another important suggestion is that government should form a (RSA) Rashtriya Shiksha Aayog or(NEC)National Education Commission. Education should transform with holistic approach and the education system must fulfill the all requirements of the fast-changing atmosphere and society. The Rashtriya Shiksha Aayog may bring a new acceptable approach through professionals, researchers, educationists and endow with deficiencies and solutions of current educational system. Highest authority of RSA should worked under the Prime Minister himself/herself means he is directly responsible to the PM.

Some other remarkable points, It is evident from the aforementioned numbers that a very little curricular emphasis is laid on foundational literacy and numeracy. It can be observed that the reason of their promotion to higher classes is mainly due to the abolition of detention in case of failure and is not caused by their improved quality. The students who have fallen behind at this foundational stage find schooling hard and are unable to cope up with it. This leads to them eventually dropping out. Teacher student ratio plays a vital role in the expansion of initial skills. If the teacher hasn't been trained properly on the fronts of say dealing with children, the pedagogy which is to be followed etc., they might find it hard to impart even the most basic skills to their students. The quality of nutritionhas momentous role in learning in the early years. Hunger and malnutrition is prevalent in children coming from socio-economically disadvantaged communities which has a toll on their learning ability. The government has launched several initiatives to achieve this objective of nutration. These are: National Tutors Programme; Remedial Instructional Aides Programme; Piloting technological interventions aids for teachers and the setting up Rashtriya Shiksha Aayog. In teacher training institutions, relevant training should be imparted to the future teachers. In fact, many of these institutions work solely for their commercial gain wherein degrees are available in exchange for money and no emphasis is laid on the quality of the teachers being produced. These needs to change and quality training should be imparted so that the future teachers are equipped with the proper tools of teaching and of dealing with children. Midday meal programme should be expanded. A nutritious breakfast as well as a midday meal should be served to elementary pupil.

3. PROVISIONS UNDER NEW EDUCATION POLICY 2020

The new system will have three years of anganwadi with pre-schooling and 12 years of schooling. Under this, three years of pre-primary and first and second classes have been kept for the students to study in the initial stage. The III, IV and V std classes are sited in the next stage. After this, the subjects will be introduce in middle school (6-8 std). All students of class III, V and VIII will give exams and there is no change regarding 10th and 12th board exams. Keeping in mind the aim of holistic development of students, these will be reviewed. A National measurementcenter forpresentationappraisal, evaluation and psychoanalysis of acquaintance for overall enlargement (PARAKH) will be established as a standardsdefining orgnisation.Emphasis will be laid on basic qualifications of reading and writing and addition-subtraction (numerical knowledge). Ministry of Human Resource Development (MHRD) establishing 'A National Mission on Basic Literacy and Numerical Knowledge' in 'NEP 2020', considering basic literacy and the attainment of numeracy knowledge as the most essential and first requirement for learning correctly. NCERT has authority to develop a national curriculum and educational framework for early upbringing (NCPFECCE). No special distinction between academic streams, extra-curricular activities and vocational education in schools, emphasis on the education of disadvantaged groups on social and economic perspectives. The National Council for Teacher Education will develop "National Professional Standards" for teachers by the year 2022, for which consultation will be held with NCERT, SCERT, teachers and expert organizations of all levels.The target of spending 6% of GDP in education, which is now 4.43 percent.The goal of NEP2020 is to endow withexcellence education to every child (3-18 age) by 2030.Vocational courses will be started from Class VI, it means that interested students can do internship from class VI onward. The music and arts subjects will be promoted. These will be implemented in the course. Sincere efforts have to be done to encourage the qualification of pupil belonging to specific categories.(National Scholarship Portal) NSP expandedto track the support, progress, and development of the students getting scholarships. Self financed and private education institutions will be encouraged to offer a large number of free and quality education also provide scholarships to the students. Start E-coursesfor the enlargement ofregional languages. A virtual lab and a national educational technology forum (NETF)formed for eminence education.As a result of the recent increase in epidemics and global pandemics, a broad set of recommendations have been covered to promote online education, making it possible to provide traditional and personalized learning whenever and wherever possible. To ensure readiness of alternative means of quality education, a dedicated unit will be created at MHRD with the objective of digital infrastructure, digital content and capacity building to meet the needs of e-education to both schools and higher education.

4. CONCLUSION

Estimates suggest that by 2030-32 India could be third largest economy in the world. In order to achieve the ten trillion dollar mark, we need to unlock the full potential of our young population and utilize it in an effective manner because all other natural resources are rendered useless if the human resources are not adept. Our strength lies in our youth and in case of the Indian context, this becomes even more accurate since we have the largest youth population in the world. But, we still haven't been able to utilise this to our advantage. In quantitative terms, the state of elementary education has increased manifold. We are providing education to most of students in the 6-14 age groups, but the quality of it still remains poor. Due to this, students are not able to enhance their learning levels and grow themselves. This has a serious repercussion on the nation as well. . We are close to achieving "schooling for all" but, now we need to make "learning for all" our outmost priority. Therefore, to change the current scenario, a cataclysmic change is required in the curriculum, pedagogy and the management structures (infrastructure, materials, equipment, technology, resources and finances). We have come a long way in the domain of elementary education since independence but a lot still needs to be accomplished in terms of quality, only then can we truly attain Universal Elementary Education.

REFERENCES

[1] Bandyopadhyay, Dr. Madhumita. "Draft Present Status of Infrastructure Facilities in Schools in India: From National and State Level Rerspective."(2016). http://www.dise.in/Downloads/Paper_on_Physcial_Facilities_(Draft_prepared_for_CAB E)

[2] Pratham (2019), Annual Status of Education Report (Rural) 2018. http://img.asercentre.org/docs/ASER%202018/Release%20Material/aserreport2018.pdf

[3] National Achievement Survey, Summary Class III (Cycle 3), 2012-13. https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/Summary-NASClass-3-Final.pdf

[4] National Education Policy 2019. https://mhrd.gov.in/sites/upload_files/mhrd/files/Draft_NEP_2019_EN_Revised.pdf

[5] MHRD- https://mhrd.gov.in/sites/upload_files/mhrd/files/documentreports/HRD%20AR%202016-17%20SE.pdf

[6] MHRD- Educational Statistics at a glance 2018. https://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf

[7] MHRD- Selected education on school education 2015-2016. https://mhrd.gov.in/sites/upload_files/mhrd/files/statisticsnew/Se

lected%20Information%20on%20School%20Education%20%282%29.pdf

[8] Nigam, Shalu (2015), The Right to Education: Rhetoric or a Reality? SSRN: https://ssrn.com/abstract=2550751 or http://dx.doi.org/10.2139/ssrn.2550751

[9] Das, Subhasish and Biswas, Amit K., Quality and Determinants of Primary Education in Rural India (May 13, 2019). SSRN https://ssrn.com/abstract=3387393 or http://dx.doi.org/10.2139/ssrn.3387393

[10] MHRD- Statistics of school education 2011-12. https://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/SES-school-2011- 12.pdf

Google.com/ Google search engine.

[11] Kapur, Radhika. (2018). Elementary Education in India. https://www.researchgate.net/publication/323695154_Elementary_Education_in_India

[12] The Editors of Encyclopaedia Britannica, "Elementary Education", Encyclopaedia Britannica, Jan 26, 2016 https://www.britannica.com/topic/elementary-education

[13] The editors of Digital Learning Magazine, "Relevance of Sports Education in Schools", Digital Learning Magazine, Mar 5, 2014 https://digitallearning.eletsonline.com/2014/03/relevance-of-sports-education-inschools/

Parichay: Maharaja Surajmal Institute Journal of Applied Research

An Empirical Analysis of Entrepreneurship Development Program on Potential Entrepreneurs

Dr. Sarita Rana*

Abstract: ***Entrepreneurship is the most fascinating component of modern day economy. Lots of training programs related to entrepreneurship emerged due to this. This paper is an attempt to determine the impact of entrepreneurship orientation on potential entrepreneurs. In particular, the study takes into account the perceived benefits before and after the particular program and maps the gap between perceived benefits and actual delivery. A sample of 50 respondents (participants) is collected for the study. The participants were engaged in an Entrepreneurship Development Program run by Indian Institute of Technology, New Delhi (India). The paper discusses parameters around which Entrepreneurship Development Program is knitted. A structure schedule is prepared and data is collected on a five-point scale in the beginning and at the end of the program. Collected data is fed to SPSS and gap between perceived and actual delivery is identified along with significance. Motivation to start a venture is also observed through structured approach. Necessary descriptive and inferential statistical tools are applied as and when needed. Results are presented trough necessary graphs and tables.***

Keywords: Entrepreneur, Entrepreneur orientation, Leadership, Training

1. INTRODUCTION AND LITERATURE REVIEW

Fortune 500 companies have lost more than 5 million jobs, but more than 34 million new jobs have been created. Entrepreneurial activity increased from 2008 rates for both men and women (from 0.42 percent to 0.43 percent for men and from 0.24 percent to 0.25 percent for women). The Nice Côte d'Azur 2011 Entrepreneurship Barometer report finds the appetite for more targeted entrepreneurship education and training ―most striking. This appetite is particularly strong in rapid-growth markets, where 80% of entrepreneurs think that students need to follow specific training to become entrepreneurs (compared with an average of 70% across the G20 nations). Revenues from Entrepreneurship Education Programs reached INR7.9 billion in 2010 and are estimated to grow at a CAGR of 13.7% to INR10.7 billion by 201226-Entrepreneurship Education in India: Trend and Factors Assessment Survey ‘, Research and Markets, 2011

The entrepreneurial revolt has taken hold across the globe and has incontestably impacted the world of business forever. Entrepreneurship has emerged over the last two decades as arguably the most potent economic force the world has ever witnessed. With that expansion has come a similar increase in the field of entrepreneurship education. The recent growth and development in the curriculum and programs devoted to entrepreneurship and new-venture creation have been noteworthy. Entrepreneurship was considered to be an employment generation sector and recognized as an instrument for tapping latent talent and harness it. The government envisaged a promotion package and financial assistance in the form of fund and non-fund to facilitate the setting up of new units or the expansion of existing line of activities. The package consisted of incentives, subsidies, concessions, infrastructural facilities, technical and managerial guidance, etc., through a network of organizations for supporting entrepreneurship development.

The overall purpose of entrepreneurship education is to attain motives by application of knowledge and skills. Typical attitudes related to entrepreneurship include autonomy, initiative, pro-activeness, and responsibility, while skills include creative problem solving, perseverance, and response to challenges. In recent years, entrepreneur and Entrepreneurship Development Program (EDP) has become a serious matter of discussion which is primarily meant for developing those first-generation entrepreneurs who on their own account cannot become successful entrepreneurs. EDP is an effective human resource development tool. It designed to help a person in strengthening and fulfilling his entrepreneurial motive and in acquiring skills and capabilities necessary for playing his entrepreneurial role effectively.

Entrepreneurship orientation programs display proactive and innovative actions and create entrepreneurial environment opportunities. Some of the dimensions of Entrepreneurship Oriented Programs are building confidence, pro-activeness and risk-taking qualities. These dimensions are useful for potential entrepreneurs for their significant growth and business performance. EOPs help potential entrepreneur to act in a strategic orientated either in its processes, methods or decision styles which indirectly help him to attain his expected benefits.

**Assistant Professor, Department of Business Administration, Maharaja Surajmal Insititute, New Delhi, India, saritarana@msi-ggsip.org*

EOPs help potential entrepreneur understand about entrepreneurial initiatives and provide link between their intentions and attitude.

Karimi, S., Biemans et.al (2012, May), have assessed the impact of entrepreneurship education oriented programs on entrepreneurial intentions of participant's next entrepreneurship courses at six Iranian universities. Results concluded that entrepreneurship oriented programs significantly influence perceived behavioral outcome in term of entrepreneurship field. However, no support was found for the effects of entrepreneurship oriented programs on attitudes toward entrepreneurship and intention. Rachel Shinnar et. al. (2009) investigated student and faculty attitudes toward entrepreneurship and entrepreneurship education programs. The authors examined students' level of interest in entrepreneurial education, perceptions of motivations and barriers to startup businesses, and occupational aspirations. Student and faculty respondents represented a variety of disciplines in and outside colleges of business. Key findings stated that interest among non-business students suggests a significant opportunity to formally expand entrepreneurship-related education beyond the business school. M. Edwin Gnanadhas (2008) has evaluated the performance of Entrepreneurial Development Programs from the stance of the banks, to study the factors influencing the attitude of the entrepreneurs towards the Entrepreneurship Development Programs. The result stated that there is no relationship between the age group of the prospective entrepreneurs and their attitude towards the training program. Also, there no relationship was found between the educational background and the level of attitude and it is proved that educational background does not influence the attitude of the respondents towards the training program. It was also concluded that the family background of the respondents influences the attitude of the respondents towards the training program.

Kristiansen, S., & Indarti, N. (2004) have stated that individuals who perceive the existence of business opportunities and other benefits (e.g., access to capital, availability of business information) are more likely to make the decision to start a new business. On the other hand, if the individuals have negative perception regarding the environment of the business, they may not decide to start their own business. Rae, D. and Woodier-Harris, N. (2012) conducted a research on exploring the effectiveness of entrepreneurship education programs in meeting the expectations of the international postgraduate students in UK. The findings indicated that entrepreneurship education can act as a great motivator to the International students from the career perspective. Also, the study suggested that entrepreneurship can be of help in assisting them to become entrepreneurs in the UK.

Autio, E., Keeley, R.H., Klofsten, M., Parker, G. and Hay, M. (2001) have empirically applied theory of planned behavior to students' entrepreneurial intentions and assessed the impacts of entrepreneurship education oriented programs on the perceived behavioral and found no support for the effects of the entrepreneurship education oriented programs on attitudes toward entrepreneurship and entrepreneurial intention. A possible explanation for this conclusion was also provided, that the students had positive attitudes towards entrepreneurship and high entrepreneurial intention at the beginning of the program and therefore there was less scope for changing their attitudes and intention. Kolvereid, L. (1996) has emphasized that in addition to personality traits, several individual difference variables have also been found to predict entrepreneurial behaviors. This paper has analyzed that those with prior experience in entrepreneurial activities, like business background have higher entrepreneurial intention compared to those with no prior experience.

2. OBJECTIVES AND SCOPE OF THE STUDY

- To identify the gap between expected and actual delivery.
- To check the significance between expected and actual delivery.
- To identify the level of motivation for entrepreneurship.

The study can prove to be useful for institutions operating in field of entrepreneurship training and development programs. Since all necessary demographics are recorded therefore study can be used to cater the particular need with respect to demographics.

3. RESEARCH METHODOLOGY

An exploratory and descriptive research design is followed to carry the research. Secondary literature is used to carry exploratory research and necessary parameters around which an Entrepreneurship Development Program revolves are identified. The parameters are organized in a structured scheduled questionnaire and responses are recorded on a five-point scale for further analysis.

All respondents were participants in and Entrepreneurship Development Program at Indian Institute of Technology New Delhi hence a convenient sample is collected due to limited time and resources.

Information through schedule technique is used to collect the data to avoid problem of low response, language barrier and partial information. Suitable coding of data is generated in spreadsheet so that it can be used in MS Excel and SPSS conveniently. After formulation of hypothesis suitable hypothesis testing statistical tools are used to test them.

The results are presented descriptively and inferentially. Contemporary and relevant charts and graphs are used for the purpose of descriptive statistics and suitable statistical methods are applied for inference.

Related to objectives following alternative hypothesis are formulated;

H_{10}: The gap between perceived and actual output of EDP is significant.

H_{11}: Age has significant impact on perceived importance of EDP parameters.

H_{12}: Educational qualification has significant impact on perceived importance of EDP parameters

H_{13}: EDP doesn't motivate participants for Entrepreneurship.

4. DATA ANALYSIS AND INTERPRETATION

Depending on the need of study the respondents are divided under certain demographics. These demographics are age, sex, education, and family background. The careful selection of demographics is made on the basis of physiological variation in perceiving Entrepreneurship development programs. As age plays an important role in perceiving any training program, with increase in variable of age the thought process becomes mature and the overall perception changes accordingly. Likewise, gender plays an important role in perceiving anything. It is a proven fact that variation in perception is significant with respect to gender. Education plays an important role in perceiving training programs of such kind. As education increases, the expectation from a training program becomes narrow or specific. Family background is another important aspect in perceiving EDP. An entrepreneur coming from a business family background will expect advanced discussions in EDP while a first-generation entrepreneur coming from a service family will expect clarity on basic business aspects from EDP. An appropriate distribution of demographics is maintained while picking respondents for the study. Following table shows the distribution of sample on demographics.

TABLE 1: (Demographic distribution of sample)

Gender	
Male	237
Female	74
	311
Education	
Under Graduate	114
Graduate	60
PG	137
	311
Age	
20 - 30	171
30 - 40	84
40 - 50	28
50 and >	28
	311
Training Attended Previous to EDP	
Yes	88
No	223
	311
Family Background	
Service	199
Business	94
Others	18
	311

Source: filed survey

In order to understand expectation of attendees from Entrepreneurship Development Programs, respondents were asked about the perceived importance of the program on eleven parameters. The formulated question, "By participating in an Entrepreneurship development program, I shall be skilled with",

(i) Business opportunity identification

(ii) Market research

(iii) Knowledge -sources of finance

(iv) Confidence Building

(v) Management skills

(vi) Process of starting venture

(vii) Risk taking

(viii) Project Report Preparation and B plan

(ix) Network building

Above mentioned parameters are measured by two questions. First respondents' expected importance for specific parameters is measured on a five-point scale of importance mentioned below:

Least Important	Not Important	Important	Moderately Important	Most Important
1	2	3	4	5

After quantification the data is coded in spreadsheet. The workbook so produced served as a platform for MS Excel and SPSS. Two software are used for analyzing the data as and when needed. Analysis of variance, t-test, and χ^2 tests are used for analysis rigorously. While comparison of means along with variance is also used as and when needed.

Following section studies objective 1 of the study that is mentioned below;

In this section actual benefits from EDP are studied. Objective 2 of the study states, "To study actual benefits delivered", in this section we achieve this objective. Apart from studying EDP delivery meeting expectation we also study the gap between importance of perceived output and actual output. Comparison of means, comparison of variances. Paired t-test, analysis of variance is used for inferential statistics while radar diagram is used for descriptive statistics.

As the respondents select EDP program with some expectations. Often EDP's do not deliver as per expectations. Hence it became very important to analyze gap between expectation and delivery. Therefore, subsequently analyzing importance of expectations we collected responses on same parameters after completion of entrepreneurship development program. A five-point scale for meeting the expectations is used to quantify the gap for all ten parameters in following manner.

Didn't meet expectations at all	**Didn't meet expectations**	**Met expectations**	**Moderately met expectations**	**Higher than expected**
1	2	3	4	5

First the radar plot is constructed to understand the sample output with respect to expected and actual output. Following diagram is presented by rescaling the mean values so that difference between expected and actual output can be observed easily.

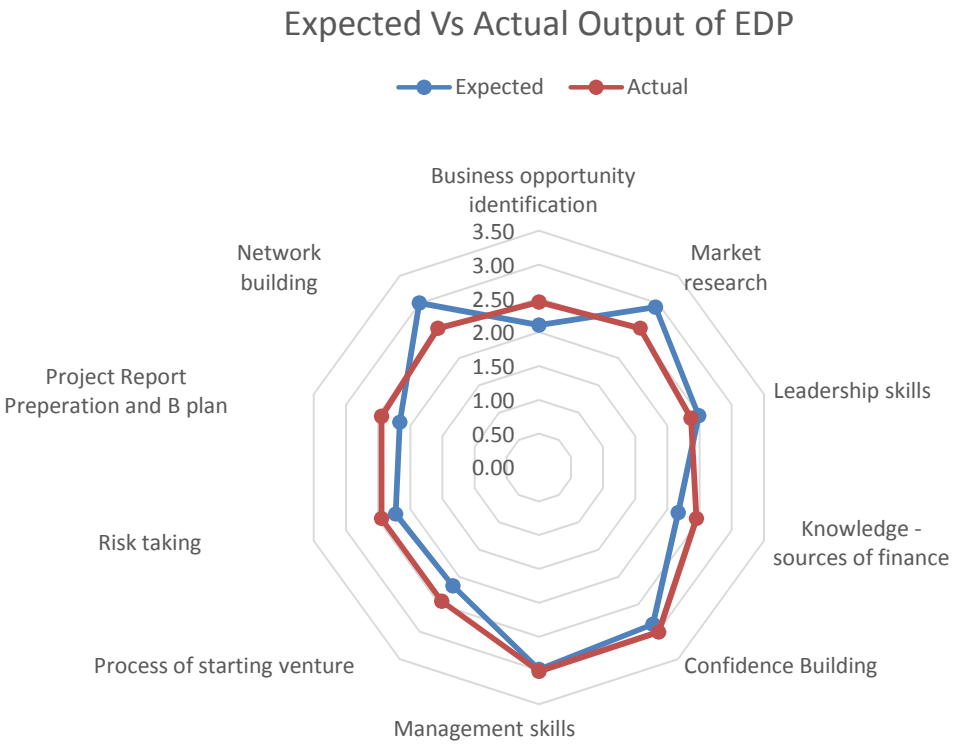


Fig. 1.

It can be observed from figure -1, that there is a huge gap between expected and actual output for marketing research enhancement and network building. This shows that people were expecting a higher output in terms of network building and market research skill enhancement but the delivery from EDP does not remain up to the mark. The delivery for enhancement of leadership skills is also little less than expected. Hence, sample output suggests that for EDP network building and market research are the areas of major concern where the delivery is less than expectation while leadership skill enhancement shall also be focused upon.

Now to generalize these results and to check whether the mismatch of expectations and delivery is just a matter of chance or statistically significant enough to believe that these areas should be worked upon we formulate and test following hypothesis by using t-test as the population standard deviation is not known.

H_{05}:There is no difference between the means of expectation from EDP for network building

H_{15}: H_{01} is not true

TABLE 12: (t-Test: Paired Two Sample for Means)

Statistics	Network Building (A)	Network Building (E)
Mean	2.5273	3.0064
Variance	1.4178	1.6709
Observations	311	311
Pearson Correlation	0.580	
Hypothesized Mean Difference	0	
Df	310	
t Stat	-7.40464	
P(T<=t) one-tail	6.25E-13	
t Critical one-tail	1.649784	
P(T<=t) two-tail	1.25E-12	
t Critical two-tail	1.967646	

From table -12, it is clear that statistically the difference between expected output from network building and actual output of network building is not significant. Hence, we do not reject null hypothesis in this case as t-stat falls within the region of acceptance on t-curve. That indicates that the difference between actual and expected output of network building is by random chance. Yet the improvements can be made for network building as people find the actual output below expectation.

H_{06}: there is no difference between the means of expectation from EDP for market research

H_{16}: H_{00} is not true.

TABLE 13: (t-Test: Paired Two Sample for Means)

Statistics	Market research (A)	Market research (E)
Mean	2.527331	2.92926
Variance	1.391993	1.769173
Observations	311	311
Pearson Correlation	0.656966	
Hypothesized Mean Difference	0	
Df	310	
t Stat	-6.76063	
P(T<=t) one-tail	3.41E-11	
t Critical one-tail	1.649784	
P(T<=t) two-tail	6.83E-11	
t Critical two-tail	1.967646	

From table -13, it is clear that statistically the difference between expected output from market research and actual output of market research is not significant. We can observe that t-stat falls in the region of acceptance as it is between two tailed critical limits of ± 1.96. Therefore, we do not reject null hypothesis in this case. That shows that the difference between actual and expected output of market research is a matter of chance. Still the improvements can be made for market research parameter as people find the actual output below expectation.

H_{07}: there is no difference between the means of expectation from EDP for Leadership skills

H_{17}: H_{00} is not true.

TABLE -14: (t-Test: Paired Two Sample for Means)

Statistics	Leadership skills(A)	Leadership skills (E)
Mean	2.37299	2.482315
Variance	1.118494	0.940815
Observations	311	311

Statistics	Leadership skills(A)	Leadership skills (E)
Pearson Correlation	0.758017	
Hypothesized Mean Difference	0	
Df	310	
t Stat	-2.71534	
P(T<=t) one-tail	0.003496	
t Critical one-tail	1.649784	
P(T<=t) two-tail	0.006992	
t Critical two-tail	1.967646	

From table -14, it can be observed that statistically the difference between expected output from leadership skills and actual output of market leadership skills is not significant. it can be observed that t-stat falls in the region of acceptance as it is between two tailed critical limits of ± 1.96. Therefore, we do not reject null hypothesis in this case as well. That shows that the difference between actual and expected output of leadership skills is a matter of chance. Still the improvements can be made for leadership skill parameter as people find the actual output below expectation.

Now we find out whether there is difference amongst parameters when it comes to level of meeting expectations from actual output. In order to do that we first compile means scores along with variance. Following table shows the sample output.

TABLE 15: (Summary Statistics)

SUMMARY				
Groups	*Count*	*Sum*	*Average*	*Variance*
Business opportunity identification	311	763	2.4534	1.3906
Market research	311	786	2.5273	1.3920
Leadership skills	311	738	2.3730	1.1185
Knowledge - sources of finance	311	762	2.4502	1.3773
Confidence Building	311	936	3.0096	1.7838
Management skills	311	937	3.0129	1.8773
Process of starting venture	311	761	2.4469	1.3641
Risk taking	311	761	2.4469	1.3641
Project Report Preparation and B plan	311	759	2.4405	1.3505
Network building	311	786	2.5273	1.4178

From table -15 we can observe that the mean scores of meeting the expectations are different for each parameter. Confidence building and acquiring management skills seem to deliver as per expectations while the network building, leadership skills, and market research remain to be delivered below expectations.

H_{08}: All parameters meet the expectation equally on completion of EDP

Or

$H_{08}: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7 = \mu_8 = \mu_9 = \mu_{10}$

And

$H_{18}: H_{00}$ is not true.

TABLE 16: (Analysis of variance)

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	157.63	9	17.515	12.13302	4.88 E-19	1.882896
Within Groups	4475.1	3100	1.444			
Total	4632.7	3109				

From analysis of variance, it can be observed that F-stats is above F-critical hence we reject null hypothesis that all parameters equally met the expectations. Therefore the difference of means (i.e. difference amongst meeting the level of expectations from EDP) is statistically significant. The description of mean values in table -15 clearly indicated the most met and least met expected parameters.

Next we observe whether the four demographics have an impact on expectations or not. We use F-test analysis. Following, code is set for parameters for further analysis.

Business opportunity identification	Q2A
Market research	Q2B
Leadership skills	Q2C
Knowledge -sources of finance	Q2D
Confidence Building	Q2E
Management skills	Q2F
Process of starting venture	Q2G
Risk taking	Q2H
Project Report Preparation and B plan	Q2I
Network building	Q2J

TABLE 17: (Comparison of Means with respect to Education)

Education	Under Graduate	Graduate	PG and Above
Business opportunity identification	2.46	2.57	2.40
Market research	2.66	2.52	2.43
Leadership skills	2.39	2.40	2.35
Knowledge - sources of finance	2.46	2.55	2.40
Confidence Building	3.11	2.97	2.94
Management skills	3.04	3.03	2.99
Process of starting venture	2.46	2.55	2.40
Risk taking	2.46	2.55	2.40
Project Report Preparation and B plan	2.46	2.53	2.39
Network building	2.41	2.67	2.57

In comparison of means it is observed that, confidence building and management skills highly met expectations of all three education groups. While leadership skill remains least matching the expectations. Now we apply F-test analysis to understand whether meeting expectations for management skills and confidence building is independent of education of respondents or not.

H_{09}: Education has no impact on, mentioned parameters of expectations

H_{19}: Education has an impact on, mentioned parameters of expectations

Table 18: (Testing of hypothesis H_{09})

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Q2A	Between Groups	3.031	2	1.515	1.090	.337
	Within Groups	428.043	308	1.390		
	Total	431.074	310			
Q2B	Between Groups	9.820	2	4.910	3.586	.029
	Within Groups	421.697	308	1.369		
	Total	431.518	310			
Q2C	Between Groups	1.565	2	.782	.698	.498
	Within Groups	345.168	308	1.121		
	Total	346.733	310			
Q2D	Between Groups	3.022	2	1.511	1.098	.335
	Within Groups	423.956	308	1.376		
	Total	426.977	310			
Q2E	Between Groups	2.336	2	1.168	.653	.521
	Within Groups	550.635	308	1.788		
	Total	552.971	310			
Q2F	Between Groups	6.399	2	3.200	1.712	.182
	Within Groups	575.549	308	1.869		
	Total	581.949	310			
Q2G	Between Groups	2.840	2	1.420	1.041	.354

	Within Groups	420.035	308	1.364		
	Total	422.875	310			
Q2H	Between Groups	2.840	2	1.420	1.041	.354
	Within Groups	420.035	308	1.364		
	Total	422.875	310			
Q2I	Between Groups	2.656	2	1.328	.983	.375
	Within Groups	415.994	308	1.351		
	Total	418.650	310			
Q2J	Between Groups	.354	2	.177	.124	.883
	Within Groups	439.164	308	1.426		
	Total	439.518	310			

Source: filed survey

From table -18 it can be observed that, significance value of parameter market research is less than α=0.05. Therefore, we conclude that education has an impact on expected delivery of EDP benefit of market research. Rest all parameters do not have significant impact of education on them the diagram shown below explains the difference of significant difference of means in expected delivery of business opportunity identification.

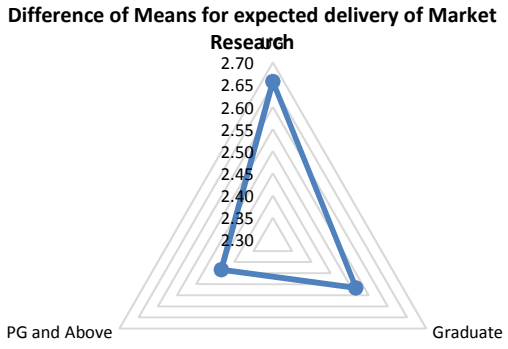


Fig. 2

It can be observed that highest agreement lies with under graduates while the least lies with PG and above level. Therefore, the people with different education background perceive different levels of expected delivery for market research.

Now we observe the difference of means in terms of expected delivery with respect to different age group.

TABLE 19: (Comparison of means with respect to age)

Age	20 y – 30 y	30 y – 40 y	40 y – 50 y	50 and >
Business opportunity identification	2.48	2.40	2.68	2.25
Market research	2.53	2.52	2.68	2.43
Leadership skills	2.42	2.32	2.50	2.14
Knowledge -sources of finance	2.48	2.40	2.68	2.25
Confidence Building	3.01	3.01	3.07	2.93
Management skills	3.01	3.02	3.21	2.89
Process of starting venture	2.47	2.40	2.68	2.25
Risk taking	2.47	2.40	2.68	2.25
Project Report preparation and B plan	2.46	2.40	2.68	2.25
Network building	2.54	2.50	2.71	2.43

Source: filed survey

From table -19 it can be observed that confidence building and management skills highly meet the expectations for all age groups. While, delivery for leadership skill remain below expectation.

We apply F-test to measure the impact of age on expected delivery. We formulated following hypothesis for the purpose and test it.

H_{010}: Age has no impact on, mentioned parameters of expectations

H_{110}: Age has an impact on, mentioned parameters of expectations

TABLE 20: (Testing of hypothesis H_{010})

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Q2A	Between Groups	2.480	3	.827	.592	.621
	Within Groups	428.594	307	1.396		

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
	Total	431.074	310			
Q2B	Between Groups	.719	3	.240	.171	.916
	Within Groups	430.798	307	1.403		
	Total	431.518	310			
Q2C	Between Groups	.960	3	.320	.284	.837
	Within Groups	345.774	307	1.126		
	Total	346.733	310			
Q2D	Between Groups	2.418	3	.806	.583	.627
	Within Groups	424.559	307	1.383		
	Total	426.977	310			
Q2E	Between Groups	.006	3	.002	.001	1.000
	Within Groups	552.965	307	1.801		
	Total	552.971	310			
Q2F	Between Groups	1.925	3	.642	.340	.797
	Within Groups	580.024	307	1.889		
	Total	581.949	310			
Q2G	Between Groups	2.362	3	.787	.575	.632
	Within Groups	420.513	307	1.370		
	Total	422.875	310			
Q2H	Between Groups	2.362	3	.787	.575	.632
	Within Groups	420.513	307	1.370		
	Total	422.875	310			
Q2I	Between Groups	2.266	3	.755	.557	.644
	Within Groups	416.384	307	1.356		

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
	Total	418.650	310			
Q2J	Between Groups	.648	3	.216	.151	.929
	Within Groups	438.870	307	1.430		
	Total	439.518	310			

Source: field survey

From table above, it can be concluded that age doesn't have any significant on any of the parameters of expected delivery from EDP. Since all significant values are above 0.05 therefore we do not reject null hypothesis, "Age has no impact on, mentioned parameters of expectations".

Now we test whether gender has an impact on expected delivery of EDP on parameters of expected delivery or not.

TABLE 21: (Comparison of means w.r.t. gender)

Gender	Male	Female
Business opportunity identification	2.42	2.59
Market research	2.49	2.66
Leadership skills	2.33	2.52
Knowledge -sources of finance	2.42	2.57
Confidence Building	2.94	3.24
Management skills	2.94	3.28
Process of starting venture	2.41	2.57
Risk taking	2.41	2.57
Project Report Preparation and B plan	2.41	2.56
Network building	2.47	2.73

Source: field survey

For male and female participants management skills and confidence building remain the most effectively delivered parameters. For female participants the delivery of both the parameters remain higher in comparison to males.

Now we try to analyze whether delivery of expected parameters from EDP is dependent on gender or not. We apply F-test to analyze following hypothesis.

H_{011}: Gender has no impact on, mentioned parameters of expectations

H_{111}: Gender has an impact on, mentioned parameters of expectations

TABLE 22: (Testing of hypothesis H_{011})

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Q2A	Between Groups	.004	1	.004	.003	.960
	Within Groups	431.070	309	1.395		
	Total	431.074	310			
Q2B	Between Groups	.157	1	.157	.113	.737
	Within Groups	431.360	309	1.396		
	Total	431.518	310			
Q2C	Between Groups	.343	1	.343	.306	.581
	Within Groups	346.390	309	1.121		
	Total	346.733	310			
Q2D	Between Groups	.008	1	.008	.006	.938
	Within Groups	426.969	309	1.382		
	Total	426.977	310			
Q2E	Between Groups	2.677	1	2.677	1.503	.221
	Within Groups	550.294	309	1.781		
	Total	552.971	310			
Q2F	Between Groups	4.016	1	4.016	2.147	.144
	Within Groups	577.933	309	1.870		
	Total	581.949	310			
Q2G	Between Groups	.015	1	.015	.011	.916
	Within Groups	422.859	309	1.368		
	Total	422.875	310			
Q2H	Between Groups	.015	1	.015	.011	.916
	Within Groups	422.859	309	1.368		
	Total	422.875	310			
Q2I	Between Groups	.035	1	.035	.026	.873
	Within Groups	418.615	309	1.355		
	Total	418.650	310			
Q2J	Between Groups	1.129	1	1.129	.795	.373
	Within Groups	438.389	309	1.419		
	Total	439.518	310			

Source: field survey

From table above it can be concluded that age doesn't have any significant on any of the parameters of expected delivery from EDP. Since all significant values are above α=0.05 therefore we do not reject null hypothesis, "Gender has no impact on, mentioned parameters of expectations".

Now we see whether family background has an impact on different parameters of expectations or not.

TABLE 23: (Comparison of means w.r.t. family background)

Family Background	Service	Business	Others
Business opportunity identification	2.43	2.48	2.61
Market research	2.48	2.49	3.33
Leadership skills	2.36	2.32	2.83
Knowledge -sources of finance	2.43	2.48	2.61
Confidence Building	3.01	2.98	3.17
Management skills	3.01	3.02	3.17
Process of starting venture	2.42	2.48	2.61
Risk taking	2.42	2.48	2.61
Project Report Preparation and B plan	2.41	2.48	2.61
Network building	2.56	2.44	2.72

Source: field survey

From table -22 it is clear that, for all three classes' confidence building and management skills are most effectively delivered parameters. Respondents who neither come from service nor from business class found these two parameters delivered highly to their expectations. Rest of the EDP parameters meet expectations moderately.

Following hypothesis is formulated and F-test is applied for testing.

H_{012}:Family background has no impact on, mentioned parameters of expectations

H_{112}:Family background has an impact on, mentioned parameters of expectations

TABLE 24: (Testing of hypothesis H_{012})

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Q2A	Between Groups	.595	2	.298	.213	.808
	Within Groups	430.479	308	1.398		
	Total	431.074	310			
Q2B	Between Groups	10.784	2	5.392	3.947	.020
	Within Groups	420.734	308	1.366		
	Total	431.518	310			
Q2C	Between Groups	3.139	2	1.569	1.407	.246
	Within Groups	343.594	308	1.116		
	Total	346.733	310			
Q2D	Between Groups	.559	2	.280	.202	.817
	Within Groups	426.418	308	1.384		
	Total	426.977	310			
Q2E	Between Groups	.139	2	.070	.039	.962
	Within Groups	552.832	308	1.795		
	Total	552.971	310			
Q2F	Between Groups	.011	2	.006	.003	.997
	Within Groups	581.937	308	1.889		
	Total	581.949	310			
Q2G	Between Groups	.527	2	.263	.192	.825
	Within Groups	422.348	308	1.371		
	Total	422.875	310			
Q2H	Between Groups	.527	2	.263	.192	.825
	Within Groups	422.348	308	1.371		
	Total	422.875	310			
Q2I	Between Groups	.472	2	.236	.174	.840
	Within Groups	418.177	308	1.358		
	Total	418.650	310			
Q2J	Between Groups	.420	2	.210	.147	.863
	Within Groups	439.098	308	1.426		
	Total	439.518	310			

Source: Filed Survey

Yet again family background impacts marketing research. The significance value for the parameter is below α= 0.05. Hence, the difference is significant to believe that family background impacts level of expectation from marketing research. Rest of the parameters have significant values above α=0.05. Hence the difference of means is not significant enough to believe that family background has an impact on them.

Following diagram describes difference of means for market research.

It can be understood that for respondents coming from other backgrounds feel that delivery of marketing research is highest on their expectations while it remains lowest with the people coming from service background.

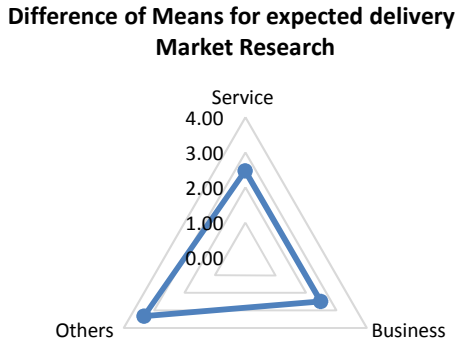


Fig. 3

5. DEFINING THE TERMS

For the purpose of the development of this paper, the following terms have been defined and accordingly they are treated in this paper.

Benefits: Benefit can be regarded as a standard for measuring achievement or success. Entrepreneur is not necessarily motivated by profit but also by other benefits like privilege, family support or good mentor and self-employment.

Perceived: It defines to become aware of something, expected or to understand. Entrepreneur perceives business success as a motivation to start up some unit by linking the base to their independence and intrinsic attitudes.

Actual: Actual means existing in fact; typically, as contrasted with what was intended, expected, or believed.

Attitude: Attitude towards behavior means the degree to which an individual has a favorable or unfavorable evaluation of the behavior. Attitude has enabled prospective entrepreneurs to see things from a different perspective. The common attitudes which are prevailing are preference for being self-employed, stability of employment, personal independence, growth and better income perspective.

Others involve taking moderate risks, assuming personal responsibility for performance, paying close attention to feedback in terms of costs and profits, and finding new or innovative ways to make a new product, or provide a new service. The growth attitude of potential entrepreneur can be linked to effect on small business growth and can be related to assess the effect on small business growth through EOPs.

Age: The attitude towards the training program can vary according to the age of participant prospective entrepreneur.

When old entrepreneurs attend the training, they are concentrating more on the training program, because they are ready to start the industrial units for their livelihood. But the young entrepreneurs may or may not have an interest to start their units. Thus the age of the entrepreneurs has a close relationship with the attitude towards the training program

Education background: Education is said to be an important factor which influences the level of attitude towards the training. The technically qualified persons can easily cope with the training methodology compared with the others. Many people who do not possess the technical qualification don't feel much comfortable and they are not able to follow the training inputs. Therefore, educational background has been identified as one of the factors which influence the attitude towards the training.

Family background: The family background of the entrepreneurs may influence the attitude towards the training program conducted. The participants with business background want to participate in the training program with more involvement. The respondents with other family background may have less involvement than the respondents with industrial background and hence the level of attitude may be different.

REFERENCES

[1] Autio, E., Keeley, R.H., Klofsten, M., Parker, G. and Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies, 2* (2): 145-60.

[2] Karimi, S., Biemans, H., Lans, T., Mulder, M., Chizari, M (2012, May). The Role of Entrepreneurship Education in Developing Students' Entrepreneurial Intentions. Proceedings of WICaNeM 2012, The 10th Wageningen International Conference on Chain and Network Science, Wageningen University, Wageningen, The Netherlands, p. 22.

[3] Kolvereid, L. (1996b). Predictions of employment status choice intentions, *Entrepreneurship Theory and Practice, 21* (1): 47-57.

[4] Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. Journal of Enterprising Culture, 12(1), 55-78.

[5] Entrepreneurship Education: Attitudes Across Campus, Rachel Shinnar et. al. (2009), *Journal of Education for Business, Heldref Publications*

[6] M. Edwin Gnanadhas (2008), Entrepreneurial development programmes conducted by public sector banks in TamilNadu-Success or failure, *Journal of Services Research*

[7] Rae, D. and Woodier-Harris, N. 2012. International entrepreneurship education: Postgraduate business student experiences of entrepreneurship education. *Education + Training*, Vol. 54 (8/9); 639 – 656

Parichay: Maharaja Surajmal Institute Journal of Applied Research

Corona and the Digital Divide

Dr. Arti Bahuguna*

Nature has its own way of balancing things. This we have witnessed time and again. The endless saga of greed, the self-obsession about I, me and myself, devil-may-care attitude has finally gone for a toss. No denying the fact the loss is enormous; damage to health, wealth and well being is evident. This pandemic is an eye-opener as it has made people realize that basic necessity for survival is still the same: food, water and shelter.

All of a sudden everybody has turned into cleanliness ninja. People have started realizing the importance of old rituals and the science behind them. How washing hands and feet before entering house was mandatory. The generation that use to mock the rituals without even realizing the sanctity, is now finally trying to see things from different perspective. Life is not that easy for majority of people across the globe. But then there is a certain class in the society which is not affected in any way or to that extent for that matter. For them everything is accessible and approachable and can be procured with just one click. Don't you think we have forgotten the major chunk of our society-the invisibles? For majority of people to make the ends meet was already a challenge and this pandemic has widened that chasm of haves and have-nots.

Nobody has ever wished for such long summer breaks especially the kids. Talking about education learners are the one who are at receiving end. The empty classrooms, corridors the silent playground seems haunted without the students. The teachers never asked for this pin-drop silence either! Earlier it was not allowed to carry mobiles to schools but now schools are being run through mobiles. Parents/grand-parents are assisting their children in attending the classes. It is not that easy for small children to remain glued to that screen for so long. They wish to go back to school to meet their friends and teachers. Many schools have made it mandatory for students to be in school uniforms while attending the class. The entire teaching learning process is facing the turbulence, the major concern being tackling the digital divide, which for sure is a herculean task!

There was News that a labourer father took his son a class 10 supplementary candidate 106 km on two wheels to an exam centre in MP Dhar town. In a country like India it is believed that education is the panacea that can cure the illness called poverty. Majority of learners are first generation learners where parents want their children not to be deprived of education as it is the only way through which they can elevate themselves. Talking about education for all during this pandemic sounds like swan song. Not every parent can afford smart-phone if by chance somehow they manage to arrange one, how to afford internet connection then. Forget about smart-phone, there are kids who go to sleep empty stomach and this pandemic has made it worse for them.

This pandemic has widened this already existing divide of haves and have-nots. Millions of people have lost their jobs. Proper planning and doable measures are required so that no child is deprived of education at any cost. There are teachers who are doing their bit to provide education to this otherwise deprived and vulnerable group. A 49 year old teacher in Tamil Nadu is reaching out to the 10^{th} class students in villages who cannot afford smart-phones and internet connections. She is taking classes in open areas maintaining all the guidelines of social distancing. Such unsung heroes/sheroes are giving new hopes to survive and look for solutions. When we talk about inclusion or inclusive education we must consider all the factors and must focus on vulnerable and marginalized section. As a teacher it is our moral duty to reach out to each and every student of ours especially during this pandemic and must look out for solution so that learning could go uninterrupted. Innovation is the need of the hour. Mobile based learning models can be tried for the time being. Few slots on television can be given to schools so that learning can go uninterrupted and can reach masses at the same time. We as a teacher can reach out to our students. It is high time to give due credit to our traditional knowledge wherein various life skills can be developed in our students.

While focusing on bringing the teaching learning process back on track, quality assurance is equally important. There should be no compromise with quality. We have seen various social platforms flooded with self-proclaimed subject experts! We must ensure that our students are getting quality education that too from authentic sources. Right now the priority is to ensure the continuity of learning process in educational institutions.

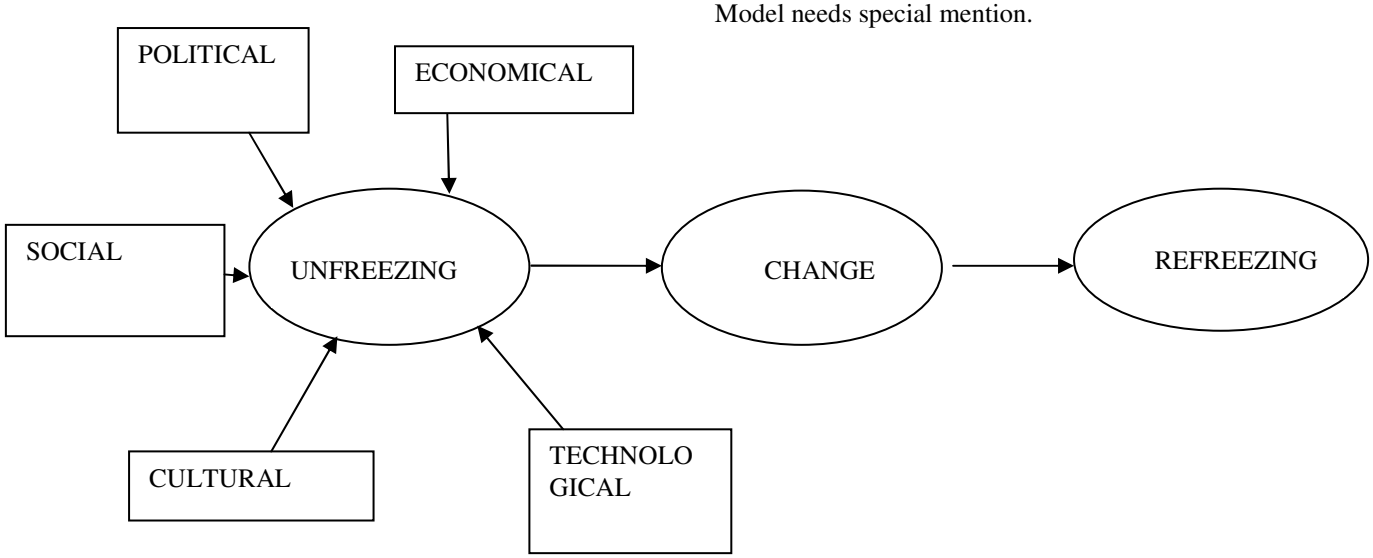
**Assistant Professor, Department of Education, Maharaja Surajmal Institute, New Delhi, India, artibahuguna@msi-ggsip.org*

Learning Rotates 360'0 from Physical Presence to Virtual Learning Environment (VLE)

Dr. Bhoomika Saroha*

In every sphere of our society each individual may it be student, teacher, professional, administrative, politician etc undergoes learning in one or the other form at different stages of life starting from birth to death.

Learning is an interaction between people and environment and is a continuous process. It involves moving from one state to another in terms of addition, deletion, modification, and enhancement etc of existing information thus compulsorily resulting in change. Therefore "KURT LEWIN'S "Change Model needs special mention.



EXAMPLE:

Face to face formal Learning in School and colleges	Time & Place: COVID	Virtual Learning Environment

In case of face to face learning, physical presence of student & teacher is must at the same time and in same place and that is what is called School/College in our Education system. The teacher delivers the lecture to the students present physically in the class with the help of black board, text books, open discussions etc. Examinations are conducted to check the performance level of the students, on the basis of which marks are given & students are promoted to next higher class for enhanced learning. Here both students and teacher has better understanding of pace of learning as well as delivering i.e individualistic attention can be given to some extent.

Today not only India but the entire world is struggling with the pandemic COVID, which made it impossible to hold class in school & colleges physically. Since March'2020 lockdown is in force and educational institutions are closed. But learning cannot be stopped for the young buds i.e. students **of our nation** rather I must say "**FUTURE OF OUR NATION"** and the answer lies in **emergence of Virtual Learning Environment (VLE).**

VLE refers to real like learning environment which make use of computers and internet in establishing link / connection between students & teachers.

**Assistant Professor, Department of Business Administration, Maharaja Surajmal Insititute, New Delhi, India, bhoomikasaroha@msi-ggsip.org*

In VLE students & teachers are not physically present at one place in a particular time but with the use of technology, the process of learning is kept "ON "

VLE isindispensible in present COVID times as on one hand it enables learning and on the other hand there is no need of being present face to face. Thus creating **WIN-WIN situations in the education sectorboth for students as well as teachers.**

ADVANTAGES	Disadvantages
1. Location independence	1. Costly in terms of infrastructural support like computer and internet
2. Flexible time	2. No face to face communication
3. Real time basis	3. Pre conditioned mind set that physical classes are better
4. Acess to vast information	4.Difficulty in holding examinations
5. Diverse view points	
6. No exposure to transport system	
7. Cost cutting in terms of building,	Electricity consumption etc.

Despite the savior with significant advantages in turbulent and distressing times, VLE has some disadvantages too. But what is required is a perfect bend by minimizing disadvantages and maximizing advantages by using new technology & techniques to the traditional form of learning.

Learning in our Indian society is little complex as people who are of sound financial position prefer private educational institutions i.e. can afford to and adapt to this new era of VLE but the ones who are attending government schools/ colleges to fulfill their learning needs along with the need of food, clothing, books & monetary support provided by the Government- this strata of our society found it difficult to move to VLE because of their practical problems and difficulties.

Thus what is required is the holistic effort on part of individual citizens, businesses, professionals, Government and society at large to overcome the difficulties/ problems associated with VLE specially by providing proper infrastructural support in terms of computers, internet etc along with full acceptance for VLE practically as well as psychologically.

No doubt VLE is in nascent stage but it must reach new heights by breaking various barrier for the intellectual growth of individuals and also helps in establishing **"EMOTIONALLY INTELLIGENT SOCIETY"** which is the need of hour and times to come.

Maharaja Surajmal Institute

Recognised by UGC u/s 2(f), NAAC 'A' Grade Accredited
C-4, Janakpuri, New Delhi-110058 Ph: 2552667, 25528117
Website: www.msi-ggsip.org

Guidelines for authors

Prospective authors are requested to submit new, unpublished articles for inclusion in the upcoming issue of Bi-annual online multi-disciplinary, ***Parichay***: ***Maharaja Surajmal Institute*** **Journal of Applied Research**. It is a refereed and highly professional journal covering information technology, management, education, other interdisciplinary field, its evolution and future prospects.

We follow a double blind peer review system and carry out two rounds of review process. In the first round, all the submitted papers are first reviewed at editorial board level and assessed on the basis of their technical suitability of the paper for the journal, scope of work, plagiarism and other ethical compliances. If selected by the editorial board, the paper shall be subjected to a fair and unbiased double blind peer review by referees on the basis of their originality, novelty, clarity, completeness, relevance, significance and research contribution.

Guidelines for Preparing Article:

1. Article Preparation
An original article would normally consist of **5000-7000** words (excluding figures, tables and references), although high-quality articles which exceed 7000 words may be considered.

All articles must be written in UK English. If English is not your first language, please ask an English-speaking colleague to proof read your article.

Submissions may be formatted in single or double spacing, preferably in Times New Roman size 12 font. All accepted articles will be correctly formatted for publication. The text of the article should include the following:

- title
- abstract
- keywords
- introduction
- methodology
- results and discussion
- conclusion and future scope
- references and biographical notes

Please make sure that authors' names are ***not included*** in the document/file properties.

2. Conference Papers

If your article is based on a conference paper which may have been published elsewhere, it is important that you observe the following:

The submitted article must have been substantially revised, expanded and rewritten so that it is significantly different from the conference paper or presentation on which it is based. The article must be sufficiently different to make it a new, original work. As a guide, you should aim to have more than 50% new material. This is a matter of judgment and will be based on a comparison of the submitted article with the original conference paper.

The original conference paper should be supplied by the author with the expanded article for the purpose of comparison.

All such articles will be subject to the same review process as any other submitted article.

Please include the statement '*This article is a revised and expanded version of a paper entitled [title] presented at [name, location and date of conference]*' in the online system when you submit your paper, using the "Notes for the Editor" field.

If the original conference paper on which the extended paper is based has been published elsewhere, or the copyright has been assigned to the conference organisers or another party, authors should ensure that they have cleared any necessary permissions with the copyright owners. Articles will not be accepted, post-review, for publication unless such written permissions have been provided along with author copyright forms.

3. Title, Abstract, Keywords, Addresses, Biographical Notes

Please assist us by following these guidelines:

- **Title**: as short as possible, with no abbreviations or acronyms.
- **Abstract**: approximately 100 words, maximum 150.
- **Keywords**: approximately 10-15 words or phrases. ***Keywords are important for online searching***; please click here for further keyword requirements PDF).
- **Address***: position, department, name of institution, full postal address and email address for each author.
- **Biographical notes***: approximately 100 words per author, maximum 150.

* Author details should not be included in the article, and are only required when completing relevant sections of the online submission form.

4. References and Notes

The references in the reference list should follow the standard IEEE reference style of the journal and citation of a reference.

The Numeric Referencing System with numbers in the text and a numerical list of references at the end of the paper, e.g. *…Smith's* [1] *research supported….*

Formats for references

Journal articles

Print
Williams, P and Naumann, E. (2011) 'Customer satisfaction and business performance: a firm-level analysis', *Journal of Services Marketing*, Vol. 25 No.1, pp.20 - 32 [Journal titles should be given in full]

Online only
Demers, A. (2009) 'The war at home: consequences of loving a veteran of the Iraq and Afghan wars.' *The Internet Journal of Mental Health*, 6(1) [online]
http://www.ispub.com/journal/the_internet_journal_of_mental_health/volume_6_nu
mb er_1_45/article/the-war-at-home-consequences-of-loving-a-veteran-of-the-iraqand-afghanistan-wars.html (Accessed 15 July 2010).

Books
Smith, A. and Brown, D. (2005) *Quantitative Data Analysis with SPSS for Windows*, 2nd ed., Routledge, London.

Edited books
Casson, M. et al (Eds*.),* (2006) *The Oxford Handbook of Entrepreneurship,* Oxford University Press, Oxford.

Book chapters
Estrin, S., Meyer, K.E. and Bytchkova, M. (2006) 'Entrepreneurship in transition economies', in Casson, M. et al (Eds*.), The Oxford Handbook of Entrepreneurship,* Oxford University Press, Oxford, pp.693–725.

Ebooks
Lowry, R. (2009) *Concepts and Applications of Inferential Statistics* [online]. Vassar College, Poughkeepsie NY. http://faculty.vassar.edu/lowry/intro.html. (Accessed 21 February 2009).

Theses
Godfrey, K.B. (1993*) Tourism and Sustainable Development: Towards a Sustainable Framework*. Unpublished PhD thesis, Oxford Brookes University, Oxford, United Kingdom.

Government publications
Department of Culture, Media and Sport, and Department of Business, Enterprise and Regulatory Reform. (2009) *Digital Britain: the interim report*. DCMS and DBERR, London. (Cm 7548). Department of Culture, Media and Sport, and Department of Business, Enterprise and Regulatory Reform (2009). *Digital Britain: the interim report* [online]. DCMS and DBERR, London. (Cm 7548).
http://www.culture.gov.uk/images/publications/digital_britain_interimreportjan09.pd
f. (Accessed 1 February 2009)

Conference papers
Unpublished:

Vaughan, R., Andriotis, K. and Wilkes, K. (2000) 'Characteristics of tourism employment: the case of Crete'. Paper Presented at the *7th ATLAS International Conference North South: Contrasts and Connections in Global Tourism*. 18-21 June 2000. Savonlinna, Finland.

Published:
Jackson, C. and Wilkinson, S.J. (2009), 'An evaluation of the viability of photovoltaics in residential schemes managed by UK registered social landlords' in *COBRA 2009:*
Proceedings of the RICS Foundation Construction and Building Research Conference, RICS Foundation, London, England, pp. 396-410.

Reports
Printed
Halliday, J. (1995) *Assessment of the accuracy of the DTI's database of the UK wind speeds*, Energy Technology Support Unit, ETSU-W-11/00401/REP.

Online
Liu, R and Wassell, I.J. (2008*) A novel auto-calibration system for wireless sensor motes*. [online] Technical report UCAM-CL-TR-727, Computer Laboratory, Cambridge University, Cambridge. http:// www.cl.cam.ac.uk/techreports/UCAM-CL-TR-727.pdf (Accessed 18 September 2011)

Standards
International Organization for Standardization (2008) ISO 9001:2008: *Quality management systems -- Requirements*. Geneva, ISO.

Online papers, preprints
Chandler, D. (2009) *Semiotics for beginners*.
http://www.aber.ac.uk/media/Documents/S4B/sem02.html (Accessed 26 July 2010).

Blogs
Shah, V. (2011) 'Capitalism - what comes next?' *Thought Economics* [online] 1 September. http://thoughteconomics.blogspot.com/2011/09/capitalism-what-comesnext. html (Accessed 14 September 2011).

Web sites
Apache Jakarta Project. [online] http://jakarta.apache.org/ (Accessed 21 September 2007).

5. Figures
All illustrations, whether diagrams or photographs, are referred to as Figures. If any figures appear in colour, please note that they will only appear in colour in the online version; in the printed version they will be in black and white. If the quality of the colour figure supplied is not suitable to be produced in colour, it will also be shown in black and white in the online version. Figures should ideally be black and white, not colour, and numbered sequentially. However, if colour is essential to the figure please send a good quality colour image. Please place them interspersed in text.

6. Units of Measurement
MSI Journal of Research follow the Système International (SI) for units of measurement. Imperial units will be converted, except where conversion would affect the meaning of a statement, or imply a greater or lesser degree of accuracy.

Guidelines for Submitting Article:

There is no submission deadline. Papers can be submitted any time of the year. Before submitting the article:

1. Have a look at our Author guidelines.
2. Read our Copyright requirements for accepted and published articles.
3. The paper need to be submitted along with plagiarism report with inclusive limit of 15%.

Paper Submission Email Id: msijournal@msi-ggsip.org

MSI Journal Web site: http://msijr.msi-ggsip.org/