

# Impact of Digitalization on Education in India: Time Series Analysis

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## Abstract

Digitalization in India has become essential and necessary in our day to day life. It has become indispensable and very important part of every individual, business organization and other financial or banking services. As we are moving towards cashless economy, it is possible with implementing digitalization in India. It will boost the digital literacy in India and India is a developing country so there is need to literate every individual and other organization about digital literacy, to move towards becoming a developed country. Therefore, this paper analyse impact of digitalization on education in India. For this analysis considered time series data from 2000 to 2019. In this paper applied regression method for the analysis and before applied the regression we have checked the normality and multicollenerity with the help of descriptive and correlation analysis. Regression results reveal that the coefficient of Government expenditure on education is negative which means there is need to improve the education with more proper funds and efforts towards education for increasing the literacy rate among youth. The Digitalization variables positively correlated to the education's variables, like literacy rate positively correlated to the secure internet server which shows that through the internet server literacy rate is going to increase and in future it will have better impact to the society with the increasing rate of literacy and internet service.

**Keywords:** Technologies, Education, Digital Literacy, Digitalization

## Introduction

Honourable Prime Minister Mr. Narendra Modi inaugurated Digital India programme on 1<sup>st</sup> July, 2015,

to provide more opportunity to the youths. Through digitalization everyone can access easily government and other services like connect with real time information, connect with social media, connect with other countries, etc. The aim to conduct this study is to tell the impact of digitalization on education sector, how digitalization accessible to every youth towards being developed India. And it supports a continuous change in all the fields especially in education sector. Government digitizing the education sector towards paperless education like: Physical books converts into e-books, Paper assignment changed into e-assignment and other things in soft copy (Rastogi, 2019). Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunity. Digitalization has become one of the influential methods that impacts to education sector and any other business organizations. Availability of smartphones, 3G and 4G networks, is directly influence to digital transformation (Hazarika, 2020).

After Demonetisation India is moving to a cashless economy and many application software launched to reduce cash transaction for cashless economy Like – Fast tag, Phone pay, Paytm, Bhim UPI etc. Demonetisation was the new era that converts into digital transformation. (Deborah, n.d.). In the time of Pandemic there was a lockdown in all over world. At time all school colleges and all private and government universities closed, even all other economic activities closed in that situation. So, all the work conducted digitally. In colleges and universities conducted their education to the students in digital mode, all farms conducted their meetings in digital mode, even all interviews conducting in digital mode in the midst of COVID-19. But there was another aspect that affects digitalisation, is network related crises mostly in the remote areas, where one cannot access internet. But

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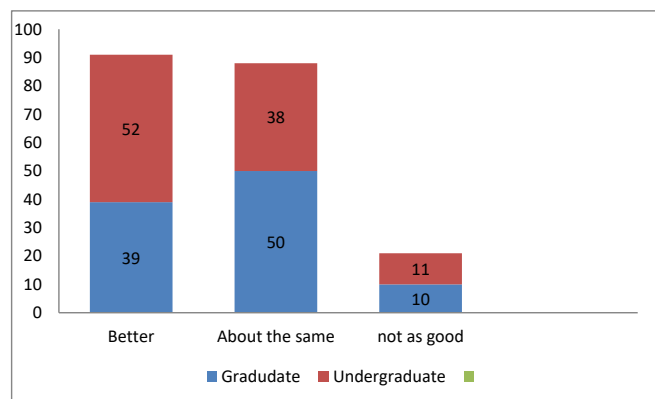
due to lockdown there was more need for digitalization in the education as well as other sectors. In the current scenario the digital platform has become more preferable than few years ago.

The transforming of education from traditional to digital mode, is very difficult task and very difficult to adopt the technological advancement to the people because there is less digital literacy in India. So for becoming Digital India the Prime minister of India initiated the program for becoming digital for the economic growth of India. In the current scenario digital education is becoming a last option for continuity of the education from primary education to higher education due to lockdown situation. But after digitalization the scenario has changed from traditional study to modern study which impacted the students as well as teacher to adopt the digital study and learning. It created much disturbance at the time of firstly adopt but now it has become a widely emerging trend to connect the people or students from one place to another and provided many opportunity to the society and expand the life of a student and teacher as well. In this Scenario education become very easy through digitalization like; in classrooms there are many digital gadgets which provides better knowledge to improving the retain power of the student through video graphic and 3D images. And in Online classes, one who cannot afford the coaching institute for cracking the exams either government or private job or any entrance so he or she may get it through digital platform like: BYJU's app, unacademy app, Adda247 and many other channels or mobile applications which they provide better knowledge in affordable prices where a student can study anytime and anywhere at his convenience. So the scenario has changed and learning is becoming easier than previous time with this type of technology and 3D effect view which has retained the study material and concepts easily by the students for a long time. It has become very helpful to learn easily. By 2020 it is observed that 1.5 million new digitized positions assessed globally, 90% people have an IT aptitudes. (Sharma, n.d.). The statement concluded that by 2020 technology emerged very rapidly and youth have better opportunities in the IT sectors with that they can achieve the growth personally and nationally. In the current scenario more than 3.5 billion people have access the internet, more than 5 billion having mobile device, with half of them having smartphones access. (*Hospitality Insights*), From that it can be said that people are mostly

engaging in the digital platform that shows the move towards digital and technological advancement. Apart from that, the cloud based learning is now on trending where the learner can access the information on demand premises. Cloud based application specifically designed for the students where they can take their exam. The objective to conduct the study is that:

- To know more about what is the effect of digitalization.
- To evaluate the impact of digitalization on education.
- This paper will evaluate different implications, challenges to the education after digitalization. And how many people have access of the digital platform and internet connection in the rural or remote area.

Fig. 1 shows that the online and offline experience of college level with blue colour shows graduate students and with red colour shows undergraduate students. From the graduate students 39% have better experience and they like to study online, 50% are neutral or same and 10% agreed that it is not good experience with online studies. From the undergraduate students 52% have better experience of online learning, 38% are about the same and 11% agreed for not having good experience for online learning. From the chart, it is clear that maximum student either graduate or undergraduate having better experience of learning via online rather than offline. So from the study it can be said that the online learning is moving fast among the students for learning from their comfort zone with physically present in the classroom. In the current scenario the online education is very much accessible by the almost students and become very familiar of it.



Source: Statista

**Fig. 1: Learning Experience of the Graduate and Undergraduate Students**

## Literature Review

Deborah (2017) evaluated the impact of digitalization on digital payment after demonetization in the tourism & hospitality sector and to study the crises faced by the hospitality and tourism sector like cancelling and booking the ticket, low investment from the foreign in tourism and hospitality sector. And to study about the digitalization through innovation after demonetisation towards the cashless economy. In this study qualitative and exploratory research conducted with primary data like conducted survey on the tourism people, Focus group interviews of tourism & travel. At the time of demonetization there is a sudden problem which impacted a common man, but the initiative which is taken by Modi Govt. in order to reduce black money, tax evasion and money laundering. The researcher's aim to find out all the crises and its implication to the tourism sector and hospitality sector with innovation of digitalization, it has given the boost up to the economy in spite of difficulty. "In the Deborah research paper digitalization linked with tourism and hospitality and its effect to the economy, in Crawford research digitalization linked with education sector specialized in higher education in the COVID scenario".

Crawford (2020) The study determined the impact of COVID-19 to the higher education in 20 countries including India, through intra digital pedagogy in order to become strengthen to succeed the present scenario and ready for future aspects. To conduct this study there is desktop analysis approach used for quality of the information including 172 sources like direct govt. websites, universities resources of the targeted 20 countries. There is also synthesis and meta-analysis of these 20 countries of digitalization. The conclusion of this study is that all universities are rapidly going to reduce face to face interaction and moving towards the digitalized education in order to become digital without any interruption. This study concluded that to provide better knowledge and skills to the students at the time of crises with safety of the students and universities higher authorities. Lodha (2018) studied to analyse the impact of demonetization on digitalization and to find out the people perception towards the digitalization change after demonetization to the changing mode of digital payment in Udaipur City. And also find comparison about the uses of ATM, Debit Cards, Credit Cards and other digital

mode of payment after and before the demonetisation. There is descriptive method used to collect primary data by filling questionnaire from 220 peoples of Udaipur city, and secondary data also collected from various published resources and websites, also used non probability convenience sampling techniques. The study concluded that digital mode of payment becomes very high and payment through IMPS becomes triple after demonetization in order to be a cashless transaction and security of money. And from the primary data it concluded that people's perception changes towards digital payment, but government has to do continuous efforts for the security of the money of the people in order to believe on safely payment. "After linking the digitalization with tourism and hospitality sector and higher education, in the Lodha's research linked the digitalization with demonetization with people's perception towards it. And what will be impact in future of demonetization and will become the cashless economy. In Kaur's research focused on the moving from electronic commerce to mobile commerce of society and marketers".

Kaur (2019) conducted this study was to evaluate the concept of digitalization for society as well as marketer and how economy will be moving from electronic commerce to mobile commerce (where all the digitally work done through the mobile phones) with various products and services of mobile banking like Mobile booking, mobile payment. Transfer of money and other financial services to access easily to the persons or customers and marketers in order to growth of the business. While conducting this research report exploratory methodology and qualitative data has been used. And it was also based on conceptual data for economic development. Kaul (2015) analysed the modern technology in five different sectors like: Agriculture, Manufacturing, Education, Healthcare and Government services. And described about the technological revolution and advancement and also discussed about new innovation wave in India, which is digitalization. This paper evaluated the socio-economic challenges, Inclusive growth and new technology adoption in India and how these factors affect the society growth and bring changes after digitalization. This paper also evaluated the modern technologies to solve the socio economic problems and challenges in India and how it will help for welfare of the society. Socio economic and environmental challenges like: Malnutrition, poverty, many diseases and literacy rate which affects the job of youths. The study is based on descriptive study and

concluded with all the environmental and contemporary approaches of technologies and socio economic factor, that to develop physical infrastructure for growth and achieve the target for improving the economic condition of the India. “After converting from electronic to mobile commerce, Kaul’s research focused on the technological effect on different sectors like: Agriculture, Manufacturing, Education, Healthcare and govt. services”. Marathe (2018) conducted this study was to evaluate the impact of digitalization on education and also discuss about the advantages and disadvantages of online mode of learning. This study also compared the old techniques of education to the modern learning or digital mode of education. This study is semi empirical or theory and experiential concept of data are used from the external sources. This paper also discussed about the SWOT analysis of online or digital learning which evaluate all the strength and weakness of the online learning platform. The study concluded that the online mode of education is going to increase 52% from 2016 to 2021. It will improve the economic growth of the country. Conversion from traditional education to online education also increases. The study also concluded that population of the age group 15-25 also a target market of online education, which improve the business of IT sector. There was also recommendation given in the study to make a provision for the digital or E-learning in the budget to profit and easy accessible to those people who lives in remote area. Government should also provide better speed of internet connection to the rural and remote area people. Government should provide the training programme for teachers and students to adopt the technology environment and improve digital literacy. “Marathe’s study evaluated the advantages and disadvantages of online education with SWOT analysis, Hans’s study focused on the merits and demerits with reasons of the changes the traditional to online mode and also discussed the different online platforms”.

Hans (2019) objectives of the study were to understand the transformation of digital education its merit and demerits and to discuss about the reason of the changes the online education. This study used descriptive and collected secondary data like some journals, magazines and some sources to understand the trend and issues while adopting digital education. This paper discussed about the new trends in education system which are digital platform from admission to leave, like: Online Admission, Online fee payment, Online Teaching with upgraded technologies that helps to teacher to teach easily and get retained the

subject matter to the students, digital textbooks, e-notes, Online learning, Online examinations, results, and other notices and circulars. Also discussed about online learning platforms which are: SWAYAM initiative which launched by the government of India itself, for improving digital literacy and becoming the learning easily and MOOCs (Massive Open Online Courses) etc. Shekhar (2017) focused on the response of the public and especially the rural people while adopting the digitalization after the step taken by the Government of India with “Digital India Programme”. And other objective is to analyse the different initiative and programme which are run by the Indian government. Data collected for that study in the both way primary and secondary, also adopt descriptive survey method with 500 respondents by filling the questionnaire. Through articles, government reports, journal the secondary data collected. In the Conclusion researcher find out that there are many hurdles like: Low internet speed, Irregular power supply, connectivity of internet in the remote areas and less digital literacy and technological advancement that’s why mostly People are afraid to adopt the digitalization. For overcome these crises the government should spend more on the continue power supply and access internet speed to the remote area and provide the training to adopt the advancement of digitalization. “In the Shekhar’s research found the result of the 500 respondent’s views on changing the traditional mode to the online mode through survey. And Yadav’s study focused on opportunities and challenges while adopting the digital technology”.

Yadav (2018) considered the opportunities and challenges which are faced by the people while adopting the technology due to lack of knowledge and training. The objective of the study was to know the importance of digitalization in our day to day life, its concepts, challenges faced by the individual while adopting the new and contemporary technological advancement and gave the practical suggestion for improving and applying the concept in real life, which our government wanted to move towards digital India programme and improve the nation’s growth. The study evaluated the solution of the vision of the Indian government initiative, “digital India” in the reality. In the conclusion it is clear that to meet the Challenges and find out another opportunity every person should mentally prepare for adopting the new technology in the future in order to Hebbbar (2020) become developed nation and vision of the government come true in the reality face. Evaluated the impact of Digital India on education

system and discussed about the Indian government move towards the digital education and any other digital programmes. The study discussed about the digitalization education, which is a campaign run by the government of India for making the education digitally empowered with the help of the advanced technology, in order to achieve economic growth of the country and become the youth digitally literate and familiar. The objective of the study was to know the effect of digitalization to the education, to create awareness about digital literacy, to educate the people and benefits of digitalization or technological advancement. The study also discussed about the digital tools which used by the teachers and students during live classes and recorded session. The tools are: Smart Class, PowerPoint, Educomp etc. The study was Conceptual in nature. The study discussed about the positive and negative impact of digital India initiative on the education. In this study the primary and secondary both type of data collected from various sources, like: In primary source data collected through the lecturers and students through survey. Secondary data collected from various sources through, Magazines, Journals, newspapers etc. "Hebbar's study focused on government moves towards the online education, which is digitalization education, with different initiatives and educational tools. Rastogi's research evaluated the advantages of available resources and how they helped in online studies."

Rastogi (2019) evaluated the available resources or any electronic media, what are the advantages to the students while adopting the digital education and what is the impact on the student and society as well. Found out the basic components of online education, importance and to find out growth factors of online education. This paper based on secondary data from the websites, newspapers, published journals etc. In the last the paper concluded that there is excessive dependence on the electronic gadgets which are adversely affect to the behaviour and psychological imbalances of the youth. The aim of the study was to know more about the basic components to promoting the digital education, to know the important online learning application factors, adverse effect of digitalization towards the students, what are the factors for growth of digital education and technological advancement in the new era. The study discussed about the basic components which are necessary for conducting online learning that are: Smart Boards, Class Room PC, Projectors, Internet connectivity and learning applications are: Google Classroom, E-Pathshala, Cuemath, GuruQ.in,

BYJU's etc. The study gave the suggestion to tackle the youth oneself from misguidance and unethical behaviour towards the education and society as well. Gurram (2020) evaluated the effect of internet banking on the customer and what was the perception towards the technology at the time of any banking transactions. The study also discussed the development of the future's viewpoint. In this study the primary and secondary data are used to reach out the conclusion like through filling the survey form. In the last it is concluded that most of the person and their family member are very much aware and familiar about the digital banking system. In fact they prefer to not visit the banks usually due to digitalization. And they do online payment without any confusion and fear of loss of the money to due high familiarity rate. They do their work in the safe mode digitally. And most of the people started using digital technology for the banks after the digitalization. "Gurram's research evaluated the internet banking after digitalization and people perceptions towards the internet banking. And how it will be affected the economy in the future. Kumar's paper evaluated the digitalization impact to the economy with different variables and what will be the opportunities for the young ones for changing the economy situation in the better way."

Kumar (2019) evaluated the impact of digitalization on Indian Economy, with its previous reviews of literature. This paper studied about some variables like: Unemployment, GDP, FDI, Money Governance, Pricing, Speed, Infrastructure etc., through the collecting research articles which based on the effect of digitalization. In conclusion the study concluded that digitalization brings new changes in the economy and provides new opportunities to the young people that directly effect to the economy in better way. It concluded that digitalization brings many advantages to boost the economy but it has to be controlled very well because it may impact negatively to the economy as well. Apart from that it gives more transparency to the economy, like: easy access to the digital payment, Brought innovation, easily access to the information of world wide. The study is totally based on the previous literature review, the researcher collected the published paper and given the review of that and on the basis of previous review researcher reached to the conclusion. Hazarika (2020) evaluated about the digitalization impact on employment in banking (Indian Scheduled Commercial Banks) sector's personnel. The objective of the study to analysed the employee's contribution to the banks, and its impact on personnel

in Indian Scheduled Commercial Banks. The study also discussed about the factors affecting bank's profitability. It focused on two major factors that profitability are use of digitalization and contribution of the banks. The study described about that no any research found the issue of not shown properly which types of employees are there who contributing more to banks, and who are threatened more as compare to another employees after digitalization, and which types of banks most threatened in commercial banks. The study evaluated through observation of lesser the jobs of clerks due to digitalization, due to negative contribution towards banks. And that's not very much effective to the increase the profitability of the banks; it may lead to bear the unproductive cost to the banks. The study based on the secondary data with some published research and genuine source from the updated released data from Reserve bank of India. In the last it is concluded as that number of officers contributed in operational profitability of banks but clerks and sub clerks did not contributed according to the data of Reserve Bank of India in 2005. And conclusion found that number of officers increased but number of clerks and sub staffs decreased in commercial Banks due to merger the banks in private banks, negative contribution of employees and digitalization, that impacted negatively to the employment of clerks and sub staffs of banks. Although there are many other jobs for the employees but clerks and sub staffs required to the banks for increasing the productivity and profits of the banks, and decreasing the employees is not a good sign for the future of the banks as well as economy. "Hazari's paper focused on the digitalization impact on the employment of banking sectors especially in Scheduled commercial banking, and what will be the effect on the banks. Gaur's paper evaluated the trends and challenges in IT and BPM sector after introducing the digitalization, with many programmes initiated by Government of India".

Gaur (2016) evaluated the trend and the challenges of digitalization in IT and BPM sector with boosting the demand of IT hardware in new technological era after starting the digital India and Make in India programme by the Prime Minister Narendra Modi in 2015. This paper evaluated vision and nine Pillars of Digital India Programme with other different initiatives which directly brings the digital empowerment of the society as well as economy. This paper applied conceptual exploratory research design and based on secondary data and review. And also discussed the previous published data like;

bandwidth capacity, Contribution to internet, Mobile Application stores download, broadband internet and mobile internet access to the BRICS nation etc. described. In the conclusion the paper concluded that in emerging trend there are many opportunities to the youth IT industry that will enhance the skill and provide better growth to the economy. Lockee (2020) evaluated about the teacher professional development for online and blended learning in the digital transformation era amidst COVID-19 when there was a sudden change in the education from offline study to online study. There have been faced different implications and challenges occur while adopting the digital platform. For overcome these type of challenges there was used Teacher Professional Development (TPD), Online and Blended Learning (OBL), Learning and performance context has been used in this study for adopting digital platform easily and effectively for the teachers and students as well. TPD provide a framework for the teacher's preparation while online teaching and practice in Online and blended environment in the time of COVID-19 era. The study also discussed the changing practice and teaching style after the digitalization. The aim of the study was to explore the quick shifting from traditional platform to digital platform in the teaching and learning process. The study examined the Meta aggressive analysis in the COVID-19 era. The methodology of this study was quick response research approach. "Lockee's research evaluated TPD and OBL which improve the teacher's efficiency in the teaching while in online education, and it will helpful to perform the task very easily and efficiently. Sharma's paper focused on the digital transformation in education sector with different changes and challenges."

Sharma (2020) discussed about the digital transformation and understood the impact of digitalization on education sector. The aim of the study was to highlight the emerging changes in the education. The study based on the descriptive research and data collected through secondary data from the published articles and some web articles. The study discussed some impacts of digitalization on education sector like: with the help of digitalization study has become easy and reliable, learners can assess the study from anywhere to everywhere with the correspondence study and distance learning. If a student wants to learn from abroad or his/her comfort zone, it become easy in the digitalization era. Learner can attend any session regarding the study from his comfort zone as well. With the asses the computer, smartphone and laptop in the

colleges, empowers the learning style or learn accurately with the grammatical mistakes and take corrective actions at the particular point of time. Universities may not send their students to the trip on the field, with the technology they may conduct the webinar for this type of trip leaning process and student may learn from the particular place or comfort zone. With the some positive impact the study discussed the negative aspects of the impact on education of digitalization.

### Data Collection and Methodology

The study is used secondary data and collected from the World Bank indicator (World Bank). Data collected from the year of 2000 to 2019 and analysed with different methodology like; descriptive statistics, correlation and regression analysis data. From world Bank Indicators data collected with different variables like; government expenditures, literacy rate, total unemployment, school enrolment, fixed telephone subscription, fixed broadband subscription and secure internet server. For analysing the collected data from the published resources there

was descriptive statistics are used for describing and summarising the numerical properties of the data, it includes classification tabulation and graphical presentation, and described and found out the conclusion with correlation and regression and summarized by applying mean and standard deviation of the collected variables.

### Variables Description

Digitalization considered as a dependent variable and others are independent. For the calculation of digitalization considered proxy of FTS: Fixed Telephone Subscription (per 100 people), SIS: Secure Internet Servers (per 1 million people), FBS: Fixed Broadband Subscription (per 100 people) and education measured by GE: Government Expenditure on education, total (% of Government expenditure) and LR: Literacy Rate youth total (% of People ages 15-24). Other independent variables are TU: Total Unemployment (% of total labour force) (modelled ILO estimate), SE: School Enrolment, primary and secondary (gross), gender parity index (GPI)

### Results and Discussions

**Table 1: Descriptive Statistics**

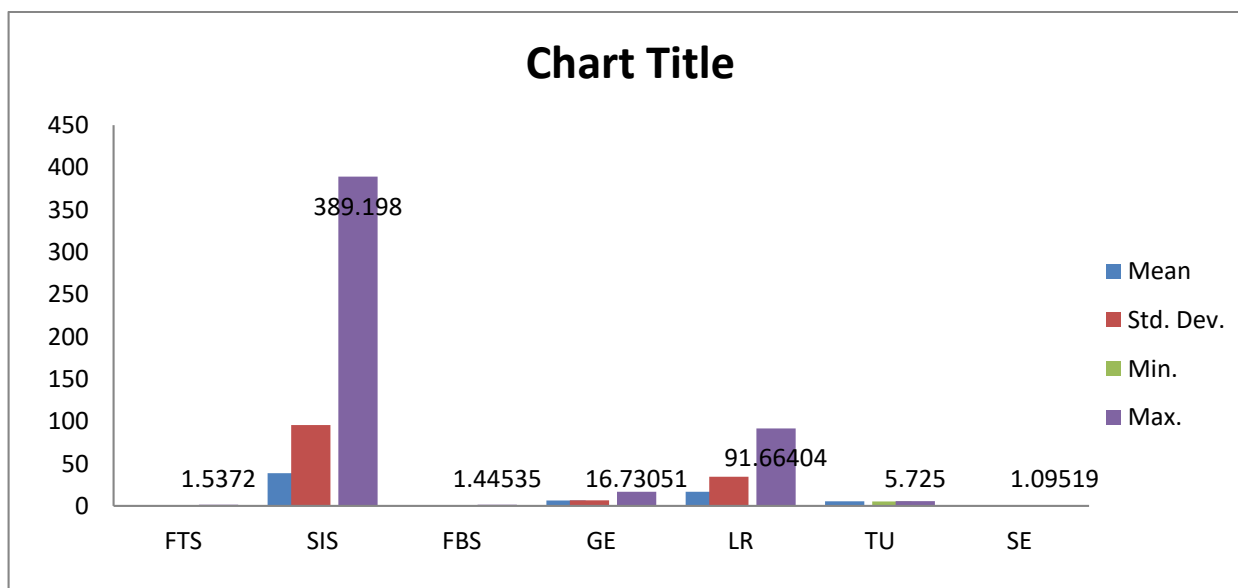
Variable	Obs.	Mean	Std. Dev.	Min.	Max.
FTS	20	0.1469479	0.3272314	0.0737767	1.5372
SIS	20	38.65685	95.62931	0	389.198
FBS	20	0.7023896	0.5782412	0	1.44535
GE	20	6.393622	6.67511	0	16.73051
LR	20	16.76827	34.50613	0	91.66404
TU	20	5.5519	0.1420259	5.281	5.725
SE	20	0.7830215	0.4107578	0	1.09519

Source: Author’s estimations.

Note: FTS- Fixed Telephone Subscription (per 100 people), SIS- Secure Internet Server (Per 1 million people), FBS- Fixed Broadband Subscription (per 100 people), GE- Government Expenditure on Education, total (% of Government Expenditure), LR- Literacy Rate Youth Total (% of people ages 15-24) , TU- Total Unemployment (% of total Labour Force) (Modelled ILO estimate), SE- School Enrolment, Primary and Secondary (gross), Gender Parity Index (GPI).

Table 1 show that descriptive analysis and describing observation of all the variables are taken is 20, it includes 3 variables of digitalization like: Fixed telephone subscription, Secure Internet Server, Fixed Broadband Subscription etc., and 4 variables of Education which are: Government expenditure, Literacy rate, Total

Unemployment and School Enrolment for the years between 2000 and 2019. Then found the mean which shows the smallest mean among the variables is 0.7023896 for fixed Broadband services. And analysed the standard deviation of all the variables, which also shown through graphical presentation.



Source: author’s estimations

Note: FTS- Fixed Telephone Subscription (per 100 people), SIS- Secure Internet Server (Per 1 million people), FBS- Fixed Broadband Subscription (per 100 people) , GE- Government Expenditure on Education, total (% of Government Expenditure) , LR- Literacy Rate Youth Total (% of people ages 15-24) , TU- Total Unemployment (% of total Labour Force) (Modelled ILO estimate), SE- School Enrolment, Primary and Secondary (gross), Gender Parity Index (GPI).

**Fig. 2: Graphical Representation of Descriptive Analysis**

**Table 2: Correlation Analysis**

	FTS	SIS	FBS	GE	LR	TU	SE
FTS	1.0000						
SIS	0.8628	1.0000					
FBS	0.3024	0.5061	1.0000				
GE	-0.2254	-0.3911	-0.2826	1.0000			
LR	-0.1144	0.0709	-0.0107	-0.0062	1.0000		
TU	-0.3263	-0.5196	-0.3123	0.5573	-0.1397	1.0000	
SE	0.1359	0.0049	0.4117	-0.1901	-0.4259	0.0821	1.0000

Source: Author’s estimations.

Note: FTS- Fixed Telephone Subscription (per 100 people), SIS- Secure Internet Server (Per 1 million people) , FBS- Fixed Broadband Subscription (per 100 people), GE- Government Expenditure on Education, total (% of Government Expenditure), LR- Literacy Rate Youth Total (% of people ages 15-24), TU- Total Unemployment (% of total Labour Force) (Modelled ILO estimate), SE- School Enrolment, Primary and Secondary (gross), Gender Parity Index (GPI).

Table 2 the correlation is found between the education variables and digitalization variable that, highest value is 0.8628 which is for Secure Internet Server among the digitalization factors and positively impacted on the fixed Telephone Subscription. Further it is going to decrease in every variable’s correlation. And education variables are also in negative terms and negatively impacted on fixed Telephone Subscription. In the last, School Enrolment is positively impacted to Total Unemployment, which shows

better results and total unemployment will decrease soon after increasing the enrolment in the school. And it will increase the digital literacy in India. Fixed Broad Band service is also affected positively to the secure internet server, which boost the Indian economy with continuous internet and broadband service in India. Literacy rate is also positively correlated to Secure Internet Server, which shows positive impact on literacy rate and in future it will increase the digital literacy rate

through internet server, where an individual may spend a lot of time on the internet through which he or she may learn easily and get familiar to the internet and digital platform.

**Table 3: Regression Analysis**

<i>FBS</i>	<i>Coef.</i>	<i>Std.Err.</i>	<i>T</i>	<i>p&gt; t </i>	<i>[95% Conf. Interval]</i>	
GE	-0.0000669	0.233544	-0.00	0.998	-0.0498455	0.497117
LR	0.0026574	0.0040011	0.66	0.517	-0.0058707	0.0111855
TU	-1.348766	1.083385	-1.24	0.232	-3.657946	0.9604138
SE	0.7126506	0.3470723	2.05	0.058	-0.0271165	1.452418
_cons	7.588451	5.895834	1.29	0.218	-4.978221	20.15512
No. of obs.	= 20					
F (4,15)	= 1.69					
Prob > F	= 0.2050					
R-Squared	= 0.3104					
Adj R-Squared	= 0.1265					
Root MSE	= 0.54044					
No. of obs.	= 20					
F (4,15)	= 1.69					
Prob > F	= 0.2050					

Source: Author's estimations.

Note: FTS- Fixed Telephone Subscription (per 100 people), SIS- Secure Internet Server (Per 1 million people), FBS- Fixed Broadband Subscription (per 100 people), GE- Government Expenditure on Education, total (% of Government Expenditure), LR- Literacy Rate Youth Total (% of people ages 15-24), TU- Total Unemployment (% of total Labour Force) (Modelled ILO estimate), SE- School Enrolment, Primary and Secondary (gross), Gender Parity Index (GPI).

Table 3 concluded the Regression of the variables of FBS GE LR TU SE, Model of SS is 1.97176532 and residual is 4.38112877 and total is 6.35289409. Model of DF is 4 and residual is 15 and total is 19. Model of MS is 0.49294133 and residual is 0.292075251, Total is 0.334362847. And other information and analysis are: observation is equals to 20, F is 4 and 15 that equal to 1.69. Prob. Is > F is equal to 0.2050. R-Squared is equals to 0.3104. Adjusted R-Squared is equals to 0.1265. And Root MSE is equals to 0.54044. It is also concluded the result for the test with Coefficient, standard error and 95% confidence level of the variables Government Expenditure, Literacy Rate, Total Unemployment and school Enrolment. Coefficient of Government Expenditure on education is shown negative and the standard Error of that is shown positive, that concludes that government should focus on the education expenditure to provide the better place for the education and economy. Coefficient and standard Error of Literacy Rate is shown positive, which shows that the improvement of literacy rate which improves the education among the youngsters and will provide the better effect to the economy. Coefficient and Standard Error of school enrolment shows positive in above table.

Total unemployment is also shown negative with the effect of literacy rate. If the literacy rate positive then students may get better education with the government expenditure with proper guidance, skills and proper learning tools, then unemployment will reduce automatically.

## Conclusions

The study evaluated the impact of digitalization on education with many factors like changing the scenario of education sector from traditional to digital platform, where some students and teachers faced many challenges while adopting the digital platform at the first time. But in the current scenario many people are very much literate about digital challenges and very much familiar about the digital platform, concluded that people are moving towards the digital assess easily and effectively with learning the digital concept. There are many positive impacts of digital platform towards education and other related sectors like: people are becoming literate about digital platforms, with that they can assess the education from anywhere to everywhere, there is less effort are considered to the education, but rather that there are some negative impacts

of digitalization where the internet connection are not provided but with the help of government's effort and provide sufficient fund towards the digital education and internet connectivity with high speed, the country become developed and connect from World Wide in the current scenario or in the future. The study is based on descriptive and analytical methods where the data collected from the published resources (World Bank indicators). From the above results and discussions it is concluded that, through the Analysis all the variables are concluded as to find mean, Standard deviation, minimum and maximum value with the observation is taken as 20. In the correlation most of the variables are positively correlated from education variables to digitalization variables, which show a good impact on the economy and in future it will perform very well as our honourable Prime Minister expected. With the results it is concluded that India is moving towards becoming digitally, paperless and cashless, which very much helps to the economy and education sector as well.

### Suggestions and Recommendations

After certain limitations and conclusions there are some suggestions and recommendations like: India is a developing country so that there are many people who have not access the internet connectivity and not digitally literate as comparison to another country, so government should raise the funds for remote area to become digitally literate them and educate them, with the help of increasing the more funds and provide better broadband service and internet connectivity India will become developed with the access of the worldwide connectivity. It will help to the welfare of the society and motivate the youth and encourage them to become digitally literate with the ease of tackle the problem of any type of situation. With the increasing the morale of the youth it will help to the government and improve the economic condition of the country. There is required a proper training of digitalization to the students as well as teachers and common people with that all of the citizen can access the digital platform without any interpretation. More IT labs should be provided to the students and teachers in all types of schools and colleges with minimum and optimal charges where every poor can access and get opportunity to learn the technological advancement.

### Limitations

The limitations of this paper are many, there has been used limited and secondary data for the study and limited objectives are used to conduct the study. The study is too short and not enough methodology has been used, the study may evaluate the more variables like: male and female ratio for education, Access education for female in rural areas, Mobile Cellular Subscription, Government expenditure on internet access to everyone and percent of individual using internet, but due to short period of time and cost, the data collected from 2000 to 2019 only. Primary data was not collected through survey and by filling the questionnaire. With the help of primary data the study may elaborate very well. This paper may provide and elaborate more the digitalization and education due to current scenario, it is not done so. But with the given information it my helpful to the society and government for analysing the education position and digitalization position in India, and will helpful for further studies in future as well, despite of certain limitations

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