A Study on Use of Digital Technologies by College Students for Academic Purpose of Mumbra Region

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ABSTRACT

Digital Technology today became the essence of every field. Digitalization is evident in Commercial, Social, Political and Educational World today. Education System can expand itself through constructive use of Digital Technology. Students today are more open to Digitalization because of their knowledge of Computers & Internet. Even the Rural areas are open to accept the Digital Technology in Education System. E-learning, E- books, Online Coaching, Use of Internet and many more things are available which make Digital technology useful for the Students especially of Higher Studies. The region like Mumbra is a small Semi Urban area with scope of development in infrastructure. The Students of Mumbra is moving towards modernization and digitalization with rapid development and easy availability of technology. But for taking the advantage of Digitalization, it is essential to have digital literacy among the Students of Mumbra Region. Digital literacy will further enhance the use of Digital Technology in Education System to.

Keywords: Digitalization, Digital technology, Students, Education, E-learning, Semi urban.

INTRODUCTION

Digitalisation is a term use to explain the modern world of binary codes. In the process of digitalization diverse forms of information such as object, text, sound, images, are converted in single binary code. Binary Codes are the number 0 and 1. All the information in the process of digitalization is converted in forms of 0s and 1s. Today the whole world is digitalized. The majority of the commercial world have been become digital. From Business to households, from Governments to academics every sector and everyone is turning digital. All business transaction take place online, banking is done through internet, admission process, filling of the forms, registration all turned digital, even shopping and paying bills became easy through digitalization.

The Education System can have a considerable impact on the pattern of studies through use of Digital technology. Digitization can be effective if it use in Schools & Colleges. The Students of Higher Studies to whom conceptual Studies is more important can make the best use of Digital Technology for enhancing their Knowledge and Colleges can provide constructive platform to the Students by making them the resources available.

There is unlimited information and data is present in the World. Tapping all the information of the World is not possible for the human being physically, but this is possible for the smart electronics instruments. Human may not recollect all the information physically but he can do so technically with help of modern technology. Today world is fitted into a small chip. The tons of information and data in any form can be easily stored in a small chip. All these can be done with the help of Binary codes. All this is possible through Digitalization and hence today's era is called as "Digital Era".

The Mumbra region is a semi urban area located in the Thane Region of Maharashtra. Being densely populated, Mumbra is developing rapidly in infrastructure and hence the availability of digital infrastructure is become easy in the region. The number of Junior & Degree Colleges are operating in the Mumbra Region can play very important role to promote the use of Digital Technology among the Students.

DIGITAL LITERACY

Digital Literacy can be explained as individual's ability to find, evaluate, compose, generate, and transmit clear information through various digital mediums. Use of Computers, Laptops, Smartphone's etc. is the part of Digital Literacy. Digital Literacy does not overlap the traditional literacy but only develop skills in human to make the life and work of human beings much easy and productive. Previously the Digital world was majorly depended on the Computers but with enhance technology which we have today, smart phones are working at par for spreading digitalization.

Today the World turns towards Digitalization. Digital World covers almost everything today. The Admissions of Schools, Colleges, filling up of the Forms, Payments of Bills, Online Shopping's, availability of Government Schemes forms Online, banking facilities, easy and quick transmission of money and information through internet made the importance of Digital Literacy very evident. Today not only the Big Business tycoons or Scientist, engineers need digital knowledge, but also the housewife and school going Secondary Class Student needs the Digital Knowledge. Digital Literacy is most important factor for Digitalization. This Digital Literacy is required among the Students so that they can make more and more use of Digital Technology for Studies.

This Study is related to the usage level of Digital Technology among the College going Students of Mumbra Region. The Colleges operating in Mumbra Region both Junior and Degree Colleges have important role to play in promoting use of Digital Technology in Studies by providing proper infrastructure and required facilities to the Students. The College can ease the use of Digital Technology for students by allowing the access to required resources.

OBJECTIVES OF THE STUDY

- To determine the level of use of Digital Technologies among the Students of Mumbra Region.

- To evaluate the level of awareness about Digital Literacy among Students of Mumbra Region.

- To Study the amount of facilities provided to the Students for better use of Digital Technology.

HYPOTHESIS OF THE STUDY

H0: Students of Mumbra Region do not use Digital Technology for the Academic Purpose.

H1: Students of Mumbra Region do use Digital Technology for the Academic Purpose.

COLLECTION OF DATA

The data is collected through both the sources, Primary and Secondary. The major data for the Study is mainly collected through Primary Data. The data is collected through Questionnaire framed specifically for different section of respondents. The Population for the Study are the Students of Mumbra of Junior & Degree College of different age group. The Sample size for the data collection was 100 Students of different group. 100 Students (25 each) of 4 Colleges(2 Junior College & 2 Degree College) were selected & Questionnaire was prepared for gathering information regarding use of Digital Instruments, Use of Internet, E books, Online Study materials etc. Some data is collected through Secondary method about Digital usage through websites of the Colleges regarding the availability of the Study material for the Students by College. Data from Students also gathered regarding the facilities available in the Colleges to promote Digitalization.

LITERATURE REVIEW

Digitization: As per the definition provided of Digitization, it is clear that it is a process of converting information into digital format. It is explained that in this process information in stored in forms of bit.

Digital technologies are electronic tools, systems, devices and resources that generate store or process data. Well known examples include social media, online games, multimedia and mobile phones. Digital learning is any type of learning that uses technology. It can happen across all curriculum learning areas.

American Library Association's digital-literacy task force: offers the definition as "Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

DISCUSSION & FINDINGS OF THE STUDY

Digitalization is very important aspect of today's modern world. Digitalization is need of hour for every person to remain competitive in this modern rapid World. The World is developing at immense pace and technology is getting enhanced with every passing moment. In the Education System use of Digital Technology can be very effective. The Students and the faculties can use Digital Technology to make the learning process convenient and interesting. The Academics can exploit the advantage of Digital Technology to its maximum. For this Study many advantages of digitalization has been observed and it is found that digitalization has many positive aspects and it needed by the Society for better and efficient living environment.

Some of the **merits of Digitalization with Academic merits for the Students & Institutions** which was observed during study are as follows:

- Easy to access and always accessible. Documents that have been converted can be easily accessed through the cloud or system using any device that has internet, anywhere or anytime.

Academic advantage: Books and Information can be easily converted into convenient form.

- Digitalization Saves space. Real Estate space is expensive; eliminating paper storage can give you with more space, reduction in rent, reduced off-site document storage fees or potential to open up a new office.

Academic advantage: Students & institutions can make much better use of space through Digital Technology.

- Digitalization helps in Disaster recovery there is always a risk of disaster, whether it is natural or manmade. Fire, flood, earthquakes or other destructive phenomenon may cause a major disaster for your paper documents seriously affecting your business.

Academic advantage: Physical form of books can be destroyed but the data through Internet can be recovered.

- Digitalization make the life of common man easier and hassle free as most of the important work can be accomplished safely like Shopping, Bank Transactions, and Admissions etc.

Academic advantage: Studies can become convenient and easy especially in case of Distance Education System.

- Digitalization enhances security scanned document is track able document. If needed, only certain users can access the documents and workflows can be set up along with permission groups for an individual, which enhances the security and maintains the confidentiality of the document.

Academic advantage: The E Books & other data can be protected through proper security which is very useful in case of patent materials. The Original work of the authors can be protected.

- Digitalization is necessary to avail the benefits of Government Schemes and Education Process as most of the Procedures of filling forms and registrations are digitalized by conducting Online.

Academic advantage: Students can avail the benefits of the Government schemes and other facilities through click of the mouse and the Paper work burden of the Colleges also reduced.

The above is some of the many advantages of Digitalization. And for availing the benefits of digitalization the concept of Digital Literacy becomes very important. As per this study, the Students and the Colleges should make use of Digital Technology for the academic purpose. Studies can be more reachable to the Students and can become more productive. But for using Digital Technology students should be aware of the Digital resources. Without proper knowledge and use of digital appliances like smart phones, Laptops, Computers etc. and without services like Internet digitalization is not possible. This study is also concern with the availability of the Services needed to support Digitalization in Mumbra Region.

ANALYSIS OF DATA

The Data is collected through Close Ended Questionnaire which was provided to the 25 Students each of 2 Degree & 2 Junior College making the total 100 response. The Questionnaire contained the question related to Use of Internet, use of E Books, Online Coaching, Online Group Studies, Online Storage & sharing of Data, Use of Educational Websites. The Question were also asked about the facilities present in the Educational Institutes to which students belongs to know whether the Students are getting proper access to the resources required for the use of Digital Technology for Academics. The response from the students have been recorded and the inference drawn and explained.

The response gathered through Students of both Degree & Junior College is presented below in tabular form which shows the level of usage of Digital Technology by the Students for their Academics.

Use of Digital Technology by the Students of College Section of Mumbra Region

List of Digital Technologies to be used by Students	*Response of College Students*		
	Junior College (Out of 50 Students)	**Degree College (Out of 50 Students)**	**Total Usage (Out of 100 Students)**
Use of Internet	*15*	*42*	*57*
Use of SMART PHONES	*18*	*47*	*65*
Use of Educational Websites	*03*	*20*	*23*
Use of E-Books	*03*	*20*	*23*
Use of On line Group Studies	*05*	*10*	*15*
Use of Online Coaching facilities	*03*	*05*	*08*
Use of Online Storage of Data	*02*	*15*	*17*
Use of Internet for availing Government schemes/scholarships	*35*	*40*	*75*

(Table no 1: Response on the basis of Questionnaire)

The Data presented in Table no 1 shows the responses of the Students of both Degree & junior Colleges. The Students responded to the questions through Questionnaire about the Use of Digital Technology by them for their Academic Purpose. The responses were very clear about the fact that Students use Digital Technology differently for various purposes. The Usage of Digital Technology is more among the Students of Degree Colleges than Junior Colleges. Using Smart Phones & Internet is fair enough for both the Students but Use of E books, Online Coaching facilities, Online Group Studies even Use of Digital Storage to be very poor among the Students of Both the Category. Use of Internet for availing Government schemes & Scholarship is highest because all these schemes are available Online only. The Overall usage of Digital Technology by theStudents of both the section is still not satisfactory as the main purpose of academics i.e. enhancing knowledge and supporting studies is not achieved by the current level of Usage of Digital Technology. The usage level among the Students of junior is far poorer than the Degree Students. Both Sections os the Students need to increase the level of Usage of Digital technology for their Academic Purpose.

The Students were further asked about the availability of the resources and the facilities for use of Digital Technology. One of the main factor for improving the use of Digital Technology among the Students can be support given from the Educational Institution to the Students. Students were asked about he facilities present in their colleges and as per the responses of the Students following data is recorded.

Availability of the Resources/Facilities in Colleges

Resources/Facilities	Responses of the Students (YES/NO)			
	Junior College		**Degree College**	
	A	**B**	**C**	**D**
Digital Boards	**YES**	**YES**	**YES**	**YES**
Free Wi-Fi in Class rooms	**NO**	**NO**	**NO**	**YES**

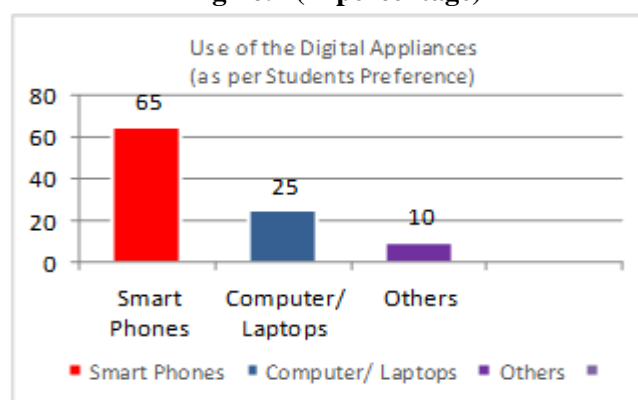| Free Access to Computers	YES	NO	YES	YES
Free Access to Licensed E books	NO	NO	NO	NO
Syllabus Contents of college Websites	YES	YES	YES	YES

Table no. 2 (Response on the basis of Questions asked)

As per the response of the Students which is shown in the table number 02 it is very much clear that the institutes do provide the basic required resources and facilities to Students to promote and increase the use of Digital Technology, but still the use of Digital technology is not satisfactory. The institutes should improve their Digital Infrastructure. The institutes should make available the E books and should promote the use of the same by the Students.

Also, to elaborate further a question is asked to the Students users to know about their preferences of choice of appliance to avail the benefits of digitalization. The options provided to the respondent Students were Smart phones,Computer/Laptops, and Other like using facilities through Cybercafés.

The following is the response provided by the respondents and the same is presented in Percentage.

Fig no.1 (in percentage)

The data of Fig no.1 clearly represents that the 65% of the Students prefer Smart Phones over Computer/Laptops which is preferred only by 25%. This make it evident that it is the use of mobile phones is much preferable among the Students as it also give them access easily to Social media Platforms. Beside that Smart Phones, Mobile phones are easy to carry, to operate and availability of number of Internet Data Packages at low price also promotes the use of Smart Phones.

LEVEL OF USAGE OF DIGITAL TECHNOLOGY BY THE STUDENTS OF MUMBRAREGION
The Level of usage of Digital Technology by the Students of Mumbra Region for their Academic Purpose in below average level. There is need to improve the level of usage of Digital technology. The use of E books, Online Coaching, Online Group Studies have to be promoted and need to be improved in better way for taking maximum advantage of Digital technology. Institutes too should provide with all the required resources and facilities to the Students and encourage them to use Digital technology for Academic purpose. The Students need to use Digital technology for better and deep explanation of the Academic concepts as the contents of the text books are rather limited.

SUGGESTIONS
As per the evaluation and analysis of data and as per the responses, the following points are suggested to improve the Digital Literacy of Students of Mumbra Region:

- Educational Institutes especially Schools can play major role in improving Digital Literacy by providing proper knowledge Computers to the students right from the Primary Level.

- Students must be provided with the basic facilities like free use of Wi-Fi and free access to Computers with proper Internet facilities to encourage use of Digital Technology.

- The Portals related to Education and Government Work should be Language friendly so that more Students can take advantage of it.

- Projects of the Colleges should be framed by the teachers in such way that the use of Internet & Computers should be evident for the Students.

- Online mock tests, Internal Examinations, Online admission process, fees payment methods, online attendance can encourage the use of Digital Technology among the Students.

- Creating Studies Group of Students on Social Media, Sharing information among the groups and making use of online storage facilities can also be useful to promote use of Digital Technology.

SCOPE OF STUDY

The Study is concerned with digital literacy and use of digitalization technologies by the Students of MumbraRegion. This Study can be used by the Institutes like Schools, Colleges of Mumbra Region for making better policy regarding Digitalization of their services. This Study can be useful for promoting and analysing the Level of use of Digital Technology. This Study can also be useful to implement innovative methods of Tests & Internal Examination by the Educational Institutes. This study also can be used as reference for any study on Digitalization of Semi Urban area like Mumbra.

CONCLUSION

Every Section of the Society whether Commercial or Non-Commercial are moving rapidly towards Digitalization. The Governments & authorities have also accepted the importance of use of Digital Technology. The Process of Education admissions and Government Schemes also turned totally online. The easy methods of Online Payments, Shopping etc. are much comfortable and profitable in today's commercial world. All these elements create great importance and scope for the use of Digital Technology. The Study proves the H0 Hypothesis that Students of Mumbra Region do use Digital Technology for their Academic Purpose but should be promoted more at every level. The use of Digital Technology can make the complicated part of the academics of Students easy for them. The better insight of the Concepts & topics can be achieved through use of Internet. E books & online storage of Data will eliminate the physical burden of the paper books. As per the Study presented, Institutes have major role to play in promoting the use of Digital Technology.

REFERENCES

- https://whatis.techtarget.com/definition/digitization

- Primary Data through Close ended Questionnaire from Students respondents of Mumbra Region (both Junior & Degree College)