

# Impact of Digital Media and E-Learning Solutions on Contemporary Management Education



K.Ravishankar, B.Jeyaprabha

**Abstract:** *E-Learning becomes a latent transfer medium for education in India. the discrimination between rural and urban education is eroded with the advent of e-learning in our country. Digital devices like Smartphone, Tab etc. and digital media are functioning as catalyst between the Students and the Instructors. Recent years, Government has taken massive initiatives by introducing NPTEL, SWAYAM and so on to impart the quality education across the nation, especially in Higher Education. Objectives: To make objective and subjective assessment of the impact of digital tool and e-learning methodologies on the quality and the outcome of MBA programmes, to study the extent of practising e-learning methodologies by educational institutions in delivering quality management education, to understand the attitude of stakeholders in implementing digital tools and e-learning technologies. Methodology: The questionnaire is divided into six parts. First part includes demographic variables, second part includes devices and internet usage, third part includes e-learning components, fourth part includes attitude of stakeholders, fifth part includes intention to use digital media and e-learning and sixth part includes the impact of digital media and e-learning on students knowledge and career growth. Sampling method adopted for this study is multi stage random sampling method. In total 180 responses were collected using structured questionnaire in Tamil Nadu state. Results and Conclusion: The students' attitude is positive towards the digital media and e-learning methods. Attitude and Infrastructure of the institution are not independent to each other. The factors like e-assignment, perception towards e-learning, Intention to use digital media, and attitude of the stakeholders are influencing the impact of digital media and e-learning solution on contemporary management education.*

**Keywords :** Digital Media, E-Learning, Impact, Management Education, Students.

## I. INTRODUCTION

Education is all about learning which includes the search for new knowledge, Skills, behaviours, or values are acquired. Learning changes the existing characteristics of an individual and strengthens him in developing his skills.

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It is the great challenge for the instructor to satisfy the needs of the learner. As of learning involves a cognitive thinking which varies from student to student. In the present education scenario the instructors have the responsibility to indulge new strategies in their teaching methodologies and to keep the students engaging in their courses. Learning can be acquired through the experience from external environment. Nowadays e-learning exit as a powerful weapon which can be used by the instructor and learner to change the learning pattern practicing in our country (Valentina Arkorful, 2014). In order incorporate e-learning, the need of Information and Communication Tools (ICT) is needed in education to enhance the experience of learning. E-learning can also be used as knowledge management in the organization (Maryam Khademi, 2011), which helps in merging technologies, organizational structure and people to create the most effective learning, problem solving and decision making in an organization. Digital platform is needed for students in accessing and collecting their required information and they can easily disseminate their knowledge sharing with other co-students. The outcome of e-learning results to inabsentia to the learner, the content of materials will be available on demand and will be best suited for the learners to update their professional knowledge. (Jabbarifar, 2009), in e-learning platform question generation is also possible in order to find out whether the student is acquired the desired level of knowledge in a subject and how they had benefited from the course content. In order to deliver the content to the learners, the teaching learning process needs techniques and tools to present the knowledge from different resources, to interact and share with others. In order to save time and remove paper stacks many industries prefer to use the electronic medium. Based on the learner's preference they can search, store and navigate the information. Transparency should be there in e-learning which helps the learners to locate what they need. The main aim of e-learning is flexibility in learning they can learn from their own place with ICT and accesses the e-learning resources at anytime they needed. There will be online evaluation and assessments, where the learners would be required to complete their tasks, and in evaluating them. In traditional education system resources will be in printed form, whereas in e-learning the resources will be available in the form of audio, Video, animations and pictures, helps in understanding the complex topics to learners, comparing the cost it is lower. If any changes to be made in e-resources, it can be done easily and the learners can also instantly update them. E-learning also needs motivation to learners from their peers, if the learners are motivated they have the confidence in learning independently which also improves their reading habits and builds in higher order thinking skills.



The Government of India has announced the year 2010-2020 as the decade of innovation. Delivery of digital content is one of the main advantages of e-learning. It also supports in collaborative learning which results in divergent thinking among the learners. There will be a paradigm shift from crowded classroom discussions to virtual learning discussions for both the teachers and learners.

(Deb, 2016) so that they can also guide the learners in e-learning. Research indicates that both instructors and learners have very positive perceptions toward using e-learning as a teaching assisted tool. In the organizations the employers are finding difficult to retain the skilled and trained employees, people have to learn quickly as they grow. Internet plays a major role in learning for the learners, if a common man improves his skills and knowledge naturally it will leads to growth of organizational growth and improvement. So the need for e-learning is arousing very fastly in the recent years. With the help of e-learning it becomes quite easier for the learners to update him very quickly, to gather information and to disseminate the knowledge acquired by him for several people around him. If the learners are willing to learn through e-learning there will be a dramatically changes will be seen in the education system sustaining in our country. It becomes very easy for the students and teachers to use the digital media platform for knowledge sharing, and for explaining and understanding the concepts. Management education in India is still lagging behind the technology but efforts were made gradually to improve the technology-oriented e-learning practices using digital media by many institutions in India. Though the management institutes instigate the e-learning practices, it is vital to access the impact of digital media and e-learning solution in management education.

## II. LITERATURE REVIEW

(Gil-Jaurena & Domínguez, 2018) Teachers' role in light of massive open online courses (MOOCs) in their article talked about the difficulties looked by educators when entering a computerized and open online education in higher education. The procedure utilized in the examination is writing audit to distinguish educator's new necessities and jobs in MOOC condition and on a review of MOOC instructors' discernments utilizing an example engaged with institutionally determined MOOCs conveyed by a separation training college. The educators in this investigation appear to have comprehended MOOCs as being test settings, which are pretty much removed from their experience of customary e-learning courses. (Chawla & Joshi, 2012) The investigation about Management instruction through e-learning in India: an exact examination talks about E-learning in the board training, since e-learning is rising as a mechanism for instruction and preparing. It is plainly observed from the expanding number of instructive establishments and associations receiving e-learning. In India, the quantity of understudies going for the executives training is high. It is important to comprehend the understudy's status to acknowledge the e-learning in the board instruction. The fundamental goal of the paper is to look at the mindfulness levels, level of nature and preparation to acknowledge e-learning condition. The paper carries a plan to the B-schools which are happy to embrace e-learning in their training rehearse and furthermore fill in as a guide for the future usage of e-learning. (Pacheco, Lips & Yoong, 2018)

This article presents Transition 2.0, a change in outlook intended to study and bolster understudies with inabilities' progress to advanced education. The examination applied a subjective way to deal with comprehend the social and social setting of the members as for their change and the utilization of computerized innovations. The specialist found that understudies with vision troubles additionally consider progress to be an aggregate undertaking and advanced apparatuses have an empowering impact in that regard. The issues crippled individuals face in versatile and electronic e-learning stages in a creating nation. The investigation establishes the issues looked by debilitated individuals face in portable and online e-learning training stages in the advanced age. Since it is basic to re-establish the training models as indicated by the necessities of individuals who are in the surge of learning instruction under private schooling. Impaired individuals are eager to learn training with the assistance of the computerized apparatuses. (Fischer & Heise, 2014) The title of the paper is about How to identify e-learning trends in academic teaching, an approach and discoveries of a pattern study is being presented in the field of e-learning. For this pattern study 427 logical articles of driving German talking e-learning meetings were analyzed. The upside of this technique is there is a simple access to the materials and gathering which are accessible in the online assets. The examination of enormous information is finished by utilizing the computerized advancements. (Skourlas et al., 2016) Incorporating computerized video assets in showing e-picking up building courses, this paper exhibits about the contextual investigation of advancement of advanced video to be utilized in e-learning postgraduate designing courses. The center thought of the paper is to drill down the data in an appealing and intuitive manner so as to draw in the understudies with the specific point. Including the video for an idea brings a simple comprehension for the understudies to comprehend the idea all the more adequately. (Pretorius & van Biljon, 2010) In this paper Learning learning the board frameworks (LMS) by thinking about the encounters of data and correspondences innovation (ICT) specialists and non-experts in utilizing the LMS of an open-distance college. ICT abilities might be a significant factor in repressing the taking in of understudies from creating networks. On the off chance that ICT proficiency isn't perceived and managed, the absence of ICT abilities may undermine the endeavours to utilize e-learning in spanning the advanced gap. (Macgregor & Turner, 2009) Returning to e-learning viability: proposing a calculated model this paper reflects upon the utilization of e-learning is to a great extent predicated upon the suspicion that it can encourage enhancements in understudy learning and accordingly can be more successful than traditional systems. The motivation behind this paper is to improve the hypothetical comprehension of the factors impacting e-learning viability, the way wherein these factors have been concentrated to date, and to propose a reasonable theoretical model of e-learning adequacy to help its assessment. (Aristovnik, Tomazevic, Kerzic & Umek, 2017) The effect of statistic factors on chosen parts of e-learning in advanced education. In advanced education, a blend of conventional up close and personal learning and e-learning is getting extremely mainstream. During their examinations, understudies are taken on a few e-courses.

They see different parts of e-courses and show various reactions when utilizing showing materials and learning in an e-course. The motivation behind this paper is to quantify such viewpoints from the understudies' point of view and investigate the distinctions among different subgroups of understudies.

**III. OBJECTIVES**

- To make objective and subjective assessment of the impact of digital tool and e-learning methodologies on the quality and the outcome of MBA programmes
- To study the extent of practising e-learning methodologies by educational institutions in delivering quality management education
- To understand the attitude of stakeholders in implementing digital tools and e-learning technologies
- To further assess how curriculum and delivery methodology can be improved to take advantage of e-learning solution

**IV. METHODOLOGY**

This research is descriptive in nature. The present study measures the impact of digital media and e-learning solutions on contemporary management education in India using structured questionnaire method. Both the primary and secondary data are used in this study. Primary data is collected by using structured questionnaire. Secondary data is collected from various journals, text books, new articles etc. to understand the present method of teaching and learning in management institutes. The questionnaire is separately developed for faculty and students. The questionnaires are vetted by various subject experts, statisticians, corporate managers, students and academicians. The questions are arranged in a proper sequence and the questions are included in a simple and understandable manner. The respondents are first educated about the purpose of the study and responses are collected later.

*Components of the Questionnaire:* The questionnaire is divided into six parts. First part includes demographic variables, second part includes devices and internet usage, third part includes e-learning components, fourth part includes attitude of stakeholders, fifth part includes intention to use digital media and e-learning and sixth part includes the impact of digital media and e-learning on students knowledge and career growth. Various types of questions are included namely, multiple tick questions, Likert five point rating scale questions, dichotomous questions, ranking questions, open ended questions. After the pilot study, the changes were made carefully and valuable suggestions received from various experts are incorporated in the final questionnaire. Subsequently, the reliability analysis is performed using Cronbach alpha test and the value is 0.838 which is above 0.5. This reliability value shows that the variables included in this study possess the desirable internal consistency needed for further analysis.

**Table: 1**  
**Reliability Statistics**

Cronbach's Alpha	N of Items
.838	79

Sample unit for this study is students and faculty of management studies department. Students from I year and II

year are considered for the study and faculty from all cadres are considered for this study. Sampling method adopted for this study is multi stage random sampling method. In this study six districts of Tamil Nadu namely, Chennai, Thiruvallur, Kancheepuram, Coimbatore, Salem and Namakkal district. In each district, 10 institution offering management educations were selected for data collection and in each institution. In total 180 responses were collected using structured questionnaire.

**4.1 Analysis and Discussion**

**4.1.1 Demographic details using frequency percentage analysis**

**Table 1: Demographic Profile of the Respondents**

S.No	Particulars	Frequency	Percentage
1	<b>Type of Institution</b>		
	Private – Arts & science college	82	44.3
	Government/ Government aided Arts & Science college	2	1.1
	Private Engineering college	45	24.3
	Private/ Deemed to be university	20	10.8
	Government university (State/Central)	8	4.3
	Stand alone B-School	28	15.1
2	<b>Institute Location</b>		
	Rural	94	51
	Semi-urban	51	27
	Urban	16	9
	Metropolitan	24	13
3	<b>Gender</b>		
	Male	118	64
	Female	67	36
4	<b>Year of Study</b>		
	I Year	78	42.2
	II Year	107	57.8

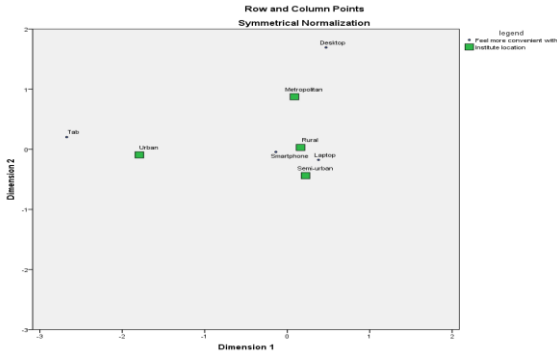
Table 1 shows the demographic characteristic of the respondents. Majority of the data are collected from the respondents studying in Private Arts and Science colleges (44.3%) and most of the institutions are located in the rural areas (51%). Majority of the respondents are male (64%). Majority of the respondents studies in final year MBA students (57.8%).

**Table 2: Multiple Tick Variable Analysis**

Items	Yes (%)	No (%)	Rank
<b>Students Own</b>			
Smartphone	77	23	I
Laptop	54	46	II
Desktop	28	72	III
Tab	27	73	IV
<b>Types of Assignments</b>			
Syllabus Content	54	47	I



Above figure 1 shows that the students of private arts colleges are mostly clarifying their doubts through internet, private engineering college students and deemed universities are mostly interacting with their faculty members for clarifying their subject doubts. Stand alone b school students are mostly referring text books to clarifying their subject doubts and government/government aided institution students are mostly interacting with their classmates to clarify their subject doubts.



**Fig: 2 Association between Institute location and Digital devices convenience**

The above figure 2 reveals the association between institution location and conveniences in using digital devices. Rural and Semi-Urban students are mostly preferred smartphones and laptop as their convenience device while students in urban and metropolitan cities prefer tab and desktop.

**4.1.3 Correlation**

**Table 4: Correlation Descriptive Statistics**

	Mean	Std. Deviation	N
Infrastructure	3.3297	1.12690	185
Attitude	3.8276	.41369	185

**Table 5: Correlation Value for Attitude of stakeholders and Infrastructure of the Institution**

Correlations			
		Infrastructure	Attitude
Infrastructure	Pearson Correlation	1	.011
	Sig. (2-tailed)		<b>.881</b>
	N	185	185
Attitude	Pearson Correlation	.011	1
	Sig. (2-tailed)	<b>.881</b>	
	N	185	185

The correlation between Attitude and Infrastructure of the institution is  $r = 0.881$  and significant values is 0.01. This indicates that Attitude and Infrastructure of the institution are not independent to each other. Here the value of  $r$  is 0.881 so it is considered to be a strong correlation.

**4.1.4 Multiple Regression Analysis**

**Table 6: Model Summary Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.620 <sup>a</sup>	.384	.353	.34266

R is the correlation, its value is 0.620 and R square is degree of determination, its value is 0.384. The degree of determination shows the extent to which Attitude, Infrastructure, Course Understanding and Content Delivery

Methods, Intention, E-Assignment, E-Assessment, Experience, E-Learning, Time management influences the Impact on knowledge and career growth.

**Table 7: ANOVA ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.832	9	1.426	12.143	.000 <sup>b</sup>
	Residual	20.548	175	.117		
	Total	33.380	184			

Table 7 ANOVA table shows that the significant value is less than 0.01, which means dependent variable that is Impact of digital media and e-learning on knowledge and career growth is significantly predicted by independent variables namely Attitude, Infrastructure, Course Understanding and Content Delivery Methods, Intention, E-Assignment, E-Assessment, Experience, E-Learning, Time management at 99 % of confidence level.

**Table 8: Model Coefficient Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.534	.364		1.46	.144
Course Understanding	.023	.047	.032	.48	.626
<b>E-assignment</b>	<b>.149</b>	<b>.055</b>	<b>.174</b>	<b>2.7</b>	<b>.007</b>
E-Assessment	.059	.043	.102	1.3	.174
Time Management	.013	.042	.025	.30	.760
Infrastructure	.011	.023	.029	.47	.633
<b>E-Learning</b>	<b>.139</b>	<b>.063</b>	<b>.148</b>	<b>2.2</b>	<b>.028</b>
Experience	.006	.055	.007	.11	.913
<b>Intention</b>	<b>.249</b>	<b>.051</b>	<b>.312</b>	<b>4.8</b>	<b>.000</b>
<b>Attitude</b>	<b>.237</b>	<b>.068</b>	<b>.230</b>	<b>3.4</b>	<b>.001</b>

a. Dependent Variable: Impact

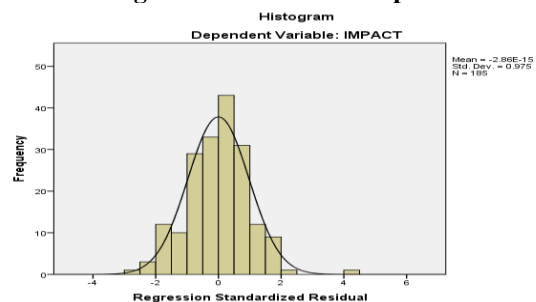
Table 8 shows the beta, T value and significant value of independent and dependent variables.

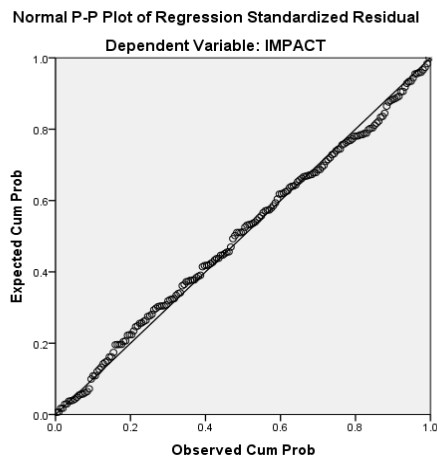
**The common regression equation is  $y=a + bx$**

The effect of Attitude, Infrastructure, Course Understanding and Content Delivery Methods, Intention, E-Assignment, E-Assessment, Experience, E-Learning, Time management on Impact of digital media and e-learning is given by the regression equation,

Impact of digital media and e-learning on Knowledge and career growth = **0.534** + **0.149** (e-assignment) + **0.139** (e-learning) + **0.249** (Intention) + **0.237** (Attitude)

**Chart: 1 Histogram and Normal P-P plot**





## V. RESULTS AND DISCUSSION

Student in most institutions offering management program in Tamil Nadu are using Smartphone and they own laptop when compare to other devices like Tab or Desktop. This result shows that the students are fond of using Smartphone and if they want to work with big screens, they prefer to use laptop. Hence, students are not ready to use the fixed devices like desktop instead they expect handy devices. Management institutes are giving assignment on syllabus contents where the students copy the contents from books or course material circulated by faculty members. Some management institutions restricted the usage of Cell Phones in the campus so students are preferred to use Laptop and rarely are they using their own wi-fi devices. The e-learning practices adopted by the management institutes are still in developing stage. The impact of digital media and e-learning solutions are mostly influenced by E-Assignment, Perception towards e-learning, Intention of the students and Attitude of stakeholders. Course understanding and content delivery, E-Assessment, Time Management, Infrastructure and Experience of students are not playing a dominant role in impacting the digital media and E-Learning in Management Education. Most of the institutions are not having proper Learning Management System (LMS) to engage the students during and after the college hours. Assignment and internal assessments are still based on the traditional manual writing pattern. In the digital infrastructure facilities, institutions are having Projectors for content delivery and it still equip with video conferencing and simulation techniques. Students are clarifying their subject doubts are strongly associated with institution location. Students of private arts colleges are mostly clarifying their doubts through internet, private engineering college students and deemed universities are mostly interacting with their faculty members for clarifying their subject doubts. Stand alone b school students are mostly referring text books to clarifying their subject doubts and government/government aided institution students are mostly interacting with their classmates to clarify their subject doubts. There is no association found with male and female students in subject doubt clarification but usage of convenient devices are not associating with male and female management students. Attitude and Infrastructure of the institution are not independent to each other. Rural and Semi-Urban students are mostly preferred smartphones and laptop as their convenience device while students in urban and metropolitan cities prefer tab and desktop. Institution location is playing a vital role in student usage of digital

devices and the way they clarify their subject doubts. Another result reveals that the students are using internet and the time they spent in internet is not having association with any of the demographic variables taken up for the study.

## VI. CONCLUSION

From the above study, it can be concluded that the students' attitude is positive towards the digital media and e-learning methods. Students subject clarifications are strongly associated with institution location and the type of institution but gender and year of study are not showing significant association with variables of digital and internet usage. Usages of convenient digital devices by Students are having strong association with the institution location and gender. Attitude and Infrastructure of the institution are not independent to each other. The factors like e-assignment, perception towards e-learning, Intention to use digital media, and attitude of the stakeholders are influencing the impact of digital media and e-learning solution on contemporary management education. The above factors are facilitating the e-learning among the students, and the educators can consider the above mentioned factors while designing and improving their activities and curriculum for e-learning.

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