

Re-engineering Management education using Digital Media and its effects in knowledge creation: Evidence from empirical data

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ABSTRACT

The impact of digital media in everyone's life cannot be under stated in today's world. Digital has become all pervasive and it's only a matter of time that Management Education will have to take recourse owing to the influence of digital. This paper aims to bring out the possibilities of using digital media to enhance learning capabilities in management education and also to find out how social media can create an impact in teaching management education. While the majority of previous research suggests that there are positive relationships between digital media and enhanced students participation and knowledge, this study relies on the management student's perception and influence of digital media in class room. This study examines a) the effects of digital media in management education b) whether different forms of digital media affect the learning c) Is there any relationship between learning better in digital media than the conventional method of teaching in class. Drawing from a sample from 110 students who are currently doing their second year management program the results are positive and highly correlated on the effects of digital media and learning

The study gives an understanding of how the future will look closely linked to the digital as an integrated learning phenomenon and how the class room dynamics will change from the present system to the age of digital with social media added in right measure.

1. Introduction

The class room learning has been on fast innovation mode ever since the technology enabled teaching started in the last decade. The coming of MOOCs and other digital avenues made a marked difference in the way class was defined not only for the management education but for other courses as well. In a country like India the advancement of technology and the rapid growth of educational market, digital learning has proved to be unique and has added significant advantage (Molla Ramizur Rahman, 2016).

Online learning also has seen creditable advantage over face to face learning (Hiltz S R, et al 2015). We have seen that the every University of Repute and all the Ivy business schools have opened up their course curriculum to the public atleast some of it if not full. Probably it's a matter of time when that will happen with every single school that will put their curriculum for the public but may be charge a fee for a certificate like the MOOC course have done with Signature courses or Verified students module.

All this and more has a challenge in the digital with the social making its all encompassing impact with more of apps being added to the play stores and a multitude of choices making it hard for the user to download and more importantly not uninstall later.

The recent studies reveal that the time spent on digital is only rising so much so that the people are spending far more time on their social and digital life online than they were doing offline some few years ago.

Fig 1

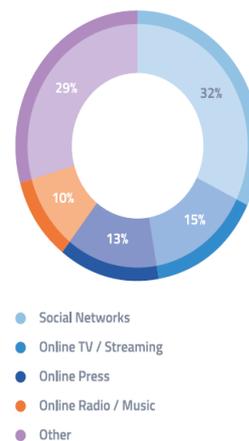
TIME SPENT SOCIAL NETWORKING

Daily Average (Hours : Minutes)



Fig 2

SOCIAL NETWORKING AS A SHARE OF ONLINE TIME (2016)



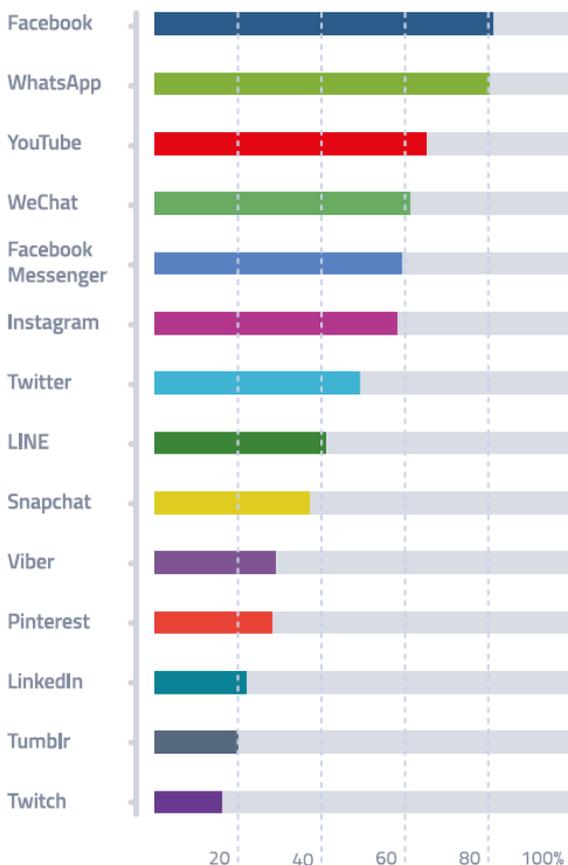
A study by Global Web Index (Fig. 1) reveals that the time spent on social has been increasing steadily over the years which was earlier hours spent weekly is the hours now spent daily. The time spent online for various other activities also makes a very important insight in the way the media habits will evolve for the average internet user.

The report (Fig. 2) also adds that globally, around 1 in every 3 minutes spent online is devoted to social networking and messaging, with digital consumers engaging for a daily average of over 2 hours (rising to 2 hrs 40 minutes among (16-24s).

Fig 3

FREQUENCY OF USAGE

% of users who use each service at least daily



As we can infer from the graph and pie chart the time spent growing steadily over the years and the social networking as a share of online time shows over 32% that would be over 6 hours if we take just 2 hours being on social rest across TV/ Video streaming, content on the news, radio, and music on the other. Also see Face book and WhatsApp taking over 80 percent usage in a day for sure (Fig. 3)

We also would want to see there is a big change that would have happened with the rollout of Jio in the last six months.

2. Review of Literature

Our research into earlier studies especially on the MOOCs since that is one of the foremost ways of getting glued to the digital experience on a self paced mode, had inferences to why the completion rate is not as expected (Katie Jordan, 2015). Though we might see, there can be external reasons to the same, the experience can help in identifying the issues associated with digital as a media and how we can encourage the academic rollout in a socialized world. The intent of the digital courses across MOOCs have a first and second week as critical for student engagement, probably giving it the sense of how to place engaging content so it goes to the next weeks of learning (Katie Jordan, 2014). This also has a lot of impact on the submission of assignments and of course continuing and finishing the course.

In a study (Fan Wei Kung, 2015) involving Blogging as an extension of classroom it was found to be really effective, 76% of the participants perceived BALL (Blog Assisted Language Learning) writing instruction positively. This gives credence to the fact that in terms of technology being the enabler with given the same set of quality perceived in the students background esp ease of use of technology, it can only help and better learning outcomes.

In a significant study (Mulla Ramizur Rahman, 2016) it was found that the students undergoing digital learning performed far better than those under traditional learning. The study conducted among the higher education students also gave insights on understanding the behavioural pattern, in understanding the subject, the capability to retain, being innovative and also their affinity to subject.

In some of the innovations that major business schools have undertaken they have exploited technology to the maximum extent so that they are able to get the tech advantage and also get the students work with them online and sometimes telecommute. The learning management systems that are prevalent inside classroom now is being taken to the world outside and students are made to see the real corporate or business structure right in front of them.

In some cases, it has been found that we come across some of the best gamifications as attempt to give the students an immersive experience and also give the challenges a real-time reaction that they can undertake though they might not have to live the same. But the experiences are getting real which in itself is an important way for making the classroom an immersive experience. This study (Yen-Chun Jim Wu, et al, 2016) examined the attitudes of students and instructors towards using ICT tools in management education and the results revealed that students perceived the ICT tools of collaboration and social media to be very helpful in learning and has helped their future employment; in addition, the teachers also found these ICT tools to be useful.

As social gathers steam to be an integral part of the human existence and the technology becomes the denominator, it's only a matter of time that they are looked at as the go to for all their idea of being in the loop especially when it's time for learning. The aspect of technology has been extended even to telecommute classroom where they attended classes without having to physically attend, possible that future classrooms will be able to be of just avatars and exchanges of ideas over chat and working over the real time. As Cisco believes in their white paper - (Education and the Internet of Everything How Ubiquitous Connectedness Can Help Transform Pedagogy, 2013), experts in a specific area will be sought to teach classes anywhere in the world, and sharing information via streaming or live video will become the way to go.

It can only be said that innovations will be in thing for the management education simply because they will look at making extraordinary over reach to education and knowledge transfer as we grow into a fully technology driven world.

3. Methodology adopted for the study

A. Objectives of the study:

The study was aimed at understanding and accesses the following attributes with reference to digital in the classroom

- To study the impact of digital media in management education.
- To study whether there is a significance difference in traditional and digital learning through various parameters
- To study the level of social media usage pattern among the management students
- To find out the students perception towards the effect of digital learning in management education

B. Research Methodology:

The study was adopted through a purposive sampling among the second year management students.

C. Research Design:

A descriptive study was conducted with 29 questions, part of which was on their demographic profile, their time spent on internet, time spent on social media platforms, digital media usage; time spent on each of the platform and how they were impacted by the usage of specific social media platform.

Also the questionnaire dealt on how many MOOCs they have taken, and completed as a percentage any relation to having had any educative experience with reference to self paced programmes and any interactive programmes on management education. The questionnaire also had 8 statements on students' perception towards effect of digital learning in management education and it is impact, these statements were generated through a brainstorming with 12 students who are currently undergoing the second year MBA and have high knowledge in digital learning. There were questions on the usage of digital and social in classrooms.

4. Data Collection

A questionnaire was administered online via Google forms and the data was collected. The questionnaire was sent to over 500 students of whom 110 responded with a success rate of over 20%. Then they were taken to excel for basic understanding in terms of percentages and SPSS was used to arrive at some of the other results that is discussed here.

The samples were between two age groups: 18-25 and 25-27 and the former were 90% and the rest 10% in the latter group and a mix of 55% male and 45% female we got a mix that had better female participation.

Table 1: Demographic details

Age Group		Sex		Education Background				Work exp	
18-25	25-27	Male	Female	Engg	Science	Com	Others	With	Fresher
90%	10%	55%	45%	40%	25%	19%	16%	40%	60%

The educational background of the students undergoing Management studies, about 40 % had Engineering background, while 25% came from the Basic Sciences background, 19% came from Commerce background and the rest from other background which included Literature, Agriculture etc. and about 40% had work experience of two years.

Social Platforms the respondents are currently using and the time spent on them:

Table 2: Social Platform usage

Facebook	WhatsApp	Twitter	Linkedin	Instagram	FB+WA	FB+Insta
90%	92%	19%	24%	47%	90%	80%

This actually gives an insight into how multiple platforms makes for high the time consumption, they are using all the four major platforms including Facebook, WhatsApp, Instagram and Twitter, although individually Twitter was the last at a meager 9% of the whole. (This is actually true of the adoption rates that we have seen for the platforms and is in sync with the acquisition figures)

The respondents answered to having attempted MOOCs course or any online courses with the following data.

Table 3: Data on MOOCs and online courses

On MOOCs/ online course	No of online course undertaken	Completed		
Have Done MOOC /online course	40%	1	6.4	11.8%
		2	19.1	11.8%
		3	9.1	6.4%
		More than 5	5.5	13.5%
Not done the above	60%			

It was also found how many online courses they have done v/s how many were completed.

Analysis which puts 2 courses as average courses taken by the students in the last one year and that number could be a median for us to work. Say two courses which are not a part of curriculum, another aspect that we see is the completion of course of more than 5 at 13.5 hinting at the strike rate of more enrolment might lead to better management in the long run. Also could be that they are looking at making a statement. Those who will study or are willing to undergo will continue to do it in spite of all the things about the low completion rates.

The respondents when asked on some reasons for the non completion of courses, they replied with no time for self paced learning. The other reasons are given below:

Table 4: Reasons for non completion of MOOCs and online courses

Reasons for non completion	
Just checked out the course	2%
No Time for self paced learning	12.2%
Non encouraging course design	8.2%
No Peers	1%
Costly to take up Verified Courses	3%

The respondents answered in the positive if they will take online or MOOC courses if delivered via social in the positive with 55% saying yes and 12% saying may be.

Table 5: MOOC / Online course via social

Will you take online/ mooc via social	
Will take	55%
No	12%
May be	12%

Some question helped analyse the time spent apart from the secondary sources that we have already highlighted, time spent on mobile, then on social is as follows:

Table 6: Time Spent on Social

Time spent on Social		Videos	Time spent on Social Platform	
Less than 30 min	0	42.7%	WhatsApp	63.6%
30-60 minutes	11.8 %	55.3%	Facebook	24.5%
More than 60 minutes	88.2%	0	Instagram	11.8

This actually goes with the world trends social / digital time spent and going ahead on understanding the preferred platform.

The time spent on consumption of video on social platforms and news and education / entertainment topped the list.

Table 7: Video consumption via Social

Type of videos consumed via social	
Movies	1.8%
News	1.9%
Inspirational	2%
Entertainment	22.7%
All above together	3.6%
Add educative to the above	10%
News Educative & Entertainments	40%

The last three insights gives an understanding of the hypothesis that we are proposing that there is ample opportunity for management education to go social. The trends have only indicated that the time spent will only increase and that this is the right time to experiment the use of social.

Table 8: Comparative Scores for Traditional learning & Digital Learning

Particulars	Traditional Learning	Digital Learning
Understanding the concepts, subjects easily	22%	78%
Retention Capability	31%	69%
Develops interests to a topic/subject	27%	63%

The comparative study of the traditional learning method and digital learning method gives a clear understanding of how digital is far ahead.

78% of the sample felt digital helps understand the concepts subjects easily, 69% said it helped retention capability and 63% felt it helped develop interest in a subject / topic.

Table 9: Social Media Literacy / Behaviour and Attitude among students

Level of Social Media Literacy	Poor Level	6%
	Average Level	12%
	High Level	82%
Level of Social Media Behaviour	Indifferent	0%
	Average	5%
	Positive	95%
Level of Social Media Attitude	Indifferent	4%
	Average	17%
	Positive	79%

The response of the respondents regarding Social Media Literacy / Behaviour and Attitude, it was found that there was a high level of Literacy almost 82% (who have apps on their mobile.)

The Social Media behaviour under study, 95% of the respondents reacted positively, that they will engage in a social media interaction.

Overall on the Social Media attitude, over 79% got positive rating about being on social.

Table 10: Use of digital or social in classroom

Faculty Usage of digital /social		If yes – <u>plarforms</u>	
Yes	32%	MOOCs	7%
		LMS	19%
		Blogging	5%
		Social	1%
Not done the above	68%	%	

32% said they have had the faculty use the digital / social in the classroom and of which 7% used MOOCs, 19% used LMS, 5% have used Blogging and 1% social to add to their classroom teaching.

The respondents felt that digital has helped immensely and they used the following keywords to describe the experience: Easy to follow, ready reckoner, interactive, immersive, engaging, and entertaining.

5. On attitude to digital learning

With respect to statement on attitude to digital learning, it is seen from the following table that digital learning is having a positive impact and the values are higher in terms of the process being experiential and facilitating learning in the classroom.

Table 11: Statements of the attitude to digital learning

Descriptive Questions	Mean	Standard Deviation	Rank
Digital Learning is more experiential and feel like being in a virtual corporate world	4.1	1.03117	1
Digital learning makes my job easier (assignments, preparing for case study or exam)	3.8727	1.03258	2
Human life cannot be fulfilled without the support of information technology	3.8545	0.83321	3
Digital learning facilitates the learning process and makes me to read more.	3.7818	1.00806	4
Digital has helped to broaden perspectives on the global business and integrate with other social medial tools	3.7455	0.73493	5
Digital Learning has helped in bridge the knowledge gap from theory to practice	3.7364	0.91549	6
Digital has helped in understanding human relationship in the connected world	3.6182	0.83481	7
Digital learning helps in critical thinking and problem solving	3.5273	0.84277	8

It has also helped bridge the gap in knowledge gap and makes human interaction more interesting and also helps critical thinking and problem solving. The interest levels are reflective of the impact that digital can have in the classroom and outside.

6. Conclusions & Recommendations

The study has revealed a positive result towards use of digital in the management education to help re-engineer the way the management education outcomes will be based.

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For example, assignments and discussions can be on a community page and the written assignments can be a Facebook posts replete with references and other media that can be used there. A video attachment to an assignment will make it rich engaging experience.

A WhatsApp group can be used to trigger learning or pre class discussion with the cases that can be shared on the group. And get the student to respond accordingly.

It is a judicious use of the medium that will ultimately give the result and there is no one size fits all approach and given the ease of use of all the above technologies that is being discussed the final outcomes may be studied.

The best use case is to trigger offline discussions on the WhatsApp / twitter or any other class room discussions that can be taken offline.

A study on organisational behaviour or management principles can be done studying the social profiles and their interactions online.