Leveraging Digital Technology for Bridging the Gap between Academia and Industry

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Abstract:
Information Communication Technologies [ICTs] are the power that has changed many aspects of the lives. The impact of the ICT on each sector of the life across the past two-three decades has been enormous. The way these fields act today is different as compare to their pasts. Across the past twenty years the use of ICT has basically changed all forms of endeavor within business, governance and off-course education!

The education is a socially oriented activity. It plays vital role in building the society. The quality education traditionally is associated with strong teachers having high degrees. Using ICTs in education it moved to more student –centered learning. ICT is an ever-changing subject. There will always be developments within the ICT that we need to be aware of and keep up to date with. Alongside there are other changes to the environment within which we work (concern with political, social, technological) which can also impact on the educational arena.

As world is moving rapidly towards digital information, the role of ICTs in education becoming more and more important and this importance will continue to grow and develop in 21st century .In this age of rapid change and uncertainty, teachers are need to adapt to change if they want to survive and keep pace with new methods and technologies.

There is need to anticipate new developments and prepare prospective teachers for their future role. Teachers should adapt current teaching skills and practice to accommodate the use of ICT. One may raise questions like what will be the long term impact of the use of these technologies into the classroom teaching. Another question being raised is: how teaching can be enhanced by using advanced tools/techniques? what kind of skills will teachers need to acquire in order to be effective in an ICT based learning environment? This paper discusses these important questions. The paper also focuses on different role of digital technology in academics, its current status and gap between academia and industry. .Also explains why teachers need to change their role. It discusses models of ICT implementation with the key role teachers.

- Keywords: Digital technology, digital divide.

1. INTRODUCTION:

The last decade of 20th century and the beginning of 21st century witnessed two important global events namely **Globalization & IT-revolution**.

"Globalization is a process of interaction and integration among the people, companies, and governments of different nations, a process driven by international trade and investment and **aided by Information Technology**." In the process of globalization along with the trade, Non-trade activities i.e. service sector also witnessed phenomenal growth. The one such service sectors is an "Education" & that too witnessed growth in the form of entering into tie-up arrangements amongst the universities across the globe so as to facilitate the process of identifying and utilizing the available human resources through interuniversity exchange program etc.

In this context, it is pointed out that the information technology has aided the process of globalization in the sense that spread of service sector like education across the globe has been facilitated with help of IT Revolution with dependency on Digital Technologies.

In the IT-Revolution, there has been increasing use of digital technology and today weare living in the age of digital era. Digital technologies have the power that has changed many aspects of the lives. The use of digital technologies on non-trade sectors like education is enormous & has become inevitable aspect while imparting an educational program today. These educational programs apart from class room lectures enter into various tie up arrangements amongst the universities as well as develop interface with corporate. The very aim of developing interface is to help

corporate in identifying human resources & utilizing these resources in the interest of corporate. It is needless to state that corporate sector is a main pillar of nation & contributes to the GDP of country. Obviously the quality of corporate depends upon effective utilization of human resources. The education sector along with digital technology plays a vital role in building these human resources. Thus, there is a strong association between education based on digital technology & industries. Moreover, in order to survive in the competitive world it has become necessary for industries to change their requirements of human resources with quality & efficiency as important criteria.

From above it is clear that, the technology, industry & the educational system have strong linkage & close association. The 21st century educational system aims to develop competency among students by providing functional based education through extensive usage of digital technology & thus provides efficient human resources required by the corporate to sustain in today's competitive global environment.

Thus frame of reference of the study undertaken lies in finding an answer weather digital technology employed in B-school educational system is effective to develop competent human resources for the corporate (applications) & that too according to the fast changing global requirements.

II. STATEMENT OF THE PROBLEM:

Against the above frame of reference & background of the study, in order to identify the problem of research, a pilot survey of selected B-Schools in Pune district undertaken through to light following important facts.

1. There has been increasing awareness to use digital technological aids while imparting functional based management programs.
2. The faculties who make use of such technological aids are not well conversant in its usage & even recipient students are ill-equipped with its operations leaving room for more effective usage i. e. there is sufficient scope for its optimum utilization.
3. The digital technology is fast changing & corporate as well as B-schools are finding a difficult to adapt them with such changing technology.

   In view of this the statement of problem lies in assessing the current practices followed by management institutes in the use of digital technological applications in imparting management education programs & exploring the possibility of its more effective usage.

III. RESEARCH METHODOLOGY

The research design is more of exploratory in nature. The primary data would be collected from selected B-schools in Pune with the help of the structured questionnaire administered to the representative sample. The secondary data would be collected from various journals on B-school education & also from research journals & web sites on IT & Digital Technology.

Digital Technology to make competent students:

Online learning environments are characterized as being systems composed of a diversity of
interrelated technological tools that enable teachers and students in higher education to develop acomplex dynamic of educational interaction based, in many cases, on a student-focused learningapproach. Internet based technology allows teachers to influence the management of the learningprocess, provide educational material, promote knowledge building, communicate with studentsand assess their learning. This technology also enables students to take an active role in theirlearning process by allowing them to access information and communicate from anywhere atanytime . These two specific aspects—the educational use of technology and theeducational interaction between teachers and students, and among students themselves—are twoof the main dimensions used to analyze the educational quality of online learning environments

Current scenario of .digital technology and Higher Education:

Digital technology has, till now, failed profoundly to break the barrier and start to be used routinely at higher education, the same way as it has done in offices around the world. The aim of this paper is to bridge the gap between technology and education, because the reasons for this failure are many and quite complex. Indeed, solving this problem is urgent as education is in the following predicament: (a) most of the teachers do not possess science knowledge deep enough in order to teach science and technology properly while (b) modern society needs individuals possessing a broad general education, good communication skills, adaptability, and a commitment to lifelong learning. ICT technology, on the other hand, is mature and cheap enough and it might, represent the only obvious solution to the science teaching problem and to lifelong learning scenarios. Despite all these, education and technology do not easily mix together. Although new software products are produced continually, teachers are

unwilling to put them into immediate use. This might be because the crucial bridge between education and technology is still missing. Teachers do not know what is available, while technology ignores teacher's needs. This paper is an attempt to bring these two sides closer. Issues faced by educationalists when trying to incorporate ICT in teaching and learning are presented herein. These should really be the main points on which designers of computer-based learning environments should focus on. The ultimate aim of the present study is to assist the understanding and mutual cooperation between system designers and educationalists, so as to improve product quality and in-class effectiveness.

The digital technologies have also generated many conflicting claims and predictions as to the present, and mainly future, effects that the Internet and World Wide Web might have on higher education environments. Some futurists tell us that the information and communication technologies produced an era of a 'digital tsunami' and are driving the restructuring of academe by forcing educators to realign and redesign their academic work dramatically, while many others contend that the use of technology has remained, and will remain, on the margins of the academic activities and is unlikely to change in any fundamental way the dominant campus cultures. On one hand, the emergence of the new technologies has broadened access to many new student clienteles and in such a way contributed greatly to social equity in higher education; and on the other hand, the continuous development of advanced and complex technological infrastructures widens the digital divide between developed and developing countries, and between rich and poor. Most academics have adopted eagerly the many technological capabilities provided by the Internet in their research activities, and, at the same time, many professors still feel reluctant to incorporate the technologies into their teaching. The digital technologies gave rise to many new providers of higher education and increased the competition in the academic global market, while we witness a growing trend of collaborations and convergence of academic practices enhanced by the new media. The World Wide Web encouraged 'digital piracy' and led to the enactment of stringent copyright and other intellectual property laws, while concurrently enhancing an open source movement that advocates the opening up of academic work and research to the public.

Conclusion:

Following are the recommendations to bridge the gap between academia and industry.

1. Academic institutions should develop systems and procedures to ensure that industry expectations are met without any compromise on academic aspirations. Initially, academia should conceive and take up short term, small budget projects which would instill confidence in industry and encourage it to start development projects. Industry also has to give a fresh look to its R&D efforts. This process must be guided by a complete shift from trading set up to a technologically- driven entrepreneurial set up. Academia should tilt the focus of basic research to applicative research. Research initiatives involving industry people with flexible formats could serve as the first step in this direction.
2. Venues should be created for close interaction starting from conceptualization down to commercialization. Setting up of technology incubation centers in close proximity of academic institutions could provide for fostering wholesome technology development.
3. Objective to bring Industry and Academia closer in terms of having productive discussion about the opportunities where they can work for mutual benefits. To explore the possibility of having customized curriculum as per the need of industry. To discuss about the current need of Industry in terms of Competent Manpower and how Academia can help them to bring desired skill set.
4. Industry should adopt institutes or few students of particular institute. Academia and industry together will provide special training to them to fulfill industry expectations.

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