Enhancing Knowledge through Current Trends in IT in today's competitive Era

Dr. Girish C
HOD, Department of Management Studies
CMRIT, Bangalore

Mrs Priyameet Kaur Keer Anand
Asst Prof., Department of Management Studies
CMRIT, Bangalore

ABSTRACT : A new revolution is in the making, similar to the industrial revolution that took place at the turn of the last century. Many economist, management experts and futurist agree that the world has entered and futurist agrees that the world has entered the new age of information; this new era is being referred as the information age. People /individuals have started realizing the importance of Internet and technology in their lives where it is not just a communication mode, but has become an enabling tool to perform various tasks over Internet like learning, networking , shopping, gaming in various forms of blogs , wikis etc. Gone are the days when people would gather information through newspaper or would go to the book shops to purchase books. Now everything is available at the click of mouse. The free flow of information is available without any geographical and national barriers. Information Age is thus knowledge based industrial revolution age, where new patterns of thinking are nurtured and where people learn ,gather share information and knowledge altogether in virtual space. This paper will focus on trends like online learning, blogs, wikis, mobile applications which are very helpful for an individual to grow and remain competitive in today's knowledge based economy. Through online learning, blogs, wiki, one can gather rich and vast amount of knowledge, ideas, material which might be helpful for an individual /people or an organization in order to remain competitive in globalized economy. This paper will focus on using information technology trends (i.e online and mobiles applications) in learning and how this can be helpful in overall development of all industries and the benefits of these emerging technologies .

Keywords: *Industrial Revolution, Internet, Technology, Online Learning*

INTRODUCTION: Information Technology is rapidly growing part of today's society. It offers everyone's life in many respects. Every human Endeavour is influenced by IT and the increasing rate at which it can be performed. Information Technology (IT) refers to the management and the use of information using computer based tools. It includes acquiring, processing, storing and distributing information. It is having impact on all trade industries and business in service as well as in manufacturing industries. The advances in information technology would result in remarkable decline in the costs of synchronization that would lead to new, concentrated business structure. It enables the business to respond to the new and urgent competitive forces by providing effective management of interdependence. In the near future businesses would be facing a lack and a redundancy of information called information glut. Information and Communication Technology allows users to participate in rapidly changing world in which work and other activities are increased transformed by access to varied and developing technologies. Emerging technologies and all new ideas, promise the possibility of significant benefits. In the initial stages of adoption, however, those benefits can be difficult to fully reveal. Real success comes only when the factors that drive a technology to grow are strong enough to outweigh any existing limitations. In the field of learning management, this frequently means user support or demand must be counted among a technology's strengths if it is to thrive. IT tools can be used to find, explore, analyze, exchange and present information responsibility and without discrimination. It tools can be employed to give users

quick access to ideas and experiences from a wide range of people, communities and cultures.

TRENDS IN IT

Online Learning: It is also known as e-learning, Electronic learning, and online learning. It is basically delivery of learning, training or education programme by electronic means. As the name suggests /implies "online" involves using the internet to provide learning materials. Online learning overcomes timings, attendance and travel difficulties. It is essentially the network enabled transfer of skills and knowledge. Content is delivered via the internet, intranet/extranet, audio or video – tape satellite, TV and CD-ROM. Structured learning activity that utilizes technology with intranet/internet-based tools and resources as the delivery method for instruction, research, assessment, and communication.

Figure 1: The online Teacher

Online Learning Delivery Formats

Over the past years ,there has seen significant growth in the number of students and educators engaged in online learning. Today, learners of all ages can experience a variety of instructional formats while participating in formal online educational activities. Below is a brief description of the four most common formats used to deliver online educational programs and services to students/learners of all the level.

Teacher-Led: This mode of online learning mirrors the role of a traditional classroom teacher in a virtual environment. This format usually makes use of a Web-based course management system or application such as Blackboard to create an online learning environment for students/learners . The online teacher provides the organization, direction, educational content and feedback for the students. The teacher makes assignments, leads threaded discussions, grades student work, establishes deadlines and administers quizzes and tests. The teacher also plays an active role in monitoring student progress and developing differentiated instructional strategies for students. This delivery format is one-hundred percent dependent on the use of technology tools such as e-mail, chat rooms, threaded discussions and pod casts to communicate and interact with students. Given the strong reliance on technology, this format requires both teachers and students to have strong computer and Internet skills.

Blended Instruction: Blended online learning is a balanced mix of traditional face-to-face instructional activities with appropriately designed online experiences. Teachers that engage in blended online learning often utilize a course management system as an extension of the physical classroom. This format leverages the communication benefits of a traditional classroom environment and links it to the power of Internet-based learning tools and resources. Educators utilize this format to expand and reinforce classroom-based instructional activities and to extend learning beyond the classroom walls and the normal school day, including evenings, weekends and scheduled breaks. This format can provide opportunities for students to work outside the classroom in virtual teams with

students from other schools to learn writing, research, teamwork and technology skills.

Teacher-Facilitated: Teacher-facilitated online learning enables an educator to work with one or more students to provide coach-like assistance with their online course or learning activities. Teachers can facilitate student learning through a combination of face-to-face interactions and exchanges using communication tools commonly found in most Internet-based course management systems. This form of delivery places an expectation on students to take significant responsibility for their own learning. A key role of the teacher facilitator is to ensure that students are engaged and making progress in their online course or activity. Teachers providing the facilitation usually know the subject matter well and can provide content-related instructional assistance to students. This delivery mode can be compared to some independent study activities used in high schools.

Self-Paced: A growing number of online educational products and services can be used by students with no teacher involvement. These products are often referred to as "self-paced" online learning experiences and they usually work best for highly independent learners who regularly demonstrate self-initiative and require little guidance, motivation and direction. Self-paced online courses and activities are often shorter in duration than semester-length courses and tend to focus on concentrated topics such as learning a specifi c software tool or program. Other examples include online test preparation tools and online remedial courseware. Two common shortfalls of self-paced online learning include: a) the inability of students to seek support, feedback and direction from an educator online; and b) the inability of students to be part of a learning community and benefit from interactions with other learners for support and assistance on collaborative projects.

BlOGS

The number of web logs ('blogs'), or online personal journals, is on the rise. While this rise may be due to human propensity for self-indulgent introspection, it could also be due to the many advantages of blogs. The prominent features of blogs, such as self-publishing, commentary, and archiving can help users develop literacy skills, critical thinking skills, and knowledge construction abilities. The easy-to-use template and free service of blogs suit educators' needs for feasible and self-maintained technological tools.

Blogs: a learning tool?

Blogs, a new mode of on-line communication in which users frequently post thoughts and commentary and interlink with each other, have received substantial attention from educational practitioners lately. When used in educational settings, blogs can facilitate thinking skills and knowledge construction.A large number of blogs have emerged and are emerging as a means to either promote discussion of various topics online, or support individual and group learning in classroom settings.The interaction with regard to a topic allows editors and users to create an on-line sense .

Blogs: a knowledge management tool?

Blogging could be used for knowledge management purposes. Knowledge management, or KM, may be thought of as a process for facilitating timely information retrieval (Stewart, 1997). As Oravec (2004) opined, due to the nature of blogs as forums for presenting related information and links to associated resources, blog readers can quickly locate filtered Internet content. She noted that issues of blogger credibility may compromise the perceived validity of the information, but this is outweighed by the inherent value of centralized access to thematically-related resources. However, Godwin-Jones (2003) and Powell (2002) caution that bloggers typically present information as a 'stream of consciousness', in keeping with the personal journal function of a blog, rather than structuring it to suit the information-gathering needs of the potential

audience. Furthermore, they note that there are few indices or search mechanisms for blog content, thereby undermining the timeliness of information retrieval. It seems that the use of blogs for knowledge management is still under-developed.

WIKIS

A wiki is a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language. Wikis are typically powered by wiki software and are often used collaboratively by multiple users. Examples include community websites, corporate intranets, knowledge management systems, and note services. The software can also be used for personal note taking.Wikis may serve many different purposes. Some permit control over different functions (levels of access). For example, editing rights may permit changing, adding or removing material. Others may permit access without enforcing access control. Other rules may also be imposed for organizing content.A wiki enables communities to write documents collaboratively, using a simple markup language and a web browser. A single page in a wiki website is referred to as a "wiki page", while the entire collection of pages, which are usually well interconnected by hyperlinks, is "the wiki". A wiki is essentially a database for creating, browsing, and searching through information. A wiki allows for non-linear, evolving, complex and networked text, argument and interaction. A defining characteristic of wiki technology is the ease with which pages can be created and updated. Generally, there is no review before modifications are accepted. Basically, because of the openness and rapidity that wiki pages can be edited, the pages undergo a natural selection process like that which nature subjects to living organisms. 'Unfit' sentences and sections are ruthlessly culled, edited and replaced if they are not considered 'fit', which hopefully results in the evolution of a higher quality and more relevant page. Whilst such openness may invite 'vandalism' and the posting of untrue information, this same openness also makes it possible to rapidly correct or restore a 'quality' wiki page.

MOBILE APPLICATION

We live in an age of information revolution. Desktop computers changes the way people work and the internet has made many things possible that were once thought impossible. The next logical step in once thought impossible. The next logical step in the advancement of technology was to move the convenience of the internet to mobile devices.

Following are the applications and services available.

1) Mobile Ticketing:

Tickets can be sent to mobile phones using a variety of technologies. Users are then able to use their tickets immediately by presenting their phones at the venue. Tickets can be booked and cancelled on the mobile with the help of simple application downloads or by accessing their portals of various travels agents or direct service providers.

2) Information Services:

A wide variety of information services can be delivered to mobile phone users in such a way as it is delivered to personal computers. These services include News Services, Stock data Financial records, Traffic Data and Information.

3) Mobile Banking

Banks now a day are exploring the use of mobile commerce to allow their customers to not only access account information, but also make transactions via mobile phones and other

MOBILE LEARNING WILL REVOLUTIONIZE EDUCATION

Continuous learning: Up until now, most people relegated "education" to a finite time in

their lives entering school at around five years old and attending school institutions all the way to university. Education is getting increasingly interspersed with our daily activities. On our phones, tablets, and PCs, we download and digest life or work-related articles with instructions on how to fix our appliances or how to use a new professional software program. Continuous learning will simply be a given for the generations of today's youngsters who are often literally born within reach of a connected personal device.

Breaking Gender Boundaries, Reducing Physical Burdens: In parts of the globe where, because of centuries of cultural practices, young women may still not be allowed to access a formal education, mobile learning promises to be able to put girls and women of all ages in contact with high-quality education privately and on their own time. Along similar lines mobile learning also helps bring educational material within the reach of people with extreme disabilities, who may not be physically able to get to a classroom or campus on a regular basis. In both of these cases, new freedoms can be exposed. As a result, these groups can take control of their educational and professional destinies.New opportunities for traditional educational institutions: The mobile learning phenomenon will not necessarily compete with well-established schools but actually complement and extend their current offerings. Traditional institutions could also help mobile learning solutions scale quickly by leveraging their vast and established networks of students, faculty, and alumni. A revolution leading to customized education: The key for successfully channeling the m mobile learning revolution will not simply be about digitizing current educational systems. The real appeal will be allowing people to choose their own paths, leverage their talents, and follow their passions and callings. Mobile learning has much business potential, but the most exciting and rewarding aspect of these solutions is that students of any age or background might have the chance to pursue knowledge that is meaningful, relevant, and realistic to achieve in their own lives.

REVIEW OF LITERATURE

 A literature review is a text written by someone to consider the critical points of current knowledge including findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work. Also, a literature review can be interpreted as a review of an abstract accomplishment. Most often associated with academic-oriented literature, such as a thesis, a literature review usually precedes a research proposal and results section. Its main goals are to situate the current study within the body of literature and to provide context for the particular reader. The literature review will throw light on the emerging technologies.According to Cober et al. (2000),online learning are time-efficient, and customizable allowing for quicker and more meaningful information exchange. According to (Drum, 2010) it can provide platform for growth can help in reducing costs and build two-way communication .

BACKGROUND

With the extensive use of the internet, these technologies are on the forefront whether it is for entertainment, personal work or making professional contacts. People seeking information have ample platform, as they are extremely easy to use and learn.

 In online and mobile learning the people and netizens can broaden their horizons , instead of traditional ways like four walls of classroom teaching. Such a way of learning is also cost effective.

RESEARCH METHODOLOGY

It is the systematic process of collecting and analyzing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested.
Definition: "It is an endeavor to discover answers to intellectual and practical problems
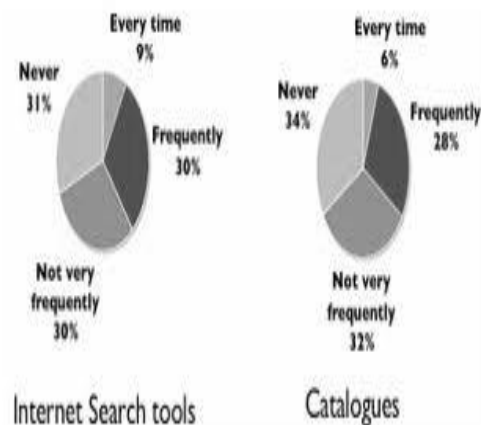
through the application of scientific method" - Redman

Data Collection Method:

Data has been collected through secondary data.
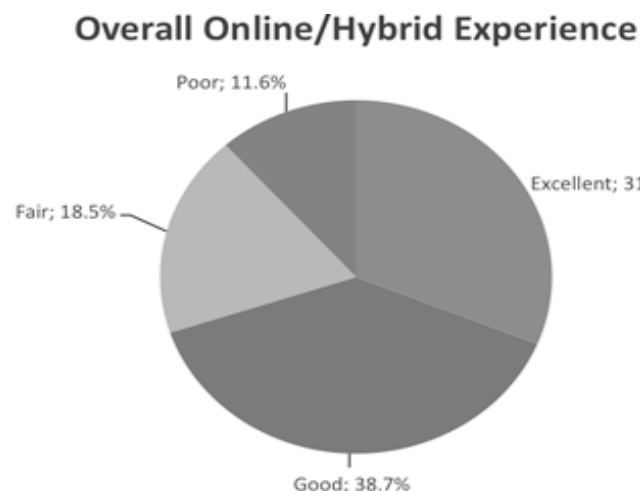
Secondary Data: Web search, Document Review.
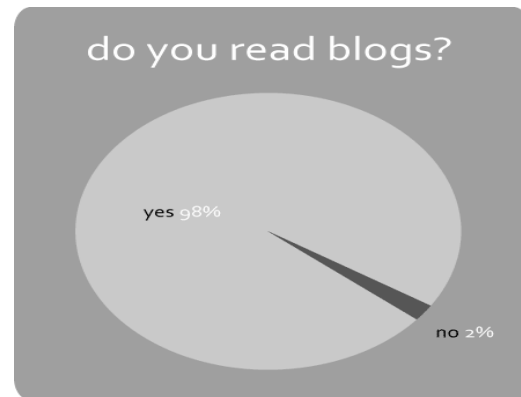
Analysis and Interpretations

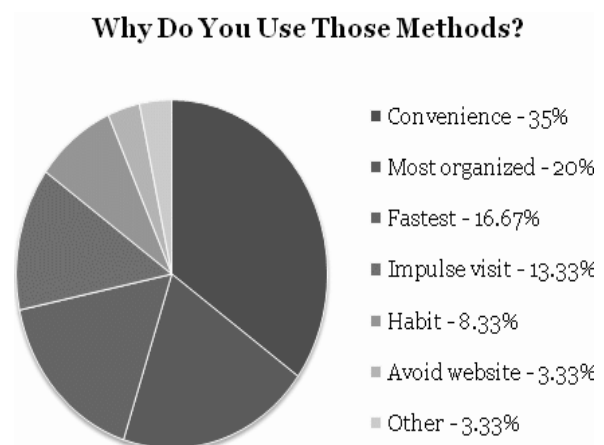**Usage of online learning/E –learning or any internet tools for learning purposes**

Internet Search tools   Catalogues

Experience while using e learning /online learning,

Overall Online/Hybrid Experience

Read blogs for enhancing your knowledge?

Latest methods in your day to day to day life.

Why Do You Use Those Methods?

- Convenience - 35%
- Most organized - 20%
- Fastest - 16.67%
- Impulse visit - 13.33%
- Habit - 8.33%
- Avoid website - 3.33%
- Other - 3.33%

Benefits of Emerging Technologies:

Conventional or manual or traditional learning takes a lot of time for the Younger Generation as information is old and not updated frequently. However , these emerging technologies saves a lot of time and provides latest and update information with diagrams etc.. It provides wider scope , choice and opportunities for both, The cost is low, it saves time, money and energy. It provides round the clock services. It is win-win for both employers and employees.

Challenges associated with Emerging Technologies:

It has a number of disadvantages, particularly in the Indian context. In spite of its wider accessibility and speedy delivery, applications that match your requirements are often hard to find. Since online is easy, there is a glut of places and areas where internet technologies are not used.

Summary of Findings

The enormous growing of the Internet and the hype of Web 2.0 applications, especially online and mobile learning, the landscape is changing. The use of technology in learning is a new issue and a challenge for the students as well as the internet users. As this is Information Age knowledge based industrial revolution will be there where new patterns of thinking will be nurtured and where people can learn ,gather , share information and knowledge altogether in virtual space.

CONCLUSION

The Internet has undoubtedly affected many aspects of our daily lives. It is changing the way we communicate, gather and disseminate information, conduct business, shop for goods and services, and manage our personal affairs. There is no facet of life that is unaffected as Internet penetration rates, defined as the ratio of the regular Internet users to the total population of the geographical area, have skyrocketed over the past decade. In recent year, the evaluation of communication via networking has given human being the ability to improve the communication faster and easier. The rapid development of WWW and IT has tremendously changed the way we live for the past decade. Today, WWW has an important role for other organizations or individuals to share and give information via the internet networking. This technology makes the process of giving and sharing information more quickly and reliable to do in any place and time. "To maximize effectiveness, education in the 21st century has to be active, engaging, and customized. Students must have universal access to mobile technologies that will enable critical thinking, differentiation, and problem solving. It is belief that the technology in meets these needs."

REFERENCES:

1. Blood, R. (2002). Weblogs: a history and perspective. In J. Rodzvilla (Ed.), *We've got blog: How weblogs are changing our culture* (1 ed., pp. 7-16). Cambridge, MA: Perseus Publishing.

2. Boyd, S. (2003, May). Are you ready for social software? *Darwin Magazine*, Retrieved January, 27, 2004, from http://www.darwinmag.com/read/050103/social.html

3. Bruner, R. (2004, April 5th). Blogging is booming. *iMedia: Viral Marketing*. Retrieved April 25th, 2004 from http://www.imediaconnection.com/content/3162.asp .

4. Carlson, S. (2003). Weblogs come to the classroom. *Chronicle of Higher Education, 50*(14), 33-34.

5. Carpinski, R. (2003, April 14th). Corporate blogs make personal connection. *BtoB Online*. Retrieved April 25th, 2004, from http://www.btobonline.com/cgi-bin/article.pl?id=10831 .

6. Edvardsson, B., Johnson, M. D., Gustafsson, A., & Strandvik T. (2000). The effect of satisfaction and loyalty on profits and growth: products versus services. *Total Quality Management, 11*(7), 918-929

7. Fang, X.-d., & Liu, S.-g. (2004). Blog ji shu zai jiao yu ling yu di ying yong yan

jiu. [Blog technology and its application in educational domain.]. *E-Soc Journal, 36*, Retrieved February 1, 2004 from http://mail.nhu.edu.tw/~society/e-j/36/36-14.htm .

8. Mobile Learning in 21st Century ,article in Newspaper Deccan Herald on 24th April ,(Priyameet Kaur keer)

9. EXLIR 2012 International Conference, Organized ny Datta Meghe Institute of Mangement Studies, Nagpur.published article on Online Learning.(Priyameet Kaurkeer)