

DIGITAL WORLD – OBSTRUCTIONS AND SOLUTIONS

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ABSTRACT

The world at present is hovering around digitization. The word digitization stands at the upper edge. To ignore it, means to deprive one of the expanding world of opportunities. In contrast to it one still finds oneself amidst lot of obstructions - obstructions that sometimes erupt in the form of financial crunch, sometimes in the sluggish attitude of the staff, sometimes in unwillingness on the part of worker, sometimes in traditional attitude of the seniors, sometimes in impediments from government and sometimes in the technology itself. Whatever be the problems one cannot avoid this most essential aspect of life. Rather one shall have to find the solutions, which too are not difficult to find. One should resolve to adopt the concept and only then they will find that nothing is impossible to usher in the new era of immense potentials.

DIGITAL TECHNOLOGY

Digital Transformation of text is an evolutionary process heavily influenced by social and cultural factors. Digital technology has potential for change that far exceeds that of print technology but enduring cultural heritage of print is impeding the radical potential of digital text. Publishers around the world are implementing new production workflows based on structural mark up and cross media publication. By introducing digital publishing, publishers want to enable their text to be distributed in print, as well as e-books or e-journals, on the web through e-learning applications.

When we pick up a pen and write on a piece of paper we store our thoughts on this paper for others. Written texts are far more durable and portable than oral representations.

DIGITAL WRITING

Typewriting and digital writing seem to be similar as far as we strike the keys and create words. Typewriting is a process of applying ink to paper and making the text readable. In digital writing by striking the keys, we send the signals to the computer. These signals are converted and handled by CPU. These are temporarily stored in main memory. Then here new signals are created and transported to the display unit. The text is represented in visual, readable way on the screen. All this happens through bits. The units of text are stored in bits patterns (usually in the codes of ASCII or Unicode) in a file. When writing is finished, the whole text is stored as a collection of bit patterns in a mass storage system-often a hard disk. The digitally stored text can easily be fetched from memory and loaded back to computer. In the digital form the text can be edited, rearranged and improved.

The long lasting lead type setting has vanished. Offset desktop publishing and other digital technologies have transformed the entire printing process i.e. graphical and typographical practices have been built into digital applications, typing, adding graphics and illustrations, photo editing, page styling etc. are done in software programming. Digitization has made print production far more efficient. It is because of digitization that we find beautifully illustrated literature in print form in the market.

Digitization has changed the entire distribution system. As bits pattern can be stored within computers, digital text can be transported between computers over networks (internet). Distribution of text in digitization is very simple, while in physical text it is too complicated. The Internet has become completely a way changing information. In this distribution system documents are linked in a hyper textual fashion forming an intricate web of digital documents. Once linked up and placed on the web, any computer connected to the Internet can access a digital text. The digital network communication is not restricted by space and material limitations, which we find in printed –paper. In digitization, the stored bits patterns of digital text are converted into electromagnetic pulses (as in the telephone system), light system (as in fiber optics) or radio waves in wireless network and transported around the world in seconds. If a book is taken out of store it vanishes entirely but stored in digital text keeps on remaining there. Here digital text can be copied over and over again without loss of data or quality.

PAST AND PRESENT

Digital transformation of text seems to be somewhat slow and gradual. Digitization started in 1850 and ASCII was adopted in 1960s. Layout facilities were developed in 1980s. In 1990 the web arrived with this abundant print material was digitized. Here we see that a print material becomes the sources of digital world. Print system seems to be long lasting. The reasons may be numerous. Continuous paper reading excels. It is because digital reading devices are expensive in respect to magazines and books publishers earn most of their money from the paper-based documents. Text versions prepared for print in page layout applications are prime source for converted structured documents and later cross-media text publication. What to talk of this factor, economic competition, digital rights management system and readers' behaviors too are major obstructions in the pace of digitization. The reader's wishes a simple procedure of purchasing e-books. Besides a chaos surrounding formats, there are complicated on line payment system and several incompatible DRM systems. In the digital world texts can be copied and distributed endlessly without loss of quality. To ensure the income of writers and publishers some kind of copy protection is needed, however, in recent, US and EU legislation has come into force for "content owners". In current DRM system the contents of e-books are strictly protected by technological obstructions, which deprive readers and buyers, of privacy, protection and undermine established owner rights to lend or sell books or to multiply copies fro private use of safe keeping. Many scholars and politicians claim that the new DRM system violates democratic values.

Besides format and DRM issues the development of e-books markets is heavily dependent on readers' behavior. Over the centuries, the printed book has developed into very sophisticated reading technology. Acquisition of classics, encyclopedia, and day-to-day controversial documents have been the status symbols of the masses. To compete with printed books, e-books must be affordable and free from hindrances.

The advantages of e-books must be improved so that these may dominate the printed versions. The publishers of e-books and e-journals are adopting the middle path. They are resorting to both the systems for their economic reasons. Still digitization is going to be the need of the hours because e-books eliminate the need of the papers. These are read on the screens. So there is no need of printers, book distributors, book stores, transportation and at the most middlemen.

Digital Libraries contain digitized works accessible via Internet. **Miska** views the traditional library as evolving into a 'personal space library' that excludes many of the characteristics and values of the traditional library and which is configured for a single individual or small group. **Wallace** takes Internet as an anasthic and individualistic. It is not based on quality resources. Fine-grained searching-searching limited to subject, editor, year of publication, author is not possible. The concept of control is absent on the Internet. The documents available today may vanish tomorrow. There is constant change on the Internet as his guide. The individual sitting in his home cannot consult the librarians. The digital library is fraught with number of problems such as quality problem, authority problem, Legal problem, fluidity, preservation problem, authenticity problem, service problem, organizational problem and political problem.

Ross Atkinson calls for the librarian to lay claims to the "control zone"-demarcating a single distributed digital library created by the academic library community and based on principles of the traditional research library. Digital library must have the properties of a traditional library such digital libraries would concern themselves with the currency, accuracy and integrity of information sources under the control of the librarians of digital world.

CONCLUSION

The main problem in Indian context is basic weak infrastructure (unstabilized power, slow and unreliable telecommunications, hostile climate condition) and huge starting cost (both direct, in terms of connecting time, down-loading charges and indirect in terms of manpower, controlled environmental space). All this requires unstinted support of decision makes. To sum up digital libraries in India could be regarded as an unavoidable necessity.

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