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INFORMATION DESIGN: IT AND COMPUTING TOOL FOR EDUCATION TO GOVERNANCE-FROM HISTORICAL PERSPECTIVE TO EMERGING SCENARIO

Prantosh Kumar Paul

FBAS, Bengal Engineering & Science University, Howrah, West Bengal, India Email: prantoshkpaul@gmail.com

ABSTRACT

Information Design is a kind of procedure or mechanism in which priorities are provided in better information representation. Here, logical representation plays an important role. Information Design is actually a kind of skill as well as practice which is talks about better information representation for easy and effective use of information, knowledge and similar content. Information Design consider as synonym of Graphic Design. For complex data and information arrangement, Information Design plays an important role. Initially, the term and concept of Graphic Design was developed by the Graphic Designer community. Though after its conceptual development, several IT and information expert started research on this. This paper is talks about Information Design; its characteristics, basic application and role in IT and computing community.

Keywords: Information, Information Technology, Computing, Information Design, Information Effectiveness, Information Architecture, Information Sciences, Information Uses, Information Divide, Information Literacy

INTRODUCTION

Information Design is talk about arrangement of simple or general information in general way. Though, it is more useful in the complex data or information representation or arrangement [08, 32]. Unstructured and scattered data and information are also possible arrange efficiently with the help of principles of Information Design. Information Design began as subset of or synonym for Graphic Design is considered as the visual display of quantitative information which was published in the year 1982. Information Design talks about textual and diagramming information arrangement for better information uses. Many cases information are not utilized and uses just because of less awareness on information literacy and availability of information. The healthy arrangement of information is many ways responsible for solving such problem, efficiently and effectively. Information Design today many ways depends on healthy IT and computing practice [09, 10].

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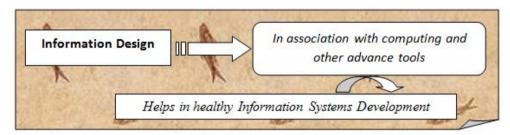


Fig.1. Information Design and its ultimate benefit

OBJECTIVE

The main aim and objective of this study is includes:-

- To learn basic about Information Design and Interaction Design;
- To find out main features and characteristics of both the domain;
- To trace the historical root of Information Design at a glance;
- To find out contemporary application and utilization of Information Design;
- To find out main challenges and issues of Information Design and Interactive Design at a glance.

Interactive Design and Information Design: Some Aspects

Interaction Design is actually a study and practice area of Information Design with interactiveness. Interactive Design and Information Design both are complementary and supplementary to each other. Interactive Design is applicable in general and other electronic products and services, and even organizations [11]. For better Information Design better interactiveness are very much essential; thus interactiveness is required.

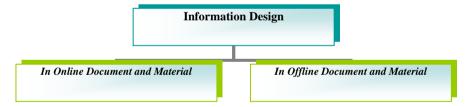


Fig. 2. Depicted the main types of Information Design based on utilization/domain

Textual Information Design not only limited to only Information Design; it also includes data, statistical and numerical design. However in broad perspective, Information Design is also talks about video, audio design. Thus proper textual, information, audio and video content arrangement also needs to handle by the Interactive Design [08, 13].

Information Design is applicable in the computer interface design, mobile interface design, website design, ATM Interface designing and so on and in all these places, interactive design also plays an important role. Better Interactive Design in Information Design improves the quality and efficiency of particular facts and objects. Interactive Design improves better usable and clear Information Design; though indirectly Information Architecture play an important role for the betterment of interactive design and Information Design, both these

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emerging aspects of Information Sciences helps in products, services and object development better way in relation to information.

Information Design: Some Historical Perspective

Information Design the concept was actually not new; though the term emerged during the last two decades of 1900's. Initially, Information Design term was used in 1970 in London Graphic Design consultancy pentagram as graphic design for displaying information effectively. The term Information Design emerged as multidisciplinary area of study in the 1970's. Several research paper and article was published during the 1970's and in 1979 some of them are consolidated manner published in the Information Design Journal.

Though the application and utilization of Graphic Design for information purposes brings one new domain called Information Design. Out of so many Information Design experts, some of them are Easterby and Zwager [1984], Duffly and Waller [1985], Schriver [1997], Edward [1982] and so on [15, 32].

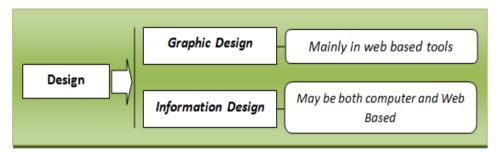


Fig.3. Depicted role of design in Information world

The term Information Design was initially concerned with diagrammatic and display of quantitative information. In USA, some Information Professionals used the term 'Document Design' instead of 'Information Design'. Traditionally it is treated as technology and engineering are mainly responsible of the evolving Information Design but it has sophisticated historical root [10, 12]. Practically the proper relationship between Information Designer and their client is also different from that between Graphic Designer and their client.

Information Design

Information Design is applicable in several places and domain. Now look these one by one:-

- In designing and development of information product such as book, journal, manual of any product need to attain the principles of Information Design;
- Design and development of sign in the public places such as airport, road direction, transportation;
- Some payment/ bill such as telephone bill, electric bill may also use Information Design principles;
- Operational instruction for industrial machinery, electronic gadget such as mobile, IT, Television and other need to use Information Design;

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- Use of mobile screen interface, computer interface are also to use Information Design for healthy and cost effective uses[14, 32];
- Design and development of website and webpages of an organization, service providers, web 2.0 sites [such as facebook, orkut] also need to design content and thus here it is possible to use Information Design;
- Design and development of SMS, E-Mail systems and its style also depends on Information Design;
- Using flowchart, diagrammatic information representation needs the affiliation of Information Design;
- In Graphic design, multimedia and general applications Information Design is useful:
- In information visualization; which includes creating graphic display's which turn data into lucid information[10];
- In guidebook, directories, dictionaries, Information Design play an important role;
- Knowledge Visualization, Cartographic Map, Geo-Spatial Information Analysis; Information Design is possible to use;
- In epidemiology, new epoch notation painting information visualization and Information Design is possible to use[09];
- Governmental policy making, health information analysis and design and similar activities needs the help of Information Design;
- Game Designing and development, social sites such as facebook, orkut and other professionals are depend on healthy Information Design principles[14].

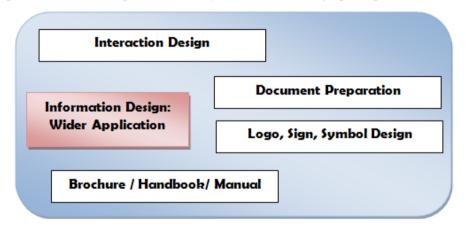


Fig. 4. Depicted some popular application of Information Design at a glance

FINDINGS

• Information Design is one of the important term which helps in better information interaction utilization;

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- Information Design improves better information interaction and information architecture systems;
- Interaction Design may be for manual objects for computational or electronic objects;
- Awareness on Information Design and similar facet is very much limited in most of the cases.

SUGGESTION

- Better and healthy Information Design principles may brings Information-People-Interaction:
- Use of Information Design principles is needed in manual documentary content management and development process;
- Information Design is an academic specialization may be started in MSc/BSc-Information Science programme.

CONCLUSION

Interaction plays an important role for overall utilization of content, information and similar facet. It is essential to utilize Information Design principles for better computational systems such as computer, websites, ATM interface, Mobile Interfaces to conventional information and knowledge medium such as books, handbook, directories, reference material and even services such as information services, reference services and referral services[02, 13]. The Information Design may help in sophisticated Information development many ways.

REFERENCES

- Cohen, E. B. (2004). Applying the Informing Science Framework to Higher Education: Knowledge Development, Management, and Dissemination. Konferencja Pozyskiwanie wiedzy i zarządzanie wiedzą (Proceedings of the Knowledge Acquisition and Management Conference) May 13-15, 2004 Kule, Poland.
- 2. Cohen, Eli B. and Nycz Malgorzata (2006). Learning Objects and E-Learning: an Informing Science Perspective. Interdisciplinary Journal of Knowledge and Learning Objects Volume 2, 2006
- 3. Martin, S.B. (1998). Information technology, employment, and the information sector: Trends in information employment 1970–1995. Journal of the American Society for Information Science, 49(12), 1053–1069.
- 4. Michael Buckland and Ziming liu (1995). History of information science. Annual Review of Information Science and Technology vol. 30: 385-416.
- 5. Prantosh Kr Paul, Kalyan Kumar "Green Computing Vis-à-Vis Information Science Indian Perspective" International Journal of Computer Science and Engineering Systems, 06(04), October 2012, Page-167-171, CSES International, ISSN 0973-4406, July-Dec, 2012, Serials Publications, New Delhi, India

NATIONAL MONTHLY REFEREED JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT www.abhinavjournal.com

- 6. Prantosh Kr. Pau1, KL Dangwal, (2012) "Green Computing: Opportunities and Problems in the perspective of Developing Countries" Asian Journal of Applied Science and Technology, 01(04), Page- 15-19
- 7. Paul, Prantosh Kumar, Dipak Chaterjee and Bhaskar Karn(2012) "Cloud Computing: Issues and challenges with probable solution in Indian Perspectives" *IJIDT* International Journal of Information Dissemination & Technology, MMU, Ambala. Vol-2. No-2.
- 8. Paul, Prantosh Kumar, Dipak Chaterjee and Bhaskar Karn(2012) "Cloud Computing: emphasizing its possible roles and importance in Information Systems and Centers" in IEM/IEEE sponsored international conference proceedings (IEMCON-12). P-345-348. [indexed, abstracted in Google Scholar[USA], Cite Ceer, EBSCO]
- Paul, Prantosh Kumar, Dipak Chaterjee and Bhaskar Karn(2012) "Information Science Education and Research: emphasizing contemporary Indian scenario- an overview" in IEM/IEEE sponsored international conference proceedings (IEMCON-12). P-349-353.
- Prantosh Kumar Paul , Dipak Chaterjee , K V Sridevi , K L Dangwal , (2012) "Computer and Information Science (CIS) Education in the Universities of India: Emphasizing Central Universities – A Brief Study" in International Journal of Marketting and Trade Policy , Page-277-284, July-Dec, 2012, ISSN-0975-6132
- 11. Prantosh Kr Paul , K V Sridevi, (2012) "Information Science (IS) Education: Challenges, Issues and Opportunities in Indian context" International Journals of Mathematics and Engineering with Computers, , 03(02), Page-87-93, ISSN-2230-8911,
- 12. Prantosh Kr. Paul, (2012) "Information Science and its increasing scope and utilization in Geo Sciences for sophisticated Sustainable Development" International Journals of Neural Networks and Applications, ISSN-0974-6048, 03(02), Page-85-89
- 13. Prantosh Kr. Paul, (2012) "Information Science (IS) and Information Technology (IT): Fundamentals emphasizing Comparative Study" International Journal of BSP [IJBSP], 03(01), ISSN-0975-8186, Page-33-37
- 14. Prantosh Kumar Paul, Ashok Kumar, Dipak Chaterjee (2012) "Health Informatics and its Practice: Emerging Domain of Information Science-Indian Scenario" in Current Trends in Biotechnology and Chemical Research, 02(02), Page- 83-87
- 15. Paul,Prantosh Kumar, D Chatterjee, M Ghosh(2012) "Medical Information Science: Emerging Domain of Information Science and Technology (IST) for sophisticated Health & Medical Infrastructure Building An Overview" in International Scientific Journal of Sports Science 01(02), Page-97-104, ISSN-2277-2804
- 16. Reichman, F. (1961). Notched Cards. In R. Shaw (Ed.), The state of the library art04(01), pp. 11–55). New Brunswick, NJ: Rutgers, The State University, Graduate School of Library Service.
- 17. "Berners-Lee on the read/write web". BBC News. 2005-08-09. http://news.bbc.co.uk/2/hi/technology/4132752.stm. Retrieved 2012-08-05.
- 18. DiNucci, Darcy (1999). "Fragmented Future" (pdf). *Print* 53 (4): 32. http://darcyd.com/fragmented_future.pdf.
- 19. Idehen, Kingsley. 2003. RSS: INJAN (It's not just about news). Blog. Blog Data Space. August 21 OpenLinkSW.com

NATIONAL MONTHLY REFEREED JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT www.abhinavjournal.com

- 20. Idehen, Kingsley. 2003. Jeff Bezos Comments about Web Services. Blog. Blog Data Space. September 25. OpenLinkSW.com
- 21. Knorr, Eric. 2003. The year of Web services. CIO, December 15.
- 22. "John Robb's Weblog". Jrobb.mindplex.org. http://jrobb.mindplex.org/2003/08/16.html. Retrieved 2011-02-06.
- 23. O'Reilly, Tim, and John Battelle. 2004. Opening Welcome: State of the Internet Industry. In San Francisco, California, October 5.
- 24. Sourav Maitra, A C Mondal, 'Web Technology Enhancement: Accomplishments and future Research Direction in Proceedings of NaCCS-2012, ISBN-978-93-80813-18-9 Page-236-241
- 25. Rupose some, 'A survey on Web Data Mining and Future Directions in Proceedings of NaCCS-2012, ISBN-978-93-80813-18-9 Page-20-23
- 26. Waydande, H.S. and Medha V Joshi, "Web Design for Librarians in Science and Technology" in the Twenty First century in T Ashok Babu (Eds.) Vision of FLIS, ISBN-978-81-309-0816-8, Page-144-148.
- 27. Saracevic, T. (1996). Relevance reconsidered. Information science: Integration in perspectives. In Proceedings of the Second Conference on Conceptions of Library and Information Science (pp. 201–218), Copenhagen, Denmark: Royal School of Library and Information Science.
- 28. Saracevic, T. (1975). Relevance: A review of and a framework for the thinking on the notion in information science. Journal of the American Society of Information Science, 26(6), 321–343.
- 29. Saracevic, T. (1979a). An essay on the past and future of information science education. I. Historical overview. Information Processing & Management, 15(1), 1–15.
- 30. Saracevic, T. (1979b). An essay on the past and future of information science education. II. Unresolved problems of 'externalities' of education Information Processing & Management, 15(4), 291–301.
- 31. Vickery, B.C., & Vickery, A. (1987). Information science in theory and practice. London: Butterworths.
- 32. Wersig, G., & Neveling, U. (1975). The phenomena of interest to information science. Information Scientist, 9, 127–140.
- 33. White, H.D., & McCain, K.W. (1997). Visualization of literatures. Annual Review of Information Science and Technology, 32, 99–168.
- 34. www.en.wikipedia.org