

‘Information’ as Term: Historical Root, Present Focus and Future Potentials with Technologies

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Abstract

Information is one of the important term now days. Today each and every one; including human being, organization, institutes are directly and indirectly associated with Information. The role and value of Information is increasing day by day. Virtually for centuries the societies in their various stages and development have prospered on the basis of Information and Knowledge. Information-The term is actually deals with Latin roots and Greek origin and was readily deployed in empiricist philosophy because it seemed to describe the mechanics of sensation objects in the world inform the senses. Virtually, due to several input, Information has reckoned as a driving force for all human developments. This paper presents a conceptual overview of information which includes origin and historical aspects powered by information. Paper lastly highlights some aspects of information; compare to data and knowledge, which we deemed equal many times.

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Keywords: Information, Knowledge, Data, Information Studies, Information Science, Information History, Future Trends, Knowledge Management Trend Report, Instruction, Character

Introduction

According to Wikipedia, the word ‘Information’ is presented by Capurro and Hjørland. Reference or “formation or modeling of the mind or character, training, Instruction, teaching” date from the 19th century in both English and other European Languages. In the transition from middle ages to modernity the use of the concept of Information reflected a fundamental turn in epistemological- form” giving a from to matter to “Communication something to some one”. Information is actually processed Data and it convey some meaning. Virtually, this is combination of some Data and Word and number; the broader circle of Data. Information synonymously treated same as knowledge but it is deals with lower position than knowledge. Information Carries of instruction and healthy and directly understandable word composition. Virtually, though the growth of new knowledge has been slow, incidental and sporadic in the beginning but in later years, Information treats as wealth and same as power.

Today we are using so many things as road, aero plane, bridges, TV Mobile, Satellite, and so on; directly and indirectly as such activities and development was made by Information and their healthy and interesting role [34, 17].

Objective

The main aim of this conceptual paper is includes; but not limited to as follows:-

- To learn basic about Information; including planning, characteristics and nature;
- To find out historical root of Information and some allied domain such as Data and Knowledge;
- To learn about Information and its convention, contemporary and emerging role in changing scenario;
- To find out role and values of information in contemporary society which includes Business, Education, Mass- Communication, Population, Government and other domain;
- To learn about Information and Technologies; their integration and Future Potentials;
- To learn some domain and knowledge cluster; directly and healthy related with Information and Knowledge.

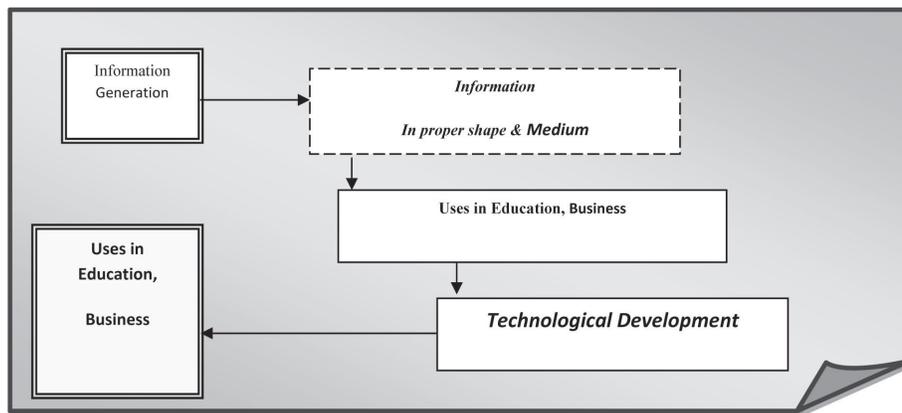


Fig. 1: Information & Technology & Development

Information: Meaning

Information is processed data which convey some meaning. The main difference between data and Information is that, data convey only some words or characteristics; while Information Processes such data and combindly come as an important meaning conveying aspects. Information can be represented and it can be changed it is

transitory in nature. Information more clearly can be identified, described, represented in information systems for different domains of knowledge. Combination of Information is called Knowledge; which reflects sound meaning and how and why on a particular topic or domain. Information has valuable role and this is play an important role for Research and development activities. Practically the input and output of the domain is information. Research is fully depends on Information; thus more research means more Information creation [01, 02, 17, 19].

The term information first came to existence in USA, as an alternative of documentation. Information is actually nothing but the collection or we can say accumulation of statements, fact and figures idea what ever it may be and that are organized in a systematic manner [13]. This systematic organization can be done through or by the way of reasoning, logic, ideas etc [05]. information actually has several facets like-

- information is a flow of message.
- information is transitory by nature.
- information inherits meaning.
- information is a particular.
- information is fragmented.
- information is dynamic.
- information is timely.
- information is purpose oriented.
- information is quantitative.
- information can be recorded.
- information needs person's affiliation.
- information is descriptive.
- information can be abstracted.
- information can be surrogated and so on.

Historical Root

Information history actually an important domain related to library but it is the broader field than that. Virtually, there are important links between the modern information age and its historical procedure. There are so many domain, component and things directly and indirectly influence this is an important domain. Virtually, following components helps to build information and thus history of the following directly may relate with historical root of Information:-

- History of Print and Written Culture

- History of Libraries and Librarianships and Documentation;
- History related to book development, Publishing history and history of reading and so on;
- History of Information and Knowledge Society;
- History of Information and Knowledge Economy;
- History of some information related domain such as Information Studies, Information Management, Knowledge Management and Information Systems;
- Apart from domain mentioned above some more domain are also indirectly associated with the Information and related activities or fields; these are Information Science and Technology, Information Technology, Computer Engineering, Communication Engineering and so on[05, 06, 07,22];
- The History of Contagious areas like- Communication history; including Information Policy and Information Architecture;
- The History of Information as social history with emphasis on importance of general and computing based Information Networks.

Virtually, in modern era, most important influences is actually on Information Theory developed by Shannon and Weaver. Today we can see use of Information in several subject and domino especially Computer Science, and Electronics and Communication Engineering but many of the Information Scientist not interested to

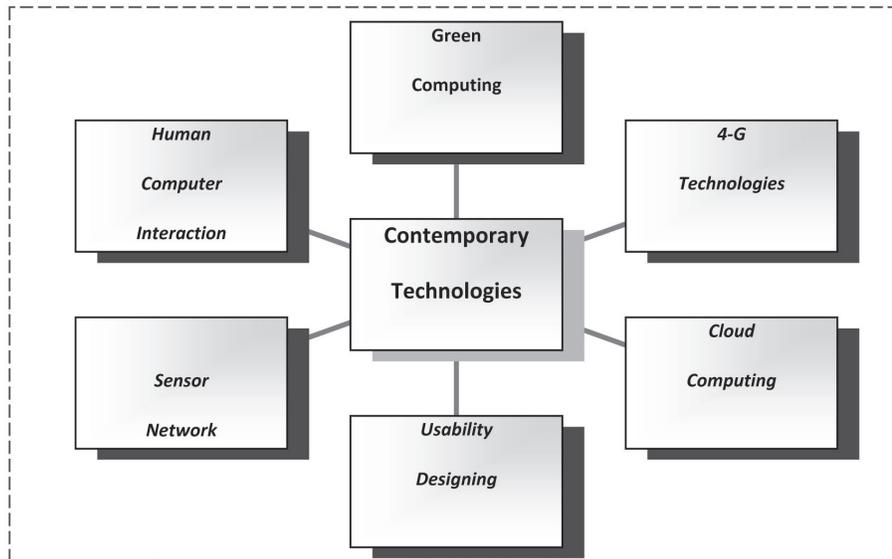


Fig. 2: Contemporary Technologies

fall such matter as Pure Information. Machlap, 1983, himself disagree with the use of concept of information in the context of signal transmission, the basic sensor of information in his view a referring “to telling something or to the something that is being told. Information is addressed to human minds and is needed by human minds” on person who involved and speaking Information. Information can be identified, described, represented in Information Systems for different domain of knowledge. Before origin and popularization of ‘Information’ as a term ‘Documentation’ was emerged but from 1962 several organization changes their nomenclature from ‘Documentation to Information’ among these, American Institute of Documentation is most common which introduce American Society of Information Science/ ASIS instead of American Institute of Documentation or AID[09, 11, 18, 22].

Information and Present Role

Information plays an important role for centuries the societies in their various stages of development and progress. Information is needed and valuable for almost all type of organization and institutes regardless of Government or Private, Profit Making or Non Profit Making, Small or Large. Virtually, Information is important fact and tool for everyone; for human being; for our family; for establishment and so on. Some of the role and contemporary application of information are as follows:-

In **Business**: in Business Information play an important role. For Product Designing to Development Information is must, marketing of product/services, supply chain management, customer’s feedback depends on Information. Apart from these, In-house document and information also associated with healthy and sophisticated information management tools; In business most organizations are some recent tools like- Data Warehousing, Data Mining, ERP and Business Intelligence and so on.

In **Government**: Government is also largest stakeholder of Information user. Government’s input as well as output is actually Information. Government’s each and every works depends on Information; work related to Ministry’s, Departments and organizations are purely depends on Information. And the amount is increasing day by day due to several output and mainly statistical data output. Government of most of the country’s today builds sophisticated information and document management tools for proper Information collection, selection, organization, processing, dissemination and so on. Today, Database Management Systems, Networking and Web Technology are using rapidly for building healthy Government Information Infrastructure.

In **Mass Communication**: sector Information is most urgent and important. Mass Communication is includes News Paper; including online and print, TV News Channel, Entertainment Channel, FM Stations, Radio Channels and soon. Before repressing Information on news; Mass communication sector first collect Information and then they select, identify, organize, process and disseminate Information with dedicated medium and way. Mass communication industry today uses new technologies for prompt and cost effective information delivery which includes

Human Computer Interaction for better Media representation and Interactive Information and Documentation building; including Audio/ Video material[08, 10, 12, 25].

In **Common People**-In common people also, Information plays a valuable role. For each and every activity we need Information. In some cases we get Information verbally in some cases with a particular format and medium; such as Document, E-Copy, and Online Copy. Thus for Information Storage we uses Database and Computing devices like Pen Drive, HDD, Compact Disk and so on. Information Dissemination through Information Kiosk; run self mode way is today empowered by Usability Engineering and Usability Experience Design.

In **Research and Development**-The input and output of R/D activities is Information. People first gain Information depending upon skilled knowledge try to develop new theories, relationship, products and services. Thus, initially during gaining of knowledge they depend on Research and after identification of new knowledge they try to disseminate it. Thus, they collect and dissemination Information. Today for better R/D so many things are practice Like Online Journal, Online Abstracting Systems, E-Book, E-Dictionaries/ E-Encyclopedia; where as earlier they depends on Traditional Product and Services[13, 14, 15,22, 26, 28].

In **Education**- In Educational activities, Information Play an important role; for building course curriculum Course Work delivery Information is needed. Spearing Education to Common one and Students also need communication and there Information is needed.

Information and Future Potentials: Technology and Tools

Earlier for Information and its management several tools was used which includes cataloguing, classification, indexing, abstracting, ledger and so on. But days are gone where traditional information management tools are used today due to interaction of Information-Technology-People or Society several tools are using like- Data Communication Technology, Database Technology, Web Technology, Image Processing and Multimedia Technology and so on[29, 19].

- Data Communication and Networking Technology are useful in Information and Communication within a building, campus, town or country to country with the help of LAN, MAN, WAN and SAN. Though this Technology, Content, Information, Audio, Video and other resources are possible to communicate and share any where through infrared and wireless/ satellite communication;
- Database Technologies are uses for Information and content storage and depending upon need DBMS may be use for Data collection, manipulation and dissemination. This saves future data preservation and utilization;
- Web Technology is uses for Information and Collection through the dedicated Website. Content generation and management both are possible with

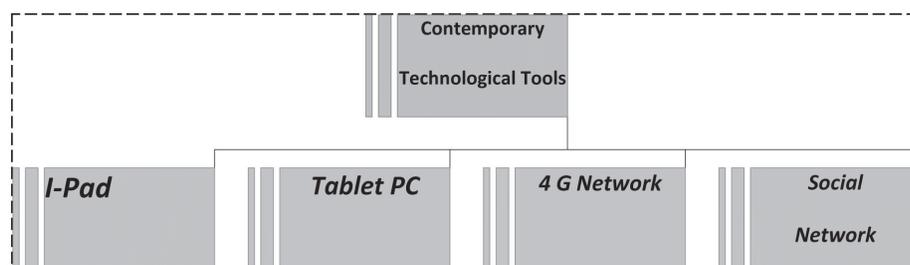


Fig. 3: Emerging Technological Product

sophisticated Website and internet systems and for all activities We Technology play an important role. Today rather than Static Website, Dynamic, PHP and client server interacting Website are uses for Information display;

- Multimedia Technology is another one, uses for healthy and sophisticated content organization and dissemination. Use of Multimedia Technology is needed for Audio/ Video Representation of Information;

Apart from using these technologies, some more are today also using in Information field. Cloud Computing is uses for Information, Software and hardware virtualization based on Cloud Architecture. Usability Engineering is another needed for Interactive Interface designing and display unit of Information Kiosks and other Information means [22, 23].

Conclusion

Advancement of technologies changes entire dimension of Information and Knowledge. The field of Information treated as Information Studies and Information Science. The Technologies and their integration in Information Science practice build Information Science with new look; thus new nomenclature originated from Information Science i.e. Information Science and Technology [IST]. Apart from Technologies mentioned earlier section some more are also integrates with IST for better Information Processing and Management and these technologies and tools are Data Warehousing, Data Mining, ERP, Green Computing, Business Intelligence and so on. Thus, from a social Science [Documentation] field, Information Science [Which is the main base of Information] Transform as an Applied Science domain with agenda of Information-Technology-People/ Community Interaction.

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