An Overview Of Changing Trend In Information Technology In Last Twenty Years

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Abstract- Since last twenty years there is a rapid research and development in the field of information technology. Information technology word comprises research and development in internet technology, information management, software, hardware and their respective technology. An effort has taken to get the overview of the changes occurred in the information technology sector over these years.

Keywords- Information, technology, IT sector, information system, trend

I. INTRODUCTION

Information technology is a fast growing and very rapidly changing sector. It involves many stake holders. These stake holders comprise computer hardware and their manufacturing companies, software development companies, internet technology, various hardware and network devices, database, information and people working in this sector. Since last twenty years, there is a massive growth in research and development in hardware, software, computer peripheral devices as well as internet connectivity devices, database storage and information retrieval.

Changing scenario:

In last twenty years, approximately from 1997 to 2017 everything in information technology has changed rapidly. In hardware if we consider monitor, there were CRT monitors, then LCD panel screens were introduced, then Plasma technology came then LED technology was introduced and now we find HD LED with touch screen facility in the market. In storage devices e.g. hard disk, in 1997 hard disks were having storage capacity of 2.1 GB ,now a days we find more than 1 TB hard disks are available in the market. In the world of operating systems the journey starts from Windows 95, Windows 98 to Windows 10.Whereas in 1997 people were using Linux 2.0[15]; today we find 'Red hat enterprise Linux 6'[16] i.e. the latest version of Linux. Similarly in 1997 Mac released a version named 'Rhapsody' (Grail1Z4 / Titan1U) operating system [17] and today latest version of Mac operating system in the market is 'Mac operating system 10.13 High Sierra' [18] . In 1997 computer processor configuration was Intel Pentium II [13] with frequency 233 MHz [8] and today we find Intel

Coffee Lake S base frequency of 4GHz [6]. Motherboard configuration available in 1997 was FIC PA 2005 [8] and in 2017 we find Gigabyte GA-Z270X [9] which supports gaming. In printing from dot matrix printers in 1997, we see 3D printing technology in 2017 [10].

IT sector revolution-

Since last twenty years information technology sector is changing rapidly. Many software development and online service companies have emerged in last twenty years. These companies have huge client base. These clients are from various sectors i.e. service sector to manufacturing sector. These IT companies develop various software products and solutions for the clients. They have given e-commerce capability to the clients and even they support the service in all areas.

Many e-commerce websites have emerged to give online trading solutions to their clients. Today people purchase almost everything through online shopping websites. Since September 2008[14] when android operating system came into market, the concept of android applications came into existence. Android applications i.e. android apps (in day to day language) can replace websites by providing better features and utility and today almost every website can be opened on the smart phone using android operating system.

II. LITERATURE SURVEY

In this research paper, the authors have written about three round Delphi surveys of information system senior executives to determine most critical issues in information system management. The authors have discussed about technological, infrastructure issues and internal effectiveness issues. [1]

In this research paper the authors have developed and tested a model of determinants of information technology out sourcing by integrating business and IT perspective. They have explained that this outsourcing is positively related to both IT and business cost structures. They also found that the degree of information technology outsourcing is negatively related to its performance. [2]

IJSART - Volume 4 Issue 2 – FEBRUARY 2018

In this research paper, author talks about reviewing of [2] patent data for measuring change in the technology. The emphasis is on assessing patent count and statistics in technological change. Author concludes that the data of patents should be utilized at the lowest level of aggregation so that problems of validity will overcome. [3]

In this paper authors discuss about effects of computerization on reduced labor input of routine manual and routine cognitive tasks as well as increased labor output in non routine cognitive tasks, in industries, occupations and educational groups. [4]

In this research paper the authors have studied information system management studies of ten nations and United States. They have studied key concerns of information system executives in these various countries and studied similarities and differences. They found that there is lot of difference in key issues due to the difference in culture, political environment, economical condition and technological status. In the conclusion they have come up with revised framework for key issue studies which will support comparison across the nations. [7]

In this paper authors have focused on OLAP. They conclude that today principle database management system vendors are in picture. Decision support systems expect different requirements on database technology. Their overall emphasis is on new requirements of OLAP. [9]

III. CONCLUSION

In past twenty years technology has changed [11] tremendously. The hardware and software we were using in 1997 is totally outdated and not of use today. The development [12] in this IT sector is happening so fast that the life span of any hardware or software technology is hardly one or maximum two [13] years. People as well as industries have to upgrade with the [14] changing technology very frequently. New versions of software [15] become available every now and then. From today and in the near future every stakeholder in the information technology [16] sector is needed to be ready for the frequent changes and enhancements. [17]

REFERENCES

 Fred Niederman, James C. Brancheau, James C. Wetherbe Information systems management Issues for the 1990s, MIS Quarterly Vol. 15, No. 4 (Dec., 1991), pp. 475-500, ISSN: 02767783

- Lawrence Loh &N. Venkatraman, Determinants of Information Technology Outsourcing: A Cross-Sectional Analysis, Journal of Management Information system, Volume 9, Issue 11,1992. http://www.tandfonline.com/doi/abs/10.1080/07421222.1 992.11517945
- [3] Bjorn L. Basberg, Patents and the measurement of technological change: A survey of the literature, Research Policy, Volume 16, Issues 2–4, August 1987, Pages 131-141.
- [4] David H. Autor, Frank Levy Richard, J. Murnane, The Skill Content of Recent Technological Change: An Empirical Exploration, The Quarterly Journal of Economics, Volume 118, Issue 4, 1 November 2003, Pages 1279–1333, Published 01 November 2003
- [5] Richard T. Watson, Gigi G. Kelly, Robert D. Galliers & James C. Brancheau, Key Issues in Information Systems Management: An International Perspective, Journal of Management Information system ,Volume 13,Issue 13,1997
- [6] http://www.techradar.com/news/intel-coffee-lake-releasedate-news-and-rumors
- [7] Animesh Patcha, Jung-Min Park, An overview of anomaly detection techniques: Existing solutions and latest technological trends, Computer Networks, Volume 51, Issue 12, 22 August 2007, Pages 3448-3470
- [8] https://www.computerhope.com / jargon / p /p2.htm
- [9] Surajit Chaudhuri, Umeshwar Dayal, An overview of data warehousing and OLAP Technology, Newsletter ACM SIGMOD Record Homepage archive, Volume 26 Issue 1, March 1997, Pages 65-74 ACM New York, NY, USA.
- [10] http://www.redhill.net.au/b/b-97.html
- [11] https://www.windowscentral.com/bestmotherboards#bestintel
- 12] Https: //www.statista.com/statistics/ 560304 / worldwidesurvey-3d-printing-top-technologies
- 13] https://www.computerhope.com / history / processor.htm
- [14] https://en.wikipedia.org/wiki/Android_version_history
- 15] https://en.wikipedia.org/wiki/History_of_Linux#Chronolo gy
- 16] https://www.redhat.com/en/about/press-releases/red-hatlaunches-latest-version-of-red-hat-enterprise-linux-6
- [17] https://en.wikipedia.org/wiki/Rhapsody_ (operating system)
- [18] https://en.wikipedia.org/wiki/MacOS#Release_history