Computer System: A Reliable Machine

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Abstract

Relaibility is an essential characteristic of computer machine. Computer system have reliability that why it is used in many fields. Artificial Intelligent and Machine Learning is wide branch in which number of applications has been developed and used in real world scenario. This paper highlights the computer system reliability in various fields where different applications have employed with better accuracy and reliable results. This paper also impact of computer system in branches that is computer science, physics, chemistry, and engineering etc.

Keywords: Reliability, Information technology, artificial intelligent, machine learning, e-commerce, Internet.

I. Introduction

Information is the base of communication between two or more devices, persons and nodes. Information is made by more than one raw data which made specific meaning. By this information a person can understand and make decision in a particular domain.

Information technology (IT) generally built by two words that are information and technology. Technology refers to any device which has the capability of storing, transferring, and retrieving the information such as computer. Such type of machine is cable to handle the huge data and information. This information may be used for making decision in any organization, institutions or any company. Jim Domsic of Michigan was used information technology first time in November 1981 [1]. IT is world level acceptable tool which have many features such as reliability, high productivity at low cost and minimize time and this characteristics impact on productivity of any firms [2]. Due to this, there is no needed wait for transferring information from one place to another and also store all transaction permanently. In the modern era, IT has been used in about all organizations, institutions, colleges, firms, etc. which shows the importance of it. Government body also employed IT for spreading project information among the citizens in the country [3]. Reliable information gets by all citizens in fast speed and at low cost dint of IT.

II. Applications of IT

Computer based technology has been very popular in present time. Computer system is using almost every domain due to reliability, accuracy in result as well as time minimizing in the processing. Here we discuss some key domain of IT in which number of application has been developed and employed in real world for solving simple as well as complex task.
Online shopping, e-marking and e-commerce: Today's market has changed from past designed due to

e-marketing. Online shopping is doing at brought level by customers and also pay through online payment system. This ratio is growing day by day because Internet is available everywhere. Online shopping and e-marketing is able with Internet only.

E-marketing gives many benefits such as maintain stock position, Sales records, bill generation, worker's salary, as well as purchase records etc. This is very beneficial for small and medium business. All activities are done through compute with Internet. Such system provides online facilities with protection and security also. Some key features of e-marking are as below [4].

- Globalize area of e-market.
- Product differentiations at high level.
- Customers mobility at higher level.
- Lesser time in processing.

Customer satisfaction is primary goal of any business and reliability of IT shows importance towards increasable online shopping. This is due to interactional and distributive fairness and easiness of procedure of it [5]. Customer relationship management (CRM) is developed with the help of IT which focuses on customer relationship development [6]. CRM generally beneficial to company in term of better customer services, discovery new customers, etc.

Electronic commerce (e-commerce means buying and selling through Internet) is possible only through Internet which was started in 1969 (ARPANET). The successful internet connection throughout world is given the facility of e-commerce in which navigation tool (like Internet explorer), search engine (like Google, Yahoo) and internet services are available for providing support e-commerce (like e-mail, internet relay chat, etc.) [6].

Banking sector: Banking sector is provide the services online like payment through online (Debit, smart, credit, paytm, etc.).Generally Automated teller machines (ATM) and national electronic funds transfer (NEFT) are employed for transferring funds from one bank to another. Such type of facility gives benefits to customers to reduction in cost, increase efficiency, quality services with reliable transaction etc [7]. Apart from this facility offline facility also provide to customers which benefited to the non-literate persons. All the records and transactions are maintained systematically and stored permanently for future uses.

Railway sector: Railway sector is employed IT in which number of computers use for maintaining each and every train schedule, ticket booking and cancel etc. Computers and internet is key facilities in railway organization by which maintain whole system effectively. It is fact that computer is a reliable system which provide the better facility to railway organization. Internet of things (IOT) technology gives benefits of thorough perception, deep intelligent application which is essential support provide to the department [8].

Education: Education is a part of each and every person by which the person learn the knowledge and skills. It involves in training, teaching, discussion and research. IT is employed about all institution of the education and play vital role for teaching and learning as well as research in many disciples. As per available way of teaching and learning, education can be provided in two ways that is offline and online. Impact of online education has increased in learning process in these days but students are not taken into account it as professional model for learning the education [9]. Another part of education is distance learning in which IT shows the effectiveness and importance in it [10].

IT tools for developing curriculum are employed like as electronic performance support, repositories and knowledge management system [11]. In the present time, different kind of ICT tools are employed in education like as computer and laptop, projectors, digital camera, printer, tablets, flipped classrooms etc.

Government of India has also run the SWAYAM portal specially for providing the better education to the students (class 9 to post graduate student) which in 4 quadrants i.e. video lecture, reading materials, self-assessment tests, and online discussion [12]. NPTEL online courses also available on their portal (23 disciplines) in which is no any fee required for joining, no age limit, and learn any time for certification courses [13].

Transportation: Traffic control system should be smooth and efficient regulate traffic flow where no occur no congestion or reduced the congestion problem. Vehicle identification through number plate of the vehicle is already running in developed in different computer programming languages. As per native language of local area, owner of the vehicle designs number plates using (Hindi and English) different languages is also identified through automatic number plate recognition [12]. Such type of applications are developed through template matching (TM) [14], support vector machine (SVM) [15], and neural network methodologies etc.

IV. Discussion

IT have broad spread area in which different kind of applications have been developed and already used in whole world. As mentioned earlier section, different applications have discussed for better understand the reliability system that is computer. There is no doubt about computer system which has different features like speed processing, high storing capacity, high reliable and accurate result, versatility, diligence. Due to these feature computer is employed almost all areas in real world for solving problem as well as betterment of results.

V. Conclusions

IT has great innovation of the science which is impact almost all fields such education, transportation, railways, banking sectors, and electronic commerce etc. This paper present a brief reviews of such applications in which computer system is employed for different purposes and shows the accurate and reliable results. IT tools is used in other fields also for various purposes. This system has capability to work continuously very fast with same speed and accuracy and also capable for performing various kind works through a single system.

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