

GROWTH OF ONLINE COMMERCE WITH COMPUTER SCIENCE AND ENGINEERING FOR NEW APPLICATIONS

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Abstract: Computer Science and Engineering has lead to new perspectives of online commerce growth with drastic evolutionary changes. Already most of commerce tasks takes place online with the support of powerful computers & associated technologies. Recent developments in the era of Software, Hardware ,Network Security , Algorithms, Multimedia,Databases , Operating Systems have made it possible for fastest and secure mode of online commerce applications . This paper focus on the Growth of Online Commerce with Computer Science & Engineering for New Applications.

Keywords: Multimedia, Business, Protocol, Stock market

I INTRODUCTION

In the early days Computers were used only for doing arithmetic calculations like addition , subtraction , multiplication and division only. In those days punched cards are used and there are no keyboards, Mouse, scanner, microphone etc.. As the development continued in advancements of Software , Hardware, Operating System , Databases, Algorithms & Programming languages , it became possible to use computers for other applications also. Now a days most of commerce applications can be solved easily, fastly , accurately and effectively with the help of solutions by Computer Science and Engineering for any complex task.

Internet is network of networks. It works on protocols of TCP/IP (Transmission Control Protocol/ Internet Protocol) .TCP/IP is collection of protocols which provides many benefits including avoid data duplication , data corruption, data delays, etc.

Multimedia is the combination of audio, video , graphics , animation, image & text. Now many of business application of computers are kn the need of handling multimedia data processing .

Due to growth of Internet applications in almost all areas of global world , most of share markets and software industries were looking forward for electronic trading. Sale of software internationally is becoming more important for software companies.

Software is collection of programs. The two types of software -System software & Application software. The software industry includes businesses for development, maintenance and publication of software that are using different business models, mainly either "license/maintenance based" (on-premises) or "Cloud based" .The industry also includes software services, such as training, documentation, consulting and data recovery.A business is an organization or enterprising entity engaged in commercial, industrial or professional activities. A company transacts business activities through the production of a good, offering of a service or retailing of already manufactured products.

A stock market, equity market or share market is the aggregation of buyers and sellers of stocks (or shares); these may include securities listed on a stock exchange as well as those only traded privately.A stock exchange is a place or organization by which stock traders (people and companies) can trade stocks. Companies may want to get their stock listed on a stock exchange. Other stocks may be traded "over the counter" (otc), that is, through a dealer. A large company will usually have its stock listed on many exchanges across the world.

An online interview is an online research method conducted using computer-mediated communication (CMC), such as instant messaging, email, or video. Online interviews require different ethical considerations, sampling and rapport than practices found in traditional face-to-face (F2F) interviews. Online interviews are separated into synchronous online interviews, for example via online chat which happen in 'real time' online and asynchronous online interviews, for example via email conducted in non-real time.

Online interviews, like offline interviews, typically ask respondents to explain what they think or how they feel about an aspect of their social world. Interviews are especially useful for understanding the meanings participants assign to their activities; their perspectives, motives, and experiences. Interviews are also useful for eliciting the language used by group members, gathering information about processes that cannot be observed, or inquiring about the past.[5] Thus the objectives researchers have do not differ significantly, however the methods and research design can be effected by the online component of the research which this article will take issue with.

The Internet of things (IOT) is the internetworking of physical devices, vehicles (also referred to as "connected devices" and "smart devices"), buildings, and other items—embedded with

electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data.

II LITERATURE REVIEW

Marketing is the study and management of exchange relationships. The American Marketing Association has defined marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large."

The techniques used in marketing include choosing target markets through market analysis and market segmentation, as well as understanding methods of influence on the consumer behaviour.

Consumer electronics or home electronics are electronic or digital equipment intended for everyday use, typically in private homes. Consumer electronics include devices used for entertainment (flatscreen TVs, DVD players, DVD movies, iPods, video games, remote control cars, etc.), communications (telephones, cell phones, e-mail-capable laptops, etc.), and home-office activities (e.g., desktop computers, printers, paper shredders, etc.). In British English, they are often called brown goods by producers and sellers, to distinguish them from "white goods" such as washing machines and refrigerators. In the 2010s, this distinction is not always present in large big box consumer electronics stores, such as Best Buy, which sell both entertainment, communications, and home office devices and kitchen appliances such as refrigerators. Consumer electronics stores differ from professional audio stores in that the former sells consumer-grade electronics for private use, whereas the latter sells professional-grade electronics designed for use by audio engineers and audio technicians.

Digital marketing is effective, targeted, measurable, and highly interactive marketing of products or services using digital technologies to reach and convert leads into customers. Radio broadcasting in the early 20th century brought the first major consumer product, the broadcast receiver. Later products included telephones, personal computers, MP3 players, audio equipment, televisions (first cathode ray tube TVs, then in the 2000s, flatscreen

TVs) and calculators. In the 2010s, consumer electronics stores often sell GPS, automotive electronics (car stereos), video game consoles, electronic musical instruments (e.g., synthesizer keyboards), karaoke machines, digital cameras, and video players (VCRs in the 1980s and 1990s, followed by DVD players and Blu-ray disc players). Stores also sell digital cameras, camcorders, cell phones, and smartphones. As of 2016, some of the newer products sold include virtual reality head-mounted display goggles, smart home devices that connect home devices to the Internet (such as smartphone-controllable thermostats and lights) and wearable technology such as Fitbit digital exercise watches.

There are several innovations in the world which witness growth. In the 2010s, most products have become based on digital technologies, and have largely merged with the computer

industry in what is increasingly referred to as the consumerization of information technology. Some consumer electronics stores, such as Best Buy have also begun selling office and baby furniture. Consumer electronics stores may be "bricks and mortar" physical retail stores, online stores, where the consumer chooses items on a website and pays online (e.g, Amazon). or a combination of both models (e.g., Best Buy has both bricks and mortar stores and an e-commerce website for ordering its products). The CEA (Consumer Electronics Association) estimated the value of 2015 consumer electronics sales at US\$220 billion. As of 2016, the vision of the Internet of things has evolved due to a convergence of multiple technologies, including ubiquitous wireless communication, real-time analytics,

III MERITS

- ✓ Flexibility
- ✓ Efficiency
- ✓ Transparency
- ✓ Reliability
- ✓ Quality
- ✓ High Speed
- ✓ Easy & Flexible
- ✓ No limitation wrt geography
- ✓ Information to larger groups reached

IV DEMERITS

Some of Demerits are as follows :

- i. Technological competence
- ii. Network Access
- iii. Authentication
- iv. Concept depends on principles of operation of devices. If principle is used wrongly then entire result is different
- v. Quickness depends on connectivity speed
- vi. Every device performance contributes to overall performance. If any device creates the delay then overall result is also delayed
- vii. Costlier

V NEW APPLICATIONS

- ✓ Predictions in share market

✓ Advertising & Marketing

✓ New policy of online banking so as to operate without giving password . System will recognise the valid user based on Automatic Intelligent detection based on retina rays, biometric features .

✓ Online customer services

✓ Agriculture products

✓ Cars and other vehicles

✓ Film industry

✓ Multimedia appliances

✓ Electronic products

✓ Electrical and mechanical products

✓ Robotics

✓ Smart city management

✓ Food products with online quick delivery services

✓ Smart Home products, Food Printer , 3D Printer, Wearable Camera ,Smart watch

The following are some of requirements to achieve best results

☞ Availability of high speed network.

☞ Security of communicated data.

☞ Compatibility with business applications.

☞ Cost factor & Time limitations.

☞ Quality of software and hardware.

☞ Handling Multimedia data in real time applications.

VI CONCLUSIONS

The growth of Online Commerce is very faster due to Invention in areas of Computer Science and Engineering. In near future many other applications covering wide range of task will be resolved quickly by computer with collaboration of Internet Of Things , Multimedia , Electronics and Management for online commerce .

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