The Role of IT in E-commerce Application Services

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Abstract

Electronic commerce refers to conduct the business communication and transactions over internet and through computers. Electronic commerce is the buying and selling of goods and services, and transfer of funds through digital communications. However, e-commerce also includes all inter-company and intra-company functions such as marketing, finance, manufacturing, and selling etc. It enable commerce and use electronic mail, electronic data interchange, file transfer, fax, video conference or interaction with a remote computer.Electronic commerce also include buying and selling over the world wide web and the internet, electronic funds transfer, smart cards, digital cash and buy using the digital networks for business.The major functions are electronic commerce applications, brokerage services, data or transaction management, interface and support layers, secure messaging, security and electronic document interchange, middleware and structured document interchange and network infrastructure and basic communications services.E-commerce uses the web to bring together customers, vendors and suppliers to each other. There are challenges like security, scalability and reliability. The application services layers of e-commerce will be comprised of existing and future applications to build on the innate architecture for customer to business, business to business and intra-organization.

Keywords: Information Technology, E-business, E-Commerce application, online shopping.

Introduction:

Electronic business referred as e- business. Commerce constitutes the exchange of products and services between business groups and individuals. Hence e-business is the simplest form, the conduct of business on the internet. It is more generic term e-commerce business refers not only buying and selling but also servicing customers and collaborating with business partners. E-commerce use the World Wide Web and internet, it enhance the relationships with clients and

partners to improve efficiency by using the application knowledge management systems in e-commerce.

E-business involves business processes through electronic purchasing and supply chain management, processing orders electronically, handling customer service and co-operating with business partners. E-business software solutions allow the integration of intra and inter firm business processes.

The current e-business models are like E-shops, E-commerce, E-procurement, E-mail, E-auctions, Virtual communities, Collaboration Platform, Third party market places, Value chain integrators, Value chain service providers, Information brokerage and Telecommunication etc.

E-commerce applications will integrate the information for conducting the smooth business. It is important to understand the aim of the architectural framework itself. It is not to build new database management systems, data repository, computer languages, software agent based, transaction monitors or communication protocols.

The major functions are electronic commerce applications, brokerage services, data or transaction management, interface and support layers, secure messaging, security and electronic document interchange, middleware and structured document interchange and network infrastructure and basic communications services.

E-commerce uses the web to bring together customers, vendors and suppliers to each other. There are challenges like security, scalability and reliability. The application services layers of e-commerce will be comprised of existing and future applications to build on the innate architecture for customer to business, business to business and intra-organization.

Objectives:

It is associated with the buying and selling of information, product services via computer networks

Use of computer networks to search and retrieve information in support of human and corporate decision making.

Online electronic commerce payments – electronic fund transfer.

Technologies such as EDI (Electronic Data Interchange) and e-mail, widely used for years in work-flow and reengineering applications.

Benefits:

Electronic commerce expands the market place to national and international markets.

Electronic commerce decreases the cost of creating, processing, distributing, storing and retrieving paper-based information.

Electronic commerce reduces the time between outlay of capital and the receipt of products and services.

Electronic commerce allow some merchandise to be sold at lower prices, less affluent people can buy more and increase the standard of living.

It enables people in third world countries and rural areas to enjoy products and services.

It also facilitates delivery of public services such as health care, education and distribution of government social services etc.

Limitations:

There is lack of system security, reliability standards in some communication protocols.

Insufficient telecommunication bandwidth.

The software development tools are still evolving and changing rapidly.

It is difficult to integrate the internet and EC software with some existing applications and databases.

Vendors may need special Web services and other infrastructures, in addition to the network servers.

EC software might not fit with some hardware or may be incompatible with some operating systems or other components.

Literature Review:

"Shebazbano Salim Khan , S. N. Borhade , and Mainuddin S. Shaikh in their paper "Impact of eCommerce on Indian Market: Social and Economic Impact" study how e-commerce as part of IT uprising became major part in the world deal in general and Indian economy in exacting. The Paper discovers the economic and social impact of e-commerce.

"affreenara and Dr Kishore Kumar Das in their paper "Growth of E-Commerce in India" talked about Ecommerce one of the highest growing business, with India having great market potential for investments. There has been huge surge in investment since; last year and more, is expected in coming years. The rapid growth in use of mobile and internet users has facilitated ecommerce business in both urban and rural cities.

" Kumar Anuj, Fahad Fayaz, Ms Namita Kapoor" This paper reveals the importance of ecommerce in Indian economy. E- Commerce is great platform not only to develop

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infrastructure but also increase employment rates in India and thus overall impact in increasing economic and social growth in Indian economy.

Methodology:

IT infrastructure includes investment in hardware, software and services. These services includes the following:

Computing platforms used to provide computing services that connect employees, customers and suppliers into a coherent digital environment.

It includes large mainframes, desktop and laptop computer and personal digital assistants and Internet appliances.

Telecommunications services that provide data, voice & video connectivity to employees, customers and suppliers.

Data management services that store and manage corporate data and provide capabilities for analyzing the data.
Application software services that provide enterprise-wide capabilities such as enterprise resource planning, customer relationship management, supply chain management and knowledge management systems that are shared by all business units.

IT management services that plan and develop the infrastructure, co-ordinate with the business units.

IT standards services that provide the firm and its business policies to determine when and how it will be used.

IT research and development services provide the potential future for their projects and investment at different market places.

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TCP/IP: Transmission Control Protocol (TCP) is the communication protocol for communication between computers and internet.

FTP: File Transfer protocol is a standard network protocol used to transfer files from one post to another.

URL: Uniform Resource Locator a common way to get to a website or homepage.

HTTP: Hypertext Transfer Protocol is a simple request/ response protocol.

SMTP: Simple Mail Transfer Protocol is used in sending and receiving e-mail.

Conclusion:

E-commerce applications enable various business functions and transactions to be done electronically. These includes e-marketing, e-advertisements, e-procurement, search engines, e-banking, mobile commerce, online trading, e-shopping, e-learning, e-catalogs and e-publishing etc.

49% Indian consumers say online sites and apps became the preferred mode of shopping for them in the last 12 months. Safety from Covid-19 and convenience were cited as top reasons by consumers for using ecommerce. 69% of those who shop on ecommerce bought groceries / essential supplies online.

Consumers used large ecommerce platforms as well as small verticals or local ecommerce sites to purchase groceries and essentials. E-Commerce so that while domestic and international trade are allowed to expand their horizons, basic rights such as privacy, intellectual property, prevention of fraud, consumer protection etc. are all taken care of.

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