

Issues and Challenges in E-Commerce

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Abstract: E-commerce deals with selling and purchasing of goods and services through internet and computer networks. E-commerce can enhance economic growth, increase business opportunities, competitiveness, better and profitable access to markets. E-Commerce is emerging as a new way of helping business enterprises to compete in the market and thus contributing to economic success. In this paper, we present and discuss these findings, and identify changes that will be required for broader acceptance and diffusion of e-commerce in India. In this research paper we will discuss about advanced analysis of E-commerce which will comprise of strengths, weaknesses, issues, opportunities and challenges faced by e-commerce in current scenario.

Keywords: E-commerce, E-commerce Challenges, E-commerce Issues, E-commerce Strength.

I. Introduction

A popular site www.flipkart.com, explains e-commerce as literally "doing business electronically" and when the term was first coined, it was seen as buying and selling on electronic networks [2]. The traditional view of doing business online includes purchasing products via online services and the Internet as well as electronic data interchange (EDI), in which one company's computer queries and transmits purchase orders to another company's computer.

Electronic Commerce today includes:

- [1]. The buying and selling of information as well as products and services.
- [2]. The use of telecommunications networks to link organizations and/or individuals.
- [3]. Sharing business information and maintaining business relationships.
- [4]. Intra-company, inter-company, and company-to-consumer processes.
- [5]. Doing business without paper.
- [6]. Engage in a wide range of activities up and down the value-added chain, both within and outside the organization..
- [7]. All computerized inter-company and intra-company functions (such as marketing, finance, selling, and negotiation)
- [8]. The use of electronic mail, EDI, files transfer, fax, video conferencing, workflow, or interaction with a remote computer.

The term e-commerce encompasses any commercial transaction conducted electronically. Simply viewing a web site is not e-commerce, but purchasing a product over the Internet is e-commerce so is exchanging vital information with a supplier or business partner. Electronic commerce can occur over means other than the Internet.

E-Commerce as Online Selling. The site www.flipkart.com narrowly defined, e-commerce means doing business online or selling and buying products and services through Web storefronts. Products being traded may be physical products such as used cars or services (e.g. arranging trips, online medical consultation, and remote education). Increasingly, they include digital products such as news, audio and video, database, software and all types of knowledge-based products. It appears, and then electronic commerce is similar to catalog shopping or home shopping on cable TV.

E-Commerce as a Market. E-commerce is not limited to buying and selling products online. For example, a neighborhood store can open a Web store and find the world on its doorstep. But, along with customers, it will also find its suppliers, accountants, payment services, government agencies and competitors online. This online or digital partner's demand changes in the way we do business, from production to consumption, and they will affect companies who might think they are not part of electronic commerce. Along with online selling, electronic commerce will lead to significant changes in the way products are customized, distributed and exchanged and the way consumers search and bargain for products and services and consume them.

II. Challenges of Electronic Commerce

Since the advent of the World Wide Web has provided an easy to use communication channel for businesses to contact current and potential customers. The emergence of the Internet as a general communication channel has also given rise to the possibility of widespread electronic commerce [5]. Even though there is still much debate relating to electronic payment for commercial activities, this is clearly an area of growth. These technologies include:

- (a) Organizational support systems, such as workflow and groupware making businesses more efficient.
- (b) Customer contact databases - helping capture information about customers and
- (c) Facilitate new methods of marketing
- (d) Electronic payment systems for goods and services - these are emerging, although the majority of payments is still based on relatively expensive traditional check clearance.

Collectively and individually, these areas will contribute to major changes in the way a company conducts its business.

III. Emergence of e-commerce

Emergence of e-commerce will be underpinned by three key components.

1. Marketing (Customer Satisfaction)

The emergence of electronic commerce will significantly impact what we currently call 'marketing'. Clearly, the appearance of electronic communities, Armstrong and Hagel⁶ implies that marketing professionals must expand their horizons, as the advent of this technology will threaten existing channels of business. Those involved in marketing need to understand the full range of products and services required by the electronic community. They must learn to take advantage of the technology that allows customers to move seamlessly from information gathering to completion of a transaction, interacting with the various providers of products and services as necessary. Armstrong and Hagel propose four types of non-exclusive electronic communities, those: interested in transactions; sharing common interests; indulging in fantasy games; and with a shared life experience. The business opportunity is for those who support and interact with these communities, building customer loyalty on an ongoing basis. By satisfying the requirements of relational marketing and transactions, companies may gain important insights into their customers' nature and needs. For example, a baby products company could entice customers to order items from an associated on-line catalogue by providing bulletin boards for new parents.

2. Organization (Process Support)

The after-sales service subsidiary of this manufacturer provided replacement parts and training to its widely

dispersed customer base. The Teletel system permitted electronic transactions, even with the smallest trading partners. Through the use of online ordering, coupled with courier service for rapid delivery, the firm was able to eliminate regional parts warehouses and reduce the average repair time from two weeks to two days. In the past, service engineers waited until they had a sufficient need for parts before driving to a regional warehouse. Once the system was implemented, they used the Teletel based "just-in-time" stocking practice for replacement parts.

Moving to a centralized warehouse reduced the need for replicated inventories and extra personnel around the country, creating substantial savings. Moreover, service engineers were further bound-in following the introduction of a revenue producing, expert system-based, training application. Technicians connected to the expert system, which asked a series of questions designed to diagnose the fault and indicate the repairs needed.

This "just-in-time" training service meant that technicians no longer required expensive and lengthy in-person training - a difficult task given the short life cycle of new electronics products. Service engineers were charged a fee for connecting to the service, but it clearly helped them to provide a faster service to the end customer whilst also further enforcing their dependence on the supplying firm. The expert system also accumulated data on repair, problems and provided valuable feedback to the design and manufacturing divisions of the company. A primary motivation for this service was to dissuade service engineers from obtaining parts and services from other suppliers. The ubiquity of Minitel merely created the environment within which the supplier could manage relationships with a very large set of buyers, without opening their service to other suppliers.

3. Banking (Payment Systems)

Commerce on the Internet is already a reality. Whilst there are strategic challenges for all businesses, they are especially ominous for financial services and banking organizations. According to INPUT IT Intelligence Services, interactive retailing via the Web will grow to 165 billion by the year 2000. To date the emphasis has been on the Internet as a vehicle for communications with customers and other companies operating on collaborative ventures (mostly email). As the capabilities of the medium are better understood, an ever-increasing number of organizations are concentrating on capturing business transactions and on-line sales.

IV. Analysis

Underpinning the activities of companies are their business processes and information support systems. A major development in computerized support systems is the advent of process support software that allows work to be routed

(similar to a paper file) around the business. These products use a variety of methods to integrate with information systems, delivering the context for action to the appropriate user. Generally referred to as workflow software, there is still considerable confusion in the marketplace. The problem is that there are no consistent meanings for the terms used (workflow, process, task, activity, etc.).

There are a considerable number of products available (at the last count, some 240) which are described by their vendors as workflow tools. Each product reflects the views on organizational behavior of the developers, with vendors interpreting the term to suit their own needs. Some see workflow as a mechanism for providing better methods to control workers. Others see it as an opportunity to enable organizational learning, allowing workers to exercise their own judgment, responding to the requirements of the case in hand rather than following predefined paths of activity. In reality, most conceptions revolve around the routing of work from one user to another in a predefined fashion.

It is clear that the term workflow is no longer appropriate - 'work' does not necessarily flow that much. Mires, The concept of work 'flowing' is just one aspect of the wider problem of managing information related processes. A new conceptual framework was introduced to support an improved understanding of the issues affecting process support systems. This model is used within the Process Product Watch (PPW) Reports which provide detailed evaluations of process support systems. The model presented underpins the organizational support aspects of the electronic commerce definition of Work ware.

For most commercial businesses the strategy making process means looking at your own market positioning - evaluating how to overtake others or protect an entrenched position in the value chain. For banks and financial services companies, that means coming to grips with the unfolding saga of electronic payment systems and managing customer relationships. Certainly, all enterprises should evaluate how their strategies for customer engagement transfer to cyberspace.

V. Strengths

Boundary less (global location): E-commerce can be dealt globally as no specific boundary is required [1]. It enables all the companies to expand them to global level.

Time saving: It saves time and transportation because there is no need to go anywhere physically.

No time constraints: It can be used anywhere, any time as there are no time constraints.

Price/Product comparison: Helps consumers to compare prices and product effectively and efficiently.

Cost effective: Reduces logistical problems and puts a small business on a par with giants.

Direct communication with the consumer: Social networking sites, online advertising networks can be mediums to buzz about online store.

Improved customer interaction: Quick feedback and comment forms are the main features to interact with customers.

Flexible target market segments: Target market segment here in e commerce is flexible can be modified any time.

Simple and easier exchange of information: Improves information sharing among merchants and customers and enables prompt quick just in time deliveries.

Lowers transaction cost: Things can be automated in a well implemented online store. If an online download facility is available, then distribution cost can be cut off.

Easy arrangement of products: Products can be arranged on the shelves within minutes. With online store it is quite easy.

Faster buying procedure: E commercially means better and quick customer services. Online customer services make customer happier Due to the absence of intermediaries for buying products. So buying procedure will be fast and quick.

No physical company setup: Doing business is cost effective because no physical set up is required for that.

Easy transactions: Financial transactions through electronic fund transfer are very fast and can be done from any part of the world.

Niche Products: Almost everything can be sold on the internet. Even if products targeted to smaller markets the buyer will be somewhere on the net.

Low operating cost: It can be started and continued with very low investment. Staff cost is very low.

VI. Challenges of E-Commerce

Security: Security matter confuses customers, especially about the integrity of the payment process.

Fake websites: Fake websites can not only disgrace e-commerce, but bring bad name to e-commerce also.

Fraud: Concerns about misuse of financial and personal data is a great weakness in e-commerce.

Fewer discounts and bargaining: Hardly online businesses offer discounts and bargaining cannot be possible.

Long delivery timing: Delivery time can be in days or weeks, which one cannot wait for.

No idea about quality and physical condition of the product: Online products cannot be touched, wear or sit on the products.

Limitation of products: Limited number of products can be available.

Lack of personal services: Physical products can be available but lack of personal services which are intangible.

More shipping cost: Shipping cost increases if we order online.

Limited exposure: In developing areas where internet is not accessible will have no or little exposure to e-commerce?

Limited advertising: Limited advertising opportunities are available because in e commerce one cannot go for mass advertising.

Customer's satisfaction: There is no interaction between the customer and the seller. Therefore the scope of convincing the customer does not exist. Many times customers prefer to buy the product by reaching personally to the market rather than purchasing through the internet.

VII. Conclusions and Future work

The future of electronic commerce is dependent on fast and reliable on-line access. It is expected that mature versions of Internet commerce applications will depend largely on the use of public key certificates. These will enable secure email communication between most leading-edge organizations, business-to-business electronic trade, and access and payment for Internet consumers. Smart cards will be well established in all industrialized countries for corporate security and secure Internet access. All new personal computers will include smart card readers and support the new computer/smart card interface. Fingerprint and voice recognition technology will be established in high-value, leading-edge applications. Strong cryptography will be widely adopted, supported by the relaxation of export controls on the dispersion of this technology. Increases in processing power will make it possible to use bulk encryption for confidentiality at high speeds over host-to-host links. Leading-edge organizations will have enterprise-wide trust infrastructures based on public key cryptography

and digital certificates and trusted third-party agreements will proliferate.

It is expected that most e-mail traffic will be secure at application and network level; most supply chains will trade electronically; some leading-edge organizations will have been re-engineered into virtual companies; consumer certificates will be in widespread use; smart cards will be in ubiquitous use over worldwide for everything from Internet access and electronic commerce to ticketing in theatres and public transport; client personal computers and network computers will be marketed with built-in fingerprint scanners in the mouse or keyboard; and cryptography and the Internet trust model will be accepted facts. A workable framework for global trust infrastructure will begin to emerge, and trusted third-party licensing and data protection laws will have been harmonized internationally. There will be recognized policy standards for issuing or revoking certificates, and international laws on liability.

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