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E-commerce and Consumer Apprehensions

ABSTRACT

E-commerce has quickly evolved since the 1990's and now has a powerful presence in the Indian Economy. With thriving Indian websites and more than 49.4 million internet users in India, the e-commerce industry is growing with each passing day. However, consumers have numerous apprehensions with e-business—from payment issues, trustworthiness of sites, registration hassles to privacy issues. The paper is divided into four sections. The initial sections comprise the introduction and historical backdrop of e-commerce. These are followed by the section on growth of e-commerce in India which discusses the Indian usage data, Indian websites and e-tailing growth in India. The last section is on consumer apprehensions which discusses the points of views of buyers and sellers, demands of online consumers and understanding commerce schemes.

1. INTRODUCTION

Electronic commerce, commonly known as e-commerce, consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The amount of trade conducted electronically has grown dramatically since the spread of the Internet. A wide variety of commerce is conducted in this way, spurring and drawing on innovations in electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), automated inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at some point in the transaction's lifecycle, although it can encompass a wider range of technologies such as e-mail as well. A small percentage of electronic commerce is conducted entirely electronically for "virtual" items such as access to premium content on a website, but most electronic commerce involves the transportation of physical items in some way.

2. HISTORICAL PERSPECTIVE

Commerce has evolved over the centuries. Prior to the evolution of money it

was a simple "barter process" where things could be exchanged, say milk for grains. The evolution of money brought with it, the concept of a "marketplace". In a marketplace, Commerce is function of 4 P's – Product, Price, Place and Promotions. Once the marketplace came into existence, a few pioneers realized that people would be ready to pay extra if they could deliver products at customer's doorsteps. A slight modification on Price and Place led to the convenience of getting products at their homes. This concept delighted the customers and thus, the concept of "Street Vendors" was born. When the Postal System came into being the sellers decided to cash in on the new opportunity and started using mailers giving description of their products. It led to the concept of "Mail Order Cataloguing". From here, the evolution of the "Tele shopping" networks was inevitable with the development of media vehicles.

Most people think e-commerce means online shopping. But web shopping is only a small part of the picture. The term also refers to online stock, bond transactions, buying and downloading software without ever going to a store. In addition, e-commerce includes business to business connections that make purchasing easier for

big corporations. E-commerce is generally described as a method of buying and selling products and services electronically. The main vehicle of e-commerce remains the Internet and the World Wide Web, but use of e-mail, fax and telephone orders are also prevalent. E-commerce can be defined as a modern business methodology that addresses the needs of the organization, suppliers as well as consumers to cut costs while improving the quality of goods, services and speed of service delivery. E-commerce is associated with the buying and selling of information, products, services via computer networks. E-commerce would have never been possible without plastic cards, online shopping carts, secure payment gateways and many other inventions which had their say in the online world.

3. GROWTH OF E-COMMERCE IN INDIA

E-commerce has also started to show its true potential in India. While on one hand, India's e-commerce solutions are becoming a sought after commodity around the world, even e-commerce based businesses are leaving their distinct marks of technology competitiveness, viable business model and entrepreneurship. E-business can indeed emerge as a major opportunity for India as the data below demonstrates:

- As of September 2002, there was a PC base of 7.5 million PCs. Despite the overall subdued market, the total installed PC base in India crossed the 36 million units mark in May 2009.
- More than 80 per cent of stand alone PCs sold during last two years were driven by the need to access the Internet.
- Ninety one per cent of India's corporate web sites are located overseas.
- Internet access continues to be most widespread amongst the 18-24 year age group. However, all age groups have seen vast increases in access over the last 18 months.

- Males continue to outnumber females in accessing the Internet at 77 per cent compared to 23 per cent. This has however increased from the ratio of 82:18 in June 1999.
- India Online Study 2008 puts India's Internet user base at 49.4 million with 82% of online India coming from urban areas and the rest from rural areas..
- Internet users on an average are estimated to be accessing the Internet for 6 hours a week.
- Over half (59.2 per cent) use the Internet as an information resource, 11.3 per cent use it as an educational tool and just fewer than 8.2 per cent use it for entertainment.

Today E-commerce is a byword in Indian society and it has become an integral part of our daily life. There are websites providing any number of goods and services.

The Internet and Mobile Association of India (IAMAI) has pegged the e-commerce market in India at Rs 9,210 crore for 2008-09. The E-Commerce Industry in India was worth Rs 7080 crores at the end of 2006-07. The market is estimated to grow 30 per cent year-on-year. It is predicted that the commerce market in India will grow to touch Rs 9500 crore by the end of 2009. The adoption and usage of E-Commerce in the country is a function of the overall environment for Internet usage in a country.

Though in India overall penetration is still low the important factor is that a critical mass of users is shaping up which will fuel rapid growth over the next 3-4 years. A Claimed or Ever Internet User is defined as one who has ever accessed Internet. A subset of Claimed Internet users, Active Internet Users are defined as those who have accessed Internet at least once in the last one month. They are the regular users of Internet and are aware of the recent trends and applications emerging on the Internet.

4. CONSUMER APPREHENSIONS

Having discussed the growth and development of e-commerce it would be prudent to look at the expectations, frustrations and apprehensions of consumers. This section is devoted to understanding the thinking and demands of online consumers.

A) The Point of View of the Buyer: Buyers expect three important actions from a typical transaction: they want to make the decision to purchase something, they want to effect payment for this something, and they want to assume ownership of what they purchased. Anything that interferes with these three actions is going to bother the buyer. The first action, making the decision to buy, has some implicit hurdles. The buyer must find what they want, evaluate their budget, evaluate their trust of the merchant, etc. The buyer weighs a lot of factors and faces a basic fact of inertia that it is often easier to not buy than it is to buy; some merchants make the buying process absurdly difficult with such design decisions as forcing the user to register and log in before accessing the shopping cart function or requiring a specific browser for buying from their site. After all, the buyer expects to give their personal information, if they give it at all, when they pay, not when they're just shopping (or just surfing the internet). Buyers don't want to buy without knowing they have bought. Buyers face some violations of the decision to buy from "slammers" and the illegal use of credit cards. Making it too easy for a buyer to purchase from your site — for example through an "express lane" commerce track — may backfire if the buyer thinks they have been tricked into the purchase. Buyers also consider themselves as having entered into a tacit contract with the merchant: when the buyer decides to buy something, s/he does so with an expectation about the availability of the something. Merchants declare the availability of their products, "available right now for immediate shipping" or "this will ship

out in 5 days", and the buyer uses that availability in their process for deciding to buy. If the availability promised by the merchant proves false, the buyer will re-evaluate their decision to buy, even if they have already entered the ordering process.

The second action, the payment, has some explicit trouble spots. The buyer needs feedback from the process that payment has been correctly made; the buyer needs to know that the totals are correct, that their credit card (for the sake of argument, consider this the predominant payment method) has been correctly charged, that the transaction is secure, and that they are protected in case something goes wrong with the transaction. If the user receives ambiguous feedback during this payment phase, they will be frustrated and worried, and will experience doubt towards every aspect of the transaction. This is such a simple milestone for the buyer, the payment phase, but online there is little reassuring feedback. In person, the buyer can confirm with a salesperson, online they have at best error messages and an email address for "customer service".

The third action, assuming ownership, is especially full of frustration for the buyer, because s/he has committed to the purchase — they've already paid — and now they are at the mercy of the merchant for the delivery of their purchase. Up until they receive the order, buyers want to know the status of the order; providing useful order status information should be a requirement for any E-commerce site, but few sites display this information in ways that are useful for the buyer. I would suggest that most buyers want to know what has been paid for, how much has been paid, when the order (or separate items on the order) will be shipped, and when the order will be delivered. If the merchant fails to meet the buyers expectations — whether the expectations are fair or accurate — the buyer will be dissatisfied. Delayed orders face the possibility of cancellation.

Most users understand that they have responsibilities when they become buyers, and most seem willing to forgive a great deal of shaky commerce systems and rough shopping experiences to buy online. The issue here, though, is that users shouldn't have to endure uncomfortable experiences to buy online, and it is up to E-commerce merchants smooth out the rough edges of the user experience.

B) The point of view of the Seller: The larger E-commerce web sites tend to treat individual buyers as statistics; individual users are difficult to deal with when the bottom line is the bottom line. Sales count as indications of trends: more click-through, more page hits, more traffic all mean more revenue. Pleasing the individual user is usually not a priority. Getting the users to recognize the site's branding is a priority, however, because the assumption is that exposure will translate to patronage. Most commerce sites don't seem to be designed for any typical user; these sites haven't built sample user profiles and then optimized site behavior for the expected behavior of these users. As online competition matures, though, we should see more sites carefully targeting their niche audiences.

C) The demands of online shoppers today: The first decade of the twenty first century has shown that online shoppers have very high expectations from online stores. Online, the basic operative metaphor for E-commerce sites is that of the "store", based on experience gained shopping in the real world. E-commerce ventures can be grouped into sites of companies that exist primarily on the internet and those that have real-world "brick-and-mortar" stores that have opened up sites (channels) on the internet. The attitudes users display towards these different categories of stores seem inconsistent at best. Any company on the web, whatever their history separate from the web, is judged according to a set of values and priorities derived from the web culture. Online shoppers seem to look for some of the following general characteristics when choosing between E-commerce

merchants:

i) The perception of the cheapest price: Numerous studies show that people comparison shop online for the cheapest price. What isn't clear is if people factor in price inflators like shipping costs or handling fees, how extensive people are in their research, or how granular people are in their appraisal. It is not clear whether buyers actually choose the lowest price.

ii) The perception of fewer hassles: The different commerce "engines" or applications accommodate user expectations with different degrees of success. Logically, those sites that provide the easiest user experience for finding products and purchasing products will be the most appealing to users.

iii) The perception of trustworthiness: A user must decide to trust an E-commerce site before making a purchase, and this decision is based on a perception and judgment of the site's trustworthiness. While E-commerce sites can provide explicit cues about their trustworthiness, sites also provide implicit cues that affect the user's perception of the site E-commerce web sites must pay attention to how they communicate to users. E-commerce sites play their role of seller by trying to broadcast two messages to potential buyers: "buy from us" and "trust us". The impact of these explicit messages, though, is often corrupted by contradictory or distracting messages implicit in the site's implementation of navigation flow, page layout, visual continuity, and information space.

iv) The visibility of the site: The user's awareness of a site has an obvious effect on their potential to purchase from the site. Advertising, public relations, and media play all contribute to increase consumer awareness about a site, but none of these speaks about the quality or trustworthiness of the site. Brand is valuable, though, when the brand is recognizable as standing for qualities of the company, but the translation

of real world brands to the web is not entirely understood yet. Please see Box 1.

5. UNDERSTANDING COMMERCE SCHEMAS

People expect certain things to behave a certain way and follow certain expected steps and processes (this packet of steps and processes is called a schema). Schemas are exceptionally powerful because they are usually internalized and applied without conscious intent. Users build an understanding of commerce from traditional commerce — a traditional commerce *schema* — then bring that schema with them when they try online commerce. Clearly, all users will not have identical commerce schemas, just like all users won't have identical desires or agendas, but many points will be similar across most schemas. Every user will have a point in the schema where they agree to a price or hand over the payment to the seller. What is expected from a commerce transaction is basic adherence to the following schema. (This is presented in the first person format from buyer perspective)

“These are the expectations I bring with me when I shop online; this list shows the needs I have when shopping, and my understanding of how shopping is supposed to be.

- A buyer
- A seller
- Authentication of the seller (Do I know him/her? Is it a company I want to do business with?)
- Something I want to buy
- Help finding the product I want to buy, if necessary
- Courteous, professional, helpful service (but I also want to be left alone to shop in peace, so make help available when I want it.)
- If the store is interesting, I might want to sign up for a newsletter
- An obvious method for purchasing (a line, a register, a checkout lane — something. Don't make me look for somebody to

take my money.)

- An explanation of store policies, if necessary (is there a warranty? Can I return the product?)
- A declaration of the amount due (Is that the correct total? Can I use this coupon?)
- Making the payment
- Authentication of the buyer (me) if not using cash
- I take ownership of the product”

Unfortunately, E-commerce simply can not meet these needs, at least not in this order. Most commerce sites fail in one (or both) of two ways: first, they may fail to adhere to the user's schema for commerce; and second, they may violate the schema. The cause of the schema failure or violation may be bad site design, bad information architecture, badly designed commerce engine, rushed implementation, unfamiliarity with the audience. While these problems vary in severity and scope any deviation from the user's expectations will disturb the user; disconcert the user enough and they may decide that they were lied to.

Violations of the schema are potentially the most disturbing problem for E-commerce users. These violations go beyond just improperly handling some expectation, they jarringly confront the user with an unexpected and threatening event. Two unfortunately common violations are the requirement to register in order to use the commerce site, and any ambiguous error within the actual ordering flow. Registration is a major sore point with commerce sites. Users do not expect to authenticate themselves before they are ready to purchase. If a user cannot flag a product for later reference for example, adding the product to a shopping cart or wish list without registering and/or logging, the typical user will be frustrated and will possibly get angry: this authentication barrier occurs at a point in the shopping experience that does not reasonably require authentication. If the user is not at the point where they are ready to lay down their money, experience tells

them that there is no reason to prove their identity. Ambiguous errors within the ordering flow are perhaps even more annoying. Commerce sites routinely fail during the final order submission: the user clicks on the submit button, and they receive a message that says there is a problem, but they don't receive the information essential to them, which is a.) the order *was* processed, and b.) their credit card *was* charged correctly.

• Online transactions are entirely mediated by
 • technology, so a failure of technology at the
 • critical point of purchase leaves users in a
 • feedback vacuum.

6. CONCLUSION

• In conclusion, it may be surmised
 • that while the Indian e-commerce sector is
 • growing speedily, consumers are still not
 • comfortable with purchasing items on the
 • internet.

BOX1: ONLINE VS. TRADITIONAL COMMERCE

Identity: Customers can easily authenticate the identity of a merchant simply by walking into a bricks-and-mortar store. There is a concreteness about a physical store that no amount of HTML will ever match.

Immediacy: In stores, customers can touch and feel and hold the merchandise. Tactile cues can drive the decision to buy. Communication with the merchant is not in the hands of a third party or technology (as with ordering by phone).

Value: The item at the center of the commerce transaction — the product, service, or property that is to be sold/bought — has some value. The relative value of an item, is much easier to appraise if that item is close at hand.

Discourse: People want the feedback available from non-verbal behavior, which forms a large part of their judgment process. Customers can converse with the merchant face-to-face; unmediated conversation is basic to human communication.

Community: Customers can interact with other customers and gain feedback about the merchant from other customers, as well as by observing the merchant interacting with other customers.

Privacy: In stores, customers can make purchases anonymously with cash; they usually do not have to give their name or address.

An online customer faces mediation at every stage of the commerce transaction. Customers can not see the merchant, only the merchant's website; they can not touch the merchandise, they can only see a representation; they cannot wander a store and speak with employees, they can only browse HTML pages, read FAQs, and fire off email to nameless customer service mailboxes; they can not explore the store's shelves and product space, they can only search a digital catalog. A customer at an online commerce site lacks the concrete cues to comfortably assess the trustworthiness of the site, and so must rely on new kinds of cues. The web is new to a large sector of the online audience and online commerce seems like a step into an unknown experience.

Table-1

MARKET SIZE FOR THE YEAR	2006-07 (Rs. Crores)	2007-08 (Rs Crores.)
Online travel industry	5,500	7,000
Online non-travel industry	1,580	2,210
- eTailing	850	1,105
- Online classifieds	540	820
- Pain content subscription- Online classifieds	20	30
- Digital downloads	170	255
Total B2C/ C2C E-commerce market	7,080	9,210

Source: http://www.exchange4media.com/e4m/izone1/izone_fullstory.asp

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