

Study on obstruction of E-Commerce and Their proposed Solution

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Abstract — Internet brought new opportunity for business. The geographical distance between buyer and seller has been decreased and has changed the way of companies and individuals conduct business. Electronic commerce is way to enhance existing business practice. E-Commerce is emerging as a new way of helping business enterprises to compete in the market and thus contributing to economic success. E-commerce can enhance economic growth, increase business opportunities, competitiveness, better and profitable access to markets. E-Commerce is showing remarkable business growth in our country. Increasing internet users have added to its growth. E-commerce has helped online travel industry in many ways and added new sales revenue through online retail industry in our country. As the new technologies are created, the new barriers to business are exposed. The present study has been undertaken to describe the present status and facilitators of E-Commerce in India, analyze the present trends of E-Commerce in India and examine the barriers of E-Commerce. This paper seeks to enumerated barriers facing E-Commerce and proposed comprehensive solution in term of both a software (an E-commerce platform should handle) and technique (to overcome human psychological barriers). And the barriers faced by the consumer and sales law and consumer information.

Index Terms — E-Commerce, Barriers, Software Solution.

I. INTRODUCTION

E-Commerce is a type of industry where the selling and buying of products is conducted over electronic systems such as the Internet. E-Commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. E-Commerce is generally considered to be the sales aspect of e-business. It also consists of the exchange of data to smooth the progress of the financing and payment aspects of business transactions. This is an effective and efficient way of communicating within an organization and one of the most effective and useful ways of conducting business applications. E-commerce as part of the information technology revolution became extensively used in the world trade in common and Indian economy in particular. As a symbol of

globalization, E-Commerce represents the cutting edge of success in this digital age and it has changed and is still changing the mode business is conducted around the world. The commercialization of the Internet has driven electronic commerce to become one of the most proficient channels for inter-organizational business processes. Internet growth has led to a host of new developments, such as decreased margins for companies as consumers turn more and more to the internet to buy goods and demand. Although the playing fields relating to physical costs and traditional advertising costs have been leveled, a merchant seeking to do business on the Internet encounters new playing fields with new barriers. Barriers in E-commerce are defined by the unlimited nature of the Internet. Seemingly unlimited customers are being chased by seemingly unlimited competition. Solutions presented to merchants by Web developers, consultants, and hosting services are likewise as many and, at times, contradictory. All merchants online face the barriers represented by the consumer psychology.

II. BARRIER #1 : SECURITY CONCERNS

The Internet still reflects its genesis as an open venue for scientific and engineering research. Security was not a major issue in the early days of the Internet as it was assumed researchers using the system would not endanger their jobs. The purpose of the Internet was open, not to move private data around the planet. Security has come a long way, with strong encryption becoming the standard. However, highly publicized security concerns of the early days of the commercial Internet still resonate with online consumers and these concerns are periodically shatterproof with high profile news stories of recognize theft at major Websites. If a site does not give the impression of being secure to a customer, the consumer will not trust it.

Solution: When selecting an E-Commerce platform, the merchant needs to ensure the platform employs strong encryption for payment processing and consumer data preservation. The data center that physically hosts the customer data should likewise occupy onsite security. While it might be not practical for the merchant to examine the hosting facility, the hosting service should detail to prospective merchants what physical security systems are in place. As well, the merchant should ensure the hosting facility has

proper disaster recovery procedures, servers should be backed up daily, and back-ups should periodically be stored off site, and so on.

If the merchant is using an online third party credit card processor, the merchant also needs to ensure the payment processor is secure. There are many such payment processors and a merchant needs to diligently research each. The merchant also needs to ensure the E-Commerce platform supports the desired payment processor.

Most online shoppers are savvy enough these days to look for the small lock symbol  and https:// as confirmations that a transaction is secure. However, a merchant should still visually or textually reinforce on checkout pages and various other site collateral that transactions and customer data are secure.

Make privacy policies clear and concise. Explain what personal information you will need and why. If you will be collecting any sensitive data like user location, IP address, browser name and similar information, ensure that you mention it on this page; and again make it clear why you are collecting it, where it will be stored, and under what circumstances you might share it with a third party.

It even considers including the TRUSTe seal, which shows that your privacy policy meets higher standards. Do not forget to make sure that it is actually a verified and updated seal, if you plan to put it up on your website. And if after all of this, you still place your privacy policy somewhere in an obscure region of your website.

Adding privacy lines, like “we respect your policy” next to the form where you are collecting email address or any other personal information can go a long way in increasing the trust and credibility of your website.

III. **BARRIER #2 CONFUSING CHECKOUT PROCESS**

According to studies 48% of customers abandon the checkout process. This is similar to nearly half of customers getting into a brick-and-mortar store's checkout line and then walking away before getting to the cash register. If this were the case in a brick-and-mortar store, the problems would be likely easy to diagnose: the line is too long, too many customers ahead are having to do price checks, etc. It would be manifesting to the merchant what steps needed to be taken to correct this shocking loss of sales. In online transactions, a loss might not be so obvious to an Internet merchant.

The top reasons customers abandon the check out process are:

1. Hidden charges at checkout.
2. The customer was simply comparison shopping.
3. Shipping charges were too high.
4. The customer did not have time to complete the checkout.
5. The product was out of stock.

Solution: To help prevent "**sticker shock**", *problem 1* an E-Commerce platform should always have a visible running

total of purchases significantly displayed during the customer experience.

Problem 2 is a problem faced by all merchants, online or offline. How to turn a visitor into a customer? An E-Commerce platform that allows the merchant to display both the suggested retail price and the online store's price can help a comparison shopper. The E-Commerce system should have a good promotions engine, allowing the merchant to offer everything from volume discounts to creating "**razor and blades**" type promotions (that is to say, the customer gets the razor at a good price if the customer buys x number of regularly price blades). Also, instead of forcing a customer to commit an item to a basket, the E-Commerce system should have a "**Wish List**" alternative. This way a customer can add a list of items and come back later to compare.

Problem 3 can be handled by matching shipping as accurately as possible with the product being shipped. Too many online merchants lagging out the shipping, charging more to make up any possible loss on another product. Amazon.com, for example, has a rather generous shipping and handling rate it pays to used book and CD merchants. It's so generous that it has created the interesting trend of being able to buy any number of books for a mere penny. The small time used book merchant simply sells the book for a token amount to profit from the padding Amazon.com adds to its shipping charge. An E-Commerce platform should allow highly grainy control over shipping charges. The merchant should be able to create a general shipping level along with product specific overrides.

Problem 4 related to customer time constraints. Some customers simply don't want to register but want to make a purchase. While for marketing purposes the merchant wants to retain this customer data via a registration process, the merchant should weigh the cost of losing a sale today. For registered customers, the E-Commerce platform needs to make maximum use of stored data during the checkout process. The E-Commerce platform should auto complete the customer's shipping information and credit card and, of course, give the customer the opportunity to make ineffective.

Problem 5 Selling out of stock items can easily be prevented if the E-Commerce platform tracks stock and matches sales to stock. If the E-Commerce platform's stock tracking function detects a product has sold out, the online store can flag the item as out of stock for the consumer

IV. **BARRIER #3: CUSTOMERS CANNOT FIND THE STORE**

If a merchant has an online shoe store, the hope is search engines like Google will drive traffic to the site. A Google search on "online shoe store" produces nearly 400,000 results. The odds a new online store will bubble to the top of search results are vanishingly small. In this highly competitive "**key word**" space, the primary barrier to being found is bigger, established merchants have adopted search engine optimization techniques (SEO) to increase their site's relevance and popularity.

Solution: Providentially, SEO is less a matter of hiring expensive consultants or tricking search engines with arcane techniques and more of a matter of employing a handful of straight forward optimization methods such as the correct use of meta-tags and the title tag, rearranging page text in a fashion that can logically broken down by a search robot, and good site layout. An E-Commerce platform should support implementing SEO techniques.

V. **BARRIER #4: UNABLE TO SELL PRODUCTS UNDER THE "LONG TAIL"**

Traditional retailers with limited shelf space tend to focus on a narrow range of products that sell in high volumes. A retailer would much rather devote shelf space to items purchased ten times a day versus once a year. However as the figure below demonstrates low sales volume products can equal or exceed sales generated by the high volume products highlighted in yellow. This often ignored product range is known as the "Long Tail".



E-Commerce removes the shelf space barrier however it presents a technical and logistical challenge for smaller merchants.

Solution: To sell from the Long Tail with minimal effort, an E-Commerce platform should be able to automate the process of order fulfillment from a wholesaler or a manufacturer. When an order is taken by the E-Commerce software, the software needs to generate an order request for the wholesaler.

While electronic merchandizing eliminates the shelf space barrier, it does not remove the problem of entering large numbers of products into an online store's catalog. Spending a lot of time manually entering low volume products into an online catalog is likewise a barrier to selling from the Long Tail. An E-Commerce platform then needs to have an import function. An Import function allows a retailer to get a delimited Microsoft Excel or Microsoft Access file from the wholesaler and quickly import dozens or hundreds of products at the click of a button.

VI. **BARRIER #5: NO SALES STAFF MEANS ANY CHANCE OF UP-SELLING**

Without a salesperson's help alerting customers as to what products compliment or enhance a purchase, online stores suffer an inability to up-sell. As well, customers sometimes rely on a sales person to inform them of additional required

products. For example, a digital camera needs batteries and a memory card.

Solution: An E-Commerce platform needs to be able to associate products with related and complimentary products. These associations need to be displayed automatically on product pages. A robust promotional engine should be able to tie the purchase of one product to a discount on another product or even a category of products. For example, an online electronics store might want to create a promotion where a purchase of a digital camera over \$200 triggers a 10% discount on the purchase of batteries or memory cards.

VII. **BARRIER #6: LANGUAGE BARRIER**

While English is the current language of business, there are a great number of consumers who speak economically important different language. Ignoring large pools of potential non-English speaking consumers can be a missed opportunity. Computers can't currently offer accurate translations and making a site multi-lingual invariably requires human translation services. Unless talent is in-house, this can mean contracting out at a very high hourly rate.

Solution: An E-Commerce platform can cut down translation time if properly architected. The system should allow all translation to be done centrally. A translator can quickly translate product names, descriptions, etc. without having to toggle between multiple screens.

VIII. **BARRIER #7: GEOGRAPHICAL BARRIER**

An online store has the potential to vend to the world. In addition to shipping, different weights and measures, and currencies all vary depending on geographic county. If the merchant's store suddenly became popular in Brazil (a nation of nearly 200 million consumers), the merchant needs to be able to handle shipping and will need to be able to price shipping properly. What if a merchant starts getting a large number of orders from another nation and finds a large percentage of orders are resulting in expensive charge backs because of credit card fraud? In a drop shipping arrangement it could be quite time consuming as the merchant has to manually call vendors and cancel orders.

Solution: The E-Commerce platform needs to be able to work in both Metric or Imperial weights and measures. An ability to work in many different currencies is a customer-friendly feature, allowing customers to correctly price goods in their own currency. The E-Commerce platform also needs to be able to block out certain nations and simply reject orders from nations with high incidents of credit card fraud. As well, some sellers of advanced electronics cannot legally sell to certain nations. An E-Commerce system that can in advance reject orders from certain nations can save a merchant from having to make time consuming overrides after the fact.

IX. CONCLUSION

There is no playing field that does not come with a new set of barriers. The proper tool can overcome any new set of barriers. While large companies can bring vast financial resources to bear to aid them in overcoming barriers and erecting new ones for smaller E-Commerce companies, one does not need to outspend large corporations to level the playing field. A proper E-Commerce platform and some basic techniques can overcome barriers.

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