

Role of Innovation & Technology in Popularity of Online Shopping

Monika Pathak¹, Gagandeep Kaur²

¹Department of Computer Science, ²Department of Commerce
Multani Mal Modi College, Patiala
Patiala, Punjab, India

Abstract-Innovation and technology play a magnificent role in popularity of online shopping system. Innovation refers to the new changes in system to meet current requirements of customers and technology advancement in an implementation of innovative ideas. With due to increasing internet penetration and availability of online shopping sites, there is a huge rush over the online shops which result in revenues in billions. The present study aims to identify factors in light of innovation and technology which play significant role in popularity of online system. We have referred Economic Survey 2012-2013 of Oxford University Press which reveals significant facts that has great impact on e-business using online shopping system. Technological differences between traditional shopping and online shopping are also analysed. We have developed factor matrix which categorized different factors into different categories along with their sensitivities. This paper concluded that the advancement in technology facilitate customers into many ways which develop trust towards e-business. The role of innovation in the field of online shopping resolves number of issues related to customer satisfaction and technical obstacles.

Keywords: Traditional Shopping, Online Shopping, Factor matrix, e-Business, Innovation.

INTRODUCTION

With due to increasing internet penetration and availability of online shopping sites, there is a huge rush over the online shopping which results in revenues in billions. Now days, online shopping have become very popular because of vast availability of internet. It is a type of E-business [1] in which one customer can purchase any product over the internet. It is a process of buying/selling products with the help of computerized business transactions electronically using the Internet. Online shopping is different from traditional shopping in many aspects [2]. In traditional shopping, we have limited variety, limited choice of buyers and buyers can buy only those products which are available in local market. Whereas in the case of online shopping, the buyer can shop wide range of products of multiple brands in limited time from his/her place. The limited options of payments are available in traditional shopping but in online shopping customer can make payments in multiple modes. Payment options available in online shopping are net banking, credit cards, debit cards, C.O.D. (cash on delivery), cheques and postal money order. With the help of online shopping, companies can make direct contact with their customers. Many people prefer online shopping because of its number of benefits like huge discounts on international brands, privacy and freedom of choice. These all factors play a vital role in gaining popularity among customers about online shopping system. On the other side, there are few issues that need to be addressed like warranty issues, return problem, late delivery problem, scam and extra shipping charges.

The present research is aimed to find out factors which play an important role in gaining popularity of online shopping system. We have gone through *Economic Survey 2012-2013* of Oxford University Press. After literature review, we have developed *factor matrix* which reveals categorization of issues and factors along with required elaboration. We have categorized these factors into different categories based on internal/external variables. After going through detailed analysis of factor matrix, we have concluded that the advancement of technology in the field of online shopping plays a positive role to build trust among customers in multi-dimensional issues [3] like ease of use of technology, confidence in payment transactions, service satisfaction and to gain social admiration.

GENERALIZED MODEL OF ONLINE SHOPPING

We have considered the generalized model of customer satisfaction in which customer search an online shop and select product of their choice. In the model, Service provider is name given to the online shopping authority which looks after the online shop. The service provider provides a GUI user friendly interface which helps customers to search product and find attractive offers and discounts on it. After, putting products into cart which maintains list of products along with total expenditure customer is redirected to third party payment site. The third party payment site handles all payment issues and transfers amount to merchant account [4].

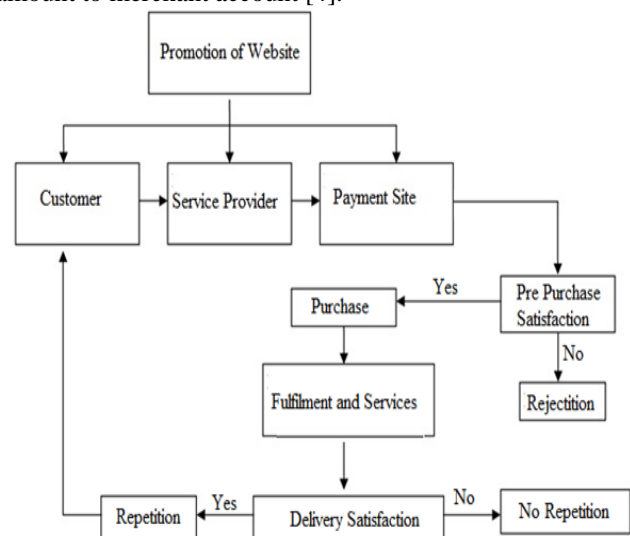


Figure 1: Process Model of Online Shopping

The payment transition is made by third party, the customer is asked to make his satisfaction. After the final payment

product is shipped to the customer place. If the customer is satisfied with service provide, Third party payment site and shipping services then there is a high probability to revisit the online shop otherwise this satisfaction leads to drop in popularity of the online shop.

We have considered above mode as base for finding factors which associate working of Service Providers, Third Party Payment System and Shipping System. The Service Provider facilitates User friendly GUI and up-to-date customer specific products with attractive offers.

FACTORS EFFECTING POPULARITY OF ONLINE SHOPPING

There are number of factors need to be consider to make a product attractive to customer and customer behaviour for shopping plays a major roles in this regards. In the present study we have consider multiple factors from different domain of customer behaviour and buying behaviour. These factors are represented into a *factor matrix* which categorized the factors into multiple categories.

Table1: Factors affecting the popularity of online shopping

S. No.	Factor	Effect
1	External Environment	Legal Framework: It protects the consumers from any kind of laws in online shopping transactions. It also sort disputes come across e-business.
		Third Part Recognition: Third party ensures trustworthiness of online vendors which develop trust of customer to online shop.
		Number of Competitors: The numbers of internet online stores that provide same service and products that create great opportunity to the customer to buy products and services at lowest rate.
2.	Geographical Factor	As per studies geographical distances have positive impact on popularity of online shopping as distance of customer and retailer does not matter.
3.	Personal characteristics	Gender: In a comparative study it is been observed that Females tend to be more attracted towards online shopping as compare to Males.
		Job: Nature of Job is not directly related with online shopping behaviour of buyer but it is also seen that people who have more time available from work life tend to do more online shopping.
		Age: Age of buyer plays a vital role in online shopping. Young people from age group of 18 to 35 years chose online shopping as their preference.
		Internet experience: Connectivity to internet and habit of being more social via networking sites also influence shopping preference to Online shopping from traditional method. Proficiency in internet usage largely affects online shopping behaviour.
		Education: Education create awareness in customer, people with higher education level do more online shopping as compare to other users.
4	Vender/service/product characteristics	Products which are not available in nearby markets and additional services like home delivery and ease of order also make online shopping more popular among users.
5	Website Quality	Security/Privacy: Websites which are certified by visa or any other payment gateway are more popular among buyers because of high safety measures [5].
6	Attitude towards online shopping	Attitude towards online shopping is changing positively from last decade due to enhancement in knowledge.
7	Intention to online shopping	Intention for online shopping is depending on nature of product. Products having more complex features and require detailed analysis before taking buy decision are more popular for online shopping.
	Decision making /info seeking	Freedom of making choice of decision to buy a product is important factor as online shopping depends upon quick buy option and order must be placed immediately.
8	Consumer satisfaction	Level of satisfaction from previous purchases made encourage or discourage future buying decision of buyer. If buyer is satisfied from past online shopping results, it provides more confidence to him for next deal positively.
9	Number of Brands	Choice of brands is a factor which influence mind of modern buyer. Online shopping gives more choice and selection of brands which are available world-wide. Hence consumers seeking wide variety of brands tend to select online shopping as their preference.
10	Amounts spent online	Spending habits of buyers are largely affected by mode of shopping as numbers of available variants with small price change make buyer spend more than pre-decided budget. Online shopping has number of options available with slight price change as a result buyers spend more in online shopping.
11	Payment options	Cash on delivery (C.O.D.): Cash on delivery [6] is a revolutionary option introduced in online shopping world. It has increased confidence level of normal buyer who has fear of being cheated, now the same buyer prefer online shopping as payment is to be made at end on receiving of product.
		Cheque/ Check: As we all know cash was the only mode of buying goods, but with introduction of online shopping number of payment mode are now available for buyer. Cheque is one of them. It gives high value transactions an added security.
		Debit card: Debit card [7] and shopping cards are creating a new era of online shopping trend. With help of Debit cards customer can make payment of their order instantly.
		Postal money order: VPP and Money Orders [8] are part of a long list of payment modes available in online shopping. It enables buyer to have some extra time for making payment by a secured mode.
		Invoice: Invoice [9] is another term used for billing system. Online shopping also provides e-bill or e-invoice in electronic form which can be printed for reference as documentary proof.
		Electronic money of various types [10]: Electronic money is fast and secure mode of making payment for online shopping.
		NEFT, RTGS, Debit Card, Credit Card etc. are some of the well-known electronic modes of payment.

ANALYSIS OF FACTORS AFFECTING ONLINE SHOPPING

We have analysis the factors affecting the online shopping in light of advancement in technology and innovation in ideas for online shopping. The table1 shows eleven categories of these factors and after analysis we have find out following facts which plays a positive role in popularity of online shopping. Finding a product online is much easier than looking for it in the local market. One can search any product easily by using any online shopping site. Shopping from the local store become more time consuming and expensive if buyers do not have his own conveyance. In online shopping one can solve all the above problems just by going online. In online mode one can choose the product he is looking from a vast range of products. As buyer has choice from products available world-wide markets which is never been possible in traditional shopping from sort. Buyer will enjoy the freedom of price flexibility. If the price of a product doesn't suite the requirement of buyer he can compare it from an online shop, or can switch to other online to store to look for cheaper price. This process can be followed in normal shop, but it would take more time and energy to do so same.

Buyer protection: Dependable websites like Ebay provides buyer protection [11] to motivate people to buy from their site. This highly trusted websites will give your money back if any seller do not deliver the item or deliver an item which does not match with the description. These types of money back policy boost buyer confidence and trust.

Privacy: There are some products which you don't want to buy publicly. You can buy any kind of product from online web store anonymously to maintain your desired privacy. On other hand may be due to market restrictions such products will not be available on display.

CONCLUSION

With the rapid advancement in technology and innovation in the field of online shopping, there is a great change in shopping pattern among all age of groups. Online shopping has made consumers more effective and efficient in their shopping behaviour and has driven businesses to a new level, forcing many to make the necessary adjustments and changes to reach the new market of knowledgeable consumers.

REFERENCE

- [1]. Ha, S. and Stoel, L., "Consumer e-shopping acceptance: Antecedents in a technology acceptance model", *Journal of Business Research*, 2009, 62, 565-571.
- [2]. Sim, L. and S. Koi, "Singapore's Internet shoppers and their impact on traditional shopping patterns", *Journal of Retailing and Consumer Services*, Vol.9, No.2:115-124, 2002.
- [3]. Close, A. G. and Kukar – Kinney, M., "Beyond buying: Motivations behind consumers' online shopping cart use", *Journal of Business Research*, 63, 986-992, 2010.
- [4]. Bellman, S., G. Lohse and E. Johnson, "Predictors of online buying behaviour", *Communications of the ACM*, Vol.42, No.12:32-38, 1999.
- [5]. Dolnicar, S. and Jordaan, Y., "Protecting Consumer Privacy in the Company's Best Interest", *Australasian Marketing Journal*, 14 (1): 39-61, 2006.
- [6]. Senecal, S., "Stopping variables in online buying processes: An innovation diffusion approach", *Proceedings of the 6th Americas Conference on Information Systems*, 2000.
- [7]. Krueger, M. and K. Leibold, "Internet Payment Systems: The Consumers View Results of the Online-Survey IZV7, Section for Money and Currency", *Institute for Economic Policy Research, University of Karlsruhe*, 2004.
- [8]. Mantel, B., "Why Dont Consumers Use Electronic Banking Products? Towards a Theory of Obstacles, Incentives, and Opportunities, *Policy Studies*", September, 2004.
- [9]. *The Economist*, "Online Payments Paying Through the Mouse", 2004b.
- [10]. Goldsmith, R., "Explaining and Predicting Consumer Intention to Purchase Over the Internet: An Exploratory Study", *Journal of Marketing*, Vol.66:22-28, Spring 2002.
- [11]. Pan, Y. and Zinkhan, G. M., "Exploring the impact of online privacy disclosures on consumer trust", *Journal of Retailing*, 82 (4): 331-338, 2006.