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Factors influencing online shopping in rural India: A review

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Abstract

Online shopping is growing rapidly but rural markets have low acceptance of this retail channel. Literature on rural online shopping is scarce and so the literature examining the influences on online shopping is used to draw inferences for rural markets. The review examines the influence of consumer characteristics on online shopping, product characteristics influence on online shopping, relative competitive ability of online and off-line retail business and their influence on online shopping and the influence of infrastructure on online shopping. The review of online shopping literature is used to draw implications for decision making and also to understand the research issues for online shopping in rural markets.

Introduction

Online shopping is gaining substantial acceptance in India. The price advantages, convenience and choice it offers to consumers has enabled ecommerce companies to grow rapidly. The advantages that online shopping holds for consumers in rural areas are many as rural consumers prefer value for money, seek convenience and variety. The advantages that online shopping offers to rural consumers is much more than the benefits offered to the urban consumers. The presence of ecommerce in rural areas is however low and there are not many studies that have examined the issue. This review examines literature on online shopping to understand the influences that affect online shopping in rural India. The review looks at differences in urban and rural markets and examines the online shopping literature to understand their influences on online shopping. Differences in the profile of rural and urban consumers and benefits sought could influence acceptance of the online shopping. Costs incurred by rural consumers and other barriers to acceptance of online shopping could also be an influence. Variations in beliefs and attitude towards online shopping as also familiarity with online shopping differs for rural and urban markets and the implications of these on acceptance of online shopping are examined. Product characteristics can be expected to have no influence but this could moderate consumer behavior and therefore this is also examined. Rural-urban infrastructure differences and their influence on the ability of the traditional retail sector and the online retail to meet the needs of consumers is also examined.

Consumer characteristics and influence on rural consumers' online shopping

Consumer profile influence on online shopping

The review seeks to understand the influence of consumers' profile on internet shopping to draw inferences on the variations in profile of rural and urban consumers and their effect on internet shopping in these two markets.

Age is also observed to have an influence on the attributes and influences on online shopping. In a telephonic interview with 790 internet users in a city the results indicated that internet shoppers were older and had higher income (Donthu and Garcia 1999).

In a study of 447 Spanish buyers using mobile applications it was observed that influences that affected satisfaction with the shopping experience varied. Satisfaction with mobile shopping and positive WOM for young adults was influenced by the entertainment the experience offered. For higher age group it was group influence (subjective norms) that influenced mobile shoppers' satisfaction and WOM (San-Martin 2015).

In an online survey of 243 users of grocery shopping service from an internet shopping service of an US retailer it was observed that people with disability or mothers with children found online shopping useful (Morganosky and Cude 2000)

There is evidence that profile of rural consumers influences online shopping. An experimental research method was used by a study with a sample of 258 rural consumers from U.S. Younger consumers in rural areas were likely to purchase through internet. Education, income and gender did not affect internet shopping in rural areas (Worthy et al. 2004).

Risk propensity of consumer towards online shopping

Risk perceptions and their influence on online shopping was examined using modelling of consumers as risk neutral and risk averse. This theoretical paper suggested that risk neutral consumers were more likely to shift to online shopping than risk averse consumers. Risk averse consumers once they used an online shopping site preferred to continue using that site unlike risk neutral consumers. The loyalty to a site possibly also explained price dispersion for commodities in online market space (Gupta et al. 2004).

Consumers relied on brand name of retailer to select the same product and pay premium for non-contractible part of the product and service bundle, like shipping reliability. Analysis of online purchase of books by 20,268 U.S. consumers indicated that for a homogenous product there was consumer preference for well-known retailer brand. Presumably brand was a proxy for retailer credibility and for which the consumers paid a higher price for the same product (Smith and Brynjolfsson 2001).

Cognitive dissonance framework was used to understand offline brand influence on online performance for multi-channel retailers. This understanding was tested using experiment method and with 4000 subjects in U.S. The study observed that offline brand image influenced online image. Thus, offline brand image reduced online perceived risk and created online loyalty. Online perceived risk however did exhibit an influence on online brand loyalty (Kwon and Lennon 2009).

In a study of 734 mobile shoppers in Germany it was observed that more than trust of m-vendor the social acceptance of m-shopping influenced intention (Grob 2018).

Analyzing the consumer responses to two bi-annual surveys Hoffman et.al. (1999) inferred that privacy issues of online shopping was a key concern of consumers

In a study of 780 university students in U.S., credit card security was an issue for online shopping (Lester et al. 2005)

Intangibility did not affect perceived risk much more for offline than online transactions but privacy and security concerns did influence perception of online transactions. This was observed in a study of 121 households as respondents in a small town in U.S. (Eggert 2006)

<u>Consumer benefits sought from online shopping</u>

The review of literature that examined the benefits sought by consumers is expected to help understand the motivational factors that affect online shopping and their influence on online retailing.

In a study of 780 university students in U.S., it was observed that fun, product information, availability of unique products, ability to compare prices and a few other advantages were identified with online shopping (Lester et al. 2005)

To understand the impact of electronic market place on the participants, the buyer search behavior was modeled. The model was validated with three airline reservation sites. Electronic market places in commoditized market provided buyers with price information and in markets with differentiated products the buyer was able to get information on products and thus helped take decision on the product that suited the consumer and also at competitive price (Bakos 1997).

In a telephonic interview with 790 internet users in a city the results indicated that internet shoppers valued convenience, sought variety, were impulsive, innovative and less risk averse (Donthu and Garcia 1999).

Convenience and comprehensiveness of online shopping influenced the propensity of rural consumers to shop online. American rural consumers were 16% more likely to shop online than urban consumers (Peters 2004)

<u>Consumer costs and barriers to acceptance is reviewed for implications for rural consumers.</u>

In a study of 734 mobile shoppers in Germany it was observed that more than usefulness (convenience etc.) or enjoyment in m-shopping it was the ease of use that influenced m-shopping (Grob 2018)

Meta-analysis of 53 articles that covered 58 studies of mobile commerce adoption indicated that usefulness was important for western culture but ease of use for eastern culture (Zhang et al. 2012)

In a study of 272 undergrads it was observed that touch and feel were important for buyers and this was a barrier to acceptance of online shopping (Citrin et al. 2003).

In a study of 780 university students in U.S. one of the disadvantages of online shopping was the inability to experience the product in online purchase (Lester et al. 2005)

Construal Level theory suggests that people with lower construal level (concrete mental representations) sought touch and feel of product compared to those with higher construal levels (abstract mental representations). Three experiments conducted on 137, 188 and 195 Chinese students indicated that perceived risk and perceived ownership were the mechanism through which the mental representation influenced purchase intention and willingness to pay, i.e. these were moderators (Liu 2017)

In a study of UK internet motor insurance market it was observed that internet search ability influenced the effective use of internet for shopping and so the issue of digital divide needed to consider not only internet access but also internet search abilities (McDonald and Wren 2017)

Consumer beliefs and attitude on online shopping

Literature that examines attitudes and beliefs towards online shopping and their influence on online retailing is reviewed to understand their potential to affect acceptance in rural areas.

In a longitudinal study of 879 rural consumers in U.S. it was observed that beliefs about online transactions (problems, quality issues) affected acceptance of online shopping (Lennon et al. 2009)

A study of 539 users of internet in U.S. observed that the reasons for differences in usage rates were the different beliefs about the internet and this influenced the attitude and use of internet Though access barriers influenced the use of internet it was the perception of ease of use and perceived usefulness of the internet that had a greater influence on attitude and usage by consumers. (Porter and Donthu 2006).

The influence of online experience on beliefs was examined in a study of 336 students in U.S. There was evidence that online shopping experience had a positive influence on purchase intentions. It was also observed that online shopping experience reduced perceived product and also financial risks (Dai et al. 2014)

In a study of 734 mobile shoppers in Germany it was observed that continued mobile shopping was influenced by satisfaction with mobile shopping experience (Grob 2018)

Influence of consumer familiarity with internet technology on online shopping

Literature that examined familiarity with internet technology and its usage and their influence on acceptance of online shopping is reviewed.

Data from online survey of 641 internet users suggested that internet browsers perceived more risk in internet shopping than internet shoppers (Forsythe and Shi 2003)

Familiarity with internet technology and its usage was examined for their influence on attitude of rural consumers towards internet shopping, online retail product information search and

online purchase. An experimental research method was used by a study that had a sample of 258 rural consumers from U.S. Internet users were observed to have a positive attitude to online shopping, more likely to search for information on products online and also to make online purchases (Worthy 2004)

Consumer behavior/response to retail strategies

Survey using 151 mail response, 326 online responses and 103 retail consumers was used to understand the effectiveness of multi-channel strategy of retailers. The study notes that multichannel retailing increased the service options for the consumer and so increased customer satisfaction and loyalty (Wallace et al. 2004)

Three experimental studies using German and Swiss participants indicated that online-offline channel integration led to competitive advantage and channel synergies than channel cannibalization (Herhausen et al. 2015)

Longitudinal study of 71 U.S. retail stores indicated that channel integration stimulates sales growth (Cao and Li 2015)

Guided purchase favor ecommerce in rural areas. An experimental research method was used by a study with a sample of 258 rural consumers from U.S. Those consumers who had guided experience of internet online shopping had a favorable attitude towards online shopping and online product information search than those who did not have guided use of internet shopping (Worthy 2004).

Product characteristics as moderators of consumer influence on online shopping

Product category influences on acceptance of online shopping is reviewed.

Experiment conducted with 270 Spanish university students indicated that well-known brands were favored for online purchase compared to favoring these brands for offline purchase. This was for those products where consumers needed to use sensory effort, to hold or touch the product (fabric) before decision to purchase (Gonzalez et al. 2015)

Based on secondary data sources that included four surveys it was inferred that connected persons spent more on books and clothing online relative to their offline spending, if they were farther from offline stores (Sinai 2004)

Online and offline retailer capabilities and their influence on online shopping

In addition to benefits sought by consumers from online shopping the accessibility of traditional retail stores and their ability to meet the consumer needs can influence online shopping.

Study of panel data over time indicated that people with low shop accessibility shop more often online (Farag et al. 2006).

Based on review of existing literature Alba et al. (1997) drew implications for participants in electronic marketplace. They proposed that non store retail formats like online shopping may be attractive in areas that lacked well developed retail industry like rural areas (Alba et al. 1997)

Dissatisfaction with local retailing in rural areas affects online shopping. In a longitudinal study of 879 rural consumers in U.S. it was observed that dissatisfaction with local retailing influenced beliefs on online shopping and also extent of online shopping (Lennon et al 2009).

Rural infrastructure influence on online shopping

Internet access is an influence but more important it is the beliefs about internet that influenced internet use. In a study of 539 users of internet in U.S. differing in usage frequency the influence of age, education, income and minorities was examined for influence on usage. The study observed that the reasons for differences in usage rates was for the reason of different beliefs about the internet and this influenced the attitude and use of internet This study also observed that internet access was one of the factors that explained the influence but more than that it was the perceptions regarding the ease of use and usefulness of the internet that influenced attitude and usage by consumers. (Porter and Donthu 2006).

Managerial Implications

Consumer derives benefits because of ability to access online information but given the low literacy levels the limited ability of rural consumers has implications for policy makers to educate rural population on use of online information.

Guided purchase improving attitude towards online shopping suggest to online retailers that they need to develop business models that incorporate such facilities for market development. Online retailers need to make online shopping easy to use for rural consumers to get them to shop online.

Online retailers need to examine options that offer rural consumers the experience of the product before final purchase decision is made by the consumer.

Online retailers may find it rewarding to promote well-known brands in rural markets than just price alone as brand acts as a proxy for product experience.

Services are intangible and online shopping does not make a difference and thus services may hold greater possibility for rural markets compared to products where the retail store provide the option of experiencing the product before purchase.

Online retailers may want to use a co-branding approach with a trusted retail brand to which rural consumers are loyal to gain acceptance in rural markets.

Online retailer may find focusing on few products like clothing to get acceptance among rural consumers.

Research Issues

Rural consumers are considered risk averse and low on innovation and in which case the acceptance is expected to be lower for internet shopping. The relationship between innovativeness among rural consumers and acceptance of online shopping is an area for research.

Need to examine if rural consumers exhibit greater importance to ease of use over utility of online shopping compared to urban consumers

Touch and feel requirement is expected to be higher for rural online shopper to make a decision compared to urban consumers. There is a need for a study to provide empirical support on this aspect.

Rural consumers' need to experience the product more than urban consumers before purchase but this may not be possible for online shopping. Brand name is possibly used to reduce risk in such situations by rural consumers. This relationship between brand knowledge and online preference needs validation for rural markets.

Services are preferred over products for online shopping in rural markets as the need for experiencing the product is high and this is possible in retail store for products but not for services. Confirmation is required for this relationship.

Partnering or use of trusted retail brand to which consumers are loyal would help gain greater acceptance of online retail service compared to urban markets. Examining case studies in rural markets that examines the issue would validate the relationship.

Rural consumers prefer certain products like clothing over other products for online shopping. Product influence needs to be examined for differential response between rural and urban markets.

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