CONSUMERS ONLINE: INTENTIONS, ORIENTATIONS and SEGMENTATION

Chanaka Jayawardhena¹, Len Tiu Wright² and Charles Dennis³

¹Loughborough University Business School
Loughborough University
Leicestershire
LE11 3TU
UK
Tel: +44 1509 228831; Fax: +44 1509 223960; Email: C.Jayawardhena@lboro.ac.uk

²De Montfort University
Graduate Business School
Bede Island
Leicester
LE1 9BH

³Brunel University
Brunel Business School
Brunel University
Uxbridge, Middlesex, UB8 3PH, UK.
Tel: +44 (0) 1895 265242
Mobile: +44 (0) 7984 921139
Fax: +44 (0) 1895 269775
E-mail: Charles.Dennis@brunel.ac.uk
Home Page: http://www.brunel.ac.uk/about/acad/bbs/bbsstaff/bm_staff/charlesdennis


Len Tiu Wright is Professor of Marketing and Research Professor at De Montfort University, Leicester and Visiting Professor at the University of Keele. She has held full time appointments at the universities of Keele, Birmingham and Loughborough and visiting lecturing positions with institutions in the UK e.g. Cambridge University and overseas. Len Tiu has consultancy and industrial experience and has researched in the Far East, Europe and North America. Her writings have appeared in books, in American and European academic journals, and at conferences where some have gained best paper awards. She is on the editorial boards of a number of leading marketing journals. She is the Founding Editor of the Qualitative Market Research – An International Journal, an Emerald publication.
Charles Dennis was elected as a Fellow of the Chartered Institute of Marketing (CIM) for work helping to modernise the teaching of the discipline. He is a Chartered Marketer and Senior Lecturer in Marketing and Retail Management at Brunel University, London, UK. The textbook *Marketing the E-business* (Harris and Dennis, 2002) and research-based *E-retailing* (Dennis *et al.*, 2004) were published by Routledge; and research monograph *Objects of Desire: Consumer Behaviour in Shopping Centre Choice*, (Dennis, 2005) by Palgrave.

Abstract

**Purpose** – This paper examines the purchase intentions of online retail consumers, segmented by their purchase orientation.

**Design/methodology/approach** – An e-mail/web survey was addressed to a consumer panel concerning their online shopping experiences and motivations, n = 396.

**Findings** – It is empirically shown that consumer purchase orientations have no significant effect on their propensity to shop online. This contradicts the pervasive view that Internet consumers are principally motivated by convenience. It was found that aspects that do have a significant effect on purchase intention are prior purchase and gender.

**Research limitations/implications** – There are two limitations. First, the sample contained only UK Internet users, thus generalisations about the entire population of Internet users may be questionable. Second, in our measurement of purchase intentions, we did not measure purchase intent *per se*.

**Practical implications** – These findings indicate that consumer purchase orientations in both the traditional world and on the Internet are largely similar. Therefore, both academics and businesses are advised to treat the Internet as an extension to existing traditional activities brought about by advances in technology, i.e. the multi-channel approach.

**Originality/value** – The paper adds to the understanding of the purchase orientations of different clusters of e-consumers

**Keywords** Purchase Intention, Purchase orientation, Internet, Online retailing, e-Retailing.

**Paper type** Research paper

1. **Introduction**

Despite considerable attention given to the Internet in the popular press; and growth in UK online shopping outstripping that of the high street by a factor of 6 to reach £6 Billion (3.5 percent of total shopping) (Verdict, 2006) representing a huge marketing opportunity, scholarly research focusing on the Internet and its opportunities seriously lags behind business practice (Hoffman, 2000; Habul and Trifts, 2000). This lag has already prompted a number of publications in quality journals, but much more needs to be done in order to fill the many gaps in our understanding of the Internet consumer (Shim *et al.*, 2001). Researchers are thus presented with many exciting opportunities. The aim of this research paper is to further understanding of the area in a measurable way by carrying out empirical research into consumer motivation to shop online. More specifically, the objectives of this research are threefold: first, to develop a means of segmenting online consumer shopping based on their purchase orientation; second, to investigate the effect of these consumer shopping orientations on purchase intentions, and finally, to place such segments in the context of gender and prior purchases. This last objective is important since prior purchase (Brown *et
al., 2003; Lynch and Ariely, 2000) and gender (Pope et al., 1999) figure prominently as precursors to purchase-intention in the academic literature in Internet retailing.

The arrangement of this paper is as follows. The next section reviews the literature and derives testable hypotheses. Thereafter, the methodology adopted in the data collection process and the analysis the data were subjected to are examined. The paper concludes by discussing the key findings and highlighting major implications for both academics and practitioners.

2. Theoretical background

Marketing literature is replete with research studies that have examined segmentation of consumer markets from a number of perspectives (Reynolds and Beatty, 1999). While a number of frameworks can be utilised to classify consumers, purchase orientation is a theoretically rich method of classification that offer deep insights into a consumer’s psyche (Gehrt, et al., 1992; Jayawardhena, 2002). Purchase orientation in this context refers to the general predisposition of consumers towards the act of purchasing (Gehrt, et al., 1992). This predisposition may be apparent in varying degrees in information search, evaluation of alternatives, purchase and post purchase evaluation. Internet provision of services, such as online shopping, reveals a chameleon-like ability to produce two countervailing forces, (i) the ‘customization’ of services, tailored to the needs of individual customers through ‘many-to-many’ communications (Novak, et al., 2000; Hoffman and Novak, 1996; Gilmore and Pine, 1998) and (2) the ‘commoditization’ or depersonalisation of services (Pine and Gilmore, 1998). In the particular case of online shopping, the Internet has the potential to strip out almost all the human interaction from transactions, reducing virtually all buyer/seller confrontations to the status of routines (Pincott and Branthwaite, 2000). Given such an environment, purchase orientation consumer’s predisposition of consumers towards the act of purchasing is arguably an important indicator.

As alluded to earlier, academic research examining the Internet shopper (i.e. consumers who purchase tangible products over the Internet) is sparse. Therefore it is prudent to draw upon emerging literature on Internet shopper, purchase orientation and consumer behaviour in traditional shopping for research of this nature. Drawing upon concepts in traditional consumer shopping purchase orientation and retail patronage mode, several authors assert that the Internet consumer is influenced by the online environment (Hoffman and Novak, 1996; Novak, et al., 2000); prefers bundled products (Bakos and Brynjolfsson, 1996; 1999; 2000); seeks transparent information when shopping (Shim et al., 2001; Lynch and Ariely, 2000); is older and higher income (Donthu and Garcia, 1999; Korgaonkar and Wolin, 1999); is more likely to be male (Korgaonkar and Wolin, 1999); is less risk averse, is not brand loyal, and is likely to switch (Keaveney and Parthasarathy, 2001; Donthu and Garcia, 1999); is convenience oriented (Brengman et al., 2005; Donthu and Garcia, 1999; Korgaonkar and Wolin, 1999; Rohm and Swaminathan, 2004; Shim et al., 2001 ); seeks sensory experience (Shim et al., 2001) is innovative and variety seeking (Donthu and Garcia, 1999; Korgaonkar and Wolin, 1999; Rohm and Swaminathan, 2004).

Common consumer segments can be found among detailed descriptions of consumer types found across a number of earlier studies. Perhaps the earliest exponent of consumer segment typology is Stone (1954). Many other authors have expounded upon Stone’s work and the following is a concise compilation that is useful in segmenting the online shopping consumer. First, the economic or price sensitive consumer is frequently identified, originally by Stone (1954), by others with useful variations (Bellenger and Korgaonkar, 1980; Lesser and Hughes, 1986; Shim and Mahoney, 1992; Sproles and Kendall, 1986) and for online
shopping by Brown and colleagues (2003); and Kau and colleagues (2003). Next, there are two types of consumers who are seemingly at opposite ends. On one hand, the active or involved consumer is frequently associated with catalogue shopping (e.g. Gehrt and Carter, 1992); and online shopping (Brown et al., 2003). On the other hand, the inactive or apathetic consumer (Lesser and Hughes, 1986; and, for online shopping, Brown et al., 2003) is often found to be a large segment of consumers. Studies have also found that customers who display brand loyalty are a sizeable segment (Hawes and Lumpkin, 1984; Sproles and Kendall, 1986). Consumers who value convenience are a significant proportion (Gehrt and Carter, 1992; and for online shopping, Brown et al., 2003). And finally, the many-to-many (Gilmore and Pine, 1998; Hoffman and Novak, 1996) characteristic of the Internet attracts consumers with the promise of a bespoke service where the consumers perceive that they are in control and active (identified for online shoppers by Brengman et al., 2005; and Joines et al., 2003).

From the above discussion, it can be construed that online shopping consumers can be classified by different purchase orientations. Since individual consumers have different dispositions towards purchases, it then follows that consumers’ purchase orientations may affect both their purchase behaviour and purchase intention in online shopping. This does not have to mean that the different purchase orientation segments do not necessarily shop online differently (Brown et al., 2003). Similarly, purchase intention is not equal to purchase behaviour, (although according to Jamieson and Bass, 1989, it may signal predictive value). Nevertheless, the weight of previous research on shopping orientations outlined above is sufficient to allow us to hypothesize that:

H1: Consumer purchase orientation will have a significant effect on their purchase intention in online shopping.

And, similarly,

H2: Consumers who have shopped online will portray multiple purchase orientations.

The consumer purchase process is a series of interlinked multiple stages including information collection, evaluation of alternatives, the purchase itself and post purchase evaluation (Engel et al., 1991; Gabbot and Hogg, 1998). In order to evaluate the information demands of services, Zeithaml (1981) suggests a framework based on the inherent qualities of products. It postulates that search qualities, which are attributes a purchaser can determine prior to purchase; experience qualities, which are attributes which can only be determined after purchase or during consumption; and credence qualities, characteristics which purchasers may find impossible to evaluate even after consumption. All products, it is suggested, can be described in terms of the proportions of the three qualities. However, since online shopping is a relatively new activity for a vast majority of consumers, online purchases are still perceived as riskier than terrestrial ones (Laroche et al., 2005) and an online shopping consumer therefore relies heavily on experience qualities. These can be acquired only through prior purchase. Shoppers who have never bought online are more risk-averse than those who have bought before (Lee and Tan, 2003). It is therefore hypothesised that:

H3: A consumer's online shopping experience will have a significant effect on his or her future purchase intention for online shopping.

From the early days of the commercial use of the Internet, studies have continually shown that there are gender differences in the usage of the Internet (Pope et al., 1999). Moreover, evidence exists that males make decisions differently. Shim (1996) found that teenage boys were more utilitarian, whereas teenage girls are more social/conspicuous conscious. Other
research shows that men see shopping as being unpleasant and undesirable (Dholokia, 1999), spend less time shopping than women and generally do not take responsibility for food and clothing purchases (Miller, 1998), are less interested in clothing and fashion (Cox and Dittmar, 1995), show a weaker sensitivity to the opinions of their friends (Shoaf et al., 1995), make quick/careless decisions more commonly (Campbell, 1997), and are more independent, confident, externally motivated, competitive, and more willing to take risks especially with money (Areni and Kiecker, 1993; Prince, 1993).

Internet use has historically been considered as being male dominated (Liff and Shepherd, 2004). Longitudinal Internet studies (GVU, 1997 to 2000; OxIS, 2003 & 2005; Verdict, 2000 to 2006) show that this gender bias is weakening, and in the UK there is now an approximate balance. Sixty-four percent of UK women and 71 percent of men are Internet users (Citizens Online, 2006). Given the preponderance of women in the overall population, this translates to 48 percent of Internet users being women. Over half of e-shoppers are now female and women are outspending men online (Verdict, 2006). Nevertheless, there are still considerable gender differences in Internet use. For example, men spend more time on the Internet (averaging 10.5 hours per week compared to women’s nine hours per week) and view 31 percent more pages (Rice, 2004). Men spend significantly more time listening to music, being entertained and reading news (Liff and Shepherd, 2004). The time spent on shopping is approximately equal (Liff and Shepherd, 2004) but men tend to buy CDs, music downloads, DVDs, books, computer and electrical products whereas women favour clothing, footwear, lingerie and accessories (Allegra Strategies, 2006; IMRG, 2007). In light of the above research we argue that women’s online purchasing behaviour is still different from men’s and it is therefore hypothesised that:

H4: An individual’s gender has a significant effect on their purchase intention in online shopping.

3. Methodology and Analysis

Data were collected using a questionnaire. An email was sent to each individual in the sampling frame, consisting of 1500 individuals who were randomly selected from a consumer panel of 10,000 Internet users owned by a research firm. The respondents were given two options with respect to the completion of the questionnaire. They could either complete and send the completed questionnaire that was attached to the email, or they could visit the Web page containing the questionnaire. Out of the 413 responses received, 396 were usable. This is a response rate of 27 percent. A large proportion of respondents (81 percent) fell between the 25-54 age group and 63 percent were male. Over a third of the respondents (151) reported to have made at least one online purchase, with 109 respondents claiming to have shopped online regularly. To assess the non-response bias, respondents and non-respondents on similar dimensions (age, gender, income and prior purchase) were compared using the standard procedure suggested by Churchill (1979). As with previous studies in the Internet (GVU, 1997 to 2000) only gender showed a statistical difference. This non-response bias cannot be disregarded; nevertheless the influence is not significant.

Hypothesis two was tested using a combination of cluster and factor analysis. In line with previous studies of this nature (Stone, 1954; Darden and Ashton, 1974; Lumpkin, 1985), dimensionality of the consumer purchase orientation scales was evaluated using principal components analysis. Component scores calculated for each of the six orientation scales were used as the input in the cluster analysis. To test for stability of the solution the sample was divided into two halves. The first sub sample was subjected to a k-means cluster analysis. The
The object of \(k\)-means analysis is to arrive at a cluster solution for which each case is closer to the mean of the cluster to which it belongs than to the mean of any other cluster. It seeks to minimize the “error”, or the sum of the squared distances between the cases and the cluster means. This procedure resulted four cluster solutions (4 to 7 clusters). Based on the cluster centroids derived from these four solutions, the second sub sample was also subjected to a \(k\)-means cluster analysis resulting in four different solutions. Thereafter four cluster solutions were tested on the entire sample to evaluate kappa (chance-corrected coefficient of correlation) between them so that the optimal number of clusters could be determined. The kappa values were as shown in Table 1, and because 5-cluster solution has a kappa value nearest to one, it was chosen to be the most reliable solution.

**Table 1.** Chance-corrected coefficient of correlation of different cluster solutions

<table>
<thead>
<tr>
<th>Number of clusters</th>
<th>Chance-corrected coefficient of correlation (kappa value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0.61</td>
</tr>
<tr>
<td>5</td>
<td>0.91</td>
</tr>
<tr>
<td>6</td>
<td>0.75</td>
</tr>
<tr>
<td>7</td>
<td>0.56</td>
</tr>
</tbody>
</table>

The suitability of the 5-cluster solution was further validated through a face validity test providing the best interpretable results. Having decided upon the 5-cluster solution, the total sample was subjected to a \(k\)-means cluster analysis to obtain a final solution. The interpretation was carried out according to the centroids of the purchase orientations within each cluster. A positive centroid represents the nature of the cluster, with zero representing a neutral position and a negative centroid indicating that the construct is not important to subjects within the cluster. Subsequently, the 151 respondents who had shopped online were given cluster membership. Their descriptive statistics are given in Table 2.

**Table 2.** Clusters of consumers by their purchase orientation

<table>
<thead>
<tr>
<th>Purchase Orientation</th>
<th>Active Shoppers</th>
<th>Price-sensitives</th>
<th>Discerning shoppers</th>
<th>Loyal shoppers</th>
<th>Convenience shoppers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster 1</td>
<td>Cluster 2</td>
<td>Cluster 3</td>
<td>Cluster 4</td>
<td>Cluster 5</td>
</tr>
<tr>
<td>Loyalty</td>
<td>-0.319</td>
<td>-0.210</td>
<td>0.419</td>
<td>0.889</td>
<td>0.139</td>
</tr>
<tr>
<td>Active</td>
<td>0.719</td>
<td>0.188</td>
<td>0.659</td>
<td>0.335</td>
<td>0.369</td>
</tr>
<tr>
<td>Inactive</td>
<td>-0.076</td>
<td>0.034</td>
<td>-0.079</td>
<td>-0.080</td>
<td>0.082</td>
</tr>
<tr>
<td>Price</td>
<td>0.159</td>
<td>1.301</td>
<td>0.889</td>
<td>0.319</td>
<td>0.509</td>
</tr>
<tr>
<td>Convenience</td>
<td>0.088</td>
<td>0.303</td>
<td>0.609</td>
<td>0.219</td>
<td>1.604</td>
</tr>
<tr>
<td>Number of members</td>
<td>19</td>
<td>41</td>
<td>26</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Proportion of sample</td>
<td>12.58 percent</td>
<td>27.15 percent</td>
<td>17.22 percent</td>
<td>19.87 percent</td>
<td>23.18 percent</td>
</tr>
</tbody>
</table>

As hypothesised, multiple consumer purchase orientations were identifiable and these can be compared with results from prior shopping orientation studies (e.g. Gehrt and Carter, 1992; Shim and Mahoney, 1996). Cluster 1 members revealed moderately high values on the active/control dimension. These consumers were categorised as ‘active shoppers’ in their orientation towards online shopping, similar to Joines’s et al. (2003) ‘interactive control motivations’. Price sensitivity appears to be the overriding factor for members of Cluster 2, similar to the ‘economic’ orientation of Stone (1954) and, for online shoppers, e.g. Joines et al. (2003). Unlike other clusters, Cluster 3 members value all orientations and could be labelled ‘discerning’ shoppers, similar to Rohm’s and Swaminathan’s (2004) ‘balanced buyers’. Cluster 4 members display ‘brand loyal’ orientation as found in offline studies by, e.g. Hawes and Lumpkin, 1984; and Sproles and Kendall, 1986. Those in cluster 5 could be labelled ‘convenience’ orientation, similar to those labelled ‘apathetic, convenience’ by Brown et al. (2003).
The remaining hypotheses were tested in a univariate analysis of variance and the results are shown in Table 3. Independent variables were prior purchase, gender and purchase orientations (those derived from hypothesis 2). Intention to purchase formed the dependent variable. From Table 3, it can be seen that there is no evidence ($F=1.28; p>0.05$) to support the hypothesis that purchase orientation would have a direct effect on consumer’s purchase intention in online shopping. However, hypotheses 3 and 4 are supported. Therefore both prior purchase ($F=17.77, p<0.05$) and gender ($F=12.64; p<0.05$) do have an effect on purchase intention.

Table 3. Main effects of variables on purchase intention

<table>
<thead>
<tr>
<th>Effect of Variable</th>
<th>$MS_B$</th>
<th>$MS_W$</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior purchase</td>
<td>43.89</td>
<td>2.47</td>
<td>17.77</td>
<td>0.00</td>
</tr>
<tr>
<td>Gender</td>
<td>31.22</td>
<td>2.47</td>
<td>12.64</td>
<td>0.00</td>
</tr>
<tr>
<td>Purchase orientation</td>
<td>3.16</td>
<td>2.47</td>
<td>1.28</td>
<td>0.26</td>
</tr>
</tbody>
</table>

$n=396$

4. Discussion and Conclusions

This study examined purchase orientations and purchase intention of online shopping consumers. It was shown that consumers can be clustered into five distinct purchase orientations, and be labelled: 1) active shoppers’, 2) price sensitives, 3) discerning shoppers, 4) brand loyals and 5) convenience oriented. These findings are largely consistent with literature in the traditional offline world, which postulates that consumers may be segmented into distinct groups. Moreover, some of these findings add weight to the literature in consumer behaviour in Internet purchases and at the same time offer new insights. A number of previous studies (e.g. Jarvenpaa and Todd, 1997; Burke, 1998) contend that convenience is the principal reason behind consumers making Internet purchases. However, convenience is only the second largest cluster in this study. Price sensitives are the largest cluster, supporting the findings for Internet studies of Brown et al. (2003); and Brynjolfsson and Smith (1999), as mentioned elsewhere in a number of earlier studies in the traditional world. As such, e-retailers whose primary strategy is based on appealing to consumers’ perceptions of convenience may be injudicious.

The importance of consumers motivated by brand (i.e. loyal shoppers) is highlighted, in resonance with findings of earlier studies (Laroche and Manning, 1984; Devlin et al., 1995; Khazeth and Decker, 1992). On the other hand consumers with a balanced orientation, whom we named ‘discerning’, i.e. those concerned with most aspects of purchase, have been found in studies by Darden and Ashton (1974); and Williams and colleagues (1978). This group demonstrated notable cluster centroid scores on the convenience, price, active and loyalty dimensions. Its fundamental shopping orientation consequently deserves further discussion. The implication here is that these Internet users are active in their shopping behaviour, display brand loyal behaviours and are prepared to engage in comparison-shopping to find the best bargains. However, they have an inclination for obtaining their purchases in a convenient manner. It could be argued that these shoppers might limit their browsing activities to shopping areas that are in a convenient location. They may balance the wish for to shop around with the practical consideration of making a convenient purchase. On the other hand, it could be argued that these shoppers may actively seek to obtain the best possible deal. What is clear is that it may be rather difficult to specifically target these consumer ‘discerning’ shopper segments, since their shopping behaviours are not easily compartmentalised. A significant finding of this study is the first cluster, which suggested that the amount of control given to online shopping consumers is a motivating factor in their purchases. Unlike in the traditional world, online shopping consumers have a significantly
higher level of control in the purchase process, and clearly they are motivated by this control imparted on them.

There is no support for the first hypothesis, where we postulated that consumer purchase orientation will have a significant effect on their purchase intention in online shopping. On the contrary, our results confirm Brown et al., (2003) finding that consumer purchase orientation does not have a significant effect on purchase intention. The implication is that although consumers can be segmented according to their purchase orientations, these may not translate into purchase intention.

Aspects that do have a significant effect on purchase intention are gender and prior purchase. Online shopping is significantly influenced by experience qualities (Zeithaml, 1981; Gabbot and Hogg, 1998). Hence the finding that prior purchase has a significant influence on purchase intention is expected. These results support Rohm and Swaminathan’s (2004) finding that the length of time since first starting online shopping increases the frequency of online shopping; and also Laroche and colleagues (2005), who contended that online retailers should focus on facilitating shoppers’ first few purchases. Furthermore the finding that gender has a significant influence on purchase intention adds weight to a number of earlier studies. It may be related to access, innovation or security concerns.

Overall these findings indicate that consumer purchase orientations in both the traditional world and on the Internet are largely similar, consistent with findings of researchers that multi-channel retailers have higher market shares of e-retail than do pure-plays (Min and Wolfinbarger, 2005). This is in contrast to the suggestions of other authors who contend that the Internet consumer is a wholly different individual (e.g. Dholakia and Uusitalo, 2002). The implication is that both academics and businesses should treat the Internet as an additional channel of distribution and an extension to existing traditional activities brought about by advances in technology.

As with any study of this nature, there are some limitations that could be addressed in future studies. Two specific limitations can be highlighted, and these could be addressed by future research. First, our study sample contained only UK Internet users, and as such generalisations about the entire population of Internet users may be questionable. A natural extension would be to replicate this study with Internet users of other countries. This may enable both academics and practitioners to obtain a more representative view of shopper behaviour. Second, in our measurement of purchase intentions, we did not measure purchase intent per se. This limitation can be improved by expressly measuring the online purchase intentions of only those e-shoppers who actually intend to purchase the product within a specified time period.

References


Georgia Institute of Technology, 1997 to 2000. GVU’s WWW user surveys (8th to 11th). http://www.gvu.gatech.edu/user_surveys/


IMRG (2007) e-Retail Annual Report, Interactive Media in Retail Group.


