A THEORY-OF-PLANNED-BEHAVIOR PERSPECTIVE ON B2C E-COMMERCE

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ABSTRACT

This study shows how different shopping orientations influence customers’ shopping criteria. Employing the Theory of Planned Behavior, this study surveys 688 respondents. Our analysis resulted in five shopping-orientation, and four shopping-criteria scales. The results suggest that customers who are 1. ‘Local shopper’ or ‘technology’ oriented, attach higher importance to the criteria of ‘shopping environment’ and ‘merchandise’; 2. ‘Local patronage’ oriented attach higher importance to the ‘shopping environment’ criterion and 3. ‘Time-concern’ oriented, attach higher importance to the ‘convenience’ criterion.

Keywords: E-commerce; B2C; Shopping Orientation; Shopping Criteria; Theory of Planned Behavior

1. INTRODUCTION

The current study investigates if and how the online customer’s shopping orientation affects their shopping criteria. We define business-to-business (B2C) e-commerce as the selling and purchasing of goods, services and information between businesses and customers using the World Wide Web.

We analyze responses from 688 US online buyers. We measure customers’ shopping orientations using a 39-item scale, categorized as: local shopper, technology, local patronage, time-concern and homebody. We also measure the importance of 29 purchase criteria on the customer’s purchase decision, categorized as: customer service, shopping environment, merchandise and convenience. We then investigate the relationship between shopping orientations and shopping criteria under the rubric of Theory of Planned Behavior (TPB).

There has been no prior investigation on the relationship between shopping orientation and shopping criteria from a B2C e-commerce perspective. The current research also enriches the field of retail and distribution management by developing new dimensions of shopping orientation and shopping criteria, and by suggesting how the retailer can successfully use such information to improve the bottom line of their organizations.

2. LITERATURE REVIEW

A review of relevant literature suggests several possible factors for the popularity of e-commerce: ability to send/receive email, targeted advertising, personalized information (Hammond, 2001), and strategic, structural and management-oriented factors (Dubelaar et al., 2005). However, from an individual’s standpoint, lack of trialability, trust and satisfaction (Rexha et al., 2003) and attitude, subjective norms (Flavian et al., 2006) and lack of face-to-face interactivity (Jahng et al., 2007) pose serious challenges.

2.1 Research Model

According to the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975, 1980), an individual’s beliefs about an event X influence his/her attitude towards the possible consequences of an action. Subsequent researchers who improved upon the TRA presented the TPB (Ajzen, 1988), which suggests that individuals’ beliefs influence their attitudes towards an action, and attitudes, in turn, influence his/her (intention to) behave in a certain manner. In the current context, we investigate if the customer’s shopping orientation affects his/her shopping criteria, which influence the customers’ shopping behavior.

2.2 Shopping Orientation

Shopping orientation is defined as “a shopping-specific lifestyle encompassing shopping activities, interests and opinions (Preez et al., 2007, p.6) and the concept is also identified with attitude about shopping e.g. attitude about local shopping is the most salient distinction between those who like to shop nearby and those who like to shop outside their local geography (Hawes et al., 1984). As such, shopping
orientation can be influenced by individual differences, product of choice and the type of retailer. Local shopper orientation measures the customer’s attitude towards purchasing at local stores (Hawes et al., 1984). Technology orientation refers to a person's level of comfort in using technology for the purpose of shopping (Dickerson et al., 1983), and time concern orientation measures a person's attitude towards scheduling activities and organizing time in the context of shopping.

2.3 Shopping Criteria

Shopping criteria are defined as the dimensions based on which the customer selects a shopping outlet, such as customer service, shopping environment, merchandise assortment and convenience of shopping. Research on shopping criteria was pioneered (Tauber, 1972) and later developed (Gentry et al., 1977-8). Subsequent studies suggest that customers make purchases for a variety of reasons, including needs fulfillment, replenishment of stocks, non-performance of existing products, perceived superiority of another product (Lamb et al., 2007), among other features (Barat, 2007).

Research suggests that customer service incorporates several dimensions: reliability (ability to perform the service right the first time), responsiveness (ability to provide prompt service), assurance (knowledge and courtesy of employees) and empathy (caring, individualized attention to customers) (Lamb et al., 2007). Naturally, the buyer is likely to use customer service as a criterion in deciding where and from whom to shop.

Typically, online shopping environment is influenced by distraction or ‘noise’, deal retraction, image, price/value comparison, quality and quantity, and loyalty towards a website (Bruner et al., 1992). Therefore, the authors argue that the shopping environment will be a likely factor in the customer’s purchase decision.

Research also suggests that two characteristics of merchandise are critical: discrepancy of assortment and of quantity. A vendor might choose an extensive or limited distribution strategy for its merchandise depending on how widely it wants its products to be available to customers (Lamb et al., 2007). Therefore, we argue that merchandise is a key shopping criterion for the customer.

Finally, convenience is regarded as the ease with which a customer can participate in the shopping experience. Since the customer is time-constrained due to multitasking, the authors argue that he/she is likely to consider convenience as an important dimension of his/her shopping exercise.

Given that younger online shoppers do a lot more multitasking and are tech-savvy, they are likely to value the benefit of time-savings (time concern orientation) and ability to use technology (i.e. technology orientation) much more than their older counterparts. However, younger shoppers are less likely to patronize local stores (local patronage orientation) and more likely to shop away from home (homebody orientation) than their older counterparts, who prefer to shop closer to home (Preez et al., 2007). Low-income shoppers, on the other hand, are more skeptical about online security and are more likely to touch and feel a product before purchase, when compared to their higher-income counterparts (Moskalyuk, 2008). In other words, it appears that convenience plays an important role.

Local shopper orientation affects customer’s shopping behavior both directly and indirectly (Hawes et al., 1984). Customer service, shopping environment (Bearden, 1977) and product assortment/merchandise (Hopper and Lippscomb, 1991) are some of the main components of the local shopper orientation. Customers also look for ‘convenience’-based criteria (Schiffman et al., 1977), such as brand choices (Alba et al., 1997), attractive prices (Kalwani et al., 1990) and comparison shopping (Gentry and Burns, 1977-8) in making their purchase decisions. Consequently, we argue that customers with ‘local shopper’ orientation will emphasize these criteria in their decision to buy online, which motivates us to frame the following set of propositions:

**P1a:** Higher the local shopper orientation of the individual, higher is the importance placed on customer service as a criterion for shopping
P1b: Higher the local shopper orientation of the individual, higher is the importance placed on shopping environment as a criterion for shopping

P1c: Higher the local shopper orientation of the individual, higher is the importance placed on merchandise as a criterion for shopping

P1d: Higher the local shopper orientation of the individual, higher is the importance placed on convenience as a criterion for shopping

Shopping environment and merchandise are critical dimensions of shopping criteria for the traditional shopping model (Jayawardhana et al., 2007). Therefore customers who are ‘technology’-oriented are also likely to attach significant importance to both these criteria. These relationships have been corroborated (Lee et al., 2006), who argue that technology orientation affects individuals’ choice of shopping criteria via the technology acceptance model. Therefore, we posit the following set of propositions:

P2a: Higher the technology orientation of the individual, higher is the importance placed on shopping environment as a criterion for shopping

P2b: Higher the technology orientation of the individual, higher is the importance placed on merchandise as a criterion for shopping

Some shoppers prefer local shopping (Vijayasarathy, 2003), whose main benefits appear to be the personal touch and care, familiarity with the surroundings, less time spent on commuting to and from the store, ease of return/exchange, parking spaces, presence of other anchor stores as well as availability of adequate related services. We can, therefore, argue that customers who are highly ‘local-patronage’ oriented will also lay more importance on the ‘shopping-environment’ criterion. Extending this reasoning to the context of online shopping environment, we posit:

P3: Higher the local patronage orientation of the individual, higher is the importance placed on shopping environment as a criterion for shopping

‘Time’ plays a critical role in the customer’s shopping episode, because most customers are engaged in multitasking. The Internet, however, allows the individual to search for more options and lower prices at a fraction of the time it takes under the traditional environment. Therefore, time-constrained customers will give substantial importance to the ‘convenience’ criterion of shopping they achieve through buying online, which motivates us to present the following proposition:

P4: Higher the time-concern orientation of the individual, higher is the importance placed on convenience as a criterion for shopping

Customers who are shy, introvert or simply too busy to go for shopping, are referred to as ‘homebody’ in the current study. This category of shopping orientation is identified in the literature as ‘anti-shopper’ (Miles, 1998) or ‘apathetic shopper’ (Reid and Brown, 1996). For some customers, intention to shop online and avoid retail stores is fuelled by safety concerns as well. Therefore, we present our fifth proposition as follows:

P5: Higher the homebody orientation of the individual, higher is the importance placed on convenience as a criterion for shopping

3. METHODOLOGY

Data was collected from 688 B2C customers using a self-administered postal questionnaire. We then ran a principal component analysis with varimax rotation on the 39 items measuring shopping orientation, as well as on the 29 purchase criteria that customers consider when shopping online. This resulted in five shopping-orientation and four shopping-criteria scales (Tables 1 and 2). Item-total correlations for the final
set of items indicated acceptable levels (Jayanti and Burns, 1998) of convergent validity for each of the above scales.

3.1 Propositions Testing
We first averaged the items measuring the various constructs to get the corresponding composite scores, which were then used as variables in the simple correlation analyses that we ran to test the propositions. To test P1a, P1b, P1c and P1d, we ran four simple correlations with local shopper orientation as the independent variable and the shopping criteria of convenience, customer service, shopping environment and merchandise as the respective dependent variables. To test P2a and P2b, we ran two simple correlations, each with technology orientation as the independent variable and the two criteria of shopping environment and merchandise as the respective dependent variables. To test P3, P4 and P5, we ran three simple correlations: first with shopping environment criterion as the dependent and local patronage orientation as the independent variable; then with convenience criterion as the dependent and time concern orientation as the independent variable and finally, with convenience criterion as the dependent and homebody orientation as the independent variable.

4. RESULTS

4.1 Internet Usage and Demographics
More than 75% of the respondents conduct their shopping-related web surfing from home, 63% had a dial-up connection and 26% had high-speed connectivity. On an average, the respondent devoted about 15% of his/her total time online on browsing shopping sites and/or making online purchases. More than 50% of the respondents are at least college graduates; about 62% of the respondents are females. The average respondent is about 55 years old, earning about $70,000 annually.

4.2 Propositions Testing
The correlation coefficients between each of the independent and dependent variables in P1b, P1c, P2a, P2b, P3 and P4 were all found to be positive and significant, providing strong support for these propositions. We found positive but non-significant relation between the respective variables in P1a, P1d and P5. Therefore, we fail to find support for these propositions (Table 3).

5. DISCUSSION
We did not find support for P1a. Both the constructs of local shopping orientation and customer service criterion appear to be very robust (alpha score 0.82 for each) as also the mean of responses for the shopping criterion of customer service, (1.79 on a scale of 1-5 where 1=very important and 5=not important). Therefore, it is difficult to identify the exact reason for this result. What we can surmise, however, is that the strength of the relationship between the two variables appears to be very weak (0.02); in addition, the respondents’ assertiveness on the local shopping orientation scale is not as strong as expected (2.44 on a scale of 1 to 5, 1=strongly agree and 5=strongly disagree). The same conjectures might apply to P1d and P5.

We, however, find support for all the other six propositions, which reveal that customers who are ‘local shopper’ oriented attach higher importance to the shopping criteria of ‘shopping environment’ and ‘merchandise’; customers who are ‘local patronage’ oriented attach higher importance to the ‘shopping environment’ shopping criterion and customers who are ‘time-concern’ oriented, attach higher importance to the ‘convenience’ shopping criterion. In other words, our findings provide irrefutable strength to our arguments and the theoretical basis of our study.

6. LIMITATION
The respondents for this study were contacted on the basis of a list purchased from a professional organization. While the authors made every effort to ‘cleanse’ the database, still there were several returned mails due to outdated and/or wrong information. Based on our tests, even though non-response bias was not a concern for the current study, we feel it compromised, to some extent, the findings of our study.
7. FUTURE DIRECTIONS

Online shopping is becoming more and more popular, even though the volume is still a fraction of its retail counterpart. We have argued that online shopping is basically an extension of the traditional shopping enhanced with technology, but there are obviously subtle differences. Research seems to be scarce on such issues. In this light, therefore, it would be interesting to investigate how shopping online compares with the traditional method, in terms of orientation, criteria, and products purchased, for example.

<table>
<thead>
<tr>
<th>TABLE 1: FACTOR STRUCTURE OF SHOPPING CRITERIA*</th>
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<tbody>
<tr>
<td>Customer service</td>
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<tr>
<td>Merchandise: reassurance of quality</td>
</tr>
<tr>
<td>Merchandise: general availability</td>
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<tr>
<td>Customer service</td>
</tr>
<tr>
<td>Complaint resolution: merchandise returns, adjustments etc.</td>
</tr>
<tr>
<td>Merchandise: seasonal availability</td>
</tr>
<tr>
<td>Information on what is available</td>
</tr>
<tr>
<td>Shopping environment</td>
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<tr>
<td>Shopping with friends/family</td>
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<tr>
<td>Shopping environment or ambience</td>
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<tr>
<td>Shopping security</td>
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<tr>
<td>Transportation to and from the store</td>
</tr>
<tr>
<td>Merchandise</td>
</tr>
<tr>
<td>Merchandise: touch and feel, then decide</td>
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<tr>
<td>Merchandise: variety</td>
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<tr>
<td>Convenience</td>
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<tr>
<td>Choice of brands</td>
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<td>Attractive Prices</td>
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<td>Comparison shopping</td>
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<tr>
<td>% variance explained</td>
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<td>Alpha</td>
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<td>Mean</td>
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<td>SD</td>
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| Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization; *1=very important, 5=not important
TABLE 2: FACTOR STRUCTURE OF SHOPPING ORIENTATION*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Local shoppers</th>
<th>Technology</th>
<th>Local patronage</th>
<th>Time concern</th>
<th>Homebody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>0.788</td>
<td>0.795</td>
<td>1.828</td>
<td>0.784</td>
<td>0.787</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.736</td>
<td>0.760</td>
<td>1.827</td>
<td>0.773</td>
<td>0.769</td>
</tr>
<tr>
<td>Factor 3</td>
<td>0.735</td>
<td>0.746</td>
<td>1.576</td>
<td>0.720</td>
<td>0.794</td>
</tr>
<tr>
<td>Factor 4</td>
<td>0.655</td>
<td>0.649</td>
<td>0.827</td>
<td>0.720</td>
<td>0.794</td>
</tr>
<tr>
<td>Factor 5</td>
<td>0.612</td>
<td>0.644</td>
<td>0.576</td>
<td>0.720</td>
<td>0.794</td>
</tr>
</tbody>
</table>

**Reverse-coded;* 1=strongly agree, 5=strongly disagree

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization

% variance explained | 10.48 | 9.49 | 8.52 | 8.09 | 5.44 |

Alpha score | 0.82 | 0.82 | 0.83 | 0.76 | 0.65 |

Factor mean | 2.44 | 3.22 | 2.68 | 2.61 | 3.00 |

Factor S.D. | 4.3 | 5.52 | 2.30 | 2.74 | 2.41 |
REFERENCES:


**AUTHOR PROFILES:**

**Dr. Gopala GG Ganesh** earned his Ph.D. at the University of Houston in 1985. Currently he is University Distinguished Teaching Professor of Marketing at the University of North Texas in Denton, Texas.

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