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Helen Klein Grand Valley State University

Nancy Levenburg Grand Valley State University

Simha Magal Grand Valley State University

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B2B vs. B2C: A Comparison of e-Business Strategies among SMEs

Helen A. Klein Seidman College of Business Grand Valley State University <u>kleinh@gvsu.edu</u> Nancy M. Levenburg Seidman College of Business Grand Valley State University <u>levenbun@gvsu.edu</u>

Simha R. Magal Seidman College of Business Grand Valley State University magals@gvsu.edu

ABSTRACT

Little research has been done on the e-business strategies of Small to Medium-sized Enterprises (SMEs). Smaller firms have come under increasing pressure to implement such applications but have limited resources and often lack necessary understanding to make appropriate choices. In an effort to find an approach to aid in making effective choices, we collected data from 400+ SMEs and used Importance-Performance maps to examine the differences in e-business strategies between B2B and B2C SMEs. Preliminary analysis indicates that B2B firms are outperforming B2C firms in achieving e-business goals.

Keywords

Electronic Business, B2B, B2C, SMEs, Importance-Performance

INTRODUCTION

Since the mid-1990s and the explosion in commercial use of the Internet, researchers have predicted that the Internet would become an effective tool for Small and Medium-sized Enterprises (SMEs) to compete effectively against larger firms. However, SMEs have only made limited use of the Internet (Grandon and Pearson, 2004; Zank and Vokurka, 2003). Reasons cited are shortages of financial and human resources and limited understanding of strategic benefits (Vlosky and Smith, 2003). Predictably, SMEs are coming under increasing pressure to make use of this technology or risk losing their place in the competitive arena (Grossman, 2004). Under these circumstances the potential for SMEs to implement Internet applications that are not aligned with their strategic goals is high. Cost-effective approaches to help SMEs make appropriate strategic choices are therefore needed.

A technique that has been widely used to evaluate strategies and appropriate resource allocations (e.g., O'Neill, Wright and Fitz, 2001; Skok, Kophamel and Richardson, 2001) is Importance-Performance (IP) analysis. Recently, Levenburg and Magal (2005) tested and validated an IP analysis tool for SMEs. Their research examined SME strategies in general without regard to firm differences. This research extends that work by examining firm differences in an effort to further shed light on SMEs' strategies and their Internet usage.

One way to examine firm differences is to consider the primary market served: Organizational customers versus individual customers, or in the e-business vernacular, business-to-business (B2B) and business-to-consumer (B2C) markets. Varadarajan and Yadav (2002) suggest that this distinction influences the formation of marketing strategy, including use of the Internet. However, a dearth of research exists that compares e-business strategy among B2B- versus B2C-serving firms (Lai and Wong, 2005; Varadarajan and Yadav, 2002). This distinction is important since it influences strategic decision making and helps clarify business performance (de Figueiredo, 2000).

The purpose of this paper is to present preliminary findings on using IP maps to understand the differences between B2B and B2C e-business strategies among SMEs.

LITERATURE REVIEW

Markets: Consumer and Business Markets

The primary difference between firms serving organizational customers (business markets) and those serving individual customers (consumer markets) is that the former generally serve customers who buy for resale and the latter, customers who buy for end-consumption. Firms serving business markets are smaller in absolute numbers than those serving consumer markets, but their purchases are exponentially larger (Perreault Jr. and McCarthy, 2005). In addition, business markets are characterized by low volume, high value transactions, while consumer markets are the opposite (Berthon, Ewing, Pitt and Naude, 2003). Consistent with this, business buying decisions tend to focus on economic factors; these buyers are "less emotional" than those that typify consumer markets (Perreault Jr. and McCarthy, 2005).

The sales of firms serving business markets are more direct, with fewer channel intermediaries than those serving consumer markets (Perreault Jr. and McCarthy, 2005). On the other hand, for companies using the Internet, Berthon et al. (2003) argue that in the B2C environment, linkages between a business and its customer are a linear function of the number of customers, while in the B2B environment linkages increase approximately by the square of the number of partners.

For Internet activities, trust has been demonstrated to be an important factor in both B2B and B2C markets (Gefen and Straub, 2003; Moores, 2005; Ratnasingam, Gefen and Pavlou, 2005). Ratnasingam et al., (2005) note that institutional trust is an important factor in driving relationships in the B2B marketplace: "it is institutional trust that lubricates the marketplace, supporting the promise of the economic and technical advantages it harbors". In B2C markets, critical trust-related factors include: payment security, confidentiality, and integrity (de Figueiredo, 2000). This suggests that in serving B2C markets, it may be more important to engage in brand- and reputation-building efforts (de Figueiredo, 2000).

Thus, there are enough dimensions that differentiate firms serving business markets (B2B) and those serving consumer markets (B2C) to indicate that their goals/motivations for engaging in e-business might differ, resulting differences in e-business strategic decision making.

E-Business Motivations

A literature review identified 19 SME e-business motivations. These relate to marketing and promoting the firm and its products and services, (e.g., (Griffith and Krampf, 1998; Stephenson, Lockwood and Raven, 2003)). Griffith and Krampf (1998) found the dual goals of providing information and accomplishing promotion, and public relations online to be salient e-business drivers. Stephenson et al. (2003) found that using the Internet to enhance the firm's image also serves as an e-business driver. Others engage in e-business to improve communication with employees, customers and trading partners (e.g., Korchak and Rodman, 2001; Vlosky and Smith, 2003; Zank and Vokurka, 2003); to provide customer service (e.g., Surjadjaja, Ghosh and Antony, 2003); and to obtain information about competitors, suppliers, and the industry (Korchak and Rodman, 2001). Still others are motivated by a desire to reduce advertising, production, shipping, or general administrative costs, thereby increasing net profits (Zank and Vokurka, 2003).

IP Analysis

In 1977 Martilla and James (1977) introduced Importance-performance analysis (IPA) as a means to analyze customer satisfaction as a function "importance" (salient attributes) and "performance" (judgments about performance). Each of these factors provides useful information individually; together they provide an even more powerful approach to examining customer satisfaction (Graf, Hemmasi and Nielsen, 1992; Martilla and James, 1977). In the end, this helps to identify and prioritize actions which minimize the differences between them (Graf et al., 1992; Skok et al., 2001), which improves overall efficiency by recommending more appropriate resource allocations (Graf et al., 1992; Slack, 1994).

Since 1977, research on IPA has taken two methodological paths, gap analysis and IP mapping. The first of these examines performance gaps, which are generally identified as the difference between performance and importance (i.e. performance minus importance) (O'Neill et al., 2001, Skok et al., 2001, Shaw et al., 2002). The second, importance-performance maps, plots average importance and performance ratings on a two-dimensional grid; this approach results in a four-quadrant matrix that then can be used to identify areas where performance is effective as well as areas where improvement is needed (Graf et al., 1992, Skok et al., 2001). An example of this can be seen in Figure 1 where the first quadrant (High Importance/Low Performance) titled "Concentrate here" identifies items that require immediate attention, items that should be given top priority if overall effectiveness is to be achieved (Graf et al., 1992). The second quadrant (High Importance/High Performance) is labeled "Keep up the good work," and represents organizational strengths, items that call for continued maintenance (Graf et al., 1992). Items in the third quadrant (Low Importance/Low Performance and labeled "Low Priority")

are those that, if their discontinuation does not pose a threat to the organization (Barsky and Labagh, 1992), may be abandoned (Crompton and Duray, 1985). The final quadrant (Low Importance/High Performance, labeled "Possible overkill") identifies items that that, though strengths to the organization, are most likely insignificant; resources can be diverted from these items to others.

Levenburg and Magal (2005) used IP maps to evaluate e-business strategies among SMEs. Their analysis, which demonstrated the value of using IP maps for these purposes, identified four factors that motivate SMEs in adopting e-business applications – Marketing, e-profitability, Communication, and Research. This paper is an extension of that analysis and focuses on specific e-business market segments.



Figure 1. IP map concept

DATA COLLECTION

To examine this and other issues, a questionnaire was developed to capture information on the implementation of e-business technologies among SMEs. The questionnaire included the nineteen SME motivations. Respondents were asked to identify the level of importance of each of these items in their decision to engage in e-business. The survey also asked them how satisfied they were with the results they obtained. Surveys were distributed to nine thousand three hundred sixty-five family-owned U.S businesses with fewer than 500 employees. Four hundred thirty nine responses were received for a 5.5% response rate, which appears to be typical in studies among SMEs. Pflughoeft et al. (Pflughoeft, Ramamurthy, Soofi, Yasai-Ardekani and Zahedi, 2003) had a response rate of 3.35%. Other researchers have experienced similar response rates (Grandon and Pearson, 2004). Responses from early and late responders were compared using t-tests and no significant differences were found between them, suggesting a low likelihood of non-response bias.

RESULTS

The nineteen business motivations were factor analyzed; four factors were identified – Marketing, e-Profitability, Communication and Research. These results are reported elsewhere (Reference withheld for review version). Figure 2 presents the resulting IP map for SMEs serving business (B2B) and consumer (B2C) markets; it also includes the iso-rating line, where importance equals performance, generally considered the optimum. As this study represents research still in process, the following preliminary observations are offered.

Several observations are offered from the "map" perspective. First, SMEs that focus on business markets (B2B) have three factors in the "Keep up the good work" quadrant and one in the "Low priority" quadrant; those in the consumer market have one factor in each of these two quadrants and two in the "Overkill" quadrant. The close positioning of both the Marketing (i.e., B-Mkt and C-Mkt) factors and e-Profitability factors (i.e., B-Pro and C-Pro) suggests that each group views Marketing and e-Profitability-related e-business motivations similarly. The placement of factors in the "overkill" quadrant (communication and research) suggests an opportunity to reallocate resources away from those factors and towards factors

considered more important (marketing), or to increase the importance (and potential strategic value) of other factors (profitability).

From the "gap" perspective, the optimal placement is on the iso-rating line where "gaps" could, theoretically, be reduced to zero. Figure 2 shows that the two factors that are nearest to the iso-rating line are both related to B2B-serving firms: Communications (B-Com) and Research (B-Res). On the other hand, the largest gaps (distances of factors away from the iso-rating line) occur with Marketing and e-Profitability factors, suggesting areas of improvement.

DISCUSSION AND CONCLUSIONS

Our preliminary analysis suggests that firms serving business (B2B) markets seem to be performing better in terms of ebusiness strategy and achieving e-business goals. This is indicated by (a) the greater number of factors in Quadrant II, and (b) smaller gaps for B2B firms relative to their B2C counterparts. This merits further investigation and analysis to determine if, in fact, SMEs serving B2B markets may be outperforming B2C-serving firms, and if so, why? For example, are B2B firms larger than B2C firms, with larger e-business budgets at their disposal? Do they have greater e-business expertise? Do others in the supply chain, or trade or industry associations, play a role in supporting their e-business initiatives?



Figure 2. IP map – B2B vs. B2C

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