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Examining the application of behavioral price research in business-to-business markets

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ABSTRACT

Business-to-business (B2B) and business-to-consumer (B2C) markets differ in many ways as documented in the contemporary marketing literature. However, many behavioral characteristics of human beings – particularly those related to judgment and decision-making – are present across diverse contexts. From this insight, we derive a proposition: many behavioral price concepts developed in the past B2C behavioral price research may be applicable in B2B context as well. The objective of this paper is to examine this proposition through analyzing the existing evidence on five important behavioral price concepts: reference price, price thresholds, acceptable price range, price as an indicator of quality, and the price–perceived value model. At a more general level, the objective of this paper is to demonstrate the importance of recognizing how buyers' responses to prices and price information differ from the traditional assumptions about such behaviors in B2B marketing literature.

The results provide strong evidence for the applicability of the reference price concept in B2B markets. The price–perceived value model is widely applied in B2B pricing, although in narrow form. Use of price as an indicator of quality also receives some support. For price thresholds and acceptable price range little research activity exists in B2B domain. Overall, while there has been some behavioral price research specifically in a B2B context, nevertheless it is comparatively sparse, and for some concepts virtually non-existent. We end the paper with a call that more behavioral price research is needed as such research has potential to help business marketing managers make more effective pricing decisions.

1. Introduction

Pricing directly impacts profitability and therefore, the ability of a firm to expand, improve offerings, better serve its customers and reward its employees and owners. Although pricing is a major concern of firms in business markets it has received relatively little research attention (Dant & Lapuka, 2008; Liozu & Hinterhuber, 2013; Reid & Plank, 2000). Similarly, behavioral price research has received scant attention in B2B research perhaps because of a prevailing assumption that B2B buyers are “rational.” That is, traditionally it has been assumed that organizational buyers rely on objective information and process price information completely and accurately (Reid & Plank, 2000; Sherlock, 1991, 1992; Wilson, 2000) and, therefore, devoid of well-documented human behavioral imperfections.

Due to the limited attention on B2B behavioral price research, price researchers face a fundamental dilemma: how separately should we develop the behavioral price theory for business-to-business markets relative to that of business-to-consumer markets? Wilson (2000, pp. 780–781) voiced a similar question regarding the theory of buyer behavior: “Why should we assume that separate theories are necessary to explain the exchange behavior adopted by the same individual when placed in different contexts?”

This question is particularly important in the pricing domain as the vast majority of past behavioral price knowledge and theory has been developed in a B2C context, producing a wealth of applicable concepts and insights. If B2B behavioral price theory were developed in isolation from the progress previously gained in consumer-oriented research, the progress of B2B behavioral price research will unnecessarily be hampered as scarce research resources may be devoted to reinventing many of the basic behavioral concepts and findings that have already been nurtured in behavioral price research. The optimal degree of developing B2B behavioral price theory as a separate entity from that of B2C obviously depends on the perceived similarities and differences between these two markets.

Although B2B and B2C markets differ in many ways, many behavioral characteristics of human beings – particularly those related to judgment and decision making – are present across diverse contexts. Therefore we propose that many behavioral price concepts developed in previous B2C

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price perception research would be applicable in a B2B context as well. The objective of this paper is to test this proposition by analyzing existing evidence on five important behavioral price concepts: reference price, price thresholds, acceptable price range, price as an indicator of quality, and the price–perceived value model. More generally, our objective is to demonstrate the importance of recognizing that buyers' responses to prices and price information differ from the traditional assumptions about such behaviors in B2B marketing literature.

The five behavioral concepts were chosen, as they have been among the most important behavioral concepts in previous behavioral pricing research. Reference price and the use of price as an indicator of quality are among the most studied concepts in behavioral price research (see Cheng & Monroe, 2013; Mazumdar, Raj, & Sinha, 2005; Somervuori, 2012). Price thresholds and acceptable price range have been researched since the 1970s (Monroe, 1973). The price–perceived value model has been derived based on these fundamental concepts and has been applied widely (Grewal, Monroe, & Krishnan, 1998; Monroe, 2003). While this set of behavioral price concepts is not an exhaustive mapping of behavioral phenomena it captures much of the essence of previous behavioral price research.

We begin by first outlining the similarities and differences in B2B and B2C markets. Then we review the fundamental concepts of behavioral price research: reference price, price thresholds, acceptable price range, and price as an indicator of quality. Finally, we introduce the perceived value model. These latter two sections first review the essence of the underlying behavioral concepts based on previous research. Then we review the existing B2B research relevant to these concepts. In the discussion we summarize key findings and provide suggestions for future research.

2. Similarities and differences between B2B and B2C markets

B2B markets include challenges that differ from those in B2C markets. First, purchasing in industrial settings typically involves multiple people with complex interactions among themselves and their various individual and organizational goals (Bonoma, 1982; Lilien et al., 2010; Webster & Wind, 1972). Members of the buying unit in organizations may include an initiator, a decider, influencers, purchasers, a gatekeeper, and users (Bonoma, 1982). Depending on the situation the combination of members varies. The more complex and involved the buying decision, the larger the decision making unit (DMU) typically is and the more carefully the decision is considered (Johnston & Bonama, 1981). Second, in contrast to consumer markets, B2B markets typically are characterized by fewer buyers buying in larger quantities, involving more stakeholders, with purchase cycles that may take months or longer to complete (Lilien et al., 2010). Third, many offering related dimensions are held different between B2B and B2C markets, e.g., technical complexity of purchased offering (Webster, 1979) and negotiated price (Stanton, 1981).

Yet, as others have noted, there are misconceptions about these differences and whether findings from consumer research can be applied to business-to-business marketing (Dant & Brown, 2008; Fern & Brown, 1984; Wilson, 2000). Although B2B markets differ from B2C markets, similarities between organizational and consumer buyers exist. For example, even though differences with business-to-consumer marketing have been identified often there are multiple similarities (Fern & Brown, 1984). Moreover, all consumer level (B2C) retailing entails B2B components as the retailer must also deal with upstream channel members to serve the final customers.

Most importantly, many behavioral characteristics of human beings – particularly those related to judgment and decision making – are present across diverse contexts. For example, Simon (1955) made the well-accepted point that human beings have general limitations in capacity to process information. Helson (1964) and Kahneman and Tversky (1979) have found that all human judgments are made with respect to a frame of reference. Stanovich (2010) indicated that the various human decision-making strategies – although often found through artificial experimental studies – have been observed across a wide array of dissimilar decision-making contexts, including business decisions. Also, Wilson (2000, p. 781) referred to the “fundamental similarities within human choice-making” when comparing B2B and B2C markets.

Thus, many similarities between B2B and B2C markets stem from psychology and behavior that are inherent to human behavior for individuals irrespective whether they are working in organizations or acting as consumers. Bunn (1994) argued that in organizations human psychology and behavior influences, for example, on procedural control of decision-making, focus on company or operational level goals, use of analysis techniques and search of information. Increasingly, it has been recognized that organizational decision makers use decision heuristics and a variety of marketplace signals and cues to facilitate their decision process (Moorman, 1995; Ronchetto, Hutt, & Reingen, 1989). Managers develop these to simplify their decisions and to cope with complexities. Evaluation often also includes qualitative judgments in addition to use of systematic and sophisticated analysis techniques (Bunn, 1994).

Just because the purchase and use of a product is for business and not for personal consumption does not negate the fact that people do not always process information in a rational manner (Dijksterhuis, Bos, Nordgren, & van Baaren, 2006; Leek & Christodoulides, 2012; Sherlock, 1992). There is simply too much available information to “aid” in their decision-making. Also, more information does not necessarily mean better decision-making (Gigerenzer & Gaissmaier, 2011). Not only is processing all the information impossible for a human mind in most situations, we also cannot analyze all available information due to both mental as well as time constraints (Simon, 1955).

So how do people make decisions? Instead of cognitively calculating all the weights in preferences of different options to make a decision, even the most “rational” of people use feelings to assist them (Bechara & Damasio, 2005; Rick & Loewenstein, 2008). Behavioral researchers from multiple perspectives agree that the initial response to any environment typically is affective, and that this emotional effect generally guides subsequent behaviors within that environment (Crosby & Johnson, 2007; Machleit & Eroglu, 2000). Research has shown that the affect area of the brain is frequently activated first when we make decisions (Davidson & Begley, 2012). Impressions and affect influence what we perceive prior to cognitive analyses (van den Bos, Vermunt, & Wilke, 1997). Each of the above points is relevant because setting prices or making purchase decisions is an issue of perception or how we see and interpret information.

Consumers and business-to-business purchasers alike, often first decide, perhaps non-consciously, and then cognitively rationalize the decision (Knutson, Rick, Wimmer, Prelec, & Loewenstein, 2007; Lehrer, 2009; Sherlock, 1991, 1992). Emotions are an important aspect of price, product, brand, and supplier evaluations (Leek & Christodoulides, 2012; Somervuori & Ravaja, 2013). Therefore, it is important to understand how buyers respond to price as a stimulus and as an indicator of quality and benefits, and to recognize that these mental processes often occur similarly in B2B and B2C markets.

3. Fundamental concepts of buyer behavior relative to price

As an important aspect of everyday life, price acts as a stimulus to people's senses. People respond to various types of symbols representing prices and pricing tactics such as price promotions. This section examines fundamental concepts concerning how buyers respond to price: reference price, differential price threshold, absolute price threshold, acceptable price range, and price as an indicator of quality (Monroe, 1973, 2003). It is imperative to note that these concepts explain how people form price *perceptions*. “Research has established that in reality, the effect of price is a matter of buyer