Factors Driving Business-To-Business Catalogue Order Satisfaction and Trust

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Abstract

The literature on catalogue buying is heavily skewed to the business to consumer (B2C) area and increasingly is orientated to the multi-channel world of shopping choice, including online, catalogue and store options. Previous studies have highlighted the role of functional variables, such as price and product range, as major determinants of buyer catalogue decisions. Non-functional variables, such as trust and reputation have received less attention, but will be featured in the current B2B study. Further previous studies have primarily been single equation explanations of catalogue decisions, whereas the current study takes a hierarchical or systems approach to decision making. A four-equation analytical path model has been designed and a large sample (n=1809) of business customers used to test the model. Multiple regression is the main form of analysis. It is suggested that one should interpret the results as a whole, rather than in simply trying to identify one or two specific determinants. Notwithstanding, price and catalogue layout were seen to play a particularly important role in explaining buyer behaviour.

Key Words: direct marketing; mail order; business buying; satisfaction

Introduction

Although business-to-business marketing is several times the market size of business to consumer marketing, it is a relatively neglected area. While there is a temptation to immediately research Internet-enabled buying because of the interest in this new medium, it seemed important to clarify our knowledge of an older format of direct purchasing, namely catalogue buying. Especially in North America, but also in Australia, catalogue greatly exceeds (in dollar volume of sales) online as a buying medium. The focus of the current paper is on business-to-business buying of office product supplies through catalogues. The study is a means of ascertaining which factors are critical in determining satisfaction and loyalty in this market. A quantitative research design has been chosen. A sample of n=2200 was selected minus a holdout sample of about 400, leaving an actual net sample of 1809 for modelling purposes. We have not used the holdout sample as yet. The size of 1809 is still very large as a marketing sample. An analytical path method has been used, which will later be extended to a structural equation model. We next introduce the literature review, followed by the research design, sample frame, research results and discussion.

Literature Review

Much of the literature is in the business-to-consumer context rather than the business-tobusiness context. Catalogue buying appeals to time-compressed consumers with high disposable income and a high need for labour saving goods and services (Dholakia and Uusitalo, 2002). It is argued that catalogue shopping is based on a broad range of experiential values, offering efficiency and affordability, but also visual appeal (Mathwick, Malhotra and Rigdon, 2001). Much of the literature has moved into the multi-channel realm, with increasing attention to online purchasing (Dennis, Harris and Sandhu, 2002; Dholakia and Uuolia, 2002; Kim 2002; Sotgiu and Ancarani, 2004). Multi-channel retailing has also been considered and it enables customers to examine goods at one channel, buy at another and pick them up at a third, if desired (Berman and Thelen, 2004). Commonly the multi-channel research compares the three way choice between online, catalogue and store (Gehrt and Yan, 2004; Palmer 2000) or mail order catalogue versus a range of outlet types (Morganosky 1997). It is argued that perceived risk, past direct marketing experiences, motivation type, product category and design aspects drive channel choice across multi-channel shopping and catalogue shopping are closer substitutes than any other pair of channels (Ward 2001). Most of the B2C studies provide insight for the current study in terms of buying criteria and potential market segments.

The specific B2B literature is not as extensive as the B2C field, which tends to be dominated by shorter magazine articles of specific cases (Anon. 1996; Brown 1989; Martin 1987). Choi (2003) is one exception, (theoretically) arguing that manufacturers setting up direct channels are likely to be deterred by the optimal number of online suppliers being only two and also by the risk of alienating retail clients. Conflict arising from managing multi channels of distribution in a B2B context is explored in Webb (2002). Shipley, Egan and Edgett (1991) conclude that direct channels have a potential advantage in terms of product and price, while distributor channels have an advantage. After-sales service was found to contribute to buyer satisfaction (Withey 1988). A further issue, to be explored in future research is the role of multichannel integration (Payne and Frow, 2004).

Research Design

A quantitative design has been used because there is reasonable understanding from past studies (Eastlick and Feinberg, 1999). A four-equation model has been developed, as follows:

(1) INT = f(T; SAT)

(2) T = f(SAT)

- (3) SAT = f(P, CL, S, FO, REP)
- (4) REP = f(P, CL, S, FO, G)

Where INT refers to behavioural intentions; T refers to trust; SAT refers to customer satisfaction; P refers to perceived fair price; CL refers to the favourable perception of the catalogue layout; S refers to service in general; FO refers to friendly telephone operators; REP refers to the corporate reputation of the provider; G refers to guarantees.

Each construct is measured as a multi-item scale, based on the literature where possible. Tests revealed that the scales were reliable, with the Cronbach Alpha ranging from 0.69 to 0.94. Six of the nine scales had an alpha greater than 0.80. Seven point scales were used. A path analysis model was the method of statistical estimation, that reduces down to four multiple regression estimates.

Sample Frame

Cooperation was sought and obtained from a large Australian-based stationery provider that has both a catalogue and an Internet-based business, especially in the business-to-business market. The survey was entirely designed by the researchers and all of the data was returned to the university. The survey was conducted online, with a prize incentive to encourage responses. The sample was reached through a normal issue of the catalogue, which invited customers to participate in the online survey. More than 3000 responses were returned. There was no missing data because incomplete responses were not accepted. The current sample was cleaned so that it became a pure business-to-business sample. A model was estimated for a sample of 1809 firms, with duplicate entries eliminated from the sample. We still have in addition a holdout sample of 400 that we will use to test the predictive ability of the model. We do not report on the results for the holdout sample here. Although the sample is large, a test was made for non-response bias by comparing late returns with early returns and testing for the statistical significance of differences in the mean value of each item. Of the 40 items tested, 38 were not significant at the 1% level. Of the two that were significant, the absolute difference in the mean was only about 0.1 points on a seven-point scale. The very large sample size makes it possible that small absolute differences could show up as significant. We conclude that there is no evidence of a likely non-response bias problem.

Research Results

Four equations have been estimated for our overall model. The detailed estimates are given in Table 1. Behavioural intention is the first multiple regression equation summarised in Table 1. The adjusted R-square is good, with 58% of the variance explained. Only three variables were significant and in order of importance (size of the standardised beta coefficient) were: trust; satisfaction and price. All three were highly significant, at the one percent level, although trust was by far the dominant variable. The t-values are given in parenthesis under the beta coefficient. Multicollinearity was not a problem for this or indeed of any of the regressions in Table 1. All of the tolerance coefficients were greater than 0.20, indicating the absence of a major collinearity problem.

Trust is the next regression equation considered in Table 1. The overall fit of the regression is good and very similar to the intentions equation. Five variables were significant, all at the one percent level of significance. In order of importance the key explanatory variables were: satisfaction; catalogue layout; provider reputation; friendly staff; and service in general (such as payment options). Satisfaction was the dominant determinant of trust.

Satisfaction is the third regression equation. The overall fit is reasonable and the F value is highly significant at the one percent level. However the fit is the least of the four regressions run here. Six variables were statistically significant, four at the one percent level and two at the five percent level. Finally, the third regression equation attempts to explain the corporate reputation of the supplier. Somewhat different variables are involved here, with roles for product quality and guarantees in particular. Other significant variables were service, price, catalogue layout and friendly staff telephone operators.

Variable	Intentions	Trust	Satisfaction	Reputation
Constant	-0.20	0.33	1.12	18
	(1.73)	(2.74)**	(8.50)**	(1.36)
Trust	0.61			
	(28.10)**			
Satisfaction	0.14	0.45		
	(6.11)**	(23.44)**		
Price	0.07		0.32	0.08
	(3.69)**		(12.80)**	(3.69)**
Layout		0.17	0.17	0.08
-		(7.40)**	(5.63)**	(2.87)**
Service		0.08	0.10	0.17
		(3.77)**	(3.90)**	(7.54)**
Friendly staff		0.07	0.12	0.06
		(3.86)**	(4.55)**	(2.76)**
Reputation		0.15	0.07	
-		(6.60)**	(2.51)*	
Guarantees				0.21
				(8.62)**
Guiding staff			0.06	-0.01
-			(2.53)*	(0.44)
Product				0.34
Quality				(13.96)**
Adjusted R-	0.58	0.58	0.43	0.61
square	(816.3)**	(494.1)**	(225.6)**	(410.1)**
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 Table 1: Multiple Regression Results for Office Products (n=1809)

****** denotes significant t or F value at 1% level

* denotes significant t or F value at 5% level

Discussion and Future Research

The various paths in the model have followed a broadly understandable pattern. The end variable in the model, behavioural intentions, is primarily driven by trust, with strong support from satisfaction. The only other factor to directly influence intentions was price, although this direct influence was relatively small, even though it was statistically significant at the one percent level. Trust can be construed as an expectation that past service quality can be assured to happen in the future. It is therefore not surprising that trust dominates loyalty decisions. Our results are quite robust with respect to intentions, with 58 percent of the variance explained. With respect to trust, we again are able to explain 58 percent of the variance. By far the dominating driver is satisfaction. The second and third influences, namely catalogue layout and the quality reputation of the provider, are a long way behind. Finally, another two influences, friendly call operators and service, are significant at the one percent level, but the magnitude of their influence is small. To interpret the results, it is clear that the way suppliers should build trust with business clients is through having satisfied customers, having a good reputation, design quality layout and provide good service,

including personal service. In other words, good and appropriate marketing is the basis of trust. Interestingly, price was not significant as a determinant of trust, though as we will see, it nonetheless plays an important part in the overall schema. If we turn to satisfaction, this was slightly more difficult to model, with 43 percent of the variance explained. Again there was a single dominating factor, price, this time. There was a big drop to the next three determinants, namely catalogue layout, friendly call operators and service, all strongly significant at the one percent level. Two more factors, namely guidance from the call operators and the quality reputation of the provider, were significant at the five percent level. Finally, we have modelled the source of the provider having a quality reputation. This model had a high level of explanatory power, with 63 percent of the variance explained. The three main drivers of a quality reputation were quality products, guarantees and service.

If we look at the framework as a whole, including both direct and indirect influences, we see that price is the most powerful influence, followed by catalogue layout. Service and friendly call operators are two additional influences of moderate importance, with quite small contributions from quality merchandise, guarantees and guiding advice from operators. It is clear that we are examining a price-sensitive market, with a dominant role for price. However, and perhaps paradoxically, despite price sensitivity, there is nonetheless a level of business customer loyalty. The loyalty is mainly driven by a history of satisfaction with repeat purchases. This satisfaction derives partly from a perception of fair pricing, but also from the provision of convenience in dealing with a familial catalogue layout and friendly call operator and other services.

It is the *total package* of this marketing offer that creates the loyalty, so it is much more than just the prices. This lesson should flow over to other forms of direct selling, such as Webenabled formats. In other words, convenience is likely to be very important for business-tobusiness markets characterised by low to moderate value repeat purchases. Perhaps another way of interpreting the results is to think in terms of the total supplier brand image experience, as perceived by the business customer. Catalogue-based suppliers need to understand the total nature of the brand experience that they create and ensure that they can consistently re-create it to ensure loyalty. Both functional and non-functional elements are inter-woven in this package of benefits, with important roles for trust, staff-customer interaction and reputation.

The study provides an in-depth and systems perspective to our understanding of what determines loyalty in business-to-business markets, using the case of office supplies. The framework can be used to understand separate triggers to buying, such as the use of incentives or the use of improved graphics in catalogue layout. Future research could analyse the effectiveness of such marketing tools and therefore be of considerable practical significance to providers. Research could also be applied to other business-to-business markets to examine the role of context in differentiating the importance of loyalty drivers. In particular, future research could test our proposition that it is simply not a choice between price and convenience, but rather the development of an appropriate package of benefits to business consumers, a package that could be construed in terms of a corporate brand. Corporate brands are likely to be quite important in the business market context generally.

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