

How e-CRM can enhance customer loyalty

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Keywords

Internet, Pricing, Customer loyalty, Retention, Relationship marketing

Abstract

Internet-based companies need to remain competitive. One way of improving competitive advantage is to attract more customers and increase customer retention; for example, by developing long-term, secure relationships between the buyers and sellers. Little empirical research has been conducted on the link between customer relationship management and customer loyalty within an Internet, or e-commerce, context. This study provides evidence of how to improve planning for customer management by presenting and testing a conceptual model of the process by which the implementation of electronic relationship marketing (e-CRM), can enhance loyalty. While building the research framework, price sensitivity was found to be a primary confounding element on loyalty and was included in the study for control. An exploratory study of Internet retailers, e-retailers, and their customers was conducted and the findings revealed that e-retail companies (with CD, DVD, video and book products) should consider customers' perceptions of relationship marketing efforts, as they are fundamental to enhancing customer loyalty and that an enhancement of customer loyalty reduces price sensitivity.



Marketing Intelligence & Planning
21/4 [2003] 239-248

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[ISSN 0263-4503]
[DOI 10.1108/02634500310480121]

Introduction

The Internet has witnessed dramatic evolution over the past 30 years. Today, the Internet provides the foundation for electronic mail (e-mail), the World Wide Web (WWW) and electronic commerce (e-commerce). Hence, it is not surprising that much entrepreneurial activity has surrounded its transfer over to the public domain. Until recently, venturing into the electronic marketplaces of the Internet seemed to promise vast opportunities, fast-track business success, continuous growth and large financial gains. However, the failure of nearly 200 United Kingdom (UK)-based Internet companies in 2000 (Neal, 2001), highlights an urgent need to discover the key to Internet success. Nonetheless, a feeling of "make or break" has taken grip and now many UK businesses have a presence on-line, advertising their company image, values and products and services. The UK online retailing marketplace is estimated to be worth £1.8 billion a year (*The Times*, 2001).

Despite the revenue-generation potential of the Internet, there is surprisingly little empirical research in locating successful online models. Research findings in the traditional marketing literature conclude that greater customer loyalty leads to higher customer profitability (Clark, 1997; Hallowell, 1996; Reichheld and Sasser, 1990; Storbacka *et al.*, 1994). Given this belief in the economic advantage of customer loyalty, there is agreement in the need to investigate the online factors underlying customer relationship building (Grönroos, 1994; Gilbert, 1996; Clark, 1997):

As organisations become increasingly customer focussed and driven by customer demands, the need to meet customers' expectations and retain their loyalty becomes more critical (Disney, 1999, p. 491).

Indeed, an article in *The Times* (2001) highlights that "almost two-thirds of British companies [e-businesses] have learnt nothing about their customers' preferences and behaviour online" and that "the future of e-customer relationship management (e-CRM) is being seriously undermined because of this ignorance". Thus, leading to the question:

Would the careful staging of relational interactions be a driver for customer retention and willingness to increase online spending with a particular company?

The objective of this research is to examine if the utilisation of information gleaned from customers' online interactions to deploy targeted, personalised relationship tools (e-CRM) will lead to loyalty online (e-loyalty). The study is anchored on Storbacka *et al.*'s (1994) dual elements of price and relationship strength. It appears that price, as an indicator of quality, would impact on the profitability of the customer while relationship strength is a key barrier to external forces such as economic changes and competition.

The Internet: new models for a new medium?

Porter's (2001) recent review of the impact of the Internet on industry structure found cases of companies focusing on price instead of continuing with their existing strategies of features, quality and service. This is understandable, since the Internet has been propagated as a near-perfect market, which offers an unprecedented transparency beyond the capabilities of conventional media. This "new lamps for old" lure has proved to be catastrophic for many, leading Porter (2001, p. 66) to conclude that "the Internet *per se* will rarely be a competitive

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advantage" alone and that "Internet technology provides better opportunities for companies to establish distinctive strategy positioning" and "gaining such a competitive advantage [will] not require a radically new approach to business".

Porter's study is not conclusive, however, with respect to the extent of the continued applicability of traditional strategies in the virtual marketplace, nor does it propose a matrix by which to measure the appropriateness of "old" against "new" business rules. Besides, any competitive advantage from increased efficiency through reduced internal costs is likely to be short-lived as other firms join in the e-commerce fray. As the market for consumer goods sold over the Internet grows from an estimated £5.2 billion in 1998, to an estimated £72 billion in 2003 (Forrester Research, 1998), there is a need to understand how to tap into this virtual marketplace successfully.

Price sensitivity

One of businesses' primary concerns is the effect of the Internet's efficiency on competition. However, the research findings in this area are often contradictory and tend to have a single-issue focus: price. Alba *et al.* (1997) and Bakos (1998) discovered that the relative ease that products can be compared over the Internet would increase the importance of price in a buyer's decision-making process, thus forcing prices to drop to relatively similar levels – "lower buyer costs in electronic marketplaces [such as the Internet] promote price competition among sellers" (Bakos, 1998, p. 37), especially in low differentiated commodity markets. This belief has its basis in the theory of price dispersion (Salop and Stiglitz; 1982; Varian, 1980). The typical scenario is some retailers would charge low prices to attract informed customers while others charge high prices to sell to uninformed customers.

In the context of the Internet, price dispersion should be small, since purchasers will generally fall into the informed consumer category, because comparing prices on the Internet is relatively easy. Yet, Clemons *et al.* (1998) found that instead of price convergence, airline tickets offered by online travel agents actually vary by as much as 20 per cent. Another study by Brynjolfsson (2000) compared pricing of CDs and books on the Internet by top e-retailers with those offered by traditional (high-street) stores. It was found that although prices on the Internet were 9 per cent to 16 per cent lower than in conventional, high-street stores, the

online dispersion of prices was high at 25 per cent for CDs and 33 per cent for books.

Given this apparent price dispersion online, establishing the price elasticity of a product becomes quite pertinent. Essentially, a customer high in price sensitivity will manifest much less demand as price goes up (or higher demand as price goes down). Interestingly, Degeratu *et al.*'s (1998) study of Internet grocery sales found that price sensitivity over the Internet was sometimes lower than the same products purchased through traditional channels. In addition, Brynjolfsson (2000, p. 26) found that e-retailers of CDs and books "with the lowest prices did not make the most sales". The findings from these studies would indicate that demand for commodity online products does not necessarily correlate with price.

A clue to what additional factors may be confounding Internet price-sensitivity and price-dispersion is Lynch and Ariely's (2000) study of consumers who purchased wine from the Internet. They found that consumers tended to focus on price when the e-retailer provided little other information to differentiate the products. The results of this study also established some form of relationship between repeat purchasing (a facet of loyalty), product price and information provision (an element of e-CRM implementation). This conclusion is in keeping with Nagel's (1987) assertion that customers often use price as an indicator of quality, especially where there are few alternative brands to compare. Finally, the suggestion that "price does not rule on the Web; trust does" (Reichheld and Scheffer, 2000, p. 105) receives support from Shankar *et al.*'s (1998) study, which highlights the possibility of goodwill transfer – a positive purchasing experience in the traditional marketplace can lead to lower price sensitivity when the product, or brand, is purchased online.

Customer loyalty

Studies often report that, on average, it costs a company more to attract a new customer as it does to implement a retention strategy. Reichheld and Sasser (2000) in their study of the Internet clothing market, found that customer acquisition cost is 20 per cent to 40 per cent greater than acquiring a new customer in the traditional retailing marketplace. This leads to higher losses in the early stages of the relationship, but in months 24 to 30, the Internet customers are likely to spend twice as much as they did in the first six months. In an earlier study,

Reichheld and Sasser (1990) found that existing customers are not only less price-sensitive; they are more economical to maintain than new customers. Therefore, if this additional propensity to spend can be directed towards an extended range of products rather than mere repeat purchases of the original product, then the possibility of increasing profitability is high.

Yin (1999) defines "hard-core" loyalty as consisting exclusively of repeat purchase behaviour. At the same time, Bentley's study (1999) has linked customer loyalty directly to profitability by confirming Reichheld and Sasser's (1990) suggestion that loyal customers are less sensitive to price changes and are more susceptible to being charged premium prices. Gilbert (1996) postulates that relationship management (RM) schemes can reduce the long-term costs of attracting new customers by increasing the length of time they would stay with a company. Customer retention for greater profitability, favourable referrals and market share is a given benefit.

An examination of most relationship marketing definitions to date show they are focused on the "what" rather than the "how" – i.e. they:

... are couched in terms of desired outputs, and do not indicate the required inputs or features which would enable an observer to determine if a relationship marketing policy was being followed (Blois, 1996, p. 161).

Perhaps one of the most cited definitions of relationship marketing is Morgan and Hunt's (1994, p. 22) view that:

Relationship marketing refers to all marketing activities directed toward establishing, developing and maintaining successful relational exchanges [with customers].

Again, this definition has its locus on the desired outcomes of relational marketing rather than what relational marketing actually entails. Storbacka (1993; Storbacka *et al.*, 1994) proposes the "relationship revenue" model to measure the profitability outcome of a particular customer relationship. The contribution of this model lies in its identification that there are only two ways of increasing revenue – to raise prices or to increase the customer's patronage concentration.

In Grönroos' (1990) six-dimensions model, we find the foundation to understanding the facets of relational marketing and the direction to take for successful relational marketing implementation. Gilbert (1996) extended this relationship marketing implementation theory by developing a five incremental step framework to maximise

customer retention. However, there is still lacking the evidence to suggest that the same relationship marketing rules would apply in the e-commerce environment. Thus, in recognising the relative lack of literature in this new arena, a working definition of e-CRM for this study is presented below:

e-CRM refers to the marketing activities, tools and techniques, delivered over the Internet (using technologies such as Web sites and e-mail, data-capture, warehousing and mining) with a specific aim to locate, build and improve long-term customer relationships to enhance their individual potential.

From the literature, it seems that, despite the armchair convenience and near-perfect conditions of online buying, customer demand is multi-faceted and not at all well-defined.

Despite a general consensus on the why of customer loyalty: "long-term e-commerce profit hinges on customer loyalty" (Reichheld and Scheffer, 2000, p. 106) and customer loyalty online towards an e-retailer maybe stronger than offline towards a traditional high-street retailer (Shankar *et al.*, 2000). Although much has been written about RM's benefits, little detailed empirical evidence exists as to how companies should go about enhancing their customer relationships.

Hypotheses and theoretical model

Owing to limited literature in the online environment, this study will assume that the facets (e.g. reciprocity of attitudes and behaviour) that constitute a relationship found in the traditional (high-street) setting, are similar to those on the Internet. Additionally, it accepts that e-CRM shares the same roots as conventional RM and, therefore, will have a similar ability to establish a relationship between the customer and the e-retailer. Hence the hypotheses set are:

H1. An e-retailer's e-CRM effort is positively related to the customer's perception of that e-retailer's e-CRM effort.

Based on Too *et al.*'s (2001) study in the traditional retail setting which established a correlation between a retailer's RM effort and customer trust and commitment, this study proposes that the same principles also apply within an e-retailing context:

H2. A customer's perception of an e-retailer's e-CRM effort is positively related to the customer's loyalty towards the e-retailer.

Owing to the conflicting views that price on the Internet may or may not be important

(Alba *et al.*, 1997; Bakos, 1998; Brynjolfsson, 2000; Lynch and Ariely, 2000), the extent to which the conflict dictates price sensitivity cannot be overlooked.

H3. An e-retailer's e-CRM effort is negatively related to customer price sensitivity.

A fourth hypothesis is proposed to examine if e-loyalty and price sensitivity are correlated:

H4. The more loyal a customer is towards an e-retailer, the less sensitive he/she becomes towards price.

Methodology

An initial research was conducted to establish which product categories had the highest purchase volumes online. Nielsen Netratings (2000) provided a list of the top 15 e-retailers in the USA. Each e-retailer's Web site was visited and a list was extracted of the products sold. The result revealed that the most common set of products sold online were books, CDs, DVDs and console games. During July 2001, a further survey was conducted using Yahoo.com to locate the same in the UK. It provided confirmation that, at the time of research, there were 1,314 Web sites listed selling books, CDs (music), DVDs (video) and games. From this result, the authors inferred that these products after travel and transportation, were the most popular products sold over the Internet in the UK at that time.

Another UK-based shopping portal, Wisecat.com (2001) was used to establish a listing of the top 40 UK e-retailers. By visiting each of the Web sites, the 40 e-retailers were categorised by the products they sold. E-retailers that were not "pure-clicks"; that is, ones possessing both online and offline presence, were then eliminated to avoid possible confounding errors emerging from the transfer of loyalty in the physical to the virtual platform, as identified by Shankar *et al.* (1998). By limiting the research environment to just "pure clicks" e-retailers, all efforts to build relationships with customers must, therefore, originate from the e-retailer's Web site. Of the UK top 40 e-retailers, 11 of these were "pure clicks" selling books, CDs, DVDs and games.

Questionnaire

For this study, two questionnaires were developed based on Too *et al.*'s (2001) study of traditional high-street retailers. The first questionnaire was formed to measure the e-CRM effort employed by each of the 11 e-retailers (*H1*). The second questionnaire was developed to capture the perception of e-CRM received, their expressed loyalty and

sensitivity to price changes by the customers of each of the 11 e-retailers. All statements within the questionnaires were measured using a seven-point Likert scale ranging from "strongly disagree" to "strongly agree".

Insight to the how and what of virtual CRM by the pure-clicks, would be collected via a list of 13 CRM elements delivered electronically (see Appendix, Table AI). All human interactions (such as high-street outlets and call centres) were excluded. Too *et al.*'s second questionnaire, consisting of 13 items bar changing all references to the physical "store" to the "e-retailer", was adopted (see Appendix, Table AII). The items used to measure price sensitivity were obtained solely from the literature. Demographic data was also collected.

Data collection

The overall goal of this study is to establish whether e-CRM affected the loyalty of customers who purchase CDs, DVDs, books and console games over the Internet from "pure-clicks" e-retailers. However, it is not the scope of this study to include the understanding of what type of person, nor what group of people are more likely to purchase one of these products from the Internet. Therefore, the population chosen for the survey was based on people, who are likely to:

- have access to the Internet;
- work within an environment that encourages the use of the Internet; and
- be able to purchase from the Internet using a credit card.

IBM UK was chosen as the sample frame as it provided a rich mixture of age, ethnic cultural roots, job position and disposable income levels, ideal for such a study. From a total of 21,082 employees, the minimum sample size was calculated at 2,103. Assuming 50 per cent "clean" respondents, 4,216 employees were randomly selected from the e-mail addresses of IBM UK to participate in the survey[1]. Once a target respondent received the e-mail, the questionnaire was presented to him/her via the Web browser.

If a respondent indicated he/she had never purchased from the Internet, the survey was considered "complete" and, on return, it was included in the analysis. If the respondent had purchased from the Internet, data was collected about what product type, or types, were bought. To qualify for the final stage of the questionnaire, the respondent was asked whether he/she had purchased a CD, DVD, book or console game from the Internet. A negative response at this point meant that the survey was over and the returned

questionnaire included in the analysis. The remaining respondents were then asked to indicate which e-retailer they had purchased a CD, DVD, book or console game from and to complete the main section of the questionnaire which gathered data on the project's main constructs.

Results

All completed questionnaires were transferred electronically back to the originating database and converted through a software programme into an SPSS record. The system recorded a total of 4,048 receipted request e-mails. A total of 2,125 (52.5 per cent) responded, of which 1,093 (51.4 per cent of the responses) were able to complete all sections of the questionnaire (i.e. those that had purchased a CD, DVD, book or console game from the UK's top 11 e-retailers listed).

The internal reliability of the questionnaire scales was checked using Cronbach's coefficient (α) for 58 statement items. Apart from customer loyalty behaviour (0.71), all the constructs alphas (α) are of ≥ 0.8 . Since this study is concerned with the overall measure of customer loyalty, the overall reliability is deemed acceptable.

In addition, a test for significant co-variation between the dependant and independent variables by analysing each construct item groups of e-CRM, customer loyalty and price sensitivity, was conducted. Factor analysis was used to measure the same construct and then compared to assess internal construct validity. Pearson's test for linear correlation was used to calculate the correlation co-efficient between each construct and its measurement method. Valid construct measurement is observed in that the correlation coefficient for each construct measured by different methods is always higher than that between construct correlation coefficient using different methods of measurement.

Demographics

The demographic profiles of the two samples are presented in Table I. In total, 919 (43.2 per cent) of the survey respondents have not purchased from the Internet compared with 1,206 (56.8 per cent) who have. It is noted that of the 2,125 respondents, two-thirds are males and one-third females. Among the Internet non-purchasers, the ratio of males to females is 3:2 (60.95:39.05). However, among the Internet purchasers, this ratio changes to 3:1 (75.93:24.07).

Although an established organisation, the recruitment profile from the data seems to

favour "younger" employees, with nearly 55 per cent (54.5 per cent) of the employees below 36 years old. With the exception of the most mature group (54+), age does not appear to be key to buying or not buying online. The majority of IBM's employees are either single or married, with nearly as many employees being single as married. Once again, it is interesting to note that marital status does not seem to influence preference for buying online.

The salary ranges of employees are evenly spread with each of the six salary bands averaging 16.66 per cent of the overall total. Given the age and qualification distributions, it is unsurprising to note that nearly 47 per cent (46.9 per cent) of the participants are earning between £15,000 and £34,999. The spread of Internet buyers and non-buyers for these participants is pretty even. It is observed that for the lowest earning band (up to £14,999) the ratio of Internet non-buyers to buyers is 1:2, while in the highest earning band (over £60,000) the ratio indication is in reverse, being nearer 2:1 buyers to non-buyers. The trend for higher earners to buy online is further reflected in the next two salary bands (£35,000-£44,999 and £45,000-£359,999) where there is a 3:2 ratio of buyers to non-buyers. Certainly, the data does suggest that there is some relationship between buying on the Internet and salary levels.

Hypothesis testing

To test the notion that e-CRM deployment by Internet companies will increase the likelihood of customer loyalty and price tolerance, four hypotheses were proposed. All the hypotheses were directionally related and so one-tailed linear (Pearson's linear correlation) and non-linear (Spearman's rank correlation coefficient) correlation tests were used to analyse the results. Extreme values were discarded. The first hypothesis assumed a significant result at the 0.05 level ($p < 0.05$) while the large 1,093 survey responses for *H2*, *H3*, and *H4*, allowed a more stringent significance level of $p < 0.01$.

H1. The first hypothesis proposes a positive relationship between the amount of e-CRM implemented by an e-retailer and the customer's perception of the e-CRM effort they believe they received from the e-retailer. Having excluded an extreme value, the result shows positive and significant linear (0.613, $p < 0.05$) as well as non-linear (0.547, $p < 0.05$) relationships between e-CRM efforts and e-CRM perceived. The positively skewed distribution indicates that the general level of e-CRM implemented within

Table I
Demographic data summary categorised by Internet buyers and non-buyers

Variable/level	Total respondents (n = 2,215) Frequency (per cent)	Internet buyers (n = 1,206) Frequency (per cent)	Internet non-buyers (n = 919) Frequency (per cent)
Gender			
Male	69.51	75.93	60.95
Female	30.49	24.07	39.05
Age			
Up to 19 years	1.22	1.16	1.32
20-27 years	25.41	24.23	26.73
28-35 years	27.91	30.29	24.75
36-45 years	26.64	27.97	25.08
46-53 years	13.88	12.37	15.84
54+ years	4.94	3.98	6.27
Professional qualification			
GCSE or O' level	15.81	12.03	20.79
A' level	28.61	27.22	30.58
Bachelor degree	41.79	45.89	36.16
Masters degree	11.34	12.61	9.79
Doctorate	1.04	1.24	0.77
None	1.41	1.00	1.87
Marital status			
Single	43.44	44.07	42.46
Married	49.69	49.96	49.39
Separated	1.93	2.07	1.76
Divorced	4.94	3.90	6.38
Salary range			
£0-£14,999	10.87	6.72	16.50
£15,000-£23,999	24.24	19.67	30.03
£24,000-£34,999	22.68	24.81	20.02
£35,000-£44,999	16.42	18.09	14.08
£45,000-£59,999	12.14	14.44	9.13
£60,000+	13.65	16.27	10.23

e-retailers' Web sites could be enhanced as their features fall behind some of the more thorough e-CRM implementations. By the same token, the negatively skewed distribution of customers' perception indicates that customers believe the relationship they have with their e-retailer is stronger than it actually is. As hypothesised, these two variables are positively related and therefore, *H1* is supported.

H2. The second hypothesis proposes a positive relationship between the amount of e-CRM a customer believes he/she has received from an e-retailer and the customer's loyalty towards that e-retailer. As highlighted earlier, the e-CRM distribution is negatively skewed, indicating that the customers perceive a greater relationship with the e-retailers than it actually is. The sample distribution for customer loyalty is approaching normality, indicating that loyalty levels among the respondents are evenly

distributed. The sample result shows positive and strong linear (0.579, $p < 0.01$) as well as non-linear (0.559, $p < 0.01$) correlations between perceived e-CRM and loyalty; thus, lending support to *H2*.

H3. The third hypothesis proposes an inverse relationship between the amount of e-CRM a customer believes he/she has received from an e-retailer and the customer's price sensitivity towards any changes in the prices of CDs, DVDs, books and console games sold by the e-retailers. The sample distribution is approaching normality with no extreme outliers. The inverse relationship between the variables is rather weak as depicted by the Pearson's test for linear correlation (-0.150 , $p < 0.01$) and Spearman's rank order coefficient correlation test (-0.158 , $p < 0.01$). The weak correlations, together with the variability of the data on the extraction of a scatter plot, means that *H3* cannot be accepted safely.

H4. The final hypothesis proposes a relationship between the customer's loyalty towards an e-retailer and that customer's price sensitivity towards the products sold by the e-retailer. The aim of this hypothesis is to verify the main relationships between the three constructs: perceived e-CRM received, loyalty towards the e-retailer and customer's price sensitivity. The results clearly show that there is a significant, negative linear ($-0.346, p < 0.01$) and non-linear relationship ($-0.339, p < 0.01$) between loyalty and price sensitivity, indicating that if a customer is loyal to an e-retailer, he/she is less sensitive to price changes by that e-retailer. However, owing to the variability of the data and a rather weak *H3* finding, the correlations presented for *H4* cannot be safely accepted.

Discussion and implications

The study results tend to agree with current research that well-educated and wealthy people are the strongest users of the Internet (Methelie and Nysveen, 1999). More specifically, the findings in Figure 1 suggest that customers' perceptions of CD, DVD, video and book e-retailers' relationship marketing efforts are fundamental to enhancing and maintaining customer loyalty. Although the results are not entirely conclusive, there is also an indication that price sensitivity is affected by the strength of relationship.

Data collection was via two surveys: the first survey was used to measure the e-CRM implementation effort of each of the UK's top 11 multi-media entertainment products e-retailers. The second survey was used to measure the e-CRM marketing effort as perceived by these companies' customers,

their loyalty towards the e-retailer and their sensitivity to price changes. This survey was received by 4,048 target respondents and achieved a response rate of 52.5 per cent (2,125 responses) without reminders. The high response rate implies a general interest in the research subject. Of the 2,125 responses, 1,093 respondents (51.4 per cent of the responses) had purchased from one of the UK's top 11 multi-media entertainment products e-retailers and, thus, qualified for hypotheses testing.

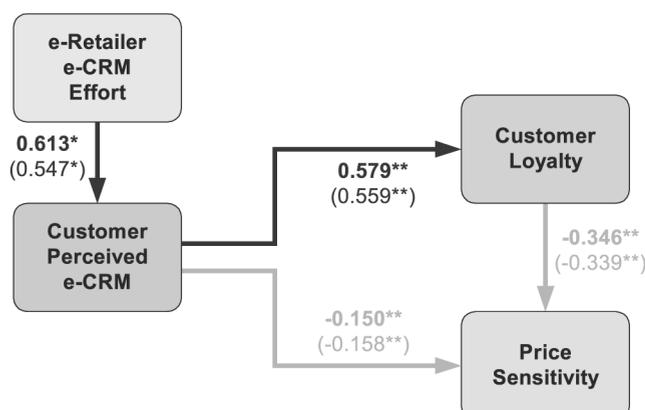
There are some useful insights from the demographical data. One observation is that more males have bought on the Internet than females. This presents an opportunity for an e-retailer, product/service permitting, to revisit their e-CRM strategy with a view to attracting more female buyers online. Further inquiry into the gender preferences and attitudes will give added insight to the types of product or service to be offered and how to establish and build a relationship with the female consumers.

The research indicates a correlation between earning capacity and propensity to buy on the Internet. As such, it is worth noting the crossover salary of £25,000 from a 1:1 willingness to buy to a ratio of 2:1. By identifying the marginal, or non-buyers, Internet companies can re-direct and focus their relational efforts to keep not only the high earning online buyers loyal, but also to include the lower paid customers as well as 54+ customers.

The notion that CRM is able to increase customer loyalty relies on the research conducted by Grönroos (1994), Reichheld (1996), Dekimpe *et al.* (1997) and Bentley (1999). The literature pertaining to customer loyalty has shown that loyal customers increase profitability (Reichheld and Sasser, 1990; Reichheld, 1996; Hallowell, 1996; Dekimpe *et al.*, 1997). In the context of Internet e-retailing within the multi-media entertainments markets, the suggestion of e-CRM implementation leading to increased customer loyalty finds support in this study. For the pure-clicks the significance of this finding is all the more critical, as the Internet is their only practical medium from which to build customer commitment and loyalty.

The compounding impact of price sensitivity on customer loyalty is harder to assess. Alba *et al.* (1997) and Bakos (1998) postulate that relatively low search costs over the Internet would mean customers would become less price-tolerant. Although it is not conclusive by the results of this study, there is some evidence pointing to the tripod of e-CRM, customer loyalty and price sensitivity. The results show an indirect link

Figure 1
Research model-linkage between e-CRM, loyalty and price sensitivity



between e-CRM implementation and reducing effects of price sensitivity among customers. This is in line with the findings of Brynjolfsson (2000), who discovered that the pricing over the Internet is more dispersed than the pricing of the same products on the "high-street". However, the loyalty-price sensitivity link is weak and e-retailers should not ignore other possible factors, such as loyalty, trust and rich product information.

The study has found that by embedding an e-CRM strategy into the business strategy of the Internet companies, it is possible to gain a better understanding of the needs and wants of their customers and to create a two-way relationship for customer loyalty and improved profitability. It has established that price sensitivity is a weak factor in determining how a customer chooses to purchase (Degeratu *et al.*, 1998). It is likely, that other factors, such as trust and loyalty may have a role in driving the emphasis back towards maintaining service and fulfilment quality rather than merely focusing on cost-efficiency.

Limitations and future research

The use of IBM UK as the sampling frame may not reflect the population of Internet users. However, the large sample size and the diversity of employees should provide a good base from which to launch a larger, more comprehensive study of the Internet buying behaviour of the UK population.

One area of concern relates to the distribution of purchases made to the UK's top 11 e-retailers. Table II shows how Amazon.co.uk dominates the e-retailing marketplace. The large market share that Amazon.co.uk enjoys in the multi-media entertainments product market may have a biasing effect on the results of the first

hypothesis. The methodology used in this study has tried to keep this effect to an absolute minimum. In addition, the large sample size will generally be able to overcome any influence imposed by Amazon.co.uk

The third hypothesis proposing that e-CRM perception among customers will reduce customer price sensitivity was not supported by the study's results. However, the established relationship, although weak, will need further investigation given its significance level ($p < 0.01$). Additionally, there is a need to understand the continued presence of substantial price dispersions on the Internet (25 per cent for CDs and 33 per cent for books) despite its near-perfect conditions. The consequence of 24/7 access, price and product transparency on traditionally high-involvement, high-value products, cannot be dismissed lest it should be proved that the Internet has the capability to commoditise luxury or branded items.

Conclusion

This study has demonstrated that customer loyalty can be improved when used within an Internet context. The findings reinforce the need to develop RM, as it can lead to greater customer loyalty for "pure-clicks" retailers as well as physical retailers. It was found that e-CRM implementation effort correlates with the perceived degree of e-CRM received (*H1*) and, in turn, is linked to the loyalty experienced by a virtual customer towards the e-retailer (*H2*). Also, in planning for long-term e-commerce profit, then price sensitivity is a critical consideration for the e-retailer faced with the dilemma of keeping prices low and attempting to add value to build and maintain relationships. The Web site and literature research conducted in the early stages of this study has revealed that,

Table II

Usage frequencies of the UK's top 11 multi-media entertainment products e-retailers

Valid	Relative frequencies of e-retailer usage within sample frame			
	Frequency	Per cent	Valid per cent	Cumulative per cent
101cd	15	1.4	1.4	1.4
Amazon	819	74.9	74.9	76.3
Audiostreet	37	3.4	3.4	79.7
Blackstar	26	2.4	2.4	82.1
BOL	50	4.6	4.6	86.6
BookShop	6	0.5	0.5	87.2
Britanniamusic	20	1.8	1.8	89.0
CDNow	38	3.5	3.5	92.5
GamesParadise	2	0.2	0.2	92.7
Jungle	79	7.2	7.2	99.9
VideoParadise	1	0.1	0.1	100.0
Total	1,093	100.0	100.0	

despite the near-perfect market conditions of the Internet, price dispersion is greater on the Internet than in traditional markets. Therefore, although there is only a weak relationship between customer loyalty and price sensitivity ($H3$) in this study, further investigation is necessary for a better understanding of pricing strategies on the Internet.

This study has found that e-CRM can directly improve loyalty of the Internet customers. Since price sensitivity may not be the governing factor that describes how a customer chooses to make a purchase other factors such as security and trust as well as service-quality attributes, such as speed and convenience, could be incorporated into the e-retailer's e-CRM strategy. Therefore, by careful structuring of an e-CRM strategy, and its integration into the basis of the business strategy and operations, an Internet-based retailer should then have a better understanding of their online customers to create and maintain a two-way relationship to improve customer longevity.

Note

- 1 Permission to conduct survey using IBM UK Employees from IBM EMEA Survey Approvals, Tel: +44-208-818-4000.

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Appendix

Table A1

Facets of RM implementation within an e-CRM context

1 Customer account	Places high importance on developing an ongoing relationship with customers
2 Returns policy	Places more effort into dealing with existing customers rather than new ones
3 Order tracking	Places much effort into keeping promises made to customers
4 Newsletter	Is highly involved in maintaining good customer relations
5 Personalisation	Tailored marketing campaigns rather than mass marketing campaigns are used
6 Suggestions box	Asking for and reacting to the future product and services needs of customers
7 Complaints (suggestive)	Promotes and encourages customers to share problems when they arise
8 Recommendations	If possible, the needs of customers are reviewed and responses are made on an individual basis
9 Complaints (corrective action)	Corrective action is taken if customers are unhappy with the quality of the products or services
10 Information clarity	High-quality customer service is provided at all costs
11 Complaints (responsiveness)	Customer complaints are reviewed and acted on swiftly
12 Product portfolio	Maintains highly appealing products and services to customers
13 Feedback surveys	Customer feedback on the quality of its products and services is highly valued

Table A11

Facets of RM in an e-CRM context

1	Developing an on-going relationship with customers is very important
2	It is a priority to place more effort into dealing with existing customers rather than new ones
3	Much effort is made to keep promises made to customers
4	The organisation is highly involved in maintaining good customer relations
5	Tailored marketing campaigns rather than mass marketing campaigns are used to satisfy the individual needs of customers
6	Asking for and reacting to the future product and services needs of customers
7	Promoting and encouraging customers to share problems when they arise
8	If possible, the needs of customers are reviewed and responses are made on an individual basis
9	If customers are unhappy with the quality of the products or services, corrective action is taken
10	It is a priority to actively provide high-quality customer service
11	Customer complaints are reviewed and acted on swiftly
12	Constant attention is made to maintain highly appealing products and services to customers
13	Customer feedback on the quality of its products and services is highly valued