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Marketing Science Institute
1000 Massachusetts Avenue
Cambridge, MA
02138-5396

Phone: 617.491.2060
Fax: 617.491.2065
www.msi.org

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Adoption and Effectiveness of Loyalty Programs: The Retailer's Perspective

Jorna Leenheer and Tammo H.A. Bijmolt

Loyalty programs are important and popular marketing tools for retailers. Yet most retailers don't fully exploit their programs' potential to enhance customer knowledge and loyalty via targeted promotions and other marketing actions.

Jorna Leenheer is Assistant Professor at the Department of Marketing, Vrije Universiteit Amsterdam, The Netherlands.
Tammo H.A. Bijmolt is Professor of Marketing Research at Tilburg University, The Netherlands.

Report Summary
Loyalty programs are important ways for retailers to improve customer knowledge and enhance customer loyalty, yet retailers' perceptions of this marketing instrument have received little research attention.

In this study, authors Leenheer and Bijmolt survey 180 retail companies—37% of which have loyalty programs—to better understand the drivers of retailers' adoption of loyalty program, as well as their perceptions regarding program effectiveness.

They find that retailers' adoption is driven primarily by market standards, specifically the percentage of competitors with loyalty programs. Retailers are also more likely to adopt loyalty programs when their customers differ strongly in profitability, presumably so they can retain the most profitable customers. However, differences in customer preferences do not increase retailers' adoption of loyalty programs, perhaps because exploiting diversity in preferences requires advanced data analysis and program design. Finally, firms with a strong customer orientation, and thus most apt to benefit from loyalty programs, are more likely to adopt them.

Retailers' perceived effectiveness of loyalty programs mainly depends on program rewards and on whether customer purchase data are fully analyzed. A saving feature in a loyalty program is strongly linked to program effectiveness, both in gaining customer insight and enhancing loyal buying behavior. A promotion feature did not have any effect on perceived effectiveness, perhaps because high membership rates diminish the power of distinguishing between members and non-members.

Finally, the intensity of data analysis is strongly related to effectiveness. In this regard, although direct mailings improve customer loyalty considerably, the effect is not significant—suggesting that some companies send out direct mailings without careful data analysis and targeting.

Overall, Leenheer and Bijmolt find that retailers are not fully exploiting the potential of loyalty programs to enhance customer knowledge and loyalty. Few retailers currently conduct the data analysis needed to differentiate between member customers with targeted promotions and actions. Further, few retailers use programs elements such as credit card privileges, contests, or product demonstrations. ■

Introduction

Retailers know that it pays off to increase loyalty in existing customers and dissuade them from switching (Macintosh and Lockshin 1997; Sirohi, McLaughlin, and Wittink 1998; Steenkamp and Dekimpe 1997). Loyal customers are often more profitable, and a loyal customer base is a valuable asset to a retail company (Srivastava, Shervani, and Fahey 2000).

Although retail companies have traditionally been transaction, rather than relation, oriented (Mulhern 1997), many retail companies are shifting from a purely transactional perspective toward a more relational perspective with customers. One means to do so is through loyalty programs. Loyalty programs enable retailers to identify individual customers, determine their profitability, differentiate between them, and enhance customer loyalty.

Several authors have proposed classifications or stages of relationship marketing. Coviello et al. (2002) label the first stage of relationship marketing as database marketing, and describe it as the use of technology-based tools to target and retain customers. Day (2000) speaks of value-adding exchanges: the focus of the firm shifts from getting customers to keeping customers. The firm pursues this objective by developing a deep understanding of their customers' needs, then tailoring their offering to these needs as closely as possible, and giving continuing incentives for the customer to concentrate most of their purchases with them. Berry (1995) classifies this as "level one" relationship marketing, a relational perspective that relies primarily on pricing incentives to secure customers' loyalty.

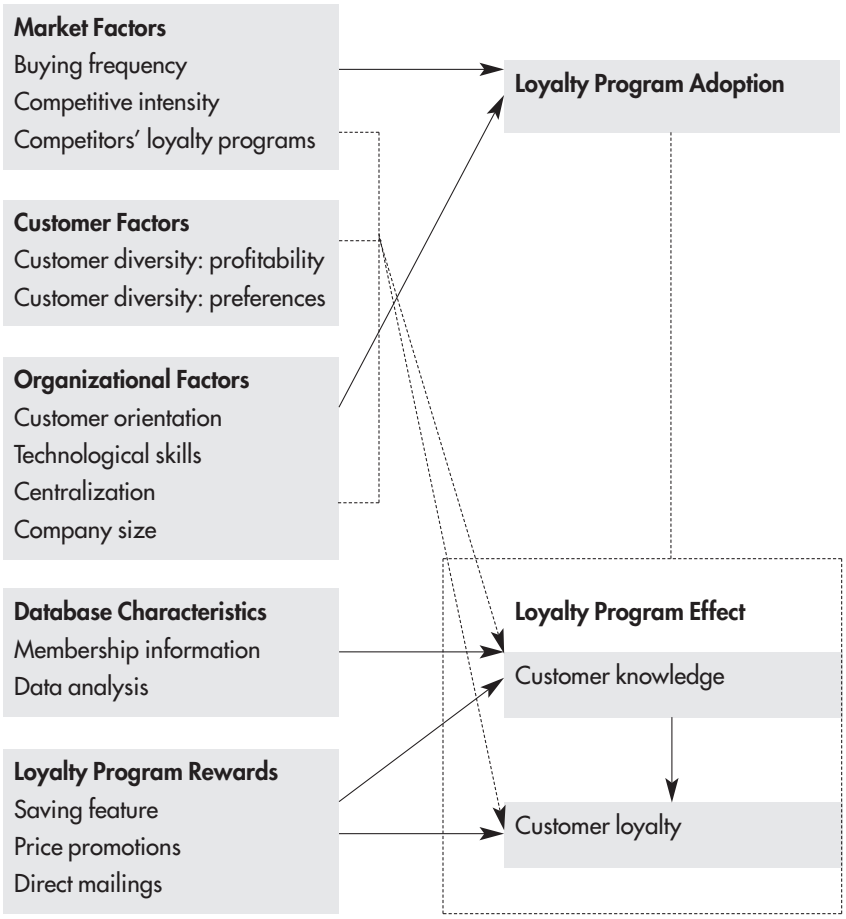
Loyalty programs fit well into this framework. A loyalty program can be defined as an integrated system of marketing actions that aims to make member customers more loyal (Sharp and Sharp 1997). A customer must become a member and identify himself or herself as such at every purchase occasion, usually with a loyalty card, to take advantage of the loyalty program. Beyond this, loyalty programs differ between retailers in terms of program rewards and database elements. For example, the British retailer Tesco offers a loyalty program in which members save points for a variety of rewards. It also enables members to use the loyalty card as a credit card (Passingham 1998). In another example, the Safeway Club Card provides direct price discounts to members (often in the form of buy-one-get-one-free) and it sends periodical personalized direct mailings (Middleton Hughes 2000).

Existing academic research demonstrated the theoretical basis of loyalty programs (Kim, Shi, and Srinavasan 2001; Zhang, Krishna, and Dhar 2000), and has provided empirical evidence of their effectiveness (Bolton, Kannan, and Bramlett 2000; Magi 2003). Experimental research has focused on loyalty program design elements such as saving features (Kivetz and Simonson 2002a; Roehm, Bolman Pullins, and Roehm 2002) and consumer characteristics (Kivetz and Simonson 2002b) to explain differences in effectiveness. However, most existing research focused either on one loyalty program or one program characteristic. Further, all existing research was based on consumer, rather than retailer, data and thus, could not examine the market or organizational conditions under which a loyalty program was a suitable marketing investment.

In contrast, this study assesses the drivers of retailers' loyalty program adoption and the perceived success of these programs based on a retailer perspective. Retail managers work with loyalty programs on a daily basis, and can draw from wide experience and numerous (proprietary) information sources. Our study, which is based on a survey of 180 retailers in the Netherlands, contributes to the literature on loyalty programs in two ways.

First, our survey of retailers on the *adoption* of loyalty programs provides insight into the market and organizational characteristics (e.g.,

Figure 1
Conceptual Framework



competitive intensity and company size) that stimulate or restrain loyalty program adoption. Although the growth in retail loyalty programs is remarkable, loyalty programs are not equally widespread in all retail sectors. Even in sectors where they are popular, some players do not use them. To broaden academic insight into managerial decision-making and to support future retail decision-making, it is important to understand why some retailers have adopted marketing strategies such as loyalty programs and others have not.

Second, through a large sample of loyalty program providers, we can study the effects and relative importance of specific reward elements (e.g., saving features) and database elements (e.g., data analysis) on loyalty program *effectiveness*. We ask retailers to assess loyalty program effectiveness in terms of two benefits: enhanced customer loyalty and improved customer knowledge.[1] In existing research this second benefit—improved customer knowledge—has not received much attention.

In the next sections, we describe our framework and formulate hypotheses regarding the factors influencing loyalty program adoption and loyalty program effectiveness. We then describe our research method, present the results of the empirical study, and discuss managerial implications and limitations of the study.

Loyalty Program Adoption

Day (2000) argued that building company-customer relationships is neither appropriate nor necessary for every market, customer, or company. In the same vein, relational instruments such as loyalty programs are not a useful investment for every retail company. When deciding whether or not to adopt a loyalty program, a retailer anticipates the related benefits and costs. A company assesses the expected profitability of an innovation such as a loyalty program based on its customer base characteristics, market characteristics, and organizational resources and characteristics. We suggest two customer factors, three market factors, and four organizational factors that may impact retailers' loyalty program adoption. Figure 1 shows our conceptual framework.

Customer factors

An important advantage of loyalty programs over traditional marketing instruments is their capability to differentiate between customers. Loyalty programs realize customer differentiation through two mechanisms: (1) differentiation between loyalty program members and nonmembers and (2) differentiation between loyalty program members themselves due to personalized program rewards. A loyalty program's potential to differentiate creates the strongest relative advantage over mass

marketing when customer diversity is high (Sheth, Sisodia, and Sharma 2000). Diversity may take one of two forms: profitability diversity and preference diversity.

Profitability. When customers vary substantially in profitability, it is not rational to invest in all of them equally. In order to optimize customer equity a company should reward those who are most profitable to encourage them to stay, and it should give incentives to those who are not profitable yet (Berger et al. 2002; Rust, Zeithaml, and Lemon 2000). A loyalty program can reward customers for purchase behavior or it can select profitable customers and treat them with privileges and additional service (Bell et al. 2002). In this way a loyalty program can help to spend marketing budgets more efficiently.

Preferences. Customers can also differ in their preferences towards the company's offering. First of all, not all customers are willing to be involved in a relationship with the retailer. Reinartz and Kumar (2000) advise managers to let short-life customers who are notorious switchers "fly around", rather than bother them with relational investments. Moreover, customers with low relational preference are less likely to become members of the loyalty programs. Loyalty programs thus provide a self-selection mechanism so that customers who are not relation-prone will not be bothered. In addition, customers differ in their preferences for specific products and product categories. A loyalty program can use segmentation criteria such as assortment interests or lifestyle to provide customer-specific actions. In general, a loyalty program has the potential to distinguish between customer preferences and to make tailored offers to increase customer value and loyalty. Because the benefits of differentiation are highest in a diverse market, we hypothesize:

H1a: Retail companies with a more diverse customer base in terms of profitability are more likely to adopt a loyalty program.

H1b: Retail companies with a more diverse customer base in terms of preferences are more likely to adopt a loyalty program.

Market factors

Product Market Type. Grönroos (1995) argues that relationship marketing makes less sense if consumers buy infrequently in the product category, as in case of durables. In such markets, transaction marketing may suffice to attract the consumer once he or she makes a purchase. This suggests that loyalty programs provide highest benefits in markets where consumers make purchases with high frequency. This also relates to the fact that it is crucial that not only the retail company but also its customers adopt the loyalty program. Customers will adopt a loyalty card only if they receive positive reinforcements from it frequently. Positive reinforcements are automatically created at a transaction, when the customer is identified as a program member and may receive program rewards such as price promotions or saving points. So, a product category in which customers buy with high frequency has higher potential for developing program loyalty (Bhattacharya and Sen 2003; Yi and Jeon 2003). Overall, we hypothesize the following:

H2: Retail companies active in a market in which customers buy with high frequency are more likely to adopt a loyalty program.

Competitive Intensity. The adoption of relational instruments creates larger benefits if the risk of losing existing customers to other players in the market is higher. This relates to the competitive situation in the market. Competition is most intense if competitors have a comparable marketing mix. In such markets, companies use promotional actions to attract each other's customers. A better long-run strategy to create competitive advantage is to differentiate oneself from the competition through innovations (Nijs et al. 2001; Voss and Seiders 2003). A loyalty program creates competitive advantage, not so much by attracting new customers but by locking in

present customers. Because in a competitive market the threat of losing customers is substantial, creating customer loyalty is beneficial. Therefore, we posit:

H3: Competitive intensity in a market increases the likelihood of loyalty program adoption by retailers.

Competitors' Loyalty Programs. The adoption of innovations such as loyalty programs is often stimulated by examples in the environment (Verhoef and Hoekstra 1999; Wierenga and Oude Ophuis 1997), for two reasons. First, companies face uncertainty concerning future benefits and costs, and may use competitors that have already introduced a loyalty program as "models" upon which to base their decision. This phenomenon is called mimetic isomorphism and was first described by DiMaggio and Powell (1983) to explain a tendency towards homogeneity within markets. Mimetic isomorphism is thus driven by a reduction of uncertainty and risk concerning the future profitability of an innovation, which increases the attractiveness of an investment (Gatignon and Robertson 1993). Second, companies lose competitive advantage with competitors' marketing actions and want to catch up through counteraction (Leeflang and Wittink 1996). Loyalty programs are called a defensive strategy because they aim to keep the present customers in the face of future competitive offers, rather than to gain market share (Sharp and Sharp 1997). However, in retailing most customers buy regularly at different companies within the same sector, so customer bases show considerable overlap (Reichheld and Sasser 1990). Hence, a motivation to react to competitors' loyalty programs is to prevent customer defection, knowing that keeping customers is easier than getting them back. For these two reasons, we hypothesize:

H4: The fraction of competitors with a loyalty program enhances the likelihood of loyalty program adoption by retailers.

Organizational factors

For a successful implementation of relationship marketing, a company needs appropriate resources and competencies. Day (2000) proposes three categories of resources that compose the relational capability: orientation, knowledge and skills, and integration and alignment of processes. Along these lines we discuss components that influence loyalty program adoption.

Customer Orientation. Grönroos (1999) argues that relationship marketing requires a shift in focus from products towards resources and competencies in relationships. Customer orientation reflects the firm's understanding of its target buyers and its commitment to deliver superior value to these customers continuously (Narver and Slater 1990). The benefits of a loyalty program have strong parallels with customer orientation. Loyalty program data can enhance customer understanding and, through differentiated offers, a loyalty program can create higher customer value. Because the benefits of a marketing strategy depend on its compatibility with the company's overall strategy (Day and Van den Bulte 2002; Nijssen and Frambach 2000), we hypothesize:

H5: Retail companies that are more customer oriented are more likely to adopt a loyalty program.

Technological Skills. Retail companies make use of various technologies (such as scanners and inventory management systems) to optimize information streams within the company. In general, it has been found that technological skills enhance organizational innovations (Damanpour 1991). Technological skills to acquire, manage, and model customer information are also key to relationship marketing (Day 2000; Hogan, Lemon, and Rust 2002). Hence, in our context these skills could enhance the benefits of loyalty program data, while reducing costs of implementation and data handling. We hypothesize:

H6: Retail companies with better technological skills are more likely to adopt a loyalty program.

Centralization. In centralized retail companies, the decision-making authority is concentrated at the head office. This leads to lower commitment and involvement of the individual outlets, which could negatively influence the implementation of innovations such as relationship marketing (Damanpour 1991; Frambach et al. 1998). Relationship marketing requires a change in the focus of the entire organization, which concerns a change in mindset rather than a change in rules (Berry 1995; Grönroos 1999). So, internal marketing must motivate employees to support a successful loyalty program adoption, and to adopt a customer-focused approach. In an organization in which decisions are made solely at the head office, it is harder to convince employees at the individual outlets about the need for behavioral changes to support these decisions. Because a successful implementation of relationship marketing is more difficult in a centralized organization, the expected benefits of a loyalty program are lower, and we hypothesize:

H7: Centralized retail companies are less likely to adopt a loyalty program.

Company Size. Large companies are more likely to adopt innovations (Frambach et al. 1998; Wierenga and Oude Ophuis 1997). They possess more means to invest in large-scale innovations, and their innovations are often more profitable because of scale advantages. The costs of loyalty program adoption are partly fixed, for example, in setting up a card registration and data warehouse system, which favors adoption of large-scale programs. In addition, the benefits are higher for large companies, because a larger customer base can be reached with the loyalty program. Therefore, we hypothesize:

H8: Larger retail companies are more likely to adopt a loyalty program.

Loyalty Program Effectiveness

Clearly, the drivers of loyalty program effectiveness are of great managerial interest. The degree to which a marketing strategy is effective depends on its implementation and usage (Alavi and Joachimsthaler 1992). As such, we expect that perceived loyalty program effectiveness relates to database elements and loyalty program rewards, and possibly market and organizational factors (see Figure 1). These latter factors serve as a selection mechanism based on expected benefits and costs, and if selection is appropriate the success of the program mainly depends on implementation and usage factors. Wierenga and Oude Ophuis (1997), for example, found that market and organizational factors do not influence the effectiveness of management decision support systems if implementation and usage factors are included as well. For loyalty programs the same might hold, though we have no ex-ante reasons to rule out an independent effect of market and organizational factors on loyalty program effectiveness. Two database elements and three loyalty program reward elements may influence loyalty program effectiveness in terms of a better understanding of customers' needs and wishes (customer knowledge) and an improved customer commitment to repurchase (customer loyalty). Further, customer knowledge may influence customer loyalty.

Customer database elements

Membership Information. Many companies require customers who become members of their loyalty program to provide personal data through a subscription form (mostly socio-demographic information and sometimes domain-specific interests or attitudes). The addition of personal data to purchase data improves the quality of the customer database. For example, addresses can be used to develop geo-marketing profiles, and household composition can be used to distinguish socio-demographic groups. Membership information enables a company to obtain better, personalized knowledge about their customers. Therefore, we hypothesize:

H9: Loyalty programs that oblige members to provide personal data enhance customer knowledge more than loyalty programs without such an obligation.

Intensity of Data Analysis. Customer databases only improve customer knowledge when the data are analyzed properly. However, many companies are not able to handle the enormous databases statistically (Verhoef et al. 2003). The analysis of customer-level purchase data provides an important opportunity to better understand customer behavior and increase customer knowledge (Rossi, McCulloch, and Allenby 1996). Therefore, we propose:

H10: The intensity with which loyalty program data are analyzed enhances customer knowledge.

Loyalty program rewards

Saving Features. Saving features are a form of postponed rewards. Customers have to spend a substantial sum of money, which typically requires a long series of purchases, in order to obtain a reward in the end. As such, a saving feature is an instrument that provides very transparent loyalty incentives. The effectiveness of saving features in enhancing customer loyalty has been shown by experimental studies (Van Osselaer, Alba, and Manchanda 2004) and panel data analysis (Leenheer et al. 2003).

To benefit maximally from the saving feature a customer must use his or her loyalty card at every purchase. Customers' consistent use of loyalty cards enhances the quality of the customer database, which optimally supports customer knowledge. Realizing card loyalty is sometimes mentioned as a key motivation of giving loyalty rewards (Mauri 2003). In addition, a saving feature captures information about saving and redeeming behavior, and rewards choice (Kivetz and Simonson 2002a). As such, it provides a company additional knowledge about relationship status and product preferences. We hypothesize:

H11a: Loyalty programs with a saving feature enhance customer knowledge more than loyalty programs without a saving feature.

H11b: Loyalty programs with a saving feature enhance customer loyalty more than loyalty programs without a saving feature.

Promotion Features. Many loyalty programs offer price promotions to their members on products in the assortment. These price promotions are offered only to loyalty program members, differentiating between customer members and nonmembers. Customers might therefore consider such price promotions as a relational investment, which enhances their loyalty (DeWulf, Odekerken-Schröder, and Iacobucci 2001). A customer might also attribute obtaining a discount to his or her own effort. Schindler (1998) showed that this induces feelings of pride, which motivates repeat behavior and enhances customer loyalty. Further, a retail company obtains person-specific response information. This improves customer knowledge on the individual customer level, in terms of price sensitivity, deal proneness, and product preferences. We expect:

H12a: Loyalty programs with a promotion feature enhance customer knowledge more than loyalty programs without a promotion feature.

H12b: Loyalty programs with a promotion feature enhance customer loyalty more than loyalty programs without a promotion feature.

Direct Mailings. Direct mailings are an effective tool to differentiate between customers and to approach them individually (Bult and Wansbeek 1995). Direct mailings are a form of personal treatment, and could thus enhance customer loyalty (DeWulf, Odekerken-Schröder, and Iacobucci 2001). As with price promotions, a retail company obtains individual-level response information on the mailing offerings, which could improve their knowledge about customers. Therefore, we hypothesize:

H13a: A loyalty program that uses direct mailings enhances customer knowledge more than a loyalty program without direct mailings.

H13b: A loyalty program that uses direct mailings enhances customer loyalty more than a loyalty program without direct mailings.

Customer knowledge → customer loyalty

Customer knowledge has been recognized as an important tool to enhance customer loyalty in mass markets (Coviello et al. 2002; Hogan, Lemon, and Rust 2002). A retailer who knows his or her customers on a segment or even individual level can provide better service and develop stronger relations with them. A company can apply micro-marketing or provide personal offers. So, customer knowledge can be used to improve customer value, and we hypothesize:

H14: Customer knowledge enhances customer loyalty.

Research Method

To test our hypotheses, we conducted a survey among marketing managers of retail companies in the Netherlands. Our questionnaire was extensively pre-tested among nine experts. This group of experts consisted of three academics, three research consultants, and three retail managers, each strongly involved in retailing and loyalty program projects.

The sampling frame was formed by a commercial database that contains all retail chains with at least seven outlets or 100 employees in the Netherlands. From this database, we excluded all companies that are pure service providers (e.g., hair dressers), companies that register customers automatically (e.g., video rentals), and companies strongly limited in their marketing actions because of government regulation (e.g., pharmacies). All other companies were contacted by phone to obtain the name and e-mail address of the person responsible for the company's marketing policy. We were thus also able to remove companies that had gone bankrupt or that appeared not to operate in a business-to-consumer market. The remaining sampling frame consisted of 418 retail companies. These retail companies received a questionnaire in March 2003, and could choose to complete it by regular mail or e-mail. A reminder was issued if a respondent did not reply within two weeks. As an incentive, we offered all respondents a report with the study findings.

We received 180 complete questionnaires, for a response rate of 43.1%. This response rate is very high for this type of research, which indicates that loyalty programs are an important topic to retailers. To test for nonresponse bias, we compared late respondents with the rest of the sample on all constructs in our framework (Armstrong and Overton 1977). We used two definitions for late respondents, namely the slowest 25%, and those companies that received a reminder (37.4%). For both definitions, no significant differences appeared between late and early respondents for any of the constructs in our conceptual framework (all p-values > .20).

Measures

Most variables on organizational and market characteristics were measured with multi-item 7-point Likert scales. We based our scales on scales from existing research, sometimes adapting certain items to make them suitable for a retail environment. The reliability was sufficiently high for all scales (Cronbach's $\alpha > .75$). Customer diversity was measured with two single-item scales that measure the extent to which companies perceive their customer base as diverse in terms of profitability and in terms of customers' preferences. Buying frequency was measured as a categorical variable with three levels (< 6, 6–30, > 30 purchases per year in the product category) to indicate product market type. We used dummy coding with the middle category (6–30 purchases) as baseline category. For measuring competitive intensity

Table 1
Sample Description

Sector	Number of Respondents	Loyalty Program Adoption Sample	Loyalty Program Adoption Sampling Frame
Groceries	22	50%	47%
Apparel	61	34%	35%
Living	20	10%	8%
Consumer electronics	20	30%	27%
Gasoline	10	100%	87%
Personal care	11	55%	57%
Leisure	19	32%	26%
DIY (do-it-yourself products)	10	40%	36%
Department stores	7	14%	15%
Total	**180**		

(α = .79), we used the scale developed by Jaworski and Kohli (1993). To measure the influence of competitors' loyalty programs we use the percentage of competitors that adopted a loyalty program. We defined competitors as those companies that are active in the same retail sector. For this, we segmented the sampling frame into 25 homogenous sectors, and determined loyalty program adoption for all 418 companies in the sampling frame. The scale for customer orientation (α = .85) was derived from the marketing orientation scale of Narver and Slater (1990). The scale for technological skills (α = .79) was based on the scale of Gatignon and Xuereb (1997). The scale for centralization (α = .78) was adapted from Jaworski and Kohli (1993). Their scale addresses the hierarchical authority towards individual employees within the organization, and we reformulated the items in order to measure the hierarchical relation between individual retail outlets and the head office instead. Company size was measured as the number of outlets of the retail company. Because the variable was highly skewed, we log-transformed it. The specific item formulation and scale reliabilities can be found in Appendix 1.

In the sample, 67 companies operated a loyalty program (37%), which is only marginally higher than in the sampling frame (33%). For 34% of the companies, the (commercial) director completed the questionnaire, for 29% the marketing manager, and the remaining 37% consisted of marketing analysts, marketing researchers, and employees with related functions. The sample covers a wide range of different retail sectors, as is shown in Table 1.

Retail companies that indicated they used a loyalty program were asked to complete an additional set of questions about program reward elements, database elements, and the perceived effectiveness of the loyalty program. We asked retailers to indicate whether or not their loyalty program contains certain design elements (dummy coded). Further, retailers were asked to indicate on a 7-point scale the intensity with which they analyze the data obtained from the loyalty program.

To measure the effects of loyalty programs on customer loyalty, we closely followed the framework of Oliver (1997). It is well documented that true customer loyalty requires both behavioral and attitudinal loyalty (Dick and Basu 1994; Jacoby and Chestnut 1978). Oliver (1997) argued that customer loyalty consists of four components: cognitive loyalty (quality and superiority), affective loyalty (liking and

Table 2
Design of Retail Loyalty Programs ($n = 66$)

Element	Description	Number of Loyalty Programs: Absolute	Number of Loyalty Programs: Percentage
Saving feature	Saving for points to obtain reward in the future	51	77%
Promotion feature	Discounts on certain items for all program members	41	62%
Direct mailings	Program members receive direct mails	50	74%
Credit cards	Loyalty card can be used as a credit card	7	11%
Contests	Lotteries, competitions	9	14%
Demonstrations	Trade shows, product instructions, workshops	5	8%
Multi-vendor	Loyalty program can be used at different companies	9	14%

Table 3
Loyalty Program Adoption (Logit Model)

Explanatory variable	Hypothesis and expected sign	Coefficient	Wald-statistic	*p*-value[a]
Constant		–6.658	9.304	.002
Customer factors				
Customer diversity				
- Profitability	H1a: +	.193	2.717	.050
- Preferences	H1b: +	–.069	.260	.305
Market factors				
Buying frequency			.670	.358
- High	H2: +	.223		
- Low	H2: –	–.091		
Competitive intensity	H3: +	.240	2.823	.047
Competitors' loyalty programs	H4: +	.040	13.254	<.001
Organizational factors				
Customer orientation	H5: +	.518	5.184	.012
Technological skills	H6: +	.031	.048	.414
Centralization	H7: –	–.183	2.220	.068
Size	H8: +	.126	.737	.196

Model Fit

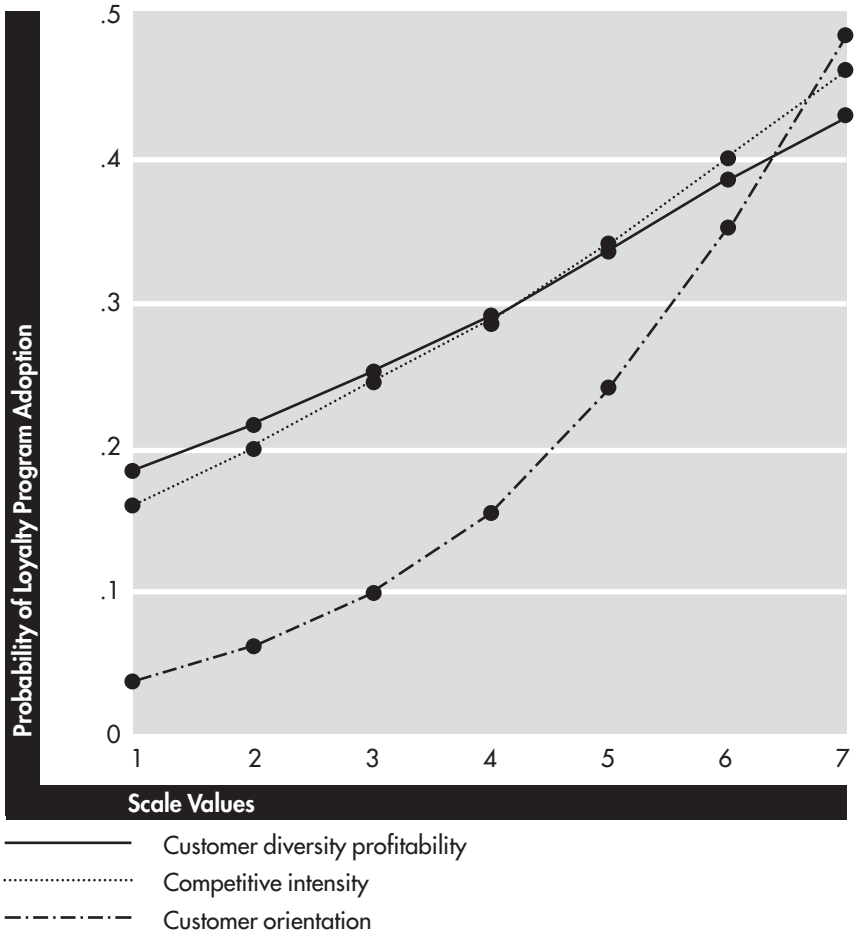
Pseudo $R^2 = .253$

Correctly predicted: 72.6%

[a] one-sided tests

Figure 2

The Effects of Customer Diversity in Profitability, Competitive Intensity, and Customer Orientation on Loyalty Program Adoption



involvement), conative loyalty (commitment and behavioral intentions), and action loyalty (purchase behavior). We used a scale of four items, each of which measures the perceived effect of loyalty programs on one of the loyalty components (α = .76). The customer knowledge scale reflects the degree to which the loyalty program improves knowledge about needs and wishes of individual customers and customer segments (α = .84). One company did not provide information about the perceived effectiveness of its program, so 66 companies remained for the analysis of loyalty program effects.

Table 2 describes the design of the 66 loyalty programs in the sample. Most loyalty programs (51) require the consumer to provide personal data at subscription. Further, we found considerable variation in the intensity with which retailers analyze loyalty program data. Loyalty programs are predominantly used for offering saving features (51 programs) and promotion features (41 programs). In addition, more than half of the companies send direct mails to program members (50 programs). Only a few loyalty programs provide other forms of rewards, such as credit card usage or product demonstrations. In our analyses, we will consider only reward elements used by at least 10 loyalty programs, to ensure that the results are reliable and generalizable.

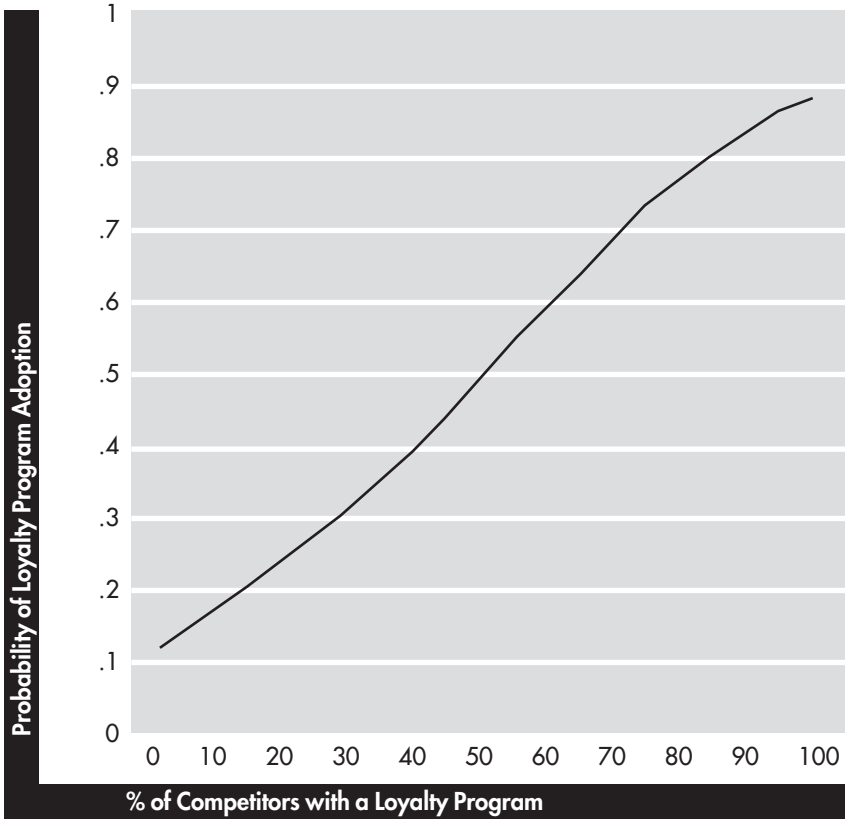
Results

Loyalty program adoption

To assess the drivers of loyalty program adoption by retailers, we estimate a logit model. We checked for multicollinearity between the independent variables, which turned out to be low for all metric variables (all correlations < .33). The coefficients of the logit model and test statistics are presented in Table 3.

The results show that diversity in customer profitability stimulates loyalty program adoption (H1a accepted, p = .050), but diversity in customer preferences does not (H1b rejected). Buying frequency has no significant relation with loyalty program adoption, nor do the level contrasts (high or low) (H2 rejected). Loyalty program adoption is strongly influenced by the competitive environment: positive significant effects were found for both competitive intensity (H3 accepted, p = .047) and competitive loyalty programs (H4 accepted, p = .001). Furthermore, the organizational factor customer orientation positively influences loyalty program adoption (H5 accepted, p = .012). As hypothesized, centralized companies are less likely to adopt a loyalty program, and the effect is marginally significant (H7 accepted, p = .068). However, the other two organizational factors, technological skills and company size, have the expected signs, but are not significant (H6 and H8 rejected).

Figure 3
The Effect of Competitive Programs on Loyalty Program Adoption



Because a logit model is non-linear in nature, coefficient estimates give limited insight in effect sizes. Figures 2 and 3 provide a graphical presentation of the effect size of the significant explanatory variables: customer diversity in profitability, competitive intensity, customer orientation (all in Figure 2), and competitors' loyalty programs (Figure 3). Each line represents the probability of loyalty program adoption when all variables are fixed on average sample value, with only the variable of interest being varied over its entire range. Figure 2 shows that customer orientation has a substantial impact on loyalty program adoption. Depending on the score on this variable, the probability of loyalty program adoption can differ almost 50 percentage points between companies. The effects of customer diversity in profitability and competitive intensity are lower; both variables could change the probability of adoption with about 20 percentage points. However, the largest effect comes from competitors' loyalty programs; depending on the value of this variable, the probability of adoption could differ almost 90 percentage points. In sum, we find that competitors' programs and customer orientation have the largest impact on a retailer's loyalty program adoption.

Loyalty program effectiveness

We study the perceived effectiveness of loyalty programs in terms of customer knowledge and customer loyalty by selecting only those companies in the sample with a loyalty program (66 companies). We perform two regression analyses, one with perceived effects on customer knowledge as the dependent variable and one with customer loyalty as the dependent variable. As independent variables we include all loyalty program reward and database factors (H9-H13). In addition we check for possible effects of market and organizational factors. Given the small sample size, we first enter all loyalty program reward and database factors. Next, we sequentially enter the market and organizational factors, but remove them again if they are nonsignificant (forward variable selection method). The results of the final models are presented in Table 4.

The effect of a loyalty program on customer knowledge strongly depends on the intensity with which data are analyzed (H10 confirmed, $p < .001$). Given that retailers differ in data analysis intensity on a 7-point scale, the coefficient of .328 implies that the customer knowledge effect varies more than two points because of this factor (on a 7-point scale). Saving features influence customer knowledge positively as well (H11a confirmed, $p = .030$), and the coefficient size is considerable ($\beta = .647$). On the other hand, membership information does not influence customer knowledge significantly (H9 rejected), suggesting that retailers do not exploit the customer information they gather. We find no significant influence of promotion features and direct mailings on the loyalty program's enhancement of customer knowledge (H12a and H13a rejected). When

Table 4
Determinants of Loyalty Program Effectiveness

	Customer Knowledge				Customer Loyalty			
Variable	**Hypothesis and expected sign**	**Coefficient**	***t*-value**	***p*-value[a]**	**Hypothesis and expected sign**	**Coefficient**	***t*-value**	***p*-value[a]**
Constant		1.825	2.751	.004	3.923	10.08		.000
Database elements								
Data analysis	H9: +	.328	4.629	.001				
Membership information	H10: +	.076	.204	.430				
Reward elements								
Saving feature	H11a: +	.647	1.926	.030	H11b: +	.432	1.738	.043
Promotion feature	H12a: +	–.056	–.177	.420	H12b: +	–.099	–.430	.334
Direct mailings	H13a: +	.003	.090	.465	H13b: +	.206	.885	.185
Customer knowledge					H14: +	.203	2.45	.008
Market and organizational factors								
Buying frequency								
- High		.620	1.924	.031				
- Low		–.436	–1.103	.138				
Centralization		.186	1.906	.030				
Model fit	R^2 = .465				R^2 = .200			

[a] One-sided tests if directional hypothesis was formulated.

checking for effects of market and organizational factors, we find that buying frequency positively influences the customer knowledge effect (p = .050), as well as centralization of the company (p = .030). Compared to a retailer operating in a sector in which customers buy with low frequency, a medium buying frequency leads to an increase of .44 points and high buying frequency out of 1.56 points of 7 points on the knowledge effect.

Customer loyalty is positively influenced by the usage of a saving feature (H11b confirmed, p = .030), but not influenced by a promotion feature (H12b rejected). The saving feature leads to an increase of the customer loyalty effect of almost a half point, which is a considerable effect size given that customer loyalty is measured on a 7-point scale. Sending direct mails to loyalty program members also has a considerable positive, but nonsignificant, effect on customer loyalty (H13b rejected). In line with theoretical considerations, customer knowledge obtained from the loyalty program enhances the effect on customer loyalty (H14 confirmed, p = .008). For customer loyalty, it turns out that none of the market and organizational variables is significant.

The customer knowledge model includes database elements that are not included in the

customer loyalty model. To test if these variables are mediated by customer knowledge, we use the procedure proposed by Baron and Kenny (1986). We estimate a model for customer loyalty out of all variables included in either one of the two original regression models. We find insignificant effects for all variables not included in the customer loyalty model originally (data analysis, membership information, centrality, and buying behavior), which shows that customer knowledge has a complete mediating effect for these variables. That means, for example, that data analysis positively affects customer knowledge and thereby indirectly customer loyalty, but that it does not have an additional direct effect on customer loyalty.

Conclusions

We propose and test a conceptual framework of retailers' loyalty program adoption, and their perceptions regarding loyalty program effectiveness. To test the formulated hypotheses, we surveyed 180 retail companies, 37% of which have a loyalty program. Overall, we find that customer, market, and organizational factors drive loyalty program adoption. However, perceived loyalty program effects are hardly affected by these factors. Instead, the perceived effectiveness of a loyalty program mainly depends on loyalty program rewards and analysis of customer purchase data. This overall pattern is in line with earlier findings in the literature on managerial decision making (e.g. Alavi and Joachimsthaler 1992; Wierenga and Oude Ophuis 1997).

Loyalty program adoption seems to be driven strongly by market standards. The percentage of competitors with a loyalty program is a strong driver of loyalty program adoption. Previous research has found that companies rely heavily on competitors' experiences with innovations (DiMaggio and Powell 1983), and tend to overreact to competitors' marketing actions (Leeflang and Wittink 1996). This may lead to suboptimal situations in which too many companies use loyalty programs. However, our analyses refute the argument that loyalty programs are ineffective if a large part of the market uses them (Dowling and Uncles 1997). That is, we find that the percentage of competitors with a loyalty program stimulates retailers to adopt a loyalty program also, but it does not affect loyalty program effectiveness.

Furthermore, companies are more likely to adopt loyalty programs when their customers differ strongly in terms of profitability. Customer diversity offers potential for a customer-centered approach, in which loyalty programs fit well (Sheth, Sisiodia, and Sharma 2000). However, we do not find that a company is more likely to adopt a loyalty program if strong differences exist in customer preferences. Exploiting diversity in preferences requires advanced data analysis and loyalty program design, which currently seem to be one bridge too far for most retailers. Loyalty programs allow companies to differentiate between member customers with targeted promotions and actions, but only a few retailers currently use loyalty programs for that purpose. Hence, retail companies ignore part of the potential of loyalty programs to serve individual customers better.

Organizational factors play a secondary role in the retailers' loyalty program adoption. We do not find that technological skills play an important role in the decision to adopt a loyalty program. Less technological companies can probably adopt simpler systems. Further, our results show that centralized companies gain most from a loyalty program in terms of better customer knowledge. However, we do not find that centralized companies are more likely to adopt a loyalty program, which suggests that they undervalue the benefits of obtaining customer-specific information. Unlike much innovation literature (e.g., Frambach et al. 1998), we do not find a positive relationship between company size and loyalty program adoption. For small companies loyalty programs are probably an attractive alternative to mass-market marketing such as newspaper and tele-

vision commercials, in which they face even larger scale disadvantages. Further, the scale advantages of a loyalty program might influence especially the adoption decision of very small retail companies, which are not included in our sampling frame. Customer orientation is the only organizational factor that strongly enhances loyalty program adoption. Previous research already found that customer orientation enhances the adoption of database marketing by manufacturers (Verhoef and Hoekstra 1999). Our findings confirm the proposition that customer orientation puts a company in a better position to take advantage of the benefits of a loyalty program.

Our findings indicate that retail companies make limited use of the potential of a loyalty program, with only a few reward elements frequently used. Many loyalty programs provide saving features (77%), promotion features (62%), and direct mailings (74%) to members. Only a few loyalty programs use other elements, such as credit cards or demonstrations. For the design elements used, we find that the saving feature plays a crucial role in the effectiveness of the loyalty program, both in gaining insight into customers and in enhancing loyal buying behavior. A promotion feature does not generate any effect. This may be caused by the high membership rates of many loyalty programs, which diminish the power of distinguishing between members and nonmembers. A more powerful strategy could be to differentiate between members themselves and to target specific member segments.

Data analysis is crucial if a firm is to understand its customers. Further, data usage enables implementation of targeted actions that enhance loyalty, such as direct mailings (Bult and Wansbeek 1995). We find that direct mailings improve customer loyalty considerably, but the effect is not significant. This suggests that some companies send out direct mailings without careful targeting, which relates again to poor data analysis.

Managerial Implications

Our analyses show that a promotion feature in a loyalty program does not generate large effects on customer loyalty and customer knowledge. A more effective strategy might be to target price promotions to specific customer segments, in this way better exploiting the loyalty program's opportunity for differentiation. Segmentation could be based on profitability or on category penetration, cross-category buying, brand choices, etc.

Further, our analyses show that a saving feature enhances effectiveness considerably. A saving feature offers explicit loyalty incentives by rewarding loyal members best. To retain the advantages of rewards connected to a firm's own assortment (Roehm, Bolman Pullins, and Roehm 2002), saving features could reward customers with free or discounted items from the product assortment.

Finally, our study demonstrates the importance of analyzing customer-specific purchase data to improve knowledge of the customer base. Targeted actions such as direct mailings, which require data usage, could enhance customer loyalty.

Limitations

Our study focuses on loyalty programs in the retail sector, where they are widely used. However, loyalty programs also appear in other industries, such as airlines, lodging (Bell et al. 2002), and financial services (Verhoef, Franses, and Hoekstra 2001). Given differences in market structure and product type, the drivers and effectiveness of loyalty programs could be different in these industries. For example, in the airline industry large customer differences exist in flying frequency, which partly relates to the distinction between business and private customers (Kearney 1990).

On average, the retailers in our sample make only limited use of the opportunities of loyalty

programs. Loyalty programs mainly provide saving features, promotion features, and direct mailings. The literature mentions several other possibilities, such as silver, golden, and platinum customer tiers (Rust, Zeithaml, and Lemon 2000) or multi-provider loyalty programs (Dowling and Uncles 1997). We could not test the effectiveness of these program designs. Future research could try to identify cases of more advanced loyalty program design or conduct experimental research to test their effectiveness.

Finally, we studied the effects of loyalty programs but did not consider their costs. The costs of rewarding members differ between loyalty programs because of differences in program design and intensity of data analysis. To make a balanced choice on loyalty program design, a company should account for these cost differences. ■

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Note

1. Using perceived measures is common in management research to measure, for example, relationship quality (Jap 2001; Kumar, Stern, and Achrol 1992) or market performance (Li and Calantone 1998). We take the retailer's perception of loyalty program effectiveness as our dependent measure.

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Appendix 1

Scale Operationalization

Variable	Operationalization (Items)
Market Factors	
Customer diversity: profitability	Our customers differ strongly in profitability.
Customer diversity: preferences	Our customers differ strongly in their preferences.
Buying frequency	How often do your customers buy something at your company or that of your competitors? ≤ 5 times a year (n = 65) 6–30 times a year (n = 81) ≥ 30 times a year (n = 34)
Competitive intensity α = .79 Adapted from Jaworski and Kohli (1993)	1. Competition in our industry is cutthroat. 2. In our industry one competes often with price promotions and other marketing actions. 3. Price competition is a hallmark of our industry.
Competitors' loyalty programs	% competitors that adopted a loyalty program
Organizational Factors	
Customer orientation α = .85 Adapted from Narver and Slater (1990)	1. We are very committed to our customers. 2. Customer satisfaction is an important objective when determining our strategy. 3. The creation of customer value plays a central role in our strategy. 4. We thoroughly study the needs of our customers.
Technological skills α = .89 Adapted from Gatignon and Xuereb (1997)	1. Our company is one of the first to adopt new technologies. 2. We have more technological knowledge than the competition. 3. Compared to the competition we make use of more advanced technologies.
Centralization α = .78 Adapted from Jaworski and Kohli (1993)	1. Also for minor decisions, individual outlets have to consult the head office. 2. Individual outlets can take only limited actions without approval of the head office. 3. In general, important decisions are announced only to the individual outlets after the final decision has been taken by the head office.
Company size	Logarithm of total number of outlets
Loyalty Program Effects	
Customer loyalty α = .76 Adapted from Oliver (1997)	1. Customers are convinced better of the company's benefits. 2. Customers feel a stronger tie with our company. 3. Customers are less prone to buy at competitors. 4. Customer loyalty in terms of buying is higher.
Customer knowledge α = .84	1. We better understand customers' needs and wishes. 2. The distance between our customers and us has decreased. 3. We can better distinguish between different customer groups.
Data analysis	With which intensity do you analyze loyalty program data?

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