# Loyalty program activity: make B2B customers buy more

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## Abstract

**Purpose** – Loyalty programs (LPs) in a business-to-business (B2B) context have been under-researched when compared to consumer markets. The purpose of this paper is to investigate if and to what extent the loyalty program activity (LPA) based on recency, frequency and monetary framework reflects the effectiveness of a specific LP.

**Design/methodology/approach** – Using the data obtained from 818 business customers enrolled in a LP, logistic regression models are run to find the impact of LPA on the company's sales.

**Findings** – The results suggest that in a linear LP, the frequency of rewards impacts sales the most, compared to recency and amount of points redeemed. The intensity of a LPA is influencing the expected sales in a company.

**Research limitations/implications** – The current study is not focused on the redemption patterns and the value of the rewards offered in the program. Limitation of the study only to one country and in a single company does not allow to generalize presented findings.

**Practical implications** – Companies should focus their efforts on defining the best level of frequency rewards in their LPs. Reward timing should be considered as a factor that influences the change in customer purchasing behavior more than the amount of points accumulated.

**Originality/value** – The research provides empirical evidence to support the highest influence of frequency of rewards on sales, compared to recency and amount of points redeemed. This is one of the few LP studies conducted in the context of the B2B market.

**Keywords** Customer activity, Loyalty programmes

**Paper type** Research paper

## 1. Introduction

Following Reichheld and Sasser's (1990) seminal article, companies have started paying more and more attention to managing relationships with existing customers. After almost 25 years since this publication, securing customer retention seems to be an even more urgent task. According to KPMG's Global Consumer Executive Top of Mind survey, 90 percent of consumer goods and retail senior executives are concerned with customer loyalty (KPMG, 2017). It comes as no surprise that companies are introducing loyalty programs (LPs) to enrich relationships with their customers and build up more business value from a loyal customer base (Viswanathan *et al.*, 2017). However, to develop and maintain a LP means a considerable and long-term commitment to a company's budget. Recent report by KPMG shows that a LP can cost a company as much as 5 percent of sales (KPMG, 2016) thus, it is crucial to understand how LPs can influence on company performance (Bijmolt *et al.*, 2010; Breugelmans *et al.*, 2015) and drive sales (Lal and Bell, 2003; Taylor and Neslin, 2005).

It should be noted that consumer LPs received a lot of scientific investigation in the last decade (Brashear-Alejandro *et al.*, 2016; Beck *et al.*, 2015; Dorotic *et al.*, 2014; Meyer-Waarden, 2015; Meyer-Waarden *et al.*, 2013; Liu and Yang, 2009). However, research concerning LPs in a business-to-business (B2B) context are scarce comparing to consumer markets

(e.g. Viswanathan *et al.*, 2017; Davis-Sramek *et al.*, 2009; Lacey and Morgan, 2009) which represents a noticeable gap in marketing knowledge. In addition, out of a limited number of B2B contributions, we could not identify studies pertaining to transactional business markets.

This study aims to contribute to marketing knowledge by addressing the gaps described above. The aim of this paper is to shed more light on LPs' efficacy in B2B and their possible impact on the company's performance. More specifically, the purpose of the paper is to verify if and how customers' activity in a LP leads to higher sales in B2B.

This paper is organized in the following manner: first, the literature review of LP's effects is discussed with reference to different market settings and varying program designs. Second, loyalty program activity (LPA) framework is introduced along with the theoretical discussion based on reward behavior literature. Next sections provide study results and discussion on the findings. The paper concludes with managerial implications and suggested directions for future research.

## 2. Literature review
### 2.1 The purpose of LPs
LPs are designed to retain customers and develop stronger customer-company bonds (So *et al.*, 2015; Mangold and Faulds, 2009; Kreis and Mafael, 2014). From a customer's perspective, a LP can be defined as a marketing process that aims to generate rewards based on repetitive purchase (Kumar and Reinartz, 2005). From a company's perspective, LPs are set to stimulate sales growth (Bolton *et al.*, 2000a, b), increase share of wallet (Beck *et al.*, 2015) and enable collecting customers' insights that are used to develop and provide tailored marketing activities (Liu, 2007).

Out of the five main components of a LP such as: membership requirements; program structure (design); points structure; rewards structure; and program communication (Liu and Yang, 2009; Bijmolt *et al.*, 2010; Breugelmans *et al.*, 2015), the reward structure that is related to the reward form, timing and compatibility with the brand has been found to influence sales most (Liu and Yang, 2009; Bijmolt *et al.*, 2010; McCall and Voorhees, 2010). In this sense, LP value is conceptualized as: cash value of redemption rewards; the range of different rewards (redemption choice); the aspirational value of rewards; the perceived likelihood of achieving rewards; and the scheme's ease of use (O'Brien and Jones, 1995).

In LPs, customers can usually earn some kind of currency (e.g. points or miles) based on their spending per transaction and then redeem this currency for a reward once enough points are accumulated (Magatef and Tomalieh, 2015). In other words, customers are motivated to buy more frequently (i.e. transact more) and in larger volumes from a supplier who provides a LP (Lewis, 2004). Based on this logic, a special kind of mass market LPs – frequency reward programs (FRPs) – is commonly applied by transaction-based businesses which are characterized by high rate of repeated purchases (Breugelmans *et al.*, 2015). More frequent purchasing creates an opportunity for customers to collect points faster and thus bring the reward relatively closer (Kopalle and Neslin, 2003; De Wulf *et al.*, 2003). This emphasis on the collect – redeem mechanism in FRPs underlines customers' repetitive spending, and thus collecting points for future rewards (Liu, 2007). However, collecting points by customers also mean additional challenge for companies running a LP – growing liabilities, which stem from unredeemed points (Bazargan *et al.*, 2017; Breugelmans and Liu-Thompkins, 2017). In response, companies often introduce point expiration policies to manage the level of LP-related liabilities (Breugelmans *et al.*, 2015). Recent studies in the field show that this administrative way of dealing with points stockpiling works well in specific market conditions (Bazargan *et al.*, 2017) and requires special arrangements to be effective (Breugelmans and Liu-Thompkins, 2017).

Mass-market LPs started to flourish at the beginning of the 1980s for customers of airline and hotel industry, which were characterized (at least by the end of the last century) by relatively high share of repetitive buyers (Breugelmans *et al.*, 2015). Importantly, LPs in these industries could take advantage of the low marginal cost of brand-related rewards (i.e. free airline ticket/hotel stay or free service upgrade) while maintaining high perceived value of customer rewards.

Later LPs proliferated to "transactional" services with the implementation of Shell Smart and Tesco Clubcard serving as good examples in the mid-1990s (Stone and Desmond, 2007, p. 360). In a transactional setting, a customer can choose from various suppliers at any time. As a consequence, the probability of switching a supplier is higher than in ongoing relationships (Lemon *et al.*, 2002). Thus, the prominent goal of a LP on the transactional market is to build switching costs and create a customer lock-in effect to drive the company's business (Sharp and Sharp, 1997).

### 2.2 Loyalty program activity

Previous research has evidenced that the perception of value differs between different groups of customers and, respectively, concludes in different levels of response to marketing efforts (Reinartz and Kumar, 2000; Bruneau *et al.*, 2018). Steinhoff and Palmatier (2016) evidenced the varying effects of a LP due to customers' status (members and non-members). However, the latest Loyalty Census by COLLOQUY shows than in the USA alone there are almost 4 billion LP memberships, which translates to 12 memberships per average American citizen (COLLOQUY, 2017). Whilst LP membership is popular among customers, only half of them are estimated to be active. The results presented in consecutive reports by COLLOQUY pinpoint that despite growing membership in US LPs, active membership[1] is consecutively decreasing from 54 percent in 2009 to 44 percent in 2015 and to 42 percent in 2017 (COLLOQUY, 2017). This points to the notion that the impact of LPs on company performance should be evaluated in relation to customer activity more than just membership status (Henderson *et al.*, 2011).

Strong customer relationship may be the outcome of a LP, though the level of relationship strength would differ according to the perception of additional value created by a LP for a specific customer. Perceived attractiveness (value) of a LP is influenced by the way points can be collected and redeemed (Nunes and Drèze, 2006; Dowling and Uncles, 1997; Johnson, 1999). The LPA is then reflected in the customer's activities related to pursuing and obtaining rewards (Dorotic *et al.*, 2014; Yi and Jeon, 2003). In other words, the more points are collected and redeemed by a customer (i.e. higher LPA), the higher is the perceived value of a LP for a customer. If customers are active members of a LP (i.e. they collect and redeem points), they perceive a higher value offered by the focal company comparing to its competitors (Bolton *et al.*, 2000a, b; Liu, 2007). Along with higher perception of the value offered by a focal LP, the better business outcome should appear.

### 2.3 Measuring the LPA

The well-established recency, frequency and monetary (RFM) value framework (Bult and Wansbeek, 1995) can be used to capture customer's LPA (Kahn, 1998; Reinartz and Kumar, 2000; Kumar, 2011). RFM is a marketing model that analyzes simultaneously how recently, how often and how much the customers have purchased from a company during their purchasing activity. RFM analysis is grounded on the assumption that: customers who procured recently are more likely to buy again, compared to those who did not purchase for a long time; customers who buy frequently are more likely to repeat purchases than sporadic buyers; and customers who spend more react better than those who spend less (Kristiani *et al.*, 2014).

Although RFM has been criticized for not being linked with a company's profitability (Reinartz and Kumar, 2000) and ignoring customer idiosyncrasies beyond transactions (McCarty and Hastak, 2007), it is widely used in business practice (Verhoef, 2003) and produces viable results in most of the market conditions (McCarty and Hastak, 2007).

Used predominantly in direct marketing, RFM is an acceptable procedure in customer segmentation and targeting but has not been used in discussing effective design of a LP before. In this study, RFM model has been adapted to reflect LPA by defining recency as the number of days since the last redemption, frequency as the number of redemptions and monetary value as the amount of points redeemed by customers.

### 2.4 Reward-redemption behavior and hypothesis development

The fundamental assumptions for rewards component in LPs originate from the reinforcement theory of motivation (Skinner, 1974). This theory suggests that while individuals can choose from several responses to a given stimulus, they will normally choose the response that has been correlated with positive consequences previously. Thus, the behavior which is followed by a reward (positive reinforcer) is more likely to be repeated than nonreinforced behavior (Rothschild and Gaidis, 1981). The timing of a reward, i.e. time intervals and rates of reward are basic elements in conditioning (Gallistel and Gibbon, 2000).

According to Nunes and Drèze (2006), in a LP accumulated points need to be redeemed often enough so that there is reinforcement. In their study, LP members who successfully attained a reward manifested increased motivation in following attempts to achieve the upcoming reward. Yi and Jeon (2003) found that the timing of a reward has an impact on customer purchase behavior depending on the level of involvement toward a product category. Reinartz (2010) considers the timing of reward redemption an important design characteristic of an LP and argues that customers prefer instant rewards or short gathering periods. Importantly, the more time is needed to reach a certain reward level, the more points are never redeemed (Kumar and Reinartz, 2005).

The customer's stimulus to satisfy a goal rests on the time-based distance from a reward (Henderson *et al.*, 2011). Evidence from consumer markets suggests that reward-related behavior in a LP influences customer buying behavior through a points pressure mechanism (Kopalle *et al.*, 2007; Liu-Thompkins and Tam, 2013; Breugelmans *et al.*, 2015). It means that customers increase their intensity of buying while getting closer to the reward threshold (Bijmolt *et al.*, 2010). In other words, the motivation to get the reward faster (time) and more often (frequency) incentivizes customers to spend more (Taylor and Neslin, 2005).

The timing of redemption (i.e. recency) is idiosyncratic. More specifically, it depends on customers' efforts (Kivetz and Simonson, 2002; Kivetz and Simonson, 2003; Nunes and Dreze, 2006) and on individual purchasing orientations which are based on their experiences and personal value systems (Meyer-Waarden *et al.*, 2013).

The redemption can be triggered by a company if participants are prompted about what they have attained to date (Hwang *et al.*, 2016; Bijmolt *et al.*, 2010) likewise indicating that they can achieve a higher goal if they buy more. Customers who bought more recently are expected to react more to new offerings than those who purchased a long time ago (Stourm *et al.*, 2015; Hasouneh and Alqeed, 2010). Therefore, it is expected that most recent buyers who redeemed a reward have a higher probability to buy again than less recent buyers.

Once a reward is obtained and the incentive has disappeared, the level of motivation drops, thus the customer may not be locked-in with the company later on. Hence, post-reward behavior is related to reward recency which is defined as the number of days since the last redemption. Out of LPA components, the "freshness" of reward experience (i.e. recency of reward redemption), is expected to influence the subsequent purchasing behavior (Taylor and Neslin, 2005; Henderson *et al.*, 2011). Dorotic *et al.* (2014) argue that the customer's decision to

redeem a reward meaningfully increases purchase behavior before and after the redemption happening, even if members decide not to redeem all of their accumulated points. The authors found that the repeated purchase behavior is related mostly to the "redemption momentum," which derives from the existence of pre-reward effects. In other words, customers tend to spend more both before and after getting a reward.

Noting that frequency of points redemption influences the customer purchasing behavior before getting the reward, while recency of redemption influences the buying behavior after getting the reward, we formulate the following hypothesis:

*H1.* Reward frequency affects sales more than (a) recency of reward redemptions and (b) amount of points redeemed.

## 3. Methodology
### 3.1 Empirical context and data
To investigate the influence of a B2B LP on sales performance we selected an office supplies wholesaler company in Poland. The office supplies sector in Poland is represented by more than 5,000 companies (mainly micro companies). It is considered to be highly fragmented as the biggest player on the market (a multinational brand) holds an estimated 11 percent of market share. Supplying companies seek to establish formal relationships with their business customers, using fixed-term contracts in order to manage the risk of customer attrition and improve their operational performance. Fixed-term contracts are suitable for mid- and large size customers who can effectively plan their demand. On the contrary, smaller business accounts prefer not to commit to a specific supplier and thus buy on spot choosing the most appropriate offer from competing suppliers.

To attract and retain smaller businesses, office suppliers offer LPs based on the amount spent with them by customers. Points can be redeemed for a material reward from a catalogue or a discount on selected supplies. This type of LPs is referred to as continuous and linear (Dorotic *et al.*, 2014).

The supplier in this study has been established in 1990s by a Polish entrepreneur and holds 9 percent of market share in Poland. It operates country-wide and serves to various customers' segments with about 12,500 office items ranging from pens and pencils to large scale copiers. The company in our study runs a FRP for customers in the small-office-home-office (SOHO) and small to medium enterprise (SME) market segments. The program was introduced in 2002 in order to tackle marketing activities rolled out by company's main competitors and support sales growth. The program is single-tiered, i.e. there is one level of membership. Customers collect 1 point for each 100PLN (approx. 24EUR) they spent. These points can be redeemed for rewards from a catalogue (750 rewards, including discounts). The program design, value of the points and structure of rewards are similar across all major suppliers on the market. Interestingly, at the time of our study, none of the companies has introduced an expiration policy for points redemption.

To verify the research hypothesis a database of SOHO/SME customers was obtained from the company. The database contained records on 4,096 customers in total, out of which 818 participated in the LP (20 percent). The data pertaining to purchases and LPA of all LP members was used for the study.

## 4. Results
In order to compute the LPA, direct marketing/RFM analysis procedure from SPSS 24 (IBM, 2016) was used first. Because of the large database size, we followed with the process of grouping large number of numeric values into three different binning solutions (4, 5 and 9 bins). Consequently, independent binning method with ties assigned to the same bins was performed.

Following guidelines provided by Hughes (1994), LPA was calculated as a sum of individual RFM scores for each customer (Table I).

Kolmogorov-Smirnov tests for all bin solutions ($p > 0.05$) indicate that the postulate of normal distribution of data is not violated.

Logistic regression is used to predict the likelihood of a binary event (Hair *et al.*, 2010) which in our case is represented by sales performance, depending on the values of the independent variables such as RFM value which are categorical. The correlation matrix among the predictors is assessed in order to make sure that there is no excessive multicollinearity among the explanatory variables. Correlation coefficients among independent variables deemed acceptable values of less than 0.90 (Tabachnick and Fidell, 2013).

Number of stock keeping units (SKUs) purchased by a customer was used as a control variable to account for the effect of a customer's procurement concentration which could result in higher repurchase (Reinartz *et al.*, 2005).

The outcome variable – sales change – was computed as the difference between current and previous sales to a customer (0 = lower sales or no change; 1 = higher sales). Consequently, four models were estimated: only control variable; control variable and 4-bin solution; control variable and 5-bin solution; and control variable and 9-bin solution (Table II).

The results of logistic regression for sales change variable showed that independent variables effect on the prediction were significantly different from zero. LPA described by frequency of rewards, recency and points redeemed positively affects sales performance.

To test for the main hypothesis, based on distribution of cases in bins and yielded probabilities for the models, a 4-bin model was chosen as the best fitting. Separate scores from RFM procedure were sequentially entered into the model (see models 5, 6 and 7 in Table II). The Hosmer–Lemeshow goodness-of-fit test yielded a $\chi^2$ of 6.115 and was not significant ($p > 0.05$), suggesting that the model fits the data well. The accuracy of sales change prediction based on the model was considerably better than by chance (66.5 vs 50.0 percent).

| Number of bins | $n^a$ | Cells $M^a$ | $SD^a$ | $n^b$ | Loyalty program activity score $M^b$ | $SD^b$ |
|---|---|---|---|---|---|---|
| 4-bin | 57 | 14.37 | 12.5 | 818 | 7.55 | 1.94 |
| 5-bin | 99 | 8.26 | 6.96 | | 15.09 | 9.03 |
| 9-bin | 328 | 2.49 | 1.93 | | 15.02 | 6.06 |

**Notes:** [a]of cells; [b]of cases. $M$ = average

**Table I.**
Loyalty program activity in different bin number solutions

| Model | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. SKU (control) | −0.06** | −0.09** | −0.01** | −0.01** | −0.01** | −0.01** | 0.01** |
| 2. RFM4 | | 0.20** | – | – | | | |
| 3. RFM5 | | – | 0.12** | – | | | |
| 4. RFM9 | | – | – | 0.06** | | | |
| 5. R4 | | | | | 0.13** | 0.15** | 0.17** |
| 6. F4 | | | | | | 0.22** | 0.25** |
| 7. M4 | | | | | | | 0.18** |
| log likelihood | 1,042.81 | 1,023.50 | 1,022.33 | 1,022.25 | 1,039.23 | 1,029.15 | 1,022.74 |
| pseudo $R^2$ | 0.06 | 0.09 | 0.09 | 0.09 | 0.07 | 0.08 | 0.09 |

**Notes:** $n = 818$. SKU, Sales keeping units; R4, recency in a 4-bin solution; F4, frequency in a 4-bin solution; M4, value in a 4-bin solution. Constant was omitted. **$p < 0.01$ (two-tailed)

**Table II.**
Results of logistic regressions for sales change variable

Annual frequency of redemptions ($B = 0.25$, $p < 0.01$) influences on the probability of higher sales more than the recency of redemption ($B = 0.17$, $p < 0.05$) and amount of points redeemed ($B = 0.18$, $p < 0.05$), while the interaction term is not significant. As a consequence, the higher is the LPA, the more likely it is that sales will grow year on year. The results of this study suggest that an increase of recency by 1 code in RFM coding scheme increases the probability of sales growth by 18.20 percent, and amount of points redeemed (i.e. increase in monetary value by 1 code), increases the probability by 19.8 percent. Frequency of redemption has the highest impact (27.80 percent) on probability of sales increase (Table III).

Though the results seem to support the research hypothesis, final conclusions should not be drawn before evaluating the possible impact of variation in frequency and recency scores. More precisely, the same LPA score can be produced by different levels of frequency and recency. For example, $R = 1$ and $F = 3$ would influence the LPA score the same as $R = 3$ and $F = 1$). To account for this issue, two binary variables – F4LoHi and R4LoHi – were created to capture high/low frequency and recency, respectively. Results show that high frequency of redemption increases the chances of higher sales by 1.74 times, while if recency redemption is high, chances of sales increase are 1.4 times higher (Table IV).

In accordance with prior models, we find it relevant to control for the impact of combined effect (frequency and recency redemption interaction) on sales performance as well.

The results of the new model (Table V) show that both the level of recency and the combined effect of levels of frequency and recency on sales is not significant ($p > 0.05$). Consequently, it can be concluded that hypothesis is supported.

| Elements of the model | $B$ | SE | Wald | df | Exp(B) |
|---|---|---|---|---|---|
| SKU | −0.01** | 0.001 | 46.047 | 1 | 0.991 |
| R4 | 0.17* | 0.071 | 5.616 | 1 | 1.182 |
| F4 | 0.25** | 0.072 | 11.554 | 1 | 1.278 |
| M4 | 0.18* | 0.072 | 6.289 | 1 | 1.198 |
| Constant | −0.23n.s. | 0.308 | 0.570 | 1 | 0.792 |

**Notes:** SKU, Stock keeping units; SE, Standard deviation of the coefficient; ns, not significant. *$p < 0.05$; **$p < 0.01$ (two-tailed)

**Table III.**
Results of logistic regression for sales change variable in a 4-bin solution

| Elements of the model | $B$ | SE | Wald | df | Exp($B$) |
|---|---|---|---|---|---|
| | | | Controlling for frequency | | |
| SKU | −0.01** | 0.001 | 45.916 | 1 | 0.991 |
| R4 | 0.18* | 0.071 | 6.167 | 1 | 1.193 |
| M4 | 0.18* | 0.072 | 6.048 | 1 | 1.194 |
| F4_HiLo | 0.55** | 0.160 | 11.945 | 1 | 1.736 |
| | | | Controlling for recency | | |
| SKU | −0.01** | 0.001 | 45.144 | 1 | 0.991 |
| F4 | 0.25** | 0.072 | 11.614 | 1 | 1.280 |
| M4 | 0.18* | 0.072 | 6.116 | 1 | 1.195 |
| R4_HiLo | 0.34* | 0.156 | 4.672 | 1 | 1.401 |

**Notes:** SKU, Stock keeping units; SE, standard deviation of the coefficient. Constant was omitted. *$p < 0.05$; **$p < 0.01$ (two-tailed)

**Table IV.**
Results of logistic regressions for sales change variable in a 4-bin solution controlling for frequency and recency

## 5. Managerial implications and discussion

This study adds to the scant literature on B2B LPs by providing insights into possible dynamics of managing customer relationships on transactional B2B markets. The use of real sales data offers prominent evidence of how LP's activity can influence on business performance. The study showed that additional customer value created through LP and expressed in higher level of LP-related activity could transfer to increased sales. Thus, even in simple single tiered (or linearly structured) LPs, positive business outcomes can be achieved. The results of the study suggest that on transactional markets, LPs with higher frequency of rewarding can lead to better business results in terms of the sales increase.

We investigated the impact that LPA using the RFM framework and showed its application to LP management. It is a relatively simple calculation procedure, which is well adopted in marketing practice. The data used in our study performed the best in a 4-bin solution (i.e. variables were coded according to which quartile they belong). To our knowledge, the impact of LPA on sales performance has not been studied in this manner previously. We would like to encourage using the procedure to better understand the dynamics of LPA and improve LP's performance.

For example, our results show that, on average, each quartile up in the frequency of points redemption increases the chances of higher sales by 28 percent, while the amount of points spent increases the chances of higher sales by 20 percent. Further, the high frequency of redemption increases the chances of higher sales by 1.74 times, while the value of points redeemed has little effect. The practicality of this notion is the following: moving customers from the second to the third quartile of frequency of redemption almost double the chances of higher sales.

Apart from the calculations template, our study offers three important insights to help marketing and brand managers design better B2B LPs.

### 5.1 Use the momentum and drive redemptions

The study's findings suggest that the frequency of reward experience is the determinant factor that affects sales the most, compared to recency and amount of points redeemed. Building on this insight, it should be noted that stretching the inter-redemption periods (i.e. making customers collect points longer in order to get a reward) lowers the frequency of reward experience. This, in turn, harms the opportunity to use the reward-redeem mechanism to foster sales increase. Future sales are driven by the LP perceived value that leads to customer behavioral loyalty.

The recency of redemption is a variable which is "controlled" by customers. However, managers can and should encourage the redemption by proper program communication which concentrates on redeeming points more than on collecting them.

Whilst the act of redemption is a customer decision, the frequency of redemption is an element of a LP design. Each company should carefully design redemption frequency in

| Elements of the model | $B$ | SE | Wald | df | Exp($B$) |
|---|---|---|---|---|---|
| SKU | −0.01** | 0.001 | 44.496 | 1 | 0.991 |
| M4 | 0.17* | 0.072 | 5.836 | 1 | 1.190 |
| F4_HiLo | 0.54* | 0.219 | 6.144 | 1 | 1.720 |
| R4_HiLo | 0.35n.s. | 0.208 | 2.761 | 1 | 1.412 |
| F4_HiLo × R4_HiLo | 0.01n.s. | 0.302 | 0.001 | 1 | 1.010 |
| Constant | 0.34 | 0.226 | 2.351 | 1 | 1.413 |

**Notes:** SKU, Stock keeping units; SE, standard deviation of the coefficient; ns, not significant. Constant was omitted. *$p < 0.05$; **$p < 0.01$ (two-tailed)

Table V.
Results of logistic regression for sales change variable in a 4-bin solution controlling for recency, frequency and including interaction

order to generate higher sales while managing LP liabilities. For example, it might be more beneficial to have more vertical reward options while avoiding overcrowding a reward catalog with too many options at the same level of points.

### 5.2 Carefully design expiration policy

It is a common market practice to introduce points expiration to tackle LP liabilities. Though we acknowledge the necessity of managing the liabilities represented by points that were accumulated but not yet redeemed, we believe that this financial safeguarding should be designed as a "fuse" in LP rather than its focal point.

If a LP is properly designed, the liabilities should not pose a threat to financial performance since they would build up for a definite period of time, until they are redeemed by customers.

If customers are not redeeming the points, it is worth verifying if:

- LP value is properly communicated and understood by customers.

- Rewards are attractive – what is the customer perceived value of LP's rewards.

- Rewards are attainable – for customers in a single tier continuous program – to be effective, the target segment must be clearly defined. It might be more beneficial to create separate programs for distinct segments or to create a multi-tier LP.

This line of thinking is echoed by Dorotic *et al.* (2014), who suggest avoiding point expiration policy and imposing mandatory redemption thresholds in order to improve LP performance.

### 5.3 Support brand with proper LP management

The market in our study is a commodity market and the brands are treated alike. Since all major brands are running LPs just having one will not suffice a differentiator. However, the differentiation is likely to be produced by a positive rewards experience. The collect-redeem mechanism in LPs is used to create behavioral loyalty, and often this is a loyalty toward LP itself (Kumar and Shah, 2004; Evanschitzky *et al.*, 2012; García Gómez *et al.*, 2012). In a situation of low customer engagement, building customer bonds based on LP rather than on a brand itself can be a sounder strategy. Well-designed LP, which is relevant to the target market and encourages frequent redemptions, is likely to build up brand strength. However, if customer's experience with a LP is not empowered, the brand will erode and ultimately fade from consumer's consciousness.

## 6. Limitations and future research

The findings reported in the study provide useful insights for marketing managers who set up and operate LPs on B2B transactional markets. As evidenced, LPA with regards to rewards is a promising avenue of B2B investigation. It would be of interest for a company to know the optimum level of frequency when designing a LP. This remains an interesting topic to be considered for further research. Depending on the value perception and satisfaction with a LP, a delayed reward can lead to greater loyalty than instant rewards once customers are gratified, while instant rewards lead to greater loyalty than delayed rewards once customers are disappointed (Hu *et al.*, 2010).

Finally, as the study was limited to one country and a single company, more research is needed to generalize presented findings.

### Note

1. COLLOQUY defines active membership in terms of annual loyalty program-related activity, i.e. through earning or redeeming (points, miles) at least once a year.

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