The economic worth of loyalty programs: An event study analysis

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ABSTRACT

Despite significant research and progress in examining the effects of loyalty programs on consumer behavior and firm performance, the firm value implications of these programs are still unclear. The article investigates whether loyalty program introduction affects firm value, as measured by abnormal stock returns. The authors test the hypotheses empirically by conducting an event study of 260 announcements which cover 110 firms in the United States across different industries for 18 years from 2000 to 2017. Findings reveal that the introduction of loyalty programs, on average, positively influences firm value. The results of this study also reveal the existence of contingencies including synergies with complementary market-based assets and market conditions of lower uncertainty in determining the value of loyalty programs. The authors conclude that the value of loyalty programs is greater when the perceived risks of purchase are lower.

1. Introduction

For most organizations, economic success depends on the ability to maintain long term relationships with customers who purchase their offerings repeatedly (Rust, Lemon, & Zeithaml, 2004). Understanding the reasons behind repeated purchase is therefore an issue of considerable importance and one of the primary ways of achieving customer retention is through the erection of loyalty programs. Loyalty programs (LPs), defined as “a long-term oriented program that allows consumers to accumulate some form of program currency, which can be redeemed later for free rewards” (Liu & Yang, 2009), have thus become increasingly common among business entities, such that an important part of many firms’ customer relationship strategy is a rewards program. The main characteristic of such a program is to focus on developing customer loyalty over time by providing various benefits. In fact, consumers in the United States, in 2016, held 3.8 billion memberships in customer loyalty programs (Fruend, 2017). Given that the network of consumers who are using loyalty programs is growing, companies keep introducing and investing in these programs, both as defensive and offensive marketing strategies.

Marketing research has largely shown that the impact of LPs on firm performance is positive (e.g., Lal & Bell, 2003), though extant research has also found that the effect is contingent on the type and characteristics of the LP (e.g., Henderson, Beck, & Palmatier, 2011). Despite a large body of research (see Table 1 for a brief overview) exploring the overall and contingent effect of LPs on firm performance, the importance of these programs to shareholders has been largely unexplored. Since a large number of firms operating today are publicly owned, failing to consider shareholder interests is an important omission.

If, as the empirical evidence suggests, LPs tend to improve repeat business, usage levels, future revenues, and market share, it seems logical to expect that these effects will eventually affect stock prices and company valuations (Bijmolt, Dorotic, & Verhoef, 2011). However, the expected future value of LPs (as evidenced by abnormal returns to a program introduction), may depend on a variety of factors. These factors may strengthen either the offensive value of LPs — enabling the firm to be more successful in generating greater future cash flows, or the defensive value of LPs— ensuring lower variability in cash flows under conditions of greater uncertainty, risk or lack of alternate assets to ensure loyalty (such as strong brands). Designing a LP of an appropriate type (frequency reward vs tier) and having strong marketing capabilities may enable the firm to achieve LP growth and success. Conversely, a LP may be more necessary (and valuable as a defensive action) in dynamic market conditions (where switching may be higher) or in service industries (where quality uncertainty is greater). Lastly, there could be complementarities between LPs and assets that the firm has built, such that the effectiveness of LPs is higher for firms that have particular assets. However, though these assets (such as satisfaction or brand value) may enhance the probability of LP success, they also are an independent means to securing loyalty and may increase the redundancy of LPs.

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program has a positive impact on firm value. Reactions to an LP intro
actions even more to enable future profits emanating from a loyal
customer base. It is then apparently important to evaluate the true value

of LPs. We demonstrate that LPs show comple-
tmentarity with (and are not a substitute for) certain market-based assets
mainly linked to the visibility of the firm. Further, our results imply that
the defensive impact of LPs may have been overstated as we find loyalty

importance for extending the existing knowledge about LPs. Second, we

Converse to expectations, we observe LPs to be more valued in markets

satisfied customer base or for those with higher marketing capabilities.

However, we do not find any evidence that firm value creation in

productions also benefit from synergies with brand value and advertising.

We thus investigate the impact of the introduction of loyalty pro-
gams on firm value. We test the hypotheses empirically by conducting
an event study of 260 announcements which cover 110 firms in the
United States in 55 industries (four-digit SIC code) for 18 years from
2000 to 2017. The results demonstrate that the introduction of a loyalty
program provides an opportunity to collect and utilize longitudinal

well as reduce variability in future cash flows. Besides, running a loyalty

programs provide consumers with more value and incentive to remain in

the likely level and risks to future cash flows once the introduction de-
cision becomes known (e.g., Katsikeas, Morgan, Leonidou, & Hult, 2016).
Most studies on loyalty programs show positive effects on consumers’ attitudinal and behavioral loyalty (Table1). In fact, loyalty

programs provide consumers with more value and incentive to remain in

a relationship with the incumbent provider through the collecting and
re redeeming of points (Liu, 2007). On the other hand, loyalty programs
can help firms attract new customers in addition to retain the existing
ones (Bruneau, Swaen, & Zidda, 2018; Drèze & Hoch, 1998; Zhang &
Breugelmans, 2012). Combined, this may allow the firm to increase as well as reduce variability in future cash flows. Besides, running a loyalty

program provides an opportunity to collect and utilize longitudinal
customer data (Kopalle, Sun, Neslin, Sun, & Swaminathan, 2012). Such
a database may provide the firm with a complete view of customer
behavior, purchase habits, and preferences, allowing the firm to

improve its inventory management, pricing structures, and plan tar-
geted promotions.

However, the introduction, implementation, and maintenance of
loyalty programs are also a source of additional costs for a firm. Ac-
cording to Leenheer and Bijmolt (2008), organizational support and the
amount of dedicated resources are truly important for having a


Alternately, a firm having lower levels of these assets may need a loyalty
program even more to enable future profits emanating from a loyal
customer base. It is then apparently important to evaluate the true value
implications of loyalty programs in the presence of all these contingencies.

We thus investigate the impact of the introduction of loyalty pro-
gams on firm value. We test the hypotheses empirically by conducting
an event study of 260 announcements which cover 110 firms in the
United States in 55 industries (four-digit SIC code) for 18 years from
2000 to 2017. The results demonstrate that the introduction of a loyalty
program has a positive impact on firm value. Reactions to an LP intro-
duction also benefit from synergies with brand value and advertising.
However, we do not find any evidence that firm value creation in
response to an LP introduction is more positive for firms with a more
satisfied customer base or for those with higher marketing capabilities.
Importantly, we fail to find evidence for the defensive value of LPs.

2. Conceptual model and hypotheses

2.1. The impact of loyalty program introduction on firm value

Abnormal returns in response to a loyalty program introduction are a
reflection of the anticipated changes in the firm’s future expected cash
flows resulting from this program introduction (Pauwels, Silva-Risso,
Srinivasan, & Hanssens, 2004). Examining investor reactions is useful in
this context since returns to loyalty programs take time and firms do
not immediately see the full product market or accounting outcomes of
loyalty program introductions. However, investors are generally well
informed and forward-looking, using all available information to assess
the likely level and risks to future cash flows once the introduction de-
cision becomes known (e.g., Katsikeas, Morgan, Leonidou, & Hult,
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amount of dedicated resources are truly important for having a

Table 1
Studies Focusing on Performance Outcomes of a Firm’s loyalty program.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Industry</th>
<th>Data</th>
<th>Dependent variable(s)</th>
<th>Outcomes</th>
<th>Level of analysis</th>
<th>Cross industry</th>
<th>Interaction with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis (2004)</td>
<td>Retail</td>
<td>Online purchase data, 1058 customers, 13-month period</td>
<td>Purchase incidence rate</td>
<td>Increased annual purchasing</td>
<td>Consumer</td>
<td>NO</td>
<td>Short-term coupon</td>
</tr>
<tr>
<td>Taylor and Neslin (2005)</td>
<td>Retail</td>
<td>Behavioral and self-report (survey) data, Panel data, 2009 households purchase behavior</td>
<td>Weekly sales, Share of wallet</td>
<td>Higher storewide weekly sales, LP positive effect on share-of-wallet</td>
<td>Consumer</td>
<td>NO</td>
<td>Customer characteristics</td>
</tr>
<tr>
<td>Liu (2007)</td>
<td>Retail</td>
<td>Purchase behavior, two years, 1000 consumers</td>
<td>Purchase frequency and transaction size</td>
<td>Positive effect on frequency and size</td>
<td>Consumer</td>
<td>NO</td>
<td>Customer segments</td>
</tr>
<tr>
<td>Meyer-Waarden (2007)</td>
<td>Retail</td>
<td>Panel, 2476 consumers, 156-week, 7 stores</td>
<td>Lifetime duration, share of wallet</td>
<td>Positive effect on share of wallet</td>
<td>Consumer</td>
<td>NO</td>
<td>--</td>
</tr>
<tr>
<td>Liu and Yang (2009)</td>
<td>Aviation</td>
<td>22 publicly traded airlines in the US</td>
<td>Annual sales</td>
<td>Positive effect on sales</td>
<td>Consumer</td>
<td>NO</td>
<td>Market share and LP saturation</td>
</tr>
<tr>
<td>Meyer-Waarden and Benavent (2009)</td>
<td>Retail</td>
<td>Panel of households, 7 stores</td>
<td>Consumer expenditures</td>
<td>Positive short-term effect</td>
<td>Consumer</td>
<td>NO</td>
<td>--</td>
</tr>
<tr>
<td>Kopalle et al. (2012)</td>
<td>Hotel</td>
<td>Behavioral data, 3907 customers, two years</td>
<td>Sales</td>
<td>Increased revenues</td>
<td>Consumer</td>
<td>NO</td>
<td>LP components</td>
</tr>
<tr>
<td>Zhang and Breugelmans (2012)</td>
<td>Retail</td>
<td>Household (2104) purchase history, 120-week period</td>
<td>Sales revenue</td>
<td>Minor sales revenue gain</td>
<td>Consumer</td>
<td>NO</td>
<td>--</td>
</tr>
<tr>
<td>Chaudhuri et al. (2019)</td>
<td>Five sectors (28 four-digit SIC codes)</td>
<td>322 publicly-traded firms</td>
<td>Sales and profits</td>
<td>Positive effect on firm performance</td>
<td>Firm</td>
<td>YES</td>
<td>LP type</td>
</tr>
<tr>
<td>Current Study</td>
<td>55 four-digit SIC codes</td>
<td>110 publicly-traded firms</td>
<td>Shareholder Value</td>
<td>Positive effect on shareholder value</td>
<td>Firm</td>
<td>YES</td>
<td>Brand value, Advertising, Satisfaction, Marketing capability, LP type, Industry dynamism, Product</td>
</tr>
</tbody>
</table>

Authors Industry Data Dependent variable(s) Outcomes Level of analysis Cross industry Interaction with
successful loyalty program. For example, based on an estimation, the U.K. pharmacy chain Boots invested 30 million British pounds in the launch of its Advantage Card program, and the U.K. retailer Tesco has spent an estimated 60 million pounds to operate its Clubcard program (Bijmolt et al., 2011).

In addition to all costs of development, human resources, and support, another main cost of a loyalty program concerns rewarding customers and personalized marketing whose effectiveness and profitability depend on the market context (McCall & Voorhees, 2009). The costs of rewarding members and personalized marketing are not the same among various program designs and firms but still firms account for these costs in their decision making to adopt a loyalty program (Leenheer & Bijmolt, 2008). In the adoption and evaluation of loyalty programs, it is possible that the expected costs outweigh other benefits of a loyalty program and consequently affect the market valuation. For instance, Rite Aid Corporation in its 2011 annual report mentioned: “The decline in gross margin was due primarily to deferred revenue related to our wellness + customer loyalty program and a slight reduction in pharmacy gross margin, partially offset by lower product costs and new generic introductions”. This may be especially true if the firm already enjoys a high level of loyal customers due to the strength of firm actions (such as advertising), assets (such as brands or a highly satisfied customer base) or capabilities (such as marketing capabilities). Conversely, such assets or capabilities may be synergistic, aiding in the success of LP erection and maintenance and leading to higher future cash flows. This demonstrates that though loyalty programs have been extensively studied, the firm value implications still need further investigation. However, given the overall evidence showing the benefits of loyalty programs, at least on aggregate, we expect:

\[ H_1: \text{Shareholders’ evaluations of loyalty program introduction are positive} \]

2.2. Factors affecting the relationship between loyalty program introduction and firm value

In line with prior literature concerning loyalty programs and, in general, the market value of marketing activities, we may expect that the effect of loyalty program introduction on firm value may depend on program, firm, and market factors (Liu & Yang, 2009). Fig. 1 shows the overall framework for our study.

2.2.1. Brand value

We propose that the returns for a loyalty program introduction should be positively related to brand value for two primary reasons. First, consumers are more likely to pay attention to marketing activities (e.g. advertisements) from well-known brands and show a more positive reaction to them (Wiles & Danielova, 2009). Therefore, consumers are more likely to become aware of a loyalty program and start using it when the program is for a strong, familiar brand. Additionally, consumers consider claims (related to the loyalty program in this case) from strong brands to be more credible as they interpret new information more favorably for these brands (Hoch & Deighton, 1989). Relatedly, shareholders should see and develop stronger prospects about the firm’s future cash flows.

However, there might be a valid argument for a negative response from shareholders for high-value brands when it comes to the introduction of a LP. Liu and Yang (2009) show that a main part of the effects of a loyalty program on firm performance is mediated by enhanced loyalty toward the offering firm. As brand reputation, similar to loyalty programs, creates value for firms through relational mechanism (Walsh, Mitchell, Jackson, & Beatty, 2009; Wiles, 2007), one could argue that high-value brands have less to gain from starting a loyalty program because they already have strong relationships and a loyal customer base. Similarly, Beckers, van Doorn, and Verhoef (2018) show that companies with a good reputation gain less from stimulating customer engagement behavior, which creates value for firms through relational mechanisms. In this context, an introduction of a LP may signal to the customer that the firm is not confident of its reputation and image and has to rely further on LPs to ensure a loyal patronage. Therefore, we hypothesize:

\[ H_{2b}: \text{Market returns on loyalty program introduction are higher for firms with superior brand value.} \]
\[ H_{2a}: \text{Market returns on loyalty program introduction are lower for firms with superior brand value.} \]

2.2.2. Advertising intensity

Advertising, as a source of information, creates awareness and familiarity with products and services among customers. For firms with strong advertising budgets, shareholders may expect that the LP will be supported by a strong communication campaign. High advertising firms may be expected to spend a lot of money to promote their program, make their customers aware of it, and persuade them to adopt it.

Advertising, in addition to its effect on awareness, enhances customer relationships, brand credibility, and customer loyalty (Beckers et al., 2018). Hence similar to what we argued for about brand value, one might reason that heavy advertisers already have strong

Fig. 1. Conceptual Model.
relationships with customers. In fact, Ou, Verhoef, and Wiesel (2017) show that relationship equity strategies are less effective in some contexts including heavy advertisers. Therefore, heavy advertisers may gain less from employing other relationship strategies such as introducing a loyalty program. Thus, we hypothesize:

\[ H_{3a}: \text{Market returns on loyalty program introduction are higher for heavy advertisers.} \]

\[ H_{3b}: \text{Market returns on loyalty program introduction are lower for heavy advertisers.} \]

2.2.3. Customer satisfaction
Customer satisfaction is defined as an overall evaluation based on the customer’s total purchase and consumption experience with a good or service over time (Anderson, Fornell, & Mazvancheryl, 2004). Prior marketing literature has been shown the importance of customer satisfaction for corporate strategy (Fornell, Mithas, Morgeson, & Krishnan, 2006) and the positive effect of satisfaction on the firms’ long-term profitability and market value (Gruca & Rego, 2005).

Many studies have examined the link between satisfaction and loyalty, with loyalty seen as either a repurchase intention, an emotional bond, or a deeply held commitment (Evanschitzky et al., 2012). Satisfied customers are shown to be loyal, to buy more, to be willing to pay a price premium, and to engage in positive word-of-mouth (e.g., Palmatier, Dant, Grewal, & Evans, 2006). Marketing initiatives can be less risky endeavors and more effective among satisfied customers, given that satisfied customers are more likely to act supportively towards the company (e.g., customer engagement initiatives; Beckers et al. (2018)).

An important factor that matters for a LP’s success is the acquisition of members. In fact, when firms introduce a LP, one of their primary objectives is to maximize the number of program members within the shortest time or to acquire a given number of members (Demoulin & Zidda, 2009). A higher rate of LP penetration allows firms to reach as many customers as possible, incentivize trials and repeat purchases with various forms of rewards, and ensure their loyalty since their product or service is likely going to be attuned to customer needs. Introducing a loyalty program within a firm having a more satisfied customer base also bears less risk of program failure for a firm since satisfied customers are more likely to believe in the product offering. In addition, a bigger base of satisfied customers can be translated into a bigger group of heavy and moderate buyers for which loyalty programs can be more attractive (Liu & Yang, 2009). Thus, shareholders may expect greater future cash flows from an introduction of a LP for firms having a more satisfied customer base.

However, considering the fact that satisfied customers already show a high level of loyalty and commitment, one may argue that the higher the level of satisfaction among customers the lesser the need for introducing a LP since it may be redundant. This would make a LP more of a redundant expense and provide no additional value. Hence, we hypothesize:

\[ H_{4a}: \text{Market returns on loyalty program introduction are higher for firms with a more satisfied customer base.} \]

\[ H_{4b}: \text{Market returns on loyalty program introduction are lower for firms with a more satisfied customer base.} \]

2.2.4. Marketing capability
Marketing capability relates to a firm’s ability to employ its resources to perform marketing activities in order to achieve favorable outcomes (Fong, Morgan, & Rego, 2015). Firms in possession of strong marketing capabilities are better at monitoring the environment and sensing the market, identifying customer needs, understanding the factors that influence consumer choice behavior, building strong relationships, and implementing marketing strategies.

We expect firms having a higher marketing capability to be better able to obtain and utilize customer information in order to optimize the design of the loyalty program such that it successfully caters to customers’ needs and distinguishes itself from competitor offerings. In addition, strong marketing capabilities include strong marketing communication capabilities, which enables a firm to generate greater awareness for its loyalty program among all stakeholders especially customers (Wiles, Morgan, & Rego, 2012). Therefore, we hypothesize:

\[ H_{5}: \text{Market returns on loyalty program introduction are higher for firms with superior marketing capabilities.} \]

2.2.5. Program type
A loyalty program has different design components among which program structure is of the highest importance. There are two main structures based on which we distinguish between programs: Frequency reward programs (FRPs) are of the form “buy X times, get something free” or “buy X amount/collect X points, get a reward.” Customer tier programs (CTPs) take on the form of “buy X amount/collect X points, qualify for a tier” (Breugelmans et al., 2015; Kopalle et al., 2012). Kopalle et al. (2012) show that the frequency and tier components, both, generate incremental sales. However, in terms of customer preference, the price-oriented customers place more value on the frequency reward, the service-oriented segment highly values upgrades and preferential treatments, and both segments highly value the customer tier component.

Previous literature shows that a tier program works better for cultivating attitudinal and behavioral loyalty and it is better for fulfilling consumer and corporate goals (Kumar & Shah, 2004). That mainly is because a tier program provides firms with the opportunity to target customers more efficiently based on revenue and profit potential, adopt a customer-centric rewards strategy, provide customers with more value, and motivate them for cross- and up-selling. According to Dreze and Nunes (2009), even most non-elite consumers (71%) prefer a tier program because they believe in preferential treatments or like the idea of something to strive for irrespective of challenges. Therefore, we argue that a tier program compared to a frequency rewards program provides higher perceived levels of preferential treatment and brings more value to customers. An aspirational tier program may be expected to translate into higher future cash flows. Thus, we hypothesize:

\[ H_{6}: \text{Market returns on loyalty program introduction are higher for customer tier programs compared to frequency reward programs.} \]

2.2.6. Industry dynamism
Industry dynamism is characterized by high sales fluctuation due to greater levels of competition, technological upheavals, and associated changing customer needs and demands (Mazzucato & Semmler, 1999). Such change can indicate the presence of competition and dynamism present in an industry. In a dynamic and hyper-competitive market, the need to have loyal customers is vital. A loyal set of customers will ensure less downside risk and lower variability in cash flows. Further, loyal customers would not be easily swayed away by competitor new product offerings or advertising campaigns. Thus, the need for a LP in markets with greater dynamism is stronger and the introduction of a LP should be strongly rewarded by shareholders. Therefore:

\[ H_{7}: \text{Market returns on loyalty program introduction are higher in markets with high industry dynamism.} \]

2.2.7. Market type
Firms may operate in a variety of industries and one of the broadest categorizations of different types of industries is that of service- vs. product-dominant value offerings (henceforth, “products” and “services”). It has been argued that one of the key characteristics in which service and product firms differ is that of the intangibility of their value offering (e.g., Zeithaml, Bitner, Gremler, & Pandit, 2000). On the demand side, this value offering intangibility leads to greater quality uncertainty with respect to services. Since the nature of the service itself is
intangible, customers’ perceptions of quality are often based on price and other tangible elements that are not part of the core service (Zeithaml, 1981). Intangibility can also diminish customers’ ability to form accurate expectations. This greater intangibility leads to increased customer risk and uncertainty. A LP helps reduce this risk in two ways. First, a LP signals to customers that the firm cares to ensure repeat patronage and would not offer inferior services. Second, a LP ensures a tangible benefit for customers that would reduce the risks of purchase. Since the risks of purchase are higher in services than in products, given the greater quality uncertainty in services (e.g., Bhattacharya, Good, Sardashit, & Peloza, 2020), we may expect:

H₀: Market returns on loyalty program introduction are higher for service firms than for product firms.

3. Methodology

3.1. Sample and data sources

In order to test our hypotheses and analyze the relationship between loyalty programs introduction and abnormal stock return, we used an extensive archival search on the Factiva database of news and articles and the websites of firms. To compile the sample of corporate announcements, we focused on firms that are listed in Fortune 1000 in 2017. We considered a wide variety of search terms including loyalty program, rewards program, cash back rewards, frequent traveler program, frequency program, and frequent-flyer program (Rijmolt et al., 2011). The goal was to avoid selection bias and retrieve all articles in which a company announces an introduction of a loyalty program.

We needed to code our sample of announcements to identify the type of programs. There are two main structures based on which we distinguish between programs: Frequency reward programs (FRPs) are of the form “buy X times, get something free” or “buy X amount/collect X points, get a reward.” Customer tier programs (CTPs) take on the form of “buy X amount/collect X points, qualify for a tier” (Breugelmans et al., 2015; Septianto, An, Chiew, Paramita, & Tanudharma, 2019). To code whether the program is a frequency reward program (FRP) or a customer tier program (CTP), two academic raters followed the coding procedure (Table A6 for examples). The inter-coder reliability in terms of Krippendorff’s alpha (Hayes & Krippendorff, 2007) was 90%, which shows high reliability. The research team resolved the few inconsistent codings by more discussion.

We eliminated three groups of events — 1) events for which we could not find a certain date; 2) those for which there were confounds within ten days of their announcements (McWilliams & Siegel, 1997). Confounding events include earnings announcements, merger and acquisition activities, product recalls, executive changes, etc., and 3) announcements with no available stock price data. Our final sample, therefore, consisted of 260 announcements from 110 companies in various industries located in the United States over an 18-year period (2000–2017). Considering the number of announcements and firms, we need to mention that some firms have changed their programs and some firms have one program for B2C and one for B2B. For example, Hyatt Hotels Corporation announced its new frequent guest program, Gold Passport, in 2000 and it unveiled World of Hyatt, Hyatt’s new global loyalty program, in 2016. In addition, United Airlines debuted its loyalty program for Businesses, MileagePlus Small Business Network, in 2013, in addition to its announcement for the MileagePlus program that is for regular customers.

In order to construct the final dataset, we obtained the necessary accounting information from COMPUSTAT Fundamentals Annual database, the information on daily stock prices from the Center for Research on Stock Prices at the University of Chicago, and the information on four factors of the Fama-French-Carhart model from Kenneth French’s website at Dartmouth College. Our final dataset includes firms with an average revenue of $39.67 billion, market capitalization of $54.11 billion, market share of 22 percent, and advertising expenditures of $577.31 million.

3.2. Measures

3.2.1. Dependent variable

The objective of an event study is to ascertain the extent to which investors earn excess stock returns from an event that carries new informational content. In essence, an event study assumes that stock prices adjust immediately to reflect new available information. Our dependent variable is the firm’s abnormal stock returns, which reflects shareholder value (e.g., Skinner, Bayer, & Scholer, 2017), and we measure it using the Fama-French-Carhart model (Carhart, 1997). This model provides an indication of the expected stock return of the firm and the difference between the real stock value (after an announcement) and the expected value for the same date provides us an estimate of the ‘abnormal’ stock return. This abnormal stock return is in expectation of future cash flows to increase (before materially seeing such an increase). To estimate the parameters in the model, we considered a range of 250 trading days to 8 days before the focal event as the estimation window. The Fama-French 4 factor equation is:

\[
E(R_i) = \alpha + \beta_1(R_m) + \beta_2(SMB_i) + \beta_3(HML_i) + \beta_4(UMD_i),
\]

where \(E(R_i)\) is the normal or expected daily returns for firm \(i\) and day \(t\), \(R_m\) is the average rate of return of all stocks trading in the stock market at time \(t\), \(R_{it}\) is the risk-free rate of return at time \(t\), \(SMB_i\) represents the difference in returns between the rate of returns of small- and large-market capitalization stock portfolios during day \(t\), \(HML_i\) is the difference in returns between high and low book-to-market ratio stocks, and \(UMD_i\) is the momentum factor defined as the difference in returns between firms with high and low past stock performance. \(\alpha, \beta_1, \beta_2, \beta_3, \) and \(\beta_4\) are the parameters of the model to be estimated by the regression of \(R_{it}\) on the four factors.

For each firm on the event date, the abnormal return is estimated using the difference between the actual return and the expected return:

\[
AR_i = R_{it} - E(R_i) = R_{it} - (\alpha + \beta_1(R_m) + \beta_2(SMB_i) + \beta_3(HML_i) + \beta_4(UMD_i)).
\]

The proper event window was determined based on two considerations — first, the event window should be as short as possible in order to capture the significant effect of the event and avoid the false inferences stemming from a long event window (McWilliams & Siegel, 1997; Sorensen, Warren, & Eriksen, 2017); and second, we should expand our event window ((\(t_1, t_2\))) to at least one day before and one day after the release day. This is to take into account the leakage of the announcement content before the focal day, and the need for the dissemination of the content after the event day (some announcements need more time to be absorbed and some releases occur after the stock market closes on the announcement day) (Sorensen et al., 2017).

To ensure an appropriate event window selection, the cumulative average normal returns for multiple event windows are calculated. We assess the significance of each one, and choose the most significant one, using the t-test of Brown and Warner (1985). The cumulative abnormal return (CAR) and cumulative average abnormal return (CAAR) are as follows:

\[
\text{CAR}_{[\text{t}_1, \text{t}_2]} = \sum_{t=[\text{t}_1, \text{t}_2]}^R \text{AR}_i
\]

\[
\text{CAAR}_{[\text{t}_1, \text{t}_2]} = \frac{\sum_{t=[\text{t}_1, \text{t}_2]}^R \text{CAR}_{[\text{t}_1, \text{t}_2]}}{N}
\]

We used the standard deviation of abnormal returns over the estimation window to standardize the cumulated abnormal returns (SCAR). We used SCAR for hypotheses testing in order to correct for the firms’
differences in variance in the daily closing prices and to address this heteroscedasticity (Homburg, Vollmayr, & Hahn, 2015).

3.2.2. Independent variables

**Brand value:** For measuring brand value, we use Y&R Brand Asset Valuator data. Their model is based on the assumption that brand value is a multidimensional construct that can be assessed through customer perception measurements (Mizik & Jacobson, 2008). The overall brand asset metric combines the cognitive and emotional capital of a brand with its vitality and therefore provides a more comprehensive measure of brand value (Lovett, Peres, & Shachar, 2014). In case of multi-brand firms, we took the mean of brand value.

**Advertising intensity:** To calculate advertising intensity, we computed the ratio of the firm’s total advertising expenditure to the firm’s total assets of the year of announcement (Beckers et al., 2018).

**Customer Satisfaction:** In this paper, we used the American Customer Satisfaction Index (ACSI) database to measure customer satisfaction. The ACSI is the first comprehensive U.S. customer satisfaction database and annually reports customer satisfaction scores for approximately 200 brands on a scale ranging from 0 to 100 (Gruca & Rego, 2005). We used data available over our sample period. Similar to brand value, in case of multi-brand firms, we took the brands’ average customer satisfaction scores as the overall satisfaction for the firm. In cases of missing values, if missing completely at random (MCAR), we did mean-imputation and replaced the missing values by the industry average.

**Type of loyalty programs:** To specify loyalty programs’ type, we used a dummy variable with the value of one if the program structure meets the requirements of a customer tier program and the value of zero for a frequency reward program.

**Marketing capabilities:** Marketing capability relates to a firm’s ability to employ its resources to perform marketing activities in order to achieve favorable outcomes (Feng et al., 2015). To operationalize marketing capabilities, we follow the approach used by Kalaigannam, Kushwaha, Steenkamp, and Tuli (2013). Based on the RBV literature, they theorized that firms with higher levels of marketing capability are able to use their resources (as the inputs) more efficiently to maximize sales (as the outputs). Resources available to the firm are the level of sales, general, and administrative expenditures (SGA) and the level of its receivables. Using a Stochastic Frontier Estimation (SFE), we estimate the maximum amount of sales a firm can achieve, given its available resources. The smaller the difference between the firm’s actual sales and maximum sales, the higher its marketing capability. Any shortfall in the actual sales shows inefficiency. The SFE approach provides us with the degree of inefficiency and we can use the inverse of the firm’s inefficiency as the measure of marketing capability.

We adopt Kalaigannam et al. (2013) specification of the sales frontier:

\[
\ln(\text{SALES}_{it}) = \beta_0 + \beta_1 \times \ln(\text{MKTGSTOCK}_{it}) + \beta_2 \\
\times \ln(\text{RECEIVABLES}_{it}) + \epsilon_{it} - \eta_{it}
\]  

(5)

where, \(i\) and \(t\) are firm and year, respectively, \(\text{MKTGSTOCK}\) is the stock of marketing expenses and a proxy for the amount the firm spends on its market research, sales effort, trade expenses, and other related activities. Receivables is a proxy for investments made in building customer relationships, \(\epsilon_{it}\) is the random error component, \(\eta_{it}\) is the time-varying inefficiency term, and \(\beta_1\) and \(\beta_2\) are the parameters in the sales frontier function. In order to capture marketing capability, we follow Dutta, Narasimhan, and Rajiv (1999) and use the inverse of inefficiency term (1/\(\eta_{it}\)).

We calculate the marketing stock by considering the carryover effect of marketing effort and employing a Koyck-lag structure (Kalaigannam et al., 2013):

\[
\text{MKTGSTOCK}_{it} = \lambda_0 \text{MKTGEXP}_{it} + \lambda_1 \text{MKTGEXP}_{it-1} + \lambda_2 \text{MKTGEXP}_{it-2} + \lambda_3 \text{MKTGEXP}_{it-3}
\]  

(6)
where MKTGEXP are annual marketing expenditures of the firm. The firm-specific decay factor ($\lambda_i$) is estimated using the following specification:

$$SALES_t = \psi_i (1 - \lambda_i) + \nu_i (1 - \lambda_i) MKTGEXP_i + \lambda_i \cdot SALES_{t-1} + \nu_i$$  \( (7) \)

where $\nu_i$ is the random error term, and $\nu_{i1}$ is the contemporaneous effect of marketing expenses on sales.

**Services:** Using appropriate SIC codes of business (2-digit 70–89 for services), we coded another binary variable as 1 to show whether the firm focuses on products (vs. services).

**Industry dynamism:** It was specified as the coefficient of variation in sales of the firm’s industry, defined by the four-digit SIC code, over five prior years (Srinivasan, Lilien, & Sridhar, 2011).

$$SCAR_i[−7,7] = \beta_0 + \beta_1 (Brandvalue) + \beta_2 (Advertisingintensity) + \beta_3 (Satisfaction) + \beta_4 (Marketingcapability) + \beta_5 (Typeofloyaltyprogram) + \beta_6 (Industrydynamism) + \beta_7 (Products) + \beta_8 (B2B) + \beta_9 (Marketshare) + \beta_{10} (Firmsize) + \beta_{11} (Salesgrowth) + \beta_{12} (Industrysize) + \beta_{13} (Industrygrowth) + \beta_{14} \lambda_i + IndustryDummies + YearDummies + \beta_1.$$  \( (8) \)

**3.2.3. Controls**

We coded a binary variable as 1 to indicate a loyalty program’s focus on B2B (vs. B2C). For the firm’s market share, we used the firm’s sales relative to the total industry sales (Tuli, Bharadwaj, & Kohli, 2010). Firm size was measured as the total number of employees (Boyd, Chandy, & Cunha, 2010). Sales growth was calculated as the logarithm of the firm’s sales in time $t$ divided by sales in time $t-1$. We calculated industry size as the logarithm of the total sales volume within the four-digit SIC code. For industry growth, we computed the logged ratio of sales of the industry at the four-digit SIC code at time $t$ to those at time $t-1$ (Tuli et al., 2010). Finally, we included dummy variables for the announcement year and industry dummies based on SIC classification. Table 2 provides the descriptive statistics and correlations among the variables. Table A7 provides an overview of the data sources and measures of the study.

**4. Model specification**

To test the hypotheses, we regress the standardized cumulative abnormal return (SCAR) on our set of predictors and control variables. In our case, we only had data for firms that announce their loyalty program introduction. However, firms might have relevant private information that is not fully known to the market but that affects their decision to introduce a program or its disclosure (Li & Prabhala, 2007). For instance, managers may have private information regarding the effectiveness of similar programs.

Unobservable private information can cause self-selection bias. We account for this potential bias with the Heckman two-step procedure (Heckman, 1979). First, we constructed a matched sample set consisting of publicly listed firms that have not introduced a loyalty program (or have not announced it). We selected publicly listed firms based on two criteria: to operate in the same industry (four-digit SIC code) and to have a similar size (market capitalization, +/-20%; Homburg et al. (2015)). Following this, we specified a probit selection model for a firm’s choice to introduce a loyalty program or not. As explanatory variables in this probit model, we used a firm’s return on asset and the mean sales of peer firms. ROA has been commonly used in past literature as a strong indicator that captures the firm’s financial resources and status (or lack thereof) and can be a good proxy for the firm’s propensity to start a marketing program (e.g., Kalaigaonnam et al., 2013). Mean sales of peer firms is expected to influence a firm’s propensity to start a loyalty program. Lower mean peer firm sales would provide an incentive to guard against potential systematic risks due to loss of sales as well as serve as an offensive mechanism to secure customers from the (weaker) competition. Further, the variable is truly exogenous as it does not affect focal firm (abnormal) returns and has been used as an instrument before in prior marketing literature (e.g., McAlister, Srinivasan, Jindal, & Cannella, 2016). The results of the selection model (see Table A1) show that firms with lower returns on assets and in markets with lower mean peer firm sales are more likely to introduce a loyalty program and disclose information about it. As a second step and consistent with Heckman’s two-stage sample selection model, we included the inverse Mills ratio in the second stage or the main model. However, the inverse Mills ratio in the second-stage model is not significant. This suggests that sample selection has not biased our estimates. The following is our regression model:

$$SCAR_i[−T, T] = \beta_0 + \beta_1 (Brandvalue) + \beta_2 (Advertisingintensity) + \beta_3 (Satisfaction) + \beta_4 (Marketingcapability) + \beta_5 (Typeofloyaltyprogram) + \beta_6 (Industrydynamism) + \beta_7 (Products) + \beta_8 (B2B) + \beta_9 (Marketshare) + \beta_{10} (Firmsize) + \beta_{11} (Salesgrowth) + \beta_{12} (Industrysize) + \beta_{13} (Industrygrowth) + \beta_{14} \lambda_i + IndustryDummies + YearDummies + \beta_i.$$  \( (9) \)

where $i$ denotes the specific event, $\beta_0$ is the intercept, $\beta_1$-$\beta_{13}$ are regression parameters belonging to the independent and control variables, $\lambda_i$ is the inverse Mills ratio, and $ci$ is the error term. We examined the potential threat of multicollinearity. The variance inflation factors (VIF) were below 5.0, indicating that multicollinearity was not a problem.

**5. Results**

The results for the abnormal returns analysis around the event date,

A: Daily Average Abnormal Returns (AAR$_i$)

B: Cumulated Average Abnormal Returns (CAAR$_i$)

Notes: Day 0 corresponds to the event day.
as depicted in Fig. 2, show that the day after the announcement exhibits significant stock market reactions. To be consistent with previous event studies, we chose the most parsimonious and significant event window: the event day and the day after the announcement CAR studies, we chose the most parsimonious and significant event window: as depicted in Fig. 2, show that the day after the announcement exhibits in italics.

<p>| Table 3 |
| Abnormal Stock Returns Abnormal Stock Returns. | |
| <strong>A: AAR</strong> |  |</p>
<table>
<thead>
<tr>
<th>Event Day</th>
<th>Obs</th>
<th>M</th>
<th>SD</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>–7</td>
<td>260</td>
<td>0.05%</td>
<td>0.001</td>
<td>0.37</td>
</tr>
<tr>
<td>–6</td>
<td>260</td>
<td>0.42%</td>
<td>0.001</td>
<td>3.10**</td>
</tr>
<tr>
<td>–5</td>
<td>260</td>
<td>–0.09%</td>
<td>0.001</td>
<td>–0.70</td>
</tr>
<tr>
<td>–4</td>
<td>260</td>
<td>0.14%</td>
<td>0.001</td>
<td>1.06</td>
</tr>
<tr>
<td>–3</td>
<td>260</td>
<td>–0.04%</td>
<td>0.001</td>
<td>–0.33</td>
</tr>
<tr>
<td>–2</td>
<td>260</td>
<td>–0.06%</td>
<td>0.001</td>
<td>–0.49</td>
</tr>
<tr>
<td>–1</td>
<td>260</td>
<td>–0.10%</td>
<td>0.001</td>
<td>–0.76</td>
</tr>
<tr>
<td>0</td>
<td>260</td>
<td>0.07%</td>
<td>0.001</td>
<td>0.52</td>
</tr>
<tr>
<td>+1</td>
<td>260</td>
<td>0.24%</td>
<td>0.001</td>
<td>1.82*</td>
</tr>
<tr>
<td>+2</td>
<td>260</td>
<td>–0.09%</td>
<td>0.001</td>
<td>–0.66</td>
</tr>
<tr>
<td>+3</td>
<td>260</td>
<td>–0.07%</td>
<td>0.001</td>
<td>–0.54</td>
</tr>
<tr>
<td>+4</td>
<td>260</td>
<td>–0.23%</td>
<td>0.001</td>
<td>–1.77*</td>
</tr>
<tr>
<td>+5</td>
<td>260</td>
<td>0.02%</td>
<td>0.001</td>
<td>0.21</td>
</tr>
<tr>
<td>+6</td>
<td>260</td>
<td>–0.08%</td>
<td>0.001</td>
<td>–0.60</td>
</tr>
<tr>
<td>+7</td>
<td>260</td>
<td>–0.02%</td>
<td>0.001</td>
<td>–0.19</td>
</tr>
<tr>
<td><strong>B: CAAR[-t2, t2]</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Window</td>
<td>M</td>
<td>SD</td>
<td>t-Value</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>–7 to + 7 days</td>
<td>0.13%</td>
<td>0.0043</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>–7 to + 1 days</td>
<td>0.62%</td>
<td>0.0035</td>
<td>1.75*</td>
<td></td>
</tr>
<tr>
<td>–6 to + 6 days</td>
<td>0.11%</td>
<td>0.0041</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>–6 to 1 days</td>
<td>0.57%</td>
<td>0.0033</td>
<td>1.70*</td>
<td></td>
</tr>
<tr>
<td>–6 to 0 days</td>
<td>0.32%</td>
<td>0.0031</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>–5 to + 5 days</td>
<td>–0.22%</td>
<td>0.0038</td>
<td>–0.57</td>
<td></td>
</tr>
<tr>
<td>–4 to + 4 days</td>
<td>–0.15%</td>
<td>0.0035</td>
<td>–0.44</td>
<td></td>
</tr>
<tr>
<td>–3 to + 3 days</td>
<td>–0.06%</td>
<td>0.0031</td>
<td>–0.19</td>
<td></td>
</tr>
<tr>
<td>–2 to + 2 days</td>
<td>0.05%</td>
<td>0.0027</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>–1 to + 1 days</td>
<td>0.12%</td>
<td>0.0025</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>0 to + 2 days</td>
<td>0.14%</td>
<td>0.0025</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>–1 to + 1 days</td>
<td>0.22%</td>
<td>0.0022</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>–1 to 0 days</td>
<td>0.21%</td>
<td>0.0022</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>0 to 0 days</td>
<td>0.12%</td>
<td>0.0018</td>
<td>–0.17</td>
<td></td>
</tr>
<tr>
<td>0 to + 1 days</td>
<td>0.31%</td>
<td>0.0018</td>
<td>1.68*</td>
<td></td>
</tr>
<tr>
<td>Event day</td>
<td>0.07%</td>
<td>0.0013</td>
<td>0.52</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.10, **p < 0.05.
Notes: t-test were based on Brown and Warner (1985); selected event window is in italics.

5.1. Contingency factors affecting the value creation of loyalty programs

We estimate the effect of moderating factors and report the results in table 4. In line with H3a, we find that the value creation for a loyalty program introduction is more positive for firms with more valued brands (β1 = 0.235, p < 0.05). The results also confirm H2a, showing that LP introduction do create more abnormal returns for firms with higher advertising intensities (β2 = 30.507, p < 0.05). Contrary to our prediction in H4a/b, we do not find support that introducing a loyalty program is more valuable for firms with higher (or lower) levels of satisfaction (β3 = 0.032, p > 0.10). We also do not find support for any gains due to greater marketing capability for a loyalty program introduction (β4 = –5.392, p > 0.10) which rejects H5. We do find that the value creation for a loyalty program introduction is more positive when the program type is customer tiered (β5 = 0.690, p < 0.10) which supports H6. Finally, we observe results opposite to our prior expectations for H7 and H8. Specifically, we find higher dynamism to lower abnormal returns (β8 = –5.518, p < 0.05) and that AR is higher for product firms than service firms (β7 = 1.067, p < 0.10).

5.2. Robustness checks

We conducted various additional analyses to test the stability of the results. We describe these robustness checks in the following subsections.

**Alternate event windows:** We tested the results using other event windows to see the sensitivity of our results to the chosen event window. Specifically, we investigated SCAR(0), SCAR(1), SCAR(-1, +1), SCAR(-2, 0), SCAR(0, +2), and SCAR(-2, 1). These windows are highly correlated with our focal SCAR(0, +1) window (average correlation of 0.72, p < 0.01). Table A2 shows the results for these event windows. Most parameters show stability in terms of direction and significance.

**Alternate models of abnormal returns:** In our main analysis, we used the Fama-French-Carhart model (Carhart, 1997) to estimate abnormal returns. We re-estimated our results using the Fama-French three-factor model.
model and market model (Fama & French, 1993) to test whether the results remain stable for an alternative benchmark asset pricing model. As Table A3 in the appendix shows, most parameters remain stable in their direction and significance.

**Cluster analysis:** Because there are some firms in our sample with more than one event and observation, we re-estimated the models and clustered the observations at the firm level. Table A3 indicates a high level of stability in the results.

**Outlier analysis:** In this study, we Winsorized our data to the 2.5th percentile. By Winsorizing, we reduce the effect of potential outliers to ensure that extreme observations do not drive the results (Rego, Morgan, & Fornell, 2013).

**Long-term abnormal returns:** To account for the possibility that the market takes a long time to figure out the performance consequences of the LP announcement, we calculated long-term abnormal returns to test for the efficient market hypothesis. There are two established methods for this purpose: Buy and hold abnormal returns (BHARs) and calendar time portfolios abnormal returns (CTARs) (Barber & Lyon, 1997; Carhart, 1997).

In the BHAR method, we calculated the cumulative abnormal returns of a firm over a time window of one year, two years, and three years following the announcement relative to a matched firm portfolio. For matching firms, we consider the same four-digit SIC classification and similar market capitalization (Homburg et al., 2015). Because our sample is from 2000 to 2017, returns for a two- and three-year time window are not available for the events of 2017 and 2016 to 2017, respectively. Consistent with previous research, we did not consider firms from the computer and software industries. As Table A4 indicates, there are no significant abnormal returns as measured by the BHAR method.

In the CTAR method, we created a portfolio of firms that have announced a loyalty program introduction. Firms are added to the portfolio on the date of the announcement and kept in the portfolio for the period of one year, two years, or three years depending on the time window for the long-term returns (Sorensu et al., 2017). We employed the Fama-French-Carhart model to calculate stock returns, using the weighted least square method. Table A5 shows the results for the CTAR method. We report all returns on the time window basis, multiplying the return by the number of months. Clearly, there are no significant long-term abnormal returns. This is not unexpected and reflects the market’s ability to price the LP into the stock price in the long run, similar to other marketing actions such as product placements (Wiles & Danielova, 2009), channel expansions (Homburg et al., 2015) and CRM outsourcing (Kalsignam et al., 2013).

6. Discussion

6.1. Theoretical implication

Our results show that the initial introduction period of the LP can be a source of abnormal returns. This indicates that shareholders believe the future expected cash flows of the firm increase upon the adoption of a loyalty program. We also find no evidence for the systematic mis-pricing of stocks owing to the existence of a LP. Once the LP is in place, the market will adjust stock prices and provide expected returns depending on LP effectiveness, in line with the efficient market hypothesis (Fama, 1991). Although loyalty programs and their impact on different aspects of firm performance have been under research by many scholars, the effect of these programs on firm value has not been clear. We provide unequivocal evidence that introducing a LP increases firm value.

Our analyses also provide vital clues pertaining to investor perceptions of future LP effectiveness. We find evidence of synergies with both brand value and advertising intensity but not with customer satisfaction. Shareholders expect stronger brands and higher advertising intensities to ensure higher attractiveness and efficacy of LPs. The increased visibility of the firm and the LP may attract customers to (and retain customers within) the program. While synergies have been acknowledged as important by researchers studying marketing mix variables (price, promotion, place, and product), especially in retail contexts (e.g., Naik & Raman, 2003), much less has been demonstrated with regards to market-based assets (MBAs) and marketing actions, especially in a shareholder value context. By demonstrating the differential value of LPs in the presence of complementary MBAs, we extend the literature exploring such synergies in marketing.

We do not find such synergies with customer satisfaction and marketing capabilities. Firms enjoying a satisfied customer base may have strong relationships in place with their customers already and therefore gain less from starting a loyalty program. In addition, satisfaction may act as an independent route to loyalty and may not necessarily influence the future success of a loyalty program. This may be particularly true if shareholders expect the LP to attract more new customers (as compared to retaining old customers), since customer satisfaction may be less of a motivating factor for people (to join the LP) who have not tried the product or service yet. Shareholders also do not expect general marketing capabilities to help make a LP more effective in the future. Shareholders may expect that existing capabilities would need to be updated in order to manage a new marketing initiative—a loyalty program.

Besides the presence of synergies with certain MBAs, our results also reveal the importance of market-level factors in determining the value of LPs. We find LPs to be more valuable under conditions of less uncertainty and risk. Shareholders expect the LP to be mainly a source of growth for the firm rather than simply a way to plug defection (churn being a likely scenario under high environmental dynamism). The same reason holds for LPs providing higher market returns for product firms, where there is less uncertainty in quality and more homogeneity of performance. Product firms present lower purchase risk to customers who expect to gain from accumulating rewards from the LP as well. Lastly, we observe tiered programs to outperform frequency reward programs. The exclusivity associated with higher status is expected to be a powerful motivator for customers to purchase more (and keep a certain frequency in order to maintain the tier). This also adds further evidence to our prior conclusion regarding the growth expectations of shareholders from LPs.

Overall, a holistic view of our results indicates a critical converging factor for our moderators. It appears that LPs are more successful under conditions of lower perceived purchase risk. Strong brands, high advertising, low dynamism, and low quality uncertainty—all reduce the perceived risks of purchase (for a customer). Under such conditions, the customer is incentivized to stay loyal and buy frequently and does not face any apprehensions (or disutility) from increased purchases. In fact, due to fringe benefits provided by the LP, the customer finds the product/service offerings more valuable. Conversely, under conditions of greater risk, the LP in itself may not be enough to induce the customer to purchase. This implies that the defensive value of loyalty programs (retaining customers when there are reasons to switch) is likely lower than previously presumed (e.g., Dubé & Maute, 1998).

Overall, this study and its conclusion enrich research within the marketing-finance interface and reply to the call for further assessment of LP effects on profitability and firm valuation metrics (Bijmolt et al., 2011).

6.2. Managerial implication

This study has some important managerial implications. First, consistent with previous research on presenting the importance of

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1 This could also be due to a poorer understanding of the true level of marketing capabilities a firm has (since capabilities are not easily observable through firm financials).
marketing for firm value (and of the importance of LPs in general), we raise managers’ awareness that the capital market pays attention to another important marketing initiative which is starting a loyalty program. The LP introduction can be a source of higher future cash flows, which provide marketing managers strong justification for starting such a program.

However, the firm’s stock price can react to such an event differently depending on different factors. Specifically, managers may look to establish strong brands and increase their advertising intensities to achieve the best returns from introducing a loyalty program. Strong brands and greater advertising will help build awareness about the program and make the program attractive to customers. A LP will be successful if the firm’s offerings are perceived to be valuable, something that strong brands ensure. However, for companies that are invested in their customer relationships and have a high level of customer satisfaction, introducing a LP may not produce a synergistic effect. Similarly, the market discounts any potential effect of marketing capabilities in determining the future effectiveness of loyalty programs.

Importantly, our findings also show that LP introduction is expected to benefit firms in markets with less uncertainty and dynamism as well as product firms (compared to service firms). In line with our theoretical implications, we suggest managers to ensure that the perceived risks of purchase are low. These would include factors we identify (such as brands and advertising) as assurances of quality. Since a firm’s resources are limited, in sum, our results would enable firms to optimize budget allocation in order to achieve the greatest success from introducing a loyalty program.

Our study also provides guidance for managers regarding the type of LP to introduce. We show a tier program can lead to more values for firms as it provides more values for customers. Specifically, our results show that programs with a tiered system, which give customers the opportunity to achieve status experience higher shareholder values after LP introduction. These results are consistent with the findings of Kopalle et al. (2012) and Chaudhuri, Voorhees, and Beck (2019) regarding the benefits of tier programs first for customers to achieve status and after-wards for firms to experience higher sales and gross profits.

Lastly, while we do not find evidence of a long term stock market effect of LP introduction, we do find that firms which have an initial positive stock market reaction mostly go on to have valued loyalty programs. For instance, Hyatt enjoyed a SCAR of 2.465 and we find the program to be have been widely successful, accounting for about 75% of online bookings (Escobar, 2019). Conversely, Starbucks had a negative initial SCAR (-3.360) and their loyalty program has seen mixed results (Dooley, 2016). This vindicates initial shareholder judgments as well as exemplifies the importance of achieving an initial supernormal return.

6.3. Limitation and future research

Our study has some limitations, which suggest potential avenues for further research. First, we focus on LP introduction as the source of value creation. However, other LP-related events such as LP changes or termination can enhance or destroy firm value. Future studies might examine the effect of company-initiated customer engagement behavior on shareholder value.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jbusres.2020.09.044.

References


