A COMPARATIVE STUDY OF THE RELATIONSHIP BETWEEN BRAND LOYALTY AND MARKET SHARE AMONG DURABLE AND NON-DURABLE PRODUCTS

Lecturer PhD Ovidiu I. MOISESCU
Babeș-Bolyai University of Cluj-Napoca, Romania
Associate Professor PhD Andrej BERTONCELJ
University of Primorska, Koper, Slovenia

Abstract:
Marketing specialists widely accept that brand loyalty, as core component of brand equity, can leverage several positive effects on brand commercial performance and on other dimensions of brand equity, loyalty being both an input and an output from this perspective. Starting from the supposition that higher brand loyalty can generate higher market share, the paper investigates the relationship between the two, considering repurchase and recommend intentions as main measurements of loyalty. Analyzing the data collected through a questionnaire based survey among a representative sample of Romanian urban consumers, the paper comparatively investigates the potential positive correlations between loyalty and market share considering two market types and product categories: durables and non-durables. The results reveal that the relation is not sustained statistically in the case of non-durable, but can be modeled through exponential functions in the case of durables.

Keywords: brand loyalty, market share, durables and non-durables, Romania

Brief literature review
The concept of brand equity and its constituencies
Although the concept of brand equity has received much attention during the last two decades, the 90s “classics” (Aaker, Keller, Kapferer, Farquhar and others) still dominate the list of most quoted approaches.

For David A. Aaker (1991) brand equity is a complex system including a set of brand fundamental dimensions as brand awareness, brand perceived quality, brand loyalty and brand associations. Moreover, he designs a brand equity measuring system – the “brand equity ten” – which considers ten analytical dimensions to be taken into consideration in order to describe brand equity, dimensions among which brand loyalty (satisfaction, repurchases, and recommendations) and commercial performance (especially market share and customer base) are fundamental (1996).

Kevin Lane Keller (2008) states that brand equity should be viewed from a customer based perspective in which brand knowledge is essential in generating differential effects on consumers’ responses to marketing actions related to the brand. Keller’s brand equity model includes two general dimensions – brand awareness and brand image composed of brand associations, but brand loyalty and market share are seen as fundamental outcomes of a strong brand.

Another “classic” (Farquhar, 1989) modeled brand equity through three core elements that build a strong brand – a positive customer brand evaluation, an accessible brand attitude, and a consistent brand image in customers’ minds. His approach is more abstract,
but still relates, more or less directly, to brand awareness, brand loyalty and market performance (especially sales level).

**The concept of brand loyalty as core dimension of brand equity**

The American Marketing Association defines brand loyalty as “the situation in which a consumer generally buys the same manufacturer-originated product or service repeatedly over time rather than buying from multiple suppliers within the category” or “the degree to which a consumer consistently purchases the same brand within a product class”.

Trying to define the term, David A. Aaker (1991) considers that brand loyalty reflects the probability that a customer will switch to another brand, especially when that brand makes a change in its marketing mix. In Aaker’s view, brand loyalty represents the core of a brand’s equity. Moreover, Daryl Travis (2000) considers that brand loyalty represents the meaning of brand equity.

Brand loyalty can’t be analyzed without considering its relationship to other dimensions of brand equity like awareness, perceived quality, or associations. Firstly, all the other descriptive dimensions of brand equity can enhance brand loyalty, as perceived quality, associations and awareness provide reasons to buy and affect satisfaction. Loyalty could arise from a brand’s perceived quality or associations, but could also occur independently. Yet, the nature of this relationship is unclear. On the other hand, loyalty can induce a higher perceived quality (for example, a potential customer has a better evaluation of a brand if that brand is perceived as having a loyal customer base), stronger associations (the brand can be associated to elements characterizing its loyal customers), or increase awareness (loyal customers tend to provide brand exposure to new customers through “mouth to mouth” communication). Thus, brand loyalty is both an input and an output of brand equity and it is both influenced by and influences the other descriptive dimensions of brand equity.

**Effects of brand loyalty on marketing performance**

A high degree of loyalty among customers provides the firm with a series of specific competitive advantages, loyalty having a strong positive effect in two main directions, reducing marketing cost and increasing the brand’s revenue.

Customers can manifest their loyalty to a brand in several ways: they may choose to stay with a provider, and they may increase the number of purchases or the frequency of their purchases or even both, thus generating higher revenues for the brand. They may also become advocates of the brand, concerned by playing a powerful role in the decision making of others, thus reducing the brand’s marketing communication costs.

It is well known that it is much more expensive to gain new customers than to keep existing ones, especially when the existing customer base is satisfied and loyal. Even if there are very low switching costs and low customer brand commitment, there is a substantial inertia among customers. Still, brand loyalty must not be confounded to brand inertia. According to Bloemer and Kasper (1995), brand loyalty implies a deep-seated commitment to brands and there is a sharp distinction between repeat purchases and actual brand loyalty. In their published research, they assert that a repeat purchase behavior is the actual re-buying of a brand whereas loyalty includes antecedents or a reason or fact occurring before the behavior. Bloemer and Kasper (1995) further delineate brand loyalty into “spurious” and “true” loyalty. Spurious loyalty represents biased behavioral response
expressed over time by some decision-making unit, with respect to one or more alternate brands, as a function of inertia. True brand loyalty includes the above, but replaces inertia with a psychological process resulting in brand commitment.

The loyalty of the customer base reduces the vulnerability to competitive attacks. Loyal customers perceive very little incentive to try other brands and even if they do, there is a substantial time gap between they receive the information about the new alternative and their decision to try it. Thus, the firm has a significant time to respond to competitive threats and knowing this, competitors are discouraged from spending resources to attract other brands’ loyal customers.

Loyalty also generates trade leverage, as loyal customers expect the brand to be always available generating incentives for distribution channels to reference the brand. Research has shown that loyal customers are less price sensitive and the expense of pursuing new customers is reduced, while organizational profitability is positively affected by the level of brand loyalty. Brand loyalty can enhance marginal cash flow and profitability, as loyal customers often accept to pay a price premium for their favorite brands, are easily stimulated to new usage situations and tend to increase intensively and extensively their spending on the brand.

The marketing communication spending is also reduced as loyal customers are already confident in the purchase decision and process information rapidly, instruments like sales promotions or advertising being less intensive needed in this case in comparison to brands with low loyalty degree.

Loyalty also enhances the process of attracting new customers, and thus, generates increased market share. Satisfied and loyal clients tend to provide brand exposure and reassurance to new customers, through “mouth to mouth” communication. On the other hand, a potential customer has a better evaluation of a brand if that brand is perceived as having a loyal customer base.

Research methodology

Objectives

This paper represents a partial dissemination of the results of a larger study conducted in order to investigate and identify significant relationships among specific brand dimensions like brand awareness, brand associations (perceived quality, brand personality etc.), and brand loyalty, taking into consideration cognitive, affective and action based perspectives. The study as a whole was also intended to statistically quantify the influence of several demographics (sex, age, income, education, consumer personality) on the brand dimensions and components mentioned above. The aim of the larger study was to finally depict a general model explaining the synergic impact of brand dimensions on consumer behavior, comparatively considering two market types (product categories): durables and non-durables.

The specific objectives of this paper were to analyze the potential link and mutual influence between brand loyalty, on one hand, depicted through brand repurchase intention and brand recommend intention, and brand commercial performance, on the other hand, which we considered as being well represented through a classic market indicator, namely the brand’s market share. The analysis was conducted in a comparative manner considering the cases of two product categories and, implicitly, two market types – durables and non-durables – within an investigated statistical population consisting in urban Romanian consumers.

Indicators

Considering the paper’s research objectives, certain particular indicators
had to be established and used to measure brand loyalty and market share.

In order to establish operational indicators for brand loyalty, we conceptualized brand loyalty as the probability that consumers who have bought a certain brand within the last buying decision would choose the same brand within the following purchasing decision in a similar context given by the nature of the product, the market type (durable or non-durable) and the specific product category within the decision is made. We also extended the concept of brand loyalty towards the active involvement of loyal consumers in brand promotion through brand recommendations to other potential buyers.

Therefore, the necessary data that had to be collected regarding brand loyalty were the intention to repurchase the brand ("Will you repurchase the same brand next time?") and, respectively, the intention to recommend the brand ("Would you recommend the brand you bought last time to others?"). The data regarding to the two brand loyalty components mentioned above were implicitly collected in relation to the last purchased brand within each of the two market types, corresponding to a chosen durable and, respectively, a selected consumable product category.

The indicators’ values further used in our analysis were computed as further described. Firstly, respondents were asked to mention the most recent purchased brand, the market share of each brand being reflected by the percentage of respondents that mentioned that brand as being the most recent purchased one. Secondly, respondents were asked to evaluate their intention to repurchase the most recently purchased brand, on a modified Likert scale from 1 ("will definitely not repurchase") to 6 ("will definitely repurchase"). The repurchase intention of each brand was computed as mean of repurchase intentions mentioned by respondents who most recently bought that brand. Finally, each respondent evaluated his/her intention to recommend the most recently purchased brand, on a modified Likert scale from 1 ("will definitely not recommend") to 6 ("will definitely recommend"). The recommend intention of each brand was quantified as mean of repurchase intentions mentioned by respondents who most recently bought that brand. Thus, the indicators’ values were depicted through computing simple percentages or means for each identified brand within each product category.

**Sampling and data collection**

Data were collected through an ad-hoc questionnaire based survey, the instrument for data collection including open questions in order to identify most recent purchased brands, and, respectively, closed questions with modified Likert scales in order to assess brand loyalty from the perspective of repurchase and recommend intentions. The alteration of the classic Likert scale, specifically consisting in establishing six instead of five answering options, was intended to avoid neutral responses and force either positive or negative attitudes.

The resources and time allocated to the research did not permit conducting a panel survey in order to investigate medium or long term evolutions of the analyzed relations and limited the investigated population to the urban consumers of Cluj-Napoca, one of the largest cities of Romania, although the intention of the research was to analyze the urban Romanian consumers as a whole. Nevertheless, the research could still be considered, with certain limitations, as being representative for the entire urban Romanian population as Cluj-Napoca the second largest city of Romania, representing almost 3% of the Romanian urban population in 2009.
The investigated population was heterogeneous considering demographical characteristics (age, income, education, and sex), vocabulary, intelligence level, technical knowledge, different product categories usage etc. In order for the data to be collected in such a manner so that investigated consumers could describe their behavior and attitudes, what they do and what they think about brands of durable and non-durable products, the particular product categories selected to be investigated within the research were chosen so as to be different in usage duration, not too technical (in order for most of the consumers to be able to evaluate their own behavior and express their attitudes towards those product categories) and to have a large rate of penetration into households usage or consumption. Therefore, we chose the product category of toothpaste, as being representative for the nondurables, and television sets, for durables.

The questionnaire based interviews were conducted face to face, at the household’s residence of the respondents, by a group of 119 students, each student completing a set of five interviews.

The sampling method consisted in a mixture of classical probabilistic and non-probabilistic methods. Firstly, the population was geographically clustered considering the 474 postal areas of Cluj-Napoca. Afterwards, 119 clusters were extracted through systematic random sampling. The 119 clusters (postal areas) were assigned to the 119 interview operators (one cluster to each operator), and each operator had to complete five questionnaire based interviews on the basis of an itinerary sampling method (5 consumers from different households, located into five consecutive buildings from the assigned cluster – postal area). The data collected was validated by contacting (via phone) a random sample of respondents in order to confirm their answers. The interview operators identified as trying to mislead the research through providing non-valid questionnaires were fully verified. From a total of 595 face to face interviews, only 551 were validated, therefore, the research having, an estimation error of ±4.2%, considering a statistical confidence level of 95%.

**Hypothesis**

Considering the indicators detailed above, in order to assess the relation between brand market share and brand loyalty among durable and non-durable products, the following hypotheses were investigated:

- **H<sub>1</sub>**: Brand market share is positively correlated with brand repurchase intention in the case of non-durables.
- **H<sub>2</sub>**: Brand market share is positively correlated with brand repurchase intention in the case of durables.
- **H<sub>3</sub>**: Brand market share is positively correlated with brand recommend intention in the case of non-durables.
- **H<sub>4</sub>**: Brand market share is positively correlated with brand recommend intention in the case of durables.

**Results**

In order to investigate the previous hypothesis and to measure the proportion of market share’s variation explained by brand loyalty components, three bivariate regression models were tested: linear $Y=a+b\cdot X$, logarithmic $Y=a+b\cdot \ln(X)$, and exponential $Y=a\cdot e^{b\cdot X}$. Brand repurchase intention and, respectively, brand recommend intention, were successively the independent variable (predictor) of the model, while the dependent (predicted) variable was each time represented by brand market share. The models were tested both in case of the durable and, respectively, non-durable product.

Selecting the most appropriate model to explain the relation firstly
implied testing the existence of a relation between variables. In order to test the relation, the null hypothesis of “no relation” was rejected depending on the value of the statistical indicator \(p\), with a statistical confidence level of 95% if \(p < 0.05\), or with a statistical confidence level of 99% if \(p < 0.01\). The intensity of the relation was afterwards evaluated, according to the tested model, considering the bivariate correlation coefficient \(R\) and the determination coefficient \(R^2\), indicating the proportion of the dependent variable’s variation explained by the predictor’s variation. Finally, the regression coefficients were determined according to each tested model, along with appropriate mathematical functions to reflect the relations.

In the case of brand loyalty as repurchase intention, only hypothesis \(H_2\) was confirmed, while hypothesis \(H_1\) was invalidated (Table 1). None of the three tested models was statistically significant for a possible relation between market share and brand loyalty as repurchase intention in the case of non-durables. Still, in the case of durables, all of the three models were statistically explanatory, the most appropriate model being the exponential one.

<table>
<thead>
<tr>
<th>Market share = f (Repurchase intention)</th>
<th>Relation – existence and intensity</th>
<th>Regression coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R^2)</td>
<td>(F)</td>
</tr>
<tr>
<td>Linear</td>
<td>.089</td>
<td>.784</td>
</tr>
<tr>
<td>Logarithmic</td>
<td>.083</td>
<td>.722</td>
</tr>
<tr>
<td>Exponential</td>
<td>.220</td>
<td>2.256</td>
</tr>
<tr>
<td>Linear</td>
<td>.457</td>
<td>6.741</td>
</tr>
<tr>
<td>Logarithmic</td>
<td>.415</td>
<td>5.667</td>
</tr>
<tr>
<td>Exponential</td>
<td>.534</td>
<td>9.158</td>
</tr>
</tbody>
</table>

Table 1

In the case of brand recommendation as component of brand loyalty, the same situation was observed: only hypothesis \(H_4\) was confirmed, while hypothesis \(H_3\) was invalidated (Table 2). The tested models weren’t statistically significant for a possible relation between market share and brand loyalty as recommend intention in the case of non-durables, but all of them explained, more or less, the relation in the case of durables, with the most appropriate model being the exponential one.

As outlined in Figure 1, the bivariate regression coefficients proved, with a confidence level of 95% \((p < 0.05)\), that there was a positive exponential relation between brand loyalty as repurchase intention and brand market share in the case of durables (53.4% of the variation being explained by the model), while in the case of non-durables no relation between market share and repurchase intention was shown. The same figure also emphasized a positive exponential relation between brand market share and brand loyalty in its recommendation perspective, again only in the case of durables, with a confidence level of 95% \((p < 0.05)\), 49.5% of the variation being explained by the model. Again, no such relation could be depicted in the case of non-durables.
Table 2

Tested bivariate regression models for the relation between brand recommend intention and brand market share

<table>
<thead>
<tr>
<th>Market type</th>
<th>Model</th>
<th>$R^2$</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-durables</td>
<td>Linear</td>
<td>0.061</td>
<td>0.522</td>
<td>1</td>
<td>8</td>
<td>0.490</td>
<td>-0.139</td>
<td>0.049</td>
</tr>
<tr>
<td></td>
<td>Logarithmic</td>
<td>0.070</td>
<td>0.599</td>
<td>1</td>
<td>8</td>
<td>0.461</td>
<td>-0.257</td>
<td>0.229</td>
</tr>
<tr>
<td></td>
<td>Exponential</td>
<td>0.256</td>
<td>2.751</td>
<td>1</td>
<td>8</td>
<td>0.136</td>
<td>0.000</td>
<td>0.881</td>
</tr>
<tr>
<td>Durables</td>
<td>Linear</td>
<td>0.420</td>
<td>5.803</td>
<td>1</td>
<td>8</td>
<td>0.043</td>
<td>-0.288</td>
<td>0.082</td>
</tr>
<tr>
<td></td>
<td>Logarithmic</td>
<td>0.416</td>
<td>5.687</td>
<td>1</td>
<td>8</td>
<td>0.044</td>
<td>-0.444</td>
<td>0.351</td>
</tr>
<tr>
<td></td>
<td>Exponential</td>
<td>0.495</td>
<td>7.845</td>
<td>1</td>
<td>8</td>
<td>0.023</td>
<td>0.0002</td>
<td>1.248</td>
</tr>
</tbody>
</table>

Figure 1. The relation between brand loyalty and brand market share within durables versus non-durables
Conclusions

Analyzing the results, one conclusion that can be drawn up is that in spite of our expectations brand loyalty is not a driving factor in gaining market share in the case of non-durable products (at least in the case of the product category analyzed in our study). We might assume that in this case brand loyalty is a fundamental factor in maintaining the actual customer base and market share, but in order to gain a bigger share of the market (increase purchasing frequency and quantity), focusing more or less exclusively on strengthening loyalty is not the best strategy. A better strategic option is rather a dual one in which loyalty remains an obvious basis (so that market share should not be lost), but in order to increase market share sales marketing techniques like promotions, merchandising, sales force motivation etc. should be emphasized.

On the other hand, the research results make us conclude that in the case of durable products (or at least in the case of the investigated product category) brand loyalty is a driving factor in both maintaining and gaining market share.

Moreover, the exponential relation revealed within the analysis suggests that in the case of durables the marginal effect of loyalty level strengthening is higher if the brand already has a large customer base and market share, and, respectively, lower in the case of "young" brands without a significant market share yet.

Therefore, in the case of durables, the marketing effort in order to increase market share through greater brand loyalty of existing customers (which determine new consumers, directly or indirectly, to buy the product) is as higher as the brand has a lower market share. As the brand market share grows, the strengthening of brand loyalty will have a more powerful marginal effect, theoretically creating premises for developing dominant brands.

Research limitations and future directions

Analyzing the methodology and the results, several research limitations and future directions can be outlined. The overall significance of the paper’s results is limited to a certain local area of the urban Romanian market. Even though we could, with certain limitation, extend the results to the overall Romanian urban market level, a more geographical extensive research should be conducted in order to reveal certain local consumer behavior specifics. The research method would have been more relevant if a panel were created and analyzed over time, so as consumer evolutions could be emphasized, as the Romanian market is a developing one. Last, but not least, the research could be extended considering not only durables and consumables, but also services, as significant differences could be expected.

REFERENCES

Consumer Satisfaction and Brand Loyalty*, Journal of Economic Psychology, 16(2).