Marketing Innovation Capacity and Firm Performance in Brazilian Clothing Industries

Sandra Biégas

PhD in Administration. Professor at Department of Textile Engineering, from the Technology Center of Maringá State University. E-mail: sbiegas@uem.br

Abstract

The aim of this paper is to investigate the relationship between marketing innovation capacity and firm performance in the Brazilian clothing industries. A transversal descriptive research was conducted in a single quantitative phase, using the survey as a research strategy. The study covers jointly small and medium firms installed in a regional center of clothes industries, in theirs most important product or product line. The data (n=150) were processed using the statistical software Partial Least Squares (SmartPLS), with the evaluation of reflective measurement model and structural model. Findings show that marketing innovation capacity positively predicts market performance, which positively predicts financial performance. Then as practical implications, to achieve financial results of marketing innovation capacity it is necessary to monitor the variables that compose market performance.


Introduction

Although the clothing industry directed to the fashion market is intensive in the launch of new collections (Lacchi, Biégas and Vieira, 2013), rarely there are innovations in product, which means significant changes in function or use of the product. Innovations are common in marketing, that is, significant changes in the shape and appearance of the product (Biégas, 2014).

As an example, in jeans manufacturing industry it is seldom to launch clothing made with fabrics with totally different characteristics of the existing market, but it is...
common to launch a line of products with the same fabrics, but completely refurbished as the design, but nevertheless the products are garments with functions existing on the market. In the specific case of jeans, when there was only on the market that item without elastane, the development of jeans with elastane would be a product innovation; from this, there was the development of various jeans models with elastane shaped and differentiated appearance, and this is called marketing innovation.

The Oslo Manual (OECD, 2005) evidences this feature of the clothing industry, differentiating product innovation of marketing innovation, highlighting the central role of the implementation of new marketing practices, namely the marketing innovation capacity, to increasing the performance of organizations. However, studies on the effect of innovation capacity on firm performance, jointly address product innovation and marketing innovation.

Biégas and Neto-Steiner (2015) identified, by studying the clothing industries, the positive relationship of marketing innovation with both financial performance (profit), and with the market performance (keep and attract customers), but the relationship between these variables was verified by through simple correlation, which allows one to analyze the direction and strength of the linear relationship between two variables, but does not allow causal analysis (Pallant, 2005). As a suggestion of continuity of study, Biégas and Neto-Steiner (2015) suggests the analysis of the causal relationship between the variables, which implies the construction of a theoretical model that requires further theoretical review to support relations, and the use of other statistical technique allows the simultaneous analysis of the causal relationships between variables.

Thus, whereas in the fashion clothing industry to achieve firm performance there are frequent launch of new collections with the effective implementation of innovations in marketing techniques, but not necessarily innovations in product, the aim of this article is specifically investigate the relationship between marketing innovation capacity and firm performance. In addition, considering the suggestion and continued study proposed by Biégas and Neto-Steiner (2015), this paper aims to develop and test a theoretical model by the analysis technique of structural equations, which allows you to analyze the causal and simultaneous relationship between the variables (Hair, Hult, Ringle and Sarstedt, 2014).

There are two reasons for the development of the article. Theoretically, the main contribution of this paper is the analysis of the causal relationship between marketing innovation capacity and firm performance using empirical data from the fashion clothing industry, that enable knowledge of the effects of each of the indicator that compose the marketing innovation on firm market performance and financial performance.

Managerially, the main contribution of this paper is that the implementation of marketing innovation can be justified in the light of increases in corresponding firm market performance and financial performance identified. The knowledge of the items related to the marketing innovation capacity that have better effect on firm performance will allow the dissemination of best practices, enabling decision making for current and future managers of the fashion clothing industry.
Conceptual framework

Innovations are new solutions through which the organization delivers value to the consumer (Doyle and Bridgewater, 1998). They allow organizational survival through changes and adaptations (Trott, 2011) in activities within the organization that result in the implementation of innovations in product, process, marketing and/or organization (OECD, 2005). That is, they result in the innovation capacity (Cavusgil and Calantone, 2003; Hurley and Hult, 1998).

Specifically about marketing innovations, Menon, Bharadwaj, Adidam, and Edison (1999), Noble and Mokwa (1999), Sashittal and Jassawalla (2001) claim that the adoption and implementation of new marketing methods are inherent in the process of marketing strategy, always aiming the attraction and retention of consumers and also the achievement of economic results.

Ferrel and Hartline (2011) explain the importance of main marketing methods. Product pricing techniques will always reflect this market reality, thus leading to revenue and profit. Promotional activities are required to communicate the characteristics and benefits of a product to the intended target markets of the company, encouraging purchase and adding value, but they represent expenses. Distribution channels management is essential for the availability of the product, in the right place at the right time, in the right quantities at the lowest possible cost; they are linked to the company's profit margin.

Management of marketing activities aims to give customers a reason to buy the product of the organization, in addition to maintaining existing customers, attracting new clients, maintaining long-term customer relationships; carry out a new strategic and tactical planning, with the respective implementation and control of the marketing activities involved; and conduct research and analysis and make marketing strategy decisions about market segmentation and product, pricing, distribution and promotion (Ferrel and Hartline, 2011).

Some authors relate innovation with success, like "innovation is key to organizational success" (Doyle and Bridgetwater, 1998, p.2), "successful innovation" (Drucker, 1985, p.6, and Schumpeter, 1964, p.76); "To adopt innovations with success" (Hurley and Hult, 1998: 44); "Success of innovation" (O'Sullivan and Dooly, 2008, p.10, and Varadarajan, 2009, p.28). This study proposes that successful marketing innovation is when there is increased market and financial performance.

The marketing innovation capacity and firm performance

The marketing innovation capability is the organization’s ability to adopt and implement new marketing methods successfully. It covers the implementation of changes related to the design and packaging, positioning, promotion and/or product price or service, provided they have not previously been used by the organization (OECD, 2005), as the renewing the product design without changing the basic technical and functional characteristics; renewing the distribution channels; renewing general marketing management activities; renewing the product promotion techniques and renewing product pricing techniques employed for current and/or new products (Gunday, Ulusoy, Kilic, and Alpkan, 2011).

The firm performance reveals whether the organization has met or exceeded the pre-established objectives for the marketing strategy (Slater, Hult and Olso, 2010).

Although Hurley and Hult (1998) claim that the innovation capacity, the implementation or adoption of innovation allows the company to achieve higher performance levels, this relationship has not been operationalized in their studies. The study of Cavusgil and Calantone (2003) confirms that the innovation capacity in general is critical to achieve superior performance. O’Cass and Ngo (2011) confirm the influence of innovation capacity with firm performance, but the implementation of innovations in marketing is one of the items that make up the construct innovation capacity. Hashi and Stojcic (2013) confirm the relationship of marketing innovation capacity with firm performance, but they use a dummy variable identifying whether there was or not the implementation of significant changes in product design, services or sales and distribution. Gunday et al. (2011) confirm the relationship between marketing innovation capacity and increased firm performance, and validated a construct to assess the implementation of innovation in marketing based on OECD (2005).

Then, it is considered that the effective implementation of marketing innovation, that means the marketing innovation capacity (Gunday et al., 2011) is related to the attraction and retention of consumers and the achievement of economic results, respectively market performance and financial performance (Hogan and Coote, 2014). Therefore, it is considered the hypothesis:

H1. Marketing innovation capacity has a positive effect on market performance.
H2. Marketing innovation capacity has a positive effect on financial performance.

Additionally, Pérez-Cabañero, González-Cruz, and Cruz-Ros (2012), Gama (2011), and Morgan, Katsikeas and Vorhies (2012) propose the relationship between market performance and financial performance. Therefore, it is considered the hypothesis:

H3. Market performance has a positive effect on financial performance.

Methodology

To test the model a transversal descriptive research was conducted in a single quantitative phase, using the survey as a research strategy. The methodology is discussed in terms of the process of sampling and data collection, data analysis, research instruments (measures).

Sampling and data collection process

The data were collected through the use of a self-administered structured questionnaire validated (by three specialists of the marketing area) and pre-tested (five respondents with proper research profile), that consists of questions regarding characterization of firms and respondents; and issues that comprise the variables of
the research. Internet (Qualtrics) and human resources (visits to firms and in events of sector) were used as sources of data collection.

Managers of 304 small and medium firms in the industrial sector of "apparel manufacturing of clothing and accessories" installed in the north and northwestern Paraná, in Brazil, covering the cities of Apucarana, Cianorte, Londrina and Maringá were invited to participate in the survey. The determination of the population was made possible through access to the register of Paraná Industries (FIEP, 2015), limiting the search to those locations and the industrial sector of business activity (adopting the National Classification of Economic Activities – CENAE, covering the group 14). A striking feature of these firms is the flexibility and agility to changes, aiming to offer consumers high added value from innovations (ABDI, 2010) that occur more frequently in marketing than product (IBGE, 2013).

A final sample for adhesion and therefore no probabilistic was obtained, with a return of 150 valid questionnaires, which means, completely answered and meeting all the requirements for the respondent: a) direct or indirect involvement in the process of formulation and/or implementation of the marketing strategy in the firm; b) position at the management level in marketing, sales, business and/or product development; c) a year of minimum bond with the firm.

Data analyses

The data were processed using the statistical software Partial Least Squares (SmartPLS). A two-stage structural equation model was used to evaluate the latent measurements and to test model’s hypotheses. Prior evaluation of reflective measurement model was performed to ensure the reliability and validity of the construct measures and therefore provide support for the suitability of their inclusion in the path model. Then evaluation of structural model results was performed, examining the model’s predictive capabilities and the relationships between the constructs.

Measures

In this study, the latent variables of the research were measured by previously developed constructs and tested by other researchers. Through a Likert scale of 5 points, managers were questioned in relation to the variables that comprise the models considering the context of your most important product or product line (Sashittal and Wilemon, 1996), and considering the marketing strategy process in the last two years.

The marketing innovation capacity was operationalized by construct on the organization’s ability to implement new marketing methods (Gunday et al., 2011), about what new has been effectively implemented in the firm in the last two years: promotion techniques, price, distribution channels, product design without changing the basic technical and functional characteristics, general marketing management activities

The market performance was operationalized by construct regarding the extent to which an organization attracts and retains customers, and the financial performance was operationalized by construct regarding the extent to which an organization achieves economic outcomes (Hogan and Coote, 2014).
Findings

The structural relationship in the model of the influence of marketing innovation capacity on the firm perform were estimated using the statistical software Partial Least Squares (SmartPLS), with the evaluation of reflective measurement model and structural model.

Evaluation of reflective measurement model

The model has three latent variables with reflective measurement model (i.e., Financial performance, Marketing innovation capacity and Market performance). Constructs were assessed by running the PLS Algorithm considering parameters as recommended by Hair et al. (2014): convergent validity considers outer loading of each indicator higher than 0.708 and average variance extracted (AVE) higher than 0.50; internal consistency reliability considers composite reliability (pc) higher than 0.708; and discriminant validity considers cross loading where an indicator’s outer loadings on a construct should be higher than all its cross loadings with other constructs, and Fornell-Larcker criterion, where the square root of the AVE of each construct should be higher than its highest correlation with any other construct.

According to Table I, all of the indicators for the three reflective constructs are well above the minimum acceptable level for outer loadings (the smallest loading has a value of 0.710). Moreover, the average variance extracted values of MIC (AVE = 0.621), MP (AVE = 0.607) and FP (AVE = 0.577) are well above the required minimum level of 0.50. Thus, the measures of three reflective constructs have high levels of convergent validity. The composite reliability values of MIC (pc = 0.891), MP (pc = 0.902) and FP (pc = 0.891) demonstrate that all reflective constructs have high levels of internal consistency reliability.

Table I - Evaluation of reflective measurement model

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Indicators</th>
<th>Outer loadings</th>
<th>Outer weights</th>
<th>Composite Reliability</th>
<th>AVE</th>
<th>Discriminant Validity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td>Overall profitability (FP_1)</td>
<td>0,803</td>
<td>0,217</td>
<td>0,891</td>
<td>0,577</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Profit growth (FP_2)</td>
<td>0,776</td>
<td>0,221</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profitability per employee (FP_3)</td>
<td>0,721</td>
<td>0,213</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall cash flow (FP_4)</td>
<td>0,739</td>
<td>0,218</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash flow per employee (FP_5)</td>
<td>0,753</td>
<td>0,217</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Growth in cash flow (FP_6)</td>
<td>0,763</td>
<td>0,230</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing innovation capacity</td>
<td>Renewing the product promotion techniques employed for the promotion of the current and/or new products (MIC_1)</td>
<td>0,858</td>
<td>0,282</td>
<td>0,891</td>
<td>0,621</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Renewing the distribution channels without changing the logistics processes related to the delivery of the product (MIC_2)</td>
<td>0,838</td>
<td>0,260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renewing the product pricing techniques employed for the pricing of</td>
<td>0,710</td>
<td>0,232</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finally, about the Fornell-Larcker criterion and the cross loadings, the overall square root of AVEs for the reflective constructs are all higher than the correlations of these constructs with other latent variables in the path model, showing that all reflective constructs have discriminant validity (Table II).

<table>
<thead>
<tr>
<th>Market performance</th>
<th>Financial performance</th>
<th>Marketing innovation capacity</th>
<th>Market performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving client satisfaction (MP_1)</td>
<td>0.782</td>
<td>0.224</td>
<td>0.902</td>
</tr>
<tr>
<td>Providing value for clients (MP_2)</td>
<td>0.791</td>
<td>0.213</td>
<td></td>
</tr>
<tr>
<td>Keeping current clients (MP_3)</td>
<td>0.710</td>
<td>0.201</td>
<td></td>
</tr>
<tr>
<td>Attracting new clients (MP_4)</td>
<td>0.777</td>
<td>0.218</td>
<td></td>
</tr>
<tr>
<td>Attaining desired growth (MP_5)</td>
<td>0.811</td>
<td>0.222</td>
<td></td>
</tr>
<tr>
<td>Securing desired market share (MP_6)</td>
<td>0.798</td>
<td>0.205</td>
<td></td>
</tr>
</tbody>
</table>

**Evaluation of structural model**

The structural model was assessed by running the PLS bootstrapping routine and blindfolding procedure, considering the recommendations of Hair et al. (2014).

First, each predictor construct’s tolerance (VIF) in the structural model was examined for collinearity. All VIF values are higher than 0.20 and lower than 5. Thus, collinearity among the predictor constructs is not an issue in the structural model.

Second, bootstrapping was used to assess the significance of path coefficients ($\beta$) which represents the hypothesized relationships among the constructs; quality adjustment ($R^2$), and the effect size ($f^2$). Then, the blindfolding was used to assess predictive relevance ($Q^2$) value of path model. The Figure 1 shows path model results.

Hypothesis H1 proposed that the marketing innovation capacity is positively related with market performance. Hypothesis H1 was supported, with positive association between marketing innovation capacity with market performance ($\beta = 0.705$, $p = 0.000$). The quality adjustment for market performance can be considered mod-

| the current and/or new products (MIC_3) | 0.752 | 0.239 |
| Renewing the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features (MIC_4) | 0.773 | 0.253 |

**TABLE II - FORNELL-LARCKER CRITERION**

<table>
<thead>
<tr>
<th></th>
<th>Financial performance</th>
<th>Marketing innovation capacity</th>
<th>Market performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td>0.760</td>
<td></td>
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</tr>
<tr>
<td>Marketing innovation capacity</td>
<td>0.588</td>
<td>0.788</td>
<td></td>
</tr>
<tr>
<td>Market performance</td>
<td>0.712</td>
<td>0.705</td>
<td>0.779</td>
</tr>
</tbody>
</table>
erate ($R^2 = 0.497$) and marketing innovation capacity has a large effect ($f^2 = 0.986; p = 0.000$) and a medium predictive relevance ($Q^2 = 0.294$) on market performance.

Hypothesis H2 proposed that the marketing innovation capacity is positively related with financial performance. Hypothesis H2 was not supported by the findings. There was no significant relationship between the marketing innovation capacity and financial performance ($\beta = 0.171; p = 0.096$). But there is an indirect effect via market performance mediating construct ($\beta = 0.417; p = 0.000$) with a partial mediation ($VAF = 0.709$).

Hypothesis H3 proposed that the market performance is positively related with financial performance. Hypothesis H3 was supported, with positive relationship between market performance with financial performance ($\beta = 0.592, p = 0.000$). The quality adjustment for financial performance can be considered moderate ($R^2 = 0.522$), and market performance has a large effect ($f^2 = 0.368; p = 0.020$) and a medium predictive relevance ($Q^2 = 0.295$) on financial performance.

Figure 1- Path model results

Discussion and conclusion

This study investigated the relationship between marketing innovation capacity and firm performance in the Brazilian fashion clothing industry, in the context of their most important product or product line, and also considering their marketing strategy process in the last two years.
Figure 2 shows a schematic with the resulting structure of the proposed model, containing only the confirmed relationships, according to the results of the standardized coefficients obtained in this data collection. The marketing innovation capacity predicts market performance, which predicts financial performance.

It is interesting to note the moderate quality adjustment for market performance ($R^2 = 0.497$) and quality adjustment for financial performance moderate ($R^2 = 0.522$). This suggests that the variables that were considered to explain variations in financial performance are most appropriate, and that there are other variables that can explain the variations in market performance that were not considered in the model. To establish that only confirmed variables can explain the proposed model would be a misunderstanding of organizational complexity, and then additional variables can be considered in future studies.

The marketing innovation capacity in the present study comprises radical innovation, which manifested as something new (Doyle and Bridgewater, 1998, Tidd, Bessant, and Pavitt 2005, and Varadarajan, 2009) with the implementation of marketing methods not previously used by the firm, which means, the implementation of new techniques for promoting products, new distribution channels, new techniques pricing, new product design, new general marketing activities management (Hogan and Cote, 2014, and OECD, 2005).

The empirical results of this study show that the capacity innovation marketing is increased mainly by renewing practices in product promotion, followed by distribution channels, general marketing management activities and design, more than renewing product pricing techniques. Marketing innovation capacity improves market performance, mainly achieving client satisfaction, followed by attaining desired growth, attracting new clients, providing value for clients, securing desired market share and keeping current clients. And market performance improves financial performance, mainly growth in cash flow, followed by profit growth, overall cash flow, cash flow per employee, overall profitability, and profitability per employee (see outer weights in Table I).
Marketing researchers claim that changes in pre-existing marketing practices aim to increase results (Varadarajan, 2010), the findings of this study suggest that adopting and implementing new marketing methods successfully means achieving an increase in economic results. Marketing innovation capacity allows obtaining the market performance that leads to the financial performance.

Limitations and direction for future research

This study indicates that marketing innovation capacity is relevant to reach positive outcomes. Establishing that only marketing innovation capacity has influence on a firm's performance would be a misunderstanding of organizational complexity and even results in the model. Thus, the variable is better viewed as representative of the marketing strategy process that contribute to firm performance. It is also important to emphasize that the relationship between marketing performance and financial performance is not so direct. Marketing performance is probably a necessary but not sufficient condition to sustain financial results.

It points to the importance of future studies aimed at understanding the organizational characteristics and other variables of the marketing strategy process that drive the marketing innovation capacity.

The sample covers firms installed in a center of fashion clothes industries. One suggestion is the replication of the study in the same sector, but in another location, to verify if the results can be attributed to the sector in general, independent of regional characteristics.

The study considered jointly small and medium firms, in theirs most important product or product line. Another suggestion is to test the model proposed considering the different sizes of the firms, and also specifying the product line.

The model represents the managers’ perception, characteristic of the construct, the form and source of data collection. An alternative would be to use internal data from the organization, to have access to directly observable secondary data, but it is worth remembering that it is more difficult due to the low adherence of firms.

Managerial implications

According to the results found in the present study, although the limitations are recognized when the inability to generalize the results, some reflections on managerial orientations in the industrial context can be considered.

Findings suggest that renewing practices in product promotion and renewing distribution channels are variables that contribute to marketing innovation capacity. Although they represent expenses and costs management, both are necessary. Product promotion creates consumer incentives to purchase a product and add value for the consumer, and without good distribution, consumers would not be able to acquire goods when and where they need them (Ferrel and Harline, 2011).

One way to renewing a product promotion is a multimedia adoption, as well as a variety of web and social networking tool. Also, by means of adoption of new concepts for the promotion of goods and services of a company, use of expressively different communication techniques, development and introduction of a new brand symbol and the development of loyalty programs.
Renewing distribution channels can be done by selling through their own outlet stores or websites, as an alternative to traditional distribution channels. Also, introducing for the first time a franchising system of direct sale or exclusive retail, and licensing of products.

Marketing innovation is not directly related to financial performance. So, even though the manager seeks economic results, he has to monitor the variables related to market performance, like satisfaction and value perception of client.

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