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**Loyalty and performance: an empirical analysis of a cooperative banking network**

Daniel Côté  
(Principal author - correspondence)  
Daniel.cote@hec.ca  
Professor of Strategy, HEC Montréal  
3 000, chemin de la Cote-Sainte-Catherine  
Montreal, Quebec, Canada  
H3T 2A7

Adil Belhouari  
Research Assistant, HEC Montréal  
3 000, chemin de la Cote-Sainte-Catherine  
Montreal, Quebec, Canada  
H3T 2A7

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### **Abstract**

In this article, we analyze the relationship between market orientation, competitive position, loyalty and corporate financial performance. The empirical analysis, based on a structural equation approach, is conducted in a cooperative context. Our model is based on the resource approach and integrates operational inputs, strategic profile, competitive position, customer loyalty and company performance (sales growth and profitability). The results obtained support the link between market orientation strategy and firm performance in a cooperative context (banking sector), while the mediating role of loyalty in relation to strategic dimensions is demonstrated.

In this paper, we analyse the relation between a market orientation approach, a positional advantage, customer loyalty and firm's performance. Our empirical analysis, based on structural equation estimation, is conducted in a co-operative context. The model tested includes operational inputs, the strategic profile, the positional advantage, a factual measure of customer loyalty leading to firm's performance (sales growth and profitability). Our results support the links between market orientation and firm performance in a co-operative context (banking sector) and the role of loyalty as a mediating factor relatively to the strategic dimensions taken into consideration.

## **Introduction**

In this article, we pursue two main objectives. While the relationship between market orientation and corporate performance has been the subject of numerous publications (Kirca, Jayachandran and Bearden, 2005, Ellis, 2006), the link between market orientation, competitive advantage and organizational performance has been little investigated to date (Hult and Ketchen, 2001, Langerak, 2003). In this article, while integrating the key components of the cultural (Narver and Slater, 1990) and behavioral (Jaworski and Kohli, 1993) perspectives widely used in work to date, we propose a more comprehensive strategic formulation, thus facilitating its implementation. We measure customer loyalty, the consequence of a market-oriented strategy, from the firm's point of view (i.e., it does not simply express a behavioral intention). Conceptualized as a strategic asset based on the resource approach, we demonstrate the mediating role of the customer loyalty variables strategic profile and competitive position in relation to firm performance.

We also test the link between market orientation, loyalty and performance in a cooperative context. While this relationship has been widely demonstrated in the context of share-capital enterprises, no empirical study has addressed this question for cooperative-type organizations. It is important to analyze the antecedents and consequences of market orientation in different cultural and business contexts (Kirca, Jayachandran and Bearden, 2005). Given their importance, particularly in the banking sector, this hypothesis deserves to be validated. This type of organization is all the more interesting to analyze as it has been demonstrated that a market-oriented culture is necessary for a company to implement this type of strategy (Homburg and Pflesser, 2001). It therefore becomes possible to rethink the strategic importance of values, purpose and cooperative principles at the heart of the culture of this type of organization from a different perspective, particularly when it has been demonstrated that there is a strong convergence between the foundations of loyalty and the foundations of cooperative identity (Côté, 2005 and 2007).

In the 1<sup>e</sup> part of this article, we present a brief review of the literature, with particular emphasis on the different approaches adopted to model and validate the market orientation-loyalty-performance relationship. The second part introduces the conceptual framework developed for the purposes of this research. The methodology and empirical results are then presented. Finally, the implications of our results for managers are discussed, as are the limitations of our research.

## **Literature review**

Various approaches have been developed over the past 20 years to analyze the relationship between market-oriented strategy and corporate performance. The work of Narver and Slater (1990) and Jaworski and Kohli (1993) is a key reference. Two meta-analyses<sup>1</sup> (Kirca, Jayachandran and Bearden, 2005, Ellis, 2006) take stock of this work and the numerous empirical studies it has inspired.

Two perspectives on market orientation strategy were highlighted. Narver and Slater (1990) emphasize a cultural perspective, with norms and values encouraging behaviors consistent with market orientation. These authors emphasize the priority given to the creation and maintenance of superior value delivered to the customer, incentives for employees to develop and use market

information, understanding customer needs and the competition, and inter-departmental coordination (Hult, Ketchen and Slater, 2005). The behavioral perspective (Jaworski and Kohli, 1993) focuses on organizational activities related to generating, disseminating and responding to market intelligence (Kirca, Jaychandran and Bearden, 2005).

Drawing on work using Jaworski and Kohli's (1993) perspective, Kirca, Jaychandran and Bearden (2005) select the most cited antecedents and consequences, namely senior managers' emphasis on market orientation, the extent of formal and informal contacts between employees in different departments and information sharing, as well as organizational systems such as centralization, compensation and employee training based on market orientation. Four mediating variables were identified and empirically validated: customer satisfaction, customer loyalty, innovativeness and product/service quality. The meta-analysis by Kirca, Jaychandran and Bearden (2005) supports the validity of antecedents and mediating variables on company performance, in terms of profits, sales and market share. Finally, this meta-analysis also supports the hypothesis of positive impacts on employee commitment, team spirit, job satisfaction and conflict reduction.

The results of Ellis' (2006) meta-analysis confirm those of Kirca, Jaychandran and Bearden (2005). A few additional conclusions emerge, however. Studies using Narver and Slater's approach show a lower impact on company performance than those using Jaworski and Kohli's approach. Having distinguished studies conducted in different contexts, Ellis concludes that countries with similar characteristics to the USA have similar empirical results. Ellis (2006) thus confirms the universal nature of the link between market orientation and the performance of share-capital companies.

In a recent publication, Hult, Ketchen and Slater (2005) present the results of research based on an integration of the two approaches (Narver and Slater, Jaworski and Kohli). In this study, these authors draw on the resource approach and test the hypothesis that the selected antecedents converge to create a unique strategic resource that is difficult to replicate and provides a foundation for superior performance. Market orientation (MO) is composed of customer orientation, competitor orientation and interdepartmental coordination. This variable (OM) reflects the approach developed by Narver and Slater (1990), while market information (MI) is based on the understanding of customer needs, the dissemination of this information throughout the organization and the process of interpreting this information, and is in line with the perspective put forward by Jaworski and Kohli (1993). The ability to respond (to customer needs, to competitor actions) mediates OM and IM to influence company performance. Thus, the dual perspective is necessary to support market orientation and the link with corporate performance.

Building on Narver and Slater's (1990) cultural approach, Homburg and Pflesser (2000) add to our understanding of this relationship by modeling corporate culture (values, norms, artifacts and behaviors) as an antecedent of corporate performance. In particular, they emphasize the importance of shared values such as open internal communication, quality and competence, speed of execution, interdepartmental cooperation, innovation and flexibility, employee empowerment in a decentralized context, and employee appreciation. The model thus developed is empirically validated, while the values, norms, artifacts and behaviors that support a market orientation have a positive impact on market performance (customer satisfaction and market share) as well as financial performance (return on sales).

In addition to the relationship between market orientation and company performance (market and financial), two studies have also introduced the "competitive positioning" variable. Hult and Ketchen (2001) argue that market orientation is one of the capabilities that gives companies a positional advantage, enabling superior performance. According to these authors, market orientation, combined with entrepreneurship, innovation and organizational learning, provides a rare, valuable and hard-to-imitate positional advantage, leading to superior performance. Drawing on the resource approach, these authors argue that the 4 capabilities mentioned can collectively contribute to the creation of a unique resource. The "market orientation" capability seeks to understand the latent and explicit needs of consumers, so as to develop a superior solution to meet those needs. Of the 4 capabilities taken into account, market orientation has the greatest impact in explaining the positional advantage defined as a latent (unobserved) variable. Hult and Ketchen (2001) therefore conclude that market orientation must be taken into account in strategy research to explain company performance, and that market orientation analysis is as much the domain of strategy as of marketing.

Recognizing the lack of (explicit) investigation of the relationship between market orientation, positional advantage and organizational performance, and drawing on the cultural perspective (Narver and Slater, 1990), Langerak (2003) proposes a model where positional advantage is based on differentiation and cost. Langerak concludes that a market orientation has a significant and positive impact on the company's differentiation capability, while the impact of such a strategy on the cost position is not supported. Positional advantage based on differentiation has a significant and positive influence on company performance.

### **Theoretical model**

The model (fig. 1) estimated for this article is based on the resource approach. Resource theory is a theory of competitive advantage in which the difference in performance is based on the difference in efficiency. This theoretical framework provides us with an explanation based on the level of resources that support a persistent and different degree of performance from one firm to another (Peteraf and Barney, 2003). Firms have very distinct resource profiles. They reflect a collection of physical and intangible assets and capabilities. Valuable resources can be organizational skills embedded in routines, processes and corporate culture (Collis and Montgomery, 1995).

### **Figure 1: proposed model**

In line with recent work on the links between loyalty and performance, we have developed a model (fig. 1) that integrates both operational and strategic dimensions. Most firms are unable to link their operational inputs and strategic profile, and the measurement of loyalty to performance, via statistical analysis. Without explicit links between these variables, they cannot be sure of the best resource allocation strategy to improve service quality, satisfaction and loyalty (Kamakura, Mittal, Rosa and Mazzan, 2002). Very little research has taken these variables into account, integrating them into the analysis of the relationship between satisfaction/loyalty and company performance (Mittal, Anderson, Sayrak and Padikanalla, 2005).

*Loyalty*

In the context of the resource approach, we approach loyalty as a strategic resource, an intangible asset. The antecedents of loyalty are well known. Research over the past 20 years has established the links between loyalty, satisfaction, trust, service quality, perceived value, etc. (Zeithaml, 2000, Cronin, Brady and Hult, 2000). Trust is a key determinant of relational commitment (Morgan and Hunt, 1994). According to these authors, trust is key because it encourages the preservation of investment in the relationship through cooperation between exchange partners. It encourages resistance to short-term alternatives in favor of the long-term benefits of remaining with current partners, and ensures that the partner will not engage in opportunistic behavior. Trust (and commitment) thus reinforces effectiveness, productivity and efficiency, as well as cooperative behavior between partners (Morgan and Hunt, 1994). It is built around two facets: first, trust in the behaviors of employees in contact during service delivery, and trust based on the policies and practices that govern exchanges (Sirdeshmukh, D., J. Singh and B. Sabol, 2002, Chiou, J.S., C, Droge and S. Hanvanich, 2002). Trust, and hence the loyalty it engenders, is therefore a reflection of corporate culture, processes and routines, and therefore an intangible asset.

Loyalty as a strategic asset will have a positive impact on the company's level of recurring performance.

H1: **loyalty** will have a positive effect on company performance (revenues and profits), as well as mediating competitive position, strategic profile and operational inputs

*Strategic profile: customer focus*

Traditionally, a firm's strategic profile adopts a dominant perspective, either one based on the pursuit of greater efficiency (internal perspective), or one based on the pursuit of increased revenues through improved service quality leading to increased customer satisfaction (external perspective). Both perspectives are recognized to have a positive impact on the firm's financial performance (Rust, Moorman and Dickson, 2002, Mittal, Anderson, Sayrak and Padikanalla, 2005). It is also possible to envisage a strategic approach that includes the dual perspective (Mittal, Anderson, Sayrak and Padikanalla, 2005). Very few firms, however, have the ability to implement this dual strategic approach, because each is attached to a different organizational philosophy, while each firm adopts a dominant culture, either seeking greater efficiency through standardization, or increasing revenues through the customization of products and services (Kamakura, Mittal, Rosa and Mazzan, 2002, Rust, Moorman and Dickson, 2002).

In our research, we take the view that organizations with a "market-oriented" culture will be successful. These companies have the ability to anticipate customer needs, and respond with a superior service offering (Kirca, Jaychandran and Bearden, 2005, Ellis, 2006).

A market-oriented company will be strongly committed to market intelligence. It will have developed a culture with the customer as a priority, in both planning and execution. Finally, employees will have consistently demonstrated behaviors and attitudes "geared toward customer satisfaction" as they become accustomed to this philosophy.

H2: the "**market-oriented**" **strategic profile** will have a positive effect on the company's competitive position, loyalty and performance, as well as mediating operational inputs

### *Competitive position*

Traditionally, a firm's positional advantage is based on its ability to differentiate and/or develop a lower-cost position. While Hult and Ketchen (2001) argue that market orientation is a strategic capability that supports such a positional advantage, they do not develop an explicit measure of this variable. Langerak (2003) adds to the overall understanding by positioning differentiation and cost levers as mediating variables for behaviors associated with the cultural perspective developed by Narver and Slater (1990). The empirical results obtained validate only the relationship between market orientation and differentiation position.

In our research, we take the view that the market orientation strategy must be based on a positional advantage based on the ability to differentiate. The superior skills thus developed ensure advantageous deployment (Langerak, 2003). They can be expressed through organizational behaviours and activities based on the fields of competence required to earn customer loyalty. According to Day (1994), the strategic capabilities required to develop a market-oriented organization are superior market sensing skills and superior customer linking skills.

Superior market sensitivity puts the emphasis on learning about customers and competitors, so as to continually perceive future events and trends. The processes for gathering, interpreting and using market information are more systematic and comprehensive than for other organizations. They are based on more active introspection, critical benchmarking, continuous improvement and experimentation, wide distribution of this market intelligence, mutually shared interpretations of this information and access to the collective memory of market intelligence-based learning (Day, 1994).

Superior customer liaison is based on intimate communication and joint problem-solving (rather than negotiation) with the customer, so that individual customer needs are quickly apparent to all, and well-defined procedures are in place to meet them. Added to this is participation in the customer's development process (Day, 1994).

H3: A **competitive position** based on a differentiation advantage will have a positive effect on loyalty and company performance, as well as mediating the strategic profile and operational inputs;

### *Operational inputs*

One of the aims of the proposed strategic model (fig. 1) is to statistically identify which of a multitude of operational inputs affect customer perception attributes and company performance, via strategic orientation and competitive position. The aim is therefore to isolate the key levers that have the strongest influence on both loyalty and company performance (Kamakura, Mittal, Rosa and Mazzon, 2002). The Pearsons correlation matrix confirms the relevance of the operational inputs selected for our analysis.

The operational inputs used include the main production factors of a financial institution, i.e. capital available for expansion, taking into account regulatory standards (national and international), human resources and the automation rate of banking transactions. Human resources and the rate of automation are measured in a productivity ratio (resource performance ratio) relative to the volume of business generated annually (sum of savings collected and loans granted). A second productivity measure is also used, namely the ratio of operating expenses per \$100 of

revenue (interest income and other income, i.e. service charges). The loan loss ratio is also included, as a more cautious approach to business can lead to more limited growth in business volume and revenues, and vice versa.

An increase in the number of employees (**human resources**) is positively correlated with the level of customer satisfaction, particularly in the service sector, as it becomes possible to offer more personalized and differentiated services (Mittal, Anderson, Sayrak and Tadikamalla, 2005).

Moreover, the **automation** factor is complex. It's clear today that technology (ATM, Internet, telephone, etc.) is a key factor in customer relations. By the mid-90s, it had already been established that, in the banking sector, around 50% of transactions with individuals were carried out without the support of an employee (Meuter, Ostrom, Roundtree and Bitner, 2000). Technology has thus become a critical component of customer-business interaction, representing a fundamental shift, particularly in the service sector. Parasuraman and Grewal (2000) question the impact of technologies on the consumer via service quality and the perception of value received. While the introduction of technologies was primarily aimed at reducing production costs, the impact on the consumer is variable, since technologies can also improve service quality. Technologies enable both employees and customers to be more efficient in delivering and receiving service. Consumer acceptability is also an important issue. In the banking sector, for example, customers continue to prefer personalized service, while the branch system is still the most popular distribution channel (Curry and Penman, 2004).

The work of Meuter, Ostrom, Roundtree and Bitner (2000) provides some answers by analyzing over 1,000 critical incidents in which consumers describe their reaction to the use of technology. According to Meuter, Ostrom, Roundtree and Bitner (2000), consumers identify greater availability, improved benefits obtained through technology (ease of use, time savings, lower cost), etc., as sources of technology-related satisfaction. On the other hand, inability to access the service (malfunctioning equipment or processes), and poor design are recognized sources of dissatisfaction (Meuter, Ostrom, Roundtree and Bitner, 2000).

We therefore hypothesize that automation has a downward impact on service delivery costs, while we can also anticipate an increase in customer satisfaction. As the rate of automation is taken into account in the "**resource performance**" variable, an increase in automation reinforces the impact of an increase in human resources. The "resource performance" variable therefore has a positive impact on company performance.

The increase in a company's business volume and revenues is directly linked to the **expansion capital** held by the financial institution. An increase in expansion capital therefore has a positive effect on company performance.

The **productivity** factor implies an emphasis on cost reduction and reflects an internally-focused preoccupation. A cost-focused approach is more operationally oriented than an exploratory approach, where the emphasis is more customer-oriented (Kamakura, Mittal, Rosa and Mazzon, 2002). Increased productivity implies a reduction in inputs, standardization of products and services, and so on. We can therefore anticipate a decline in customer satisfaction. The net effect



on performance is a negative one, since lower satisfaction should have a negative effect on income levels. On the other hand, lower costs will have a positive impact on profitability.

**Loan losses** have a direct (and negative) impact on a company's profits in the financial sector. When it comes to assessing the link between loan losses and revenue growth, the argument is less clear-cut. A more rigorous approach to credit may have the effect of reducing the growth in the financial institution's business volume. We can therefore anticipate a positive relationship between the size of loan losses and revenue growth, whereas the relationship should prove negative with company surpluses.

### *Contingency factors*

Three contingency factors are retained: size, assets/customer and the environment (rural, urban) in which the financial institution operates. Given the importance of economies of scale in the financial institutions sector, we anticipate that **size** has a positive effect, both on the strategic profile and on the loyalty and performance of the company. A larger branch allows the hiring of a more varied pool of expertise, enabling a more comprehensive service offering. Economies of scale also have an impact on **average assets per customer**, on the understanding that an increase in average assets per customer has a positive effect on company performance as a result of lower transaction costs per volume handled.

Furthermore, the impact of the **environment** variable (rural, urban) is not easy to analyze. We can assume that the rural environment reflects a less intense level of competition, which has the effect of reducing pressure on prices. The rural environment also has an impact on the degree of loyalty, given the relative size of communities, the greater attachment to local institutions, and so on. This should improve company performance. On the other hand, access to expertise is more difficult in rural areas, leading to a negative effect on the company's strategic orientation and competitive position. We therefore need to explore this relationship within the framework of a global model to assess the net effect on company performance.

### **Measuring variables**

The data used to test the model (fig. 1) came from two sources. A survey was carried out in 184 branches, randomly selected from all branches in operation at the time of the survey, of a major financial institution in Quebec. Given the scope of the questionnaire, each branch general manager was invited (by telephone) to participate. 51 questionnaires were returned, duly completed. The response rate for the 184 branches contacted was 28%, while the sampling rate is over 25% (which is statistically acceptable for a representative sample at the 95% confidence level). The questionnaire submitted was developed in such a way as to reveal the strategic profile formulated and the competitive position of each branch. A Likert scale from 1 to 5 was used to measure the various items included in the questionnaire. The questionnaire was validated with 5 branch managers to ensure its relevance. Our methodology is in line with numerous research studies on strategy formulation where a key informant is invited to collaborate (Slater, Olson and Hult, 2006).

A second source of information was used for quantifiable data such as expansion capital, resource performance, productivity levels, loan losses, performance levels (surplus and income) and loyalty

measurements. Quantitative data for these variables were provided by the financial institution's head office for all branches participating in the survey. These variables are therefore measured in a uniform manner.

The **strategic profile** of each branch is constructed from the results of the branch survey. Thanks to an exploratory factor analysis, the following five dimensions are retained as a measure of the strategic profile: consistency of values, orientation towards customer satisfaction, business proposition, reinforcement of employee commitment to customer satisfaction, and market intelligence focused on a better understanding of customer needs. Table 1 presents the results of the factor analysis supporting our selection of the dimensions retained<sup>ii</sup>. These dimensions are structurally correlated (factor loading) in a "strategic profile" factor. The reliability of the factor measurement is validated with a Cronbach's alpha of 0.811 (see Table 1).

**Competitive position** is also constructed from data collected during the branch survey. Table 2 shows the results of the exploratory factor analysis, which identified the relevant dimensions<sup>iii</sup>. The following dimensions were selected (compared to the main competitor): competitive position for consulting skills, branch and employee leeway, employee loyalty and after-sales service, the sales relationship and values deployed (particularly on a social and collective level). These dimensions are structurally correlated (factor loading) in a "competitive position" factor. The reliability of the factor measurement is validated with a Cronbach's alpha of 0.826 (see Table 2).

For the **loyalty** variable, we use two indicators, i.e. the IN/OUT ratio and the mortgage renewal rate. The IN/OUT ratio corresponds to the volume of savings (tax-deferred savings) gained from the competition versus the volume of savings lost to the competition. This measure of loyalty (on savings) only takes into account the largest (and most stable) component of savings (30%). Other types of savings are not subject to an equivalent measure. As with savings, mortgages account for only 40% of credit granted. There is no equivalent measure for other (less stable) credit measures. Rather than basing our statistical analysis on a measure of loyalty based on intention to continue with the financial institution, we therefore use a measure of loyalty based on a concrete outcome, at branch level. Loyalty measured in this way is important given the limitations of an intention-based measure (Oliver, 1999, Palmatier et al., 2006).

The "**income**" variable corresponds to net interest income plus other income, while the "**profits**" variable corresponds to pre-tax surplus divided by average assets multiplied by 100.

## **Methodology and results**

Data analysis is based on the two-step process recommended by Anderson and Gerbing (1988). First, we need to validate the psychometric properties of the latent variables constructed using exploratory factor analysis (see Tables 1 and 2 and Appendix 1). Exploratory factor analysis is therefore used to capture the relevant factors for the "strategic orientation" and "competitive position" variables. The reliability and internal consistency of the constructs are based on Cronbach's alpha analysis.

### **Table 1: Strategic profile**

**Table 2: Competitive position**

Since our aim is to determine the causal connectivity between the variables in the model (Fig. 1), evaluating the model as a whole is a priority. We employ structural equation modeling for a more robust examination of assumptions. An emerging consensus in structural equation modeling is that researchers should compare rival models, not just test a single proposed model (Bollen and Long, 1992, Morgan and Hunt, 1994, Gounaris, 2005). Given the mediating role of loyalty and strategic orientation in our integrated model, we choose a model without mediating variables as a conceptual alternative (fig. 2). In this model, operational inputs, strategic orientation and loyalty are positioned as exogenous variables, so as to have only a direct effect on company performance. So, to test the hypotheses presented, we use the LISREL method.

However, validity indices are not sufficient to confirm a strong relationship between model variables. It is possible to have excellent results (indices) while having a low correlation between variables. Indices eliminate bad models, but do not indicate good models. It is therefore important to study the gamma coefficients (number and t-value) as well as the R-values<sup>2</sup> to assess the strength of the model. We also need to validate whether any direct effects having an impact on the endogenous variable are omitted in the proposed model.

**Figure 2: rival model**

Table 3 presents the descriptive statistics of the variables measured for the purposes of this research.

**Table 3: Descriptive statistics****Table 4 - Correlation matrix**

Comparison with the rival model is based on the difference between Chi<sup>2</sup> values, but given its sensitivity to sample size, a selection of indices is also reported. The suitability of the model is validated using the CFI, NFI and RFI indices, which are recommended for their relative stability and insensitivity to sample size (Cronin, Brady and Hult, 2000). The model's relative ability to explain the variance of the performance variables (revenues and profits) is also measured by the R value<sup>2</sup>. On the basis of these indices, it is therefore possible to compare models and determine the best one.

**Table 5: Validity and performance indices of estimated models**

The results presented in Table 5 clearly illustrate that both estimated models are valid (Chi<sup>2</sup>) and statistically significant (p-value) at 99.999% for the proposed model and 95% for the rival model. The quality indices (CFI, NFI, RFI) and the measure of model performance (R<sup>2</sup>) also demonstrate the superiority of the proposed model over the rival model.

We also consider the % of assumptions supported and the number of coefficients that are statistically significant. Table 6 shows the results of the proposed model, with all coefficients (except one) found to be statistically significant.

**Table 6:** Coefficients of the variables in the proposed model and Student's t test statistics

The results presented in tables # 5 and 6 support the following conclusions:

- Validity indicators ( $\chi^2 / df$ ) and performance indicators (CFI, NFI and RFI) are generally very high, exceeding 90% for the proposed model. It should also be noted that model 1 manages to explain 90% of the variance in the target variable (profit level). Only the proposed model is significant at 99.9%. The results therefore confirm that the proposed model (fig. 1) represents a better quality of explanation. The proposed model (fig. 1) succeeds in taking into account operational dimensions as well as strategic profile, competitive position and contingency factors. The structural equation model thus confirms the conceptualization of the loyalty-performance relationship (revenues and profits) within a global framework, while all variables are measured at company level.
- Although the structural analysis validates the conceptualization of the proposed model, the analysis of the identified coefficients (sign and statistical validation) provides us with a more comprehensive test. All 45 estimated coefficients (direct and indirect effects) are supported (except one), having a statistically significant "t" value.
- Having demonstrated the superiority of the proposed model, what about the main hypotheses put forward?
  - Hypothesis 1 is validated, since the coefficients obtained (direct and indirect effects) for the loyalty variable are all significant and positive. The mediating role of the loyalty variable is validated by the superiority of the proposed model over the rival model.
  - Hypothesis 2 is also validated. The "strategic profile" variable has a direct effect on competitive position and indirect effects on revenues and profits, all of which are positive and statistically significant. The mediating role of the strategic profile is also validated by the superiority of the proposed model over the rival model.
  - Hypothesis 3 is also validated. The "competitive position" variable shows a positive and statistically significant direct effect on the loyalty variable. Indirect effects on company performance variables are also positive and statistically significant. The mediating role of competitive position is also validated by the superiority of the proposed model over the rival model.

Finally, the relevance of the proposed model to the theoretical underpinnings that support it adds to the superiority of the model (fig. 1) compared to the rival model.

### **Mediation vs. moderation tests**

Multiple tests were carried out to validate the *mediational* aspect of the relationships existing between the different concepts studied. To do this, three linear regressions were carried out (Baron and Kenny, 1986) in order to confirm the following three conditions:

- 1- A significant effect of the independent variable on the mediator variable, in the first equation;
- 2- A significant effect of the independent variable on the dependent variable, in the second equation;
- 3- And also, a significant and greater effect of the mediator variable on the dependent variable.

Baron and Kenny (1986) indicate that perfect mediation is possible if the effect of the independent variable on the dependent variable is almost zero when the mediating variable is controlled.

Below are the results of the tests carried out, which confirm the mediational relationship between the various concepts in the model:

**Table 7:** Mediation vs. moderation

### **Discussion and implications**

In this paper, we propose a model that aims at a better understanding of the relationship between market orientation, competitive position, loyalty and firm performance, while integrating operational inputs as well as size, assets per customer and environment as contingency factors. Our results clearly demonstrate the importance of loyalty as a strategic resource in explaining firm performance, in a context of global estimation. We are thus responding to a research need. Identifying mediation mechanisms and effects (direct and indirect) is essential for implementing a "customer-oriented" strategy. Few studies have focused on both strategic and operational aspects, and the interactions between these two levels are rarely formalized (Kamakura, Mittal, Rosa and Mazzon, 2002). Our contribution in this article is in line with this perspective.

Furthermore, our results provide empirical support for the theoretical arguments that the dual perspective at the heart of market orientation strategy - cultural (Narver and Slater) and behavioural (Jaworski and Kohli) - is necessary to ensure its success. The strategic profile drawn from our survey of branch general managers illustrates the importance of values shared with all stakeholders, i.e. customers, employees and the public. These values must be integrated into all the company's business practices. Delivering superior value to customers is based on transparent practices, keeping promises, innovating, adapting and customizing to customer needs. Emphasis on customer satisfaction is integrated into branch-wide objectives and action plans, while employee behavior towards this priority is reinforced by senior management, who recognize, value and reward innovative ideas in this direction. Finally, market intelligence is fuelled by market research, interviews, sustained dialogue and privileged relationships between advisors and customers.

The competitive position measured empirically in our research illustrates the differentiation advantage that leads to superior performance. Here, differentiation is based on employee skills and the multidisciplinary nature of 1<sup>o</sup> line teams, the various levers for mobilizing staff (autonomy, delegation of authority, empowerment, participation, etc.), speed of service, databases, branch reputation and after-sales service. Factor analyses carried out on these items show that they are significantly correlated.

We also validate the impact of the "market orientation" strategy and the loyalty factor on the performance of the cooperative enterprise in a competitive context. Loyalty as a performance factor is key when we recognize the natural convergence between the foundations of cooperative identity and those of loyalty (Côté, 2005, 2007). It is all the more important to address the strategic issues facing cooperative organizations in a competitive context, as a strong trend towards mimicry and demutualization is clearly observable, particularly in the major mature sectors (banking, agri-food, consumer, insurance). Cooperative managers will therefore find in these results an incentive to formulate a strategy consistent with cooperative values and principles. Strengthening the cooperative identity can thus be approached as a strategic lever leading to better performance.

## **Limitations**

The results of our research are based on a single sector, which limits the scope of our conclusions. Furthermore, in order to estimate the proposed model, we needed to obtain company-wide data. Although our data reflect the performance of 51 different branches, they are all part of the same network. This accentuates the limitations and generalizability of our analysis.

The non-linear nature of the relationship between loyalty and performance (Anderson and Mittal, 2000) is not taken into account in our model. However, non-linearity may vary from one branch to another (Kamakura, Mittal, Rosa and Mazzon, 2002), leading to erroneous results. Unlike Kamakura, Mittal, Rosa and Mazzon, (2002), we do not correct for this phenomenon by incorporating an efficiency frontier, which limits the accuracy of our results.

It is also worth mentioning that our data reflect the situation of each branch for one year only. Since loyalty is a long-term behavior, the inclusion of longitudinal data would strengthen the scope of our conclusions, particularly as regards the nature of the causal links between the variables in the model.

Several additional factors need to be incorporated into such a model. The level of competition to which each branch is subject would certainly have a moderating effect on the parameters of the estimated model. Moreover, since the companies in our sample are part of an integrated network, the strategic choices made at head office level will certainly have a decisive influence on strategic choices at branch level. Nevertheless, the strategic profile, competitive position and operational inputs measured at branch level show significant differences. Important operational inputs such as advertising and promotions, the cost of acquiring new customers, the characteristics of the customers served, etc. are not taken into account. Finally, it would have been relevant to distinguish between human resources and the rate of automation, but this was not possible given the data to which we have access.

## **Conclusion**

The model estimated in this research incorporates both operational and strategic dimensions, as well as contingency factors, to analyze the link between loyalty and company performance. Using a structural equation approach, we demonstrate the positive relationship between loyalty, revenues and company surpluses.

We also approach loyalty within the framework of resource theory. Here, loyalty is seen as a strategic asset that helps explain performance differences between companies. Loyalty is thus seen as an intangible strategic asset in a company's distinct profile. In terms of strategy, we also demonstrate the impact of customer orientation as a common thread running through a company's strategic profile and competitive position. These results reinforce the findings of recent work on both the loyalty-performance relationship, but also shed additional light on the key factors of strategic orientation and competitive position, thus helping to guide the efforts of managers interested in this strategic approach. Our results support the mediating role of the loyalty variable, as well as of the "strategic profile" and "competitive position" variables.

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Figures and tables to be integrated into the text

Figure 1: proposed model

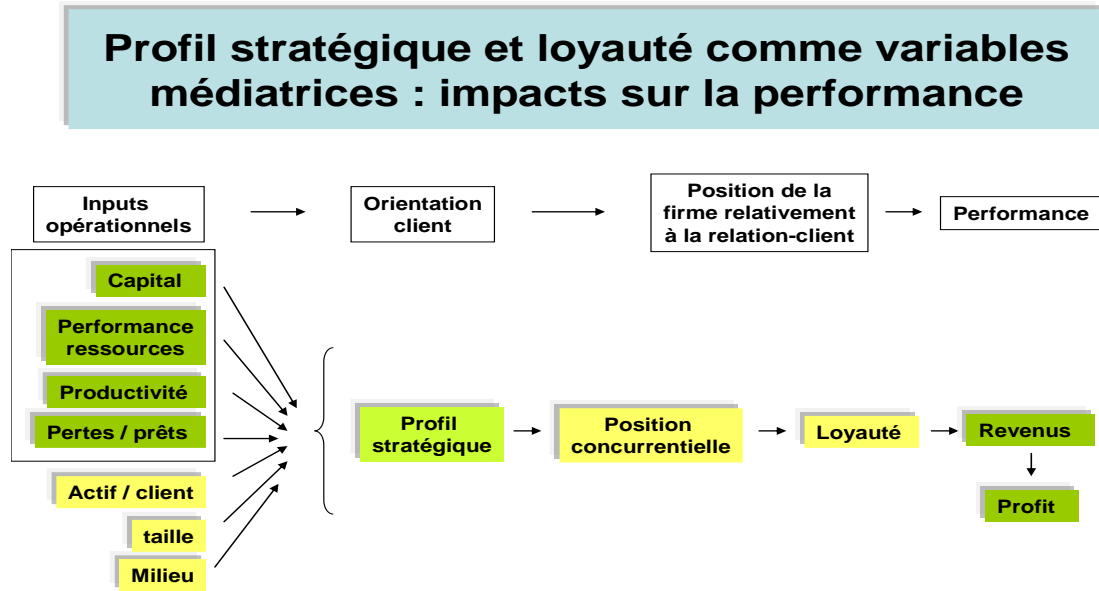


Table 1: Strategic profile

Consistent values	,827
Market intelligence and customer knowledge	,788
Focus on customer satisfaction	,730
Business proposal	,846
Strengthening employee commitment to customer satisfaction	,576
KMO	,701
Cronbach's Alpha	,811

Table 2: Competitive position

Your branch's position and consulting expertise	,735
Your branch's position and room for manoeuvre	,731
Your branch's position, participation and after-sales service	,846
Your branch's position and sales relationship	,712
Your branch's position and share classes	,815
KMO	,791
Cronbach's Alpha	,826

Figure 2: rival model

## Profil stratégique et loyauté : impacts sur la performance

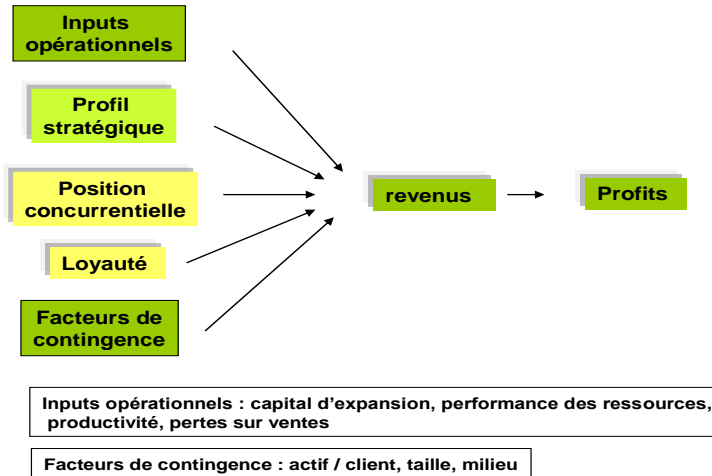


Table 3: Descriptive statistics

	Average	Standard deviation
<i>A- Branch capital</i>	7.94	1.03
<i>B- Performance - resources</i>	52.70	30.66
<i>C- Productivity</i>	65.07	7.30
<i>D- Loan losses</i>	0.70	0.19
<i>E- Assets by customer</i>	14128.61	3878.00
<i>F- Branch size</i>	111, 855,767.26	8, 337,466.34
<i>G- Environment</i>	0.88	0.86
<i>H- Strategic profile</i>	2.00	0.47
<i>I- Competitive position</i>	2.70	0.42
<i>J- Loyalty</i>	10.67	4.43
<i>K- revenues</i>	55.39	27.86
<i>L- Profits</i>	1.25	0.41

**Table 4:** correlation matrix

	A	B	C	D	E	F	G	H	I	J	K
<b>A- Branch capital</b>	1										
<b>B- Performance - resources</b>	0.04	1									
<b>C- Productivity</b>	-0.54	-0.45	1								
<b>D- Loss on loans</b>	-0.32	-0.02	-0.01	1							
<b>E- Assets by customer</b>	-0.10	0.50	-0.42	-0.02	1						
<b>F- Branch size</b>	-0.13	0.17	-0.10	-0.01	0.04	1					
<b>G- Environment</b>	-0.12	0.10	0.10	-0.18	-0.23	0.59	1				
<b>H- Strategic profile: Average score</b>	-0.01	-0.07	-0.09	0.22	0.07	0.20	0.05	1			
<b>I- Competitive position: Average score</b>	0.05	-0.02	-0.15	-0.01	0.10	-0.09	-0.13	0.41	1		
<b>J- Loyalty</b>	0.18	0.15	-0.25	-0.03	0.17	-0.28	-0.50	0.07	0.54	1	
<b>K- revenues</b>	0.14	0.39	-0.27	-0.02	0.27	-0.01	-0.13	-0.01	0.33	0.46	1
<b>L- Surplus</b>	0.69	0.21	-0.84	-0.27	0.05	-0.01	-0.14	0.01	0.22	0.35	0.24

**Table 5:** Validity and performance indices of estimated models

	<b>Suggested model</b>	<b>Rival model</b>
Chi <sup>2</sup> / df	729 / 600	924 / 408
p-value	0.000001	0,045
CFI	0.91	0,80
NFI	0.91	0,80
RFI	0.91	0,79
R <sup>2</sup>	0.90	0,692

**Table 6:** Coefficients of the variables in the proposed model and Student's t test statistics

	<b>Suggested model</b>
<b>Direct effects</b>	
Capital - Strategic profile	2.73 (3.38)
Resource performance - Strategic profile	3.98 (5.02)
Productivity - Strategic profile	-2.11 (2.64)
Losses / loans - Strategic profile	1.45 (2.48)
Assets / customers - Strategic profile	2.68 (3.32)
Size - Strategic profile	2.41 (2.96)

Environment - Strategic profile	1.21 (2.34)
Strategic profile - Competitive position	3.15 (4.27)
Competitive position - Loyalty	3.01 (4.11)
Loyalty - Income	3.48 (4.61)
Income - Surplus	5.17 (6.05)
<b>Indirect effects (via strategic profile and loyalty)</b>	
Capital - Competitive position	2.04 (2.51)
Resource performance - Competitive position	3.66 (4.83)
Productivity - Competitive position	-1.91 (2.87)
Losses / loans - Competitive position	1.18 (2.26)
Assets / customers - Competitive position	2.27 (2.73)
Size - Competitive position	2.35 (2.95)
Environment - Competitive position	1.41 (2.43)
Capital - Loyalty	2.16 (2.69)
Resource performance - Loyalty	3.75 (4.92)
Productivity - Loyalty	-2.22 (2.71)
Loss / loans - Loyalty	1.39 (2.38)
Assets / Customers - Loyalty	2.65 (3.27)
Size - Loyalty	2.18 (2.70)
Environment - Loyalty	1.18 (2.25)
Capital - Income	2.09 (2.61)
Resource performance - Revenues	3.76 (4.88)
Productivity - Revenues	-2.09 (2.57)
Losses / loans - Income	-1.48 (2.52)
Assets / Customers - Revenues	2.33 (2.91)
Size - Income	1.46 (2.50)
Environment - Income	2.01 (2.55)
Capital - Surplus	2.06 (2.61)
Resource performance - Surplus	3.79 (4.94)
Productivity - Surplus	2.71 (3.34)
Losses / loans - Surplus	1.39 (2.41)
Assets / Customers - Surplus	2.18 (2.72)
Size - Surplus	2.65 (3.19)
Middle - Surplus	2.28 (2.91)
Strategic profile - Loyalty	3.02 (4.12)
Strategic profile - Revenues	2.35 (2.94)
Strategic profile - Surplus	2.77 (3.42)

Competitive position - Revenues	2.68 (3.32)
Competitive position - Surplus	2.81 (3.57)
Loyalty - Surplus	3.88 (5.06)

**Table 7:** Mediation vs. moderation

Explanatory variable		Variable explained	Sign.	R <sup>2</sup>
Profilstrat	to	Posit_concur	0.003	0.166
Posit_concur	to	loyalty	0	0.294
Profilstrat	to	loyalty	0.613	0.005
Loyalty	to	Sales	0.001	0.208
Posit_concur	to	Sales	0.019	0.107
Loyalty	to	Surplus	0.012	0.122
Posit_concur	to	Surplus	0.13	0.046

**Appendix 1:** latent variables and selected items

**Strategic profile" factor: selected items**

Strategic profile and consistency of values

1. Value-driven decisions	,671
2. Branches perceived by customers as behaving in line with their values	,864
3. .... by its employees	,775
4. .... by the general public	,816
5. Values are respected in all management practices	,683
KMO	,790
Cronbach's Alpha	,820

Strategic profile and market intelligence

1. Market research and socio-demographic characteristics	,754
2. In-depth one-on-one interviews with key customers	,811
3. You don't presume to know your customers' needs better than they do	,709
4. Customers are encouraged to send in their comments and suggestions	,691
5. Advisors develop privileged relationships with customers by collaborating with them	,776
KMO	,808
Cronbach's Alpha	,804

Strategic profile and focus on customer satisfaction

1. Your customers recognize that your branch offers exceptional service	,683
2. You set targets for customer satisfaction and loyalty	,810
3. You implement an action plan to achieve these objectives	,835
4. Customer satisfaction and loyalty are integrated into all branch activities	,828
KMO	,776
Cronbach's Alpha	,799

#### Strategic profile and business proposal

1. The product and service offering is based on accurate, clear and transparent information	,754
2. You keep your promises to your customers	,682
3. Your branch focuses on innovations that customers don't expect, but which delight them.	,675
4. Adapt and personalize your service offering to your customers' needs	,747
5. You offer the best possible terms to customers renewing a loan or investment	,743
KMO	,702
Cronbach's Alpha	,768

#### Strategic profile and strengthening employee commitment to satisfaction

1. You reinforce your employees' commitment to customer satisfaction by recognizing and rewarding their actions in this direction.	
2. You encourage, publicize and reward your employees' innovative ideas	
Cronbach's Alpha	,770

### **Competitive position compared with your main competitor: selected items**

#### Competitive position and competence of advisors

1. For quality consulting services	
2. For employee competence	
Cronbach's Alpha	,806

#### Competitive position and room for maneuver

1. Autonomy for your branch	,734
2. Delegation of powers to employees	,794
3. Relationships	,718
4. Room for manoeuvre	,797
KMO	,763
Cronbach's Alpha	,758

#### Competitive position, participation, loyalty and after-sales service

1. Employee loyalty	,827
2. Employee participation	,885
3. Your branch's reputation	,736
4. After-sales service	,715
KMO	,698
Cronbach's Alpha	,801

#### Competitive position and sales relationships

1. Rapid loan approval	,613
2. ...other services	,748
3. Customer segmentation	,670
4. Multidisciplinary sales teams	,721
5. Canvassing	,771
6. Cross-selling	,639
7. Marketing and advertising	,692
8. Customer files	,829
9. Databases	,778
KMO	,839
Cronbach's Alpha	,883

#### Competitive position and values

1. Social values	,876
2. Economic values	,765
3. Individual values	,876
4. Collective values	,934
KMO	,714
Cronbach's Alpha	,886

<sup>ii</sup>The meta-analysis by Kirca, Jaychandran and Bearden (2005) takes into account the results of 114 studies carried out on this issue. The meta-analysis by Ellis (2006) is based on 160 empirical studies.

<sup>ii</sup> Each of the selected dimensions is itself the result of a factorial analysis. See Appendix 1 for details of the items making up each factor.

<sup>iii</sup> As with the strategic profile, the dimensions selected for the competitive position are themselves the results of factor analyses. See Appendix 1 for details of the items making up each factor.