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## A Suitable 'GPS' for SME's: the Strategic Planning and Organizational Learning Nexus.

**Author:** **Fabiola Baltar**, University of Mar del Plata, Argentina, [fabaltar@mdp.edu.ar](mailto:fabaltar@mdp.edu.ar)

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*The aim of the article is to examine the relationship between organizational learning and strategic planning actions in SMEs. The hypothesis is that those firms that think strategic planning as an organizational learning process may encourage the design of 'long-term objectives', keeping SMEs flexible and adaptive. Thus, it allows the exploitation of opportunities and the accumulation of specific and competitive internal resources. A structural equation model is proposed, based on 147 argentinean SMEs surveys. The main conclusion is that firms involving in strategic planning are more likely to improve knowledge management and increase competitive resources and capabilities.*

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### Introduction

It is well known the importance of small and medium sized enterprises (SMEs) for the contribution to employment, innovation and economic development (Sing et al. 2008). That is why authors have studied several topics related to SMEs's resources, owner's decisions and strategies implemented to survive and develop (Rivard et al. 2006; Vargas and Rangel, 2007). However, there is a negligible contribution on the relationship among strategic planning, decision-making behaviour and organizational learning. In fact, many attributes recognised to SMEs (for example, flexibility, heterogeneity, owner's personality, strategic orientation) are the result of a complex set of member's interactions, objectives, motivations, environments, leadership styles and entrepreneur's attributes, all linked by decisions, information support and 'learning by doing' actions.

Strategic planning refers to the setting of long-term organizational goals, the implementation of those plans to achieve them, and the allocation of resources required for realizing these goals (Stonehouse and Pemberton 2002;

O'Regan and Ghobadian 2004). Thus, strategic planning is about competitive advantage. SMEs that engage in strategic planning is more likely to achieve higher business performance (Carland and Carland 2003; Gibson and Casser, 2005). Despite this, several authors have concluded that, in SMEs, there is a tendency to no planning, short-term operational decisions, and owner's intuition to solve problems (Chaston, 2009). In practice, decision-making in SMEs tends to be reactive rather than proactive, and plans are often *ad hoc* and intuitive rather than formally written (Brouthers, Andriessen and Nicolaes 1998; Stonehouse and Pemberton 2002).

In the new economy context, characterized by dynamic and innovative markets and a great deal of information, it is necessary to examine these beliefs and make a contribution on understanding the importance of strategic planning actions on SMEs' learning capabilities to improve their performance. Huysman et al. (1994:167) argue that traditional theories of strategic planning have based their explanations on a 'set of clearly defined business strategies which take into account business trends and information technology trends'. This prescriptive explanation might be wrong in SMES, characterised by a low level of expertise to map out a long term business perspective. Considering strategic planning as an organizational learning process may encourage the design of 'long-term objectives', keeping SMEs flexible and adaptive. Thus, it would allow the exploitation of market's opportunities and the accumulation of specific and competitive internal resources.

For this, the following research questions are formulated a) What is the relationship between strategic planning and organizational learning in SMES? b) What are the variables associated with strategic planning and organizational learning in SMES? and c) What is considered a suitable strategic planning for SMES? In order to answer the research questions, a survey to 147 argentinean SMEs was administrated. Dimensions related to SMEs strategic planning, information support systems and organizational learning have been measured. The exploratory hypothesis is that although the level of implementation on strategic planning is still low, there is a positively correlation between strategic planning actions and organizational learning in SMES. This relation increases the competitive advantages in the long term (Grover and Segars, 2005).

I believe that the findings of the research bring practical implications for enterprises that regularly make decisions related to internal organization and business strategies. Thus, this descriptive analysis can add further evidence of strategic decisions with SMEs in the context of globalization, information society and new technology developments. In fact, the study of the factors

associated with strategic planning and organizational learning can contribute to the explanations about strategic resources and capabilities advantages among SMEs, capturing the idiosyncratic aspects present in firms that differ significantly from large companies' characteristics.

The paper is structured in three parts. First, we describe the conceptual framework that justifies the key dimensions integrated in the empirical analysis. Second, we present the methodology, the variables used and the analysis techniques. Third, we discuss the main results and, finally, we draw some conclusions and implications of the research.

## **Theoretical framework**

### **Strategic Planning and Dynamic Capabilities Relationship in SMEs.**

In the context of SMEs, many authors argue that there is a strong positively relationship between strategic planning and business performance (Carland and Carland 2003; Gibson and Casser, 2005). However, less development has the study of the links between organizational learning and strategic planning (Huysman et al. 1994). Perhaps, this is because of the use of 'several terms ambiguously and interchangeably in the literature relating to strategy, resulting in a failure to distinguish between the concepts of strategic management, strategic thinking, strategic learning and strategic planning' (Stonehouse and Pemberton, 2002: 853). While strategic thinking is oriented to understand the vision of the organization's leaders about the strategic intent of the business, the strategic learning focuses in the way in which organization's members gather information to support strategies and respond to changes in its internal and external contexts correcting differences between the results achieved and the desired ones (Lima and Filion, 2011). Additionally, strategic planning is defined as the formulation of organizational plans based on flexible and broad objectives intending to manage the firm to its competitive position in the future.

Strategic planning helps managers in gathering information about the critical aspect of their business activities, predicting future scenarios and, finally, in taking decisions (Gibson et al, 2010). The relation between information technology support (IT) and strategic planning focused on the effect of the decision-makers attributes and organizational characteristics on the adoption of IT (Caldeira and Ward, 2003; Dwivedi and Lal, 2007; Levy and Powell, 2003; Riemenschneider et al. 2003, Chuang et al., 2007). Thong (1999) identified four contextual elements that are related to IT adoption: 1) decision makers' characteristics; 2) technological context; 3) organizational culture

and, 4) environmental characteristics.

The reasons why some SMEs get involved in strategic planning while others not, still are not well understood (O'Regan and Ghobadian, 2002). In this sense, the literature have focused on the barriers to strategic planning in SMEs, identifying variables such as the lack of time (Robinson and Pearce, 1984), the lack of expertise or unwillingness to share strategic plans with employees and external consultants (O'Regan and Ghobadian, 2006). Additionally, other variables were considered by authors such as context perception (Shrader, et al. 1995; Yusuf and Saffu, 2005), firm's size (Stonehouse and Pemberton 2002), economic sector (Shrader, Mulford and Blackburn 1989) and internal implementation barriers (O'Regan and Ghobadian, 2004). According with the resources and capabilities theory, strategic planning and is related to internal dynamic capabilities (Jung, 2006). Thus, it gives relevance to organizational learning, as a strategic priority in the SMEs's decision-making process because of its influence on strategic planning development and the achievement of firm's goals.

***H1: SMEs's strategic planning is related to the information technologies support, the proactive behaviour of the owners and formal employee's participation in business decisions.***

Although information is an essential aspect in the new economy context, strategic planning is more than a database supply. Strategic planning and IT adoption are key elements for knowledge construction. As Shee and Lee (2004: 935) claim that 'IT achieve as least two objectives: reduction of uncertainties of knowledge loss derived from variation in employee positions and reduction of dependence on specific personnel and knowledge creation, searching, and diffusion is improved by IT, which increases transmission and response speeds'. In addition, IT facilitates storage and sharing of organizational knowledge. Furthermore, since high IT utilization leads to a reduction of IT application costs, it tends to be a source of competitive advantage'. Thus, gathering accurate information facilitates knowledge creation (socialization and integration of managerial routines improving innovation), knowledge flow (vertical and horizontal flows and the combination of new and old information) and knowledge sharing (dynamic capabilities achieved by the diffusion of skills, experiences and learning by doing) (She and Lee, 2004).

Moreover, organizational learning is defined as the process characterised 'by encoding inferences from history into routines that guide behaviour' (Huysman, 1994:168). Those routines refer to rules, procedures, conventions, strategies and technologies as well as intangible dimensions such

as beliefs, frameworks and culture, etc. (Nelson and Winter, 1982). As Lima and Filion (2011: 2) suggest that organizational learning process is a cyclic process where 'member's actions, perceptions and interpretations of the impacts of context changes provide feedback on the organization's activity system. Positive feedback leads to continuation of the existing action logic, but can also cause the desire to correct 'errors' by adjusting actions governed by that logic'. For this, organizational learning occurs when those actions and perceptions can be reflected in shared maps of the organization available to members to guide their actions. In large companies, this issue is solved by implementing a set of tools and formal procedures that capture the main aspects of business internal, external and performance results (for example balance scoreboard). However, it is necessary to go deeply into this phenomenon in SMEs context.

***H2: A small firm can increase organizational learning when the owners take rational decisions, interact with independent advisors, document previous decisions, formulate formal routines and share knowledge with all members.***

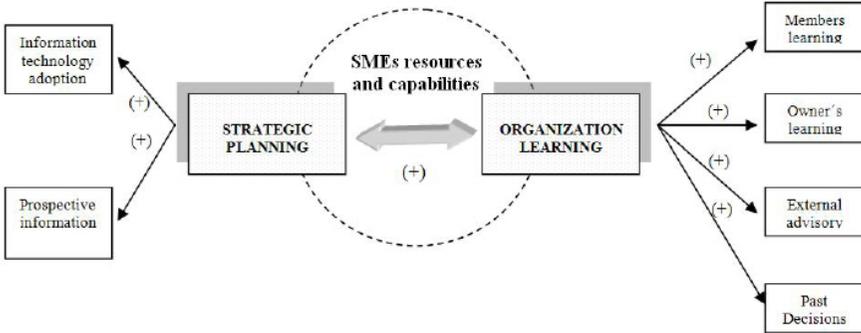
It is widely accepted that there is a direct relationship between strategic planning and organizational learning. However, the causal relationship and its direction is unclear and, ultimately, is irrelevant. For instance, King (1999: 42) considered that human resources are the primary resource for strategic planning because 'informational inputs to IS planning come from users, top management, and the IS planning staff. They are collected from top management and users through a series of interviews in the first phase of the planning process'. On the other hand, some authors have suggested that in order to achieve planning objectives and knowledge sharing is necessary to get involved in strategic planning (Lee and Bai, 2003; Pai and Lee, 2004; Sher and Lee, 2003). Jung (2006) sustains that an effective IT infrastructure and knowledge management can maximize the return on organizational knowledge through continuously creating, accumulating, and sharing information. Current capabilities and routines are conditioned by previous routines, resources, and capabilities. Therefore, the development of dynamic capabilities demands a path-dependent assumption, a double-loop learning practice, and routines to learn routines. These factors develop a solid foundation for incorporating knowledge management into the strategic approach of dynamic capabilities.

***H3: There is a positive correlation between strategic planning and organizational learning. When small firms increase the level of formalization of their routines, adopt information system support and take proactive decisions, they are more likely to improve organizational***

### ***learning and develop strategic resources and capabilities.***

According with the literature a conceptual model analyzing the relationship between strategic planning and organizational learning is proposed and shown in Figure 1.

#### **Conceptual Model of Strategic Planning and Organizational Learning Nexus**



**Figure 1:** Conceptual Model of Strategic Planning and Organizational Learning Nexus

Source: Author's own

## **Research Method**

### ***Sample and Data Collection***

An administered questionnaire was applied to 147 SMEs in Mar del Plata city, Argentina. Mar del Plata is the fifth Argentine city in terms of inhabitants, and it characterizes by a high diversification of economic activities (food and fishing, tourism and commerce, construction, textile and metallurgical industry make the main contribution to local added value) and a prominence of SMEs business. Although this is a convenience sample, it was considered the heterogeneity and its representativeness, including firms of different economic sectors, demographic attributes of the decision-maker (genre, education, age and property), and the firm's size (employment). Four dimensions were considered in the questionnaire: 1) owner's demographic characteristics; 2) characteristics of the decisions (time, type and source); 3) networks and strategies and 4) information technology support. Table 1 and 2 present the variable definitions used in the tested model.

**Table 1:** Indicators of Organizational Learning in SMEs

LATENT VARIABLE	INDICATORS
ORGANIZATIONAL LEARNING	
Related to organizational structure * Existence of a formalized structure (ORG-FORM)	<i>Has the firm a formalized structure of routines and roles? (dichotomous variable)</i> * Yes (1)* No (0)
Related to the decision-maker * Rationality in decision-making (RATIONAL)	<i>What is the most important aspect for taking a decision? (dichotomous variable)</i> * Rational (experience + information) (1) * Intuition (creativity + intuition) (0)
Related to organizational decision learning * Documentation of the decisions (DECI-DOC)	<i>Have you register past decisions implemented in the firm? (dichotomous variable)* Yes (1)* No (0)</i>
Related to external advisor participation in decisions * External advisor's participation in decisions (EXT-ADV)	<i>Do you ask for external advise to take decisions? (dichotomous variable)* Yes (1)* No (0)</i>

Source: Author's own

**Table 2:** Indicators of Strategic Planning Practices in SMEs

LATENT VARIABLE	INDICATORS
STRATEGIC PLANNING SUPPORT	
Use of information technology support (INF-SYS)	<i>Do you use information technology systems for decision support? (dichotomous variable)* Yes (1)* No (0)</i>
Use of prospective information (PROSPECT)	<i>Do you elaborate prospective information for long term decisions? (dichotomous variable)* Yes (1)* No (0)</i>
Use of instruments and firm's indicators for decision support (TOOL-SUP)	<i>Do you base your decisions on technical indicators and instrument support? (dichotomous variable)* Yes (1)* No (0)</i>
Use of tasks reports (REPORTS)	<i>Do you ask for reports of the results? (dichotomous variable)* Yes (1)* No (0)</i>

Source: Author's own

A structural equation modelling analysis (SEM) was applied to test the conceptual model. The software used is EQS 6.0. The path analysis technique was used to establish the structural relations between observed and latent

variables. The structural model has two parts: the measurement model, which relates the latent dimensions with observable indicators (construct validity), and the structural model, which establishes the correlations between the latent dimensions (reliability) (Bentler 2006). The potential of this technique is not given by the significance of the estimators but the weight and direction of the association. Significant estimators represent how the empirical model corresponds to the theoretical model proposed (Shook et al. 2004).

## Results

This section presents the main results of the research. Firstly, table 3 shows descriptivestatistics of the variables incorporated in the model and some characteristics of the sample. Moreover, as it is known that the role of the owner in the definition of the strategies and decisions are crucial, I compared the statistical differences ( $X^2$  test) among groups according with the rational or intuitional based decisions among decision-makers.

**Table 3:** Descriptive Statistics

Characteristics	Total sample (percent)	Rational decision-maker (percent)	Intuitive decision-maker (percent)
Sample size	147	71	76
Entrepreneur attributes			
Sex			
Male	60.5	47.2	52.8
Female	39.5	50.0	50.0
Age			
18-35 years	26.5	43.6	56.4
35-55 years	51.0	52.0	48.0
More than 55 years	22.5	45.5	54.5
Education			
Primary-Secondary	36.1	47.2	52.8
University (complete/incomplete)	63.9	48.9	51.2
SMEs characteristics			

Economic Sector**			
Primary	13.5	70.0	30.0
Industry	32.0	53.2	46.8
Commerce	28.6	33.3	66.7
Service	25.9	47.4	52.6
Employment			
0-5 employees	15.6	47.8	52.2
5-25 employees	38.8	43.9	56.1
25-100 employees	27.2	55.0	45.0
More than 100 employees	18.1	48.1	51.9
Formalization of routines**			
Yes	46.3	57.4	42.6
No	53.7	40.5	59.5
Strategies preferences (X priority 1)			
Profits	44.9	45.5	54.5
Financial	6.8	40.0	60.0
Consumer Satisfaction	26.5	59.0	41.0
Technological advance	1.4	50.0	50.0
Information support			
Information technology adoption***			
Yes	69.4	52.9	47.1
No	30.60	37.8	62.2
Prospective analysis*			
Yes	52.1	59.2	40.8
No	47.9	37.1	62.9
Tools support for decisions			
Yes	30.1	52.3	47.7
No	69.9	47.1	52.9
Reports of results			
Yes	71.4	52.4	47.6
No	28.6	38.1	61.9

External advisory***			
Yes	78.9	51.7	48.3
No	21.1	39.5	64.5
Decisions registration***			
Yes	28.6	59.5	40.5
No	71.4	43.8	56.2

Source: Authors' own survey. Level of significance: \* 99, \*\* 95 and \*\*\* 90 percent.

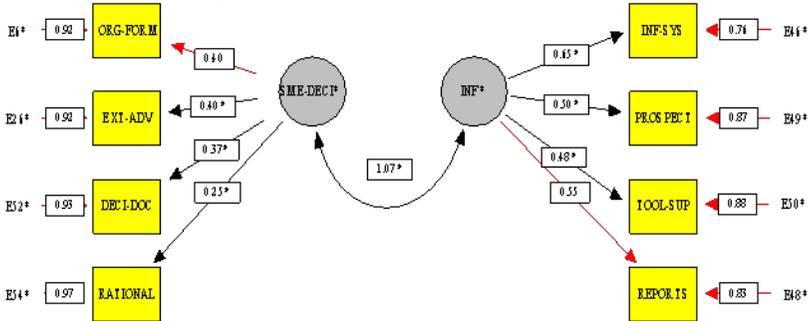
Regarding to owner's attributes, 60.5 percent are men between 35 to 45 years old (51.0 percent) and with a high level of education (63.9 percent). The distribution of the sample, according with the economic structure, is the following: a) 13.5 percent are primary activities (agriculture and fishing); b) 32.0 percent are manufacturing (food, textile, metallurgical, and chemical); c) 28.6 percent are trade firms (restaurants and textile sales) and d) 25.9 percent are service suppliers. In terms of size, 54.4 percent is less than 25 employees, 27.2 percent in the range of 25-100 employees and 18.1 percent have more than 100. Furthermore, 46.3 percent has formalised routines and structure. Also, those firms with higher level of formalisation have more employees and concentrate in industrial sectors. Finally, SMEs consider that profits (44.9 percent), customer satisfaction (26.5 percent) and financial balance (6.8 percent) are the priority strategic goal of the firm. The remaining percentage is related to ethical (6.7 percent), political (4.1 percent), personal (2.7 percent), technological innovation (1.4 percent) and ecology goals (0.6 percent). Both the owner's attributes and the industry characteristics reveal the existence of heterogeneity in the sample.

Moreover, it is possible to recognise different decision-making styles, according with the level of rationality applied to solve problems and take decisions. In the sample, 48.2 percent argue that before taking a decision they look for information and use their experience in solving problems. The rest considers creativity and intuition to imagine new solutions are the heart of business decisions. The differences between rational or intuitional decision-makers affect SMEs knowledge management but are not related to owner's attributes and employment. In this sense, the main statistical differences are in variables associated to the economic sector, level of organizational knowledge, technology and formalization. Moreover, SMEs guided by a rational decision-maker is more likely to establish formal routines, adopt information technology support, request for external advisory, use prospective information

and formally register recent decisions.

### Model fit results

Figure 2 represents a path diagram that allows us to determine the set of relationships among all variables related to the conceptual model.



**Figure 2:** Path Diagram Proposed to Test the Conceptual Model

It was calculated the robust parameters in order to correct non-normal distribution among variables. Regarding to X2, the value obtain was statistically significant ( $153.282$ , *degrees of freedom* 28,  $p$  0.1725 > 0.05) but it is well recognized that this statistic is sensitive to sample size. For this, additionally, it was considered other structural diagnostics for evaluate the overall fit of the model that are not sensitive to sample size (Bentler and Bonett, 1980). The root mean squared error of approximation (*RMSEA*) is an estimate of the discrepancy between the original and reproduced covariance matrices in the population. It is suggested that a *RMSEA* of 0.05 represents a close fit and 0.08, reasonable fits. In the model, the *RMSEA* is 0.45. Complementary, the 0.958 incremental fit index (*IFI*), the 0.955 comparative fit index (*CFI*) and the 0.981 Mc Donald's index were all above 0.90, which is the critical value that means a close fit of the propose theoretical model to the underlying data. This global model fit coefficients the reliability of the model, though the statistical significance of the coefficients (*t-values*) in both latent variables show the validation of the constructs. Table 4 shows the results of the correlations.

**Table 4:** Coefficients Analysis and Confirmed Hypothesis

HYPOTHESIS	PATH	STANDARIZED COEFFICIENT	>critical value 1.98	RESULT
H1: LATENT VARIABLE STRATEGIC PLANNING	Information system support	0.65	5.44	Confirmed
	Prospective plans	0.50	4.68	Confirmed
	Tools for decision support	0.48	4.34	Confirmed
H2: LATENT VARIABLE ORGANIZATION LEARNING	External advisory	0.40	3.00	Confirmed
	Past decisions registry	0.37	3.23	Confirmed
	Rationality	0.25	2.57	Confirmed
H3 CORRELATION	Strategic planning -organization learning nexus	1.07	4.07	Confirmed

Source: Authors' own based on EQS results.

The results show that all the variables are positively and significantly correlated. That means that those SMEs involved in strategic planning exhibit higher levels of organizational learning. Strategic planning in SMEs is directly related with information technology adoption, technical support for decisions (for example investment criteria and market research indicators), a prospective vision and formal presentation of future actions and expected results. Moreover, organizational learning is positively associated with rational decisions and registration of past events, great deal of information sources (internal and external) and democratic participation of members reporting results and sharing personal experiences with others.

## Conclusions

This article presents an empirical contribution of the relevance of strategic planning and organizational learning 'nexus' in SMEs. Following the resources and capabilities theory, a rich knowledge management and the development of an intelligent organization can promote sustainable

competitive advantages among firms. However, the main critics about strategic planning highlight that 'plans' in SMEs threaten some advantages as the flexibility and capability to adapt their behaviour to changing contexts. In that sense, results of this research show that there is no difference in terms of strategy orientation, size, and owner's profile between firms involved in strategic planning and firms that do not do it. For this, it is necessary to define strategic planning as a result of a 'learning by doing' process where every action, information and decisions are shared with members and constitute an intangible asset that makes SMEs unique and competitive. In fact, strategic planning can be compared to a 'GPS' which orients business direction, not in a prescriptive form but as a helpful option to alert when the firm goes in a wrong way and informs how to return to the right one. In this sense, strategic planning can help managers to absorb and manage information 'just in time' and promote knowledge spillovers that influence organization learning. The combination of information, expert opinions, skills, and experience is a valuable resource for seeking competitive advantages in SMEs. In fact, strategic planning is not only a proper GPS to predict results, anticipate contextual changes and reduce uncertainty costs. It is also a correct way to align organization goals towards the development of dynamic capabilities, which results in a better context for innovation, organizational performance and the achievement of sustainable competitive advantages in the long term.

Even though, these exploratory results confirm the intuitive notion about the goodness of strategic planning, they also reveal the main limitations associated with its implementation. Firstly, SMEs who recognize the importance of doing strategic planning focus more in adopting "information technologies support" than in improving the human resource capabilities (for example, low level of employee's reports and previous decision documentation). In this sense, SMEs have to increase their efforts in order to improve human resource management. Consequently, they will be able to maximize the value of those technologies and take advantages of the tacit and idiosyncratic learning which will impact on strategic planning flexibility. For this, it could be interesting to examine the managerial perceptions, employee's capabilities and the business conditions and set the barriers and opportunities to get involved in those business practices. This can improve the understanding of 'efficient strategic planning' and its business results. Secondly, it is necessary to revise the notion of strategic planning in SMEs. Plans can be revised, changed and rewritten. They are not inflexible practices that constraint business actions and manager's decisions. New economy business context requires flexibility,

rapid adjustments to changes, and opportune decisions. Evaluating moments for changing directions, interpreting information, developing the attitude to question mental models and the alertness to exploit new opportunities need organizational learning. New empirical contributions are needed, linking organizational learning with the characteristics of the strategic planning, identifying the attributes associated with long term SMEs' performance and facilitating a successful strategy positioning.

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