

**ANALYZING INNOVATION'S IMPACT ON OPERATIONAL EFFECTIVENESS: THE
CASE OF COLOMBIAN COMPANIES IN THE VALLE DEL CAUCA AREA**

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RESUMEN

Las organizaciones están gastando recursos sustanciales en la implementación de innovaciones. Por lo tanto, es importante evaluar si la gestión de esas innovaciones tiene resultados positivos en la efectividad de las operaciones.

Los datos cuantitativos de 155 cuestionarios se analizaron utilizando modelos de ecuaciones estructurales. Los encuestados fueron seleccionados de varias industrias en el área del Valle del Cauca en Colombia. Los hallazgos iniciales sugieren que las estrategias tienen un impacto indirecto en la efectividad operativa a través del logro del proceso de aprendizaje.

Palabras clave: Innovación, estrategia, aprendizaje organizacional, procesos, efectividad operacional.

Organizations are spending substantial resources in the implementation of innovations. Therefore, it is important to evaluate if the management of those innovations has positive results on the effectiveness of the operations.

Quantitative data from 155 questionnaires were analyzed using structural equation modeling. Respondents were selected from several industries in the area of Valle del Cauca in Colombia. Initial findings suggest strategies have an indirect impact on operational effectiveness through the achievement of the learning process.

Keywords: Innovation, strategy, organizational learning, processes, operational effectiveness.

Analyzing innovation's impact on operational effectiveness: The case of Colombian companies in the Valle del Cauca area.

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Structured abstract.

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Article classification: Research

Introduction.

Innovation is necessary to increase performance and productivity, which is one of the most important challenges for Latin American and Caribbean countries. Studies by Crespi & Zuñiga (2010) have shown that those that innovate have higher labor productivity than firms that do not innovate. In Colombia's case, transparency and regulatory quality and enforcement are required to encourage innovation efforts through public support and firms' decisions to invest in innovation (Crespi and Zuñiga, 2010). In this sense, the analysis of Colombia's organizations concludes that for the sample selected, innovative firms were identified as the ones implementing research & development (R&D) projects

as the most important element in the innovative process (Arocena and Sutz, 2010). This indicates that without further advances, firms are not likely to innovate. Therefore, it falls upon each industry to motivate the companies to invest in R&D, or innovation itself, to achieve noticeable positive results. Colombia's results in the past few years indicate that firms will be more innovative depending on their staff's qualifications. This coincides with the World Bank's view, which states that advanced human capital not only improves the possibility of companies emerging in innovation and R&D activities, but the skills of the workers also increase the firms' ability to absorb new knowledge and technologies (Marotta et al., 2007).

Colombia is one of the countries which has been defined as an "innovation failure" or having a deficiency of innovation. There is a low level of innovation input, that is, any type of innovation-related investment in R&D, and innovation output, which is defined as both commercial patents and scientific publications, has been as low as 0,1% of the GDP in some years. The main obstacles to R&D investment are lack of trust, different working cultures, and different motives for collaboration. The usual response to this is that firms invest in human capital development and collaboration with universities, research centers and suppliers in an effort to improve their innovation capacity (Marotta et al., 2007). It is, therefore, important to evaluate how organizations in this region are managing innovation in the areas of strategy, processes, organizational learning and so forth, and whether these dimensions have a positive impact on the effectiveness of operations.

Organizations are faced with competitive pressures to improve efficiency and productivity. They need to respond to market changes through the continual improvement of their paradigms, products, practices, processes, systems, and services, since improvement in performance derives in large measure from innovation (Ifandoudas and Chapman, 2006; Tidd and Bessant, 2009). Accordingly, many organizations are investing substantial resources in innovation initiatives to re-engineer their processes or come up with new product, paradigm or position innovations (Tidd and Bessant, 2009), but the extent to which these innovations assist organizations to improve the effectiveness of the operations still needs to be explored (Armbruster et al., 2008; Mabert et al., 2003). Therefore, being aware of the importance of innovation and subsequently dedicating substantial resources to the innovation task might not be sufficient, as the operational effectiveness might not meet the expected outcomes (Olson et al., 2005).

The purpose of this research is to get an insight into how innovative practices influence the effectiveness of operations in organizations in Colombia and particularly in the area of Valle del Cauca. The questionnaire was designed based on Tidd and Bessant's (2013) Innovation Self-assessment Tool and the operational effectiveness model developed by Santa (2014). A survey was taken among different employees from various sectors in the

Colombian industry in the Valle del Cauca region. The data collected was analyzed using structural equation modeling (SEM). Therefore, this research seeks to answer the research question, “What are the main factors in innovation that positively impact the operational effectiveness?”

Literature review.

Innovation is one of the factors that deserves more attention from academics, practitioners, and entrepreneurs, along with the entrepreneurial spirit itself. The correct application of innovative practices could open doors to new markets, making possible greater efficiency in business and economic growth (Sarkar, 2010). There are, however, numerous definitions of innovation that indicate several points of view from various authors at different times, influenced by political, economic, social, and cultural factors among others. Therefore, it is important to get an insight as to what innovation is and what are its implications.

In an earlier perspective, Tidd and Bessant (2009) state that, while new products are seen in the market as the summit of innovation, the innovation on the process plays an equally or even more important strategic role. Being able to do something that nobody has done, or being able to do it better than others, represents a clear competitive advantage. The novelty in the process can provide an offer that the competition has not achieved, faster, cheaper and more personalized. For Utterback & Abernathy (1975), the temporal dynamics of innovations of product or service and process are different, since the perfection of the process through the implementation of new technologies will make it possible to focus on reducing costs and achieve a better market share or a better competitive edge.

Being innovative in product, service or process is to be able to anticipate the dynamic needs of the market with efficiency before the competition and with utility, thus constituting a competitive advantage in an era when information is more available and technologies receive permanent evolutions and global impact. Innovation is related to attitude, posture, and way of acting, but also with change, creativity and usefulness (Schumpeter, 1942).

Another perspective taken by Schumpeter (1942) is that innovation can be seen as the attainment of a new production function, covering a new product or a new market and combining factors of a new form, which means making new combinations. Furthermore, Knight (1967) recognizes innovation as the adoption of a change that results in something new for the organization, with relevance for the environment being that the creative idea and its development represents the seed germinated by the innovator with effects for the market economy. Porter (1990) emphasizes that the term innovation is used in the

literature to describe the process of using new knowledge, technologies, and processes to generate new products and improvements in their use. The result of this process will be influenced by several factors and several theories developed as an auxiliary tool of management (Galanakis, 2006). In this way, innovation is assumed as a source of competitive advantage in an increasingly global market. Besides, (Lundvall, 1992) states that almost all innovations reflect existing knowledge (learning) combined with new uses sustaining the concept of an evolution which emphasizes interaction between institutions focused on interactive processes for the creation, diffusion and shared knowledge and relevance of the role of government as a major player in an innovative environment.

In many cases, innovation and invention have a very thin breach. Innovation is assumed as a process of multidimensional and systemic nature, and in this globalized world and with so much competition taking on increasing dimensions, the consumer becomes increasingly demanding and informed, product life cycles tend to be smaller and faster, and innovation becomes more than a challenge, something capable of shaping the needs of today's consumers, and with potential as a differentiating factor in competition and as a competitive advantage in the global scenario. The question will not be whether or not it is worth innovating but how to do it successfully and in a timely manner (Tidd et al., 2013), not forgetting that the right interaction of innovation with market orientation and organizational knowledge is a source of competitive advantage (Hurley and Hult, 1998).

The innovation-self assessment tool.

Tidd, Bessant and Pavitt (2013) defined innovation as a process of transforming an opportunity into fresh ideas and being widely used in practice. However, it is essential for organizations to be able to measure how well placed they are to deal with the challenges of managing innovation. For organizations, it is also important to better understand how they handle the challenges of building linkages into innovation space and reframing the approaches which they take to innovation. Additionally, organizations need to know the kind of organizational structure they have, and if this structure supports an innovative behavior and allows the development of novel ideas. In addition, it is important to know whether they can learn and build capability for the future.

The self-assessment innovation tool was one of the methods that Tidd, Bessant and Pavitt (2013) designed and used to analyze organizations and let them score themselves. According to John Bessant and Joe Tidd (2013), the innovation auditing tool has one main principle which is that using past knowledge the organization can raise many questions about how innovation has been managed. Thus, the organizations that respond are given a performance score compared to the initial model and this allows aspects to be identified with possible improvements. This model essentially creates a profile of

innovation performance. Organizations that operate in an innovative organizational climate have a higher probability of succeeding if they have clear strategic goals, long-term links supporting the technological areas, and steady project management processes closely supervised by senior management.

In the global market innovation performances are applied in specific organizations, making them highly contrasted to those who have no clear innovation strategy, limited technological activity and without a plan to acquire more. Additionally, organizations that show unclear management, weak external links and a poor organization in terms of supporting ideas by others are unlikely to achieve a high operational effectiveness or attain a higher competitive advantage that comes from a competitive environment. This should lead the organizations' management to question their capability, learn from their mistakes and transmit this through organizational learning, and create some patterns for future references. The way they question these aspects is by considering what they need to do more of and what they need to strengthen, what they need to do less of and what they need to stop, and what new routines should be developed in order to make certain behaviors work (Tidd et al., 2013).

Strategy.

In an increasingly competitive environment, innovation is a key factor to enable a company to achieve a dominant market position and increase its profitability (Ratten et al., 2017). All of the drivers considered in the self-assessment tool have a unique combination when applied to each organization; therefore, the results can be similar but different. The fact that firms make decisions in rapidly growing and changing competitive environments, formal strategies must be seen as part of a wider process of continuous learning from experience and from others to cope with complexity and change (Tidd et al., 2013).

Strategy includes defining the long-term objectives, the methods to achieve them, and ensuring the necessary resources. Furthermore, it is suggested that the way goals will be achieved is not specified by the strategy. In this sense, the planning and strategy are different concepts. One of the greatest limitations to strategic change is the considerable number of things successful incumbents know about their industry that unfortunately are no longer true. That is why industries need innovation, to create different strategies that will make a difference in each market (Hendela et al., 2017). As a consequence, operational efficiency and strategic flexibility combined are the requirements for such innovation skills (Boer et al., 2006).

Innovative strategies create competitive advantages. These aggregated aspects in the value chain, and achieving a sustainable competitive advantage is determined by the core competencies. This means transforming high-level technologies and production skills help individual businesses grow and adapt to the forever changing environment, as it is also competitive. Applying this method of strategic management can also be reviewed as resource-based or capabilities-based. There is a process to achieve strategies. First, it is necessary to recognize and develop all the fields that can be joined into a similar or same functioning process, product or service. The next step is to identify and investigate which new competencies must be aggregated so that the process, product or service will be innovative and therefore not become obsolete. Hence, a definition based on measuring competencies' combinations in diverse disciplines is highly useful to help formulate and develop innovation strategy (Tidd, 2012).

Processes.

The initiators of the model, Tidd and Bessant (2013), have organized and managed the questions to answer the way which the organization searches for opportunities, how they manage their selection process, how they manage the implementation of innovation projects from the idea right up to the launch and further, and the way which the employees perceive the organization supporting innovation via ideas and models. Also, the process model searches for answers that make the audit tool reflect if there is a clear and communicative innovation strategy, the way which external linkages are maintained and also how the innovation process transforms into organizational learning. Process innovation is a demonstration and a powerful source of advantage by being able to make something never made before or in a new and different way, using innovative methods. This type of innovation can be seen in the way things are created but also in the way which the products or services are delivered to the clients or the next in line in the supply chain (Tidd et al., 2013).

When an organization attempts to achieve new benefits, they require internal and external integration of various sectors and combine simultaneous mechanisms to obtain the goal of increasing their profit (Ettlie and Reza, 1992). The role that information technology plays is essential since it helps to transform information into organizational knowledge. Moreover, innovation is a social process that embraces various variables and factors. Support of new knowledge that is relevant to the organization creates a place for the creation of new knowledge. This knowledge is key for the innovation in the processes of the firm to be efficient and, in turn, develop new products (Brown and Eisenhardt, 1995), enhancing their processes and management of new technology building a totally visible improvement in its efficiency and effectiveness (Zhang and Lado, 2001).

Organizational learning.

The term organizational learning became popular in the 1990s and has widely been defined and discussed in the extant literature since then (Senge, 2006). The base of the concept has expanded in all three dimensions: conceptual, theoretical and empirical (Rahman et al., 2016). Organizational learning is defined by Dodgson (1993), as the way firms enhance their knowledge and ability by aligning knowledge around the organizational culture as well as adapting it within the organization to increase the efficiency of the workforce. Organizational learning includes R&D, training, and formal education of employees. It also involves the means that the organization uses to disseminate information throughout its employees and how this information is processed and stored.

There is an increase in the number of alliances formed by firms with the objective to adopt new technologies and knowledge. Collaborations are engaged through allocating and sharing resources between partnering firms, universities, private research centers, customers and suppliers (Dodgson, 1993). They serve as an important platform for organizational learning, knowledge acquisition and for developing new know-how (Schoenmakers and Duysters, 2006), as well as the effective transfer of tacit knowledge and capabilities (Mowery et al., 1996).

However, firms need to attain a certain level of learning ability or absorptive capacity in order to reap the benefits from organizational learning (Zahra and George, 2002), which in turn enable firms to meet current needs of technology and market. Such collaborations facilitate the learning and acquisition of new knowledge either through internal development of new products, services, or external technology acquisition (Schoenmakers and Duysters, 2006). Conversely, firms with low or stagnant organizational learning face challenges adjusting to environmental changes and ultimately their ability to reduce costs or to change product lines (Kloot, 1996). Hence, the need for overcoming obstacles and learning from experiences as an organization.

Organizations need to avoid routine behavior; although learning is difficult, its application can lead to preventing waste of time and money, and avoiding repeated confusion and mistakes during the firm's production. Learning can affect the initial arrangements established, and show requirements for a new set of skills that are needed, along with much-needed effort. Therefore, it is not surprising that many companies decide to use the strategy of borrowing ideas from textbooks or other firms' experiences so as to cut the process. This generally does not end well, because copying ideas and applying them without much thought will not generate positive achievements in the long term; the key is to use the potential in learning from others' and the firm's own errors, and creating routines and strategies that generate organizational learning accompanied by innovation.

There is no substitute for the long and experience-based process of learning, for which it is advised to take organizational learning as one of the main pillars towards innovative and thriving companies that reflect this in their operational effectiveness (Santa et al., 2014).

Operational effectiveness.

Operational effectiveness refers to the ability to establish processes, based on core capabilities within the organizations, that encourage them to exceed customer's expectations (Santa et al., 2014). A firm's performance is based on its strategy and operational effectiveness, as they operate concurrently (Tutorea and Rotaru, 2012). In this vein, it is argued that although operational effectiveness can be the key to the competitiveness of companies, this will only be possible if companies operate better and faster than the competition (Bigelow, 2002). Otherwise, organizations can fall into a dispute, thus losing any possibility of competitive advantage (Tutorea and Rotaru, 2012).

Gaining a competitive advantage and improving operational performance is not a short-term task. Consequently, excelling in some of the objectives and being competitive in each of the others, gives an organization an edge in the market (Wheelwright and Bowen, 1996). Operational effectiveness is generally achieved by emphasizing five dimensions: 1) cost; 2) quality, 3) reliability, 4) flexibility, and 5) speed. A cost advantage can only be achieved when the company carries out activities more efficiently, including the elimination of waste. Quality is achieved when products or services meet customer demands and meet the manufacturing specifications of the product or service delivery. Reliability is achieved when the products maintain their condition or services and meet agreed conditions. Flexibility is acquired when the organization is able to adjust what it does, how it does, and when it does, in response to customer demands. And finally, speed is obtained when organizations can offer new products or services in a timely manner and are able to shorten the time between application for a product or service and delivery of it, as often, and when it is required (Santa et al., 2014).

Achieving all of the above implies identifying and recognizing the organization's current situation and ensuring the achievement of operational effectiveness, thus allowing the required adaptability to changes in the market environment, and becoming more competitive. All this, for the sake of a sustainable future (Santa et al., 2014).

In view of the above review of the literature, organizations should measure how well they are placed to deal with the challenges of managing innovation and how this endeavor helps them to achieve the effectiveness of operations. Accordingly, it is important to link the operational performance objectives with the dimensions selected from the innovation

self-assessment tool, strategies, process and organizational learning. Thus, the main purpose of this research is to build on and extend the existing literature and to put forward a theoretical framework that examines the following propositions (see figure 1):

- Proposition 1.** There is a predictive influence of Strategies on Organizational Learning;
- Proposition 2.** There is a predictive influence of Strategies on Processes;
- Proposition 3.** There is a predictive influence of Strategies on Operational Effectiveness;
- Proposition 4.** There is a predictive influence of Organizational Learning on Processes;
- Proposition 5.** There is a predictive influence of Organizational Learning on Operational Effectiveness;
- Proposition 6.** There is a predictive influence of Processes on Operational Effectiveness.

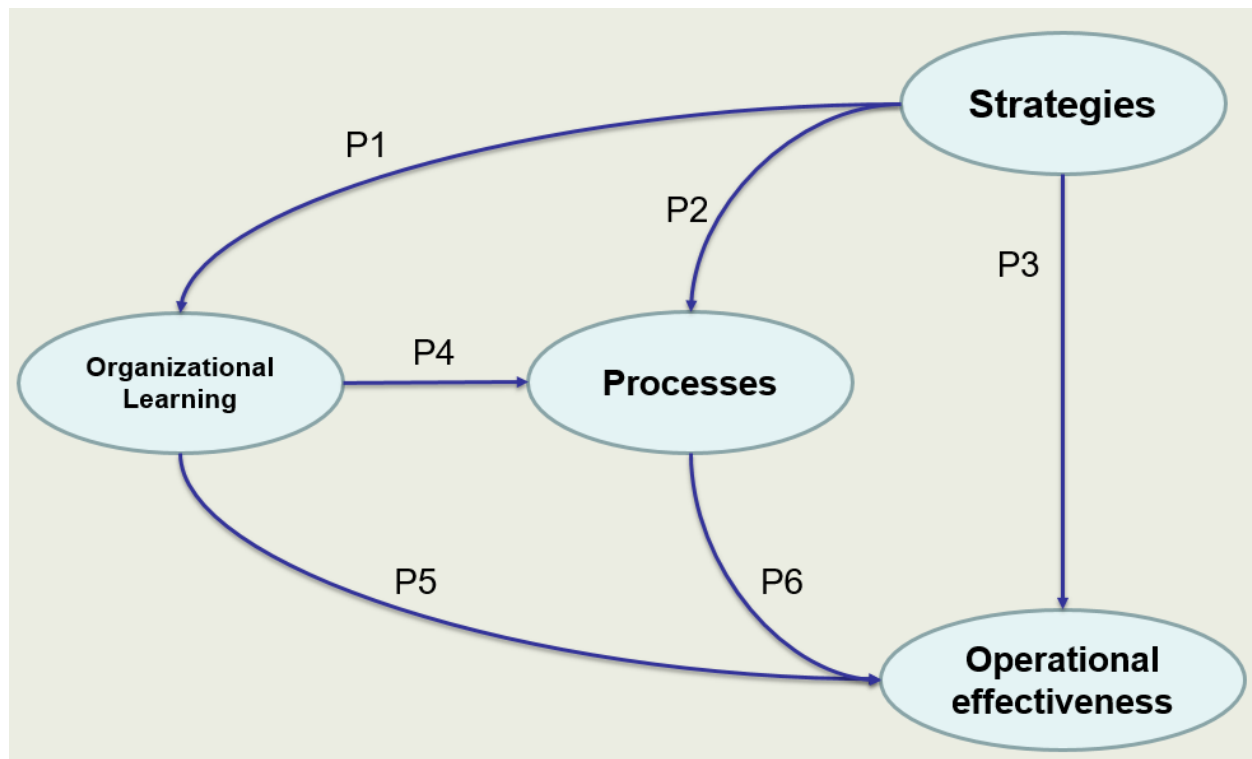


Figure 1. Theoretical Framework and Propositions.

Methodology.

This research was undertaken with an exploratory purpose, as there is no evidence of research on the impact of strategies, processes and organizational learning on operational effectiveness in Colombia and in the Valle del Cauca region. An exploratory

study is undertaken when there is a lack of understanding of the problem, which leads to an unstructured problem design. (Hair, J. F. et al., 2010)

This research addresses issues that are currently problems in many organizations in the area where this research was conducted. For this purpose, quantitative data was gathered through a self-administered online questionnaire directed to organizations in the manufacturing sector that were implementing innovations at the time of the survey. The questionnaire was administered to managers, engineers (technologists), and administrative and operational staff as, according to (Orlikowski and Gash, 1994) and (Schein, 1996), different actors in an organization have different assumptions, expectations, knowledge, and perceptions of innovation. The two sections of the questionnaire were developed based on the self-assessment tool by Tidd, Bessant & Pavitt (2013) and operational effectiveness by Santa et al (2014).

Of the 500 surveys distributed among the organizations that had implemented innovation initiatives recently, 170 were returned (34% response). Each returned questionnaire was reviewed for completeness and, of the 170, only 155 were considered usable and therefore practical due to large amounts of missing data, lack of involvement of the respondent in the use of innovation, or the impossibility of identifying the role of the respondent (manager, engineer or operator-user).

Both SPSS V21 (SSPS Inc and IBM Company, Chicago, Ill, USA) and Analysis of Moment Structures (AMOS version 21.0.0, AMOS Development Corporation, Spring House, Penn., USA) were used to undertake multivariate analysis research on the gathered data. Software applications were used to confirm the conceptualized model shown in Figure 1, by estimating the model variables' predictive relationship and model fit indices and to determine the confidence level. Confirmatory factor analysis (CFA) was used to study the relationships between observed and continuous latent variables, and to determine the measurement model's overall fit (Cooksey, 2007; Hair, J. et al., 2010). Factor loadings were estimated, items loaded on only one construct (i.e. no cross loading) and latent constructs were correlated (equivalent to oblique rotation in exploratory factor analysis). Internal consistency was assessed using Cronbach's alpha coefficient and the items-to-total correlation. Table I summarizes the constructs' coefficient values. All constructs have values greater than 0.7 of the cut-off level set for basic research (Nunnally, 1978). Additionally, confirmatory factor analysis (CFA) was conducted to test construct validity.

Variable	Number of Items	Alpha (α)
Strategies	4	9.07
Processes	4	8.68
Organizational Learning	3	8.21
Operational Effectiveness	4	9.07

Table 1- Cronbach's alpha

To support the model goodness-of-fit indices (GFI) were utilized: the model shows 120 distinct sample moments, with 37 distinct parameters to be estimated. The Chi-square equals 298,104 with 83 degrees of freedom, with a CMIN/DF of 3,592 and a 0.000 probability level. Note that Wheaton et al. (1977) suggested a ratio of approximately five or less as a reasonable criterion, Marsh and Hocevar (1985) recommended using ratios as low as two or as high as five, and Carmines and Mclver (1981) suggested ratios in the range of 2:1 or 3:1 as indicatives of an acceptable fit between the hypothetical model and the sample data. The CFI value above 0.9 supports the model, with a result of 0.929 (Bentler, 1990). In addition, the reliability of each of the constructs in the model was evaluated using several fit statistics, the root mean square error of approximation (RMSEA) was acceptable as the model had a value of 0.079 and the maximum is considered to be 0.08 (Bentler, 1990; Jöreskog and Sörbom, 1982).

The baseline comparisons fit indices suggest that the hypothesized model fits the observed variance-covariance matrix well relative to the null or independence model (see Table 2).

Model	NFI Delta1	RFI Rho1	IFI Delta2	TLI Rho2	CFI
Default model	.892	.805	.930	.897	.929
Saturated model	1.000		1.000		
Independence model	.000	.000	.000	.000	

Table 2- Baseline Comparisons

Results.

The findings from SEM (Table 3 and Figure 3) show a strong and positive relationship between strategies and organizational learning ($\beta=0.75$, $p < 0.001$); strategies and processes ($\beta = 0.35$, $p < 0.001$); organizational learning and processes ($\beta=0.35$, $p < 0.001$) and organizational learning and operational effectiveness ($\beta=0.84$, $p < 0.001$), thereby confirming propositions P1, P2, P4 and P5 respectively. These four propositions endorse the importance of strategies as a key element in the direction that learning and process innovation need to take. Additionally, the important role that organizational learning has when leading the innovation in processes and the operational effectiveness of the organizations studied in this research.

			Estimate	S.E.	C.R.	P	Label
OrgLearn	<---	Strategies	,669	,076	8,794	***	
Processes	<---	Strategies	,344	,092	3,747	***	
Processes	<---	OrgLearn	,659	,116	5,686	***	
OE	<---	Strategies	,064	,082	,785	,432	
OE	<---	OrgLearn	,580	,143	4,065	***	
OE	<---	Processes	-,141	,118	-1,192	,233	

Table 3- Regression Weights: (Group number 1 - Default model)

The results of the study show that there is no impact of strategies on operational effectiveness ($\beta=0.10$, not significant). Additionally, there is no impact of processes on operational effectiveness ($\beta=-.25$, not significant). Table 4 shows the propositions and the results from the SEM.

Proposition	Result
1 There is a predictive influence of Strategies on Organizational Learning	Confirmed
2 There is a predictive influence of Strategies on processes	Confirmed
3 There is a predictive influence of Strategies on Operational Effectiveness	Rejected
4 There is a predictive influence of Organizational Learning on Processes	Confirmed
5 There is a predictive influence of Organizational Learning on Operational Effectiveness	Confirmed
6 There is a predictive influence of Processes on Operational Effectiveness	Rejected

Table 4- Propositions and results

The results from the structural model clearly support the theory about the importance of strategies having a positive impact on organizational learning and innovation in processes. Additionally, the fact that organizational learning has a positive impact on processes and operational effectiveness, demonstrates its importance to innovation.

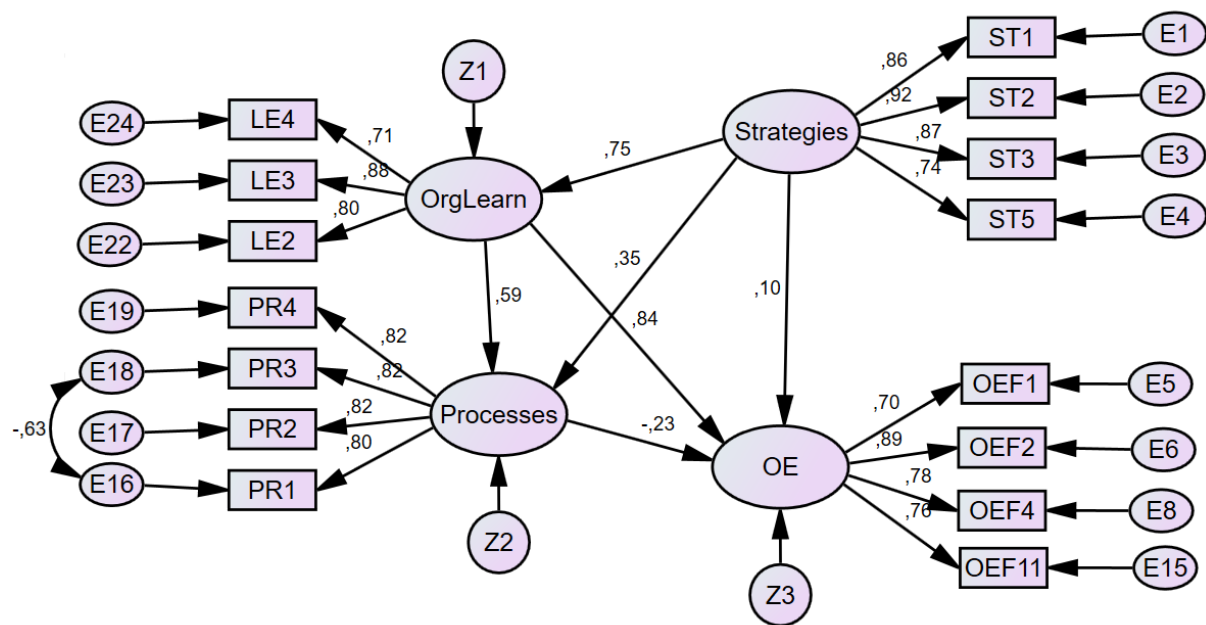


Figure 3 - Structural model results

Limitations.

Our study has limitations. First, we used a convenience sample, deliberately selecting respondents based on their operations and practice knowledge, experience, expertise, and tenure in the management and implementation of innovation. Second, the sample size is relatively small compared to more extensive, quantitative studies conducted in Western cultures, so generalizability across all sectors is dubious. Nevertheless, the results provide insights that justify extended, larger, quantitative studies.

Conclusion.

We set out to answer, “What are the main factors in innovation that positively impact the operational effectiveness?” Results suggest that only organizational learning has a positive and strong predictive power on operational effectiveness. This fact supports the view of Dodgson (1993), who stated that organizational learning is the way firms enhance their knowledge and ability by aligning knowledge around the organizational culture as well as adapting it within the organization to increase the efficiency of the workforce. Therefore, efficiency and effectiveness can only be achieved through the implementation of appropriate learning cultures across the organization. Additionally, as organizational learning includes R&D, training, and formal education of employees, it should be used as a powerful strategic tool to disseminate knowledge and information throughout the organization. Additionally, the organizations in the studied region should be concerned about the way they are disseminating their strategic view and the way they are setting up their innovation in processes, as these two dimensions show an insignificant predictive power on operational effectiveness.

Another important finding from this study is that strategies have a significant and positive predictive power on organizational learning and processes. This finding confirms the importance of strategies for learning and innovation in processes that the organizations must achieve when they are searching for a competitive advantage or gaining a higher market share. As Tidd & Bessant (2013) pointed out, strategies must be seen as part of a wider process of continuous learning from experience and from others to cope with complexity and change.

Finally, the impact of strategies on operational effectiveness is indirect throughout the learning of the organization. When organizations in the selected sample search for opportunities, when they are managing their selection process, and when they are attempting to implement and manage innovation projects from the idea right up to the launch and further, they must create outstanding learning processes so the strategies can

have an impact on the effectiveness of the operations. Not being able to accomplish an appropriate learning process indicates that the strategies in the organization will fail in their main objective to improve the effectiveness and efficiency of the operations of the organization, and to gain and sustain a competitive advantage.

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