

Strategic Managerial Mix Driving Managerial Efficiency: Analysis of

Family Business Firms in Mexico

Connie Atristain-Suárez, Andrée Marie López-Fernández (Universidad Panamericana, México City Campus, México)

Abstract: Family business firms (FBFs) are the predominant type of business around the world, and Mexico is no exception. These firms are constantly facing a changing and challenging environment that requires effective decision making regarding resource and capability managerial efficiency. The aim of this study was to determine the elements that family business firms in Mexico consider as determinants in the achievement of managerial efficiency. The overall approach of the study was qualitative, as CEOs from FBFs were interviewed to uncover their decision making process regarding their managerial efficiency and relation to their strategic managerial mix. The study provides a comprehensive view of FBFs' leaders' perceived importance of resource and capability managerial efficiency, and depicts the reasoning behind such decision making; it contributes by providing insight into FBFs' dynamics behind the alignment of their strategic managerial mix with business processes towards the achievement of managerial efficiency.

Key words: managerial efficiency; strategic managerial mix; business processes; resources/capabilities; family business firms; Mexico

JEL code: M100

1. Introduction

Globalization has provided important growth opportunities for Family Business Firms (FBFs) operating in Mexico, including foreign trade and investment opportunities, and a gateway for more than one million consumers and thousands of competitors. That said it also poses a threat to small and medium-sized family businesses which are not competitive due to inefficient management, leading family business' owners to sell their firms and others to merge with other organizations in order to avoid perishing. FBFs are the predominate type of business around the world which has led to a significant economic transcendence. Most small and medium-sized enterprises (SMEs) are family businesses and a majority of family companies are SMEs; therefore, given the amount of FBFs, as well as their particularities and difficulties, their study is interesting and relevant (Ginebra, 2001; Davis et al., 1997; Grabinsky, 1994; Martinez, 1984). SMEs continue to face challenges related to new markets, competition,

Connie Atristain-Suárez, Ph.D., Professor, Department of ECEE (School of Economics and Business) at the Universidad Panamericana, México City Campus; research areas/interests: competitiveness, strategic planning and managerial efficiency of SMEs in Mexico, as well as the Family Business. E-mail: connie.atristain@up.edu.mx.

Andrée Marie López-Fernández, Ph.D., Professor, Department of ECEE (School of Economics and Business) at the Universidad Panamericana, México City Campus; research areas/interests: corporate social responsibility, marketing strategy, and consumer behaviour. E-mail: andreemlf@gmail.com.

and greater consumer expectations (Blackwell et al., 2006). However, the greater concern relates to management efficiency; there are problems with managerial performance measurement, the determination of influencing factors (Hwang & Kao, 2006) and competitiveness (Barney, 2001) within FBFs.

The fact that FBFs are operating in a highly competitive environment means that they need to develop mechanisms to assess the degree with which desired performance is achieved. FBFs' competitiveness significantly depends on managerial efficiency of resources and capabilities and clearly defined inputs/outputs in business processes. Inputs, at different stages (i.e., procurement, utilization or transformation, coordination and operationalization), impact the managerial efficiency and directly or indirectly contribute to added value. Therefore, in order to achieve competitiveness, FBFs should concentrate efforts on improving their efficiency through business processes (Norris et al., 2001). Also, a strategic managerial mix (i.e., resource and production planning, internal control systems and output strategies) may boost competitiveness. The questions are, how does FBFs' management measure business processes to ensure managerial efficiency? And, how does a strategic managerial mix improve managerial efficiency of resources and capabilities through business processes?

The general objective of this paper is to analyze the influence of a strategic managerial mix on FBFs' managerial efficiency to achieve competitiveness. However, specific objectives include: to analyze the business process decision making that leads FBFs in Mexico to achieve resource and capability managerial efficiency; to evaluate the elements of a strategic managerial mix (i.e., resource and production planning, internal control systems and output strategies) that lead to resource and capability managerial efficiency; and, to determine the competitive posture of FBFs operating in Mexico. In order to accomplish the study's objectives, a study was held with CEOs from FBFs operating in Mexico to gather data and information on the elements that shape their resource and capability managerial efficiency, decision-making, and competitive strategies.

2. Literature Review

2.1 Managerial Efficiency

Managerial efficiency, focused on organizational resources and capabilities, contributes to business processes' productivity and performance; further, the higher the managerial efficiency, the more competitive the FBF. Performance evaluation is a necessary part of management control as it is used not only as a reference for decision making, but also as a basis for any improvement. Hence, resources and capability managerial efficiency measurement becomes an important and wide-ranged subject (Wang et al., 2006). Managerial efficiency is usually measured on the basis of inputs/outputs, and manufacturers are usually evaluated in terms of their ability to minimize input consumption or maximize output with minimum input; that is an adequate measurement of resources and capabilities as to reduce excesses that may result in inefficiency (Leibenstein, 1966). The managerial efficiency of the organization's resources and capabilities that increase productivity, the more efficient the administration is. The more resources and capabilities that are wasted or used during the production process, the more inefficient the administration will be. Therefore, management is more efficient when resource and capability allocation is precise and when the associated processes are measured, controlled, and well-aligned with the firm's strategic direction.

2.2 Business Processes

Firms usually operate multiple production processes, each supported by their own set of inputs (i.e.,

resources and/or capabilities). These processes are often correlated and linked within a network, where inputs and outputs are effectively associated (Barnum & Gleason, 2006). An important objective of production processes is the detection of the particular activities and tasks that add value to the entire chain of production. Said activities' value is visible in the economic value of the entire process, and the consumers' value (Anupindi et al., 1999), which is achieved by fulfilling their requirements (Tenner & DeToro, 1997).

A business process is defined as a set of activities which are performed in coordination with the organization's internal and external environment, and jointly with business goals (Weske, 2007). A business process is a persistent unit of work started by a business event. The process is driven by business rules that trigger tasks and subprocesses. Tasks and sub-processes are assigned to resources, which are organizational units that are capable and authorized to play specific roles in the processes (Dayal et al., 2001). The execution of most business processes entails scheduling decisions since the activities to be executed may compete for shared resources (Barba, 2013).

Business processes are a series of logically related activities or tasks, such as procurement, utilization/transformation, coordination and operationalization, performed together to produce a defined set of results (Atristain & Rajagopal, 2010). According to these authors, procurement means "acquiring resources and capabilities necessary for the operation"; utilization and/or transformation refers to the "employment or modification of resources and capabilities to produce goods or services"; coordination is the "orderly way to control the firms' resources and capabilities"; and, operationalization is related to the manner in which firms "carry out the merchandising and logistics of the resources and capabilities" (Atristain & Rajagopal, 2010).

2.3 Strategic Managerial Mix

The identification and strategic analysis of resources and capabilities, both owned and attainable, is paramount to FBFs' growth. A strategic managerial mix may be understood as the way in which top management combines and allocates the firm's available resources and capabilities (Atristain & Rajagopal, 2010). Managers are usually those that determine the direction that the firm will take, including the design of strategic objectives and goals, target markets in which it will operate, and the resources and capabilities required to do so effectively (Kor & Mahoney, 2000; Mahoney & Pandian, 1992; Castanias & Helfat, 1991). Therefore, family business firms' managers, who may be owners as well, are effectively responsible for the execution of the strategic managerial mix in alignment with managerial efficiency. There are four elements that are included in the strategic managerial mix, these being: resource planning, production planning, internal control system and output strategies.

Interest in resource allocation planning for business process management has significantly increased in the past decade. Today, because business processes for resource manufacturing are highly networked, they require skilled allocation planning (Wua et al., 2013). The challenge is to address the conflicting objectives arising from the integration of diverse resources. Because, while certain resources may be appropriate to achieve some business processes, sub-tasks, the interaction links among these resources could be inefficient and result in an ineffective resource allocation plan. Therefore, resource planning requires the business process of resource and capability procurement to be strategically developed. Thus,

H_{1a}: The managerial efficiency in resource planning is driven by resource procurement.

H_{1b}: The managerial efficiency in resource planning is driven by capability procurement.

The problem with the order alignment with resource and capability allocation is not new when we are talking about production planning. Production planning is related to managing the productive resources required to perform transformation from raw materials to final products to satisfy customers in the most efficient way (Pochet, 2001). Effective production planning plays an important role in the production management systems; therefore,

production planning should be aligned with the business process of use and transformation of resources and capabilities. Hence,

H_{2a}: The managerial efficiency in production planning is driven by resource utilization and/or transformation.

 H_{2b} : The managerial efficiency in production planning is driven by capability utilization and/or transformation.

The management of control processes is important because it enables the measurement of various indicators that ensure quality, efficiency, effectivity, productivity, and performance, amongst others. For that matter, effective internal control systems are essential for the achievement of the firm's desired productivity and performance (Lakis & Giriunas, 2012). Also, internal control systems are effective when the firm's strategic goals may be fulfilled (Mohamud, 2013). Hence, and internal control system ought to be grounded in the business process of coordination. Thus,

H_{3a}: The managerial efficiency in internal control systems is driven by resource coordination.

H_{3a}: The managerial efficiency in internal control systems is driven by capability coordination.

Once the product has been manufactured, there are still several strategic decisions that must be made for the product to effectively reach its ultimate destination. For instance, there are marketing, sales, logistics, distribution strategies and customer service, to name a few, that should continuously be formulated in accordance to environmental changes (Barcik & Jakubiec, 2013; Kotler & Armstrong, 2012). For this study we consider output strategies to be all those activities related to marketing and advertisement, distribution and logistics, customer service and sales. Therefore, output strategies should be well-aligned with operationalization business processes. Hence,

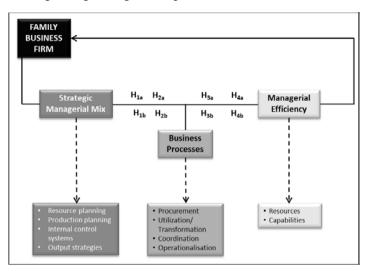
H_{4a}: The managerial efficiency in output strategies is driven by resource operationalization.

H_{4a}: The managerial efficiency in output strategies is driven by capability operationalization.

3. Study Design

The purpose of the study is to analyze the influence of a strategic managerial mix on FBFs' managerial efficiency to achieve competitiveness. This research began as an exploratory study and gradually became more descriptive as FBFs' managerial efficiency; strategic managerial mix and competitiveness were analyzed and evaluated in relation to each other. Eight hypotheses are proposed to analyze the established objectives and a framework was developed (Figure 1 includes the hypotheses framework) to depict the relationship amongst the hypotheses and the corresponding variables.

Data and information was collected by means of a questionnaire and an in-depth interview with the CEOs of manufacturing family business firms operating in Mexico. The firms have been in operation for at least five years in two states, Mexico City, *Distrito Federal*, and State of Mexico, *Estado de México*. A total of seventeen CEOs were interviewed within five months with no significant changes throughout said period. The information was collected via interviews with top executives; an instrument of semi-structured questions, some with pre-coded options to rank and others open-ended, was administered separately for the qualitative assessment of responses. Purposive sampling was employed to select the sample of Family Business Firms' entrepreneurs for analysis. The sample was distributed as follows: 76% (13 FBFs) of the total sample were located in Mexico City and 24% (4 FBFs) in the State of Mexico. In reference to size, 53% (9 FBFs) of the total sample are small and 47% (8 FBFs) are medium. Content analysis was done to summarize the open-ended questions, as the analysis of qualitative



responses is beneficial in deriving strong managerial implications.

Figure 1 The Influence of FBFs' Strategic Managerial Mix on Managerial Efficiency

The semi-structured questionnaire was administered individually and in person to FBFs' owner-managers and/or CEOs; it included two main sections, the first section related to FBFs' business processes decision making related to the elements that affect resource and capability managerial efficiency. And, the second section referred to aspects related to the firms' strategic managerial mix, and its influence on managerial efficiency. The interviews were made up of three major sections; the first section was related to the firm's strategic managerial mix (i.e., resource planning, production planning, internal control system, and output strategies) and its association with resources and capability managerial efficiency. The second section focused on the firm's business processes (i.e., procurement, utilization/transformation, coordination and operationalization) and their association with resource and capability managerial efficiency. Finally, the third section evaluated the firms' alignment of the strategic managerial mix with business processes in pursuit of managerial efficiency.

4. Findings and Discussion

The findings revealed that family business firms operating in Mexico see managerial efficiency as the adequate implementation of business processes. Meaning that, the effective execution of these processes (i.e., procurement, utilization/transformation, coordination and operationalization), leads to resource and capability managerial efficiency. That said it is the elements of the strategic managerial mix that drive managerial efficiency through the effective implementation of the business processes. The study's participants were all in the agreement that resources and capabilities are key to the achievement of managerial efficiency. Interestingly, there were certain resources and capabilities that were considered of greater importance for the FBFs' CEOs; Table 1 includes the most important resources and capabilities as perceived by participants, and their association with business processes and the strategic managerial mix.

In relation to resource planning and procurement, the majority stated that supplier credit and working capital are primary, while process documentation and implementation and process record and control methods are the highest ranking capabilities to be procured. For production planning, the most important resources to be utilized

and/or transformed were human and financial resources, and product improvement and new product development are the top capabilities to be utilized and transformed. In regards to internal control systems and coordination, the resources work programs and production policies were found to be top priority, while job responsibility analysis and determination and objective determination and scope were capabilities of great importance. For output strategies and operationalization, marketing and advertisement programs and product distribution logistic program were considered the most important resources, and customer service and sales strategies the most important capabilities.

		Managerial Efficiency				
		Business Processes	Resources		Capabilities	
egic Managerial I	Resource Planning	Procurement	Supplier credit	Working Capital	Process documentation and implementation	Process record and control methods
	Production Planning	Utilization/ Transformation	Human	Financial	Product improvement	New product development
	Internal Control Systems	Coordination	Work Programs	Production policies	analysis and	Objective determination and scope
	Output Strategies	Operationalization	Marketing and advertisement programs	Product distribution logistic program	Customer service strategies	Sales strategies

Table 1 Relation of FBFs' Strategic Managerial Mix and Managerial Efficiency

When evaluating the elements that best drive managerial efficiency of resource planning, it was expected that family business firms would lean towards resource rather than capability procurement. Findings were in line with the latter, as approximately 78 percent of the respondents established that resource procurement is essential to managerial efficiency, and about 22 percent agreed that capability procurement was more important. Therefore, H_{1a} is accepted. Participants further explained their inclination towards resources over capabilities; the following are excerpts from the CEOs interviews regarding their resource planning and resource/capability procurement:

"It [resource procurement] provides adequate time to manage the company's working capital needs (produce-sale-payment)."

"It [resource procurement] is the company's main source of financing; it is considered a recurrent practice because it provides the resource immediately."

"It [capability procurement] is important to have order, as well as organization, production and enterprise management rules."

"This [capability procurement] leads us to continuous improvement."

The next element to evaluate was production planning. Since the sample includes manufacturing companies, it was suggested that resource utilization and/or transformation would be slightly higher. However, 58 percent of the family business firms' leaders operating in Mexico view capability utilization and/or transformation as a more important aspect to achieve managerial efficiency; and, approximately 42 percent agreed that resource utilization/transformation is of higher importance. Thus, H_{2b} is accepted. That said, because the difference is quite subtle, it is plausible that a larger sample may yield a balanced perception of elements causing managerial efficiency. The respondents provided explanation for their inclination towards capabilities, including:

"It [capability utilization and/or transformation] can ensure efficient production and continuously improved processes."

"It [resource utilization and/or transformation] is elementary for the company's existence; without it the company could

[&]quot;It [capability utilization and/or transformation] is a way to comply with the rules of the production area, sales, and administration."

not operate."

"It [resource utilization and/or transformation] is the support for the business to operate comfortably; it pays for all other resources and general operating expenses."

FBFs operating in Mexico have established human resource strategies and note the importance of personnel employed in resource use and transformation within the production processes to achieve objectives and competitive advantage. However, this is not considered in the previous dimension of resource and capability procurement. Also, FBFs consider that they have established financial strategies which are reflected in the proper use of financial resources so they can achieve their financial goals and objectives in the short, medium and long-term.

The third aspect that was evaluated was the internal control systems' influence on managerial efficiency driven by resource or capability coordination. Findings showed that the participants' perceptions of resource and capability importance are somewhat balanced. That said, approximately 57 percent of the respondents stated that the coordination of resources was of greater importance to the achievement of managerial efficiency. While, about 43 percent posited that the coordination of capabilities was essential to such efficiency. Therefore, H_{3a} is accepted. Participants clarified their decision making regarding the coordination of resources as follows:

"It [resource coordination] involves all areas of the company and their respective staff, having a greater coordination of the daily work and therefore, a greater compliance with commitments made to customers."

"It [resource coordination] is required in order for the daily work in the production process to be planned, organized, coordinated, and of good quality."

"It [capability coordination] gives the opportunity to assess and support customers' unexpected and challenging demands, optimally - in time and product size and shape."

"It [capability coordination] helps the company operate more efficiently, since it can coordinate the staff and assign tasks and responsibilities in advance."

The last element evaluated was the output strategies and the effects on operationalization of resources and capabilities to ensure managerial efficiency. The results indicate that only 40 percent of the respondents agreed that resource operationalization is important to managerial efficiency; and, 60 percent stated that the operationalization of capabilities was of greater importance for the achievement of managerial efficiency via output strategies. Hence, H_{4a} is accepted. The following excerpts from the participants' interviews further illustrate their decision making:

"It [capability operationalization] is what differentiates the company from its competition."

"It [capability operationalization] brings us closer to the market and keeps us current with our clients; since we are continually renewing ourselves; it allows us to sell more and better respond to customers' needs."

"It [resource operationalization] is the way we communicate with customers; with this, we communicate with the company; we disclose what we do and how we do it."

"It [resource operationalization] enables us to be on time in the market; it gives us advantage over the competition and increases our customers' confidence."

5. Conclusion and Managerial Implications

Family business firms, like in most countries, are significantly responsible for the country's economic development and growth; therefore, determining the elements that drive the managerial efficiency achievement via a strategic managerial mix and business processes is important not only because there is a positive impact on firms' growth, but also because there is a positive impact on the country's growth. CEOs from family business

firms operating in Mexico were queried, through a questionnaire and in-depth interviews, to obtain information on FBFs' managerial efficiency of resources and capabilities. The study provided a panorama of the CEOs' stance on the importance of managerial efficiency as well as insights to the reasoning behind their decision making.

Competitive advantage means a firm has relative superiority in resources and capabilities which confers superiority in execution (Atristain, 2013). Therefore, resources and capabilities distinguish firms amongst each other, and it is their efficient management that drives profit and competitive advantage effectively differentiating them. However, for most of these firms the technology and installed capacity do not have great importance in the resource and capability use and/or transformation within the production process. This suggest a decrease in business growth and negative impact on productivity due to a lack of economies of scale; further, these firms fail to develop competitive advantages in the medium and long term, affecting the company's overall financial performance. Furthermore, they do not have documented processes to obtain resources, which are essential for: operation standardization, continuous improvement of resource use and management, process variability reduction, rework avoidance, and increased product quality. Further, such documented processes are material to train new collaborators and manage quality control systems.

Findings suggest that FBFs are lacking in logistics strategies, which means they have difficulty to efficiently operationalize capabilities. They also fall behind with training programs, which makes it hard for them to efficiently operationalize resources. Further, FBFs have established record schemes and controls to obtain capabilities; however, FBFs do not have a staff development scheme that enables them to improve personnel skills within the short, medium and long term. Therefore, family business firms do not provide the basis for their collaborators to have the necessary skills and specialization to allow them to better cope in their daily tasks. This, of course, has a negative impact on individual and organizational productivity and performance, which leads to a negative impact on business growth. Also, most of the respondents agreed that process implementation is an important factor in goal achievement, clarity in activities, better supported value chain, and quality increase of products/services, and customer satisfaction.

FBFs' leaders operating in Mexico are noncommittal when it comes to the efforts made to ensure managerial efficiency. Meaning that, they consider, to a certain extent that all elements in the strategic managerial mix are important, yet a significant difference is noticeable when these elements are evaluated by resources and capabilities. For instance, as they find the procurement of resources to be of high importance, their operationalization takes a back seat as capabilities are considered top priority. While the results of utilization and/or transformation and coordination were much more balanced, there was a difference in resources and capabilities. Perhaps the expectation is that firms seek a balance of resources and capabilities by balancing the strategic managerial mix's element. However, FBFs operating in Mexico are aligning business processes with the strategic managerial mix in accordance to day-to-day operations.

The highly competitive environment in which FBFs are operating is reason enough for organizational leaders to need to fully comprehend the very elements that are strategic in their managerial efficiency of their resources and capabilities and, also, the elements that are lacking in effectivity. Each firm has its particularities that may or may not differentiate them from one another, however, such distinction is not enough to produce and provide the added value that translates into a sustained competitive advantage. The latter requires continuous improvement of business processes which, in turn, requires greater leadership and operational effectivity. These firms need to consider and improve upon all elements however ranked they are in importance. That is, the interconnectedness also applies to the elements, and any mishap may result in a negative impact on performance and business growth.

It is important to consider that many firms do not know how to optimize managerial efficiency regarding resource and capability use and allocation. Finally, family business firms' leaders need to recognize the importance of all elements, that is, both business processes and the strategic managerial mix.

Business processes are fundamental to every company's performance and ability to successfully execute business strategy. Therefore, business processes' managerial efficiency regarding resource and capability procurement, utilization or transformation improves FBFs' competitiveness. Likewise, processes are the key mechanism by which businesses provide added value; but how do FBFs establish high-performing processes? The key is to understand the current maturity of business processes' decision making and the processes' performance while identifying the level of performance required and establishing a path to achieve the desired maturity and performance. In order to remain competitive, FBFs have to continuously improve their business processes. Family business managers should note the importance of driving more leadership and operational excellence to improve the firm's performance. We suggest that higher competitiveness in FBFs may be achieved with the rational resource utilization and capability learning and building, in order to stimulate the firms' growth. In Mexico, family business firms' CEOs show resistance towards reorganizing their companies and consider that decisions within business processes regarding resources and capabilities require a shift in the way they try to achieve managerial efficiency to improve competitiveness. As such, we suggest that the firms start by auditing assets, capabilities, risks, and weaknesses; then, move toward a decision audit to understand which set of decisions enhances the firm's performance. By doing so, their strategic managerial mix may be well aligned with business processes to fully and effectively drive managerial efficiency.

6. Limitations and Future Research

The limitation of the study is the sample size. Although information was effectively obtained from seventeen Family Business Firms operating in Mexico, the results are not generalizable. Also, it is important to consider more variables in order to gain clearer insight into the reasoning of Family Businesses Firms' decision making about business processes and the Strategic Managerial Mix. Future research could focus of FBFs' design and execution of strategies based on their strategic managerial mix; further, a longitudinal study would yield interesting findings regarding the strategic managerial mix and sustained performance.

References

- Anupindi R., Chopra S., Deshmukh S., Mieghem J. and Zemel E. (1999). Managing Business Process Flow, Prentice-Hall, Upper Saddle River, NJ.
- Atristain C. and Rajagopal (2010). "Conceptual perspectives on organizational performance and competitiveness of SMEs in Mexico", *Journal of Transnational Management*, Vol. 5, No. 4, pp. 322-349.
- Atristain C. (2013). Organizational Performance and Competitiveness: Analysis of Small Firms, Nova Science Publisher, New York, p. 211.
- Barba I. (2013). "Constraint-based planning and scheduling techniques for the optimized management of business processes", Ph.D. thesis, University of Seville, 2012, available online at: http://regula.lsi.us.es/C/TD.pdf.
- Barcik R. and Jakubiec M. (2013). "Marketing logistics", *Acta Academica Karviniensia*, Vol. 4, pp. 5-12, available online at: http://www.slu.cz/opf/cz/informace/acta-academica-karviniensia/casopisy-aak/aak-rocnik-2013/acta-academica-karviniensia-4-2 013.
- Barney J. (2001). "Is the resource-based view a useful perspective for management research?", *Academy of Management Review*, Vol. 26, No. 1, pp. 41-46.

Strategic Managerial Mix Driving Managerial Efficiency: Analysis of Family Business Firms in Mexico

- Barnum D. T. and Gleason J. M. (2006). "Biases in technical efficiency scores caused by intra-input aggregation: Mathematical analysis and a DEA application using simulated data", *Applied Economics*, Vol. 38, No. 14, pp. 1593-1603.
- Blackwell P., Shehab E. M. and Kayz J. M. (2006). "An effective decision-support framework for implementing enterprise information systems within SMEs", *International Journal of Production Research*, Vol. 44, No. 17, pp. 1, 3533-3552.
- Castanias R. P. and Helfat C. E. (1991). "Managerial resources and rents", Journal of Management, Vol. 17, No. 1, pp. 155-171.
- Davis J. H., F., Schoorman D. and Donaldson L. (1997). "Toward a stewardship theory of management", *The Academy of Management Review*, Vol. 22, No. 1, pp. 20-47.
- Dayal U., Hsu M. and Ladin R. (2001). "Business process coordination: State of the art, trends, and open issues", in: *Proceedings of 27th Very Large Data Base Endowment Conference*, Roma, Italy.
- Ginebra J. (2001). Las empresas familiares: su dirección y su continuidad, México, Panorama.
- Grabinsky S. (1994). La empresa familiar: guía para crecer y sobrevivir, México, Del Verbo Emprender, Edición especial para Nafinsa.
- Hwang S. N. and Kao T. L. (2006). "Measuring managerial efficiency in non-life insurance companies: An application of two-stage data envelopment analysis", *International Journal of Management*, Vol. 23, No. 3, Part 2, pp. 699-720.
- Kor Y. Y. and Mahoney J. T. (2000). "Penrose's resource-based approach: The process and product of research creativity", *Journal of Management Studies*, Vol. 37, No. 1, pp. 109-139.
- Kotler P. and Armstrong G. (2012). Principles of Marketing (14th ed.), Pearson Education, Inc., p. 720.
- Lakis V. and Giriūnas L. (2012). "The concept of internal control system: Theoretical aspect", *Ekonomika*, Vol. 91, No. 2, pp. 142-152.
- Leibenstein H. (1966). "Allocative efficiency vs. X-efficiency", American Economic Review, Vol. 56, No. 3, pp. 392-414.
- Mahoney J. T. and Pandian J. (1992). "The resource-based view within the conversation of strategic management," *Strategic Management Journal*, Vol. 13, pp. 363-380.
- Martínez Nogueira R. (1984). Empresas familiares, análisis organizacional y social, Buenos Aires, Macchi.
- Mohamud H. A. (2013). "Internal auditing practices and internal control system in somali remittance firms", *International Journal of Business and Social Science*, Vol. 4, No. 4, pp. 165-172.
- Norris G., Hurley J. R., Hartley K. M., Dunleavy J. R. and Balls J. D. (2001). Del ERP al E-Business, Ediciones Deusto: Bilbao.
- Pochet Y. (2001). "Mathematical programming models and formulations for deterministic production planning problems", in: M. Jünger & D. Naddef (Eds.), *Computational Combinatorial Optimization, Lecture Notes in Computer Science*, Berlin: Springer, pp. 57-111.
- Tenner A. and DeToro I. (1997). Process Redesign: The Implementation Guide for Managers, Addison-Wesley Longman, Inc., Glen View, IL.
- Wang F. C., Hung W. T. and Shang J. K. (2006). "Measuring pure managerial efficiency of international tourist hotels in Taiwan", *The Service Industries Journal*, Vol. 26, No. 1, pp. 59-71.
- Weske M. (2007). Business Process Management: Concepts, Languages Architectures, Springer Science & Business Media, Berlin, Germany, p. 368.
- Wua J., Zhangb W. Y., Zhangb S., Liub Y. N. and Mengb X. H. (2013). "A matrix-based Bayesian approach for manufacturing resource allocation planning in supply chain management", *International Journal of Production Research*, Vol. 51, No. 5, pp. 1451-1463.