

Technology, Innovation, Finance and CRM: Repercussions on Competitiveness

JOSÉ SÁNCHEZ GUTIÉRREZ
TANIA ELENA GONZÁLEZ ALVARADO

Coordinators

UNIVERSIDAD DE GUADALAJARA

RED INTERNACIONAL DE INVESTIGADORES EN COMPETITIVIDAD

Technology Innovation,
Finance and CRM: Repercussions
on Competitiveness

Technology Innovation, Finance and CRM: Repercussions on Competitiveness

JOSÉ SÁNCHEZ GUTIÉRREZ
TANIA ELENA GONZÁLEZ ALVARADO
(Coordinators)



Technology Innovation, Finance and CRM: Repercussions on
Competitiveness
Universidad de Guadalajara

Sánchez-Gutiérrez, José; González-Alvarado, Tania Elena (coordinators)

This work is a product of the members of RIICO (Red Internacional de Investigadores en Competitividad) with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of Universidad de Guadalajara and RIICO.

All the photos on this book were taken from Unsplash. Unsplash is a photo discovery platform for free to use, high-definition photos. Unsplash, Inc., a Canadian corporation) operates the Unsplash website at unsplash.com (the “Site”) and all related websites, software, mobile apps, and other services that they provide (together, the “Service”) with the goal of celebrating and enabling contributors and fostering creativity in their community.

Primera edición, 2017

© D.R. 2017, Los autores

© D.R. 2017, Red Internacional de Investigadores en Competitividad

© D.R. 2017, Fondo Editorial Universitario

© D.R. 2017, Universidad de Guadalajara
Centro Universitario de Ciencias Económico Administrativas
Av. Periférico Norte 799, Edificio G-306
Núcleo Los Belenes
45100 Zapopan, Jalisco, México

ISBN 978-84-17075-56-9

Impreso y hecho en México
Printed and made in Mexico

Chapter 5



CRM as a Fostering Tool for Competitiveness: Plastic Manufacturing SMEs

*By José Sánchez-Gutiérrez, Tania-Elena González-Alvarado and
Oscar Alejandro Espinoza-Mercado*

CRM as a Fostering Tool for Competitiveness: Plastic Manufacturing SMEs in the ZMG

José Sánchez-Gutiérrez
Tania-Elena González-Alvarado
Oscar Alejandro Espinoza-Mercado
Universidad de Guadalajara, México

INTRODUCTION

Manufacturing SMEs, specifically those that are part of the industry, have to take into account several tools such as CRM (Customer Relationship Management), which is an element of business strategy that helps to raise awareness of the importance of the customer (Kaplan & Norton, 2001;



Chalmeta, 2006; Yeh-Yun Lin, & Yi-Ching, M., 2007; Richards & Jones, 2008; Verhoef et al., 2009; Van de Vrande et al., 2009), since they are actually the main reason to remain present. Therefore, it is necessary to make the operational changes that are needed for this purpose, mainly those that have to do with customer service, as well as those regarding to the products offered by the company, sales, order management, everything related to distribution and logistics, billing and collections; But above it all, it requires a change of mentality, company's philosophy and SMEs efforts that have to work a lot in this workforce (Hernandez, Gandara and Macias, 2012).

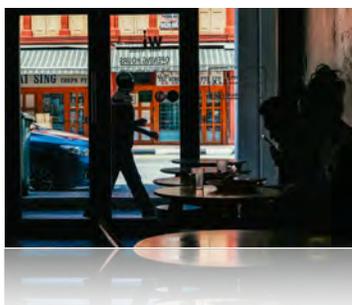
At the international level, the development of the plastic sector has a significance within innovation and competitiveness levels. So, it is important to carry out a diagnosis of the situation of plastic sector SMEs in Jalisco, in order to help to identify the way in which companies are organized and, as well as the strategies that are taking place to generate the conditions that produce innovation processes, that at the same time, impact in their competitiveness levels. According to the OECD (2010), small firms are playing an ever-increasing role in innovation, driven by changes in technologies and markets. Some spin-offs and high growth firms are having remarkable success. However, the broad bulk of small firms are not capitalising on their advantages. (OECD, 2010)

1. CONTEXTUAL FRAMEWORK.

1.1. Mexican SMEs in the world.

As time goes on, SMEs have realized that they are capable of delivering high quality degree products to their customers (Carpintero, 1998; Anzola, 2002; Perez & Stumpo, 2002), much of this is due to innovation, being in a more demanding market (Salavou, 2002; Keskin, 2006; Low, Chapman, & Sloan, 2007; Lee, et al., 2010). This is actually due to the fact that they have adapted to their customer needs and changes that exist in their environment.

Lloyd, Muller and Wall (2002) argue that SMEs size presents the opportunity to innovate and thus cope with a competitive advantage, since their organizational structures are simpler and adapt more easily to changes. These small enterprises are quite important since they are fundamental to every development country. The small and medium sized enterprise sector accounts for 99% of firms in the OECD area, and 50-70% of value added across these countries. (OECD, 2010)



Small and medium-sized enterprises (SMEs) in Latin America, Asia, the United States and Europe make up the vast majority of the business world (OECD, 2000; Gonzalez, 2002; OECD, 2002; Gonzalez, 2005). That is why it is important for them to acquire regional or local economic development.

SMEs have a key role to play in enhancing Latin America's growth potential. But SMEs are highly heterogeneous in terms of access to markets, technologies and human capital, as well as their linkages with other firms, and these factors affect their productivity, export capacity and potential growth. (OECD & ECLAC, 2012).

Throughout the world there are companies of different dimensions, the variables or criteria that are taken into account for their classification differ in each country (Gonzalez, 2002). Latin American SMEs are highly heterogeneous (Gonzalez, 2002; OECD & ECLAC, 2012). As for Mexico, the business order is instituted by the Ministry of Economy. For this purpose, it establishes the criteria for stratification of the number of

employees and economic activity, resulting in the classification presented in Table 1. Mexican classification includes self-employment, for this reason exist micro enterprises with zero employee.

Tabla 1. Mexican enterprises stratification

Sector	Micro		Small		Medium	
	Employees	Annual Sales Amount Range (mdp)	Employees	Annual Sales Amount Range (mdp)	Employees	Annual Sales Amount Range (mdp)
Industry	0-10	Until \$4	11-50	from \$4.01 until \$100	51-250	from 100.1 until \$250
Commerce	0-10	Until \$4	11-30	from \$4.01 until \$100	31-100	from 100.1 until \$250
Service	0-10	Until \$4	11-50	from \$4.01 until \$100	51-100	from 100.1 until \$250

Source: DOF, 2009.

Data collected by the National Institute of Statistics and Geography (INEGI) during the 2014 economic census shows that in Mexico by 2014 there are more than 4 million companies, 97.6% are micro-enterprise and they concentrate 75.4% of the overall employed people, followed by small companies with 2.0% and 13.5%, finally medium-sized companies representing 0.4% and 11.1%.

Small and medium-sized enterprises, SMEs, are of particular importance to national economies, not only for their contributions to the production and distribution of goods and services, but also for the adaptation flexibility to technological changes and great potential for job creation. They represent an excellent means to boost economic development and a better distribution of wealth.

Today, governments in developing countries recognize the importance of SMEs for their contribution to economic growth, job creation, and regional and local development. To give an idea of what this number of companies means, we can compare our figures with those of other nations, taking into consideration the relative sizes of their respective economies in relation to that of Mexico.

Based on the above information (table 2) almost under any parameter, in our country there is a wide number of companies for the economic apparatus size. The number of industries is similar to that of the United States and Japan if we take the total registered.

Tabla 2. Manufacturing enterprises

Country	Manufacturing enterprises	GDP regarding Mexico´s (Mexico = 1)
United States	355,597	17.5
Japan	331,859	7.9
United Kingdom	240,928	2.4
France	210,778	2.4
Germany	70,777	3.2
Canada	30,254	1.2
Italy	30,122	2.0
Mexico 1)	344,118	1.0
Mexico 2)	144,655	1.0

Source: Encyclopaedia Britannica, Book of the Year 2003.

Table 3. Plastic Manufacturing SMEs at the Metropolitan Area of Guadalajara

	2009	2014	Growth rate
Micro	374	462	24%
Small	206	245	19%
Medium	68	84	24%

Source: IIEG (2017).

1.2. The small and medium enterprises of the plastic industry of the Metropolitan Area of Guadalajara.

Jalisco state it is considered as the federative entity of the country that goes to the tip in comparison to other states in the plastic manufacture. The manufacturing industry is considered by the National Institute of Statistics as one of the most important economic activities in the state. The number of plastic manufacturing SMEs has increased in recent years (Table 3).

Mexico imports 55.2% of the total consumption of plastics and exports 33.6% of local production (Conde, 2012). The improvements in design and productivity levels in the processes is the only way to compete with the import products that we have in Mexico. There are opportunities for import substitution according to the national demand (Table 4).

Therefore, we must take advantage of the high consumption of modern plastic that is currently creating designs according to demand, all these characteristic points of industry and knowledge of the international context lead us to thoroughly analyze the mechanisms that allow us to carry out this setting. More ahead there is a table in which strengths and

weaknesses regarding the plastic industry in Metropolitan Area of Guadalajara are analyzed.

Table 4. Mexican Market segmentation (2011)

Market segment	Consumption (Ton/Year)
Container	2,620,000
Consumption	868,000
Construction industry	845,000
Automotive	380,000
Electric-electronic	318,000
Agricultural	220,000
Others	41,000
Total	5,300,000

Source: Conde (2012).

There are a few research projects about the CRM and the SMEs in Guadalajara with interesting results. One of them is about de electronic sector, and the other is about the Jewelry industry (Sanchez, Ramirez & Garcia, 2008; Sanchez, Sigala & Sandoval, 2009). Both of them analyzing the relationship between CRM and Competitiveness. The presents results and discussing in this paper are the continuity of the same study.

2. THEORETICAL CONCEPTS

2.1. Customer Relationship Management

Customer relationship management (CRM) refers to building one-to-one relationships with customers that can drive value for the firm (Kumnar, 2010; Knox et al, 2007; Payne & Frow, 2005; Barnes, 2001). CRM is a combination of people, processes and technology that seeks to understand a company's customers. It is an integrated approach to managing relationships by focusing on customer retention and relationship development. (Chen & Popovich, 2003)

According to Trainor, Adzulis, Rapp and Agnihotri (2014), CRM is much more than the simple management of customer databases, suggesting to analyze the use of technology with the interaction of organizational resources. On the other hand, Porras (2001) says that successful

marketing aims to know and understand the consumer so much that the product or service meets their needs and gets sold without promotion.

CRM states that companies must develop lasting relationships with the client and keep them over time, as the only alternative to develop their trust and loyalty to know their preferences and particularities. In contrast, it has allowed organizations to better listen to their customers to adapt services and products to their true interests and needs. The organizations had an empirical way of treating clients, they did not use database to know their customers, since they lived nearby and everyone knew each other, nowadays it is called CRM.

Hoffman & Bateson (2000) mention that Customer Relationship Management is a process for attracting, differentiating and retaining customers. Moreno (2015) expresses that customer relationship management (CRM) is a strategic procedure that companies do to ensure that their clients are faithful to the company.

For Payne and Frow (2005) CRM combines relational marketing strategies with information technologies to establish relationships with customers, as well as opportunities to use the information obtained to understand customers. This tool is of great help to improve the



profitability, productivity, marketing, the ease of knowing how to satisfy the clients to whom a company is directed, reducing costs, knowing the characteristics of the target clients (Brown 2000). As a matter of fact, CRM helps to segment customers according to the customer's income, tastes and behavior; the key element to this tool is linked to the capacity of the company to respond to

customers' needs and tastes (Cabanelas, Cabanelas and Lorenzo, 2007).

CRM seeks to maintain positive customer relationships, increase loyalty and satisfaction, and most importantly, strive to maximize its Customer Life Cycle Value (LCV) over the relationship duration (Persson and Ryals, 2014). Chen and Popovich (2003) perceive the CRM as an integral combination of people, processes and technology development that try to understand the requirements of the clients, this obviously leads to locate updated the customer satisfaction and its perception of our

relationship with them, it would lead to greater loyalty to them. On the other hand, Mishra and Mishra (2009) comment that relationship marketing helps organizations to effectively manage interactions with consumers, in a way that helps to improve competitiveness.

2.2. Competitiveness.

Competitiveness is a concept applicable to different levels of analysis whether it is a country, sector of activity or a company. First, Competitiveness is a central preoccupation of both advanced and developing countries in an increasingly open and integrated world economy (Porter, Ketels & Delgado, 2007). Second, the prevalence of clusters reveals important insights about the microeconomics of competition and the role of location in competitive advantage (Porter, 2000). Clusters represent a way of thinking about national, state, and local economies, and they necessitate new roles for companies, government, and other institutions in enhancing competitiveness (Porter, 2000). Third and last, enterprises means both supporting and supplying activities and the entrepreneurial climate in the industry itself (Padmore & Gibson, 1998).

Porter (1991) conceives competitiveness as competitive advantages have definitively displaced the classical conception of comparative advantages. Capacities in the endowment of natural resources of a country determined the competitive level of it (Rodrik, 2007; Isham et al., 2005; Crouch & Ritchie, 1999; Grant, 1991; Pearce & Turner, 1990; Krugman, 1987; Dunnig, 1980). This is an aspect that becomes increasingly important in the field of business, which is derived from the demands of the current economic environment framed in the global crisis (Li et al., 2016; Shen, Au & Birtch, 2016; Trapczynski et al., 2016; Madrid, García & Van Auken, 2016; Detarsio, North & Ormaetxea, 2016). For Solleiro and Castañón (2005) competitiveness is a complex concept and can be studied from different approaches and disciplines; so it is not possible to establish a single definition; due to its usefulness that lies in identifying ways to promote companies that contribute to raising real levels of well-being. However, there are some concepts related to competitiveness: competitiveness is defined as the process of dynamic integration of countries and products into international markets, depending on both supply and demand conditions (Dussel, 2001). Competitiveness is related to the capacity to increase the standard of living, to generate sustained productivity, to be successfully inserted in

international markets (Reinert, 1995; Cellini & Soci, 2002; Garelli, 2003; Kitson, Martin & Tyler, 2004; Padilla, 2006).

Competitiveness reflects the extent to which a nation, in a system of free trade and fair market conditions, can produce goods and services that surpass the test of international markets, while maintaining and increasing the real income of its population at a long term (OECD, 1996). The concept of competitiveness involves static and dynamic components: although a country's productivity is clearly determined by the ability to sustain its income levels, it is also one of the central investment return determinants, which is one of the Key factors to explain a growing economy (World Economic Forum, 2009).

2.3. Competitiveness in the business sector.

Krugman (1994) has pointed out that companies are competing, not nations; a country is competitive due to companies; this is the basis of competitiveness. For this reason, companies' competitiveness depends on factors at three levels: the first level is the competitiveness of the country, which includes variables such as macroeconomic stability, openness and access to international markets or complexity of regulation for the business sector; the second level refers to regional infrastructure; a third level that explains a companies' competitiveness has to do with what happens within the company itself (Cervantes, 2005). Also, business competitiveness is derived from the competitive advantage that a company has through its production and organizational methods (reflected in price and final product quality) in relation to those of its rivals in a specific market (Abdel & Romo, 2004).

For Solleiro and Castañón (2005) competitiveness is the ability of an organization to maintain or increase its participation in the market based on new business strategies, sustained productivity growth, inter-enterprise capacity to participate in negotiations with different institutions and other companies within their environment, in a competitive environment determined by the sector and the consumer market and in policies introduced by national governments and regional economic alliances.

2.3.1. Elements that influence competitiveness in SMEs:

Based on OECD data (1992, cited in Solleiro & Castañón), the elements that influence competitiveness in companies are:

- Successful management of production flows, raw materials and inventories.

- Successful management of the interaction mechanisms between planning, marketing, research and formal development, design, engineering and industrial production.
- The ability to combine research and development and innovation activities in cooperation with universities and other enterprises.
- The ability to incorporate more precise definitions of demand characteristics and market evolution in the design and production of strategies.
- The ability to successfully organize inter-company relationships with suppliers and customers.
- Improvement of workers' capacities through investment in specialized training and the generation of high levels of responsibility for production workers.

The above elements only include aspects that can be controlled by the companies, considering the relationship with the universities and the customer-supplier relationship. Finally, being competitive today is vital for the survival of SMEs by being a reference of anticipation capacity and responses to the challenges of the environment (Bhamra, Dani & Burnard, 2011; Welter & Smallbone, 2011; Camisón, 1997). To improve competitiveness, SMEs have the need to adapt both their strategies and their organizational structure and management to the dynamic environment of today's economy. However, many companies persist in a conservative attitude waiting to observe the operability of certain strategies to introduce changes in their structures. But these companies can learn about its customers, finally it could be the principal factor of organizational change with low cost and big opportunities.

3. METHODOLOGY

The methodology is a process or technique that enables to arrive at a determined result. Bernal (2006) mentions that there are different types of methods for conducting research, such as: inductive, deductive, inductive-deductive, hypothetical-deductive, analytical, synthetic, analytical-synthetic, historical-comparative, quantitative, qualitative, comparative and dialectical. The method used for this research is the quantitative method that is defined as the measurement of characteristics of social phenomena through observation and experimentation which quantifies reality and uses statistical tests for data analysis (Lara, 2011).

For a population analysis it is preferably done by means of a sample that is the representative set of elements, since it helps to obtain information similar to the one of a census of quickly and low cost. There are several types of sampling: stratified sampling, clusters, simple and systematic random. In this case the type of simple random sampling was used, that is to say that each company of the population has the same probability of being selected. A personal survey was conducted to 129 companies. The survey was conducted with a confidence level of 97% and with a 4% error. The results were captured in the SPSS program for statistical analysis, since it facilitates the interpretation of the results and helps to have more information about it. This survey was carried out with the Likert scale, where all the items measured with the same intensity. In this process the respondent provides with an answer which goes from 1 to 5, wherein 1 means “totally disagree” and five “totally agree”. Results were obtained through the following formula:

$$n = z^2 \frac{N \cdot p \cdot q}{i^2 (N - 1) + z^2}$$

Figure 1. Model



Source: Created by the authors based on the results obtained in the project “Determinants of Competitiveness in SMEs” CA-UDG-484.

General objective.

To analyze the relationship between CRM and competitiveness within plastic manufacturing SMEs in the ZMG.

Specific objectives.

1. To analyze the relationship between Management capacity and CRM within plastic manufacturing SMEs in the ZMG.
2. To analyze the relationship between Marketing innovation and CRM within plastic manufacturing SMEs in the ZMG.

Hypothesis

H1: The greater implementation of a CRM system, the greater competitiveness.

H2: The Management capacity is related to CRM, the managers have helped to make changes in the CRM and achieve the planned results.

H3: The Marketing innovation is related to CRM, the managers focuses on terms of regaining the relationship with the lost customer.

4. STUDY RESULTS AND CONCLUSION

We show the results of the applied survey, where Cronbach alpha box helps us to evaluate the reliability of the items of an instrument. Generally, a group of items exploring a common factor shows a high Cronbach alpha value (Streiner, 2003). On the other hand we present the KMO test table and the sphericity of Barlett test. The investigation was carried out for companies dedicated to the plastic industry in the State of Jalisco in the Metropolitan Area of Guadalajara, which is constituted by the municipalities of Zapopan, Tlaquepaque, Tonalá, El Salto and Tlajomulco. The questionnaire was based on the Likert scale where respondents answered one if they totally disagreed or five if they totally agreed. The results obtained are shown below, starting with Cronbach alpha analysis.

Table 4. Cronbach alpha coefficient CRM and competitiveness

Cronbach alpha coefficient	Elements number
.905	26

Source: Created by the authors based on the results obtained in the project “Determinants of Competitiveness in SMEs” CA-UDG-484.

It can be observed that the variables of the questionnaire can be explained with statistics, that is to say, that there is a high reliability in the questionnaire applied with an index of 0.905.

Table 5. Bartlett and KMO test. CRM and Competitiveness

Kaiser-Meyer-Olkin measure of sampling adequacy	Medida Kaiser-Meyer- mn	.848
Adecuacity sampling Oklin		
Bartlett esphericity test	Aprox. Chi-cuadrado	1654.793
	gl	325
	Sig.	.000

Source: Created by the authors based on the results obtained in the project “Determinants of Competitiveness in SMEs” CA-UDG-484.

Table 5 shows that the Kaiser-Meyer-Olkin measure of sampling adequacy is considerably high: 0.848, and a 1654.793 Chi-square. This means that the number of items that are useful in the questionnaire is

high. It is observed that there are 325 degrees of freedom which means that manufacturing companies answered several different answers.

Based on table 6, it is corroborated that the Management capacity is related to CRM, the managers have helped to make changes in the CRM and achieve the planned results, so the first hypothesis is proven. As for the current analysis, it is worth to mention that CRM 3 (7.082 quadratic mean) and CRM 1 (6.782 quadratic mean) turned out to be the most important ones since they got a reasonable result, which means that they are highly representative. In CRM 3, it can be assumed that it is quite important to consider the customer relationship since most of the objectives have to do with the customer. It all comes down to the change awareness and objectives orientation.

Table 6. Management Capacity - CRM (ANOVA)

		Sum of squares	gl	Quadratic mean	F	Sig.
CRM1	Between groups	101.733	15	6.782	19.142	.000
	Within groups	40.391	114	.354		
	Total	142.123	129			
CRM2	Between groups	85.358	15	5.691	26.624	.000
	Within groups	24.366	114	.214		
	Total	109.723	129			
CRM3	Between groups	106.226	15	7.082	21.890	.000
	Within groups	36.882	114	.324		
	Total	143.108	129			
CRM4	Between groups	97.595	15	6.506	11.168	.000
	Within groups	66.413	114	.583		
	Total	164.008	129			

Source: Created by the authors based on the results obtained in the project "Determinants of Competitiveness in SMEs" CA-UDG-484.

By giving a deeper glance to table 7 it is simple to detect CRM 1 as the one which follows the most representative. By saying so, a quadratic mean of 6.782 is worth to stand out, since it actually expresses the second most representative one. It is actually linked to identifying related factors that have to do with such a relationship management.

As for measures of marketing innovation with respect to business and innovation, the company focuses on terms of regaining the relationship with the lost customer. Given the circumstances the plastic industries turned out to be more focused on the relationship with the customer and manage to implement a good marketing system to recover customers.

Table 7. Measures of marketing innovation with respect to the company and innovation

		Sum of squares	gl	Quadratic mean	F	Sig.
CRM 1	Between groups	101.733	15	6.782	19.142	.000
	Within groups	40.391	114	.354		
	Total	142.123	129			
CRM 2	Between groups	85.358	15	5.691	26.624	.000
	Within groups	24.366	114	.214		
	Total	109.723	129			
CRM 3	Between groups	106.226	15	7.082	21.890	.000
	Within groups	36.882	114	.324		
	Total	143.108	129			
CRM 4	Between groups	97.595	15	6.506	11.168	.000
	Within groups	66.413	114	.583		
	Total	164.008	129			

Source: Created by the authors based on the results obtained in the project "Determinants of Competitiveness in SMEs" CA-UDG-484.

The current research was carried out for small and medium-sized enterprises (SMEs), which have between 11 and 250 employees in the organization, without considering micro-enterprises that have less than 10 workers.

The study aimed to focus manufacturing industries in the Metropolitan Area of Guadalajara, addressing the municipalities of Guadalajara, Zapopan, Tlaquepaque, Tonalá, Tlajomulco and El Salto.

Surveys were applied only to senior managers, managers or first level managers, which still makes us think whether the given results would have the same appreciation from lower levels.

REFERENCES

- Abdel, G. & Romo, M. (2004). Sobre el concepto de competitividad. *Comercio Exterior*, 55(3), 200-214.
- Anzola, S. (2002). *Administración de Pequeñas Empresas*. Mexico: McGraw Hill.
- Barnes, J. G. (2001). *Secrets of customer relationship management: It's all about how you make them feel*. McGraw-Hill Companies.

- Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: the concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375-5393.
- Cabanelas J., Cabanelas P. y Lorenzo J. (2007). La gestión de las relaciones con los clientes como característica de la alta rentabilidad empresarial. *Revista Europea de Dirección y Economía de la Empresa*, 16(3), 133-148.
- Carpintero, S. (1998). *Los Programas de Apoyo a la Microempresa en América Latina, El microcrédito como la gran esperanza del siglo XXI*, Bilbao: Deusto, 182 pp.
- Cellini, R., & Soci, A. (2002). Pop competitiveness. *Banca Nazionale del Lavoro Quarterly Review*, 55(220), 71.
- Chalmeta, R. (2006). Methodology for customer relationship management. *Journal of systems and software*, 79(7), 1015-1024.
- Chen, I. J. & Popovich, K. (2003). Understanding customer relationship management (CRM) People, process and technology. *Business Process Management Journal*, 9(5), 672-688.
- Conde, M. P. (2011). *Presente y Futuro de la Industria del Plástico en México. Ambiente plástico*. México: Centro Empresarial del Plástico.
- Crouch, G. I., & Ritchie, J. B. (1999). Tourism, competitiveness, and societal prosperity. *Journal of business research*, 44(3), 137-152.
- Detarsio, R., North, K., & Ormaetxea, M. (2016). Surviving and Competing in Times of Crisis: Cases of Strategies by Argentine SMEs. In *Competitive Strategies for Small and Medium Enterprises* (pp. 139-151). Springer International Publishing.
- Dunning, J. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of international business studies*, 11(1), 9-31.
- Dussel, E. (2001). *Un análisis de la competitividad de las exportaciones de prendas de vestir de Centroamérica utilizando los programas y la metodología CAN y MAGIC*. Mexico: UN-ECLAC.
- Dwyer, L., & Kim, C. (2003). Destination competitiveness: determinants and indicators. *Current issues in tourism*, 6(5), 369-414.
- Garelli, S. (2003). Competitiveness of nations: the fundamentals. *IMD World competitiveness yearbook*, 702-713.
- González, T. (2002). Limitaciones de la información para estudios comparativos de micro, pequeña y mediana empresas de diferentes

- regiones o países. VII Congreso Internacional en Contaduría Administración e Informática, ANFECA, FCA, UNAM.
- González, T. (2005). Problemas en la definición de microempresa. *Revista Venezolana de Gerencia*, 10(31), 408 - 423.
- Grant, R. M. (1991). Porter's 'competitive advantage of nations': an assessment. *Strategic management journal*, 12(7), 535-548.
- Hernández, M., Gándara, M. y Macías, M. (2012). Factores estratégicos del CRM en las pymes de la ZMG que mejoren su posición competitiva en la industria mueblera. Vol. 6, Mexico: Red Internacional de Investigadores en Competitividad.
- Hoffman, N. (2000). An examination of the Sustainable Competitive Advantage Concept: Past, Present and Future. *Academy of Marketing Science Review*, 4, 1-20.
- IIEG (2017). Industria del Hule y Plástico. Ficha Técnica. Mexico: Instituto de Información Estadística y Geográfica.
- INEGI (2014). Micro, pequeña, mediana y gran empresa. Estratificación de los Establecimientos. Censos económicos, Mexico: INEGI.
- Isham, J., Woolcock, M., Pritchett, L., & Busby, G. (2005). The varieties of resource experience: natural resource export structures and the political economy of economic growth. *The World Bank Economic Review*, 19(2), 141-174.
- Kaplan, R. S., & Norton, D. P. (2001). The strategy-focused organization. *Strategy and Leadership*, 29(3), 41-42.
- Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of innovation management*, 9(4), 396-417.
- Kitson, M., Martin, R., & Tyler, P. (2004). Regional competitiveness: an elusive yet key concept?. *Regional studies*, 38(9), 991-999.
- Knox, S., Payne, A., Ryals, L., Maklan, S., & Peppard, J. (2007). *Customer relationship management*. Routledge.
- Krugman, P. (1994). Competitiveness: a dangerous obsession. *Foreign affairs*, 28-44.
- Krugman, P. (1987). The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic scale economies. *Journal of development Economics*, 27(1-2), 41-55.
- Kumar, V. (2010). *Customer relationship management*. John Wiley & Sons.

- Lara, E. (2011). *Fundamentos de Investigación*. México: Alfaomega.
- Lee, S., Park, G., Yoon, B., & Park, J. (2010). Open innovation in SMEs— An intermediated network model. *Research policy*, 39(2), 290-300.
- Li, W. Y., Chow, P. S., Choi, T. M., & Chan, H. L. (2016). Supplier integration, green sustainability programs, and financial performance of fashion enterprises under global financial crisis. *Journal of Cleaner Production*, 135, 57-70.
- Lloyd, L., Muller, K. & Wall, S. (2002). Innovation and educational policy in SMEs: a Czech perspective. *Education y Training*, 378-387.
- Low, D. R., Chapman, R. L., & Sloan, T. R. (2007). Inter-relationships between innovation and market orientation in SMEs. *Management Research News*, 30(12), 878-891.
- Madrid, A., García, D., & Van Auken, H. (2016). Financing constraints and SME innovation during economic crises. *Academia Revista Latinoamericana de Administración*, 29(1), 84-106.
- Mishra, A. & Mishra, D. (2009). Customer Relationship Management: implementation process perspective. *Acta Polytechnica Hungarica*, 6(4), 83-99.
- Moreno, F. (2015). *Perspectiva General del Customer Relationship Management*. *Gaceta Sansana*, 2(6), 20-41
- OECD. (1996). *Industrial Competitiveness: Benchmarking Business Environments In The Global Economy*. Paris: OECD.
- OECD (2000). *OECD Small and médium Enterprise outlook*, París: OECD, 222 pp.
- OECD (2002). *OECD Small and médium Enterprise outlook*, París: OECD, 248 pp.
- OECD (2010), chapter "Introduction", in *SMEs, Entrepreneurship and Innovation*, OECD Publishing, Paris.
- OECD & ECLAC (2012). *Latin American Economic Outlook 2013: SMEs policies for structural change*. Paris: OECD/UN-ECLAC. 185 pp.
- Padilla, R. (2006). *Instrumento de medición de la competitividad*. Mexico: CEPAL.
- Padmore, T., & Gibson, H. (1998). Modelling systems of innovation: II. A framework for industrial cluster analysis in regions. *Research policy*, 26(6), 625-641.
- Payne, A. & Frow, P. (2005). A Strategic Framework for Customer Relationship Management, *Journal of Marketing*, 69(4), 167-176.

- Pearce, D. W., & Turner, R. K. (1990). *Economics of natural resources and the environment*. JHU Press.
- Peres, W., & Stumpo, G. (coord.) (2002). *Pequeñas y medianas empresas industriales en América Latina y el Caribe, México, CEPAL/ Siglo XXI*, 550 pp.
- Persson, A. & Ryals, L. (2014). Making customer relationship decisions: Analytics rules of thumb. *Journal of Business Research*, 67(8), 1725-1732.
- Porrás, C. (2001). Cuatro pilares para intimar con el cliente. *Biblios Revista Electrónica de Bibliotecología, Archivología y Museología*, (10), 12- 15.
- Porter, M. E., Ketels, C., & Delgado, M. (2007). The microeconomic foundations of prosperity: findings from the business competitiveness index. *The Global Competitiveness Report 2007–2008*, 51-81.
- Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic development quarterly*, 14(1), 15-34.
- Reinert, E. S. (1995). Competitiveness and its predecessors—a 500-year cross-national perspective. *Structural change and economic dynamics*, 6(1), 23-42.
- Richards, K. A., & Jones, E. (2008). Customer relationship management: Finding value drivers. *Industrial marketing management*, 37(2), 120-130.
- Rodrik, D. (2007). Industrial development: Some stylized facts and policy directions. *Industrial development for the 21st century: Sustainable development perspectives*, 7-28.
- Salavou, H. (2002). Profitability in market-oriented SMEs: does product innovation matter?. *European journal of innovation management*, 5(3), 164-171.
- Sanchez, J., Ramirez, A., & Garcia, K. (2008). Customer relationship management (CRM) and products development process as marketing knowledge in the Jewelry Industry: Cases in Guadalajara, México. *Competition Forum* 6 (2) p. 252.
- Sanchez, J; Sigala, M., & Sandoval, O. (2009). Customer Relationship Management linking with Marketing Knowledge in the electronic sector in Guadalajara. *Mercados y Negocios*, 1(20), 107-122.

- Shen, N., Au, K., & Birtch, T. (2016). The Performance of Chinese Private Firms in Coping with a Global Financial Crisis: Who Is Best Positioned?. *Frontiers of Business Research in China*, 10(4), 548.
- Solleiro, J. & Castañón, R. (2005). Competitiveness and innovation systems: the challenges for Mexico's insertion in the global context. *Technovation*, 4, 1059-1070.
- Streiner, D. (2003). Being inconsistent about consistency: when coefficient alpha does and doesn't matter. *Journal of personality assessment*, 80(3), 217-222.
- Trainor, K. J., Andzulis, J. M., Rapp, A. & Agnihotri, R. (2014). Social media technology usage and customer relationship performance: A capabilities-based examination of social CRM. *Journal of Business Research*, 67(6), 1201-1208.
- Trapczynski, P., Jankowska, B., Dzikowska, M., & Gorynia, M. (2016). Identification of Linkages between the Competitive Potential and Competitive Position of SMEs Related to their Internationalization Patterns Shortly after the Economic Crisis. *Entrepreneurial Business and Economics Review*, 4(4), 29
- Van de Vrande, V., De Jong, J. P., Vanhaverbeke, W., & De Rochemont, M. (2009). Open innovation in SMEs: Trends, motives and management challenges. *Technovation*, 29(6), 423-437.
- Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, A. (2009). Customer experience creation: Determinants, dynamics and management strategies. *Journal of retailing*, 85(1), 31-41.
- Welter, F., & Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*, 49(1), 107-125.
- World Economic Forum (2009). *The Global Competitiveness Report 2009-2010*. Geneva.
- Yeh-Yun Lin, C., & Yi-Ching Chen, M. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News*, 30(2), 115-132.