Global Connectivity, Knowledge and Innovation for Sustainability and Growth: New Paradigms of Theory and Practice

Editors

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ISBN: 978-0-9797659-9-5

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CSR Strategies To Improve Competitiveness Development: Manufacturing Industry In Mexico

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Abstract

Corporate Social Responsibility (CSR) involves proactive strategies and business practices adopted voluntarily by companies that go beyond regulatory requirements for managing its social responsibility, and thereby contribute broadly and positively to society, and the commitment of citizens, institutions, public and private, and social organizations, in general, to contribute to the increased welfare of local or global society. The study analyzes the impact of CSR in the Competitiveness in the SMEs Manufacturing Industry, using EQS software to detect the correlation and confirmatory analysis in this research.

Keywords: Corporate Social Responsibility, Competitiveness and SMEs Manufacturing Industry

Introduction

The phenomenon as globalization has had an impact on the performance of companies in our society (Siegele and Ward, 2007) imposing restrictions and demands on development-oriented activities of humanitarian work and if possible, get a financial reward (Pirson and Lawrence, 2010). It has been shown that the Government itself is not only competent enough to meet the basic needs of most people and consequently must be various options to increase the quality of life of the population (Griesse, 2007).

Sajardo Moreno and Serra Yoldi, (2009) perceive three types of CSR:
a) financial responsibility, b) social responsibility, and c) environmental responsibility.
The fundamental principles of CSR refers to: accountability; transparency, ethical behavior, respect for the interests of the parties concerned; respect for the rule of law; respect for international standards of behavior and respect for human rights.

Theoretical framework

By mid-1970 on the implementation analysis it focused on the model that was carried out CSR. Sethi (1975), proposed a three-stage scheme based on the obligations and responsibilities that the company has and is integrated into its operation, as: 1. Stage socially responsible policy Stage 2. and 3. Stage mandatory. Carroll (1979) created a model centered on the performance of socially responsible companies, in which four interrelated categories are defined: a. Economic, b. Legal, c. Ethics and d. Discretionary.

Drucker (1984), proposes that to achieve the implementation of CSR is necessary that businesses convert their social responsibilities, business opportunities, to thereby generate skills, competencies, better paid jobs and

opportunities for access health services for society. So, the relationship between corporate social performance and financial performance is one of the most studied topics (Chand and Fraser, 2006; McWilliams and Siegel, 2001).

Corporate Social Responsibility in the model that implemented Cochran, Wartick and Wood(1984), who defined it as a set of principles of social responsibility, processes of social responsiveness, and policies, programs and observable results of a business organization, and how they relate relations with the social type of the company.

López Salazar, (2013) adds that the growing interest in the concept of social responsibility is founded on the interest there is in society that companies operate in a socially responsible manner, this represents a challenge for corporations as raises the standard to reach, also, Rosas, (2010) adds that social responsibility has gained ground in the agendas of governments, executives, business managers and somewhat more in the university sector, few companies recognize social responsibility as a way to evade tax or as a marketing strategy.

Salazar, Soto and Sanchez (2011), comment that CSR use Instrumental means to achieve organizational or as threats to its stakeholders objectives, this approach sees the need to respect the interests of all participating groups achieving a balance in the results, meanwhile, Valenzuela, Jara, and Villegas (2015) argue that the business sector is essential to have information on the subject Social Responsibility, because in this way can adopt certain practices that suit their interests, involving the various stakeholders, and even providing benefits for each.

In other ideas, Mazzoti-Pabello and Solís-Pérez (2014) comment that according with 26000:2010 the essential characteristic of CSR is the willingness of the organizations incorporate social and environmental considerations into their decision-making and accountability for the impacts of its decisions and activities on society and the environment.

Giacomozzi, and González (2014) consider the importance to have an intangible asset according to different relationships, such organization and stakeholders related with economic, legal, ethical and discretionary dimension, and the generation of social capital is the result of hard work and continued in the four dimensions, which does not leave out any of them creating value for each of the stakeholders and the ability to produce capital as a central element of CSR.

Some critics say that CSR is expensive and that the positive effects can often occur only in the distant future, if they come at all. Supporters of CSR argue that the cost of a responsible social and environmental behavior back to the company over time (Porter and Kramer, 2006). Especially the positive relationship can be found in the context of environmental performance and economic performance (Russo and Fouts, 1997). So, according to the authors CSR for companies if they can have high costs, and it is important to emphasize that implemented CSR in a company is really expensive, but your benefits will be long-term and short by little in the future. Keinert (2008) establish that CSR has been seen as a resource for the development of competitive advantages. Companies can be differentiated through their corporate image and reputation achieved by social responsibility, which ultimately would impact positively on the financial performance of the company (Bear, Rahman and Post, 2010; Fernández and Luna, 2007; Lai, 2010; Flatt and Kowalczy, 2006; Orlitzky, Schmidt and Rynes, 2003) also being able to generate sustainable profits over time and contributing to form an identity for the company (Bendix and Abratt, 2007).

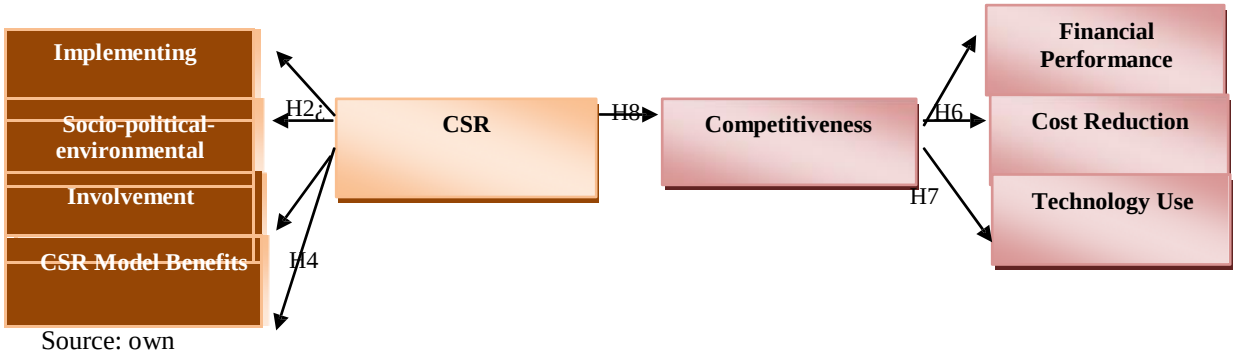
And this CSR strategy is carried through implementation, involvement, benefits and socio-politic-environmental based on competitiveness in their financial, technological performance and cost aspect.

Methodology

The surveys were applied in 400 SMEs manufacturing industry in Guadalajara, Mexico, during September to December 2015, the pilot questionnaire was applied to 20 SMEs, and the suggestions to improve the collect information were included in the final questionnaire, applying 434 surveys, rejecting 34 due incomplete information.

The study is correlational and descriptive; include enterprises from 11 to 250 workers, the universe of the study is 1285 plastic and metalworking SMEs located in Guadalajara, Mexico.
In the figure 1 shown the theoretical model considering the independent variable CSR and Competitiveness as dependent variable.

Figure 1. Theoretical model of the relation between CSR and competitiveness



Source: own

Also, there are eight hypotheses that will contribute to this research:

H1: Most implementation, better is CSR.

H2: Most socio-political-environmental support, better is CSR.

H3: Most Involvement, better CSR.

H4: Most CSR Model benefits, better CSR.

H5: Better financial performance, better Competitiveness.

H6: Better cost reduction, better Competitiveness.

H7: Better technology use, better Competitiveness.

H8: Better CSR, better Competitiveness.

With regard to the development of the measures, the Social Responsibility was average with a scale of 4 items adapted from Giacomozzi, and González (2014), Mazzoti-Pabello and Solís-Pérez (2014), Sethi (1975), Valenzuela, Jara, and Villegas (2015), Carroll (1979), Drucker (1984), Cochran and Wood (1984), Porter and Kramer (2006), Keinert (2008), Azcarate, Carrasco and Fernandez (2011), Salazar, Soto and Sanchez (2011).

Competitiveness was measured by 6 times and was adapted from Friedman (1970), Barney (1991), Freeman (1994), Russo and Fouts (1997), Miles and Covin (2000), McWilliams and Siegel (2001), Chand and Fraser (2006), Van Beurden, and Gößling (2008). All items used were measured with a Likert scale of 5 positions with 1 = strongly disagree to 5 = strongly agree.

Assessing the reliability and validity of measuring scales of the CSR and competitiveness, a Confirmatory Factorial analysis (CFA) with the method of maximum likelihood and EQS 6.2 software (Bentler, 2005; Brown, 2006; Byrne, 2006).

Rates of statistical adjustment that were considered were the NFI, NNFI, CFI and RMSEA (Bentler, and Bonnet, 1980; Bentler, 1990; Hair et al., 1995; Chau, 1997; Heck, 1998).

Table 1. Technical Information for the Study

Study Characteristics	Description
Universe[1]	1285 Plastic and Metalworking SMEs
Fieldwork	Guadalajara, Mexico
Sampling	SMEs from 11 to 250 workers
Information collect method	Personnel survey
Type of sampling	Simple random
Size of sampling	400 SMEs
Sampling error margin	± 5% to a global level, to a confidence level of 95% (p=q= 0.5)
Date of fieldwork	September to December 2015

Source: Own based in study information

Analysis and Discussion

The results of the Confirmatory Factorial Analysis (CFA) are presented in table 1 and shown that the model presents a good of data analysis ($S\text{-}BX^2$= 971.3254; *df* = 329; (p < 0.0000); NFI = .903; NNFI = .923; CFI = .935; RMSEA = .030). Also, Cronbach's alpha is higher to 0.800, and Loading Factorial Index (LFI) exceeds the value 0.70 recommended (Nunnally and Bersntein, 1994; Kline, 2011; Albright y Winston, 2015).

Moreover regarding evidence of discriminant validity, measurement is provided in two forms that can be seen in Table 2. Since, with a confidence interval of 90% confidentiality, none of the individual elements of the factors latent correlation matrix contains the 1.0 (Anderson and Gerbing, 1988). Another point to note is extracted variance between the pair of constructs is higher than its corresponding EVI (Fornell and Larcker, 1981). And based on these criteria it is concluded that the different measurements to the model shown sufficient evidence of reliability and convergent and discriminant validity.

Table 2. Internal consistency and convergent validity of the theoretical model

Variable	Indicator	Factor Loading	Robust T-Value	Cronbach´s alpha	LFI	EVI
Implementation	RSG2	0.904***	1.000*	0.913	**0.915**	**0.781**
	RSG3	0.911***	25.099			
	RSG4	0.835***	20.016			
Socio-political-environmental	RSP5	0.796***	1.000*	0.825	**0.824**	**0.611**
	RSP6	0.722***	19.017			
	RSP7	0.823***	20.615			
Involvement	RSI1	0.842***	1.000*	0.894	**0.896**	**0.683**
	RSI2	0.846***	13.152			
	RSI3	0.752***	17.656			
	RSI4	0.862***	21.043			
CSR Model Benefits	RSB2	0.884***	1.000*	0.848	**0.849**	**0.739**
	RSB4	0.834***	12.093			
Financial Performance	FP1	0.722***	1.000*	0.955	**0.956**	**0.783**
	FP2	0.849***	26.117			
	FP3	0.938***	24.000			
	FP4	0.940***	23.495			
	FP5	0.953***	23.683			
	FP6	0.886***	21.655			
Costs Reduction	PC3	0.923***	1.000*	0.935	**0.936**	**0.785**
	PC4	0.967***	42.573			
	PC5	0.869***	26.718			
	PC6	0.774***	18.997			
Technology Use	TE1	0.855***	1.000*	0.929	**0.930**	**0.691**
	TE2	0.863***	54.830			
	TE3	0.892***	37.353			
	TE4	0.859***	33.587			
	TE5	0.701***	22.963			
	TE6	0.802***	30.406			
$S\text{-}BX^2$ (df = 329) = 971.3254 (p < 0.000); NFI = .903; NNFI = .923; CFI = .935; RMSEA = .070						

* = Constrained parameter values in the identification process

Source: Own

Chart 2. Discriminant Validity of the theoretical model measurement

Variables	Implementation	Socio-political-environmental	Involvement	CSR Model Benefits	Financial Performance	Costs Reduction	Technology Use
Implementation	**0.**	0.295	0.206	0.381	0.852	0.486	0.09
Socio-political-environmental	0.145, 0.445	**0.611**	0.983	0.660	0.02	-0.142	0.497
Involvement	0.068 , 0.344	0.225, 0.537	**0.683**	0.441	-0.014	-0.216	0.355
CSR Model Benefits	0.626 , 0.078	0.324, 0.648	-0.064, 0.244	**0.739**	0.006	-0.062	0.288
Financial Performance	0.799 , 0.167	0.494 , 0.826	-0.168, .208	-0.280, '-0.004	**0.783**	0.510	-0.152
Costs Reduction	0.339, 0.655	0.299, .583	-0.190, 0.162	-0.348, '-0.084	0.213 , 0.497	**0.785**	-0.202
Technology Use	-0.188, 0.200	-0.202, .078	0.136, 0.440	0.416, 0.604	-0.354, 0.050	-0.350,-0.054	**0.691**

The diagonal represents the extracted variance index (EVI), while above the diagonal part of variance (squared correlation) is presented. Below the diagonal, the estimate of the correlation factor with a confidence interval of 90% is presented.

Source: Own

The hypotheses were tested in the theoretical model of corporate social responsibility and competitiveness through structural equation modeling (SEM) using software EQS 6.2 (Bentler, 2005; Byrne, 2006; Brown, 2006). The nomological validity of the theoretical model was tested through the realization of the chi-square, in which the theoretical model with the measurement model was compared with no significant differences (Anderson and Gerbing, 1988; Hatcher, 1994). The results of this analysis are presented in Table 3.

Table 3. Results of the SEM Theoretical model

Hypothesis	Structural Relationship	Standardized Coefficient	Robust T-Value	
H1: Most implementation, better is CSR.	Implementation → CSR	0.245	15.038	
H2: Most socio-political-environmental support, better is CSR.	Socio-political-environmental → CST	0.218	13.21	
H3: Most Involvement, better CSR.	Involvement → CSR	0.213	15.317	$S\text{-}BX^2_{(329)}$= 971.3254 p = 0.001
H4: Most CSR Model benefits, better CSR.	CSR Model Benefits → CSR	0.227	12.093	NFI= 905 NNFI = 923
H5: Better financial performance, better Competitiveness	Financial Performance → Competitiveness	0.321	21.840	CFI = .935 RMSEA = 0.070
H6: Better cost reduction, better Competitiveness	Cost Reduction → Competitiveness	0.237	22.072	
H7: Better technology use, better Competitiveness	Technology Use → Competitiveness	0.250	29.856	
H8: Better CSR, better competitiveness	CSR → Competitiveness	0.244	18.489	

*** = $p < 0.001$
Source: Own

Chart 3 showed the results obtained from the Structural Equations Model, regards to the **H1** the results obtained, $\beta = 0.245$, $p < 0.001$, indicates that CSR implementation process has important impact in the CSR of manufacturing firms. Also for hypothesis **H2**, the correlation obtained, $\beta = 0.218$, $p < 0.001$, suggest that socio-political-environmental issues has significant effects in CSR. In **H3,** $\beta = 0.213$, $p < 0.001$, suggest that people involvement also has effects in CSR manufacturing firms. **H4**, $\beta = 0.227$, $p < 0.001$, the CSR Model Benefits affect significantly the CSR in plastic and metalworking SMEs.

Related with hypothesis **H5** the results obtained, $\beta = 0.321$, $p < 0.001$, indicate that financial performance has good impact in the competitiveness level. In **H6** $\beta = 0.237$ $p < 0.001$), show that cost reduction also has significant effects on business competitiveness. The results obtained in hypothesis **H7**, $\beta = 0.250$, $p < 0.001$, present the technology use has important impact on business competitiveness. Finally, the results obtained on hypothesis **H8**, $\beta = 0.244$, $p < 0.001$, presents that CSR affects significantly on SMEs business competitiveness

Limitations

The first limitation is that the sample considered companies from 11 to 250 employees, excluding companies from 1 to 10 workers, and more than 250 employees, with the presentation of a significant amount of manufacturing SMEs that future studies should be important to consider these companies to analyze the effects of CSR in competitiveness, and the effects of different enterprises size.

The questionnaire was applied to directors or managers high level, and the results may differ from the functional managers or middle managers.

The present study consider just the plastic and metalworking SMEs, could analyze the impact in other manufacturing enterprises.

In future studies, it could be important to consider the views of customers and suppliers to analyze the results, comparing the opinions in and out of SMEs.

Finally, it could be interesting analyses and discuss some questions:

According to the results that would be in the manufacturing SMEs if a more sophisticated CSR measuring model, impact in competitiveness of SMEs? What elements are most important in the implementation, socio-cultural-environmental, involvement, and model benefits impacting in CSR? What specific activities of financial performance, reducing costs and technology use are most affecting business competitiveness? What are the practical considerations in SMEs to apply CSR and affect competitiveness in Service SMEs? These and more questions could be answered in future studies.

Conclusions

This research has shown that plastic and metalworking SMEs in Guadalajara, Mexico has a good correlation between the variable competitiveness dependent with the independent variable CSR, and results expressed in this study appear to be consistent with the relationship of the factors use of technology, costs and financial results with the variable competitiveness, and implementation factors, socio-political-environmental, involvement and model benefits that are related to corporate social responsibility.
The SMEs analyses are in a process of transformation of administrative systems, conscious that they need to change and apply an integral CSR model to create added value in the society, being aware to get new challenges responding the implications of this CSR strategy, where the team must involvement in the change, from planning to implementing the process, getting benefits in all the organization.

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