

Exploring the Sustainability of SMEs: The Puerto Rican Case

Introduction:

The issue of sustainability in Puerto Rican companies have acquired great importance in recent years due to the persistent economic recession in Puerto Rico. In this sense, both the government and the private sectors look at the development of SMEs as a path that can significantly contribute to the economic development of the island. This is largely due to the fact that SMEs represent around 95.0% of all private establishments in Puerto Rico (CCEPR, 2016) and generate about 80% of employment (Congressional Task Force, 2016).

Both the local government and the private sector have identified many opportunities and created multiple alliances and initiatives to advance SMEs in Puerto Rico in the areas of advanced manufacturing, emerging industries, technology, export of products and services, visitor economy, aerospace and bio-economics (DDEC, 2017; EcharPalante.com, 2017; Echar Pa'Lante, 2017).

However, even though their strategic importance, SMEs face multiple challenges to achieve sustainability. According to the explanatory memorandum of Puerto Rico's Act No. 62 of June 11, 2014, known as the Microenterprise Support Act, these companies constantly face the challenges that come with high operating costs, lack of access to credit, mastery of new technologies, difficulty to innovate, excessive regulation or administrative procedures.

Here the necessity to continue developing economic models focused on this sector. The purpose of this study is to contribute to the establishment of a paradigm for the sustainability of SMEs through a diagnosis of the current sustainability level of Puerto Rican's SMEs as well as an analysis of the areas that must be strengthened to achieve a high level of sustainability. Although due to the exploratory nature of this study, the research sample is relatively small.

Theoretical framework:

Wilson (2003) argues that corporate sustainability is an alternative to the growth models of traditional companies without neglecting the natural pursuit of profitability. On the other hand, in the business literature, the construct of sustainable development and corporate social responsibility are often seemed as synonyms. Nevertheless, according to Portales et al. (2009), when it comes to the corporate sustainability construct both sustainable development and social responsibility must be incorporated into its conceptualization. Based on this theory, Portales, et al. (2009) and García, et. al (2010) proposed a new methodology and an instrument to evaluate the sustainable development of organizations called the Penta-Dimensional Model of Corporate Sustainability (MOPSE, by its Spanish acronym).

The MOPSE stresses the importance of SMEs giving equal weight to economic, social and environmental aspects as set out in sustainable development and corporate social responsibility models such as the Triple Bottom Line (TBL) model developed by Elkington (1997). The TBL model distinguished itself by the emphasis on transparency and the involvement of all stakeholders in order for companies to harmonize traditional financial aspects with social justice and environmental quality ones. The TBL model assumed that, for businesses to be more responsible

in their actions and achieve their sustainable development, the private sector must acquire greater power while the government loses influence. In these sense, the TBL model recognizes that companies have to develop and enhance their competitive advantages in order to successfully compete first in the local market and then migrate to a global market (Porter, 1990). However, for these competitive advantages to be sustainable, enterprises need to give equal weight to responsibilities with all stakeholders, transparency in all internal and external transactions, the positive impact of technologies and the environment inside and outside companies, internal and external relations and the overall management of the company (Berkovics, 2010; Elkington, 1997; García et al., 2010).

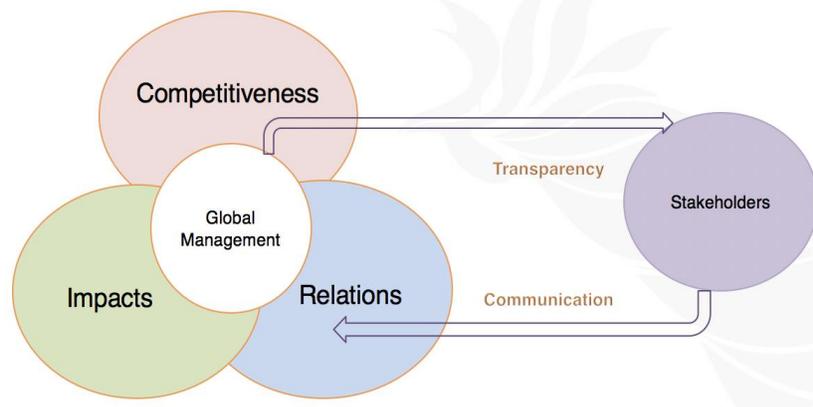
Regarding the construct of social responsibility, it has been developed through multiple theoretical proposals aimed at explaining the rationale and the elements that should be considered. According to García et al. (2010), social responsibility has evolved from a concept that was limited to the philanthropic issue to one that encompasses social and environmental aspects in the operations of organizations and their relationship with stakeholders. For example, analyzing this construct Dahlsrud's (2008) found that its definition is framed within five key dimensions: environmental, social, economic, interest groups and volunteering.

MOPSE's development

García et.al. (2010) developed the MOPSE framework based on the basic principles used to address the issues of corporate sustainability and social responsibility and on universally applicable policies, practices, and ethical values at the international level, such as United Nations' Global Compact, OECD Guidelines, Global Reporting Initiatives, AA1000 Assurance Standard, ISO 26000, and the SA800. Under the MOPSE, the economic construct shows how investors have been benefited by their enterprise; the social construct deals with how the organization has benefited the different interest groups inside and outside the company; and the environmental construct aims to show how the organization has contributed to the sustainability of its environment by minimizing its negative impact and maximizing its positive ones. Based on these three constructs, Portales et al. (2009) developed a diagnostic instrument with five dimensions along with the level of sustainable development of an organization can be measured. These five dimensions are global management, competitiveness, relationships, impacts, and transparency.

In the MOPSE, the overall management dimension involves identifying the ways in which management is carried out within the company, knowledge of the business model and its structure. The competitiveness dimension is aimed at measuring the level of market knowledge and the different characteristics that the company must have to achieve a better performance in three axes: social, economic and environmental. The relationship dimension purpose is to identify the different actors involved in the company and how they favor its best performance. The impacts dimension allows to know the effects of the company's actions both on the company itself and abroad. Finally, the transparency or accountability dimension allows for the identification of how the company communicates its results to those groups that can provide added value (García et al., 2017). Figure 1 shows the relationship among the MOPSE's five dimensions and Table 1 shows a summary of the indicators used through the measurement instrument to assess each dimension.

Figure 1: Relationship among the MOPSE’s five dimensions



Source: Adapted from García de la Torre, C., Portales, L., Camacho Ruelas, G. & Arandía Pérez, O. (2010). Instrumento de evaluación de sustentabilidad y responsabilidad social en Pymes. *Administración y Organizaciones*, 12(24), 91-103.

Table 1: Penta-dimensional Corporate Sustainability Model (MOPSE)’s dimensions

Dimension	Indicators
Global management	Mission and vision. Ethics code. Strategic planning Processes. Performance indicators. Results communication
Competitiveness	Employees development mechanism. Industrial knowledge. Competitors. Resources deployment. Continuous development. Research and development.
Relations	Stakeholders knowledge. Communications mechanism. Employees’ performance evaluations. Suppliers. Relationships with shareholders and clients. Community development. Processes’ environmental impact.
Impacts	Relationships with employees, shareholders, suppliers, and community. Environmental protection policies. Development of the community and the region in which the company operates.
Transparency	Knowledge regarding how to report social as well and environmental issues. Compliance with fiscal and legal obligations. Audits Corruption practices.

Source: Adapted from García de la Torre, C., Portales, L., Camacho Ruelas, G. & Arandía Pérez, O. (2010). Instrumento de evaluación de sustentabilidad y responsabilidad social en Pymes. *Administración y Organizaciones*, 12(24), 91-103.

Application of the Penta-Dimensional Model (MOPSE) to Puerto Rico's SMEs

In a context where the high mortality of SMEs is a constant, the research and development of tools that favor the permanence and evolution of these entities must be continuous. With this objective in mind, arises the interest in applying the Penta-Dimensional Model of Corporate Sustainability in Puerto Rico. The diagnostic instrument used to apply the model allows for the developing of a profile of sustainability, knowing areas of opportunity and strengths, generating recommendations and possible lines of action, and supporting participating companies in the achievement of its sustainability.

Methodology:

Statistical techniques and internal consistency

The measurement instrument consisted of a one hundred six (106) items questionnaire aimed at providing a company's detailed structural information for each of the MOPSE's five dimensions. Most of the questions are closed, being there dichotomous, in percentages or on Likert scales of three, four or five points. The questions have different weights per dimension depending on the value that it brings to the theoretical concepts. The open questions were used to validate the information provided by the company. Each dimension was normalized to 100%, in this way the sustainability profile was performed according to the percentage reached in each dimension. All indicators were validated to measure both their internal and external consistency to establish the relevance of the instrument in measuring the theoretical framework.

The sampling for this study was chosen by convenience with a usable sample of 108 questionnaires. In each case, it was requested that the senior person in the company answered the questionnaire to make sure that he or she knew the overall perspective of the company. Only micro, small and medium enterprises were surveyed either in person or online. These companies are defined in accordance with Act No. 62 of June 11, 2014 known as the Law to Support Microenterprises, Small and Medium Enterprises:

- Microenterprise is a business or company that generates a gross income of less than \$500,000 a year and has 7 employees or less.
- Small trader is a business or company that generates a gross income of less than \$3,000,000 a year and has 25 employees or less.
- Medium trader is a business or company that generates a gross income of less than \$10,000,000 per year and has 50 employees or less.

Once the data was collected, descriptive analyzes were done to properly characterize the sample and then, as a statistical inference tool, a factor analysis was conducted. But, before carrying out a factorial analysis, the viability of the data must be evaluated. Castro-González and Arias (2016) affirm that the most used tests for this type of analysis are the Bartlett Sphericity test and the Kaiser-Mayer-Olkin (KMO) test for sampling adequacy. The Bartlett's test corroborates that the variables are not correlated in the population while the KMO measure indicates the proportion of the variable's variance that could be explained by underlying factors (Castro-González & Arias, 2016). Regarding the Bartlett's test, values lower than the significance level (0.05 in this case)

indicate that there is sufficient correlation between the variables to proceed with the factorial analysis. On the other hand, for Singh, Sek Khin and Zolfaghari (2010), on the Kaiser-Meyer-Olkin (KMO) test values on the 0.5 to 1.0 range will indicate that factor analysis is appropriate. Table 2 shows each test corresponding values for the model's dimension. All values exceeded the minimum required. In fact, some KMO's values were higher than 0.70, which indicates that the factor analysis is adequate for this study.

Table 2: Adequacy and feasibility tests: KMO and Bartlett's tests by dimension

Tests	Dimensions				
	Global Management	Competitiveness	Relations	Impact	Transparency
Kaiser-Mayer-Olkin Adequacy test (KMO)	0.707	0.734	0.65	0.696	0.61
Bartlett's Sphericity Test Approx. Chi Square	316.771	272.958	229.629	197.557	210.842
df	136	91	120	78	105
Sig.	0.000	0.000	0.000	0.000	0.000

Factor analysis is a widely used multivariate technique that aims to reduce a model dimensions when there is a data base with a high number of variables. The objective of this technique is to select the variables or combination of variables (dimensions) that best explain the underlying model; thus, based on the explained variance of the selected variables, synthesizing the information contained in the data set (Pérez, 2004). To conduct the analysis, a categorical principal component analysis (CATPCA) was performed first. This procedure allows for the optimal scaling of any mixture of nominal, ordinal and numerical variables before the application of the factorial analysis (Portales, 2015). According to Pérez (2004), the objective of this analysis is to find the largest variance explained in the data, given the different dimensionality of the model. A Qualtrics software was used to process the data.

To measure the model's internal validity, the general Cronbach's alpha was calculated, yielding a value of 0.79. According to Hair, Black, Babin & Anderson (2010); Gadermann, Guhn, & Zumbo (2012) and Oviedo & Campo Arias (2005), when the Cronbach's alpha numerical value is greater than 0.70, it can be inferred that the internal consistency of the questionnaire is optimal; in other words, the questions in the questionnaire respond appropriately to what is sought to be solved in a research problem. The internal consistency of the instrument is strengthened when analyzing the different values for each dimension. As can be seen in table 3, all Cronbach's alpha for the analyzed dimensions are greater than 0.75; therefore, the internal consistency of each dimension is suitable (Castro-González & Arias, 2016, Fabrigar et al., 1999, Hair, et al., 2010; Thompson 2004).

Table 3: Cronbach's alphas by dimension

Dimension	Cronbach's alphas per dimension				
	Global management	Competitiveness	Relations	Impacts	Transparency
Cronbach's alpha	0.886	0.885	0.852	0.747	0.757

Analysis of findings:

Sample demographics

The nature of the sample allows for exploring different economic sectors and making a more adequate diagnosis of what is happening with the SME sector in Puerto Rico. Most of the participants in this study (67%) identified themselves as owner or president, general manager or vice president (22%) or other (11%), so it is inferred that the vast majority had full knowledge of operations. In addition, it should be noted that, given the high participation of owners or general managers or vice-presidents, these results have a high reliability level and this characteristic explains the high value of the Cronbach's alphas obtained. Also, the majority of participants (76%) were 40 years of age or older and had undergraduate degrees (49%) and masters or doctorates (46%).

At the time of the study, 15% of the participating companies were 0 to 4 years old, 22% had 5 to 9 years, 20% had 10 to 14 years and 43% had more than 15 years in the market. From this distribution it can be concluded that 63% of companies have surpassed the number of vulnerable years in which many SMEs end their operations or life cycle. Based on the high level of participation of this type of companies, it might be inferred that the participating sample had a genuine interest in the sustainability and growth of their corresponding businesses.

On the other hand, 68% of the participating companies reported having annual gross revenues between \$ 99,000 and \$ 999,000 showing that more than two thirds are micro and small enterprises. Regarding the industrial sector, 59% of the participants stated that they belonged to the services sector, 24% to the commercial sector, 7% to the industrial sector, 7% to construction, 1% to agriculture, and 2% did not identify the sector. This result supports Heizer, Render and Munson (2017) finding that currently of all commercial transactions taking place in the world about 70% correspond to companies belonging to the service sector.

Finally, the number of employees of the companies in the sample could contribute to determine the firm's size indicating that surveyed companies belonged to the micro, small and medium sectors since 60% of the sample had between 1 and 10 employees, 25% between 11 and 50, and 8% of companies surveyed had between 51 and 100 employees. For their part, 7% of the participating companies had more than 100 employees.

Descriptive analysis

Table 4 shows the means obtained from the CATPCA analysis. It could be observed that the model's five dimensions had different means, demonstrating that not all Puerto Rican SMEs are in the same stage of sustainable development. When analyzed by dimension, global management had the highest mean (0.6286) on a scale of 0 to 1, so it can be concluded that 63% of the participating companies appropriately identify the ways of carrying out management at the inside of the company and know their businesses models and structures. This dimension obtained the lowest standard deviation (0.134), thus demonstrating the low variability of the data and the highest reliability of the study results. In general, if we observe separately the standard deviation

of each of the five dimensions, we can see that the range for this statistic is narrow, from 0.1339 to 0.2316.

The impacts dimension was the second one with the highest mean (0.6020), that is to say that 60% of the companies fully identify possible damages and benefits that their operations generate among its different stakeholders. It should be mentioned that this dimension obtained the highest standard deviation (0.2316), which suggests a greater variability of the indicator among the companies that answered the questionnaire; so it is possible to hypothesize that there is a different degree of maturity in the natural evolution of this indicator.

Based on the dimensions' means, the third dimension in order of importance was competitiveness (0.5731), which, among others, measures the efficient use of resources and if these are sufficient to develop the overall strategy of the company. In terms of its standard deviation, it was only 0.1619 (the second lowest value) indicating a good level of reliability. The fourth dimension in order of importance was relations with stakeholders with a mean of 0.5283. In other words, this value indicates that 53% of the participating organizations generally showed different degrees of relationship with their stakeholders, shareholders and employees being the groups that, on average, are better known and cared for. Finally, the lowest mean was obtained by the transparency dimension (51%), indicating that transparency is a weak area, which in turn represents an important opportunity to improve the sustainability of the participating companies.

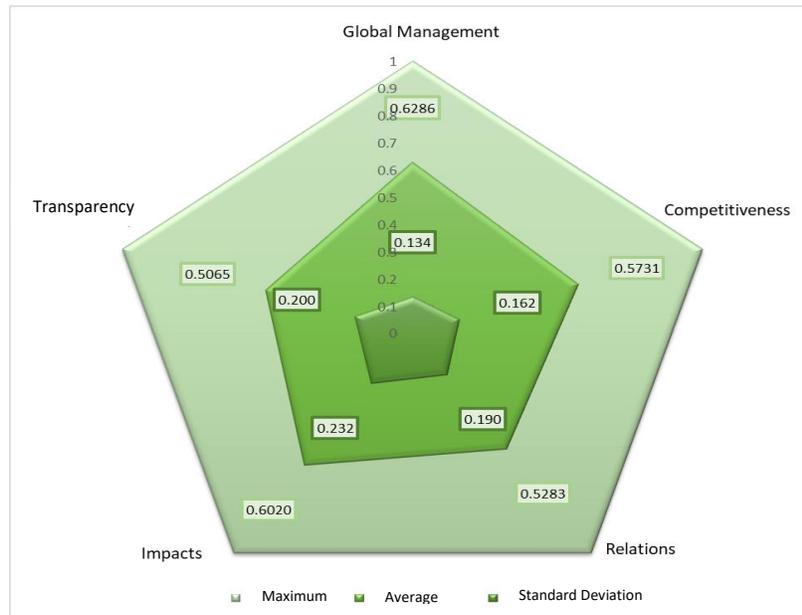
Generally speaking, these results suggest that Puerto Rican SMEs are diverse. This is consistent with the sample's demographic statistics, particularly the variety of industrial sectors and the number of employees. In fact, the data showed that in the sample there was representation of companies of all sizes at different levels of sustainable development.

Table 4: Data analysis by dimension

Statistic	Global management	Competitiveness	Relations	Impacts	Transparency
Minimum	0.2742	0.0909	0.0000	0.0000	0.0000
Maximum	1.0000	1.0000	1.0000	1.0000	1.0000
Mean	0.6286	0.5731	0.5283	0.6020	0.5065
Median	0.6540	0.6000	0.5858	0.6563	0.5546
Standard deviation	0.1339	0.1619	0.1903	0.2316	0.1997

Figure 2 graphically describe the aforementioned descriptive analyzes. By each dimension, it shows the mean of the scaling values obtained thru the CATPCA analysis. These values, as previously explained, ranges from 0.00 to 1.00, being 1.00 an optimal level of sustainability and 0 no sustainability at all. Figure 2 represents the current situation of the sample from an ideal level of sustainability (1.00).

Figure 2: Mean and standard deviation of the sample of companies by dimensions



Source: Self-made

For each dimension, to estimate the sustainability level, the sum of responses by each company were standardized to a 5-point scale (Portales, 2009). The scale has the following meaning: 1 means a low level of sustainability, 2 means at below the average level, 3 means an average level, 4 means at above average level, and 5 means that the company has achieved an optimal level of maturity when it comes to its sustainability. Table 5 shows the sustainability level achieved by the sample. According to the analysis, none of the participating companies achieved an optimal level of sustainability, only one company has an above average level, 55 companies (51%) were found at an average level, 38 (35%) were found at below the average level and, finally, 14 companies (13%) were found at the initial level of sustainability.

However, stratified by dimensions, it can be seen that in the global management dimension most companies (69%) achieved a below the average level of sustainability. On the competitive dimension, most companies (98%) achieved sustainability levels between below the average and average. Meanwhile, on the relations dimension most companies (71%) felt at an average level of sustainability. On the impacts dimension most companies (77%) achieved a sustainability level of average or above average. Finally, on the transparency dimension most companies (68%) achieved an average level of sustainability. These results show that there is a great opportunity for companies to improve their sustainability levels and prepare themselves to have better levels of global positioning becoming more competitive in an increasingly globalized world (Castro-González et al., 2014).

Table 5: Sustainability level by dimension

Level	Global management	Competitiveness	Relations	Impacts	Transparency	General
1	23	9	9	9	11	14
2	75	42	22	16	22	38
3	10	56	77	53	73	55
4	0	1	0	30	2	1
5	0	0	0	0	0	0

Analysis of Puerto Rican SMEs' strengths and opportunities

To easily appreciate Puerto Rican SMEs' competitive advantages related to the achieved sustainability level, table 6 shows by dimension the questionnaire items responses considered as strengths in business sustainability. For the purpose of this study, a scaling value greater or equal to 0.80 has been considered as strength. Similarly, table 6 shows by dimension the questionnaire items responses considered as opportunities that must be deal with to achieve a greater level of sustainability. For the purpose of this study, a scaling value lower or equal to 0.40 has been considered as opportunity. Following the tables there is a discussion of the implication of both the strength and opportunities.

Table 6: Puerto Rican SMEs' strengths

Dimensions with indicators	Mean	Standard deviation
Global management		
Compliance with goals and objectives	0.85	0.19
Vision, mission, values, and code of ethics alignment	0.80	0.27
Competitiveness		
Industrial sector knowledge	0.87	0.19
Employees' competencies knowledge	0.86	0.16
Resources' effective and efficient use	0.85	0.18
Relations		
Taking into account employees' worries, suggestions and ideas	0.93	0.12
Taking into account employees' health and security	0.89	0.17
Taking into account employees' working conditions and remunerations	0.89	0.15
Preference for using local suppliers	0.86	0.20
Stakeholders' knowledge	0.84	0.18
Responses to employees' worries, suggestions and ideas	0.80	0.19
Impacts		
Knowing whom are its best clients as well as the potential ones	0.90	0.16
Practices seeking to balance employees' job and family obligations	0.86	0.21
Salaries according to industrial standards	0.84	0.18
Transparency		
Compliance with fiscal and legal obligations	0.95	0.14
Having employees' files	0.83	0.25
Compliance with salary regulations	0.83	0.24

Table 7: Puerto Rican SMEs' areas of opportunities

Dimensions with indicators	Mean	Standard Deviation
Global management		
Employees' participation on the vision and mission writing	0.42	0.19
Employees' support for the ethical code	0.40	0.20
Vision and mission periodic review	0.39	0.21
Competitiveness		
R&D budget	0.41	0.20
Identification of job profiles competencies	0.29	0.25
Relations		
Organizational climate evaluation	0.43	0.18
Employees' training program and carrier plans	0.41	0.20
Shareholders' satisfaction monitoring programs	0.40	0.24
Frequent communication of financial performance	0.39	0.25
Impacts		
Knowledge of employees' turnover rates	0.44	0.17
Existence of a recyclable program	0.43	0.17
Elimination of practices that damage the company's reputation	0.43	0.18
Existence of a generational change plan	0.41	0.20
Purchase of recyclable products and raw materials	0.41	0.20
Documentation and follow up of claims about environmental damage	0.39	0.21
Transparency		
Separation of business and family finance	0.45	0.15
Quick and efficient mechanism to access the company's data	0.45	0.15
Knowledge of applying laws and regulations	0.45	0.15
Existence of mechanism to denounce abuses or harassments	0.45	0.16
Performance of external audits	0.43	0.18
Use of knockouts products	0.27	0.06

Global management

The overall management dimension is related to the knowledge of the company's business model and its sustenance in a third generation. Among the questionnaire items that had a highest score (>80%) were that current operation helps to fulfill goals and objectives and that the general behavior of the company is aligned with its mission, vision, values, and code of ethics. It is important to mention that the items that obtained a good score (79% -70%) were that the companies considered that processes and procedures were in compliance and that they have codes of ethics or behavior rules. On the other hand, from the table 7, the areas of improvement regarding the global management were that SMEs should give more participation to their employees in the writing of its mission and vision and that the code of ethics was endorsed by their workers. And, finally, the answer with most space for improvement was that the mission and vision should be reviewed periodically.

With regard to the overall management dimension, there is no doubt that most of the participating companies have the necessary elements to carry out their operations, which is fundamental to the success of any business. Also, they seem to have enough knowledge of the key aspects of strategic management. In fact, most have codes of ethics or formal conduct that help in the management of the business. However, participating companies are not necessarily implementing the management practices associated with their strategic development. For example, very few companies in the sample periodically review their mission and vision and only half of the sample

have described their main processes or have a manual of administrative procedures. In addition, very few have performance indicators. This are important opportunities areas for the participating companies to develop in the medium and long term.

Competitiveness

The dimension of sustainable competitiveness includes the generation of knowledge within the company, operational and productive efficiency, human capital development, eco-efficiency and profitability. The items that obtained a higher score ($> 80\%$) were that SMEs showed they have a good knowledge about their industrial sector situation, have high knowledge of the competencies of their employees, and they carry out their processes with effectiveness and efficiency. For their part, the responses that obtained a good score ($79\% -70\%$) were that they possessed sufficient financial, material and human resources to develop the company's strategy, and the implementation of new ideas within it.

On the other hand, the items that obtained a low score were that only 41% of companies claimed to have a budget dedicated to research and development of processes and technologies. It is relevant to mention that research and development is important for companies to achieve high levels of competitiveness, particularly the development of new processes and innovative techniques to carry out their activities (Castro-González et al., 2014). Other area of concern is that only 29% of respondents felt that their employees' positions are aligned with their competencies, i.e. 61% consider that the positions are occupied by people not qualified for their position. Even more, 29% stated that the necessary competencies are not identified in the different job profiles. These areas make SMEs vulnerable since there are no guidelines to promote the consistency and effective management of talent within the company and this is compounded by the fact that administrative procedures (global management dimension) are not in writing. Furthermore, only a little more than half of the participating companies have a continuous improvement system in terms of quality and productivity, which leads directly to a lower level of competitiveness and makes them more vulnerable.

Furthermore, although most participating companies claimed to possess the human, material and financial resources needed to develop the company strategy, less than half know fully what those resources are. This ignorance is another aspect that could be contributing to the concentration of Puerto Rico's SMEs at the average to low level of sustainability.

Relations

The relations dimension deals with the relationships between the company and its stakeholders. It should be mentioned that this dimension obtained the highest number of indicators with scores higher than 0.80 (6 indicators out of 23). The high scored items were related to responding to the needs, concerns and suggestions of its employees, attending to the needs of its employees in health and safety matters, improving working and remuneration conditions beyond the legal requirements, the support to local suppliers, the identification of company's stakeholders, and the training of employees. These scores reflect a high level of sensitivity, awareness and responsibility to those who contribute to the success of the company in the day to day. All these aspects are key

elements of an efficient human resources management strategy. Furthermore, the support to local suppliers contribute to gaining legitimacy while creating shared value.

On the other hand, the variables that obtained a low average (<45%) were to know the level of satisfaction of its shareholders, life and career plan for its employees, to carry out evaluations of organizational climate, and the indicator with the lowest average was that the results of the company are infrequently reported (0.39).

Regarding the internal relations, lacking career plans that help employees grow and feel satisfied can affect the long-term continuity of the company's operations, especially in key positions. Also, unidentified conflicts among employees which are not served on time can also affect the business efficiency and stability.

As for external relations, not having good mechanisms to communicate the results to the shareholders could result in a reduction of trust and have an impact on the level of long-term capital investments. On the other hand, very few SMEs stated that they participate in philanthropic activities benefiting neighbors or community organizations. Not having good relations with the community could be a source of conflict threatening the sustainability of the company in the medium and long term because these groups can affect the image of the organization.

Impacts

This dimension seeks to maximize the social, economic and environmental positive impacts and minimize the negative ones both inside and outside the company to respond to the different requirements of its stakeholders. In this sense, the sample reflected scaling values greater than 0.8 in variables such as knowing which are the company best clients and the potential ones, work practices that seek and favor a balance between work and family of its employees, and a salary range similar to the average that is handled in that industry. These aspects are key to the success and stability of any company in terms of good talent management. Healthy work practices also contribute to employee satisfaction, reduce legal demands, improve the company's reputation and attract the best talent. On the other hand, a good percentage (79% -70%) of the participants expressed that shareholders are satisfied with the business profitability, know the contribution of the company to the community in which it operates, and has a control over employees' punctuality and assistance.

The items that obtained scaling values lower than 0.45 were to detect how the company's products affect the environment, know the employees' turnover rate, elimination of practices that do not favor the creation of a good reputation among its customers, plans for generational change, purchase of recyclable products and raw materials, minimize the use of non-degradable materials, and follow up complaints about the company's activities that negatively affect the environment.

A figure that stands out is that 47% said that there is a wage difference between men and women occupying the same position, which is prohibited by federal as well as by local laws. This could become a source of legal litigation for gender discrimination and such demands tend to be extremely long and costly, which in the short and long term could significantly affect the reputation

and economic stability of any company. However, this figure is lower than the one found by Hofstede (2017) on the masculinity dimension (54%) in Puerto Rico.

Regarding the impact on the environment, the participating companies gave little importance to this aspect of their business without realizing that the new customers generation give great weight to this aspect. They neither establish explicit commitments in favor of the environmental nor do they have formal goals in that direction. New regulations, products related accidents, or consumer conflicts regarding the product might call into question the viability of the business. A timely environmental analysis would allow for the establishment of contingency plans and perhaps the development of new products or attributes that help to make them more attractive while minimizing the negative impact on the environment. Addressing these issues could also help SMEs to improve productive, fulfill their social responsibility, and improve their reputation.

Transparency

The transparency dimension seeks to measure and communicate the companies' good practices, including the impact they generate in their context. Transparency or accountability is critical to raising the reputation and legitimacy of the organization among its stakeholders. In the sample, the scaling values that stood out positively (> 80%) were timely compliance with their tax and legal obligations, employees have a file containing the aspects that may be of interest to the company (contracts, documentation identity, Social Security registration, copies of payroll receipts, etc.), and compliance with salary regulations. Most companies in the sample seem to have internalized that this way of operating increases the sustainability of the organization since fines and legal demands can be extremely expensive and it also adds credibility among their stakeholders.

However, for 8 out of 18 items obtained low scores (<45%), so SMEs ought to pay attention to this dimension to increase their sustainability. Specifically, these items were separation of company and family finance, availability of mechanism access quickly and efficiently the company's information, knowledge of legislations and regulations to which the company is subject to, mechanism for reporting abuse or harassment, external audits, use or purchase of knock off products, annual reports that includes their contributions at the economic, social and environmental levels, and use of corruption mechanisms to obtain some profit. This latter item was the only factor that obtained a zero score.

The failure to separate the company's finances from the personal ones could jeopardize the financial stability of both of them in case of any unusual situation at the business or personal levels or litigation that represents a significant expense. On the other hand, if companies do not have proper mechanisms to access business information, then there is a high potential that the company is not operating in the most effective and efficient way. Also, it could lead to ethical and legal questions from some stakeholders that, in turn, might affect the company's reputation. Low transparency might be strengthened through different types of audits that convey stakeholders' confidence and allow for problems to be identified sufficiently in advance so as not to negatively impact the business. Clients and investors give great weight to this type of factors.

On the other hand, ignorance of the law does not exempt companies from complying with current regulations. In the case of Puerto Rico, where both local and USA legislation may be applicable,

it could become a real threat to the economic stability and continuity of company operations since the local and federal government have the power to temporarily intervene or close businesses permanently when they breach some laws. Finally, although some participating companies admitted the use of knock off products, none admitted having used corruption mechanisms to gain some benefit. Anecdotally, once the interview with some participants ended, they stated that no company in Puerto Rico would recognize that it has used corruption mechanisms, which in some measure projects ethical conflicts and lack of social responsibility. This perception is consonant with the report of the Civil Rights Commission of Puerto Rico of 2015 that includes the multiple instances in which individuals and private businesses use different mechanisms of corruption for their own benefit (Civil Rights Commission, 2015).

Practical Implications

According to the findings, most participating companies were classified at the intermediate level of sustainability (level 3 of 5) indicating the need for greater attention and support to SMEs. Also, since the global management dimension reflected low levels of sustainability, to strength their operations SMEs need to improve their business strategic planning through continuing education, participation in mentoring programs, coaching, process documentation, and administrative procedures, and the creation of succession plans for key positions. Both the private sector, business associations and the government should coordinate their efforts in this direction, particularly in the case of companies with high potential growth.

To increase their competitiveness, SMEs must continually improve their quality and productivity thru the review on a continuous basis of their strategic plans, the formal or informal participation of employees and other relevant stakeholders on the decision making process, obtain quality certifications for their applicable products and services, conduct periodic internal as well as external audits to identify weaknesses and address them in a timely manner, plan and implement recruitment processes that identify the best talent, invest in continuous training of staff at all levels, and develop evaluation tools to formally and periodically evaluate employees performance.

Business organizations should also assist SMEs in improving many business practices and customer relationships through ongoing seminars, workshops, readings and mentoring on customer service strategies, and targeted trainings on how to recruit employees with customer service skills. These organizations can also identify market opportunities both at the local level and the global one, and promote the use of strategic planning. They can also help increase the number of local SMEs in Puerto Rico that are embedded in global markets by identifying and announcing market opportunities among their memberships, identifying SMEs that could meet state and federal agencies' needs, and promoting SMEs to create business proposals individually or through partnerships, and promote the development of international markets thru member participations on trade fairs and missions.

In addition, in the short and medium term, local and municipal governments should continue efforts to support SMEs sustainability. Government agencies with ongoing financial programs for SMEs should offer and require entrepreneurs with ongoing businesses to take practical workshops on strategic planning and monitor compliance with current legislation requiring that 20% of all governmental purchases have to be reserve for SMEs.

Finally, the private and public education system should continue to promote entrepreneurship initiatives in schools at all levels, particularly in science, math and arts courses. To achieve this, it is critical to support professional development in entrepreneurship among K-12 teachers through either public-sector initiatives or public-private partnerships. Emphasis should be placed on the undertaking of comprehensive initiatives beyond pilot projects.

Public and private universities should also continue to promote, and support programs and initiatives aimed at training school teachers and university professors from all disciplines in the area of entrepreneurship and incorporating a business vision through the curriculum of all disciplines to ensure that more students see entrepreneurship as an option for professional development. This vision should include frequently exposing students to the stories of successful entrepreneurs with businesses relevant to their areas of studies, and to create continuing education programs with the direct participation of entrepreneurs with vast experience. It is also necessary to encourage and support initiatives on theoretical and applied research on entrepreneurship, including encouraging SMEs to allow researchers to use their internal data.

Conclusion

This exploratory study shows that Puerto Rico has SMEs that seek to incorporate the best corporate practices to be sustainable in the long term. The analysis of the penta-dimensional model indicates that 51% of the companies in the sample are already at an intermediate stage of sustainability (level 3 of 5). The findings also showed that the dimensions having a higher level of sustainability were global management, impacts and competitiveness while the dimensions that achieved lower scaling values were relationships and transparency.

Based on this study's findings, it is suggested that SMEs take forward steps towards the modification of nascent and ongoing business models, increase the ability to compete, adapt to change, enhance the creation of innovative products and services, and work together with public and private organizations to create more efficient business ecosystems. However, these findings should be further researched due to the small sample used in this study.

Also, it is of the utmost importance to continue to promote entrepreneurship and SME research initiatives in Puerto Rico to develop local databases, initiatives and programs that respond to the real needs of SMEs. Despite cultural, economic and political differences, a study applying the MOPSE framework (García, et al., 2017) have shown that SMEs in Puerto Rico have similar weaknesses than SMEs in other Latin American countries. However, it is warranted to carry out more comparative research to diagnose fully the differences and similarities among Puerto Rican, Latin American and USA SMEs.

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