



The Concept of Sustainability in View of Micro, Small and Medium Brazilian Companies

Claudio L. Meirelles, José Benedito Sacomano, Fabio Papalardo

► To cite this version:

Claudio L. Meirelles, José Benedito Sacomano, Fabio Papalardo. The Concept of Sustainability in View of Micro, Small and Medium Brazilian Companies. IFIP International Conference on Advances in Production Management Systems (APMS), Sep 2014, Ajaccio, France. pp.90-97, 10.1007/978-3-662-44736-9_11 . hal-01387851

HAL Id: hal-01387851

<https://inria.hal.science/hal-01387851>

Submitted on 26 Oct 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

The concept of sustainability in view of micro, small and medium Brazilian companies

Meirelles L. Claudio^{1*}, Sacomano B. Jose¹, Papalardo Fabio¹

¹ Paulista University-UNIP, Pos-Graduate Program in Production Engineering, São Paulo, Brazil

{Claudio Lira Meirelles, claudio@baumannconsultancy.com}

Abstract

The present moment in enterprises scenario show a triple crisis in financial, ecological and social aspects, forcing companies to revise their strategy to make a stand with sustainability in the market. Micro, small and medium organizations (MSMEs) are 99% of companies in the world, main source of employment and are having difficulties to adapt to this moment because of the lack of public policies, knowledge and innovation capacity. The objective is to show what the Brazilian MSMEs understand about sustainability, using a descriptive approach, with mixed procedures and survey method in the cross-sectional. The research identified that the factor with more impact in the profitability of the firm, such as cost, is considered the main factor in ensuring the sustainability of the company. And the factors, social and environmental, aren't considered important to achieve this sustainability, to conclude that these businessmen see their business in the short time.

Keywords: Sustainability 1. Micro, Small and Medium Enterprise 2. Social Responsibility 3.

1 Introduction

Present business world is having a triple crisis following to financial, ecological and social areas, forcing companies to show a new approach of governance that allows developing a set of performance indicators to measure the sustainability of these three aspects at the company level [1].

Increasing sustainability enters in the corporate agenda, forcing them to include this theme in their strategies and to create sustainable strategies. However, in practice, the lack of segmented information, discussing issues of sustainability face some difficulties, mainly because this new reality requires a vision in product level, strategic and tactic [2].

At one side, the new legislation is emphasizing social responsibility, corporation image and client awareness and, on the other side, consumers are getting more interested in products and services related to economic viable practices, that are socially just and environmentally correct. This makes the producers worry about producing goods that do not hurt the environment and recycle products after their usage. In this context, sustainable development policies which benefit companies will be important to local economics dynamics. But it can't be forgotten that it is necessary for the present policies not to compromise future development [3, 4, 5].

This situation is changing the business models and economic relations that are based in sustainable development as a competitive factor. In this context, it is necessary to adapt micro and small firms according to the importance of job creation, wealth distribution and ability to innovate [5].

The micro and small companies have competitive advantage to be next to the consumer, making it possible to anticipate competition on observation and adjustment of demands on sustainable practices for their stakeholders. It is important to understand that micro and small organizations as being considered the main source of development and employment in most countries, representing approximately 99% of companies in the world, but also stand out as a source of pollution of nature, approximately 30% of the total, due to the difficulty to implement other innovative methods or not to use cleaner technology [6].

SMEs in the European economy are the main sources of employment, entrepreneurship and innovation, representing 66.7% of the jobs in the European Union. In Brazil the micro and small organizations are responsible for 99% of establishments, 51.6% of private formal jobs in the country, no agricultural, and almost 40% of salaries [5, 6, 7].

The commerce is the activity with the greatest number of MSEs, accounts for over 50% of total Brazilian MSEs. The services sector is the second area with the greatest number of MEPs, representing 33.3%, followed by industry with 10.7% and 4.5% of the construction sector. The participation of MEPs in total export companies in 2011 reached 61.5%, and 27.0% in the micro and 34,5% in the small firms. The Industrial sector represents about 60% of total exports made by MPE, against a percentage of 80% corresponding to the larger firms. The commercial sector, in contrast, has more important role among the MPE than among larger firms [8, 9, 10].

Small and medium companies are limited in resources, human capital and technology; they have difficulties in managing new projects. A solution for these firms is business network, as was the case in the autoparts industry in Mexico. Firms that get to improve their capacity to compete are those that reinvent the way to do business, creating a sustainable scenario [7], [11].

The main elements of sustainable business are: a multidimensional concept of sustainability as a central principle of the company, easy comprehension of communication, formulating sustainability concrete goals and detailed strategy for achieving these objectives, the alignment of management incentives intra-organizations and the involvement of stakeholders and, in particular, the employees in the process [1].

Thus, considering the importance of this issue for the competitiveness of companies, one wonders how micro and small businesses understand what sustainability is. To answer this problem, this paper has as main aims to show what the most important concept of sustainability in the MSMEs is.

2 Methodology

With the objective and the research problem chosen, this study used descriptive approach with quantitative and qualitative procedures, methods survey in a cross-sectional. The decision of using descriptive study systems from the claim to identify a population, or subgroups of a population, situations, events, attitudes or opinions arising from certain phenomenon [12, 13, 14]. The procedures were defined from the research objective, which aims to understand the vision of sustainability by a population at a determined moment, using structured techniques for data collection.

2.1 Planning the research

To operationalize the research, defined data sources, collection method, structure and data processing.

Data source

The choice of data to be analyzed has as its base in the objective of the research, bearing in mind the constraints and difficulties in collecting. This study in

particular, defined as a micro, small and medium size research, and the first decision was to choose which method of classification of the size of the companies was going to be used.

There are two ways to classify the size of the companies. One adopted by BNDES, other banks and governments, which considers the gross income as a form of analysis, and the other adopted by IBGE and SEBRAE, which takes under consideration the number of employees, this classification was chosen for the research. This criterion can be seen in Table 1 [15].

Table 1. Classification criteria for companies (Source: adapted Sebrae, 2012).

INDUSTRY	
Micro	<= 19 employees
Small	20 - 99 employees
Medium	100 - 499 employees
Larger	> 500 employees
COMMERCE AND SERVICE	
Micro	<= 9 employees
Small	10 - 49 employees
Medium	50 - 99 employees
Larger	> 100 employees

Population and sample

For the research 50 companies were selected; they are associated in the FCDL-CE and FEDERAMINAS, with segments, locations and different sizes. At the request of the companies names will be preserved.

The Interviews were conducted with representatives of the companies that were in the author's presentation this journal, being mostly socio-directors of organizations.

Although the strict representativeness of the used sample may not be proved, as generally occurs in sample obtained by accessibility, it may be supposed that treat it is feature of the Northeast region of Brazil, where the research was performed.

Data collection

Data collection in selected companies for research was conducted through a structured questionnaire, composed of closed question about research questions.

According to Martins, the questionnaire "is an important tool for data collection for social research, and it is formed by a set of questions about situations and variables to be measured or described". The same author explains that the interview is required to be a research technique for gathering information, data and evidence to get information from the interviewee that were not collected before [16].

For this article, a part of the collection instrument that is being used for the development of the PHD thesis of the author and presented in Table 2.

Table 2. Instrument for data collection (Source: the author).

In your opinion what concept (or concepts which) is more relevant sustainability of your company?			
Environment		Social development	
Costs		Employee welfare	
Production		Profit	
Productivity		Market stability	

3 Results and Discussion

Results obtained in the study observed the following information.

In the city of Montes Claros, Minas Gerais state, 11 companies that met the classification of companies understood as a source of research, micro, small and

medium firms, and with different activities, services, commerce and industry were interviewed.

Business managers were interviewed and after the data charting from the questionnaires, which can be seen in figure 1, arrived at the following results:
1 - Cost and profit are the most relevant to the organization's sustainability factors, both with 25.81% of the votes;

2 - Social Development is the least relevant to the company's sustainability factor, with 3.23%;

3 - Environment with 6.45% of the indications is the seventh factor less weight to corporate sustainability among eight possible options.

MONTES CLAROS - MG											
	ENT 1	ENT 2	ENT 3	ENT 4	ENT 5	ENT 6	ENT 7	ENT 8	ENT 9	ENT 10	ENT 11
environment			1							1	
cost	1	1	1	1	1	1		1	1		
production								1		1	
productivity				1	1			1		1	
social development		1									
employee welfare				1	1			1	1		
profit		1		1	1	1	1	1	1		1
market stability		1				1					

frequency	Total	
2	6,45%	
8	25,81%	
2	6,45%	
4	12,90%	
1	3,23%	
4	12,90%	
8	25,81%	
2	6,45%	

Figure 1. Search results in Montes Claros – MG

The figure 2 shows a graph to demonstrate easier to visualize search results form.

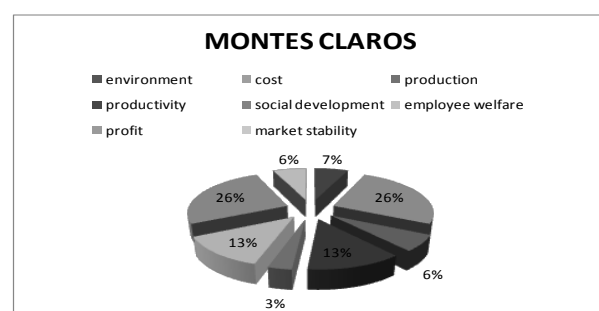


Figure 2. Result graph in the city of Montes Claros – MG

In the city of Araxá, in the state of Minas Gerais, 18 companies that met the classification of companies understood as a source of research, micro, small and medium firms, and with different activities, services, commerce and industry were interviewed.

Business managers were interviewed and after the tabular data from the questionnaires, which can be seen in figure 3, arrived at the following results:
1 - Social Development is the most relevant factor for the sustainability of the organization with 21.95% of the votes

2 - Stability in the market is less relevant to the company's sustainability factor with no indication;

3 - Environment with 14.63% of the votes is the fourth factor with less weight to corporate sustainability among eight possible options.

ARAXA - MG																		
	ENT 1	ENT 2	ENT 3	ENT 4	ENT 5	ENT 6	ENT 7	ENT 8	ENT 9	ENT 10	ENT 11	ENT 12	ENT 13	ENT 14	ENT 15	ENT 16	ENT 17	ENT 18
environment		1				1						1	1	1	1			
cost				1	1	1	1								1		1	1
production		1		1								1		1		1		
productivity		1			1	1						1			1		1	1
social development		1		1		1				1		1			1	1	1	1
employee welfare	1															1		
profit			1					1	1		1							
market stability																		

frequency	Total	Porc. (%)
	6	14,63%
	8	19,51%
	5	12,20%
	7	17,07%
	9	21,95%
	2	4,88%
	4	9,76%
0	0,00%	

Figure 3. Search results in the city of Araxá – MG

The Figure 4 shows a graph to demonstrate easier to visualize search results form.

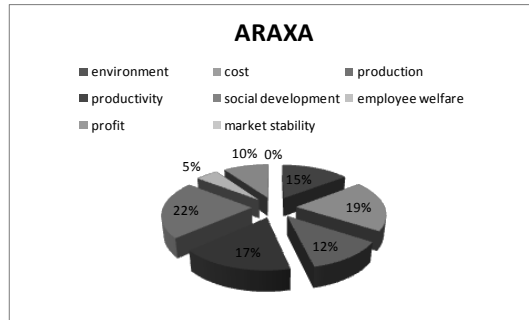


Figure 4. Result graph in the city of Araxá – MG

In the city of Fortaleza, state of Ceará, 16 companies that met the classification of companies understood as a source of research, micro, small and medium firms, and with different activities, services, commerce and industry were interviewed.

Business managers were interviewed and after the tabular data from the questionnaires, which can be seen in figure 5, arrived at the following results:

- 1 - Welfare is the most relevant factor for the sustainability of the organization with 21.74% of the votes;
- 2 - Production is less relevant to the company's sustainability factor with 1.45% of the votes;
- 3 - Environment with 10.14% of the votes is the sixth factor less weight to corporate sustainability among eight possible options.

FORTALEZA - CE																
	ENT 1	ENT 2	ENT 3	ENT 4	ENT 5	ENT 6	ENT 7	ENT 8	ENT 9	ENT 10	ENT 11	ENT 12	ENT 13	ENT 14	ENT 15	ENT 16
environment	1				1	1	1					1			1	1
cost	1				1	1	1	1	1			1			1	1
production	1															
productivity		1	1		1	1	1	1	1	1		1				
social development	1		1	1	1	1	1				1	1	1	1	1	1
employee welfare	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1
profit					1	1	1			1					1	1
market stability			1		1	1	1		1	1	1	1		1		1

	Total	Porc. (%)
environment	7	10,14%
cost	10	14,49%
production	1	1,45%
productivity	9	13,04%
social development	11	15,94%
employee welfare	15	21,74%
profit	6	8,70%
market stability	10	14,49%

Figure 5. Search results in Fortaleza – CE

The figure 6 shows a graph to demonstrate easier to visualize search results form.

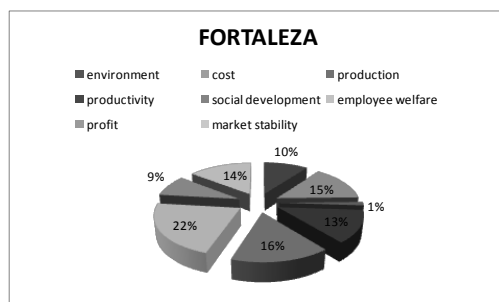


Figure 6. Result graph in Fortaleza – CE

In the town of Juazeiro, in the state of Ceará, five companies that fell into the classification of companies understood as a source of research, micro, small and medium firms, and with different activities, services, commerce and industry were interviewed.

Business managers were interviewed and after the tabular data from the questionnaires, which can be seen in figure 7, arrived at the following results:

- 1 - Environment and Social Development are the most relevant to the organization's sustainability factors, both with 21.43% of the votes;
- 2 - Production and productivity are less relevant to the company's sustainability factors with no indication;

JUAZEIRO DO NORTE - CE					
	ENT 1	ENT 2	ENT 3	ENT 4	ENT 5
environment	1			1	1
cost				1	1
production					
productivity					
social development	1			1	1
employee welfare	1	1			
profit		1			1
market stability			1		1

	Total	Porc.(%)
environment	3	21,43%
cost	2	14,29%
production	0	0,00%
productivity	0	0,00%
social development	3	21,43%
employee welfare	2	14,29%
profit	2	14,29%
market stability	2	14,29%

Figure 7. Search results in the town of Juazeiro – EC

The Figure 8 shows a graph to demonstrate easier to visualize search results form.

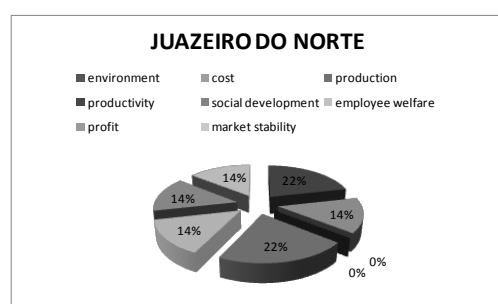


Figure 8. Result graph in the town of Juazeiro – EC

- Analysis of consolidated results in Fortaleza and Juazeiro, representing the state of Ceará in the Northeast, the following results are presented in figure 9:
- 1 - Welfare is the most relevant to the organization's sustainability factor with 20.48% of the votes;
 - 2 - Production is less relevant to the company's sustainability factor of 1.20% of the votes;
 - 3 - Environment with 12.05% of the indications is the fifth factor with less weight to corporate sustainability among eight possible options.

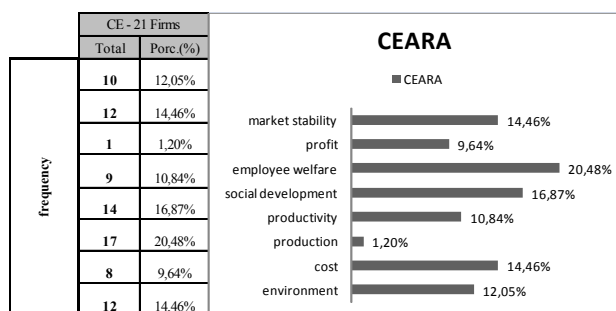


Figure 9. Search results in the state of Ceará

Analysis of consolidated results of the cities of Montes Claros and Araxá, representing the state of Minas Gerais in the Southeast region, the following results are shown in the Figure 10:

- 1 - Cost is the most relevant to the organization's sustainability factor with 22.22% of the votes;
- 2 - Stability of the market is less relevant to the company's sustainability factor with 2.78% of the votes;

3 - Environment with 11.11% of the votes is the fifth factor with less weight to corporate sustainability among eight possible options.

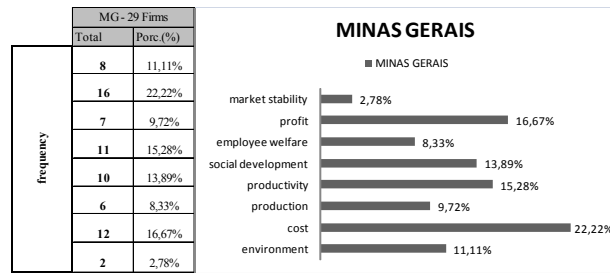


Figure 10. Search results in the state of Minas Gerais

Analysis of consolidated results of all companies surveyed, representing organizations classified as micro, small and medium sized regions of the Northeast and Southeast, the following results are shown in the figure 11:

- 1 - Cost is the most relevant to the organization's sustainability factor with 18.06% of the votes;
- 2 - Production is less relevant to the company's sustainability factor with 5.16% of the votes;
- 3 - Environment with 11.61% of the votes is the sixth factor less weight to corporate sustainability among eight possible options.

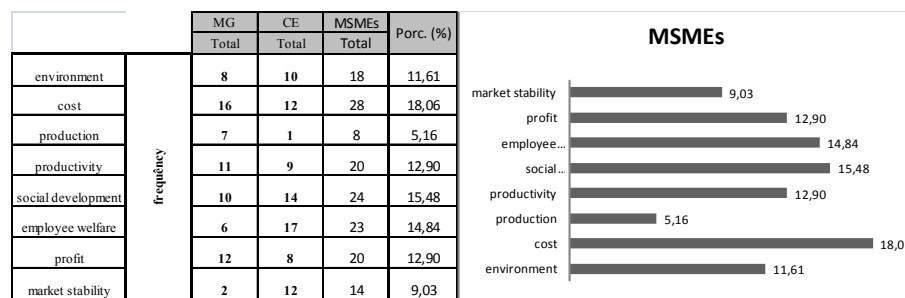


Figure 11. General search results

4 Conclusions

Sustainability is an important topic in academia and nowadays. Even with the broad debate on what would be a sustainable company, this condition may result from better management practices, adjustments in operating procedures or the use of more efficient technology, the environmental factor stands out, which is related to the demands of the market and society to a company to be sustainable in the long term [1], [2], [5], [6], [17].

Micro, small and medium companies have considerable impact on world economies, mainly by employing a significant number of hand labor with lower qualification is necessary to understand how to position in this segment before this new reality [8].

Whereas only 10.7 % of companies are MSEs of the industrial sector and 89 % of companies have activity as trade, service and construction sector it is an evident characteristic of the non-manufacturing sector, which resulted in the search result as that found factor of greatest relevance to the sustainability of the company "cost" and less relevant, "production" [8].

Different than reported in the media and academic papers, highlighting the "environment" as the main factor for sustainability of companies, the survey found that this factor is not seen as a relevant for achieving sustainability in organizations [1], [2], [4], [5], [6], [17].

Given the results presented, conclude that the factor in MSMEs that directly impacts the profitability of the company, such as cost, is considered as a major factor

in ensuring the sustainability of the enterprise market. The characteristics of being faithful service and commerce sectors as representing most companies in these sizes.

Having the factors, social and environmental, not considered as important factors for achieving sustainability in the market even before new legislation and consumer requirements, leading to the conclusion that these entrepreneurs understand and plan their business in the short term.

These findings open a gap for further research, enabling a better understanding of the characteristics of these factors, pointing the need of the development of public policies towards new strategies of business enterprises in these sizes.

References

1. Ozcure, Gurol; Demirkaya, Harun; Eryigit, Nimet. The sustainable company and employee participation as a part of the solution to triple crisis in the European Union and Turkey: Exemple of OMV Samsun Elektrik. *Procedia Social and behavioral Sciences*, 24, 2011, pg. 1274-1287.
2. Egels-zanden, Niklas; Rosen, Magnus. Sustainable strategy formation at a Swedish industrial company:bridging the strategy-as-practice and sustainability gap. *Journal of Cleaner Production*, xxx, 2014, pg.1-9.
3. Faccio, M.; Persona; A.; Sgarbossa, F. Zanin, G..Susteinable SC through the complete reprocessig of end-of-life products by manufacturers: A traditional versus social responsibility company perspective. *European Journal of Operational Reserch*, 233, 2014, pg. 359-373.
4. Musson, Anne. The build-up of local sustainable development politics: A case study of company leader in France. *Ecological Economics*, 82, 2012, pg. 75-87.
5. SEBRAE. O que pensam as micro e pequenas empresas sobre sustentabilidade. *Estudos-e-pesquisas, Sebrae, Maio*, 2012.
6. Hoof, Bart Van; Lyon, Thomar P.. Cleaner production in small firms taking part in Mexico`s sustainable supplier program. *Journal of Cleaner Production*, 41, 2013, pg. 270-282.
7. Sadaba, Sara Marcelino; Ezcurdia, Amaya Perez; Lazcano, Angel M. Echeverria; Villanueva, Pedro. Project risk management methodology for small firms. *International Journal of Project Management*, 32, 2014, pg. 327-340
8. SEBRAE/DIEESE. Anuario do trabalho na micro e pequena empresa. Sebrae/Dieese, Brasilia-DF, 5ª edição, 2012.
9. SEBRAE. As micro e pequenas empresas na exportação brasileira 1998 – 2011. Sebrae, Brasília, 2012.
10. SEBRAE. Boletim estudos e pesquisas. Sebrae/UGE, No 6, Jan. / Fev., 2014.
11. Alvarado, Tania Elena Gonzales; Granados, Maria Antonieta Martins. La innovcion em entornos econômicos poço favorables: El sector auto partes maxicano. *Estudios Gerenciales*, 29, 2013, pg. 167-176.
12. Freitas, Henrique; Oliveira, Mirian; Saccol, Amarolinda Z.; Mascarola, Jean. O Método de Pesquisa Survey. *Revista de Administração - RAE*, São Paulo, v.35, n.3, p. 105-112, jul./set., 2000.
13. Gil, Antonio Carlos. Como elaborar um projeto de pesquisa. 4.ed.,Sao Paulo: Atlas, 2002.
14. Yin, Robert K. Estudo de caso: Planejamento e Métodos. 4 ed., Porto Alegre: Brookman, 2010.
15. SEBRAE. Critérios de classificação de empresas: EI-ME-EPP. Disponível em http://www.sebrae-sc.com.br_leis_default.asp_vcdtexto=4154. Acesso em 10 mar. 2012.
16. Martins, Gilberto de Andrade. Metodologia da investigação científica para ciências sociais aplicadas. 2.ed. São Paulo: Atlas, 2009.
17. ESTADAO. Sustentabilidade. Available at: <http://topicos.estadao.com.br/sustentabilidade>. Acessed on: April, 2014.