

Sustainability Trends and Implementation in Academy and Consulting

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Abstract: Sustainable development and sustainable shareholder value gain are terms increasingly being worked in the academic and corporate worlds. Based on the Sustainable Shareholder Value Model, by Hart and Milstein (2004), along with research by Sgarbi et al (2008) and Telles (2011), this paper verifies and compares if the jargons from Sgarbi (2008) are being used by professors from PUC-SP and by professionals and consultants in Brazilian companies, in addition to verifying how these professionals and consultants classify these jargons for the next two decades. The conclusion shows that the distribution of jargons from Sgarbi (2008) over the quadrants by Hart and Milstein (2004) are balanced both by professors and by sustainability professionals and consultants. Both the future on the next two decades and the quadrant with highest frequency percentage are related to present topics, externally to the company.

Key Words: Sustainable development; Sustainability management; Trends in Brazilian market

1 Introduction

Corporate decisions that consider only the economical aspects have given a determining contribution to the un-sustainability of the planet. Scholars and researchers demonstrate that there is the need for several other practices, involving social, environmental and financial dimensions, with other dimensions already arising, such as spiritual and cultural. This paper presents sustainability concepts and is based on the Sustainable Shareholder Value Model, by Hart and Milstein (2004), along with research by Sgarbi et al (2008), about Sustainability Jargons, to verify if there is alignment between what is taught at the graduation business administration courses at PUC-SP with what is practiced in the corporate world, through sustainability professionals.

To do so, results from the research conducted by Telles (2011) about “Integrating sustainability in the education of business administrators” are used, and a parallel with the research conducted in this paper is made, with market professionals trying to identify whether there is alignment between what is taught at administration courses and what is practiced via sustainability

consultants and professionals in the work environment. Future trends about sustainability were also investigated in this research, and noticed by sustainability professionals and consultants. Based on the Hart and Milstein model adjusted to the Sgarbi research, it identifies the key items in the topic of sustainability that are trends, in addition to adding free thinking from those who work with the topic of sustainability.

2 Sustainability Concepts

For the UN Report *Our Common Future*, known as the “Brundtland Report,” sustainable development is the one that meets the present needs without compromising the possibility of future generations meeting their own needs. It has two key concepts: the concept of ‘needs,’ especially essential needs from the world’s poorest, who shall be given top priority, and the notion of limitations that this phase of technology and social organization imposes to the environment, preventing it from meeting present and future needs. Therefore, by defining the objectives of the social and economical development, it is necessary to take into account its sustainability in all developed or developing countries, with market economy or central planning.

There are many interpretations with common features that shall derive from a consensus on the basic concept of sustainable development and on a series of strategies necessary for its execution. Development supposes a progressive transformation of the economy and the society. If a development path is sustained in the physical sense, theoretically it may be attempted even in a strict social and political context. However, it is only possible to be sure of physical sustainability if the development policies consider the possibility of changes on access to resources and cost and benefit distribution. Even in the narrowest sense of physical sustainability, a concern with social equity among generations is implied, and evidently should be extended to equity in each generation. (CMMAD, 1987, p.46)

In the context of sustainability, economical, social and environmental aspects from everyone involved need to be considered by developed and developing countries. It is important to extend the discussion on the topic to the most different spheres, adopting different languages and facilitating understanding.

Formal education may assume this role and work in a stronger manner on the awareness on sustainability, but this awareness needs to occur in different spheres, not only in those on formal education.

There is no consensus on the sustainability concepts, “its importance has increased thanks to the growing awareness and acknowledgement that the existing development standards cannot be generalized.” (CAVALCANTI, 1996, p.81)

Knowing and analyzing sustainability concepts and similar is a delicate task. It may be interesting to learn about the most different lines and controversies without creating expectations that an ideal, single, complete and conclusive concept will be achieved, due to the fact that it is still being formed. This results in the importance of thoroughly discussing the theme, especially from the education perspective, for its task of formation and development of a critical vision, and one must not forget its noble role of developing citizenship, whether in elementary or higher education.

Goodland (1994), Dixon and Fallon (1989), and Serageldin (1993) consider that the definition of sustainability shall acknowledge the distinction of three areas: social, economic and ecologic or environmental. Sachs et al. (1993) also suggest two other areas: space and cultural, which may be included in the environmental, on the first case, and in social sustainability, on the second case.

The sustainability concept, considering its vastness, may be divided into two levels that complement each other. The first one refers to nature, and the second, to society. In the latter, Guevara (2011) focuses on the issue in education for sustainability, which would imply a change in the traditional education system.

Creating sustainable value, says Lazlo (2008), is a way for the company to advance in its business priorities, lead in innovations and achieve competitive advantage. Developing these nowadays in highly competitive markets requires leading companies to carefully consider the environmental and social dimensions of their business activities.

At the same time, any organizations have understood that by being “green” they can attract new consumers and leave their community more appealing. They use green marketing to differentiate from their competitors. Despite the fact that some companies are already aware of the sustainable financial development, some corporate levels have started discussing about going beyond sustainability (which balances our demands with what nature can provide us) to restore or rebuild what we have degraded. (Hitchcock & Willard, 2008). However, how could the sustainable development be made operational starting from the possibility of a gradual process of awareness, change of values and concepts in the relationship between man and nature and between men? It seems that, as Hubbard mentioned (apud Guevara, 2011), initiatives in many segments have outlined over the last decades.

Barbieri (2004) notes that the fact that the creation of boards of directors and departments for handling environmental issues has accelerated indicates the presence of demands from parties interested in strengthening their position favorable to the environment. New knowledge and new work profiles are currently demanded from us.

The new work and worker profile increasingly values the entrepreneur and creative capacity, understanding that creativity presupposes imagination and realization, and is involved with the knowledge that comes from within and the knowledge of the reality experienced. (GUEVARA, 2009, p.167)

Thus, amidst conceptual discussions about the topic, the corporate environment, in its vast majority, seems to persist in maintaining actions that ensure that their goals and profit margins are achieved, through the decision power from their managers, even if harming the environment.

This paper will adopt the acronym MVSA to refer to the Modelo de Valor Sustentável ao Acionista (Sustainable Shareholder Value Model) by Hart and Milstein (2004), with update of the sustainability jargons from Sgarbi et al (2008) to analyze two investigations. The first one, educational, was conducted by Telles (2011) at PUC-SP, verifying whether teaching the topic of sustainability as a discipline in business administration courses was aligned with the sustainability jargons included in the MVSA. The second research, conducted in the context of this article, verifies the demands where sustainability professionals and consultants in Brazil are included. From the answers to the questionnaires applied, it is possible to not the quadrants most requested by

companies, and with this we were able to analyze from both investigations if both professors and professionals and consultants are working according to MVSA jargons, and if the sustainability topic has been explored in the academic world according to market demands.

The research with professionals and consultants also identified the trends they noticed according to their current work meeting corporate needs.

The MVSA by Hart and Milstein (2004, 2005) considers financial, social and environmental dimensions in decision making progressively, including internal and external aspects to the companies conjugated with their present moment and the desired future; this results in a multidimensional analysis through four quadrants, where different variable shall be considered in order to find integrated solutions.

Hart (2005), explaining his MVSA, developed along with Milstein, proposes a multidimensional analysis through four quadrants. He states that the creation of sustainable value requires that companies work each quadrant in the model, being clear concerning the respective strategies per quadrant, in order to build value to the shareholder. First, companies can create value by reducing the level of material consumption and pollution associated with fast-paced industrialization. Second, they can create value by operating in higher levels of transparency and receptiveness, as requested by society. Third, they can create value through development of new, advanced technologies with potential to reduce the size of the human footprint in the planet. Finally, companies can create value by meeting the needs of those in the base of the world's income pyramid, in order to facilitate the creation and distribution of inclusive wealth.

This paper, through the results analyzed, approximates the academic world from the corporate world and understands that different spheres need to lean on each other to build a more sustainable planet.

3 Data and Methodology

3.1. Research with professors from PUC

3.1.1 Field procedures

Telles (2011) adopted as a research instrument a semi-structured questionnaire to Sustainability professors at the Business Administration course from PUC-SP.

The questionnaire prepared by Telles (2011) was comprised of open- and closed-answer questions; however, for the context of this paper, only the closed-answer questions related to sustainability jargons were considered.

Closed-answer questions in this context are based on the 47 sustainability jargons already characterized, according to Sgarbi et al. (2008), within the model by Hart and Milstein (2004), scored according to the Likert scale, ranging from 1 to 5, where the score refers to how much the professor applies the item analyzed when teaching the discipline, being:

- 1 = never applies
- 2 = rarely applies
- 3 = sometimes applies
- 4 = generally applies
- 5 = always applies

Each quadrant equivalent to each dimension and strategy corresponding to the respective questions in the questionnaire was adopted as a category. Thus, it was possible to analyze whether there was alignment between what was taught at the first semester of 2011 in the Business Administration graduation course from PUC-SP by the discipline of Sustainability and the model by Sgarbi et al. (2008), based on Hart and Milstein (2004).

From the 8 professors responsible for the discipline in the semester, 4 responded. The interviews were conducted at PUC-SP –Monte Alegre campus, on April 2011.

Concerning the subjects, sample, criteria for inclusion/exclusion and sampling universe, there was:

From the eight professors responsible for the discipline in the semester, three had taught the discipline in previous semesters (veterans) and five are newcomers to this discipline in the course.

Continuing with the procedure used, it is worth explaining the model adopted, as well as the associations for the categories.

In Telles (2011), we find the details on the model by Hart and Milstein (2004), which based the research according to the four quadrants. The analysis was facilitated by research from Sgarbi et al (2008), through sustainability jargons, found in Telles (2011), which facilitated the word association and the approximation of concepts, by quadrant category.

The research from Sgarbi et al. (2008) brings sustainability jargons classified and associated to the Hart and Milstein (2004) model, from research by Telles (2011).

The items in the questionnaire were extracted from the quadrants according to research from Sgarbi et al. (2008), and every word was placed as an item to be scored by respondents.

Table 1 Association Between Key Dimensions, Strategies and Questions

Quadrant	Key Dimension/Corporate Return	Strategy	Questions
1	growth path and trajectory	sustainability vision	11 to 19
2	innovation and repositioning	clean technology	01 to 10
3	cost and cost and risk reduction	fight against pollution	20 to 34
4	reputation and legitimacy	product management	35 to 47

Figure 1 presents the following aspects: quadrants X strategies X issues from the questionnaire already grouped.

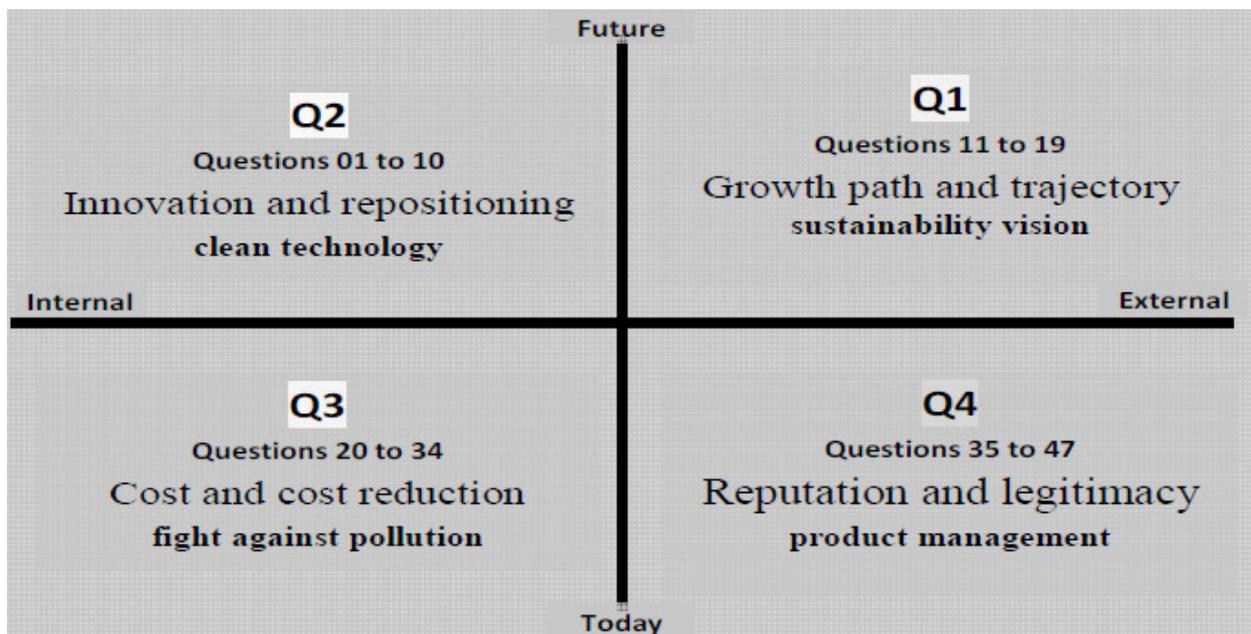


Figure 1 Association between quadrants, strategies and questions

The analysis intended to identify whether the Sustainability discipline in the Business Administration graduation course from PUC-SP, on the first semester of 2011, was taught with balance among the quadrants concerning the sustainability jargons from Sgarbi (2008) based on MVSA. For such, the answers from professors were distributed and analyzed according to quadrants, dimensions and strategies from the base model. Thus, we were able to verify the priority the professors give to the model's quadrants.

3.1.2 Question from the research

Is the integration of the Sustainability discipline from the Business Administration graduation course (FEA) from PUC-SP aligned with the research model by Sgarbi (2008), about sustainability jargons, a research based on the model by Hart and Milstein (2004)?

Result from the questionnaire applied to 4 Sustainability professors, related to the 47 items extracted from the study "Sustainability Jargons," by Sgarbi et al. (2008).

The 47 items were divided into 4 quadrants, according to the sustainable shareholder value model, by Hart and Milstein (2004). Table 2 below is separated by different colors, facilitating the reader's understanding.

Table 2 Contents and Jargons

	Prof.1	Prof.2	Prof.3	Prof.4
1-Social-environmental information base	5	4	1	5
2-Ecodesign	3	5	3	2
3-Ecoefficiency	4	4	4	3
4-Energy efficiency	4	4	4	3
5-Technology innovations	3	5	5	4
6-Cleaner production	4	4	4	4
7-Ecologically-targeted products	4	5	4	3
8-Green revolution	5	5	2	3
9-Clean technology	4	4	3	4
10-Green technology	4	4	2	3
11-Pyramid base	4	5	5	
12-Preservation of biodiversity	4	5	2	4
13-Development of deteriorated areas	3	4	1	4
14-Sustainable development	5	5	4	5
15-Social entrepreneurship	2	4	2	4
16-Fostering the improved quality of life of the population	3	5	4	4
17-Well-being function	3	5	2	4
18-Urban reinvestment	2	4	1	3
19-Triple result	3	5	3	4
20-Comply with the environmental and social legislation (go beyond)	3	5	4	4
21-Environmental audit	3	3	2	3
22-Environmental certificate	3	4	3	3
23-Green consumption	4	5	3	3
24-Pollution control	4	3	2	4
25-Environmental management	4	3	1	4
26-Residue management	3	4	1	4
27-Environmental risk management	3	4	2	3
28-Social-environmental management	3	5	3	4
29-ISO 14000	3	3	4	4
30-Prevention to pollution	4	5	1	2
31-Resource productivity	4	4	2	3
32-Recycling and reuse of materials	4	4	1	4
33-Reduction of residues	4	5	1	3
34-Environmental management system	4	4	2	3
35-Corporate citizenship	2	5	4	4
36-Environmental accounting	2	2	2	3
37-Social balance disclosure	2	4	4	5
38-Product lifecycle management	3	5	4	3
39-Stakeholder management	4	4	4	5
40-Environmental impact management	4	5	3	5
41-Ethic management	3	4	4	4
41-Corporate management	4	5	5	4
43-Green project	4	4	2	3
44-Voluntary regulation	3	4	1	4
45-Environmental responsibility	4	5	2	5
46-Social-Corporate Responsibility	5	5	5	5
47-Transparency	4	5	5	4

Please find below the individual score, by professor, given to each item: 5 – always applies to 1 – never applies. Considering the purpose of the research by Telles (2011), which was to verify if the Sustainability discipline was being taught aligned with the conceptual model adopted, the sum of the item scores per quadrant per professor divided by the number of items (arithmetic average) translates how much each professor is teaching discipline aligned with the model – for this, the analysis is made on each quadrant. In the end, a general course analysis is also conducted, bringing more reliability to the answers from the questionnaire. Please find below the arithmetic averages per quadrant and per professor, based on table 2.

Table 3 Arithmetic Averages Per Quadrant and Per Professor

Quadrant	Prof1	Prof2	Prof3	Prof4
Q1	3.22	4.67	2.67	4.00
Q2	4.00	4.40	3.20	3.40
Q3	3.53	4.07	2.13	3.40
Q4	3.38	4.38	3.46	4.15

For better analysis, the table below presents a calculation of percentages per respondent professor per quadrant, as well as a final average considering all professors.

Table 4 Percentages Per Professor Per Quadrant

Quadrant	Prof1	Prof2	Prof3	Prof4	Average
Q1	22.79%	26.64%	23.27%	26.75%	24.86%
Q2	28.29%	25.12%	27.92%	22.74%	26.02%
Q3	24.99%	23.21%	18.61%	22.74%	22.39%
Q4	23.94%	25.03%	30.20%	27.78%	26.74%

Below there is a graphic representation of averages, in percent, from all professors who responded to the questionnaire, so that we can make a global analysis.

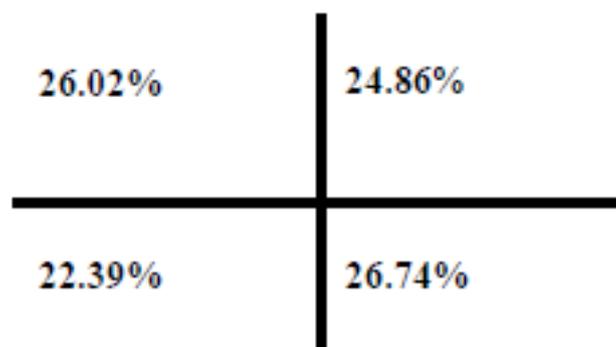


Figure 2 Average Percentages Per Quadrant

We notice that there is good balance in contents taught by professors concerning the 4 quadrants, even with more emphasis on quadrants Q4 and Q2, which correspond to the “product management” and “clean technology” strategies, respectively.

The less explored quadrant, considering all professors who responded to the questionnaire, was quadrant Q3, with a difference of 4.35 percentage points in relation to Q4, the most explored quadrant. Since the MVSA defends that it is necessary to make decisions considering variables in the 4 quadrants, if one wants to adopt these values, it is possible to conclude that the way the Sustainability discipline is being taught by the 4 professors in this semester is aligned with the model, because the professors are balancing the distribution of the items related to sustainability jargons researched and proposed by Sgarbi et al. (2008).

Therefore, based on Sgarbi et al. (2008) and on Hart and Milstein (2004), we could conclude that the Sustainability discipline in the Business Administration graduation course from PUC-SP is being taught in a balanced manner, as suggested by Sgarbi et al. (2008) and by Hart and Milstein (2004), with the 4 dimensions of the 4 quadrants. This suggests that the professors are aligned with the model proposed.

With the end of the research by Telles (2011), new questions about sustainability have arisen: Is the alignment between items discussed in the corporate environment with the MVSA adequate according to the jargons from Sgarbi (2008)? What is being taught about sustainability in the business administration formation courses is aligned with demands from corporate world, based on the MVSA?

Thus, we extended the research to sustainability professors and consultants, as presented below.

3.2 Research with sustainability professionals and consultants

3.2.1. Field procedures

With the purpose of aligning what is taught in business administrators' formation (Telles, 2011) with what is practiced by sustainability consultants and professionals in the market, this quantitative research was conducted based on the master's dissertation by Beatriz Marcos Telles (2011), by the Business Administration program from PUC-SP, "Integrating Sustainability in the Education of Business Administrators."

The target audience was selected to verify the effectiveness of jargons developed by Sgarbi et al. (2008) on routine tasks and activities conducted by sustainability professionals and consultants in Brazil, as well as the classification in the quadrants developed by Hart (2005). The vast majority of this research audience is comprised of sustainability/corporate social responsibility professionals (44.7%) – usual denominations in Brazil –, as well as corporate sustainability consultants (42.1%); the rest fitted in other categories and academia (13.2%).

The base of people invited was the personal mailing list from researcher Marcus Hyonai Nakagawa, director president of Abraps – Brazilian Association of Sustainability Professionals. In total, 50 professionals were invited, and 44 people responded to the full questionnaire. The research was conducted via website and system SurveyMonkey, www.surveymonkey.com, and the answers were given between September 12th and 21st, 2011. The invitations to the research were made individually and in person to everyone in the list.

The research was divided in two parts, one related to how current the use of jargons from Sgarbi was in the everyday life of sustainability consultants and professionals, based on Telles (2011), resulting in a questionnaire with 47 closed-answer questions to check the variable applicability of the item; and the other related to the future of sustainability, also based on the

jargons, with a question in which 5 essential items for the next two decades should be selected among the 47 jargons. Thus, the crossing of information between the current use of jargons and the future trend can be measured based on results from the research.

3.2.2 Questions from the research

The main question from the research was: which of the 47 items (based on jargons from Sgarbi) apply to your everyday life? For every item, the methodology was the same as the one used by Telles (2011). The other question was to verify the use of these 47 items (jargons from Sgarbi) over the next few years, and had the following format: which of the topics below will be essential within the next two decades? The respondent had to choose necessarily 5 issues.

3.2.3 Data analysis

3.2.3.1 Question about the use of the 47 items (Sgarbi) on everyday life

The questions about using the jargons from Sgarbi analyzed statistically by question pose two hypotheses and the following result:

H0 = The respondents have the same opinion.

H1= The respondents do not have the same opinion.

On the T test with the theoretical average of 2.5, which represents the average value from 1 to 5 from the Telles model (2011), through questions related to the following items: 4 (ecodesign), 15 (development of deteriorated areas), 20 (urban reinvestment), 33 (resource productivity), and 38 (environmental accountability), the answer is that it is not possible to affirm that the respondents don't share the same opinion.

Conducting an analysis per quadrant, through a chi-square test, with frequency estimated in each answer = 8.8 (44 respondents / 5 options), we have the following questions and results.

H0 = The frequency of answers is random

H1= The frequency of answers is not random

The result from this analysis is that all items, except 23 (environmental audit), 31 (ISO 14000), and 40 (product lifecycle management), do not accept the null hypothesis, that is, the distribution of frequency of answers is significant and biased, indicating that the answers are concentrated in one or more answers. As an example, by analyzing the frequency of answers from item 23 (environmental audit), we have:

Table 5 Example of Frequency

Question	Frequency of answers
1. Never applies	6
2. Rarely applies	11
3. Sometimes applies	11
4. Generally applies	11
5. Always applies	5

In this example, it is noticed that the three options (2, 3 and 4) had the same frequency, that is, there is no predominance among them.

Following the analysis by Telles (2001) according to graphic 5 already presented about the professors researched, here we have a similar graphic, now for the 44 respondents, according to arithmetic averages calculated per participant and their respective percentages calculated, with the posterior general average per quadrant, where we find:

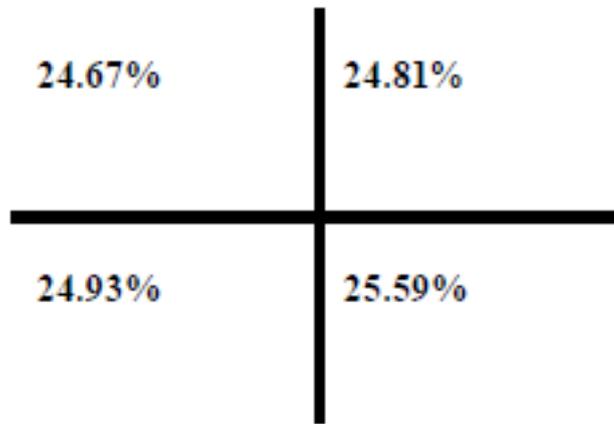


Figure 6 Average of percentages per quadrant

An ANOVA test of comparison shows that there are no significant differences among the quadrant percentages at 10% significant level. Actually an ANOVA comparing averages clearly indicates a lack of preference for any one of them ($p = 0,823$). Moreover an analysis of correspondences in the chart displays which quadrants are closer (Q1 and Q4) and where the respondents are located in relation to the quadrants, and the result is that the vast majority of people have no preferences (inertia = 82%). We notice that, as in the analysis of results from PUC professors, there is balance in the use of the 4 quadrants considering the research by Sgarbi et al. (2008) of sustainability jargons, adopting the model by Hart and Milstein (2004).

The research demonstrated that sustainability professionals and consultants work giving priority on their everyday tasks to questions in Q4, quadrant that suggest a company's concern with transparency and receptiveness, bringing corporate return of "reputation and legitimacy."

In second, comes Q3, the quadrant with questions related to costs and cost reduction, which analysis is conducted on the company's current internal situation at the moment.

By the research and analysis with sustainability professionals and consultants, based on the MVSA, we notice that the higher demands are on the model's lower quadrants, especially by company image, reputation and legitimacy; that is, how it is communicated to the external environment and, in second, by its current internal situation, where costs and cost reduction take relevance.

Comparing both investigations – with professors who teach Sustainability at PUC-SP in the business administration graduation course and with sustainability professionals and consultants –, we notice that:

The professors' apparent priority were: Q4, Q2, Q1, Q3.

While the market demands to sustainability professionals and consultant may seem to be : Q4, Q3, Q1, Q2. Although, as mentioned before, the differences are not yet statistically significant, but may indicate trends.

We started the comparative analysis by commenting the two moments when the investigations align, the quadrant considered priority, which was Q4 in both cases. In the third priority, there was also alignment with Q1. Thus, our comparative analysis demonstrates that the priority taught in the education of business administrators – Q4 – is the same one the market has been concerned with, and refers to the image transmitted, because it affects the company's reputation and legitimacy. Here, we have full alignment between education and market.

The third priority is also aligned between the research with sustainability professors and the one with sustainability professionals and consultants, concentrated on Q1, which brings the aspects of sustainable development, the most difficult quadrant to be committed with, according to authors Hart and Milstein (2004), in which the company should consider global problems such as hunger, poverty, social inequality on their efforts and decisions. The question to be answered in this quadrant by the companies, according to the authors, is: "Does our corporate vision lead us to solving social and environmental problems?" (Hart e Milstein, 2004, p.91)

We are analyzing the divergences in priorities. While professionals and consultants give second priority to demands for questions in Q3, related to "costs and cost reduction," involving the fight against pollution and residues, where internal company variables are conjugated with its current situation, offering inputs to decisions, professors stick with Q2, where discussions and information about clean technology, innovation and repositioning are intensified, since this quadrant is related to the variables analyzed on the company's internal environment conjugated with variables for the future desired, for tomorrow.

The third priority was already commented, where there is research alignment, related to Q1. Now, we find now as fourth and last priority of professors aspects from Q3, and from professionals and consultants, demands for Q2.

With this, we notice that Q3, which concerns aspects of costs, cost reduction, fight against pollution and attention to residues, considered as second priority for demands met by professionals and consultants, is considered by professors as the last priority.

Hart and Milstein bring a model where the lower quadrants (Q3 and Q4) refer to the current situation from companies, considering the internal (Q3) and external (Q4) environment.

The research with consultants and professionals demonstrated exactly this – that corporate demands refer to the present, when priorities are established on quadrants Q4 and Q3.

In the case of professors, we notice a mix in central priorities, overlapping the lower quadrant with the upper quadrant; that is, mixing knowledge from the past and from the future.

With this, we notice that this sample with professors demonstrates that education has fulfilled its role, mixing discussions and information from the present and awakening the future, contributing to the construction of a sustainable planet through a new generation of managers more aware and committed to life.

3.2.3.2 Questions about the future

Concerning the answers we received about the 5 fundamental sustainability jargons for the next two decades (table 6), based on jargons from Sgarbi (2008), we found: Sustainable development (43.9%), Transparency (41.5%), Pyramid base (34.1%), Stakeholder management (31.7%) and Ethic management (29.3%).

Table 6 Topics that Will be Essential over the Next Two Decades (Top 10)

Item	%
14-Sustainable development	44.7%
47-Transparency	44.7%
11-Pyramid base	34.2%
41-Ethic management	31.6%
39-Stakeholder management	28.9%
5-Technology innovations	23.7%
4-Energy efficiency	21.1%
38-Product lifecycle management	21.1%
41-Corporate governance	21.1%
46-Corporate Social Responsibility	21.1%

It is noticed that aspects of image, legitimacy and reputation will remain a priority (Q4) in the future. They also consider a priority aspects considered by Hart and Milstein as sustainable development, concentrated on Q1, the most difficult quadrant to achieve commitment with, because it encompasses expanded awareness on global problems. Concerning items such as Technology innovation (24.4%), Green technology (12.2%), Clean technology (12.2%), and Green revolution (2.4%), which have future, revolution and innovation in their name, they were not scored directly as important for the future.

By the classification of sustainability jargons (Sgarbi, 2008) based on MVSA from Hart and Milstein (2004), the respondents selected topics concentrated on the external environment, considering the present moment of the company and its reputation, legitimacy, as well as aspects from tomorrow. With this, the strategic planning gains strength to learn the present actions that bring legitimacy and visibility to work, advancing and adjusting to the sustainable future, where the company needs to be committed to solving global problems.

Following the classification by respondents until the ninth item, it is possible to notice that the items scored as seventh – Product lifecycle management (22%); eighth – Corporate Social Responsibility (19.5%) and Corporate governance (19.5%); and ninth – Residue management (17.1%) are those related to the present and to the external environment.

It is noticed that, in most answers, there still is a major operation of the present issues, even if for the next two decades in Brazil. Thus, the research suggests that, over the next decades, Brazil will still be making an effort in present, not in future, issues.

4 Conclusions

The work presented sustainability concepts and used two investigations to discuss this theme, in the sense of checking alignments with the MVSA (Hart and Milstein, 2004), updated by Sgarbi (2008), which defends that it is possible to develop economically with sustainability generating value to shareholders.

In the research by Telles (2011), we found alignment between what is taught in the Sustainability discipline of the Business Administration graduation course from PUC-SP and the multidimensional matrix Hart and Milstein (2004) defend on their MVSA, which presents

a theory that it is possible to make corporate decisions aiming at the sustainable development, via multidimensional analyses considering financial, environmental and social dimensions. Other authors are expanding the dimensions to be included in decision making, where they suggest adding cultural and spiritual aspects.

In parallel, we also verified an alignment between the demands made by the companies about sustainability, within the model adopted in this paper, and the ones made by sustainability professionals and consultants.

We noticed that two of the four quadrants receive the same priority, both from professors, by teaching sustainability in the graduation course, and from professionals and consultants, by meeting market requirements: the first position goes to reputation and legitimacy (Q4) and the third goes to sustainable development (Q1), which shows us that the image the company transmits has been relevant and a priority, both in the administrators education environment and in corporate practices that request support from sustainability consultants and professionals. In third, both academia and companies consider sustainable development issues, which is a good sign, because it could have been the last priority from both parties researched, and it did not happen. We are motivated by this, because it may signal the beginning of a change in awareness.

The education of administrators is a process directly related to the corporate environment, because it contributes with base knowledge and experiences for the new generations of managers and leaders, and it is relevant and, facing this, it is crucial to be quickly organized for this alignment on sustainability the mankind so badly needs.

Simultaneously, professionals who work directly with sustainability also need to align with these dimensions and variables, because they will have the opportunity to influence and make aware companies they are part of. Likewise, work has brought the trends noticed by these professionals, where we verified that, in Brazilian companies, priority is still given to present aspects, not to future thinking. Maybe a new apprenticeship on building the future will be necessary at the moment.

With this, we conclude the paper, but not the discussion, contributing to reflections towards change in postures, attitudes and models, in the sense of favoring the considerable reduction in the size of human footprints on the planet.

A new awareness is necessary, and a new management model needs to be built, in order to take the much-needed sustainable development to companies and to mankind.

References

- [1] Barbieri J. C. Environmental Management Business. 1st edition. São Paulo: Saraiva, 2004.
- [2] Cavalcanti R. N. Mining and Sustainable Development: Cases of Companhia Vale do Rio Doce. 444 p..Tese (Doutorado em Engenharia Mineral.) – Universidade de São Paulo, USP, Brasil. Escola Politécnica, Universidade de São Paulo, São Paulo, 1996. (In Portuguese).
- [3] CMMAD – World Commission on Environment and Development. Our Common Future. Rio de Janeiro: Editora da Fundação Getúlio Vargas, 1987. (In Portuguese).
- [4] Dixo J. A., Fallo L. A. The Concept of Sustainability: Origins, Extensions and Usefulness for Policy. Washington: World Bank Environment Department/Division Working Paper/Policy and Research Division, n.1989-1, July, 1989.

- [5] Goodlan R. Environmental Sustainability and the Power Sector. *Impact Assessment*, 1994,12(3): 275-304.
- [6] Guevar Arnoldo José de Hoyos et al (org.). *Education for Sustainability*. São Paulo: Saint Paul Editora, 2011. (In Portuguese).
- [7] Guevar Arnoldo José de Hoyos, Rosini Alessandro M., Silva José U., Rodrigues Mônica C. (org.). *Awareness and Sustainable Development in Organizations*. Rio de Janeiro: Elsevier, 2009 (In Portuguese).
- [8] Hart S. L. *Capitalism at the Crossroads: The Unlimited Business Opportunities in Solving the World's Most Difficult Problems*[M]. 1st Edition. Nova Jersey: Wharton School, 2005
- [9] Hart S. L, Milstein M. *Creating Sustainable Value*. *Revista de Administração de Empresas – RAE Executivo*, may/june 2004,3(7): 65-79 (In Portuguese)
- [10] Hitchcock Darcy, Willard Marsha. *The Step-By-Step Guide to Sustainability Planning: How to Create and Implement Sustainability Plans in Any Business or Organization*[M]. London: Earthscan, 2008
- [11] Lazlo Chris. *Sustainable Value: How the World's Leading Companies Are Doing Well by Doing Good*[M]. Stanford: Stanford University Press, 2008
- [12] Serageldin I. *Making Development Sustainable*[J]. *Finance & Development*, 1993, 30(4):6-10
- [12] Sgarbi V. S. et al. *The Jargon of Sustainability: A Discussion from the National Scientific Production*. X Encontro Nacional de Gestão Empresarial e Meio Ambiente ENGEMA 2008. (In Portuguese)
- [13] Tachizawa T. *Non-governmental Organizations and Third Sector: Ngos Creation and Action Strategies*[M]. 2nd ed. São Paulo: Atlas, 2005. (In Portuguese)
- [14] Telles Beatriz M. *Integrando a sustentabilidade na formação de administradores*. São Paulo: 240p. *Dissertação de Mestrado, Programa Administração, PUC-SP*, 2011 (In Portuguese)