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Indicators of Organizational Sustainability: A Proposition From Organizational Competences

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Abstract

The concept of organizational sustainability (OS) is deeply linked to the Triple Bottom Line (TBL), which is a hierarchical model that segments the OS into economic, environmental and social pillars. This article rescues the OS framework of Munck, Munck, & Borim-de-Souza (2011), in which the authors suggest the use of competences as support for OS. However, even so, there are gaps for OS management and evaluation. From this, the present article bases itself in the concept of delivery, suggesting that each competence possess a set of expected actions and results and and suggests a series of deliveries for the OS competence. Such deliveries are understood as indicators which allow the measurement of the OS.

Key Words: *Organizations, Sustainability, TBL, Segment and Management*.

Introduction

Sustainability is a popular theme in society and has also entered organizations under the denomination Organizational Sustainability (OS). The Triple Bottom Line (TBL) (Elkington, 1999) is a hierarchical model that delimits the OS, defending its division into three pillars: economic, environmental and social. The TBL also advocates the evaluation of the pillars in the performance measures in a balanced form, without prioritizing one over the others. Even with these guides, current literature is scarce in management instruments for the OS, therefore suggesting the use of competences as support for this phenomenon (Munck, Munck, & Souza, 2011). The idea of competence allows the for the visualization of the OS as a phenomenon that occurs in levels, advocating that an organization should not be seen as sustainable or not, but rather as holding a certain OS level.

Due to the intangibility of competence, arises the concept of delivery, which suggests that evaluations of competence should visualize their deliveries, in other words, the results and actions arising from the fact that an organization holds a certain competence. The OS framework presented (Munck, Munck, & Souza, 2011) is part of a study of the competences of an OS, suggesting that the OS competence (central competence) is supported by the economic OS, the environmental OS and the social OS (key competences). From this emerges the objective of the present paper, to point the outcomes (viewed as indicators) that denote the plain development of the key competences and consequently of the central competence. Based on the extensive literature of the subject, the present research elaborates a set of indicators the may be used as a measurement of the OS competence in any organization.

Organizational Sustainability (OS)

Organizational sustainability (OS) has become a popular theme over the last few years, which has lead organizations to come under great pressure from markets and legislations, and have thus sought to align

themselves with sustainability, originating the term OS. By reaching in the direction of sustainability, organizations seek legitimacy before markets, increasing their scope and securing greater financial returns.
In the context of OS, the Triple Bottom Line (Elkington, 1999) comes to light, which advocates that the traditional business model, that considers only economic factors in the appraisal of a company, should be expanded to a new model by also contemplating the organization's environmental and social performance, as well as the financial.

The Triple Bottom Line offers guidelines so that organizations approach sustainability. This way, being the Triple Bottom Line a model conceived for the organizational sphere and widely accepted by various authors (Callado, 2010; Hoff, 2008; Dyllick & Hockerts, 2002; Savitz & Weber, 2006), including empirical works in the area (Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013), its is chosen as the guide for this work. Other authors do not cite the Triple Bottom Line, but segment the OS in similar pillars (Passet, 1996; Sachs, 1990; Azapagic, 2003).

By what has been stated, it is inferred that the OS, by mainaining a balance between the economic, environmental and social perspective, is concerned as much by the organizations and shareholders financial interests, as with supporting the the natural environment and the social relations under the influence of the organization (stakeholders).

A large amount of organizations (Hahn & Scheermesser, 2006) have faced constant environmental changes and suffered pressure from legislations and society, forcing them to seek alignment with sustainability. One of the main obstacles of the OS is the confrontation with the economic pillar, since, in the classic view, organizations have as sole function the maximization of the shareholders capital.
The idea of a company aligned with sustainability is that of company activities developed in a social-environmental context which conditions the quality and the availability of natural and human capital. More than these three elements, the balance between them is fundamental (Savitz & Weber, 2006; Lemme, 2010).

So, it may be inferred that OS "balances the economic, environmental and social development, as much as in the internal as in the external sphere of the organization. Enables the organization the capacity to survive and pay the invested capital; seeks the reduction of environmental impacts and promotes the rational use of natural resources; guarantees the individuals sufficient resources to access equal opportunities and development in face of organizational objectives, as well as assures that individuals receive balanced and contextual social and environmental benefits and detriments that arise from organizational activities (Munck, Bansi, Dias, & Cella-de-Oliveira, 2013)."

Sustainability is a state in which an organization or a society exhibits a relation to economical environmental and social aspects (Munck & Souza, 2009). Therefore, usually when it is said that an organization or a society is sustainable it is meant that it holds a certain state of sustainability. As such, sustainable is what can be maintained, in other words, nothing is stagnant, that is why sustainability must be viewed in levels (Van Marrewijk & Werre, 2003). This way, the correct would be to say that a given organization or society holds a certain level of sustainability, rather than what is and is no longer sustainable.

Reinforcing the idea of viewing sustainability as a state, organizations may be classified in OS levels (Van Marrewijk & Werre, 2003):

- Level 0 (pre-sustainability): in this level there is no regard toward sustainability. However, certain steps labelled as sustainability may be initiated when the organization receives external pressures (legislation, consumer pressure, etc.);
- Level 1: in this level sustainability consists in providing society with well being, within the limits of legislation. There may also be actions of charity. The motivation for sustainability is its perception as a duty and an obligation;

- Level 2: sustainability consists in the integration of social, ethical and environmental aspects, as long as it contributes to the economic pillar of the organization. The motivation is economic, aiming at the organization's reputation

- Level 3: consists in balancing the economic, social and environmental concerns. Actions go beyond legal requirements and economic considerations. The motivation is that human potential, social responsibility and taking care of the planet are considered equally important;

- Level 4: seeks balance, functional solutions and creation of values in the economic, social and environmental spheres. It also seeks the synergy to win along side all of the interested parties. The motivation is recognition that sustainability is important on its own, especially because it is seen as an inevitable progress;

- Level 5: it's the level of holistic sustainability; totally integrated and incorporated in all aspects of the organization, aiming to contribute to the quality and continuity of life. The motivation comes from the view that sustainability is the only alternative, since all beings and phenomena are mutually interdependent. Each person or organization , therefore, has a universal responsibility towards others.

Each level includes and transcends the ones before, resulting in business practices and institutional development that denotes the different levels of sustainability (Van Marrewijk & Werre, 2003).
Even though the Triple Bottom Line is a hierarchical model, the study of the OS lacks management instruments and tools which allow its operationalization, so, without casting judgement of values, a framework is presented that guides the management of the OS (Munck, Munck, & Souza, 2011). This choice arouse from the fact that this framework was conceived from the Triple Bottom Line e specifically for the management of the OS. This model shall be presented in the next section.

Organizational Sustainability Framework

Before dealing with a specific sustainability model, it becomes necessary to build three organizational sustainabilities, which shall support the framework. These sustainabilities are built based on three pillars of the Triple Bottom Line. From the constructs of various authors (Elkington, 1999; Munck, Munck, & Souza, 2011; Savitz & Weber, 2006; Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013) aiming to integrate the three pillars, these are viewed as three sustainabilities, which, is properly developed, are capable of providing a satisfactory state of OS. Thus, the three sustainabilities are called: Economic Organizational Sustainability (EcOS), Environmental Organizational Sustainability (EnOS), and Social Organizational Sustainability (SOS). The basis of this OS construction, constituted by the before mentioned three sustainabilities, may be also found in various other authors (Callado, 2010; Dyllick & Hockerts , 2002; Jamali, 2006; Kranjc & Glavic 2005) and are defined in Box 1.

Economic Organizational Sustainability (EcOS)	Economic viability is at the core of this sustainability (Azapagic, 2003), since it generates profit and jobs e so contributes to the general social welfare. Even in an ambient of sustainability development, there is the need to recognize the traditional accounting vision (Dyllick & Hockerts, 2002), because without the economic capital the company ceases to exist. Therefore, the authors suggest that the EcOS must guarantee sufficient liquidity cash flow by producing above average return for its stockholders. It also includes topics such as competitivity, job offer, insertion into new markets and long term profit. In short, to achieve EcOS means that the organization conducts its activities in a responsible and recognized manner, with social and economic return for those involved (Munck, Munck, & Souza, 2011).

Environmental Organizational Sustainability (EnOS)	Deals with topics such as preservation of biodiversity; resource regeneration capacity, re-usage and recycling; constraining non-renewable resources and waste generation. Companies aligned with EnOS (Dyllick & Hockerts, 2002) only consume natural resources at a rate below its natural regeneration capacity, or below the production rate of substitutable resources. These companies also do not cause emissions that accumulate in the environment at rates above the systems natural capacity to absorb and assimilate these emissions. The greatest challenge pointed out by the authors is that for the many services provided by the environment, there is either no known substitute or it is available at prohibitive prices. The EnOS encompasses the prevention of the impacts created by the organization on the natural system, composed of living and non-living beings. It goes beyond certifying the conformity to governmental regulations and initiatives, like recycling or efficient energy usage, since it does not exempt a comprehensive approach over the organizational operations, which are ruled by the evaluation of the impacts generated by the company's products, processes and daily services, by the elimination of unnecessary costs and of high emissions, besides minimizing practices that may affect the access of future generations to critical natural resources (Munck, Munck, & Souza, 2011).
Social Organizational Sustainability (SOS)	Human capital refers mainly to aspects such as skills, motivation and loyalty of employees and business partners. It obliges the company to internalize the social costs, maintaining and providing the growth of the social capital; avoid exploiting the individual, giving incentive to auto-renewable structures; promoting democracy, amplifying the scope of personal choices and distributing resources and property rights in a fair manner (Dyllick & Hockerts, 2002). It encompasses the management of the impact that the organizations cause on the social systems by it's operational activities. The expectations of the different social groups relates to the organization are genuinely considered. In summary, it incorporates questions related to human development (education, training, occupational health, workplace safety and competence development), to equality (fair salaries and benefits, equal opportunities and absence of workplace discrimination) and to ethical considerations (human rights, cultural values, inter-generation and intra-generation justice) (Munck, Munck, & Souza, 2011). The SOS covers the following characteristics (Azapagic, 2003): fair pay, equal opportunities, good health and safety conditions, gratification system, securing ideas for the improvement of the Triple Bottom Line, competence development and training, career plans and ethical organizational behaviour.

Box 1: Definition of the three sustainabilities.

From the comprehension of the three sustainabilities, it is possible to understand the following OS model, which offers guidelines for OS management. Several works (Munck, Munck, & Souza, 2011; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013) propose a conceptional structure (framework) capable of representing the integration of sustainability elements in the organizational framework, which is represented in Figure 1.

Various authors which approach the framework (Munck, Munck, & Souza, 2011; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013) explain that its components must be aligned, since the processes occur due to their balanced relation. The framework presented carries a systemic perspective, that delineates the inter-dependency of its elements, in which the slightest jerk of one of the elements is capable of throwing off balance the whole structure. For this reason the structure, even if it graphically resembles a hierarchic structure, does not have this pretension. This way, this systematic character is represented by double

arrows, which make evident the inter-dependence of the elements, showing their interactions, which occur in both directions, and that the elements depend one on the other.

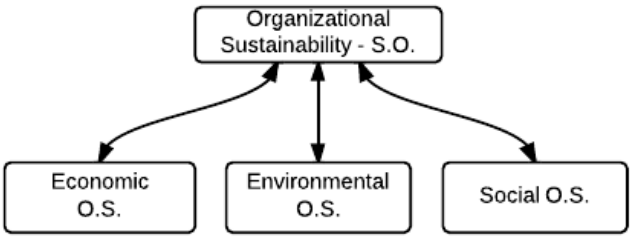

Figure 1: Organizational Sustainability framework (Munck, Munck, & Souza, 2011; Cella-De-Oliveira, 2012; Bansi, 2013; Dias, 2013).

Still in regard to the framework, it is necessary to point out that it follows the "win-win" paradigm, in other words, working the OS distributes the gains to all the stakeholders (including society and environment). The gains for managing the environmental and social dimensions might be intangible, in the form of legitimation, gains in confidence and intellectual capital, competence development, and in the strengthening and consolidation of the organization, as well as gains in long term capital (Hahn & Scheermesser, 2006).

This section walked through the paths for understanding OS, where the Triple Bottom Line is viewed as a hierarchical model for the OS and the framework as necessary for the OS occurring. However, it is still necessary to walk further in order to enable OS operationalization, and for this, the next section shall tackle the logic of competences.

Competences

The logic of competences shall be approached with the intuition of providing a form for OS operationalization. Organizational competence is defined as the ability to do something (Mills, Boume, & Richards, 2002). An organization is said to be highly competent when it is capable of beating their competitors in a given factor. As such, it is not something that an organization has or stops having, but rather something it has in a certain level.

The debate over competences is not recent and a great diversity of of competence concepts exist (Bitencourt 2005), however, the following definition stands out:

A continuous and articulate process of formation and development of know-how, skills and attitudes in which the individual is responsible for the construction and consolidation his/hers competences (self-development) by interacting with other people in the workplace, family, and/or other social groups (extended scope), with the aim of improving his/hers capacity, in order to, this way, add value to the organization's activities and to oneself (self-realization) (Bitencourt, 2005)."

Competence is not simply formed by abilities and technologies, but by the integration of these elements (Hamel, 1994). In other words, the author emphasises the existence of synergy between these elements. However, the authors point out that, distinguishing simple groups of abilities and technologies of a competence is not easy.

Competences are assets which allow certain tasks, routines and processes to be performed. The notion of competence appears associated to verbs like know, act, mobilize resources, integrate multiple and complex expertise, know how to learn, know how to engage, take on responsibilities and have strategic vision. The competences must aggregate economic value to the organization and social value to the individual (Teece, Pisano, & Shuen 1997).

Organizational competences can be explained as consisting of a combination of corporate characteristics, abilities, motivations and know-how. These mechanisms are incorporated in their systems and processes and are spread between their collaborators and structures (Turner & Crawford, 1994). Competence reflects the organization's specialization, resulting from their collective learning, and refers to functional areas of the organization, like skills, technologies and resources (Helleloid & Simonin, 1994; Chiesa & Barbeschi,

1994) also agree with the definition of competence as a set of skills, technologies and resources, and reinforce the importance of the articulation of these elements. Such elements may be defined as follows (Drejer, 2000):

- Technology: usually the most visible part of a competence, since it represents the tools which humans use to perform their activities. The author prefers to view technology as physical systems or tools – restricting the softer technological perspectives as part of human skills and knowledge.
- Individuals: the most obvious part of competence – without humans to use the technologies, nothing would happen. Therefore, humans are a focal point of competence development.
- Organization: refers to the formal management systems in which humans act. For example: planing and control, wages and benefits, communication channels, and hierarchical responsibilities and tasks.
- Culture: refers to the informal organization of the company. Corporative culture influences humans through values and norms which guide shared activities.

Other authors point out variations in these elements, however they are similar in terms of contents, therefore the present work opts for this classification (Drejer, 2000).

Competence may yet be defined as the capacity to sustain the coordinated implementation of means and capabilities in a manner which promises to aid the company to reach its objectives. Having competence implies in an organizational intention to reach some desired results through specific actions (Sanchez & Heene, 1997).

It is important to note that organizational competence is not simply the sum of resources, since other factors come into play (Mills, Boume, & Richards, 2002), such as organizational synergy, environment, relationships, organizational knowledge, etc. Competence is a global skills and characteristic, because it encompasses all areas of the company's operations: production process, commercialization process and support processes such as finances, general services, supplies, etc. (Boog, 1991).

Competence is not merely a dual phenomenon, that is, it is absent or present in the organizations. It is a phenomenon that occurs in levels (Souza, 2010), therefore, an organization is not thought of as being competent on its own, but an organization is deemed competent in certain aspects by the consequent competence it has in managing its networks e developing the competences included in these networks (Souza, 2010). From the recurrence of the different aspects in which an organization may be competent, the existence of different types of competences emerges, as categorized on Box 2:

COMPETENCES CATEGORY	DISCRIPTION
Ordinary resources[1] and competences	Resources at the same level as competitors, without offering any differentiation
Important resources and competences	Potential source of competitive advantages or disadvantages
Essential competences	Central competences for the survival of the organization and it's strategy
Distinctive competences	Competences capable of differentiating the organization from its competitors by offering competitive advantages
Organizational competences	Key activities for each business
Support competences	Activities that offer support to the development of other organizational activities
Dynamic capacity	The organization's capacity to constantly adapt its competences or activities whenever necessary

Box 2: Types of competences (Mills, Boume, & Richards, 2002).

1Resources is that which an organization possesses (even if temporary), these being tangible (i.e. buildings, equipments, licenses, patents, etc.), or intangible (skills, experience, know-how, etc.).

These different competences are made up from different resources. This way, this situation may be illustrated through an analogy, where the competence is made up of construction blocks, called resources, which are coordinated in a given path, resulting in that competence, which may be seen as a wall (Mills, Boume, & Richards, 2002).

Besides the resources, each competence may be assisted by support competences (Mills, Boume, & Richards, 2002; Hamel, 1994), creating an an intricate hierarchic net of competences composed by the items in Box 2 and shown in Figure 2.

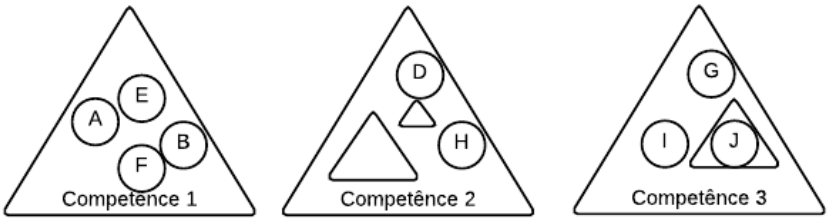

Figure 2: Competence architecture (Mills, Boume, & Richards, 2002).

Figure 2 shows the competence architecture, where the triangles represent the competences and the circles the resources. This figure shows that a competence may be formed by resources, only, or also by other competences, as the case with competences 2 and 3. This process does not have any limits, as a given competence may be formed by various competences (Mills, Boume, & Richards, 2002).

An inherent difficulty to the study of competences regards its visualization, since it deals with a subjective concept. The concepts of competence based on resources do not ensure that the organizations fulfil that which the competences allow then, in other words, does not guarantee the deliveries, which highlights the importance of this concept, which shall be addressed next (Dutra, Hipólito, & Silva, 2000).

The Concept of Outcome

Competences may be described as articulated sets of expertise, skills and technologies (Helleloid & Simonin, 1994; Drejer, 2000, Prahalad & Hamel, 1990), however, the fact that an organization possesses certain elements does not guarantee it's outcome, in other words, it is not synonymous with the competence being put into practice (Salgado, 2007).

From this criticism, it may be inferred that a competent organization is one which holds the capability of guaranteeing conditions to obtain results and deliver their final objective (product, service, etc.), in an efficient and effective manner. Therefore, it is only possible to talk about competence when competence is practised, translated into how to be, how to do and how to mobilize expertise in different contexts (Mills, Boume, & Richards, 2002).

So, it may concluded that competence must be evaluated when it is generating actions, or outcomes. From this comprehension it is important to highlight that researches that aim to identify the competences must start from this principle and, so, proceed in the organization in a search for outcomes of the researched competences.

Material and Methods

This research is a qualitative theoretical study that aims to create a set of organizational sustainability indicators to measure the sustainability in organizations. This paper looked for relevant authors in this field to help reach up the aims. The results are showed in the next session.

Results

Competences And Organizational Sustainability

Sustainability is an approach born outside organizations that when enters the internal ambient lacks management tools. There is little in terms of how to systematically articulate these concepts so they become organizational actions and decisions (Munck, Munck, & Souza, 2011). As such, a set of tools become a necessity for the adequate management of OS, and the organizational competence approach has proven to be sufficient , as demonstrated in other empirical works (Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013).

The logic of competences was designated as capable of offering the solid theoretical bases and the necessary applicability to the objectives processes and enabling actions (Munck, Munck, & Souza, 2011). The authors also explain that the competence logic permits analysis through their constitutive resources and indicator measures which portray the reach of the central elements of the OS.
Redeeming the framework of the OS, previously presented, and inserting the competences' perspective (Munck, Munck, & Souza, 2011). The authors explain that the OS is understood as a central competence, made viable by the overlapping of the key competences: Economic Sustainability, Environmental Sustainability and Social Sustainability, as shown in Figure 3. The hierarchic of the competences (Mills, Boume, & Richards, 2002) can be observed in the figure and the two categories of the competences used are explained in Box 3.

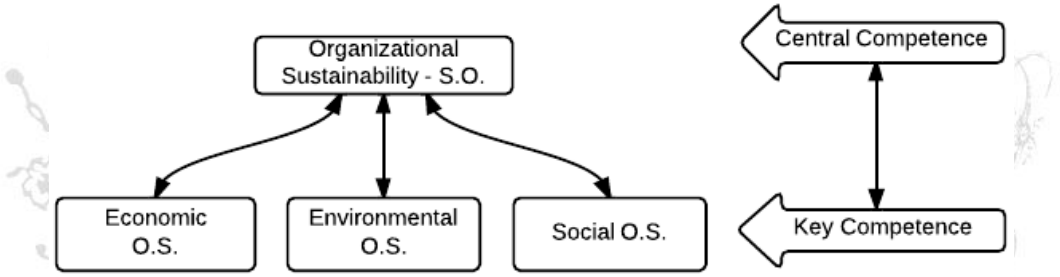

Figure 3: Organizational sustainability framework seen from the competence point of view (Munck, Munck, & Souza, 2011; Cella-De-Oliveira, 2012; Bansi, 2013; Dias, 2013).

COMPETENCE CATEGORIES	COMPETENCE IDENTIFICATION
Central Competences	Represents corporative organizational actions essential for the company's survival and fundamental for its strategy
Key Competences	Represents a small number of essential actions, generally three to six, expected to be found and developed in each business unit of an organization

Box 3: Competence categories (Munck, Munck, & Souza, 2011).

The logic of the competences offers guidelines for managing the items related to the sustainability of the organizations, because it delimits and orients objective and coherent actions (Munck, Munck, & Souza, 2011). Delimiting the qualifications which shall give organizations the status of being qualified as sustainable is also a responsibility of the competences. Thus, while the competence is the capacitative foundation for sustainable organizational development, the articulation between different levels of competence shall connect the organizational expertise regarding to the social, economic and environmental concerns and, by means of properly understood processes, shall grant increasing strength and objectivity towards this relationship (Munck, Munck, & Souza, 2011).
The previously presented characteristics of the framework in respect to the inter-dependency and systematic character of its elements must not be forgotten, which enables to reinforce the dependency

between the competences that composes it. The insertion of competences in this model draws to the notion of how competences may bring about the development of OS. After presenting the OS framework, the instrument for measuring the framework's competences shall be presented in the next section.

Sustainability Measurement Model Based on Competences

After being introduced, in the previous section, to the OS model adopted in this research, the topic now is measurement. For the balanced development of the three sustainabilities as a key to reaching OS (Elkington, 1999), the organizations need tools which guide the development of each of the competences that constitutive sustainability.

An important warning regarding the use of competences for OS management: competence is used by the authors as a tool that aims to give competitive advantages to the organizations, or "it can be said that the organization possesses competences if it can beat its competitors, aggregating values" (Mills, Boume, & Richards, 2002). Although this positioning of competing and surpassing competitors may remit to the idea of looking solely for economic increments, and is not coherent with the principles of sustainability, in this work competence shall be used as enabling the balance between the presented OS.

Another responsibility of the competences is to define the qualifications that shall give the organizations the status of being qualified as sustainable. The articulation between different levels of competences shall connect the organizational expertise regarding economic, environmental and social concerns, by way of properly understood processes that shall grant increasing strength and objectivity to this relationship.

Outcomes are vital for the measurement of competence, because these shall show the results gained by the competence. Therefore, the challenge is to asses which outcomes represent the service of a given competence. Seeking to meet this challenge, the sustainability indicators available in the literature are employed.

However, before advancing into knowing the indicators, it shall be interesting to formalize a concept about them. Indicators are parameters or values derived from parameters which point to and offer information on the state of phenomenon (OECD, 1993). Indicators serve to point out relevant characteristics of a system and clarify the complex relations between the different variables involved in a phenomenon, making it visible or perceptible in order to communicate its informations, making it objective instrument of analyses on the considered phenomenon (Hanai, 2009).

Much like other organizational phenomena, politics and strategies, sustainability demands methodical instruments which enable the monitoring of development processes in diverse contexts and situations, use the use of indicators (Hanai, 2009), and various authors have approached sustainability from the use of indicators (Cella-de-Oliveira, 2012; Salgado, 2007; Rovere & Barata, 2007).

With the goal of measuring sustainability, a series of mechanisms are proposed in the literature (Louette, 2009), however, in this research only two of mechanisms were used with greater emphases:

- Global Reporting Initiative (GRI): edits indicators widely accepted in global literature. It is the primary world standard for measuring, monitoring and divulging the sustainability programmes of companies. The GRI tries to place the environmental and social reports at the same level as the financial reports in terms of rigour, clarity, precision, utility, comparability, and influence of the investors (Savitz & Weber, 2006).

This model was conceived to be used by organizations of any size, sector or location. It takes into account the practices faced by a series of organizations, from small companies to large groups, with varied operations and spread geographically, with global agreements by various stakeholders, applicable in performance reports of the organization's sustainability.

- Business Sustainability Index (BSI): edited by São Paulo's Futures, Merchandises and Stocks Market BMF&IBOVESPA, it is one of the more consolidated methodologies in Brazil. This index is edited annually, since 2006, listing the 50 companies with better performance among those with stokes traded in the Brazilian stock market (BM&FBOVESPA, 2013).

Both groups of indicators , GRI and BSI, offer guidelines for preparing reports, but do not offer metrics for measuring the phenomena the propose to evaluate. The GRI indicators present a clear vision of the the phenomenon, but does not define its reach (Munck, Bansi, Dias, & Cella-de-Oliveira, 2013). They do not tackle tendencies and rates of changes, positive and negative, as well as monetary and non-monetary, consequences of economic activities, and thus, do not offer a holistic perspective.

One of the main negative aspects of the GRI indicators is that its focus is to offer data for elaborating reports, and consequently, does not have practical character, goal, reference value, nor evaluation criteria (Munck, Bansi, Dias, & Cella-de-Oliveira, 2013). Still, even though such indicators are not sufficiently robust for the measurement of phenomena, they do offer support for creating indicators adapted to the context of each organization.

In relation to the BSI, similar commentaries may be made, once this instrument also acts as a guideline for elaborating reports. As such, the theme of organizational competences is rescued in order to permit a differentiated form of index operationalization.

Retrieving the OS framework, presented previously, it is hoped that each competence has a set of expected outcomes. These outcomes are seen as indicators (OECD, 1993), and so, each outcome acts as a parameter or a value derived form parameters, which point to and offer information on the state of the phenomenon. This way, the relation between indicators and expected outcomes is made clear, which works in a similar fashion with this research, as shown in Figure 4.

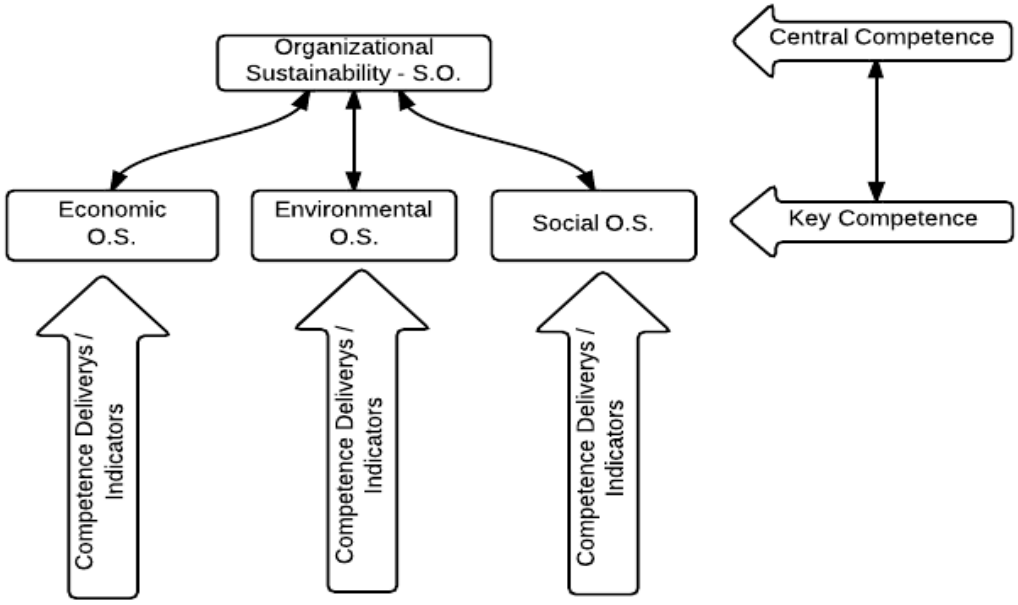

Figure 4: Indicator actions in the framework (Author).

By viewing the expected outcomes as indicators, it is possible to analyse the degree of development of a competence in the organization. The use of competence outcomes as indicators is a practice already tested with success by (Souza, 2010; Cella-de-Oliveira, 2012), being therefore replicated in this research.

Therefore, it is necessary to list each outcomes the competences of Economic Sustainability, Environmental Sustainability and Social Sustainability would produce under a stage of full development. Such outcomes, seen as indicators, have been described from the point of view of two groups of indicators: GRI (GRI, 2013) and BSI (BM&FBOVESPA, 2013) and, also, with support from the Triple Bottom Line e researched literature. With such information in hand, the goal was to create coherent indicators with the logic of organizational competences, as well as to list all the outcomes that any given organization needs to enforce in order to obtain a satisfactory level of OS competence development.

The new group of expected outcomes/indicators is called Organizational Sustainability Indicators (OSI), which, if completely developed, show the total competence development of the Economic Sustainability, Environmental Sustainability and Social Sustainability, which implies performance of the OS competence. The OSI is divided in the Economic (Box 4), Environmental (Box 5), and Social (Box 6) dimensions.

Economic organizational sustainability indicators
Indicator EcOS-01 Generation of adequate capital pay outs to the shareholders *adequate pay outs is defined as rewarding the shareholders above the market average, permitting the maintenance and development of the organization.
Indicator EcOS-02 Honours the taxes, tributes, fees, and other government contributions.
Indicator EcOS-03 Punctuality in the payment of salaries, benefits, and contracts with suppliers and other partners.
Indicator EcOS-04 Does not practice disloyal competition, trust, monopoly or dumping.
Indicator EcOS-05 Minimizing fines and non-monetary sanctions resulting from the nonconformity with laws and regulations
Indicator EcOS-06 Not gaining economic advantage by illicit means.
Indicator EnOS-07 Not exercising self-interest pressures in the crafting of public policies.
Indicator EcOS-08 The decisions are taken based on a formal strategic planning that encompasses the organization as a whole, made by professionals who are competent to do so and considering the environmental and social dimensions, as well as the stakeholders. *stakeholders: all the parties interested in the activities of the organization, such as shareholders, collaborators, clients, suppliers, etc.
Indicator EcOS-09 Placement of products in the market in an efficient and competitive manner, aiming to maximize sales.
Indicator EcOS-10 Capacity to adapt products and processes to new market demands, i.e. new products, legislations and regulations.
Indicator EcOS-11 Capacity to conduct research and development of new technologies and products with adequate environmental characteristics, reducing environmental and social impacts and resulting in gains for the organization, even if it is not a demand of the market.
Indicator EcOS-12 There exists risk management plans and evaluations, with concern of the company's capacity to honour financial commitment with collaborators and shareholders.
Indicator EcOS-13 It considers the financial feasibility of the chain of production. All agents (suppliers, intermediaries, clients, transporters, beneficiaries, etc.) are analysed in the decision making.

Indicator EcOS-14 The company's financial statements, including risks of operations, are at everyone's disposal, through reports or other means.
Indicator EcOS-15 Market monitoring plans exist, with the goal of identifying opportunities.
Indicator EcOS-16 Concern over the organization's image is constant, all encompasses all stakeholdres.
Indicator EcOS-17 The company has restructuring plans in case of exceptional events (economic market crah, natural phenomena, etc.).
Indicator EcOS-18 Management of tangible and intangible actives receives the same attention.
Indicator EcOS-19 Company's growth follows the sector's growth.

Box 4: Indicators of Economic Organizational Sustainability (Elkington, 1999; Munck, Munck, & Souza, 2011; Callado, 2010; Hoff, 2008; Dyllick & Hockerts, 2002; Savitz & Weber, 2006; Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013; Lins & Zylbersztajn, 2010; Laville, 2009; Lemme, 2010; Munck, Bansi, Dias, & Cella-de-Oliveira, 2013; Van Marrewijk & Werre, 2003; Jamali, 2006; Kranjc & Glavic, 2005; GRI, 2013; BM&FBOVESPA, 2013).

Indicators of Environmental Organizational Sustainability
Indicator EnOS-01 The organization possesses environmental policies tied to its strategic planning, management and processes.
Indicator EnOS-02 Monitoring programmes of environmental performance exist and its results are considered in the future planning.
Indicator EnOS-03 Informs and incentives collaborators at all hierarchic levels to contribute to the organization's environmental performance.
Indicator EnOS-04 The organization seeks environmental quality throughout it's productive chain: suppliers, intermediaries, clients, etc., exerting influence of them.
Indicator EnOS-05 Selects and purchases the best raw material in terms of quality, quantity, price, and environmental character (recycled raw materials or those produced/extracted with low environmental impact).
Indicator EnOS-06 Develops programmes and research aiming to substitute raw material with those from renewable sources (i.e. fossil fuels for biomass).
Indicator EnOS-07 Incentives minimized consumption and efficient use of energy. All energy sources are considered, whether bought from other companies, or obtained from fuels, burning of residues, among others.
Indicator EnOS-08 Extraction, use and elimination of water in an effective manner, minimizing consumption or promoting its reuse.
Indicator EnOS-09 Minimizing greenhouse gas emissions, and adopting measures and technologies that reduce the toxicity of these gases.

Indicator EnOS-10 Initiatives towards providing products and services with low consumption of natural resources (i.e. water and energy), or that use renewable resources or resources resulting from these initiatives.
Indicator EnOS-11 Recycling of residues (solids, liquids and gases originated from the production activities), at the company or by sending to them partners
Indicator EnOS-12 Adequate disposal of by-products and residues (i.e. clippings, raw material packing, cleaning residues, etc.), by treating and/or disposing them in a manner that does not damage the environment, even if this action if performed by third-parties.
Indicator EnOS-13 Monitoring and recovering of potentially hazardous products to the environment after their lifecycle (batteries, tires, etc.).
Indicator EnOS-14 Instructs and educates the consumer with respect to the correct use of the products/services, aiming to improve environmental performance.
Indicator EnOS-15 Has an open channel with the community regarding its environmental performance and solves indicated problems.
Indicator EnOS-16 Minimizing leaks or spills of substances hazardous to the environment.
Indicator EnOS-17 Respects legislations, treaties and norms regarding the environment (extraction of raw materials, transportation, product disposal, legal preservation areas, residue destination, etc.).
Indicator EnOS-18 Investments in search of production alternatives, aiming to improve environmental performance, either by seeking new production technologies, infra-structure, raw material extraction or other forms the improve the environmental performance.
Indicator EnOS-19 Infra-structure used in the development of products and services that result in lower environmental impact.
Indicator EnOS-20 If used correctly, the products shall not cause environmental impacts.
Indicator EnOS-21 Not receiving fines or sanctions resulting from nonconformities with environmental laws and regulations
Indicator EnOS-22 Possesses contigency plan in case of environmental desasters.
Indicator EnOS-23 Informs society of its environmental policies.

Box 5: Indicators of Environmental Organizational Sustainability (Elkington, 1999; Munck, Munck, & Souza, 2011; Callado, 2010; Hoff, 2008; Dyllick & Hockerts, 2002; Savitz & Weber, 2006; Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013; Lins & Zylbersztajn, 2010; Laville, 2009; Lemme, 2010; Munck, Bansi, Dias, & Cella-de-Oliveira, 2013; Van Marrewijk & Werre, 2003; Jamali, 2006; Kranjc & Glavic, 2005; GRI, 2013; BM&FBOVESPA, 2013).

Indicators of Social Organizational Sustainability
Indicator SOS-01 Low collaborator rotation.
Indicator SOS-02 Salaries at least equal to the regional minimum wage, with growth opportunities.

Indicator SOS-03 Offers safety conditions and occupational health, minimizing rates of lesions, occupational illness, sick days, days off and deaths related to work.
Indicator SOS-04 Frequent training opportunities and other activities that promote the development of its collaborators.
Indicator SOS-05 Career programmes and internal recruitment.
Indicator SOS-06 No discrimination of gender, age, ethnicity, creed, and minorities in the selection of new collaborators and in day-to-day activities, engaging all the collaborators in this struggle.
Indicator SOS-07 The organization has policies of collaborator inclusion, valuing diversity: people with special needs, immigrants, minorities, etc.
Indicator SOS-08 Conducts satisfaction surveys among its collaborators, and its results are considered for changes.
Indicator SOS-09 No discrimination of gender, age, ethnicity, creed and minorities in promotions and occupation of superior hierarchic posts
Indicator SOS-10 Salary equality between genders, ages, ethnicities, and minorities, within the limits of each post.
Indicator SOS-11 Respects free union or class associations.
Indicator SOS-12 Enforces collective agreements.
Indicator SOS-13 Concern with the quality of life of its collaborators (promotes well-being of the collaborators by giving information and stimulating actions regarding eating healthy foods, practising exercises and development of self-esteem and well-being)
Indicator SOS-14 Does not make use of child, forced, nor slave labour.
Indicator SOS-15 Offers opportunities for the development of the communities (i.e. school, work, other forms or income generation).
Indicator SOS-16 Possesses practises that aim to guarantee third-party works treatment equivalent to direct employees.
Indicator SOS-17 Social policies are communicated to the collaborators and disseminated through all hierarchical levels.
Indicator SOS-18 The company has a system to monitor judicial actions against collaborators and seeks way to rapidly solve them.
Indicator SOS-19 Adequate labelling of products and services, informing in a clear manner all the informations, procedures for use, risks and cautions that the client needs.
Indicator SOS-20 Makes accessible information of products/services. For example: technical information in Braille, audio information, and services containing adapted software.
Indicator SOS-21 Makes available a channel of communication for its clients. Costumer satisfaction os researched and is important for the organization. The company pays attention to complaints and solves raised problems.

Indicator SOS-22 Has a system for monitoring judicial actions resulting from its relationship with costumers and society and seeks to rapidly solve them.
Indicator SOS-23 Minimizes nonconformities regarding regulations and laws related to damages caused by products and services on the health and safety of the client (i.e. Brazilian ABNT norms).
Indicator SOS-24 Receives no fines for nonconformity with laws and regulations regarding the offering of products and services.
Indicator SOS-25 Adherence to laws and norms related to marketing communications, publicity and promotion. Uses marketing instruments in an ethical manner, respecting the consumer and society. Does not provide false informations or that may induce to an incorrect interpretation of the product, incites violence, exploits fear, takes advantage of children and other vulnerable people, nor disrespects environmental and social values.
Indicator SOS-26 The products cannot be the cause of death, chemical or psychological dependency, risks or hazardous to the health and physical integrity of the user/consumer or third-parties.
Indicator SOS-27 Utilizes directly or indirectly public spaces (i.e. urban landscapes, buildings, streets, perks, etc.) with respect and due value. No visual, noise, nor environmental pollution.
Indicator SOS-28 Participates in public policies (public entities, politics, etc.) by means of formal and transparent proposals.
Indicator SOS-29 Has a policy for the use of information, without its inadequate use or seeking benefits from the information of stakeholders.
Indicator SOS-30 Has a friendly relationship with the stakeholders, without exploiting them, aiming to create lasting parterships.
Indicator SOS-31 Is concerned with the application of the social practices of it's partners and incentives their development.
Indicator SOS-32 Communicates it's social policies to the society.

Box 6: Indicators of Social Organizational Sustainability (Elkington, 1999; Munck, Munck, & Souza, 2011; Callado, 2010; Hoff, 2008; Dyllick & Hockerts, 2002; Savitz & Weber, 2006; Souza, 2010; Cella-de-Oliveira, 2012; Bansi, 2013; Dias, 2013; Lins & Zylbersztajn, 2010; Laville, 2009; Lemme, 2010; Munck, Bansi, Dias, & Cella-de-Oliveira, 2013; Van Marrewijk & Werre, 2003; Jamali, 2006; Kranjc & Glavic, 2005; GRI, 2013; BM&FBOVESPA, 2013).

After presenting the OSI, it becomes relevant to explain how these indicators were elaborated. Measurements of quantities were discarded, since, in the context of this work, the existence of organizational competence for addressing a given issue is viewed as important. Taking as example the Indicator EnOS-07, it seeks to identify the organization's capacity to manage the use of energy resources, reducing it to the necessary minimum, through it's rational use. However, it is not relevant in this work to identify this consumption numerically.

Discussion

The instrument represents an ideal situation, in which, when all of the indicators are clearly present, the OS competence shall be fully developed. Identifying the effectiveness of each indicator shows where each organization needs to focus greater efforts.

From the presentation of these indicators, it is believed that an organization that has developed them to a satisfactory capacity shall enjoy a good level of OS. Metrics may be used for measuring how developed each of the indicators are. Many research techniques, such as interviews, focus group, etc., may be applied, to all the hierarchic levels. Having reached the initial goal of creating a set of indicators representative of OS, the present works goes on to, in the next section, to it's final considerations.

Conclusions

Many authors theorize about OS and point to the necessity of developing this concept within organizations, however, a gap has been identified in this debate, which is the lack of tools for its measurement. From this, the objective of this work was laid, which was the creation of a representative set of indicators for evaluating OS.

In an initial stage researches were redeemed and the understanding of the OS concept was consolidated. This allowed to view the concept of sustainability not as that of being or not being present in the organizations, but rather as that of being present at a certain level of development. However, there was still the lack of ways with which to measure how developed the competence was.

From the concept of outcome, an opportunity to elaborate a set of indicators was identified, which was supported by a series of research in the area. Aiming for credibility and representation of the concept of OS, the indicators were based on consolidated instruments in the area. From the concept of outcome, such indicators constitute a viable instrument for identifying the state of OS. New advances may be made for creating quantitative forms of computing the collected data, ascertaining the development of OS competence.

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