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# FOSTERING A SUSTAINABLE SOCIETY BY INTRODUCING PROJECT MANAGEMENT PRACTICES

Promovendo uma Sociedade Sustentável Apresentando Práticas de Gerenciamento de Projetos

Luciano Ferreira da Silva², Luciana Magalhães Girardin Pimentel Rodrigues¹,
Nadia Pedrosa Fernandes,² Wilson Marcena Rodrigues,² Arnoldo Jose de Hoyos Guevara¹

1 Pontificia University Catolica - São Paulo, Brazil

2 Nove de Julho University - UNINOVE - São Paulo, Brazil

E-mail: If silvabr@yahoo.com.br, lucianamgirardin@gmail.com,
nadia pedrosa@hotmail.com, wmarcena@gmail.com, arnoldodehoyos@yahoo.com.br

Abstract: This conceptual article has as main aim described the project management as a factor to improve the sustainability of society. To do so, it is necessary to understand the project attributes and the changes in perspectives when adopting project management as a practice to promote sustainability. The discussion proposed here uses a heuristic method searching for patterns in the academic literature and in organizations to build arguments that can aid in the dissemination of project management practices. It is worthy to notice that it is not our intention here to deal with these issues in depth, but to encourage a discussion so that issues can be raised and solutions can emerge. Then, in addition to the question of sustainability in project management, we also added a discussion about the incorporation or greater stimulus to the use of project management practices in the public segment. There is a risk of being superficial in the discussion presents here, but the reason to integrated several contents is because it is not possible to describe a more sustainable society without addressing all segments.

**Key words:** Project management; Sustainability; Project; Sustainable society

Resumo: Este artigo é mais e tem como objetivo principal descrever a gestão de projetos como um fator para promover a sustentabilidade na sociedade. Para isso, é necessário entender os atributos do projeto e as mudanças nas perspectivas ao adotar o gerenciamento de projetos como uma prática para promover a sustentabilidade. A discussão aqui proposta utiliza um método heurístico que busca padrões na literatura acadêmica e nas organizações para construir argumentos que possam auxiliar na disseminação de práticas de gerenciamento de projetos. Vale a pena notar que não é nossa intenção aqui lidar com essas questões em profundidade, mas sim encorajar uma discussão para que as questões possam ser levantadas e as soluções possam emergir. Em seguida, além da questão da sustentabilidade na gestão de projetos, também foi adicionada uma discussão sobre a incorporação ou maior estímulo ao uso de práticas de gerenciamento de projetos no segmento público. A razão para integrar vários conteúdos é porque não é possível descrever uma sociedade mais sustentável sem abordar todos os segmentos.

Palavras-chave: Gestão de projetos; Sustentabilidade; Sociedade Sustentável

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### INTRODUCTION

The use of natural resources followed an extractive orientation at several moments in the humanity history. Nature and the planet were seen as an abundant and inexhaustible source of resources. This reality can be perceived mainly from the 1st Industrial Revolution until the middle of the 20th century. Thus, the economy was based on extractive activities, which led many to believe that economic growth was synonymous with the free exploitation of available resources (Lombardi, 2008).

In this context, we perceive that the Public and Private Administration is not so much concerned about the limitation to obtain resources. However, the issue of scarce resources was already discussed by Thomas Malthus in the 18th century. Nevertheless, the perspective on sustainability that can be evidenced at the beginning of the 21st century was only incorporated at the end of the 20th century. This delay in the paradigm change in the areas of administration, political science, and economy made some issues to become urgent as negative externalities of the production and consumption process, as well as the introduction of a perspective that embraces the circular economy as a paradigm (MaCarthur, 2012).

King and Lenox (2001) and Orsato (2006) raise the question of how managers become increasingly concerned about the strategic implications of environmental challenges. We can say that at the beginning of the 21st century managers are beginning to move beyond the question of whether or not they need to have attitudes towards sustainability. An example of the pressure that managers in the public and / or private sectors suffer can be highlighted in reports provided by World Bank, United Nations and other institutions around the world.

According to World Bank (2017) if the global population indeed reaches 9.6 billion by 2050, it will be necessary almost three Earth planets to provide the natural resources necessary to maintain people's current lifestyle. An example of the relevance of this discussion is that the United Nations has already introduced consumption in its discussion on the Sustainable Development Objectives(SDO) for 2030. Thus, the discussion presented here aims to go against a paradigm centered on a conventional economy and which does not adopt sustainability as a principle.

Therefore, when dealing with the evolution in administrative thinking, it is necessary to optimize not only the use of the resources of the firm, but especially the natural resources of the planet. In this same line of defense for the planet's resources, in 1994, the United Nations Industrial Development Organization(UNIDO) and the UNEP (United Nations Environment Programme) initiated the world program for CP (Cleaner Production). This program aimed through local capacity construction of each country to implement actions focused on CP (Luken, Navratil, 2007; Kazmierczyk, 2002).

CP is intended to increase efficiency in the use of raw materials and basic inputs through waste reduction with no generation, mitigation or recycling. In addition, the application of CP practices allows companies to qualify for the efficient use of raw materials, since they require the application of specific expertise, investment in technology and changes in attitude of the people involved in the process (UNEP, 2007). In this same direction, there was also the adoption of new management models of the organization's operations such as LCA (Life Cycle Assessment), ISO 14000 and the already mentioned CP.

Based on this context, it is necessary to insert project management in the discussion proposed here. This field of knowledge presents in the administration helps in the introduction of the necessary changes that incorporate the sustainability in the activities of the organizations, including both segments: the public and the private one.

Project management differs from regular management mainly because of its temporary aspect. In project management, there is a schedule of activities with start and end dates previously established (Kerzner, 1998). Moreover, the evolution of this field of knowledge, as well as its practices, provides new perspectives such as the "Agile model" that guarantees greater efficiency and effectiveness in promoting changes in production processes.

Therefore, the discussion proposed here aims to answer the following question: how project management can improve sustainability in a society? With this purpose, the main objective is to describe project management as a factor to improve environmental sustainability. Thus, it is necessary to present the context of sustainability and the main assumptions of project management, which will be done in the next sections of this article.

#### PROJECT MANAGEMENT FOR A MORE SUSTAINABLE SOCIETY

This section aims to present the main assumptions for sustainability and project management perspectives. It is necessary to understand that often the focus on being sustainable lies on private organizations. However, this section aims to present a narrative in which models and practices of private sector management can contribute to the construction of a more sustainable society. In the present case, the project management presented here may generate relevant insights that will contribute to advance of the management discussion. What matters in the end are the positive results according to the premises of each organization, public or private, without compromising future generations.

### Society needs a vision and practices for sustainability

The term sustainability has been used more often by individuals since the early of 21st century. This fact produces interest in several areas and generates the growing need for discussions and researches in the public and private sectors, in the area of economy, administration, engineering etc.

It is important to mention here that already since 1992 at ECO-92, the document "Agenda 21 Global" was one of the most important produced at the United Nations Conference on Development and the Environment. The document generated from these discussions focused on the conservation and management of natural resources for sustainable development. Nevertheless, this same theme was already on the agenda at the 1972 Stockholm Conference, when the document "Our Common Future" was produced (Jappur, 2004; Pimenta & Govinhas, 2011). In addition, at COP 21 that took place in France in 2015, treated the obligation to deal with the problems regarding production and consumption affecting global society in the beginning of the 21st century.

The term sustainability comes from the word sustainable, which means capable of being preserved and maintained, representing a continuous process that is capable of preventing the destruction of a given system. The concept of sustainability is related to maintaining the balance between three dimensions: economic, environmental and social. This sustainability perspective is recognized as Triple Bottom Line (Elkington, 1998).

Thus, sustainable development is represented by the ability to maintain economic activities to supply the needs of current human beings, without compromising the planet's ability to attend future generations. This perspective is agreed upon and taken as a guideline for decision-making in both the public and private sectors. Based on this context, where the sectors of society are recognized as directly related to sustainability, Carvalho and Rabechini Jr. (2015) point out that many companies have awakened to the competitive potential of sustainability subject with a more innovative, contemporary and less predatory view.

Therefore, based on these ideas, organizations start to look for solutions to develop management in a more sustainable way, that assume not only policies and practices of reuse of natural resources, but also the reduction of waste of raw material. Based on this logic, the organization adds value and improves its position in society. An example of such an attitude can be seen in the actions of Unilever in its "Project Sunlight".

The company Unilever (2017) in an effort to promote sustainability in various places required projects ranging from children's awareness (hygiene, natural resources etc.); The improvement of young people's self-esteem; Among other actions of the company and its partners. It is worth mentioning that this type of private company posture is becoming increasingly common, and in order to implement significant changes both in the company itself or its stakeholders, it is also necessary to change management posture.

Then, we can say that the actions of companies that contribute to a more sustainable society are praiseworthy. On the other hand, when it comes to public organizations, they should already have a greater concern with individuals in the present time and in the future. We may not forget that public organizations are designed to provide services for the promotion of a better quality of life for individuals in a society. Thus, if the management of such organizations is not oriented towards sustainability, in all its dimensions, a serious problem will be created in the future. This may not be evident at the present time because of greater availability of resources, but in the long run everyone will end up paying the bill (Silva & Cunto & Guevara, 2016).

According to Martens and Carvalho (2016), to contribute with sustainability, companies must modify their industrial processes, so they can produce without harming the environment. Therefore, by altering productive processes harmful to the environment, environmental damage can be reduced or mitigated. Rondinelli and Vastag (2000) highlight that a growing number of corporations around the world are certifying their production management with ISO 14000. Besides, the ISO 14040 standard deals with LCA practices, which are part of rules sets on environmental management, that are described by the EMS (Environmental Management Systems).

ISO 14000 aims to anticipate the causes of the production process as its impact on air, water, and waste treatment. With the use of this standard, it is also possible to seek greater efficiency and operational efficiency oriented towards a conscious management. Thus, an assessment of sustainability performance can be defined as the measurement and management of the interaction between companies, society and the environment (Neate John, 2007).

<sup>&</sup>lt;sup>1</sup> C.f.: https://brightfuture.unilever.com/

Another initiative for a more sustainable production is the CP. The CP proposes the substitution of the linearly oriented industrial model, based on the end-of-pipe waste inclusion system for further treatment and disposal. Furthermore, there is the use of the concept of continuous improvement that allows improving the efficiency, the profitability and the competitiveness of the companies (Giannetti et al., 2008; Pimenta & Govinhas, 2012).

As we can see from the speech of several social actors at the beginning of the 21st century, and even in the change of stance of many companies, the movement for sustainability is a constant. Some may even say that in many private sectors, change has taken place by obligation, but even in those cases if we prove progress towards sustainability, it is advisable to support such practices.

Another need is to promote change and break with the status quo of a prevailing order. To do so, the project management area has much to help. Then, while treating the whole as by its parts, we may establish the re-adaptation of processes or parts of these processes based on continuous improvement. This action may make it easier to break a valid whole based on a consolidated paradigm, to seek the construction, or reconstruction, of a sustainability-oriented whole.

## **Project management**

Project management is an area that has gained importance in organizations. One of the reasons for its relevance lies in the fact that to improve its competitiveness many companies need to hold off themselves from conventional activities and invest in innovative activities. Indeed, new goods or services are the result of temporary firms where the team, which is made of people, works towards the same objective. It is worth mentioning that the limitation of resources and efforts in a given period of time is one of the main aspects that describe the concept of projects.

The projects in private companies have usually started with a business perspective in mind, and with a goal typically focused on better business outcomes. Shenhar et al. (2007) advocates extending the traditional focus of project management to the firm's operations, to a more strategic perspective that encompasses market interaction and greater closeness to customer expectations.

This aspect presented by Shenhar et al. (2007) helps understand changes in the external environment that influence a company management capacity. In this context of project management, it can be said that one of the aspects that contributes to change management is the categorization of project within a strategic whole. As Figure 1 portrays, the global strategy is represented in the set of projects or programs that comprise a portfolio of projects (Turner, 2016). Thus, the unfolding of global strategies results in goals for each activity and / or individual, besides that helps meet achievement of those goals more synergistically.

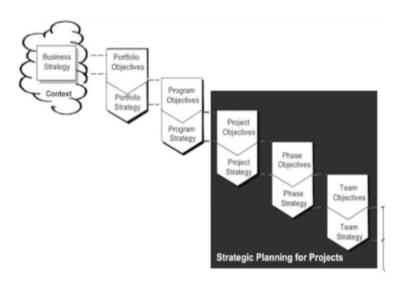


Figure 1 Linking Corporate and Project Strategy

Source: Turner, 2016:28.

In order to understand project management better, it is necessary to find out content such as those present in the PMBOK. PMBOK is a project management guide created by the North American institution PMI (Project Management Institute). In this guide, project management is the result of applying the knowledge, skills, tools and techniques to project activities to meet your requirements. Thus, project management is accomplished through the appropriate application and integration of the 47 project management processes, logically incorporated into five groups of processes: initiation, planning, execution, monitoring and control, and closure (PMI, 2013).

Highlighting the theme proposed in this article, it is necessary to understand the researchers point of view such as Carvalho and Rabechini Jr. (2015). They argue needs to incorporated economic, environmental and social dimensions, explaining that they must to be considered and driven on in the project management function.

Shenhar and Dvir (2007) have described that the economic dimension of sustainability becomes important to organizations because it remunerates the investor's capital. However, Shenhar and Dvir (2007) still argue that the environmental and social dimensions are fostered so that the company performs better. The authors say that these practices can be applied in terms of project efficiency, buying better, applying resources efficiently, using clean technologies, using renewable energy and reducing the use of fossil fuels.

If so, being sustainable is a business strategy for an organization, then we can assume that project management needs to have that requirement as a target. In this context, the project manager constraints should not be deadlines, costs and scope goals, but rather to analyze which actions will lead the organization to achieve sustainable processes. This project manager's mindset must be apparent and permeate his actions and decisions throughout the project up to the point where this behavior will be copied by the other team members.

## Project management and sustainability

As it has been said, an important aspect when it comes to sustainability is to undertake changes in an already operating system. To do so, the use of project management practices can contribute to greater effectiveness of activities and better reach of results. It is worth noting that changing existing systems by inserting practices oriented towards sustainability becomes a great challenge. Although the decision on conventional changing processes is consensus in many situations, it is impossible to abruptly change complex systems such as urban mobility, sewage systems, power supply, among others, just to succeed in services provided by the State.

On the other hand, when the focus is on implementing sustainability practices into private sector processes, it may be easier to provide changes in some respects. However, even in this sector, some barriers and limitations will be found as the lack of skilled labor for new operations. In this way, when dealing with the organization management, it is necessary to go beyond the practices and mechanisms of regular management. It is necessary to incorporate project management by disseminating this culture sustainability so that the organizational whole can be better managed by the contribution parts called projects.

Therefore, the proposed discussion here aims to foster reflection on the adoption of project management in the public and private sectors for the conception of a greater sustainable society. It is necessary to emphasize that the discussion about implementing, or even improving, the project management in the private sector is already a consolidated reality. However, the proposal presented here is also to discuss the management practice in public sector, when it's necessary to be aware of the due restrictions and peculiarities of this sector.

In addition to this hard discussion about management in the different sectors, we also add here a complicating factor, but that should not be left out, this factor is the sustainability. So, to update he discussion about management the sustainability in its three dimensions must be contemplated (Elkington, 1998; Jappur, 2004; Pimenta & Govinhas, 2011).

It is worth mentioning that initiatives are shown in project management in the public sector as a way to optimize services and activities (Young, Grant, 2015). Thus, this results-oriented application swell would facilitate the incorporation of private sector management concepts and models. In this case project management can be a great ally in the sustainable use of public resources. In addition, we must not forget that public sector resources are also limited by and come from individuals. Here we have a very controversial point that is the goals and indicators definition for the individuals of the public sector. As Osborne and Gaebler (1992) proposed effective management in the public sector more focused on targets and qualified deliveries of services would generate a reinvention of the State.

In order to reinforce the importance of project management being considered part of sustainability-oriented management, an unfiltered search for the words "Project Management and Sustainability" was carried out in the "Proquest" academic publications database – graphic 1. Based on the results obtained, it was possible to highlight the greatest interest of researchers on the subject, especially after 2010. It is worth noting that the use of filters, or even the verification of redundant results, was not performed, and this information is only presented here to illustrate the relevance of this theme over the years.

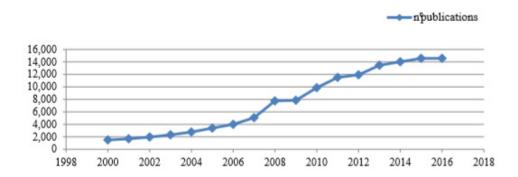


Figure 2 Researches about Project Management and Sustainability Source: Proquest, 2017.

Silvius and Schipper (2010) emphasize the importance of thinking about a maturity model in project management that includes sustainability. The authors even say that although many projects have already incorporated sustainability-related issues, we still have much to do to better address these issues. Corroborating these ideas, Brook and Pagnanelli (2014) say there is a lack of research on projects and sustainability insights about managing sustainability-oriented changes, especially in projects that contemplate innovation.

Therefore, the discussion presented here attempts to give due importance to the project management introduction, in the public and/or private sectors, to contribute to improvements in the three dimensions of sustainability. Although, regard these many things still need to be discussed about project management practices, the evidence presented here is useful to foster this discussion. It is worth remembering that we are living in a moment of transition where many conventional structures that are not concerned with the reduction and elimination of waste must be broken. Thus, we propose project management as a great ally in the management of this change.

### CONCLUSION

The discussion proposed here was intended to reflect on the introduction of project management to improve sustainability in society. Therefore, the discussion was also included regarding the incorporation or greater application of this practice in the private sector. The pretension here was contributed by the provocation and materialization of some questions.

We know that the discussion about managerial practices in the public and private sectors is different, but we can argue that it is often necessary to treat as analogous. In addition, it is already challenging to discuss sustainable project management in the private sector. However, this article was not intended to deepen these issues, but to highlight them and propose new discussions that contribute in some way to the promotion of sustainability in society as a whole.

It is worth mentioning that incorporating private sector practices into public activities is no longer a taboo. Thus, we can already show some level of managerialism in this type of activity, but public management still has much to go forward. Nevertheless, often speaking in shorter terms, goal, continuous improvement, budget reduction in some agencies is still prohibitive.

We cannot forget that besides these aspects we still add in our discussion the three dimensions of sustainability as a goal. In short, we can say that we live in a time of great challenges, and one of them is supply to individuals' needs in the present moment without compromise the quality of life, or even survival, of future generations. In this context, we again argue that the introduction of project management as a practice can improve the sustainability of society. Consequently, a complete change breaking with the current state may be counterproductive, but when treating the whole by its parts, in projects, we can improve the whole system.

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