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PROJECT MANAGEMENT, STRATEGIC MANAGEMENT AND SUSTAINABLE DEVELOPMENT: A REVIEW OF THE LITERATURE

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ABSTRACT

An organization with a commitment to sustainable principles needs incorporating a broad range of stakeholders and addressing environmental and social issues as their inter-relationship with financial issues. The purpose of this article is to review Project Management contributions that integrate sustainability issues with a managerial focus. A conceptual framework that integrates the project management, managerial and sustainable development fields provides a structure to the survey. The results show a lack of research contributing with methods or frameworks that discusses how project management should support an organization´s strategy and sustainability. The paper provides a contribution to researchers interested in project management concentrate their efforts to ensure project governance that integrates sustainability issues with management focus.

Keywords: Project management; Strategic management; Sustainable development; Meta-research.

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INTRODUCTION

Sustainable development, as defined by the Brundtland Commission's Report, is the development that meets the needs of the present w0ithout compromising the ability of future generations to meet their own needs (United Nations, 1987). Elkington developed the concept of Triple Bottom Line which proposed that business goals were inseparable from the societies and environments within which they operate (Elkington, 1997). Sustainability was adopted by many companies through their mission statement and strategy. However, the social and environmental dimensions of sustainability are difficult to incorporate in programs and projects –the vehicles for executing the organization's strategy. Organizations that assume a commitment consistent with sustainable development principles define economic, environmental and social goals. In many cases, these goals are difficult to quantify given their intangible nature. As a consequence, project assessment and tracking with respect to these goals is also difficult. To understand the problem of governing projects throughout the organization, and manage them so that they provide value and minimize the project´s environmental and social impact, it is necessary to investigate project management research in allied disciplines such as management and sustainable development. Both researchers and practitioners would benefit from a review of project management state of the art with regard to both managerial and sustainable development concerns.

The linkage between strategic management (SM) and sustainable development (SD) is found in works concerned with reporting topics such as social and environmental disclosures; regulation impact; and relations among environmental disclosure and environmental performance. In addition, there are works that deal with social and environmental accounting (Burritt & Schaltegger, 2010). Social and environmental accounting systems include articles that have the purpose to analyze the accounting system in order to improve it to produce social and environmental information (Eugénio, Lourenco, & Morais, 2010). Empirical studies attracted research over the last years as the majority of studies are empirical (Eugénio, Lourenco, & Morais, 2010).

Project management (PM) and strategy has been a popular research subject in the last years. Killen et al. (Killen, Jugdev, Drouin, & Petit, 2012) observes that as the project management community has strengthened its focus on the strategic aspects of project management, it has also placed a higher level of importance on Project Portfolio Management and its relationship with strategy. Patanakul, Shenhar and Anderson (2012) group the literature in this area into research that discusses the significance of project management as a source of strategic advantage to a company (Longman & Mullins, 2004); research that proposes methodologies for project selection and project portfolio management (Patanakul,

Milosevic, & Anderson, 2007); and project management/business alignment (Srivannaboon & Milosevic, 2006). Case study research was conducted in five companies to explore how project strategy is used and found that the project teams applied various forms of project strategy, namely, Product Superiority, Customer Intimacy, and Time-to-Market strategies (Patanakul, Shenhar, & Milosevic, 2012). While this contribution is relevant to both practitioners and researchers, in managing projects of other types, other strategies may be used.

The linkage between project management and sustainability is found in the various standards of project management. In particular, there are many mature contributions with application in the construction and manufacturing sector. In the construction engineering discipline, people implement planning, managing, and controlling of construction projects to meet time, budget and specifications. With the advent of green construction, research about environmental impact of constructions is growing. Regarding the manufacturing sector, Labuschagne et al. (2005) propose to consider the project life cycle, the asset/process life cycle, and the product life cycle while assessing sustainability issues. In fact, many authors have proposed methods like Life Cycle Assessment, an analytical tool that implements life cycle thinking, which has been standardized by the International Organization for Standardization (International Organization for Standardization, 1997), for analyzing the environmental impacts of products or services. In the field of service operations such as banking, education or medical services, there are very few proposals (Chou, Chen, & Conley, 2012).

Current research focus on PM and management, or PM and sustainability, or management and sustainability linkages. The purpose of this article is to review Project Management contributions that integrate sustainability issues with a managerial focus. The review aims to analyze contributions that do consider Project Management, Strategic Management and Sustainable Development dimensions. For this purpose, we first define a conceptual framework that integrates the project management, managerial and sustainable development fields and provides a structure to the survey. The results of this work will help researchers interested in PM focus their efforts in areas of high impact and that need contributions. Also, practitioners will benefit with the review of papers in the area.

The rest of this paper is structured as follows. Section 2 provides the conceptual framework for SPM4SD. Section 3 briefly explains the methodology to assess the state of SPM4SD research. Section 4 proposes the SPM4SD research assessment framework, Section 5 describes data collection details, and Section 6 documents the analysis of collected papers. Section 7 discusses results and Section 8 provides some conclusions.

CONCEPTUAL FRAMEWORK

By Strategic Project Management for Sustainable Development (SPM4SD) we refer to a method to govern investments throughout the organization, and manage them so that they provide value to the organization and minimize the project´s environmental and social impact. Figure 1 depicts a mapping of three primary and three secondary domains contributing to SPM4SD. The primary domains are Project Management (PM), Sustainable Development (SD) and Strategic Management (SM). The secondary domains are Project Management for Sustainable Development (PM4SD) as the intersection of PM and SD; Strategic Project Management (SPM) as the intersection of SM and PM; and Strategic Management for Sustainable Development (SM4SD), as the intersection of SM and SD.

Since the focus of this research is to review project management literature integrating sustainability concerns, only PM4SD and SPM4SD sub-domains are included in the analysis.

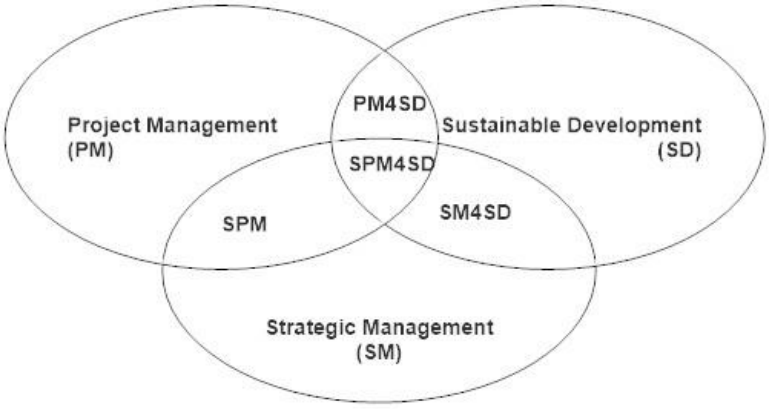

Figure 1. SPM4SD Primary and Secondary domains.
Source: prepared by the authors

The scope of PM and SD domains is wide. In this work we describe each domain space in terms of relevant dimensions for the aim of the research. To define PM dimensions we consider the PMBOK Guide where a project is defined as a temporary endeavor undertaken to create a unique product, service, or result (Project Management Institute, Inc., 2013). The temporary nature of projects refers to its life cycle. In addition, projects or deliverables of a project can have social, economic and environmental impacts that far outlast the projects themselves. The existing body of knowledge developed in the last 60 years adopts a project-centric view of the role of projects and their management. International project management organizations have built their own project management guidelines upon knowledge areas such as project integration management, scope management, schedule management, cost management, resource and personnel management, communication management, risk management, procurement management, and quality management. More recently, a large body of literature has emerged focusing on the strategic dimension of

projects (Shenhar, 2004), (Artto & Kujala, 2008). The authors suggest that a strategy should be used by a project team as a guideline for effectively performing project activities. For the purpose of this research we believe that the following categories will represent relevant dimensions of PM. Some dimensions are based on the traditional project centric-view of projects: project integration management, scope management, schedule management, cost management, resource and personnel management, communication management, risk management, procurement management, quality management. We also include dimensions that represent linkages between strategy and projects: project business, alignment, and project strategy.

Based on previous reviews we can propose several dimensions relevant to sustainability, for example, social and environmental disclosures, or relations between disclosure and performance. However, the purpose of this research is to review contributions related to the project management field. Then, only dimensions appropriate to project management are considered. For the purpose of defining a comprehensive set of dimensions we rely on the concept of maturity models. A maturity model can be viewed as a set of structured levels that describe how well the behaviors, practices and processes of an organization can reliably produce required outcomes. Silvius and Schipper (2010) developed a maturity model that addresses the consideration of sustainability aspects in project management. The model is based on two dimensions. The first dimension is that of the criteria of sustainability, the second is that of the level considering sustainability. The criteria are defined for economic, environmental and social issues. Sustainability can be considered at different levels such as resources, business process, the business model, and product and services. Based on this proposal we define twelve dimensions to categorize reviewed papers relating each three criteria with each level of analysis: environmental sustainability of resources, environmental sustainability of business process, and so on. For the cases where economic, social and environmental criteria are relevant, or when it is not appropriate to select a level of analysis, we use “sustainable development” as a dimension name.

These dimensions are meant to cover the whole PM and SD space and will be validated through the literature review described later in the paper.

METHODOLOGY

This section presents the methodology for carrying out a literature review. The methodology is based on the steps defined in (Estevez & Janowski, 2013) and comprises the following steps:

a) Defining the assessment framework.
b) Identifying domains and defining data collection.
c) Selecting relevant papers.
d) Documenting selected papers.
e) Analyzing selected papers.
f) Defining state of research.

In what follows, we develop these steps.

Research assessment framework

The research assessment framework is based on the review of Ahlemann, El Arbi, Kaiser and Heck. (2013). The authors discuss the nature of research in the project management discipline to understand some problems in PM methods: the usefulness and effectiveness of PM methods cannot be proven; there is a lack of universal applicability of methods; and PM methods suffer from low adoption and individual acceptance rates. They perform the review and classification by categorizing papers according to the type (descriptive, prescriptive, conceptual, theory, literature analysis). They further analyze prescriptive papers in terms of their theoretical foundation, the methods used for solution development, and the type of result evaluation.

The proposed framework is based on seven main constructs: problem, paper type, result type, theoretical foundation, solution development, results evaluation and type of research question.

The Problem construct captures the type of Project Management problem studied in a given research paper, and to what extent it addresses the SD perspective. The Project Management and Sustainable Development perspectives comprise the dimensions described in Section 2.

The Paper type construct refers to the research nature. Five possible values are descriptive, prescriptive, conceptual, theory or other (Ahlemann, El Arbi, Kaiser, & Heck, 2013). Table 1 provides a brief definition of the type of research.

Table 1.

Types of research.

Descriptive	Descriptive research answers the questions regarding what and how as well as Yes/No questions.
Prescriptive	Prescriptive research seeks to help people solve practical problems by developing and testing artifacts.
Conceptual	Conceptual papers present assumptions, premises, axioms, assertions without empirical work.
Theory	A theory should fulfill three criteria: (1) a theory must have clear constructs; (2) the relationships between the constructs must be defined; and (3) a theory must be testable.
Other	Literature analysis, editorials, reports, book reviews, and calls for papers/abstracts/participation.

Source: adapted from Ahlemann, F., El Arbi, F., Kaiser, M., & Heck, A. (2013). A process framework for theoretically grounded prescriptive research in the project management field (p. 45). International Journal of Project Management, *31*, 43-56.

Prescriptive research is further analyzed considering the following construct: research type, theoretical foundation, methods used for solution development, and evaluation method.

The Result type construct refers to the solutions produced by prescriptive research, that is, a method, a model, a framework, an ontology, a reference model or a system.

The Theoretical foundation construct refers to the artifact development process to justify the design decisions. Possible values are gathered from key words included in the paper.

The Solution development method construct may assume the following values: literature analysis, mathematical and logical deduction, empirical data analysis or no details provided.

The Evaluation method construct represents the method used to assess the effectiveness of the proposed artifact. To assure that prescriptive research results really apply and yield the intended benefits, researchers may use the following methods (if any evaluation is performed): case study, simulation, survey, expert opinion, meta-analysis, literature review, and text analysis.

The other categories of research (descriptive, conceptual or theory building) are categorized answering the type of research questions that the papers attempt to answer. In order to describe the type of research questions, a key phrase from the abstract is used.

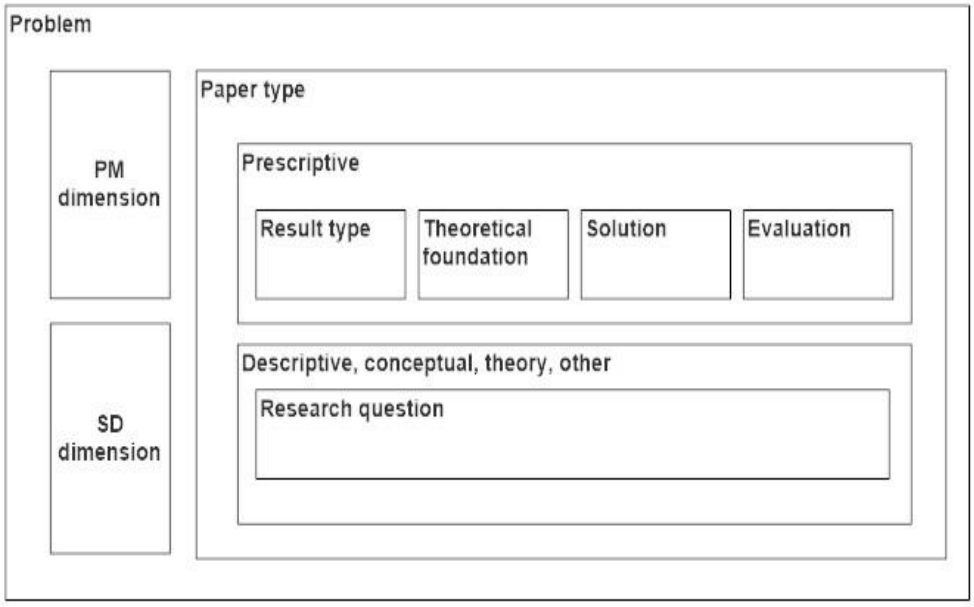

Figure 2. Proposed assessment framework
Source: elaborated by the author

Data collection: Strategic Project Management for Sustainable Development domains

As previously mentioned, we considered three primary domains - PM, SM and SD, three secondary domains –SPM, PM4SD and SPM4SD. Since the focus of this work is to review project management literature integrating sustainability concerns, only PM4SD and SPM4SD are included. We conducted searches in the Scopus database to look for the appearance of a set of keywords in the titles, abstracts and key words of the papers. For each domain, the keywords depicted in

Table **1** were used.

Table 1.

Domains and keywords used in searches

Domain	Keywords
Project Management for Sustainable Development (PM4SD)	"Project management" AND "Sustainable development" "Project management" AND "Sustainability" "Project management" AND "Corporate Social Responsibility"
Strategic Project Management for Sustainable Development (SPM4SD)	"Strategy" AND "project management" AND "sustainable development" "Strategic project management" AND "Sustainable development" "Strategic project management" AND "Sustainability" "Strategy" AND "project management" AND "Corporate Social Responsibility" "Strategic project management" AND "Corporate

Social Responsibility”

Source: elaborated by the author

Scope of data collection

The analysis is restricted to the past 5 years (2009 to 2013), as this timeframe should be suitable to provide a good snapshot of current Project Management research. Journals that address quite specific issues are not selected. Table 2 lists the titles of the selected journals.

Table 2.

Selected journals

Journal title	Number of articles
Business: Theory and Practice	1
Construction Management and Economics	1
EMJ - Engineering Management Journal	1
Environmental and Resource Economics	1
Environmental Impact Assessment Review	2
Environmental Impact Assessment Review,	1
Environmental Management	1
European Journal of Operational Research	1
Expert Systems with Applications	1
Impact Assessment and Project Appraisal	2
International Journal of Environmental Science and Technology	1
International Journal of Project Management	5
International Journal of Sustainable Development and World Ecology	1
Journal of Applied Ecology	1
Journal of Business Ethics	1
Journal of Change Management	1
Journal of Cleaner Production	3
Journal of Construction Engineering and Management	9
Journal of Environmental Economics and Management	1
Journal of Environmental Management	2
Journal of Management in Engineering	6
Journal of Mines, Metals and Fuels	1
Journal of Professional Issues in Engineering Education and Practice	3
Journal of Scientific and Industrial Research	1
Journal of Strategic Information Systems	1
Journal of Technology Management and Innovation	1
Journal of the Operational Research Society	1
KSCE Journal of Civil Engineering	1
Management Research Review	1
Project Management Journal	2
Sustainability	4
Business: Theory and Practice	5
Construction Management and Economics	1
EMJ - Engineering Management Journal	1
Total	66

Source: elaborated by the author

Data analysis

The papers’ review and classification were done by two researchers to increase reliability of results. The analysis was done by reading the title, keywords and abstract. In some cases, the same paper appeared for two sub-domains. For further analysis, they were classified in the SPM4SD sub-domain. There are five papers classified in “Other” category

since they are not related with project management. In total, 66 different papers were analyzed.

Table 3.

Number of PM4SD and SM4SD papers assessed in the scopus database.

Subdomains	2009	2010	2011	2012	2013	Total
SPM4SD	8	10	9	11	15	53
SM4SD	0	1	0	1	0	2
PM4SD	1	0	2	1	2	6
Other	2	0	1	1	1	5
Total	11	11	12	14	18	66

Source : elaborated by the author

Problem

The SPM4SD research problems were classified according to the dimensions defined for the PM and SD perspectives. More than one dimension may be appropriate in most cases. However, the dimension closer to the paper goal was chosen.

The 39,3% of papers refer simultaneously to economic, environmental and social sustainability (Table 4). In these cases “sustainable development” dimension label was used. In general, papers do not refer to one analysis level (resources, business process, the business model, or product and services). Only two papers clearly refer to one level (business process). We also added a new dimension, “Education”, to adequately classify three papers. The 36,1% of papers were classified as “Others” since they do not consider a problem related with any of the defined dimensions. Remember that SD dimensions are based on a sustainability issue in the context of a Project Management problem (see Section 2).

Table 4.

Sustainable development dimensions

Sustainable development dimension	Number	Percentage
Economic sustainability	1	1,6
Education	3	4,9
Environmental sustainability	4	6,6
Other	22	36,1
Social sustainability	5	8,2
Sustainability of business process	2	3,3
Sustainable development	24	39,3
Total	61	100

Source : elaborated by the author

Table 5 depicts Project Management dimensions addressed in papers. Regarding this dimension, 36,1% of papers were classified as “Other” dimension since, in general, they are

descriptive papers that do not focus on any project management activity. 16,4% of papers contributed to a process management problem.

Table 5.

Project Management dimensions.

Project management dimension	Number	Percentage
Cost management	1	1,6
Education	3	4,9
Integration Management	4	6,6
Other	20	32,8
Portfolio management	2	3,3
Process management	10	16,4
Procurement management	1	1,6
Project Business	3	4,9
Project strategy	5	8,2
Quality Management	1	1,6
Resource and personnel management	4	6,6
Risk management	1	1,6
Stakeholder management	6	9,8
Total	61	100

Source : elaborated by the author

Paper type and prescriptive research

Regarding the paper type, 28 (45,9%) of papers were classified as descriptive, 28 (45,9%) as prescriptive; 1 (1,6%) were classified as Other; and 4 were conceptual.

In what follows, prescriptive research papers are analyzed. In order to provide information about the topics tackled in these papers, Table 6 depicts a phrase taken from the papers' abstract.

Table 6.

Prescriptive papers topics

TOPICS	REFERENCE
evaluation of corporate social performance through projects	(Salazar, Husted, & Biehl, 2012)
presents a referential stage model for corporate social responsibility (CSR) implementation by linking CSR to four business operations	(Martinuzzi & Krumay, 2013)
identify challenges faced by project managers who execute green construction projects	(Hwang & Ng, 2013))
implement technology roadmapping	(Gerdsri, Assakul, & Vatananan, 2010)
a decision- support system (DSS) that systematically integrates urban metabolism components into impact assessment processes	(González, Donnelly, Jones, Chrysoulakis, & Lopes, 2013)

a method that can be applied by state agencies to quantify the life-cycle emissions associated with different pavement designs	(Cass & Mukherjee, 2011)
analyzes how risk-retention groups (RRGs) can be used to provide the required insurance coverage against third party claims under relational contracts	(El-Adaway, 2013)
assess the efficiency, effectiveness, relevance, sustainability, and effects of housing development projects in Ethiopia	(Shiferaw & Klakegg, 2013)
assess the performance level of a project in terms of waste management practice	(Cha, Kim, & Han, 2009)
assessing building technologies systematically	(Pan, Dainty, & Gibb, 2012)
assessing the sustainability performance of an infrastructure project	(Shen, Wu, & Zhang, 2011)
determine the most cost-effective route to building certification and to support the Army goal of sustainability	(Bastian, 2011)
developing a new approach whereby investors can incorporate the choice of financial protection measures into investment evaluation	(Chang, 2013)
developing an intelligent decision support system for fish disease/health management	(Xiaoshuan, Zetian, Wengui, Dong, & Jian, 2009)
efficiently and effectively creating innovative ideas	(Mao, Zhang, & Abourizk, 2009)
evaluate the effects of different sources of uncertainty on sustainability	(Agliardi, 2011)
how to deal with the business aspects of their projects, as well as better support their company's business strategy and sustainability	(Patanakul & Shenhar, 2012)
indicators for sustainable development relating to water resources projects	(Irajpoor & Latif, 2011)
investigate whether linking stages by integrated contracts can lead to more sustainable road infrastructure development	(Lenferink, Tillema, & Arts, 2013)
managing project portfolio	(Heising, 2012)
modifications to conventional building practices to optimize the delivery of cost-efficient green building projects	(Robichaud & Anantatmula, 2011)
multimode resource-constrained project scheduling problem	(Florez, Castro-Lacouture, & Medaglia, 2013)
sustainability programs at universities	(Weber, Bookhart, & Newman, 2009)
procurement method in order to improve owners contracting strategies	(Oyegoke & Kiiras, 2009)
project feasibility study in line with sustainable construction practice	(Shen, Tam, Tam, & Ji, 2010)
reconstructs land subsidence using an integrated regional groundwater flow and land subsidence model	(Cao, Han, & Moser, 2013)
sustainable project delivery processes	(Klotz & Horman, 2010)
urban sustainability assessment model	(Yigitcanlar & Dur, 2010)

Source : elaborated by the author

Result type

While analyzing prescriptive papers, 18 (64,3%) contributed through a method, 4 (14,3%) contributed through models; 5 (17,9%) contributed through a framework; 1 (3,6%) contributed through a system. None of the papers contributed with an ontology or a reference model.

Theoretical foundation

The reported theories belong to multiple disciplines such as operations research, engineering, or social sciences. However, almost all papers do not provide details about the theoretical foundation. This is consistent with Killen et al. (Killen, Jugdev, Drouin, & Petit, 2012) observation that project management and portfolio project management research remain largely a theoretical.

Solution development method

Prescriptive research papers report one or more solution development methods. Nine (32,1%) papers could be classified as using empirical data analysis; 11 (39,3%) report literature analysis; 4 (14,3%) are based on mathematical and logical deduction; while 4 (14,3%) do not provide details.

Evaluation method

Prescriptive papers that reported an evaluation mentioned the following methods: case study (10), expert opinion (3), simulation (2), and survey (1).

Descriptive, conceptual, theory building research

Research questions

To determine the research questions addressed by papers the abstracts were analyzed. Table 8 summarizes topics in terms of a phrase taken from the abstract.

Table 7.

Conceptual and descriptive papers' topics.

Topics	Reference
Conceptual research	
corporate social responsibility in project management	(Schieg, 2009)
examine the role and impact of societal engagement in infrastructure projects	(Keith, Wong, Kumaraswamy, Mahesh, & Thomas Ng, 2012)
introduce the concept of CSR in construction management and development process	(Lassch & Yang, 2011)
Land acquisition management and corporate social responsibility	(Bhattacharya, 2011)
Descriptive research	
management of green construction projects	(Hwang & Tan, 2012)
teach sustainable built environment processes	(Korkmaz, 2012)
benefits and barriers in applying green strategies in the process of	(Zhang, Shen, & Wu, 2011)

housing development	
delivery of Cleaner Production (CP) services to businesses, governments and other organisations	(Van Berkel, 2010)
demonstrate that stakeholder-oriented multi-criteria analysis (MCA) can adequately address a variety of sustainable development dilemmas in decision-making	(De Brucker, MacHaris, & Verbeke, 2013)
design renewal challenges	(Midler & Beaume, 2010)
details the emergence of Social Impact Management Plans	(Franks & Vanclay, 2013)
develop a theoretical model to explore the contextual and causal factors of project attractiveness	(Santos, Kuk, Kon, & Pearson, 2013)
ecosystem management in project construction	(Chen, Tian, Zhang, Feng, & Yang, 2012)
how sustainable development contributes to aligning longer-term strategic management of clients in the building sector with their short-term needs for construction project management	(Herazo, Lizarralde, & Paquin, 2012)
implementation of the first cleaner production and design initiative project	(Lobendahn Wood, Mathieux, Brissaud, & Evrard, 2010)
managing a series of village-level water projects	(Armanios, 2012)
managing sustainable change in professional and personal arena	(Vora, 2013)
sustainability course within the construction management program in the civil engineering department	(Wang, 2009)
performance of project delivery processes for sustainable high-performance buildings	(Korkmaz, Riley, & Horman, 2010)
project management of R&D	(González, Sbragia, Galante, Soto, & Valdivieso, 2013)
project management strategies being used in The Netherlands to increase the effectiveness and efficiency of implementing multifunctional water projects	(Boer & Bressers, 2013)
projects articulate the social dimension	(Vifell & Soneryd, 2012)
risks associated with the design elements and construction management practices	(Fortunato III, Hallowell, Behm, & Dewlaney, 2012)
significance of project management in achieving green or sustainable construction	(Wu & Low, 2010)
specification of green construction	(Lam, Chan, Poon, Chau, & Chun, 2010)
studied how project delivery methods influence an owner's ability to achieve its sustainability goals	(Mollaoglu-Korkmaz, Swarup, & Riley, 2013)
sustainable construction	(Jones, Shan, & Goodrum, 2010)
The encounter between human rights, Indigenous peoples and mining and other extractive industries is discussed	(Hanna & Vanclay, 2013)
the extent to which the relationships and influence of project delivery attributes, such as owner commitment, team integration, and contractual relationships, affect project sustainability goals	(Swarup, Korkmaz, & Riley, 2011)
Understanding perceptions of sustainability in the (construction) industry	(Chong, y otros, 2009)
urban project management	(Mieg, 2012)
variables associated with the implementation of renewable energy (RE) projects	(Eswarlal, Dey, Budhwar, & Shankar, 2011)
Other research	
application of the Equator Principles, and the IFC Performance Standards	(Lawrence, 2009)

Source : elaborated by the author

DISCUSSION

Contributions from the construction industry remained predominant in prescriptive type papers (see topics included in Table 7). They refer to green constructions projects, building technologies, waste management, certification, effects of housing development, among other topics. It is important to note that the construction engineering discipline have always contributed to the PM field. Themistocleous and Wearne (2000) investigated papers published in International Journal of Project Management from 1984 to 1998 and reported that cases from the construction industry remained predominant in PM research. Similarly, leading topics in descriptive papers come from the construction engineering field.

On the other hand, when it comes to the management field, there is a lack of research contributing with methods or frameworks that discusses how PM should support an organization´s strategy and sustainability. This is surprising since projects are the vehicles for executing the organization´s strategy. The paper of Patanakul and Shenhar (2012) is an exception to this trend. The authors propose a framework for building a dedicated project strategy document for an individual project, and show how this framework can guide the project planning and execution processes. However, the paper does not address sustainability. It was retrieved by the Scopus search because the word "sustainability" appears in the abstract but it does not refer to sustainable development issues.

CONCLUSIONS

This work provides a review of project management contributions that integrate sustainability issues with a managerial focus. A conceptual framework that integrates the project management, managerial and sustainable development fields provides a structure to the survey. The framework may be useful to other researcher who would like to replicate the analyses in the future.

The review shows there has been some research into the strategic relevance of projects and into sustainability of construction projects, but also that this research has not yet answered the question of how to govern project so that they provide maximum value and minimize environmental and social impact. The perspective of engineering literature tends to be environmental impact of green construction projects. Literature focusing on strategic management has taken a wider and more strategic perspective indicating that project management implementation should be aligned with the higher level business strategy. However, since we did not search the SPM domain, only one paper was retrieved.

Several implications for further research can be recognized. An organization with a commitment to sustainable principles needs incorporating the interests of a broad range of

stakeholders other than shareholders and addressing environmental and social issues as well as their inter-relationships with financial issues. The strategy definition usually includes performance measures and more research on how to link these measures with projects' outcomes is needed. In addition, project development may produce undesirable environmental or social impacts. Project managers need a systematic approach based on the simultaneous analysis of environmental and social impacts and contribution to organizational goals. Further research on managing the link between strategy process and project development is needed.

We hope this paper encourages debate in project management community and that new perspective research intended to ensure project governance that integrates sustainability issues with managerial focus can arise.

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GESTÃO DOS PROJETOS, ADMINISTRAÇÃO ESTRATÉGICA E DESENVOLVIMENTO SUSTENTÁVEL: REVISÃO DA LITERATURA

RESUMO

Uma organização que tem um compromisso com os princípios de sustentabilidade precisa incorporar uma grande variedade dos stakeholders e considerar os aspectos ambientais e sociais como também sua inter relação com questões financeiras. O objetivo deste artigo é fazer uma revisão das contribuições relacionadas com a gestão dos projetos que integram os aspectos de sustentabilidade com foco na administração. Uma estrutura conceitual que íntegra os campos do gerenciamento de projetos, sua administração e desenvolvimento sustentável fornece a estrutura para o estudo. Os resultados mostram uma falta de investigações que fornecem métodos ou estruturas que descrevem como a gestão de projetos deve dar suporte à estratégia e sustentabilidade de uma organização. Este trabalho constitui uma contribuição para pesquisadores interessados em gerenciamento de projetos para que seus esforços se concentram em garantir a governança de sustentabilidade com foco em na administração.

Palavras-chave: Gestão dos projetos; Administração estratégica; Desenvolvimento sustentável; Metapesquisa.

GESTIÓN DE PROYECTOS, GESTIÓN ESTRATÉGICA Y DESARROLLO SOSTENIBLE: UNA REVISIÓN DE LA LITERATURA

RESUMEN
Una organización con un compromiso con principios de sustentabilidad necesita incorporar una amplia gama de stakeholders y considerar aspectos ambientales y sociales así como también su inter-relación con cuestiones financieras. El objetivo de este artículo es hacer una revisión de las contribuciones vinculadas con la Gestión de Proyectos que integran aspectos de sustentabilidad con un enfoque de administración. Un marco conceptual que integra los campos de la gestión de proyectos, la administración y el desarrollo sustentable provee la estructura al estudio. Los resultados muestran una falta de investigaciones que aporten métodos o marcos de referencia que describan cómo la gestión de proyectos debería dar apoyo a la estrategia y sustentabilidad de una organización. El trabajo constituye un aporte para los investigadores interesados en gestión de proyectos para que concentren sus esfuerzos en asegurar una gobernanza de proyectos que incluya cuestiones de sustentabilidad con un enfoque de administración.

Palabras clave: Gestión de proyectos; Administración estratégica; Desarrollo sustentable; Meta investigación.