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Project Planning and Control in Social and Solidarity Economy Organizations: A Literature Review

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Abstract

Formal project planning and control systems include planning, measuring, and monitoring functions that enable the development of project plans and the comparison between the planned project objectives and the actual project performance. Social and solidarity economy brings new challenges to the project management discipline, especially on project planning and control, which need to be performed in an unusual context. In this paper, we review the project management literature in social and solidarity economy organizations to evaluate the main control issues faced by project managers working in this context. The AACE framework for project control plan implementation is used to classify the current literature in that domain. Our analysis shows that only three of the fourteen processes of the framework are covered, namely project scope and execution strategy development, resource planning and project performance assessment.

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1. Introduction

Project management science is not a new concept for scholars. Many studies have been conducted in the aim of improving project management practices while others focus mainly on studying the impacts of project management in different environments or contexts. IT projects, large engineering projects and event planning projects are just a few of the specific environments covered in the project management literature. A glimpse at the literature guided us to consider project management in the social and solidarity economy (SSE), which is scarcely covered by existing and actual research initiatives. We posit that the specific context of this economy sector might bring new challenges to the project management discipline.

This paper focuses specifically on the project planning and control processes of project management, as evaluating all project management processes is an overwhelming task and may be undertaken in future research. Formal project planning and control systems include planning, measuring, and monitoring functions that enable the development of project plans and the comparison between the planned project objectives and the actual project performance. Project planning and control is carried out through various processes and tools that are used to set adequate objectives and to detect specific issues that may arise when executing any project and that favor the right selection of corrective actions.

Researchers have recognized the positive impact of using project planning and control tools and techniques to manage projects¹, but the social and solidarity organization literature has largely ignored these tools. This might appear surprising as project management practices within these organizations has found a wide application for supporting multiple activities such as appointing project teams or managing budgets². Nevertheless, descriptive use of project planning and control mechanisms in this type of organization is uncommon, which may suggest that standard project control mechanisms are not adapted to their specific context³. This paper aims at identifying these discrepancies and to encourage future research in that domain based on a literature review.

Before defining the specificities that differentiate regular private firms versus social and solidarity economy organizations (SSEO), we need to define the concept of social and solidarity economy (SSE). According to Fonteneau et al.⁴, the main principles of the SSE are solidarity and participation, both helping in value creation through goods and services that have a social and economic goal. Marques⁵, in a United Nations Research Institute for Social Development's (UNRISD) report, completes these principles with autonomy and self-management. Moreover, Malta, Baptista, & Parente⁶ refine the goals of the SSE: "goals are neither centered in profit nor in individualistic needs. It is an economy that presents itself as a material and human alternative to capitalist economy" (p.35). The SSE might take many forms such as cooperatives, mutual benefit societies, associations and community-based organizations, social enterprises and foundations⁴. All these forms of social and solidarity economy organizations have a collective dimension to it. Either they have a membership prerequisite (cooperatives) or they only live to offer financial support to a cause that benefits the society (foundations). As Marques⁵ points out, the SSE emerged from the individualism and poverty that arose with the advent of the industrial revolution. With the collectivity, it was a way to fight the problems that the government was not able to solve⁶. SSEOs often rely on voluntary involvement, as there are usually no obligation to get involved in the decision-making processes. It is more frequent to see this voluntary involvement in cooperatives, mutual benefit societies and other associations⁴. The last differing principles is participation. Indeed, SSEOs are usually seen as more democratic than private firms as they tend to apply the one person one vote paradigm instead of one share one vote.

We could then define SSE as an economy that has an economic and social function (main goal), a collective dimension (society), solidarity, autonomy, voluntary involvement and that needs participation (one person one vote)⁴. More often than never, social entrepreneurs want to change the world⁷. Malta et al.⁶ perfectly summarize the concept as "Solidarity Economy presents an alternative project of society more fair and less unequal: it is in fact a political project" (p.37).

Crawford and Bryce⁸, with their paper on humanitarian aid projects explains perfectly why there is a need for separate literature on this precise subject. Indeed, the authors argue that, as the project goals are more often interested in "social transformation/human development" than traditional projects in other industries making measurements and control more complex. As the authors⁸ explain, "although aid projects frequently have a "hard" element (e.g. drilling boreholes), this is normally viewed as a "mean" to some developmental "end" (e.g. improved public health" (p. 364). Moreover, Crawford and Bryce⁸ continue with a focus on stakeholders of aid projects. Having obvious social, economic and ecological impacts, projects tend to be more political, hence attracting "a wide range of stakeholders

who demand high levels of accountability from implementing agencies" (p.364). The SSE is no different, having many stakeholders (from local governments to private donors to national governments, etc.) and having, most of the time, soft social projects that have a high impact on their beneficiaries.

So how do all these differentiating aspects of the SSE affect project planning and control? It could be affected in many possible ways, such as voluntary involvement (how do you plan a project with team members that are volunteers?), participation (how do you control the stakeholders in an organization where everyone is a stakeholder?) and social goal of the SSEO (how should the value-creation be evaluated when economic gain is not in the scope of the project?). Should project planning and control in the context of SSE have a specific methodology for IT projects? These are all pertinent questions that may be answered by the literature on project management. The main goal of this paper is thus to evaluate the extent and the gaps of the literature on project planning and control in the context of social and solidarity economy.

This paper is divided as follow: the second section will cover the methodology, such as the type of review, the search strategy and the framework used. The third section then presents the literature review and a discussion on the findings, and is followed by a conclusion in the final section.

2. Methodology

2.1. Literature review and search strategy

A narrative review is a type of literature review that focuses on the findings of the literature on a specific domain⁹. As the main goal of this paper is to evaluate and identify gaps in the literature of project planning and control in the context of social economy, this type of review seems indicated. We do not aim at covering every piece of evidence that has been written, but we have the conviction that important papers were included in our sample. As the focus of this paper is project planning and control, we firstly searched for "project planning" OR "project control" AND "social economy" OR "solidarity economy". We did not find any relevant papers. We then changed the keywords to be broader in project management instead of project planning and control. We searched the following databases (Emerald Insight, ProQuest, ScienceDirect and Google Scholar) with keywords entered as below with English and French as language criteria:

- "project management" AND,
- "social economy" OR,
- "solidarity economy".

The first screening was based on the title of the paper. It had to be about managing project in the specific context of the social and solidarity economy. For Google Scholar, the first screening was done by refining the keywords to have more pertinent results. The new keywords included only "project management" and "solidarity economy". Also, a year constraint (2007 to 2017) was added, which removed nearly 2000 results. After reviewing the title and the abstract, we only kept 8 papers out of the 131 found in Google Scholar, which left us with a sample of 11 papers (n=11) that cover project management in the context of social and solidarity economy.

The table below details the number of articles that was found during the search for each database.

Table 1. Sample size by database

Search steps	Emerald Insight	ProQuest	ScienceDirect	Google Scholar
First search	0	58	27	2,040
After first screening	N/A	2	1	131
Last screening	N/A	2	1	8

2.2. Framework

The framework used in this review paper will be the AACE International framework for project control plan implementation, which is a part of the Total Cost Management Framework¹⁰. Although many other frameworks could have been used such as the processes from the PMBOK from the PMI, the AACE model was selected as it offers great insight on total cost management while using Deming’s wheel of quality (Plan-Do-Check-Act) to pinpoint and categorize activities. As each project control process of the framework is clearly explained and detailed operationally, it offers an interesting approach to classify existing research covered by the literature on project planning and control in the social and solidarity economy.

The AACE framework’s fourteen processes are divided in four macro-processes. The first macro-process, Project Planning, consists of all the processes that pertain to the planning of the project, including schedule planning and development, cost estimating and budgeting, resource planning, but also project scope and execution strategy development. The second macro-process, Project Implementation, contains only one process: Project Control Plan Implementation. Third is Project Performance Measurement, regrouping processes such as progress and Performance Measurement. Finally, Project Performance Assessment consists of processes that provide inputs, such as decisions, for the other processes. All fourteen processes follow a logical flow (similarly to Deming's plan-do-check-act wheel), interacting with one another through inputs and outputs.

Table 2 presents the AACE model’s project control processes and categorizes the articles from our sample according to these processes.

Table 2. Articles classification based on the AACE International Framework for project control plan implementation

		PLAN						DO	CHECK		ACT			
		7.1 Project Scope and Execution Strategy Development	7.2 Schedule Planning and Development	7.3 Cost Estimating and Budgeting	7.4 Resource Planning	7.5 Value Analysis and Engineering	7.6 Risk Management	7.7 Procurement Planning	8.1 Project Control Plan Implementation	9.1 Project Cost Accounting	9.2 Progress Performance and Measurement	10.1 Project Performance Assessment	10.2 Forecasting	10.3 Change Management
#	Authors													
1	Navarro-Flores (2011)	X												
2	Ika et al. (2010)	X												
3	Arena et al. (2015)										X			
4	Brière et al. (2015)				X									
5	Crossan et al. (2011)										X			
6	Hadj et al. (2015)				X									
7	Esteves (2013)				X									
8	Rusare, Jay (2015)	X												
9	Lacerda et al. (2016)				X									
10	Lewis (2002)	X												
11	Haddad et al. (2016)	X												

3. Literature Review and Discussion

Of the framework’s fourteen processes, only three are discussed in the literature, emphasizing many gaps. In the following subsections, we will explain these three processes more in detail, clarify how they are covered by the literature on project planning and control in the SSE, and discuss the links with this SSE context.

3.1. Project scope and execution strategy development

Project scope and execution strategy development is divided into two different tasks: defining the scope of the project following multiple best practices and defining the execution strategy. On the one hand, defining the scope of

the project includes many documents that define in detail what the project is all about, including project specifications, scope of work, work breakdown structure (WBS), schedule with risks, events logs and assumptions, budget estimations also with risks, events logs and assumptions, etc. One could say that this is similar to a project charter. The execution strategy is on the other hand composed of three items, which are the type of work, the execution type and the contracting strategy. The type of work defines what needs to be done in a general manner such as expansion project or a relocation. The execution type is how the project will be executed (e.g. standard execution, fast-track, aggressive execution, etc.). Finally, the contracting strategy is how will be handled the relationship with contractors (e.g. alliance, prime contractor, joint venture, etc.).

We found five articles that pertain to this process. Three of them focus on the Logical Framework Approach (LFA) or Project Implementation Profile (PIP) for defining the scope of projects in SSEOs^{11,12,13}. Another article focuses on the contextualization of projects in the third sector¹⁴, while the last article describes tools used by project managers in planning and executing¹⁵.

Project scope and execution strategy development is the AACE framework's process that is the mostly discussed in the literature. As the scope definition is the starting point (and reason) for any project, differences should emerge when comparing project planning and control processes between regular private firms and social and solidarity economy organizations. The fact that the literature focuses on the project scope definition demonstrates that there is indeed a difference. This supports our argument that SSEOs have many specificities that differentiate them apart from regular firms.

3.2. Resource planning

Resource planning is divided into two sub processes: labor management planning and equipment management planning. The former serves as a measurement for comparing the actual labor or cost of the project versus the planned labor or cost, while the latter serves as a measurement for equipment usage to compare the actual cost to the planned cost. They both have a purpose of prediction for the final forecast costs of the project based on actual cost. Finally, the resource planning process also has a purpose of identifying the appropriate resources for the project.

Resource planning is only covered in four of the articles in our sample. While two of them identified the project manager's required competencies in the context of SSE^{16,17}, just El Hadj et al.'s article covers the employee's identification to the project¹⁸. The last article covers the resource allocation in a portfolio point of view¹⁹. Although we are aware that the first three studies are not directly related to the resource planning, they are nevertheless related to resource management and this is the reason why they are classified as such.

The fact that the research initiatives in our sample mostly focus on the project manager might signal a trend. Many reasons could explain this. One of those being that in many SSEOs, the project team might mostly be volunteers while the project manager might be an employee or even the founder of the organization. The planning for evaluation of labor costs is also lacking. This might also be related to the fact that there is a major aspect of volunteering in SSEOs. Although some resources might not be charged, this does not mean that there should not be cost control for other types of resources during the project.

3.3. Project performance assessment

Project performance assessment starts with the choice of an assessment method that is in line with the purpose of the project, but that is also a valid way of measuring project performance in the specific context of the organization. The goal of this process is to identify the best way to measure variances, risk factors and opportunities for the project. The measurement systems should also be well interfaced between the systems used for assessment and, of course, with all participants in the project. Therefore, this process "should provide the team with an understanding of work accomplished"¹⁰. This required assessment should be not only on cost, schedule and resource performance, but also on productivity and risk factors.

Only two papers pertaining to this process were found. While one of them focuses on the performance measurement systems²⁰, the other one covers results management (non-tangible outcomes)²¹. Although we classified both papers in this process, not one really pertains to the project performance but more on how to measure performance in SSEOs. As Arena et al.²⁰ (p.652) report, the performance measurement of a SSEO "is not an easy task, because it requires the

consideration of a variety of objectives and results for a heterogeneous set of stakeholders, sometimes with conflicting interests". That may be one of the reason why there are only a few papers that tackle this project performance assessment. Performance measurement in SSEOs is also challenging because these types of organizations have a social goal, meaning that they cannot simply measure their performance according to profit yield, but according to social output, which yields challenges in aligning and measuring the goals and the performance of projects.

4. Conclusion

Project success depends on many factors, and context is one of them. In this paper, we discussed how the literature covered the specific context of social and solidarity economy. Based on the AACE International Framework for project control plan implementation, articles found in the literature were classified to discover that only three processes are covered, namely project scope and execution strategy development, resource planning and project performance assessment. Therefore, there are still eleven processes of the AACE framework that need to be further investigated. The main contribution of this paper is to outline the gaps, while evaluating the extent of the literature on project planning and control in the context of social and solidarity economy.

The results of our analysis support our argument that project planning and control needs to be addressed differently in SSEOs. The findings suggest that research initiatives should be developed to tackle project planning and control in the context of social and solidarity economy. We argued that the main goal of the project (project scope and execution strategy development) should be aligned with the social mission of the organization while not necessarily being pecuniary. This is the aspect that is the most covered in the literature. Within this process, the logical framework approach is the most cited model to define the scope and the reasons of projects^{11,12,13}. We also argued that many challenges would arise with the fact that employees are mainly volunteers, which is also in line with the findings. Indeed, four papers focused on the resource planning process. Half of these papers focused on the project manager and resource allocation while the other half focused on the team identification, commitment and cooperation. Finally, the project performance assessment was the process that was less covered in our findings. Only two papers tackled this process, while it should be an important aspect of project control since SSEOs mostly measure results in non-traditional monetary ways.

We are aware that there are some limitations to our findings presented in this paper. One of those being the search process that only included four databases. Moreover, we included papers from 2007 to 2017. Although we are confident in our methodology, we may have missed some papers on the subject.

Future research will be needed to confirm the findings this paper brings. To reclaim this field of research, scholars will need to address the other processes of the framework used. While continuing to improve the literature on the three processes discussed earlier, we would suggest focusing first on the risk management process, the project control plan implementation process and the progress performance and measurement process, which are, in our opinion, the most likely to be influenced by the specific context of social and solidarity economy.

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References

1. Montes-Guerra, M. I., Gimena, F. N., Pérez-Ezcurdia, M. A., & Díez-Silva, H. M. (2014). The Influence of Monitoring and Control on Project Management Success. *International Journal of Construction Project Management*, 6(2), 163–184.
2. Nicolăescu, V., Căce, C., & Căce, S. (2012). Importance of Financing the Social Economy Projects. *Journal of Community Positive Practices*, 3, 520–537.
3. Montes-Guerra, M., & De-Miguel, A. R. (2015). Project Management in Development Cooperation: Non-governmental Organizations. *Innovar Journal*, 25(56), 53–68.
4. Fonteneau, B., Neamtan, N., Wanyama, F., Morais, L. P., & de Poorter, M. (2010). Social and Solidarity Economy: Building a Common Understanding.
5. Marques, J. S. (2013). Social and Solidarity Economy, Between Emancipation and Reproduction, (May), 1–13.

6. Malta, M. C., Baptista, A. A., & Parente, C. (2014). Social and Solidarity Economy Web Information Systems: State of the Art and an Interoperability Framework. *Journal of Electronic Commerce in Organizations*, 12(1), 35–52.
7. Rahdari, A., Sepasi, S., & Moradi, M. (2016). Achieving sustainability through Schumpeterian social entrepreneurship: The role of social enterprises. *Journal of Cleaner Production*, 137, 347–360.
8. Crawford, P. et Bryce, P. (2003). Project monitoring and evaluation: A method for enhancing the efficiency and effectiveness of aid project implementation. *International Journal of Project Management*, 21(5), 363-373.
9. Paré, G., Trudel, M. C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information and Management*, 52(2), 183–199.
10. Stephenson, H. L., Hollmann, J. K., Farin, M. A., Hartley, R., Murugesan, R., & Simons, W. J. (2011). 60R-10: Developing the Project Controls Plan.
11. Haddad, C. R., Ayala, D. H. F., Maldona, M. U., Forcellini, F. A., & Lezana, A. G. R. (2016). Process improvement for professionalizing non-profit organizations: BPM approach. *Business Process Management Journal*, 22(3), 634–658.
12. Lewis, D. (2002). Organization and Management in the Third Sector: Toward a Cross-Cultural Research Agenda. *Nonprofit Management and Leadership*, 13(1), 67–83.
13. Rusare, M., & Jay, C. I. (2015). The project implementation profile: A tool for enhancing management of NGO projects. *Progress in Development Studies*, 15(3), 240–252.
14. Navarro-Flores, O. (2011). Organizing by projects: A strategy for local development-The case of NGOs in a developing country. *Project Management Journal*, 42(6), 48–59.
15. Ika, L. a., Diallo, A., & Thuillier, D. (2010). Project management in the international development industry: The project coordinator's perspective. *International Journal of Managing Projects in Business*, 3(1), 61–93.
16. Brière, S., Proulx, D., Flores, O. N., & Laporte, M. (2015). Competencies of project managers in international NGOs: Perceptions of practitioners. *International Journal of Project Management*, 33(1), 116–125.
17. Esteves, L. E. (2013). Project Management in Nonprofit Organizations. Universidade do Minho.
18. El Hadj, S. ., Chédotel, F., & Pujol, L. (2015). Construire un projet inter-organisationnel dans l'Économie sociale et solidaire : quel lien entre l'identification et l'émergence d'une compétence inter-organisationnelle ? *Revue Française de Gestion*, 41(246), 169–173.
19. Lacerda, F. M., Martens, C. D. P., & de Freitas, H. M. R. (2016). A Project Portfolio Management model adapted to non-profit organizations. *Project Management Research and Practice*, 3(5120).
20. Arena, M., Azzone, G., & Bengo, I. (2015). Performance Measurement for Social Enterprises. *Voluntas*, 26(2), 649–672.
21. Crossan, D., Ibbotson, P., & Bell, J. (2011). The hologram effect in entrepreneurial “ social commercial ” enterprises Triggers and tipping points. *Journal of Small Business and Enterprise Development*, 18(4), 655–672.