SE7215 ASSESSMENT 1

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CRITICAL ANALYSIS: A REVIEW OF THE APPLICATION OF PROJECT MANAGEMENT METHODS IN THE CZECH REPUBLIC

Introduction

This report critically reviews the application levels of project management methods in the Czech Republic, as Taraba (2018) stated. Project management is a certain type of constructive management, to develop critical patterns in the establishment regarding a project's success. Taraba's (2018) topic was about investigating the improvement of project management levels in the past decade. Additionally, Taraba (2018) assumed an increase in productivity alongside growth in technical knowledge and applications. Therefore, Taraba (2018) carried out a survey on perceived levels of applications and analyzed the survey results. Eventually, the findings indicated that the levels of project management applications are on the rise (Taraba, 2018). Nevertheless, project success and the levels of project management applications do not seem to correlate (Doskočil, 2016).

Critical Analysis

The organization of Taraba's (2018) paper outlines multiple certifications and options of project managers in the Czech Republic, as well as the methods and tools they use. As a result, Taraba (2018) has a basis to investigate the opinion that the application levels should rise, considering the amount of provided information. By contrast, Doskočil (2016) highlighted in their research that is also conducted in the Czech Republic, that project managers make mistakes and hinder the project's success. Furthermore, proper application of project management knowledge to meet the project's requirements is, by definition (PMI, 2021), required.

One hypothesis formed by Taraba (2018) was about examining the trend and qualities of project management methods in the surveyed companies. In other words, Taraba (2018) explored the observed application levels and anticipated them to be in a rising trend over the years. In order to achieve that, Taraba (2018) split the survey-takers into two groups regarding what they thought of the application quality.

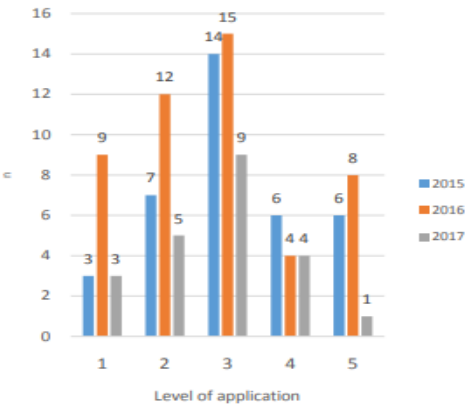

Figure 1 Histogram of reported levels of applications from the survey (Taken from Taraba, 2018). 1 indicates low levels, 3 indicates medium levels and 5 shows very-high levels of applications.

Results show an increase in the very-high category, especially in 2016 (Figure 1). Likewise, projects such as construction that have high complexity benefit from a more curated strategic agile approach (Parker et al., 2015; Sohi et al., 2016). Subsequently, one way to increase resource availability would be to provide an environment for employees to work together more, instead of assigning them individual projects and separate expectations on the content expected from them (Sohi et al., 2016). As outlined, the constant same approach will not give enhanced results (Parker et al., 2015; Sauer et al., 2001).

Similarly, a finding from the survey Taraba (2018) conducted was in relation to how employees were convinced that the current project

management methods application levels were high-ranking, but on the contrary, more than half of the respondents opted in on options that were not high. Furthermore, these insights could be due to experienced complexity instead of applied methodology quality (Abdou et al., 2016). Moreover, this is also noticeable in the 2017 responses to the study, as the responses skewed towards the moderate choice (Taraba, 2018).

The paper in mention has a report of a survey and the design procedure of the research is a crucial element to mention. Lack of empathy or having limited information to emphasize could be the reason why the results were skewed to the high category, especially excluding the 2017 results. Furthermore, having five tangibles as perceived application qualities and not showing empathy or information-level metric is a debatable approach. Furthermore, surveys should cover multiple metrics, including but not limited to satisfaction, responsiveness and assurance (Dengkai et al., 2021). Correspondingly, Dengkai et al. (2021) also list empathy as a crucial element of a survey. There was mention of institutes that provide project management certifications in the Czech Republic, but there is no mention of the qualifications of people that attended the survey.

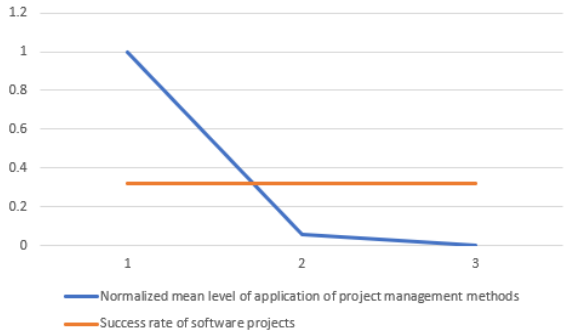

Figure 2 Line chart of normalized mean values of reported levels of applications from the survey, lower is better (Adapted from Taraba, 2018), and success rate of software projects (Data taken from Sudhakar, 2016).

As previously mentioned, there is minimum correlation between perceived application levels against project success levels (Figure 2). Success rate of software projects depend on budget, time and features, but the project completion and success rate is on a steady climb since project management applications worldwide are improving (Sudhakar, 2016). Moreover, this could be credited to multiple factors such as team, environment or resources. Also mentioned by Taraba (2018) as part of their first hypothesis, there is not a clear indication (Figure 2) of application of project management methods solely affecting the project's success by itself.

Taraba (2018), due to the nature of the research design of a survey, showed no obvious bias. Although it is difficult to skew results in a way to not debase the publication (Hill & Shaw, 2013), Taraba (2018) did not elaborate on the methods they followed for the survey in detail. Nonetheless, Taraba (2018) did mention how they separated the groups and how their decisions were related to the research, but there was no mention on the systems that are in place to prevent fraud or falsification. Evidence illustrates that this is a big issue, considering the survey response bias, and there should be agile systems with investment in case related systems whether the survey results were adjusted afterwards (Schouten et al., 2016). Likewise, this is noticeable in the Wikipedia gender disparity survey with figures on 25% inaccuracy due to bias (Hill & Shaw, 2013). In other words, Hill et al. (2013) produced findings that there was a self-selection bias on the Wikipedia survey on gender gap. Even though this may perhaps be precise, Taraba (2018) having no concrete indication of bias with an almost bell curve spread of results imply that there was some measure of survey integrity (Schouten et al., 2016).

Conclusion

Taraba (2018) conducted a survey and achieved results that show improvement on project management approaches applications. Furthermore, Taraba (2018) also mentions how the results were achieved with what techniques.

Another study that took place in the Czech Republic by Doskočil (2016) also mention the impact project managers have on the project. Moreover, Doskočil (2016) says that there are still flaws on the approach and there could be improvements. Furthermore Parker et al. (2015) and Sohi et al. (2016) agree that there is clear need of flexible and effective approaches. By contrast, the project success rate is climbing (Sudhakar, 2016). To iterate, Taraba (2018) has related this growth to the level of applications in a way that requires multiple points of view. Therefore, the result of project management practices improve project success rates (Abdou et al., 2016; Doskočil, 2016; Parker et al., 2015; Sudhakar, 2016; Taraba, 2018) becomes clear, especially when the questions relating to surveyor empathy (Dengkai et al., 2021), survey methodologies and bias (Hill & Shaw, 2013; Schouten et al., 2016) and, how perceptions are categorized are addressed (Taraba, 2018).

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CRITICAL ANALYSIS: SYSTEMATIC LITERATURE REVIEW OF PROJECT SUSTAINABILITY STRATEGIES BY AARSETH ET AL. (2017)

Introduction

This report critically reviews research on sustainability strategies by Aarseth et al. (2017). These strategies serve as new approaches for project managers to enhance their projects. Aarseth et al. (2017) conducted a systematic literature review and, identified two main properties regarding project sustainability that have benefits on both delivering and accepting ends (Aaltonen & Kujala, 2010; Ahola et al., 2013; Eskerod & Huemann, 2013; Orr & Scott, 2008). Additionally, these assumptions have a perspective from project developers and clients, that delivers on the key idea of exploring how the ongoing sustainability issues are addressed (Aarseth et al., 2017).

Aarseth et al. (2017) also state that this paper identified 8 distinct strategies in regard to project sustainability strategies. Furthermore, these identified strategies can be used in project organization, project hosting and business collaboration (Aarseth et al., 2017). Aarseth et al. (2017) think that businesses should incorporate sustainability principles.

Critical Analysis

According to Aarseth et al. (2017) projects have grown to be progressively more globalized. Moreover, when implemented, these projects impact the growth in many territories (Javernick-Will & Scott, 2010; Kerr et al., 2011). Indeed, this means that the improving countries will have fundamentally more development-related sustainability projects (Aarseth et al., 2011; Javernick-Will & Scott, 2010). Eventually, these projects may come with problems for the local community and the government (Brugmann, 1996). As a result of the apparent need of addressing these issues (Hart, 1997; Labuschagne & Brent, 2005; Lélé, 1991; Victor, 2006), sustainability can be fundamentally challenged (Lélé, 1991; Victor, 2006) by the assets of the delivering side and other external factors (Aarseth et al., 2017; Voinov, 2008).

In many countries, governments also expect businesses and project owners to delve into projects that are more sustainable in the long run (Aarseth et al., 2017; Brugmann, 1996; Labuschagne & Brent, 2005). Additionally, from a similar point of view, there are arguments that the current project management frameworks (Guide, 2001) cannot provide insightful information on matters such as humanitarian and environmental issues (Eskerod & Huemann, 2013). Consequently, these vague sustainability methodologies require some sort of revision and improvement (Aarseth et al., 2017; Eskerod & Huemann, 2013). Furthermore, projects with these sustainability efforts need encouragement from governments and societies (Doppelt, 2017; Valbuena-Hernandez & Ortiz-de-Mandojana, 2022).

There have been numerous definitions for sustainability that specifically concentrate on natural and social resources but for project managers, the sustainability definition should incorporate balanced social environmental and economic goals for the project (Azapagic & Perdan, 2000; Labuschagne & Brent, 2005; Sillanpää, 2017). However, no matter the amount of considerable work put into defining sustainability it stays ambiguous (Aarseth et al., 2017; Voinov, 2008). As a result of this, sustainability practices tend to skew to be applicable to project goals and to the overall vision of the company.

Aarseth et al. (2017) mention governments' involvement regarding sustainability as they take increasing notice of local environment. Furthermore, this is especially true according to Labuschagne & Brent (2005) as government is defined as a crucial pillar of society, the others being business and civil society.

According to Aarseth et al. (2017), there are multiple ongoing sustainability issues. These problems include interactions between humans and nature (Ostrom, 2009; Pauly et al., 2002), as well as other resources such as energy (Dell & Rand, 2001; Goldemberg et al., 2008; Rosen et al., 2008). At the same time, agriculture (Doran & Zeiss, 2000; Kerr et al., 2011) and tourism (Gössling et al., 2002) also need answers to sustainability issues within their respected fields. Essentially, these fields start projects, and these projects need project managers, therefore these project managers should provide answers to questions regarding sustainability. On the other hand, corporate sustainability is mostly dependent on stakeholders' practices, corporate responsibilities within itself and socially, and corporate's allocated resources on sustainability (Eskerod & Huemann, 2013; Valbuena-Hernandez & Ortiz-de-Mandojana, 2022; Van Marrewijk, 2003).

Even though there are massive amounts of text resources or research on sustainability, it is a fairly new topic for project management (Silvius & Schipper, 2014). Nonetheless, the definition for sustainability can change depending on the project's goals, it is usually covert or obscure. As a result, sustainability in project management is a new and fragile topic in the scholarly works (Aarseth et al., 2017).

The paper by Aarseth et al. (2017), is organized by outlining the literature review methodologies they used and, further improving their structure by explaining how they processed the data.

Aarseth et al. (2017), also explains their findings and what they figured out in a discussion and conclusion section. Furthermore, Aarseth et al. (2017), argue that they have found suitable perspectives for multiple fields and categorized the approaches for further ease of use. Similarly, Aarseth et al. (2017) explains their findings on how spontaneously emerging problems should be approached (Morris, 2013) with sustainability strategies. Moreover, these problems can be steadily treated when aforesaid strategies are adopted by project providers and clients (Aarseth et al., 2017; Lélé, 1991). Also, there are mutual strategies that benefit both parties (Aarseth et al., 2017; Azapagic & Perdan, 2000).

Overall, the paper by Aarseth et al. (2017) does not deviate from the key topic description they have provided. Strengthening their findings, Aarseth et al. (2017) also display an example case that further elucidates the sustainability practices and how they relate to the project management practice. Additionally, Aarseth et al.'s (2017) literature review resulted in showing multiple beneficial points (Labuschagne & Brent, 2005; Orr & Scott, 2008) where there is still room for improvement and research can also take place (Aarseth et al., 2017; Aarseth et al., 2011).

Conclusion

The paper cautiously states that there is an inclusion of sustainability practices in projects and in the project management field (Aarseth et al., 2017). In the same way, there was a lack of sustainability practices on multiple ends including developers, clients, civil environment and more (Hart, 1997; Labuschagne & Brent, 2005; Sillanpää, 2017; Victor, 2006; Voinov, 2008).

Promoting suitable candidates (Aarseth et al., 2017; Javernick-Will & Scott, 2010) and organizing better project structures (Azapagic & Perdan, 2000; Lélé, 1991) is a crucial aspect of improving project management approaches for sustainability (Labuschagne & Brent, 2005). Similarly, Aarseth et al. (2017) found that setting strategical and practical sustainability goals is important from the beginning of the project.

As a result, creating channels or practices for suppliers to be more sustainable (Azapagic & Perdan, 2000; Brugmann, 1996), setting policies for sustainability (Aarseth et al., 2011; Lélé, 1991; Silvius & Schipper, 2014) and influencing other project practices (Aarseth et al., 2017; Morris, 2013; Orr & Scott, 2008; Valbuena-Hernandez & Ortiz-de-Mandojana, 2022) connect seamlessly with a mutualistic relationship that benefits both perspectives and outsiders (Aarseth et al., 2017; Brugmann, 1996; Ostrom, 2009).

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