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A small garage on the sidelines of a corporation: Should innovative projects be isolated?

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Abstract

The article aims to attempt to answer the question of whether innovative projects should be isolated in an organisation. A critical analysis of the literature on the subject reveals a divergence of views on the proper placement of social or technological innovation projects. The research hypothesis formulated holds that the more conducive the innovative project team is to interact with the rest of the organisation and the norms and values within the team are oriented toward learning, the stronger the learning of the project team. The culture metaphor of an organisation was used to verify the research hypothesis. It has been assumed that project team learning means that project team members transform the norms and values previously adhered to in the organisational culture. On the basis of the survey results, it was impossible to accept the research hypothesis. Despite the increase in the intensity of the factors that foster interactions between teams implementing innovative projects and the rest of the organisation, team learning did not increase as originally expected.

1. Introduction

Numerous authors see project implementation as an enabler of organisational learning (Barker and Neailey, 1999; Huber, 1999; Schindler and Eppler, 2003;

Terzieva and Morabito, 2016). It means that, in order to adapt the organisation to changes in the environment, managers decide to implement projects in which – first, at the project team level – people adapt to new challenges and later the whole organisation learns from them on the basis of the experience they have gained. In project teams, the key to change is not just individual learning but the learning of the entire project team, which then, as mentioned above, translates into organisational learning. As Gil and Mataveli (2018) suggest, a project team learns when the individual or collective performance of project tasks continuously improves since procedures are improved, resources are better utilised and new knowledge is accumulated. This knowledge can then be transferred to other projects or activities of the organisation. As the cited authors note, although the content of the project may be temporary and new each time, the organisation of the project is the source and result of learning. In other words, as a result of changes and learning, project management processes and tools are improved, best practices are collected and the maturity of project management in an organisation increases over time. Thus, as a consequence of learning from the ongoing projects, what is developed is the knowledge regarding both new goods, services, or technologies and the project management processes themselves.

As might be expected, learning will occur especially in innovative projects. This is so because it is believed that project innovation determines the degree to which the project course of action deviates from the existing activities in the organisation (cf., for example, Griffin, 1997; Shenhar and Dvir, 2008; Kielbus, 2011; Trocki, 2012; Kamiński, 2021). Thus, for instance, Shenhar and Dvir (2008) distinguish three levels of innovation: a derivative project, a platform-based project, and a breakthrough project. Each of these three levels of project innovation affects – to a different extent – the project management process based on nine different areas of the Project Management Body of Knowledge (PMBOK). The higher the innovation of the good or service, the more ambiguity there is at the beginning of the project, therefore the estimates are less accurate and the risks are higher. In such a case, more flexibility and creativity are needed to bring the project to a successful conclusion.

This different approach to implementing projects with various degrees of innovation affects the way they are positioned in the structures of a given organisation. A critical analysis of the literature on the subject reveals a divergence of views as to the proper placement of projects related to social or technological innovation (cf., for example, Trocki, 2009; Galbraith, 1999; Zgrzywa-Ziemak and Kamiński, 2009). Some scholars suggest a strong integration of the implemented project with the structures of the enterprise while others believe that in the implementation of innovative projects, it is more desirable to completely separate the project tasks from the structures of the institution. Therefore, this article aims to try to answer the question of whether innovative projects should be isolated. The culture metaphor of the organisation will be used to provide the answer to this question (Suł-

kowski, 2004). It has been assumed that learning in a project team means that its cultural norms and values have transformed from those of the previous organisational culture. This change is triggered not only by the learning of individuals who spur the team to change but also by interactions with – in this case – the remaining part of the organisation.

2. Theoretical framework of the research

The isolation of innovative projects in research and development activities has been observed for a long time. For example, as Hilmer and Donaldson (1997) noted, the purpose of R&D is to develop innovations and the scientists and engineers employed work on projects that can take many years to complete. Feedback takes a long time. Moreover, the nature of tasks does not make it easy to direct the work of the people hired. Employees working on R&D projects are highly skilled; they have a significant degree of independence and have irregular working hours, during which they perform their work at home or over the weekend. Typical is the atmosphere of tolerance and freedom, which should not limit anyone's creativity.

This desire to provide freedom and opportunity to engage in innovative projects is also pointed out by Hammer (1998) and Wozniak (Wozniak, Łokaj, 2009). Hammer observes that if organisations operate on the basis of paternalism, employ extensive control mechanisms, are bureaucratic, and have limited personal freedom, then all invention is lost in the maze of formal company rules. In such a case, creative thinking can only be developed outside of working hours. In the interview, Wozniak, the co-founder of Apple Inc. speaks "about a small garage on the sidelines of the corporation". In his view, corporate culture can hinder the development of ideas and a group of innovators should not be placed too deep in the organisational structure, i.e. they should not have too many hierarchical levels, superiors and decision-making dependencies above them. The management of an organisation need to understand that true innovation, which brings things so new that they are called revolutionary, is almost always created not in a company but in a home environment. It is created by young people who often work in their garages. This is why highly innovative organisations allow employees to dedicate 20% of their working time to develop their own ideas and projects independently.

On the other hand, Galbraith (1999), citing the differences between the operational organisation and the innovative one, points to the fact that in the case of the structure of the operational organisation, the problems of division of work, departmentalisation, leadership span, and distribution of authority are important while the design parameters of the innovative organisation consist of, among other things, *organisational differentiation* and preservation of the so-called *reserves*. *Organisational differentiation* means separating the initial innovation work from the operational organisation and its control. This allows both activities to run

simultaneously and prevents premature rejection of new ideas: *The less the dominant culture of the organisation supports innovation, the greater the need for separation. Often, this separation occurs naturally [...]. If a company wants to foster innovation, it can create reserves where innovation activities can occur as a matter of course* (Galbraith, 1999, 105).

Finally, Trocki (2009), when considering forms of project organisation, notes that for the implementation of highly innovative projects, it is desirable to separate project tasks from the structures of the institution and use the so-called pure project organisation. The project manager has the full organisational capacity necessary to manage the project and the assignment of employees to the project is also completely independent and unambiguous (Trocki, 2009). If learning is fostered by the presence of organisational slack, the negative phenomena of a matrix organisation, such as the involvement of its employees in multiple projects, the volatility of project teams or the desire to maintain strong synergies between projects, will not be present. It may be thought that a “pure” project organisation fosters the most conducive full focus on implementing an innovative project.

On the other hand, the fundamental reasons for not isolating innovative projects stem from learning at the team level, which is the result of interactions among people in the enterprise that promote the externalisation of individuals’ knowledge, making it possible for this knowledge to flow and undergo verification (Zgrzywa-Ziemak and Kamiński, 2009). Consequently, one can speak of shared knowledge growing out of the knowledge of individuals but relating to the team or the entire organisation rather than to individual employees. Kasl et al. (1997) define team learning as the process through which a group creates knowledge for its members, for itself as a system, and for others. They identify three ways of learning within and by a team: fragmented, summative, and synergistic. In the case of synergistic learning, knowledge is created jointly by group members. Diverse perspectives are integrated toward thought patterns shared by all. This is not possible without teamwork, which allows new ideas to be presented freely and openly so that team members can benefit from newly acquired information. In summary, in synergistic learning (Zgrzywa-Ziemak and Kamiński, 2009):

- team members reformulate individual and collective views,
- the team becomes less isolated as information flows freely from and to it,
- experimentation both individually and in teams is frequent and bold,
- team members seek opinions that may be “uncomfortable” or challenging.

Since, as mentioned in the Introduction, project implementation is seen as an enabler of organisational learning, synergistic learning should apply to both the project team and the entire organisation. It is easy to see that this will not be possible without a free flow of information and the project team should not be isolated; it should be allowed to interact with the rest of the organisation in numerous ways. Such interactions will occur primarily (Barker and Neailey, 1999, Huber, 1999) in a matrix structure, when the project team is at the place of delivery of

project objects (such as being in constant contact with the customer), in project teams whose composition is interdisciplinary, when project teams are deliberately including people who are well-connected with others in social networks, bringing different ways of thinking and acting to the project team.

However, the learning of the project team initiated by the interactions described above will only be possible if it is supported by values that foster change (Kamiński, 2021). As Haffer and Glińska-Noweś (2013) claim, cultural values such as openness, willingness to experiment and improvise, team spirit based on trust, respect and cooperation, empowerment of employees, openness to change in an interactive, systemic learning process that occurs in the relationship with external stakeholders and – most importantly – in the mutual interactions among the organisation employees are of particular importance in the formation of a learning organisation.

Summing up the above considerations, the following research hypothesis was formulated: The more the interactions of the innovative project team with the rest of the organisation are fostered and the norms and values of the project team are conducive to learning, the stronger the learning of the project team.

3. Research methodology

In order to demonstrate the research hypothesis, the culture metaphor of organisations will be used, according to which organisations can be treated as cultures. They can be considered socially conditioned both at the level of social groups, ties, power mechanisms, and communication as well as at the level of their products, i.e., values, norms, and social patterns. This analogy is developed in the strand of organisational culture and cross-cultural management (Sułkowski, 2004). In such a metaphor, the project team will have its own norms and values. It can be treated as an organisational subculture, whose norms and values will be all the more different from the organisational culture, the more intensive the learning will be in the project team, which, while carrying out a unique project, will have to create and verify new ways of doing things (Kamiński, 2021). This is in line with, among others, the views of Schein (2017), who maintains that organisational culture results from learning while solving problems of external adaptation and internal integration. Thus, in order to verify the research hypothesis, it was assumed that the more differences regarding norms and values between the project team and the organisation, the stronger the learning in the project team. Seven dimensions of organisational culture were used to measure norms and values. They include (Hopkins, Hopkins and Mallette, 2005): employee autonomy, formalisation of activities, support provided to subordinates by a superior, identification of employees with either the project or the organisation, reward for performance, acceptance of conflicts among employees or teams, and acceptance of risk. So, in this case,

a ready-made model described by the cited authors (seven questions about organizational culture along with a five-point Likert scale) was used. To determine the strength of the project team's learning, a Student's t-test for dependent groups was conducted, which makes it possible to compare two variables measured in the same sample. This meant comparing the arithmetic mean of the values of each dimension of culture in the organization with the arithmetic mean of the values of these dimensions of culture in the project team. The presence of a statistically significant difference indicates the existence of project team learning. The project team's learning will be stronger the more dimensions (up to a maximum of seven possible) have this statistically significant difference. With one statistically significant difference, project team learning is weak, and with seven statistically significant differences, it is very strong. The absence of statistically significant differences, on the other hand, means that there is no project team learning.

In turn, the status of the project in the organisation, the dependence of project team members on project teamwork (understood as taking a salary for project work, tying one's career to project work, the length of time spent on project teamwork), and the number of methods of communication in the organisation were considered to be factors fostering interactions. These three factors (measured using a Likert scale) were combined into a single variable.

Finally, participation in development-oriented training, personal mastery, and motivating project team members for self-development and improvement were identified as factors that foster learning among project team members. Again, these three factors (measured using a Likert scale) were combined into a single variable.

The survey covered companies (from different industries) whose *core business* was repetitive in nature (their *core business* is not project realization) and in which project teams using classic project management methodologies (e.g., PRINCE2, PMI, IPMA) were active. The main reasons for selecting the traditional approach to project management have been identified as being, first and foremost, clearly defined project goals, a well-defined organisational structure or restrictiveness of management with regard to how key project processes are implemented (cf., for example, (Wyrozębski, 2007; Kopczyński, 2014)). Therefore, the questionnaire developed for the study was addressed to project managers of various enterprises (taking into account the industry, size, and form of ownership of the enterprise). However, only data from questionnaires meeting the limitations mentioned above were used to verify the hypothesis. The objects of the study were companies operating in Europe and the USA. In Europe, project managers available through LinkedIn were surveyed, as well as project managers who were met while working with industry or while taking postgraduate classes (in Poland, these were students of the Polish-American Business School at Wrocław University of Science and Technology, and in Germany, graduates of the Project Management

course at TU Dresden – IHI Zittau). The questionnaire addressed to project managers in Poland was written in Polish, and to other project managers in Europe in English. Primarily project managers from Poland, Germany, the UK, the Netherlands, and France participated in the survey via LinkedIn. In the US, however, the surveys were conducted through SurveyMonkey, a service that professionally implements surveys in companies. The requirements in connection with the survey were the same in the US as in Europe, both in terms of company characteristics and respondents.

The survey was conducted from December 2019 to January 2020. The study results were obtained from 106 project managers from companies operating in Europe and 281 from the USA. This gave a total of 387 surveys. Subsequently, 98 questionnaires were selected as those which describe projects that were identified by respondents as groundbreaking and – at the same time – those in which project teams were characterised by norms and values fostering learning.

4. Verification of the research hypothesis

Thus, in the case of the research hypothesis, the relationship between how conducive the project team's interactions with the rest of the organisation are and the learning of that team is considered. It is supposed to manifest itself in the number of differences with respect to the norms and values found in the project team compared to the rest of the organisation. It is presumed that the project team's interaction factors will be accompanied by strong project team learning. The learning of the project team should be weaker when the factors are not conducive to interactions with the rest of the organisation. As mentioned above, the status of the project in the organisation, the dependence of project team members on project teamwork, and the number of methods of communication in the organisation were considered factors fostering interactions. These three factors were aggregated into a single variable; two ranges of its values were identified to characterise innovative projects in which the project team's interactions with the rest of the organisation were fostered. The observations collected in the study were assigned to these two ranges, and the number of differences was calculated with respect to the norms and values (Table 1).

Based on the results, the research hypothesis cannot be accepted. This is because fostering the project team's interactions is associated with fewer, rather than more, differences in the values of the average culture dimensions, as originally expected. This means weaker learning for project teams, in which they are fostered to interact with the rest of the organisation, compared to project teams that are isolated. Thus, empirical results support the isolation of innovative projects.

Table 1. Fostering the interactions of the project team with the rest of the organisation and differences in mean values of culture dimensions in the dependent samples – the organisation and the project team

Dimensions of culture	Interactions are not fostered	Interactions are fostered
	n = 35	n = 63
	difference	difference
Employee autonomy	0.600*	0.460*
Degree of formalisation of activities	-0.987*	0.246
Support provided to subordinates	0.229	0.444*
Identification with the organisation/ project team	0.600*	0.704*
Reward for performance	-0.114	0.032
Acceptance of conflicts	0.029	0.143
Acceptance of risk	0.514*	0.206
Number of statistically significant differences between the organisation and the project team	4	3

Note: * The difference in mean values is statistically significant at $p = 0.05$.

Source: the authors' own study.

The results of the study indicate that the team implementing an innovative project that is not isolated:

- either takes over the norms and values of the organisational culture, learns as a result of adapting to the organisation and creates few new norms and values specific to the project being implemented;
- or the organisational culture takes on certain norms and values of the project team but this would only be likely in the case of large projects and teams that can influence the entire organisation with their presence.

This will mean that in organisations whose *core business* consists of repetitive activities and, consequently, in organisations that are rather conservative in nature (core business activity does not involve unique projects), the number of interactions between the learning project team and the rest of the organisation should be limited to some extent. The isolation of an innovative project will limit the team's adoption of existing solutions and provide a basis for learning and developing new ways of doing things. However, this does not change the fact that isolating the team that implements an innovative project has its strengths and weaknesses, which both the organisation's management and the project sponsor should consider each time (Table 2).

Table 2. Strengths and weaknesses of isolating a team implementing an innovative project in a conservative organisation

Strengths	Weaknesses
<ul style="list-style-type: none"> – The day-to-day operations of the organisation do not interfere with the implementation of an innovative project and learning. – The isolation of the project allows obtaining a good insight into the situation and problems of the project, which fosters learning. – There is an opportunity for employees to focus on project tasks. – It is easier to manage the project because the manager has exclusive possession of all project resources (and can generate organisational slack). – It is easier to criticise existing solutions in order to come up with one's own ideas. – It is easier to combine new "project" knowledge with the existing "functional" knowledge of members of the project team because it takes place in isolated conditions. – There is an opportunity to better design and implement learning processes. 	<ul style="list-style-type: none"> – They need to build or get used to a new team and a new work environment different from what employees are used to. – More project team members due to the desire to keep the representativeness of the team, which should be self-sufficient. – It is more difficult to exchange knowledge among projects; they become hermetic and – in each one – it is possible to "break open doors". – The project unit is treated as a foreign entity in the organisation. – There is greater resistance to change when the solution was created in "isolation" and is something foreign to the rest of the organisation members. – Possible problems with the authority of the project manager in the rest of the organisation (outside the project team). – The limited back office of the project team as it is generally impossible to shift full resources to the project.

Source: the authors' own study.

5. Conclusions

The above-discussed research, of course, has its weaknesses, which include, first and foremost, a focus on organisations whose *core business* involves repetitive activities rather than unique projects. This may mean that the answer to the question of whether innovative projects should be isolated depends on the nature of the organisation in which the project is implemented. The legitimate question, then, is whether innovative projects should also be isolated in the case of an innovative organisation. Indeed, in business practice, it can be seen that isolating the team implementing an innovative project in an innovative organisation is also justified and has its strengths. These include, for example:

- the inability to disorganise the process of creating a new good or service by not being able to weave additional threads and ideas into the project, often to the detriment of the scope and duration of the project;
- the stabilisation of project-specific and optimal management processes;

- no dilution of the responsibility for the tasks performed by focusing only on the tasks that fall within the scope of the project without the ability to perform tasks in other projects;
- focus on the basic scope of the project and the limitation of the work to its parameters without trying to get the best possible quality, which is not reflected in the requirements of the recipient;
- the increase in the motivation of the project team based on creating a project ethos.

Naturally, these strengths seem to offset to some extent the weaknesses associated with isolating an innovative project in an innovative organisation. They include:

- more difficult interactions with other functional areas outside the project and the need to work exclusively with employees assigned to the project;
- a more difficult exchange of knowledge among projects because they are hermetic and – in each – it is possible to “break open doors”;
- a hindered flow of information and ideas, which would allow reducing project risks, taking advantage of opportunities or redefining the scope of the project early enough to take advantage of business opportunities arising at the organisation level.

Of course, a mere analysis of the strengths and weaknesses of isolating innovative projects in innovative organisations does not allow offering a clear recommendation on whether to do it or not. In order to be able to give a clear answer to the question posed in the title of the article, the authors would have to conduct further empirical research in the area under discussion, this time involving innovative organisations that, so to speak, make their daily living on projects.

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