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Unit of Study: INFO6010 Advanced Topics in IT Project Management

Assignment name: Assignment 1

Lecture time: 6:00pm Friday

Lecturer name: Bernard Wong

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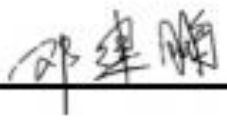
Signed  **Date** 15/10/20

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Exploring the Main Factors Affecting the Success of the Project

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Content

Introduction

In the process of exploring the factors that affect the success or failure of the project, the most critical step is to determine the definition of the project success firstly. Historically, project success refers to projects that can achieve their goals within budget and schedule. This evaluation standard has always been the most common measurement standard in many industries. However, in fact, for different types of projects, the criteria for success are entirely different and may change over time. At the same time, due to many managers can not identify the difference between project success and project management success, it is necessary to distinguish between them when analyzing influencing factors of project success.

The loss caused by project failure is huge. A PwC research of over 10,640 projects found that only 2.5% of companies successfully completed 100% of their projects, and those failed IT projects cost the US between $50 billion and $150 billion annually (HARDY-VALLEE, 2012). As of 2018, the average project cost of IT project exceeds the budget by 27% (Project Management Institute, 2018). In addition, at least one in sixth of IT projects become a "black swan", with cost overruns by 200% and schedule overruns by 70% (Flyvbjerg and Budzier, 2011). Therefore, identifying the factors of project success to avoid failure and make clear the role of project management in achieving project success is necessary.

This paper will analyze the factors affecting the success of the project from two aspects: project management, as well as culture and organizational climate. In addition, since the success of project management is often linked to the results of the project, the first part will start from the definition of these two terms, describing their relationship and the factors that affect their success. For how the project management affect the project success, this paper will explore it from two parts: managers and risk management.

1. Project Success and Project Management

1.1 Project and Project Management

Nowadays, project management has been regarded as an effective tool for dealing with complex activities. Although different project management techniques have been widely accepted in the fields of time, cost and quality planning and control (Munns and Bjeirmi, 1996), the distinction between project and project management remains confusing for many managers.

A project can be considered to be the achievement of a specific objective, which has clear start and end dates and involves a range of resource-consuming activities and tasks (Munns and Bjeirmi, 1996). It is common a long-term task, involving the entire project life cycle rather than the development production cycle. Different projects can be divided into different types according to their expected outcomes, which can be the production of a new product or the development and deployment of a new technology. In contrast, project management can be defined as the process of controlling the achievement of project objectives (Munns and Bjeirmi, 1996). It is based on a set of framework or technology to control the project plan and process, and terminates after the project is delivered. Therefore, it is a short-term task, which is different from the project.

Since projects and project management have different focus and definitions, they will also have different success criteria. Before exploring the impact of project management on project success, the definition and relationship between project success and project management success must be clarified.

1.2 Project Success and Project Management Success

Project success criteria are different due to different size, complexity, and target (Müller and Turner, 2007), therefore, it is difficult to have a set of universal criteria to judge the success of the project (Westerveld, 2003). According to the five layers structure of project success definition presented by Robert Goatham (2020), a project is successful if it achieves all the agreed "project goals"(the tier 4 definition), which is also the classic textbook definition. However, due to the budget and schedule are so visible that many projects are judged by tier 2 and tier 3: If the project can be completed within the agreed budget and time and meet the expected quality standards, it is a success (Goatham,2020). The judgment result based on these standards may change over time. When the Australian government decided to construct Sydney Opera House in 1975, the initial budget is $7M and the duration is 5 years. In the end, the project cost $110M and took 13 years (Interesting facts about Sydney Opera House, 2020). The project can be regarded as failure at that time according to tier 2, 3 and 4. However, it is obviously that this project has created tremendous value so far and become an icon of Australia. This situation corresponds to the tier 5: A project is successful if the product it produced can generate significant net value for the organization after the project is completed (Goatham,2020).

According to the definition of the project, it can be found that its important content is profitability, competitiveness, and market ability. The definition of project management shows that it focuses on the goal as well as the efficiency and effectiveness in the process of achieving the goal. In terms of function, the project management provides specific plans, methods, and success criteria for

project success. Therefore, project management and its technology can be considered as a subset of the project (Munns and Bjeirmi, 1996), and it is an crucial factor in achieving the success of the project. However, in many cases, the success of the project is not only determined by this factor, which shows that the success or failure of project management is independent of the success or failure of the project. In the case of the Sydney Opera House, even though the project management is failure, the project is still successful because it meets higher and long-term goals.

1.3 The impact of project management on project success

1.3.1 Project Manager and Project Success

Project manager is a critical success factor in a project (Hoxha and McMahan, 2018). As the core of the project organization and team, the project manager provides direction, support, and assistance for solving interpersonal and organizational problems (Rauniar and Rawski, 2012), and ultimately ensures that the goal is achieved is the main responsibility. A qualified project manager can promote the development of a project-centric culture in the organization, and will also serve as a bridge between internal and external communication within the organization (Mir and Pinnington, 2014). For project managers of IT projects, in addition to traditional project management capabilities, strong learning capabilities to adapt to continuously updated technologies are also necessary. At the beginning of the project, the project manager has the responsibility to determine the success criteria of the project based on the project background and requirements, and use this as a guide to make decisions and contact customers.

The leadership style of the project manager plays an important role in the success of the project (Aga, Noorderhaven and Vallejo, 2016). Yang, Huang and Wu (2011) all state that there is a positive correlation between project manager's transformational leadership and project success. Project managers who adopt transformative leadership can improve team communication, enhance team collaboration and team cohesion (Yang, Huang and Wu, 2011). Meanwhile, team building is a key factor for project success, and it is positively related to project performance (Aga, Noorderhaven and Vallejo, 2016). Therefore, it can be considered that transformational leadership has a direct and indirect impact on project success (Yang, Huang and Wu, 2011). Organizations need to promote the development of transformational leadership styles for project managers.

In addition to the personal abilities of the project manager, the support of the middle and senior managers in organizations as well as the training and

education for project managers are also critical (Carvalho, Patah and de Souza Bido, 2015). A relevant research shows that trained project management staffs have a relatively high positive impact on project success (Mir and Pinnington, 2014). Those trainings are not only about the hard skills such as appropriate framework adoption but also soft side. Carvalho (2014) emphasizes the importance of soft skills in project management, especially related to communication and stakeholders' management and skills. Communication involves in all stages of the project life cycle, including identifying stakeholders, making plans, assigning tasks, adjusting stakeholders' expectations and reporting performance (Carvalho, 2014). For implementing projects successfully, it is necessary to combine both hard and soft skills.

1.3.2 Risk Management and Project Success

Risk management is another factor affecting project success. As a critical part of project management, the function of risk management system can be divided into two sections. In the instrumental context, risk management as a management tool is used to collect and analyze information to support decision-making in project execution (de Bakker, Boonstra and Wortmann, 2010). In this process, risk management can used to help staffs measure plans and reality, and show predictable behavior (de Bakker, Boonstra and Wortmann, 2012). That is a direct impact on the success of the project. The other risk management approach is the evaluation approach. This approach regards risk management as an analytic process to identify the risk factors. Information which collected in this process will be recorded and be used on later projects (de Bakker, Boonstra and Wortmann, 2010). That is an indirect impact on the success of the project. Meanwhile, project risk management also can contribute to project success through communication function (de Bakker, Boonstra and Wortmann, 2012). During the execution of risk management activities, the interaction between stakeholders can create communication effect and further affect project success.

Although risk management has a positive affect on project success, in order to achieve that, managers do not need to perform completed risk management procedure. According to the research of de Bakker, Boonstra and Wortmann (2012), individual risk management activities can also contribute to project success. They focus on seven different risk management activities in their research: risk control, risk reporting, risk analysis, risk management planning, risk registration, risk identification, and risk allocation. Risk management activities are generally directly related to actions. Almost all stakeholders think the contribution of risk identification and risk allocation to project success is much higher than other risk management activities. Both activities can affect the actions people take in the project and staff's general views on the project (de Bakker, Boonstra and Wortmann, 2012). For other activities, although they

all can generate affect to prompt project success, risk control as a management activity of the situation as-is, has the least impact on the success of the project (de Bakker, Boonstra and Wortmann, 2012). As the risk manager, it is suggested that to pay more attention on risk identification to prompt risk information exchange among stakeholders and managers.

2. Culture and Organizational Climate

Organizational climate is about employee's awareness of certain activities and procedures in a certain environment and those behaviors that may be rewarded, supported, and expected (Spector, 2019). Organizational climate is gradually formed through continuous communication and interaction among employees. Gray (2001) state that in a positive organizational atmosphere, team members can "achieve their goals" by guiding their efforts to the "best". Meanwhile, staffs can participate in the formulation and realization of project goals to the great extent, in this climate, they are willing to present their suggestions and ideas which can contribute to advanced decision making (Gray, 2001). Once the suggestion is adopted, staffs will get inner satisfaction. Personal happiness and satisfaction play a vital role on improving employee motivation and achieving project success.

The leader of an organization has a direct influence on the organizational climate (Gray, 2001). Climate is a strategic decision. Project manager should identify what is important and what should be emphasized based on project category and goal. Also, the personality of the organization's leaders has an impact on organizational climate. For example, friendly leaders will make employees want to communicate, leaders who prefer to emphasize high productivity, personal goals, and personal responsibility can arouse employees' motivation for achievement. Therefore, top managers should consider the character of project managers when allocate projects.

Although the terms culture and climate are generally used interchangeably, but they are not the same concept (Gray, 2001). Organizational culture is the values and business philosophy with organizational characteristics that are gradually formed within the organization and are recognized and observed by all employees (Kendra and Taplin, 2004). That is formed based on the experience of all members. Organizational culture ensures that there are some common values and beliefs about project management among members of the organization. Those value and beliefs allow strengthen the cohesion of members as well as improve execution efficiency and effectiveness. At the same time, because there are different subcultures and cultural values between organizational levels, in order to establish a strong project management culture, organizational executives should understand those values and strive to develop a set of shared values related to project management firstly (Kendra and Taplin,

2004). A strong project management culture is a key factor which affect project success.

3. Discussion

HB280 document from Standards Australia (2006) summarizes specific recommendations based on four sections (benefits, risk, management, disclosure) for the board of directors and senior management and explain the importance of those recommendations. In HB280 document, authors analyzed five real cases and presented the following main suggestions which is corresponding to perspective of this paper:

The board must ensure that the proposed benefits of the project are aligned with the strategic direction of the organization before approval. According to the case of SKYHIGH organization, without the supervision of the board, project sponsors may achieve success at all costs, even redefine goals and spend more money.

The board of directors and senior management must not only establish a strong risk management and control system, but also be responsible for ensuring their effectiveness. For boards, they should spend time understanding the effects which brought by unexpected risk and resolve conflicts of priority tasks.

4. Conclusion

It is obviously that project management is the key factors of project success. Project management is to plan, organize, monitor, and control all aspects of the project in a continuous process to achieve project goals. Successful project management can increase the probability of project success, although it cannot prevent project failure. At the same time, failure of project management does not mean that the project will fail, as the example of the Sydney Opera House mentioned above. Therefore, it seems inappropriate to hold the project management team fully responsible for the success or failure of the project.

Meanwhile, project managers and senior executives play a critical role in achieving project success. For senior executives, choosing appropriate project manager is quite important. An excellent project manager will define the project success criteria at the beginning of the project, adjust appropriate strategies based on the situation during the project process, strengthen the communication between the internal and external of project, and form a good organizational climate. At the same time, risk management and organization climate will also affect the project success. The good organizational climate and culture can increase staffs' motivation and satisfaction which can improve the

efficiency and effectiveness of project execution.

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