The Rational and Behavioral View in Project Management

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Abstract. The purpose of this paper is to critically analyze the application of rational and behavioral views in project management. The result of this case study illustrates an optimized combination of rational and behavioral standpoints serves best in project management in response to complexity, uncertainty and ambiguity of project environment. The analysis demonstrates that rational view based on knowledge provides a quantitative method to improve the successful rate of project but has limitations in the complex context where are unable to adapt to and not consider people issue, whiles the behavioral view such as biases underlying belief and values, emotional intelligence and motivation mainly focuses on unforeseen risks that people results in, which is easier to be in response to uncertain situations but lack measurability, objectivity and logic. Through comprehensive and systematical analysis, the optimized combination of rational and behavioral views that puts the technical issue and people issue together into project management might be more effective.

Introduction

The 20th century to the present witnesses the dramatic evolution of modern project management. It is a rational perspective that mainly focuses on technical aspects of management and the application of models or methodologies involving PMBOK Guide which is the description of what “should” be done from inception to closure in project management[1] (Shore, 2008). There is, however, a behavioral view that emphasizes on human aspects of management and what people or organization “actually” do[1] (Shore, 2008). The paper critically examines the application of rational and behavioral views in response to complexity, uncertainty and ambiguity in modern project management. Some[2] (Ackah, 2016) argue that the rational perspective is the most effective scientific method to provide a guideline for project management, while others[1] (Shore, 2008) contend that the success of project management requires the behavioral view. This paper will suggest that an optimized combination of rational and behavioral standpoints serves best in project management, which is intended to maximize the rate of success about project in different ways. In this paper, firstly, the effectiveness of technical-based rational view would be analyzed, next, the shortcoming of rational view that lack of people management and adaptability of complex project environment would be pointed out, thirdly, the people-based of behavioral view would be illustrated critically, finally, the optimized combination of rational and behavioral standpoints that put the technical issue and people issue together into project management would be suggested.
Rational View in Project Management

The Effectiveness of Technical-based Rational View

The rational perspective of project management that is characterized by traditional, mechanistic, objective, and measurable traces specific rules, procedure and process to achieve tangible deliverables, which avoids errors and enhances the successful possibility of project in technical level [2] (Ackah, 2016). In particular, traditional and rational project management methodology based on knowledge that could be tailored and employed in project environment plays an integral role in the efficiency, problem-solving and improvements of results. For example, PMBOK (A Guide to the Project Management Body of Knowledge) is a classic representative of rational view. There is overlap among Baccarini [3] (1999), Matos [4] (2013) and Lopes [4] (2013), as they all hold the fairly similar view that PMBOK provides a tool, technique, principle and framework for project team to measure feasibility, draw up a plan and control risks within time, cost and quality constraints during initiation, planning, execution, monitoring and controlling and closure process in order to meet the needs and expectations of stakeholders and improve the probability of successful project, which has been recognized as the use of a rational viewpoint in project context. In additional, PMBOK that is defined as “good practice” divides project management into ten knowledge area and five process group makes project management efficient, straightforward and linear through the utilization of template, standardized scheduling or budget planning and control techniques without any changes [5] (Špundak, 2014). It is worthy of mentioning that keeping every task in order in the planning phase is essential for sustainability and success of project because it is not uncommon phenomenon that delay and overrun leads to failure. Hence, it is indispensable to apply rational view in the lifecycle of project management in technical ways.

The Shortcoming of Technical-based Rational View

In contrast to above all of these authors, Loo [6] (2002) highlights that rational view of project management has its limitation and is not capable of fitting all except technical aspects. Firstly, the rational perspective that is featured by hierarchical and linear structure critically concentrates on theory not practice, which is not flexible and has inability to appropriately reflect complexity, irregularity and uncertainty of contemporary project context [5] (Špundak, 2014). Secondly, the traditional and rational project management methodology is widely criticized by neglecting human and behavioral factor that is the main contributor of uncertain project environment, which has significant influence on the ultimate outcome of project [7] (Belout, 2004). Clearly, the rational view is a scientific and quantitative tool for effective project management which could plan all of stages and reduce the rate of failure of project in technical ways, while people management is the essence of project management. Therefore, the project management is not just related to technical issue but people factor which is intended to take behavioral view into consideration.

Behavioral View in Project Management

Culture and Personal Biases

From behavioral point of view, it is a people-based position that stresses on how people act in the organization, which is theory-in-practice. As pointed out by Shore[11] (2008), a behavioral view that focuses on how leader makes decisions in the project management and what people or organization “actually” do in the process, which considerably impact the results of project. In
terms of how leader makes decisions, there are culture and personal biases to be introduced. Shore [1] (2008), together with Keil, Depledge, Rai[8] (2007) agree with the point that cognitive biases underlying culture including groupthink, overconfidence, selective perception, illusion of control and so forth plays a significant effect on decision-making process in project management. For example, as stated by Shore [1] (2008), Columbia shuttle project encountered failure on February 1, 2003 due to the personal biases behind the politics and culture of NASA, which led to overconfidence and mismanagement. Furthermore, the project leader made false decision due to overly conservatism that overlooked the available data from previous experience. Hence, it can be clearly seen that cognitive bias underlying culture which includes belief and value system is the reason of the different behavior of project manager. As the modern project is being considered globalized and multicultural, if the project managers are not able to recognize their own belief and value that results in personal biases, the project management might make unprejudiced or false decisions and even leads to failure of project.

Table 1. Cognitive Biases.

<table>
<thead>
<tr>
<th>Cognitive Biases</th>
<th>Competing Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available data</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Conservatism</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Escalation of commitment</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Groupthink</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Illusion of control</td>
<td>Internal focus, stability</td>
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<tr>
<td>Overconfidence</td>
<td>Internal focus, stability</td>
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<tr>
<td>Recency</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Selective perception</td>
<td>Internal focus, stability</td>
</tr>
<tr>
<td>Sunk cost</td>
<td>stability</td>
</tr>
</tbody>
</table>

Emotional Intelligence and Motivation

In relation to what people or organization “actually” do in the process, there are emotional intelligence and motivation to be considered. EI (Emotional Intelligence) is a soft skill that could be learned by themselves to manage their own and other’s feelings and emotions in order to provide a proper guide for their thinking and behaviors [9] (Salovey & Mayer 1990, p.189). Furthermore, both Rezvani[10] (2016) and Clarke [11] (2010) hold the similar opinion that the level of work performance would be affected by emotional intelligence. In practice professional, if the staffs are able to manage their own emotion and understand other’s emotion, the staffs would have a rational attitude to communicate with internal and external stakeholders to meet their needs or expectations, which facilitate the achievement of organizational and project goals. Moreover, if the project managers possess a high level of emotion intelligence, the leaders are easily to locate and understand their situations, keep close relationship with team members and motivate them in the routine work, which is effective to promote teamwork in project context. Based on a Hierarchy of Maslow Needs Theory, there are five levels involving physiological needs, safety and security needs, belongingness and love needs, esteem needs and self-actualization needs. The higher level of needs of staffs could be met, the better work performance could be produced [12] (Kim & Shin 2015). In the real project work, if the project managers use their own high emotional intelligence to satisfy esteem needs and self-actualization need of team members, which is a kind of cost-effective way to stimulate teambuilding and to produce high productivity in the project management. In brief, the behavioral view of project management is related to people management and relationship
building in project teams. In project management framework, the behavioral view is suitable for human resource management and stakeholder management, which could minimize the unforeseen risks produced by human and maximize the opportunity of success in active ways. However, the behavioral view, unlike rational view, could be subjective and variable and could not be measured by tools or techniques due to the people issues. Therefore, the rational approach could be introduced into behavioral view to measure the work performance.

Figure 1. Hierarchy of Maslow theory.

Discussions and Conclusions

This paper has considered the application of rational view and behavioral view in project management. It has been argued that which rational view or behavioral view is more effective to increase the rate of success of project. The rational view and behavioral view are the opposite sides of project management. The rational view based on knowledge and techniques provides a scientific methodology that could precisely measure the scheduling and budget in planning phrase but has limitations in the complex context where are unable to adapt to and not consider people issue, while the behavioral view such as personal biases underlying belief and values, emotional intelligence and motivation mainly focuses on unforeseen risks that people results in, which is easier to be in response to uncertain situations but lack of measurability, objectivity and logic. Through a comprehensive and systematical analyze, an optimized combination of rational and behavioral standpoints would be better for project management.

Limitations and Implications for Future Studies

There are a few gaps in this research such as inadequate academic sources, small-scale empirical analysis and uncovered data measurement and analysis which might not be an objective argument and might not reflect the general situation. Furthermore, the limitation of behavioral view could be explored deeply. However, the analysis of rational view and behavioral view might be comprehensive both positive and negative sides. Overall, it appears that the rational and behavioral view might be applied together in different ways in the project management.
References


