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A CONTINGENCY THEORY PERSPECTIVE TOWARDS PROJECT MANAGEMENT CONTROL SYSTEM

Abstract

The success of a project mainly depends upon meticulous planning of such variables as cost, scope and labour. The importance of project management has gained considerable importance recently in both small-scale enterprises and large multinational corporations, which has led project management to be regarded as a critical constituent of enterprise performance. The implementation of a project as planned is only possible with the help of a control mechanism. Recent research indicates that projects that fail to yield intended outcomes lack appropriate control mechanisms. Similarly, research findings also confirm that those projects that have control mechanisms contribute to overall performance increases. Contingency theory outlines that the conditions surrounding each enterprise are unique; and it is highly important that each enterprise designs its own control mechanism based on its organizational structure and other unique characteristics instead of adopting universal, one-size-fits-all solutions. Related literature points out that integration of contingency theory perspective into project management control system design helps increase enterprise performance. In this regard, the current study both investigates project management from the perspective of contingency theory and undertakes a theoretical analysis of the effects of contingency-based project management control on project performance.

Keywords: Project Management, Contingency Theory, Management Control Systems, Project Performance

Jel Code: M19, M49

PROJE YÖNETİM KONTROL SİSTEMLERİNE YÖNELİK OLARAK KOŞULSALLIK YÖNETİM YAKLAŞIMI

Özet

Proje yönetiminin önemi, son zamanlar sadece küçük ölçekli işletmelerde değil çok uluslu büyük işletmelerde de önem kazanmıştır ve yaşanan bu değişimler, proje yönetiminin kurumsal performansın önemli bir parametresi olmasına neden olmuştur. Bir projenin planlandığı gibi uygulanması ancak kontrol mekanizmalarının yardımı ile mümkündür. Literatürdeki çalışmalara göre, istenilen sonuçlara ulaşamayan projelerde herhangi bir kontrol mekanizmasının olmadığı görülmüştür. Öte yandan, yine literatüre göre, kontrol mekanizmaları, projelerin genel performans artışlarına katkı sağlamıştır. Koşulsallık teorisi, her bir işletmeyi çevreleyen koşulların benzersiz olduğunu ana hatlarıyla belirtmektedir. Koşulsallık teorisine göre işletmeler, evrensel ve her işletmeye uyan tek boyutlu çözümleri benimsemek yerine organizasyon yapısına, örgüt kültürüne ve içerisinde bulunduğu sektörün dinamiklerine göre kendi kontrol mekanizmasını tasarlamalıdır. Literatürdeki çalışmalara göre koşulsallık teorisinin proje yönetiminde kullanılan kontrol sistem tasarımlarına entegre edilmesi durumunda, kurumsal performansı artmasına yardımcı olacağına işaret edilmektedir. Bu çalışma kapsamında, mevcut proje yönetimi ve koşulsallık literatürü incelenmekte ve proje yönetimi kontrol sistemlerine koşulsallık teorisinin entegre edilmesi durumunda proje performansında artış yaşanacağına dair teorik bir analiz gerçekleştirilmektedir.

Anahtar kelimeler: Proje Yönetimi, Durumsallık Yaklaşımı Teorisi, Yönetim Kontrol Sistemleri, Proje Performansı

Jel Kodu: M19, M49

1. INTRODUCTION

Project can be defined as achieving intended outcomes by combining a set of activities that have been analysed and predetermined in line with labour, duration and cost; and the feasibility of which has been tested; in order to offer solutions to a problem or utilize an opportunity. Based on this definition, project management is a process that includes planning, implementation and control with the purpose of achieving predetermined outcomes. Recent research highlights the significance of project management in highly competitive and complex business environments and indicates that project management has become a crucial asset that provides enterprises with a competitive edge (Rezania et. al, 2016; Maylor, et. al, 2006).

Project management inherently includes phases like planning, implementation, control and taking necessary precautions. It is critical that the processes involved in a project, which is the cumulative outcome of predetermined and planned activities, be controlled by a certain system and necessary precautions be taken so that anticipated risk factors can be eliminated.

Particularly in large-scale projects that require effective management in the presence of time constraints, project teams can consist of various sub-teams. Additionally, these teams can operate in different physical locations all over the world. Such situations, along with the necessity of dealing with time, cost and labour constraints, have led to the emergence of effective project management control mechanisms (Ghazvini et. al, 2017). The main goal of project management can be summarized as managing the risk of not being able to complete the project within the predetermined boundaries (etc. time, cost, labour) (Ghazvini et. al, 2017).

It is unlikely to envisage all possible risks that may emerge while implementing a project. A project inherently incorporates two types of risks. The first are those risks that cannot be anticipated. As in the case of R&D and innovation projects, the project outcomes may fail to live up to predetermined standards even though all activities are performed flawlessly and in a timely manner. The second type of risks are those that arise due to a failure to effectively manage external variables involved in the implementation process. Bringing second type risks under control; implementing alternative plans if they still emerge; and controlling the whole project based on a predetermined system are only possible thanks to a project control system. The current study is intended to present a meta-analysis of the effects of designing a contingency theory-based project control system on project success and performance.

2. LITERATURE REVIEW

2.1. Project Management Control

Projects inherently consist of certain and complex activities and steps. Project coordinators are those individuals who are responsible for successfully management and implementation of these complex processes within the predetermined time and budget constraints, also in line with customer needs (Saynisch, 2010). Therefore, project coordinators must have a control system to overcome uncertainties and potential challenges (Rozenes et. al, 2006).

A project intended to be implemented in an enterprise should be monitored and controlled by means of a control system appropriate for the enterprise and the project (Thomas et. al, 2008). The successful completion of a project is heavily dependent on precise planning of project duration, cost and activities; determining all possible risks; and having a well-designed control system (Datta and Mukherjee, 2001).

It is crucial to utilize various control systems in project management in order to be able to check whether intended project targets have been achieved; to monitor the process and performance; to determine possible changes arising in the process; and to implement these changes (Kurşunoğlu, 2017). The primary reason why a control system is integrated into project is that it enables us to ensure that the project is smoothly maintained to attain its goals and to detect any possible situation that may hamper planned activities.

Monitoring and assessing project performance has been one of the highly regarded research agendas recently (Rezania et. al, 2016). Such variables as project team behaviours, outcomes of operational decisions and facilitation of project target completion are all associated with project performance (Rezania et. al, 2016). Performance management should be supported by an appropriate control system which will allow for a clear and complete performance management (Davila, 2000). Findings indicate a positive correlation between management control and project management performance (Bernroider and Ivanov, 2011). Avison et. al. (2001) indicates that an increase in project performance can be achieved by emphasizing and encouraging control methods.

Another crucial element regarding project management is project budget control. A key factor enabling effective project control is successful budget management (Wall and Boer, 2017). Especially in large-scale, international projects, it is vitally important to monitor and control project budget in line with project plan.

According to Rozenes et al. (2006), the effect of process control on project life cycle is substantial. Their research makes it clear that the main reason for failure in project completion is to a large extent related to the inability to effectively plan and monitor the processes involved; and project management control is of utmost importance in achieving project outcomes. The authors also state that existing literature is mainly focused on the use of control tools such as performance assessment and documentation.

2.2. Management Control System

Although there has been an increase in the volume of literature related to management control as well as an increase in the number of project-based studies; and the use of management control systems in project management has become an important research agenda over the past few years; further research is still needed (Canonico and Söderlund, 2010).

Not only business enterprises but also every single organization needs a controlling mechanism including planning and control activities to achieve its predetermined goals (Yücel and Eren, 2010). Business owners or administrators also conduct a number of controlling procedures in order to decide whether intended outcomes are achieved; processes are completed with the predetermined amount of input; employees act according to specified procedures and suppliers deliver goods in a timely and correct manner. These controlling procedures also inform key actors in organizations about their progress and help them channel employees towards targets.

Based on these organizational controlling processes, activities that are faulty or need changes are detected and measures to eliminate reoccurrence of such issues are taken. Control systems are also needed both to initiate steps towards enhancing employee efficiency and performance and to help inform administrators and employees (Yücel and Eren, 2010).

Multiple definitions of control pose a challenge for researchers to compare and combine control studies (Fisher, 1998). Robert Anthony defines control systems as a process that allows for effective use of resources to attain organizational goals (Hared et. al, 2013). Kloot (1997) defines it as a holistic system that is not limited to budgeting systems but includes all controlling functions including activities within the organization. Management Control System is, in general, a combination of systems that covers a great deal of information about multiple decision mechanisms including customers, competitors, suppliers, market and financial environment; and this official and financial quantitative information is utilized by the management to decide (Chenhall, 2003). In research related to management control, control has been seen to focus on (1) implementation of strategy as planned and (2) the compatibility of actual outcomes and intended outcomes (Fisher, 1998).

The real challenge and uncertainty to define control system in an enterprise is to choose which control systems can provide the best solution and can cater to the needs of the enterprise (Fisher, 1998). Therefore, control systems should be developed in a way that will help management examine information about customers, products and service processes in the best possible way and make strategic decisions accordingly (Chenhall, 2003).

Previous studies reveal that the incompatibility of the implemented management control system with the project and enterprise features can lead to a decrease in project team productivity and innovative ideas, which stem from (1) increased unproductivity, (2) increased managerial uncertainty, (3) increased emphasis on controlling, (4) increased hierarchy and bureaucratization between project manager and team members (Canonico and Söderlund, 2010).

Management control plays a significant role in attaining organizational goals and directing employees towards these goals (Canonico and Söderlund, 2010). As a result of its role in creating synergy among employees and facilitating communication among employees working in different physical locations, management control systems are an indispensable aspect of organization (Long et. al, 2002). Business enterprises need unique control systems taking into account their distinct organizational structures, cultures, sectoral dynamics, internal and external shareholder expectations and management's strategic decisions. Let alone the fact that similar enterprises operating in the same sector need different control systems, even different departments in the same enterprise may need to adopt distinct control systems.

2.3. Contingency Theory And Contingency Based Control System

Another challenge to implement management control systems is to decide what constituents should be present in a control system (Fisher, 1998). Each enterprise designs a control mechanism with regard to its sector, products, customers and market conditions. The development of a project management control in an enterprise is based on the managerial structure of the organization running the project (Wall and Boer, 2017).

An effective project control system specifies what is to be monitored; by whom, when and how. It also makes it clear who will be responsible for intervention in cases of problems, also providing answers to what, where, and when questions. Considering these aspects, a control mechanism must be unique to the enterprise in question and take its specific conditions into account.

As a result of studies conducted on systems approach since 1970s, a new theory called contingency or conditionality approach emerged (Koçel, 2018). The main insight of contingency theory is that ‘the best organizational structure’ belief in traditional or systems approaches is not valid as organizational structure is contextual and based on conditions bordering the organization. The conditions and context present for each organization is the determinant of its ‘best’ organizational structure and control system design (Sarpkaya, 2010). In other words, contingency theory challenges the idea that there exists an optimal control system for all enterprises regardless of the context and conditions. On the contrary, the implementation and feasibility of control systems are highly contextual and heavily dependent on the conditions under which the organization operates (Fisher, 1995).

According to Samagaio et al. (2018), contingency theory emerged out of the compatibility between the characteristics and potential of the enterprise. Contingency based control system suggests that a control system that will be designed and implemented within an enterprise will be unique to that enterprise and related control mechanisms are context dependent (Merchant and Van Der Stede, 2007; Otley, 1980). Studies also hypothesizes that the integration of contingency theory into control systems may also contribute positively to individual performance.

Contingency approach evaluates organization in relation to its internal and external conditions. Therefore, the efficacy of organization is accomplished not because certain fixed models are implemented but because a solid structure is established bridging internal circumstances and external ones (Koçel, 2018). While there are many studies on the origins of contingency theory and its effects on the development and implementation of control systems, studies focusing on the effects on project management control systems are not sufficient.

3. CONCLUSION AND DISCUSSION

In our highly globalized and competitive world, control process, which is one of the management processes in enterprise project management, stands out. The successful completion of projects that are implemented by business enterprises is dependent upon monitoring, assessing and controlling the whole process through which targets are achieved. Control mechanism is an indispensable aspect of project management as it helps project coordinator detect emerging problems during the process, diagnose them and intervene when necessary; and produce alternative solutions in cases of divergences. The lack of management control systems is observed to lead to a deceleration in growth rate and firm failures considering its role in assisting rapidly growing young business enterprises in meeting their information needs.

Besteiro et al. (2015) investigated success factors in project management and identified the desired qualities of a project management system. According to their findings, holding regular project meetings, documenting feedbacks and determining control periods during the project process are important. While common approaches regarding project success, failure, performance and management in previous research was mainly focused on identifying critical success factors, there has been more emphasis on contingency-based studies recently (Hanisch and Wald, 2012).

The implementation of a project management control system based on contingency theory can help analyse potential risks and uncertainties that may emerge in the process and manage factors affecting project success and performance (Hanisch and Wald, 2012). It is predicted that defining control variables and boundaries clearly is the primary step to ensure the success of a contingency based project control system designed with the purpose of increasing project management success and performance. It is thought that the borders of a control system designed for project management shouldn't be either too narrow or too broad; and especially in large-scale projects, it should have sufficient connections with other project control mechanisms.

Another critical point that may affect the success of contingency based project control system is that each circumstance and sub-circumstances are identified (Fisher, 1995) and these circumstances are required to be investigated by means of theoretical and empirical analysis. It is envisaged that this will help facilitate implementation of control mechanisms during the project process.

Contingency theory dates back to the second half of the twentieth century. However, there is not much research on this topic in the literature. Considering the fact that contingency theory is mainly utilized as a sub-theme in project control systems and project control systems are generally investigated in relation to financial control mechanisms, there is a lack of practical research on the subject. The current study stipulates that project management performance can increase when project management systems are designed in line with contingency approach.

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