THE ROLE OF INTEGRATION OF PROJECT MANAGEMENT OFFICE AND MANAGEMENT CONTROL MECHANISMS IN FRONTLINE OF INNOVATION PROJECTS

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ABSTRACT
The frontline of innovation projects includes raising issues and ideas in advance of the development phase of the project. It is discussed as the most difficult phase of the innovation projects and has significant influence on the strategic decisions of the organization. Project Management Office can be determined as an integrated unit at the forefront of innovation projects, based on the theory of management control and organizational design. Based on previous studies, management mechanisms can be considered as leverage to effectively integrate organization. In fact, this mechanism can be used as an alternative or complementary functions of an absent project management office. Based on the results of the examination of three companies, analyzes are presented. It shows that initially the development of management approach begins based on diagnostic systems and border. Then they are followed by serious using of interactive and belief systems, with an emphasis on value-based management methods. Taking advantage of the organizational mechanisms and management companies play an important role in the management of innovation projects.

Keywords: Project Management Office, Management Control Mechanisms, Innovation Projects

INTRODUCTION
Centering upon ideas before official commencement of projects, frontline of innovation projects plays a key role in accomplishment of projects. Frontline has been considered by prior research as the most difficult and disordered phase of innovation projects. It, however, is able to provide the most significant opportunities for improvement of effectiveness of innovation projects in a company. Important strategic decisions associated with target markets, customers’ needs, determination of prices and expected costs, and determination of the most effective technologies in fabrication of new products are all made in the frontline phase (Karlos et al., 2011).

Management contributes to long-term strategic needs through making effective decisions in frontline of innovation projects. Power of management to influence over strategic roles plays an undeniable part in frontline. Although, executive officers enter into the innovation field after design phase in which planning issues and financial obligations reveal (Artto et al., 2008). Alongside attention to management levels of an organization, managerial methods to facilitate making strategic frontline decisions and adopt them in innovative manner are to be taken into account. Participation of management in frontline is significant due to following reasons: provision of new high-quality ideas, transformation of these ideas into tangible concepts and professional opportunities among departments, transference of knowledge among projects and their frontlines (Karlos et al., 2011).

According to the above, project management offices (PMOs) or relevant organizational units are regarded to be key elements in management of innovation projects, particularly their frontlines. Such offices can be more official or unofficial organizational units that may include innovation groups, ideas management, and software systems of innovation projects (Pemsel and Wiewiora, 2013).

PMOs are technical units of an organization that have different roles and responsibilities. A PMO is responsible for supporting, coordinating, and controlling project-relate activities. However, the role of PMO as an organizational unit at frontline of innovation projects is still vague. This study is intended to draw upon managerial control at frontline of innovation projects, supposing that the management control unit is an organizational element which is compared with a PMO. According to prior studies, this is
possible to find alternatives for a PMO through a proper management over some organizational units. In fact, management mechanisms are alternatives for an absent PMO or a complementary thereto, which are addressed based on organizational design theories and management control respecting innovation projects.

Organizational Viewpoint Theory for Integrating Organizational Units
PMO can be regarded as an integrating organizational unit which includes all subordinate bodies of a company to make required coordination among involved units. Although, this is only one way to integrate an organization and managers possess special instruments and mechanisms in order to coordinate and integrate their organizations’ activities, including (Grandori and Soda, 1995):

i. Vertical mechanisms including concentration (assigning one person or subordinate body to make required decisions and collaborations) and standardization (working based on principles, procedures, and plans), both of which being established based on organizational missions.

ii. Horizontal mechanisms, which are mostly grounded on communications rather than missions. Horizontal mechanisms can be either official or unofficial structures.

iii. Information systems are separated groups of integrating mechanisms. They are complementary to vertical and horizontal mechanisms and are seldom to lonely integrating anything.

iv. Social mechanisms, which include encouragement, can be used as integrating mechanisms. Social mechanisms are mostly centered on social harmony of a behavior.

Management Control of Innovation Projects and Related Management Control Mechanisms
Management control and control mechanisms reflect a substantial issue. Management enters into the area for controlling the activities due to some reasons including guaranteeing strategy adoption, directing and impacting on personnel’s behaviors, and making required coordination.

In this article, four management control systems (MCSs) from Simons’ (1994) ‘levers of control’ framework are adopted as a framework to discuss about management control at frontline of innovation projects (Simons, 1995). These four MCSs include: beliefs systems, boundary systems, diagnostic systems, and interactive systems. Such MCSs consist of control mechanisms that represent certain organizational units and assist us to achieve various strategic purposes demonstrating the manner to apply different clusters with different control systems. Each MCS takes advantage of following control mechanisms to direct an organization:

i. Beliefs systems, which consider a strategy as a viewpoint or a collective consciousness. They control an organization through expression of missions, strategic viewpoints, and reliance on values.

ii. Boundary systems determine limits for strategic areas through determination of limitations and clear regulations as well as the risks which should be prevented. Utilizing strategic plans and processing models, boundary systems control the procedures which show standard performance with premade contexts of an organization’s documents.

iii. Diagnostic control systems regard strategies as a plan defined at the top of the hierarchy. They control the organization through determination of duties, budgets, and plans; allocation of human resources; reliance on executive objectives; utilization of guiding teams; generation of reports based on exceptions and principles; determination of supervision criteria; and employment of competing development teams.

iv. Interactive control systems serve as patterns of activity currents through involving the manager in decision-making activities carried out by employees and demonstration of strategies. Such systems control the organization by means of managerial supervision, unofficial visits, telephone calls, special meetings, participatory planning, and management interventions.

Project Management Office and its Responsibilities
In order to get insights into the role of PMOs as an integrating unit, all types of organizational units concerned with a PMO to exert a management control over innovation projects should be identified—whether the PMO is an official organizational unit or an unofficial one. This is important to note that many companies lack a unit so as to call it a project management office.

PMO, as defined by the Project Management Association, is as follows: “Different responsibilities regarding central coordinated administration of at-hand projects are assigned to a PMO. Duties of a PMO
can be ranging from supplying support experiences for project management to assigning executive responsibilities within a project management body (Project Management Office, 2008). PMO’s responsibilities include: management of actions, monitoring and controlling execution of PMO orders, standards and processes, deployment and operation of project information system, management of archiving project documents, customer relationships management, risk databases management and applying them, designing and repairing project scoreboard, organizing and structuring projects, standardizing report applications, preparing a workbook or library from project, making standard reviews on project, providing management supports, reporting project status to higher ranks, providing recommendations to higher-level managers, performing specialized tasks for project managers, directing network and environment, recruitment, selection, evaluation and determination of project managers’ wages, coordinating vendor-contractor relationships, facilitating kickoff meetings, tracking record of changes in project requirements, supporting down-selling of goods, gathering project resources from all across the organization, supervision and control of projects, profit management, allocation of resources to different projects, risk management, evaluation and designing reward systems, measuring and tracking customer satisfaction, participation in strategic planning, monitoring registration of capitals, assessing available capabilities and maturity (Turner et al., 2010).

As indicated above, analyses are expressive of a wide range of duties entrusted with PMO and responsibilities which the Office may assume aimed at fulfillment of organizational needs. Evaluation of Impacts of Management Control Mechanisms on PMOs

To do so, three companies (a), (b), and (c) each possessing at least one hundred employees were taken into account. Following results were gained based on analyzing the questionnaires:

1) Although there is no official PMO, there are different organizational units that play similar roles such as circular, part-time representatives, and innovation project groups responsible for generating new ideas made of middle managers.

2) There are a wide array of organizational units which are lodged within the company and its managerial structures. Results indicate that above-cited management control mechanisms can be considered as organizational units outside the PMO or other legal entities of the organization in frontline management of innovation projects. These units are regarded to be associated with management control: trainers or facilitators to generate opportunities or ideas, innovation project teams, development groups or delegations to choose or decide on strategies and processes of innovation projects, coordinators to apply strategies and processes, ideas management software systems, professional workforces to support executives and employees, etc. Such units are lodged outside the PMO or in a project-based organization and its management structures. These findings develop existing research on PMO aimed at expansion of the knowledge regarding organizational and managerial mechanisms involved in multifaceted management areas.

3) There is an emphasis on systematic information management process, the emphasis which is often reflected by a software system. Companies take advantage of software systems to store data, and usually less attention is paid to completion of different tasks upon innovation projects processes. This highlights the importance of research on application of information systems as a method to coordinate activities conducted in an organization. Results demonstrated that processing software-assisted idea and innovation projects reduces personal interactions and increases social gaps among company’s personnel. Consequently, this is necessary for leaders of innovation projects to make more efforts to facilitate interpersonal interactions within their organizations.

4) It seems that boundary and diagnostic systems are focused in existing organizational units. The emphasis on boundary and diagnostic control approaches are witnessed by means of lodging strategies by managers in their right places as inputs and concentrating on innovation projects concepts as outputs.

5) There was little attention paid to beliefs and interactive systems in existing organizational units. Beliefs systems are rarely used as a control approach via making constant company-society connections. According to achieved results, management is inclined to frontline of innovation projects through imposition of purposes, challenges, and, especially, instructions and resources, whereby it uses boundary
and diagnostic control systems upon assignation of responsibilities to innovation project teams. However, there is a clear dearth of beliefs and interactive systems, since when there is a dissatisfaction reported by innovation/development group representatives, managerial interventions grow to be more dominant than interactive discussions.

6) The path for natural development from boundary and diagnostic systems to beliefs and interactive ones may be available in companies. According to results, the path for natural development of an innovative company starts with emphasis being on boundary and diagnostic systems, and they are recommended to be directed toward beliefs and interactive systems. The goal of developing management controls and activities of the PMO toward beliefs and interactive systems is aimed at finding a common ground for new ideas and innovations. Impacting on beliefs to present common objectives and orientations is of paramount importance for organizations.

7) There is one reason for concentration on boundary and diagnostic systems in management controls in the age interval of participants in innovation/development groups: all individuals are newly employed and, thus, groups are relatively young at initial steps of their occupations. Moreover, innovation is suggested to be institutionalized as a desirable culture in organization aimed at starting an active role in promotion of the organization in order for quick improvement of frontline performance in innovation projects.

Conclusion

This essay draws upon investigation of the role of management control in frontline of innovation projects in organizations. PMO is examined as an integrating unit. Due to application of organizational design and management control theories, integrating mechanisms are focused in PMO. In addition, literature review on frontline of innovation projects and management control in this technical aspect was utilized. Three companies were investigated to offer an in-depth analysis of the PMO. The results gained from the manner managers administer their frontline projects demonstrated that there is wide range of integrating organizational units rather than PMOs in frontline management of innovation projects. These units include: trainers; facilitators; groups; bodies; coordinators to adopt strategies, processes, and technical forces to define innovation projects; and processing innovation projects and software systems of idea management. Based on the behavioral viewpoint framework in management, four management control systems, i.e., beliefs systems, boundary systems, diagnostic systems, and interactive systems, were inferred as proportionate to various strategic objectives.

As a suggestion for future studies, this is proposed to determine control mechanisms impacting on interactive and beliefs systems and investigate the role of horizontal and cross-sectional integrators among ideas and projects.

REFERENCES


