



Control Mechanisms and Leadership Styles: A Conceptual Framework for Innovation Projects

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Abstract

This is a conceptual paper discussing how to undertake innovation in an organization as a project, and the components of the structure and leadership style as factors that support the implementation of the project. It reviews previous research related to organizational, leadership and control theories. It focuses on introducing the role of leadership and control structures into innovation projects. The suggested structure to be adopted is a mixed combination of organic and mechanical structures. This article argues the importance of the existence of a control mechanism to regulate the project; this functions as a set of tools to control the dynamics of the organizational structure in the project. It also reveals transformational leadership as the most suitable leadership style to control and deliver a successful innovation project. At the end, this article proposes several propositions to be tested further in empirical work. Some discussions about optional research methods are also presented.

INTRODUCTION

During the 1960s, Burns and Stalker (1961), together with other contingent theory researchers, claimed that in order to sustain in the market place, an organization must innovate. In the era of closed innovation, organizations relied on their research and development (R&D) people to ignite innovation within the organization, which was considered to be a vital to ensure its sustainability. However, this vital role was reduced by Chesbrough (2003) when he introduced the concept of open innovation, one of whose principles is the adoption of knowledge from external organizations, which can also be interpreted as collaborating with experts (Un & Asakawa, 2015; Dut et al., 2016). Thus, although R&D is critical to an organization, it is not the only source of innovation (Karlsson et al., 2004). In fact, the critical question is: "Is the output relevant to the organization?" When there are significant deviations, R&D activities becomes

useless and could harm an organization in the long term (Brown & Svenson, 1988).

Van der Panne et al. (2003) argued that heavy investment in R&D activities does not take into account any guarantee of successful innovation outcomes. In fact, they found evidence that organizations could experience a serious failure in their R&D investment, which could weaken their position in the marketplace in the future. Given the large risk of failure in its R&D investment, an organization can mitigate this by breaking it down into project-based activities with other organizations that have expertise in this field. The organization can execute monitoring activities for the project (Un & Asakawa, 2015). There are many examples of empirical research into innovations carried out by organizations, on projects that are manageable for the organization. Hence, the presence of an innovation based project should reflect the innovation process being undertaken in the organization (Organ & Greene, 1981; Munns & Bjeirmi, 1996).

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Thus, the project manager has an important role, as the leader of the project (Lichtenhaler et al., 2011). The success of the project depends on the leadership style he/she adopts (Sauer et al., 2001; Barber & Warn, 2005) as well as the control mechanism that is adopted (Kirsch, 1997; Project Management Institute, 2013; Crawhall, 2013). Unfortunately, this paper found no specific papers discussing the best fit for an organizational structure and management style to deliver a successful innovation process that has economic value. Thus, this is the gap this paper intends to fill conceptually. It starts by presenting the concept of how to turn an innovation action into a project and imposes two organizational tools, i.e., a control mechanism and a leadership style to ensure the project's success. Some conceptual propositions are presented as a result of the discussions.

METHOD

This paper explores some classic papers on organizational theory, leadership theory and control mechanisms for a project. Some relevant contemporary issues were added during the review process. This paper further argues that the implementation of innovation within an organization is implemented within the project's management (Crawhall, 2013; Project Management Institute, 2013; Bowers & Khorakian, 2014).

The main issue in this paper is incorporating innovation projects within organizations. This paper uses a number of innovative-related theoretical papers. It addresses the theoretical reviews of these innovations on the causes of innovation, innovation within organizations, and organizational mechanisms associated with implementing innovation projects within organizations, including the leadership function and organizational structure for projects within an organization. In every selected paper, this paper made an effort to link it to the big issue proposed.

First, this paper discusses the control concept for a project, which is derived from the agency theory (Ouchi, 1980; Eisendhardt, 1985), and focuses on being the control concept for the project's information systems with formal and informal control mechanisms (Kirsch, 1997). These control mechanisms were found in a number of papers starting from the first paper from Kirsch to the latest literature study on project control by Wiener et al. (2016), and we identified research gaps from them. This paper departs from the previous literature by stating that a project's

structure should mimic its organization's structural behavior, given that all the organizational activities can emerge during the project, as it functions as an organization within an organization. This paper combines the control mechanisms and leadership style for the implementation of an innovation project. This paper proposes project success measurements to measure the success of the implementation of the innovation. A number of propositions were developed according to the findings in this control mechanism. Finally, some possible research ideas are presented to highlight the future research avenue.

RESULTS AND DISCUSSION

Innovation

The concept of innovation in an organization can be because of a scarcity of resources for the organization. An organization depends on its environment being able to provide the supply of natural resources which the organization needs. At the same time, when an organization has control over important resources for other organizations, the organization can also have power over the other organizations. Thus, power can be created as long as there is a dependency among organizations, which is known as the resource dependence theory (Pfeffer & Salancik, 1978). Due to the scarcity issue, organizations try to minimize their dependence and pursue innovations to reduce their dependence (Burns & Stalker, 1961).

Initially, the concept of innovation by an organization was closed innovation, focusing on its internal organization (Chesbrough, 2004) and mainly undertaken by its R&D department. There are a lot of limitations hindering an organization from innovating everything by itself (Chesbrough, 2003). To do the innovation, Chesbrough (2003) stated the organization would need other parties to support the innovation, as well as to claim mutual benefits. He introduced the open innovation concept (OI) involving external parties who collaborate to create innovations for an organization. He claimed that open innovation largely depended on the "the abundance of available ideas."

Lichtenhaler et al. (2011) revealed the importance role of the leader in preparing the employees of an organization to adopt and implement the OI concept into their organization. The leader and people in organization work together, meaning they should willingly share their knowledge and information with their peers. For

example, the leader should initiate communicative strategies using all the organization's communication channels so that people in the organization are promptly informed with updated information about the innovation project and what is expected of them in that project. Such collaborative practices should encourage innovation on both sides (Un & Asakawa 2015). To make this happen, the leader must champion the open innovation process. The leader must ensure there is a proper incentive system to reduce any negative attitudes toward the open innovation and propose the best organizational structure to impose and implement the innovation project into the organization. Therefore, the style of leadership is one critical factor for the innovation process of an organization.

Furthermore, the role of technology for innovation and an organization's business processes is also instrumental. Technology should be able to convert business processes into structured and standardized processes, which should improve the organizational efficiency as a result. Miles and Snow (2003) proposed the role of technology to create an adaptive process within an organization toward its environment. The resource dependence theory also assumed the existence of the ability to control natural resources that enhance the dominance of one organization (Gudono, 2016). Ergo, the development and usage of information technology for composing corporate strategies is vital. Innovation processes should not be (or be rather difficult to be) segregated from the implementation of information technology. In many cases, innovation should be done side-by-side with information technology, to achieve a successful innovation project (Scaringella et al., 2017).

The need for innovation could be triggered from both internal or external events, at various levels. For instance, a case study from one construction company in the UK showed that the company faced challenges to standardize its business processes due to increasing the number of business units in its organization (internal – firm level) and to elevate the challenge so it could innovate in the global market when it merged with another company, which is a form of either horizontal collaboration (Shibeika & Harty, 2016) or vertical collaboration (Shin et al., 2016) or both of them. In another case, Intel Corporation faced a challenge to move into green production and, since it is a global company with a global product, the challenge was elevated from the firm level to the global level, externally (Cur-

ry & Donnellan, 2014). Challenges to innovate could also start from a country level intervention, as shown by Canadian farmers moving from a protective industry to an open market (Ferguson & Olert, 2015), or among institutions within regional areas (Pasciaroni, 2016). It seems the innovation process would be non-linear (Golestani & Gras, 2014) and the innovation triggers could come from anywhere (Biegelbauer, 2016). There is no definitive pattern to emerging innovations. Once the innovation process has been initiated, organizations should be ready to manage the result.

Damanpour (1991) proposed three innovation categories: technical and administration, product and process, radical and incremental. Administrative innovation is related to changes in an organization's activities, while technical innovation deals with changes to its production methods. In the second category, product innovation deals with how to deliver a new product (or service) to customers, while process innovation is related to improving the process for delivering the product (or service), including job specifications, changes in the information flow, and so on. In the last category, radical innovation is a fundamental change in the nature of an organization's activities and incremental innovation defines innovations that are not done radically, or only introduce change gradually.

There was a lot of research connecting innovation projects to the implementation of information technology in an organization's business processes. For example, Scaringella et al. (2017) revealed that technology spin-offs are critical to increase organizational capacity, to create a balance between market pull and push strategies, while Lecerf and Omrani (2020) found that some information technology-based projects enabled some SMEs to improve their businesses; further assimilation with the technology can promote the SMEs to start exploring and exploiting their ambidexterity, as argued by Ko and Liu (2020) and Nofiany et al. (2021). Nevertheless, organizations should apply changes to their business process principles before being able to impose the use of information technology on their supporting units. For example, Shibeika and Harty (2016) examined the evolution from a local to an international business by starting with the business processes' standardization. Wiredu (2012) declared that the adoption of new technology by a public service department would be difficult if the process of adoption was not accompanied by an understanding of the business

processes related to the utilization of the technology. Zhang (2011) found out that one important use of technology is as a support system for product innovation. In many cases, innovation projects must be supported by the understanding and expertise of the process and the technology itself, and not merely rely on the technology. When expertise about the product's innovation process is combined with the correct understanding of the use of the technology, then the innovation project has a better chance of being successful, both operationally and financially. All in all, an understanding of the process of business (especially related to its implications for information technology) is instrumental before starting any changes.

From this point of view, innovation should take place to make changes to the business processes, as well as for the implementation of information technology. Most of the change processes should be done in a combined project between manual processes and information technology (automatic) processes. Given that, it is reasonable if one said an innovation process was also related to an innovation project (Fleming & Waguespack, 2007; Lichtenthalern et al., 2011; Zhang, 2011; Wiredu, 2012). The change in the process from manual to automatic (or semi-automatic) will cause tremendous changes in the organization, which may transform the organization and raise it to the next level or, unfortunately, it will deplete the organization and lead to harm in the long run. Consequently, having successful innovation projects is crucial for organizations and, from the project management point of view, the success of an innovation project mimics the measurement of a project's success factors in general.

There are three classic indicators that are usually adopted to measure project performance. They are the time completion of a project, output in accordance with the request and according to the budget (Willow 2000). In practice, these three indicators are closely related but the relationship among them is not always positive. For example, the on-time delivery of a project means cost-savings. However, the output may only meet with the minimum standard expected. If a team attempt to obtain a higher output quality, it may result in an extension of the project and additional costs. Therefore, the success of a project is a combination of the expected quality standard for the output and on the budget that had been allocated (Willow, 2000).

The principle of three indicators was added by Randolph and Posner (1988) by entering a control mechanism in the process of the opera-

tion of a project. To ensure an innovation project remains on-time, they proposed a time scheduling settlement for projects that were divided into smaller units of time. With this time breakdown, a project manager (or leader) could easily monitor the project's performance on a day-to-day basis. They also mentioned that communication and approval by the project team was important to ensure the quality of the output remained in accordance with the request. Moreover, they proposed that a project manager should periodically perform a monitoring process, in order to get a sense of which way the ongoing project is heading and whether there were any potential issues that could interfere with the budget or project's completion. This monitoring effort is to ensure the project is still on budget as well as on schedule. Some empirical research had been done into these three indicators of a project's success, in the long term. For example, Iamratanakul et al. (2014) merged these indicators with broader success indicators for critical project management success factors.

Given that, it is obvious that a project's organization and the leader of the project are the critical factors for a successful innovation project. So, the next critical questions is: "What structure and what leadership style should be adopted?"

The Organizational Structure of a project that supports innovation

Questions about the most suitable organizational project structure that supports innovation projects is a research topic that has often been expressed by researchers in the field of innovation over the years (Bodewes, 2002). This paper suggests applying organizational structure's principles into projects running within an organization. As outlined in the adjacent innovation, generally an innovation process results in a project, since the project itself is located in the environment of the organization and every project has its own organizational mechanism within it. By that definition, a project could be categorized as a form of smaller organization, an organization within a larger organization. Some aspects of organizations also appear in a project's structure. There is normally a group of people with shared goals and all of them have a role in the positions they fill at work, with a more limited scope compared to the umbrella organization. Hence, the theory of organizations could be applied to the project's organization. Figure 1 depicts the conceptual project's structure within an organization's structure.

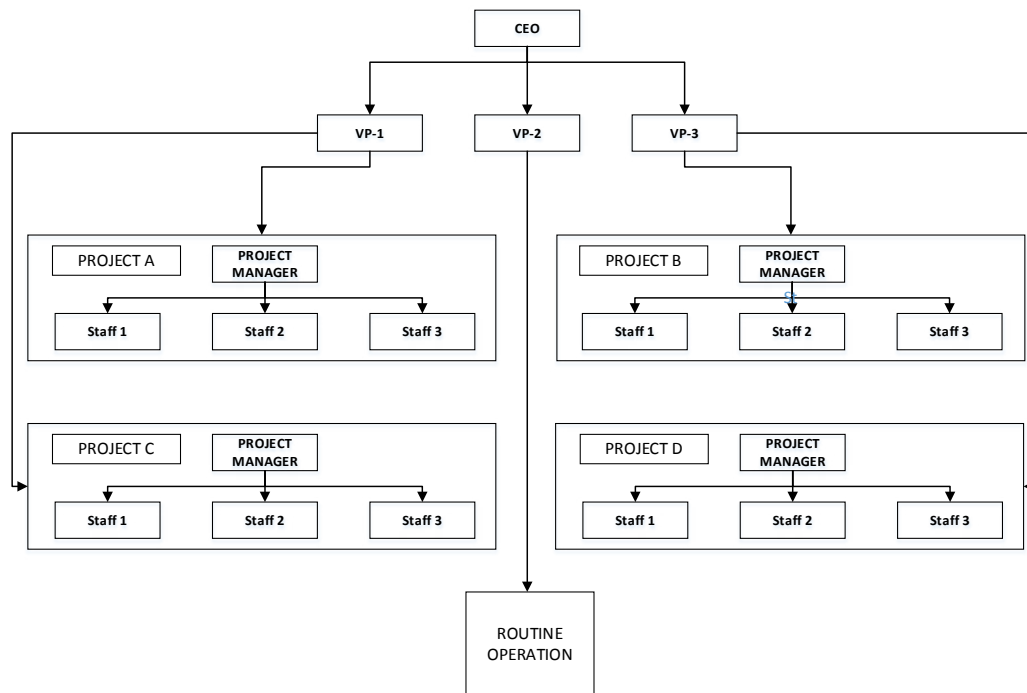


Figure 1. Conceptual structure of project organizations within an organization

From figure 1, as an example, one organization could have a couple of projects handled by different project managers. Each project manager links into one director, who is responsible to the CEO. From the diagram, it is also noted that for each project, as well as the routine operations, the organization must have the necessary structure to perform the project. In the structure, there will be managers and staff which mimic the usual organizational structure. A mini organization exists which imitates the nature of the main organization, such as having an organizational hierarchy, job descriptions, task to be completed, and so on. As a result, this paper argues that the principles of the organizational theory could apply to a project's organizational structure and the structure could be applied to an organization or project interchangeably.

Phugh et al. (1968) elaborated five traditional dimension of organizational structure: specialization, standardization, formalization, centralization, and configuration. Specialization relates to the division of labor in the organization and the distribution of tasks to various positions and levels in the organization. It works because one unit (or one individual) performs a specialized task, without the intervention of other units. Standardization relates to the existence of the working procedures and other procedures in the organization. It differentiates between a bureaucratic organizational structure and an

organic structure. The more work procedures that are identified, the more the organization becomes standardized. Formalization is related to the level where the procedures, instructions, and inter-organization communications are decided and written down. A more formal organization would have more documented procedures and standardized processes. Centralization relates to the point where the authority of the organization (or) its leaders take decisions affecting the organization. This point identifies the level of the hierarchy where the executive actions should be imposed. An organization becomes more centralistic when the authorization takes place at a high level. Configuration relates to the form of the structure of the role, whether it documents a job's description and specification in rigorous detail or in a generic fashion. It also relates to the level of the hierarchy of the span of control, from the top to the bottom level employees.

The concept of a formal structure is closely related to the bureaucratic system (i.e, centralistic, little specialization, high configuration, high formalization) from Burns and Stalker (1961). Thus, organizations with formal structures would have a tendency to be more rigid and slower in anticipating changes. On the other hand, the organic organization has more flexibility due to its flatter structure, more decentralized nature, not having rigorous documentation, the use of a more informal communication's model, and the use of spe-

cialization is high. Burns and Stalker (1961) argued that a contingent relationship between an organization's structure and performance, in a dynamic environment (ever changing), would be more suitable to be handled by an organic structure since it has better adaptation capabilities. On the contrary, the formal (or bureaucratic) structure would function better in a static environment and result in a better performance. But, some researchers are critics of the static structure. For example, Organ and Greene (1981) argued that a formal structure could violate professional autonomy norms, skill controls, and the influence of the collegial relationship. Formalization caused a feeling of alienation for the workers and led to motivational and achievement problems, boredom with the standardized work and deterred individual's potential to be fully developed in an organization.

Miles and Snow (2003) introduced four strategy models related to organizations' structures. They noted the process started with the one they called the adaptive process, to answer environmental, technical, and administrative issues. These three issues were interrelated, and they argued that they could be ignited from any point of view. From the adaptive process, they developed four strategies. The first strategy was called the defender strategy. This strategy is intended to maintain the organization's dominant position in the served market. The key to this strategy is efficient administration and the use of the appropriate technology to support the efficiency. To be able to use this strategy, the organization must adopt a formal structure and introduce standardization, to create an efficient working process. The defenders face potential threats if changes occur in the environment and the defender could experience shocks. In relation to the previous discussion, the formal structure from Burns and Stalker (1961) fitted into the defender strategy.

The second strategy was called the prospectors strategy. This strategy is the exact opposite of the defenders. While the defender organizations aim to maintain their dominance by maintaining efficiency, the prospector organizations attempt to fulfill all the demands of the dynamic market. The prospector organizations make efforts to ensure they are always up-to-date with market trends. As a result, their administration should be more flexible and must be able to serve the needs of highly-varied and different necessities as well as their usual work. The technology would also be varied, in accordance with the requirements of the market for a specific

time duration. The choice of this strategy forces organizations to become dynamic and flexible. The threats to this strategy are how efficient they can become as well as how fast they can reach an adequate efficient level, and also how much investment required in supporting technology over a relatively short period. Arguably, the organic structure from Burns and Stalker (1961) fitted in this category.

The third and fourth strategies were combined and consisted of the "waste" from both the defenders and prospectors strategies. The third strategy, called the analyzers, combined both the previous strategies' extremes while the fourth strategy, named reactor, was used by organizations that failed to execute the defenders, prospectors, or analyzers strategies.

According to Miles and Snow (2003), innovation primarily occurs with prospectors or analyzers; there is also evidence from the organic structure proposed by Burns and Stalker (1961). However, they did not provide details of the working mechanism and the control necessary for the analyzers. They mentioned that the analyzer strategy formed the central point between the two extremes and only by combining principles from both the extremes, without the details of the interaction, could a merger occur. Eventually, both extremes could go back and forth, not only from organic to mechanic but also in reverse. For example, Damanpour (1991) and Sine et al. (2006) revealed that while an organic farming structure supports innovation, they also found that the structure of the mechanistic method could still adopt the innovation, if the innovation happened intermittently. In addition, the mechanistic structure's model could also encourage innovation in administration, as long as it did not have any interaction mode with technical innovation. Thus, mechanistic strongholds can become dominant, by making their point of view, even though in further studies, various cases and anomalies happen within organizations.

Sine et al. (2006) also found anomalous mechanistic structures in developing dotcom companies. Briefly, they found out that the organizations had better performance using mechanistic structures compared to organic structures. They claimed the key difference was in the target market, i.e., the new (or emerging) market. In that new market, it was hard for an organization to adopt an organic structure due to the lack of clarity about the role and the scarcity of procedures, which became obstacles to the organization's ability to operate. Apparently, under some cir-

cumstances, the mechanistic structure was also a good option.

Hence, there was no reliable structure that could be adopted to support innovation. Formalization indeed represented the extent to which the procedures have been codified and implemented, but there was no agreement on how the codified and implemented procedures had to be undertaken. In the meta study by Bodewes (2002), he listed other irregularities about the formalistic definition, in the context of innovation. He also indicated that the majority of definitions for formalization rely on two items: coordination and control. The principle of coordination could be connected with the function of the leadership while the organizational theory could be used as early control points to seek the understanding of formalization. He gave the definition of the control of the organization as: "A set of abstract, more or less permanent relations that govern the behavior of shipbuilders' participants." Some of the mechanisms could be developed for the coordination and control of social behavior, and the individual from the group members.

Control Concept

Ouchi (1980) developed a set of control mechanism, both from internal organization mechanism, i.e., bureaucracy and clan controls. Bureaucratic control functioned as a replacement when market control could not be executed. Moreover, bureaucratic control represented the mutual relationship's norms, and agreement about valid rules that generally come from the rational output of the law. Clan control, apart from its reciprocity norms and legal powers and the authority elements of a valid power, also developed a mutual agreement about the values and beliefs that occurred in the group. Ouchi (1980) added that the bureaucratic control mechanism would fail when the control mechanism of the bureaucracy was not clearly stated. Bureaucratic control assumed that good operations should follow a supervision system, evaluation system, and instructions that must be organized and coordinated. In the absence of standardized operation practice against the system would result in the failure of bureaucratic control and, in that situation, clan control takes over. Clan control would create order through informal communication within an organization, presenting unstructured commands but well understood by each member of the group. If this clan control should fail, Ouchi (1980) argued control mechanism became only as a symbol and the ceremonial actions gestures.

This internal source of control principles were further developed by Eisendhardt (1985). She imposed a control mechanism to overcome boredom in the workplace, due to uncertainty about the instructions for, and evaluation of, the work. This control mode relied on behavior and outcomes, as an extension of the bureaucratic control from Ouchi (1980). Eisendhardt (1985) argued about the importance of control in the design of an organization, or, in the context of this topic, how it was related to the design of an organizational structure. The structure used at that time was a formal structure with a control mode that also tended to be normal (Eisendhardt 1985).

The development process of this control model was also done by a number of other researchers, who mainly focused on the control of development projects (innovation) related to information systems. For example, Kirsch (1997) proposed a control mechanism for the two extreme phenomena, namely formal and informal control. Formal control is described as a tool to measure performance, or to do a performance evaluation. Informal control, on the other hand, relied more on "a code of practice that has not been written" as social values, general beliefs, or traditions between the people or individuals. Formal control, in its execution, was divided into two: behavior control which is based on the behavior articulated by certain rules (rule based) and outcome control which articulates the desired outcome. Informal control, in its execution, is also divided into two: informal control based on a group (clan) and informal control based on individuals (self). Group control is a type of control over groups or individuals that share the same values and goals while self-control is defined as the control developed by an individual to perform the tasks that were given to him/her.

Kirsch (1997) described the interaction mechanism between formal and informal control; the more a project manager understands the content of the project, the more the process becomes clearer, and behavior control dominates as a result. Outcomes are influenced by outcome control and self-control. Kirsch (1997) also showed that when the results of a project become clearer and more visible, the output is more easily achieved. The individual and the team find it easier to regulate themselves with clear objectives and to achieve the specified purpose, which allows them to set up their own goal achievements (self-control) at the same time. Kirsch (1997) also described that clan control must be treated differently because clan control is not only related to the project but also to other situations outside the

project. Thus, in a project clan control could be articulated but its purpose could result in anything other than control, depending on the results of the project.

In relation to the issue of an organization's structure, formal control represented the existence of a mechanistic structure and informal control of an organic structure. However, some empirical research also proved that both these control mechanisms could work dynamically, in the development of a project. The interchange usage of formal and informal controls could be as a result of problems during the project's embodiment (Susilo et al., 2009). Wiener et al. (2016) gave the view that shifting the control domain of a project is discussed frequently, not only in the technical area but also in the managerial area, and includes such things as the effect on job satisfaction and performance. They suggested viewing this control not only as a systematic mechanism but also from a the negative aspect as the residual effects from the control process itself, which could be associated with the authority of the leaders who chose the control mechanism. They also noted that the interaction of formal and informal controls was open to further investigation.

Wiener et al. (2016) further argued that the existence of the control mechanism should also be viewed from the observed problems and the troubleshooting action required. Indeed, some spillover effects could happen as a result. Traditionally, for example, the strategy defenders (Miles & Snow, 2003) relied on formal control of the process. In the progress of the strategy, its redefinition identified that an informal control mechanism could arise with the defenders, while the proectors could use a formal control mechanism, on the basis of the operational base of the organization. Eisendhardt (1985) claimed the control principles should be applied universally. She describes that the control principles are inherited from the agency theory, where the controls are about creating equilibrium between stakeholders and agents. Thus, the control mechanism's principles could be applied within the domain of the broader management of a project and not limited to one type of project only (e.g. information system project).

The formal and informal control mechanisms are still relevant and can be used in project management due to their goals being to ensure the project results in the organization being in a better condition. In relation to innovation projects, the formal and informal controls could also be implemented together, simultaneously. According to Susilo et al. (2009), a pro-

ject would begin with the tradition of strong formal control, to ensure the purpose of the project, resource allocations, delivery time, and expected output were all clearly articulated. Logically, the project would adopt the formal structure and tend to enforce a formal control mechanism. During the project's duration, problems would arise and need solutions from outside of the system. By then, the informal control mechanisms would be more useful and the project manager would be more willing to use those mechanisms. Their finding is in agreement with Heiskanen et al. (2008) who found the dynamic interaction between the control mechanism and getting results was strengthened by incidents (or problems) during the duration of the project (Prifling et al., 2009). Gregory and Keil (2013) found three control mechanisms: authoritative, coordinated, and trust based which were the control mechanisms that could keep a balance between client and vendor during a project.

In relation to a project's organizational structure, Organ and Greene (1981) formulated that role conflict problems often occurred in the mechanistic structure due to bureaucratic elements that were prone to cause a conflict of interests among the different roles. Also, they found out that ambiguity often occurred, due to a lack of clarity about the structure of the organization. In that situation, they proposed formalization to negate the ambiguity and to provide a special policy to deal with role-conflict issues. However, the level of formalization must be maintained so that the role-conflict is still manageable and does not fail systematically. This mixed approach is a win-win solution to maintain formalization at one point, because formalization is still needed but at a certain level of control so it does not become another problem. The ability to play both sides could be classified as an ambidextrous ability, which is important for organizations with limited resources (Nofiany et al., 2021).

Following the view of Organ and Greene (1981), the innovation project's structure could use a strategy that was similar to the control mechanism, to ensure the innovation project reached its purpose. Bodewes (2002) proposed a joint effect mechanism to combine the processes' and rules' codification, together with an observation mechanism. The rules should be clearly stated during the formalization process. The placement of the formal control mechanism is needed to ensure the level of compliance, as well as to keep in-balance with the informal control mechanism. Following the work of Susilo et al. (2009), the formulation of the structure should

be set at the beginning of the project and then it becomes more dynamic when the project starts to run. Thus, some propositions could be established as follows.

For a mechanism's formalization,

Proposition 1: A formalization proposition will arise/be established in the early stages of an innovation project.

For a control mechanism specifically to provide formal control,

Proposition 2: Formal control will be applicable and specified for the early stages of the initiation of an innovation project.

For a control mechanism during the project's implementation,

Proposition 3: Formal control and informal control will be used interchangeably in accordance with the observation of the problems found in the project.

And, to the relationship's engagement between the two types of control,

Proposition 4: The dynamics for formal and informal control would mutually negate each other. Formal control would dominate when informal control was inferior, and vice versa.

Innovative Leadership and Innovation

A leader's role is central to the establishment of an organization, and also instrumental in determining the way it functions and its sustainability (Lichtenthaler et al. 2011). Leaders have power (authority) which is derived from the position they hold, or due to their unique competencies or having a personality that make people voluntarily comply with their orders. A leader can choose the way to lead his/her team, how to dominate the team if required, and how to act in a specific manner so that the others follow him/her.

Yukl (2012) provided a couple of points of view to assess the effectiveness of a leader through several theories such as the path goal theory, the situational leadership theory, the leadership substitution theory, the normative decision making theory, and the leader member exchange (LMX) theory. According to Yukl, the 1980s saw charismatic and transformational leadership concepts emerge. He described a charismatic leader as being someone who behaves differently to most other leaders. Charismatic leaders are indicated by the existence of leadership qualities such as confidence, being motivated to achieve the set goal and assert their influence, and have strong

convictions about what they believe in. Charismatic leaders would easily convince their followers to do the task assigned to them.

Nevertheless, Burns (1978) challenged this charismatic leadership concept by providing an alternative concept, which is transformational leadership. The transformational leadership concept is built from the micro point of view where the leaders have influence over their subordinates and raise their influence to the organizational level. Transformational leaders will try to raise awareness in their followers, to achieve better idealism with better values. Their followers will change from ordinary to better people. By design, transformational leadership is associated with the process of sharing among all the elements in the leadership, while the leader acts as the moderator for the process of sharing. Transformational leadership is also associated with the ability to play a leadership role as the agent between the internal resources and external power source (Fleming et al., 2007), and to have the ability to adjust the ambidextrous behavior of two different resources (Rosing et al., 2011). Somehow, transformational leaders were coming from the ordinary people with specific skills. For example, Phoocharoon (2013) found that teachers had a transformational leadership role by transforming their students into becoming better students, and cultivating leadership characteristics in them.

Apparently, a key success factor for innovation relates to the ability of a leader to transform the needs of an organization into an innovation project, and then ensuring the project runs properly. From the discussion about leadership styles, this paper argues that the transformative leaders' style is the style which should be proposed as the best approach for the management of any innovation project, because a project leader with this style will attempt to ensure synergy between the project's resources and to rely on his/her ability to communicate. The transformational leaders will manage the communication with the organization and the ability to transform their teams to undertake their assignments, to ensure the innovation's implementation (Lichtenthaler et al., 2011). The leaders would function as idealistic figures or patrons, who serve as examples, as well as being a source of information for all things related to the innovation. The leaders undertake liaison and integrator roles between the internal resources of the organization and the external power source of the organization. A leader must be able to mobilize cooperation between the two elements, as well as preventing mutual alienation and cannibalism practices between the or-

ganization and its environment. Thus, a leader's role is instrumental in the mobilization of both the resources and for preventing negative competition from the resources, which could threaten the innovation process of the organization (Fleming & Waguespack, 2007). They further argued that the style creates a good interaction between the leader and his/her subordinates and thus ensures that the project's coordination and control mechanism could be executed because potential issues, either technical or managerial, could be discussed and anticipated.

Yukl (2012) claimed that using the transformational leadership style will create a favorable power balance between the internal resources and the external power source, similar to an ambidextrous ability at the individual level (Nofiany et al., 2021). Innovation projects demand good coordination between all the resources. The role of the leader or project manager is to coordinate and promote harmony between all the resources and this is instrumental for achieving a project's success. It should be noted that a leader's competency as an agent, as well as a moderator, are highly-valued. It is also the responsibility of a leader to match the innovation's strategy, which can be more technical with the organization's strategy, which may be more conceptual (Kaplan & Norton, 2008). Thus the relationship between the leadership style for a successful project is proposed as follows.

Proposition 5: A transformational leadership style could be positively associated with the success of an innovation project.

CONCLUSION AND RECOMMENDATION

To conclude the discussion, this paper summarizes innovation from the project management's point of view so that its success can be measured, not only by the size of the innovations, but also according to the project's success indicators: on time, on budget, and fitting the specification. Further, this paper proposes the term "organization mechanism" should be applied to projects, due to their similarity, an organization within an organization. The structure is a combination of mechanistic and organic mechanisms which uses the advantages of each mechanism. The form of this combination is similar to the model analyzers conveyed by Miles and Snow (2003). This paper adds formal and informal control mechanisms to be imposed on any project activities. The formal and informal mechanism can be used interchangeably and modified in accordance with the problems and their mitigation

actions. This article stresses the critical role of the leader in choosing the most suitable control mechanism as an instrument. As such, the formal control mechanism relates to the mechanistic control measure of the work and its output, while informal control relates to the agreement which is not well written. It resides in the group and individuals who manage their behavior during the project. These two mechanism can be executed dynamically by a proper and competent leader, the best example of which is a transformational leader. All the discussions above are summarized in several testable propositions.

A number of topics related to the above proposed propositions could be followed up with further research. In relation to this, this paper offers several suggestions as follows.

To understand the dynamic interaction between formal and informal controls, this paper proposes the use of experimental methods to detail the process of the interaction between the two in a project. As revealed by Nahartyo (2013), the strength of the experimental method is the ability of researchers to control the treatment assigned to the participants. Thus, this experimental study could analyze the cause and effect between control and success more thoroughly and will provide a stronger magnitude than other methods.

In addition, this paper suggests the best approach to undertake the research is by doing a longitudinal study. Data gathered from the longitudinal process should be collected at many points in time (i.e. time series data). By making observations at some point in time, the researcher should get more data indicating the variation between the two control mechanisms for a project. In addition, the evolution of the influence of transformational leadership on a project's success could also be observed in more detail. The gradations of those influences will be interesting to observe if there are enough data to see the variation of the changes. Some recent studies supported the benefits of doing this kind of longitudinal study in social science (Hermanowicz, 2013) as well as in physics or other natural sciences (Golestani & Gras, 2014).

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