Headquarters deployment of capabilities in the MNC: The problem of activity and conceptual fit

Abstract

This paper explores the determinants of the performance of headquarters deployment of capabilities to sub-unit innovation projects in the multinational corporation. Headquarters deployment of capabilities concerns the attempt to introduce a specific capability to a sub-unit innovation project with the intention of strengthening the innovation project by reproducing the achievement of the capability's specific end result. Whilst the ideas of HQ deployment of capabilities to sub-units underpin an extensive literature on HQ attempts at creating value, the strategic fit that is considered vital for such deployments to succeed has at the same time been seen as very difficult to achieve. Combining these themes makes for the observation that we know little about the conditions under which HQ is able to successfully deploy capabilities to sub-units or about the challenges that may render such attempts failures. In this paper we seek to fill this gap by exploring what the conditions affecting the performance of HQ deployment of capabilities to innovation projects may be. With this goal in mind we address the research question: Why does the performance of HQ attempts to deploy the same capabilities across different innovation projects of sub units vary? To answer this question we contrast high- and low-performing cases of headquarters deployment of the same "core" capability to six innovation projects within two sub-units of a multinational corporation. We suggest a model that elucidates determinants of the performance of headquarters capability deployment on the basis of the capability microfoundations and the innovation project's network related activities and interdependencies. We contribute to research on parenting theory and strategic fit by identifying the dimensions of activity and conceptual fit that explain capability deployment performance. We furthermore identify that innovation projects are dependent on internal and external networks for support regarding these dimensions. Specifically, HQ deployment performance is found to be dependent on the "fit" between the *a priori* capability characterizing the innovation project and the new capability that is being deployed by HQ.

Keywords: Headquarters, Value Creation, Strategic Fit, Capabilities, Microfoundations, Multinational Corporations

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INTRODUCTION

In this paper, we explore determinants of headquarters' (HQ) performance in deploying innovation capabilities across its' sub-units within the multinational corporation (MNC). HQ deployment is defined as the attempt to introduce a specific capability to a sub-unit in order to reproduce the achievement of the capability's specific end result. An example of HQ deployment of innovation capabilities to sub-units could be how HQ has identified a weakness in the way a sub-unit project manages quality risks in its' innovation process. Being in the possession of a capability that has proven able to eliminate quality risk to a greater degree than what is currently the case in the project, HQ decides to deploy this capability to the sub-unit innovation project. Deployment performance, then, is defined as "the degree to which goals are attained" (Daft, 1998; p. 663) and more specifically refers to the extent to which the core capability has been adopted by the project in question.

Research on the MNC is increasingly interested in the role of HQ (Andersson & Holm 2010; Ambos & Mahnke, 2011; Ciabuschi et al., 2012; Collis et al., 2007). The debate generally departs from and distinguishes between the "administrative" role of damage control and the HQ "entrepreneurial" role of value creation (Chandler, 1991; Foss 1997). The ability of HQ to strengthen the global innovation of the MNC has gained increasing attention as it represents a way for HQ to perform a value-creating role. This resonates with research on innovation, increasingly identified as fundamental constituent of MNCs competitive advantage (Bartlett & Ghoshal, 1989; Conner, 1991; Mudambi 2002).

One way of addressing HQ value creation and capabilities is by focusing on the deployment of superior, or "core", capabilities (Campbell et al., 1995; Helfat & Peteraf, 2003). The ability of HQ to deploy core capabilities is argued to rest on what is referred to as strategic fit. Strategic fit concerns the ability of the parent to create "net" value to its' sub-units. One way in which HQ can create value is by deploying valuable capabilities across the sub-unit innovation projects to make these units more competitive. Achieving strategic fit required for value creation that increases sub-unit

competitiveness is however difficult and most parents are believed to fail in doing so (Campbell et al., 1995; Forsgren et al., 2005). A major challenge for the parent in achieving strategic fit is to correctly identify and analyze parenting opportunities. If the parent fails at this task, it will cause a mismatch between the parenting and the opportunity (Campbell et al., 1995).

In the MNC, parenting challenges are echoed by research findings that successively have added more complexity to our understanding of the MNC and its context (Cantwell, 1989; Doz et al., 2001; Forsgren et al., 2005; Nohria & Ghoshal, 1994). Different capabilities driving and characterizing innovation are often found among corporate units both hierarchically below, and geographically far from, HQ (Birkinshaw & Hood, 1998). Moreover, such capabilities are often embedded in the business relationships of these sub-units (Forsgren et al., 2005). In fact, it has been argued that capabilities originate from the exchange in such relationships, and therefore are unique for the individual subsidiary. It has furthermore been pointed out that capabilities can be difficult to manage (Collis & Montgomery, 2005; Goold & Campbell, 2002) because of their varying characteristics (Grant, 1996). This complexity is further stressed by the capabilities microfoundations approach (Felin et al., 2012; Foss et al., 2010). The microfoundations approach can be understood as focusing on collective phenomena, such as the management of capabilities, while arguing that explaining this kinds of phenomena requires the consideration of its 'lower-level entities', these, in turn, can be different processes in organizations and their interaction. The microfoundations approach thereby argues that understanding management of capabilities requires investigating the characteristics of the underlying components of these capabilities as well as how these components interact (Felin et al., 2012).

On the basis of the above discussion, it is probable that the ability of HQ to deploy a new capability into the innovation process of a subsidiary is dependent on the qualities of the fit with existing capabilities. The strategic fit between new and existing capabilities may be difficult to achieve depending on a number of factors, including investment in new knowledge and organizational and technological change. Combining these themes in the literature makes for the observation that whilst the ideas of deploying capabilities underpin an extensive literature on HQ

value creation and MNC complexity, we still know little about the conditions under which HQ is able to successfully deploy capabilities to sub-units or about the challenges that may render such attempts failures.

In this paper, we set out to fill this gap by exploring what influences the performance of HQ deployment of capabilities to sub-unit innovation projects. In so doing, we seek to address the following question: Why does the performance of HQ attempts to deploy the same capabilities across different innovation projects of sub units vary? When postulating this question, we work under the baseline assumption that performance will vary in the first place (Campbell et al., 1995).

To address our research question we apply an inductive multiple-case methodology (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). Addressing this question through an in-depth case study of the complex dynamics of HQ deployment of capabilities in ongoing innovation projects is suitable given the current, low, stage of theory development in this area (Edmondson and McManus, 2007), along with the complex organizational setting of MNCs (Eisenhardt and Graebner, 2007; Roth and Kostova, 2003), and the "why" research question (Eisenhardt, 1989; Yin, 2009). The study totals 73 interviews divided into a pilot and a main study, as well as between HQ and six sub-unit innovation projects. This has yielded testable propositions to provide a model of the influence of capability microfoundations (Felin et al., 2012; Foss et al., 2010) on the performance of HQ deployment of capabilities.

By focusing on challenges facing HQ in deploying capabilities across sub-units, we make an empirical contribution by shedding light on an under-studied area that connotes to strategic challenges facing MNCs. Through the formation of empirically derived theoretical proposition, and by using these to build a model that explains the variation of HQ's capability deployment performance. Our study elucidates two dimensions of fit between the *a priori* capabilities of the innovation projects hosted by sub-units and the capability introduced by HQ as vital for the performance of such HQ deployment. We make a theoretical contribution to research on strategic fit by identifying the dimensions of activity and conceptual fit as well as by indicating that these dimensions are in turn dependent on the ability of the innovations projects supporting networks to

cope with the core capability deployed by HQ. Additionally, this study highlights the necessity of analytically considering microfoundations when investigating HQ value creation within the MNC.

The rest of the paper is organized as follows. We describe our methodology in the next section. Then we present our theory development and postulate a set of propositions, which together provide a model the impact of capabilities' microfoundations on HQ deployment of capabilities. We proceed by discussing the specific contributions of this study. The paper concludes with limitations, the consequence of our model for future research, and by highlighting managerial implications.

RESEARCH SETTING AND RESEARCH METHOD

As a point of departure, this paper sets out to describe the research setting and method before moving on to the empirically derived propositions. This structure is contingent on the research question and follows other case study research (Prashantham & Dhanaraj, 2010). We are applying a multiple-case methodology (Eisenhardt, 1989; Eisenhardt & Graebner, 2007) in a nested case study (Gibbert et al., 2010; Miles & Huberman, 1994). This allows for an in-depth study of the complex dynamics of HQ deployment of core capabilities in ongoing sub-unit innovation projects and related deployment performance. The multiple-case study is further considered suitable for theory-building in areas that are under-researched (Edmondson & McManus, 2007; Gibbert et al., 2008). Finally, it also has a good "fit" with the "why" research question of this paper (Eisenhardt & Graebner, 2007; Yin, 2009).

The choice of the investigated MNC, Atlantic Heavy Industries (anonymized), fits our focus as deploying core capabilities in innovation projects is considered vital by its HQ, and since the MNCs R&D organization is both complex and globally dispersed. Thus, the research setting comprise a challenging environment for HQ deployment of capabilities and an excellent laboratory for bringing the microfoundations of capabilities to the fore and in so doing investigate factors that influence HQ capability deployment performance. The study covers HQ and six innovation projects based at two different R&D sub-units. The MNC context presents a diverse set of both external and internal environments. This heterogeneity and complexity has been argued to make it suitable for researchers aiming to extend existing theories in management (Kostova, Roth & Dacin, 2008; Roth & Kostova,

2003). Studying a single MNC enables us to keep HQ constant, and thereby facilitates investigating the variation in performance of the deployment of the same core capability across different projects.

The HQ interviews were chain-, or snowball-, sampled (Miles & Huberman, 1994) to ensure interviewing the executive most closely involved with the deployment and structured with the aim of understanding how HQ worked and was organized for deploying capabilities. The six innovation projects of this study have been sampled to be as comparable as possible. The projects are all at similar stages of development as well as on-going, which allow us to study the performance of HQ capability deployment in real-time. All innovation projects of this study are furthermore all based at R&D sites that have been acquired, of the same type (new product development projects) and at a similar cost-level (Class 2 out of 3). The differences between projects are mainly in terms of capability deployment performance and whether the project is on time and on budget, as well as in the specifics of the machines they are trying to develop.

Besides comparability, the purpose of our sampling is to have three projects each of high and low performance. As the focus of this paper is the variation in the deployment performance of the core capability across the innovation projects, we use "polar sampling" (Eisenhardt & Graebner, 2007), i.e. sampling equal numbers of high- and low- performing cases, to more clearly observe contrasting patterns in the data.

Following Rogers (1962), we conceptualize an innovation as the development of a new, or significantly improved, machine. This paper follows Helfat and Peteraf (2003) in defining a capability as; "*the ability of an organization to perform a coordinated set of tasks, utilizing organizational resources, for the purpose of achieving a particular end result*" (p. 999). A core capability is here defined as a specific capability deemed (by HQ in this study) to be vital for innovation (Helfat and Peteraf, 2003), and therefore should be the capability that will be deployed firm-wide to support and improve innovation projects for the purpose of ensuring innovation process reliability. Performance refers to the "deployment performance" of the core capability, which corresponds to the extent to which the sub-unit has been able to adopt the new capability object of deployment by the HQ into the ongoing innovation project.

Empirical Strategy

Atlantic Heavy Industries is a large MNC with over 20 000 employees, and it has globally dispersed R&D operations with substantial activities in ten countries. Atlantic Heavy Industries is active in the heavy industrial machinery business, which caters to industries such as open- and closed-shaft mining, forestry, and infrastructure construction.

This is a case of how HQ, having achieved MNC growth for a long period of time through acquisitions, currently is facing increased competition from other major global players in their newly consolidated industry. The competition to develop new technologies and to improve the advanced and expensive equipment better and faster than the other major players in the industry is fierce. Pressed to greatly increase firm innovative competitiveness, and against the background of the MNC consisting of a wide portfolio of acquired sub-units, HQ decided to integrate the MNCs' global R&D operations by the building of firm-wide capabilities in innovation. This situation echoes Winter (2000) who points to "crisis induced by sustained competitive pressure" (p. 993) as a driver of firms' perceived need to upgrade their capabilities. The rationale for why HQ is investing a lot of resources as well as risking the disruption of innovation projects in order to deploy HQ capabilities across its' sub-units is twofold; 1) the deployment of a new capability could potentially increase the competitiveness of the individual projects, and 2) common capabilities hold the promise of innovation synergies that may be unlocked if the engineers and researchers of various sub-units can start collaborating on the basis of the deployed capability. More specifically, the core capability deployed by HQ that is the focus of this study is one with the supposed potential of enabling sub-unit innovation projects to improve innovation quality. This, in turn, is done by applying a set of activities and processes concerning early-stage testing and analysis of ideas to the projects' innovation process. The intention is for these activities and processes to allow the project to greatly reduce late-stage discoveries of mistakes.

The fact that the innovation projects are ongoing complicates the deployment of HQ capability, since it needs to be done "in flight" so to speak. This is however a necessary evil, as "the perennial gale of creative destruction" (Schumpeter, 1942) leaves the firms of the industry no time to put innovation on hold to deploy important capabilities. The main reason why the performance of HQ

global deployment of a core capability crucially matters is that high performance constitutes an advantage in a competitive industry. Low performance means that major innovation projects, charged with developing new technology to sustain the competitiveness of the firm, are severely slowed down, potentially disabled, by having introduced capabilities that are not working, consuming vast amounts of money and placing the competitiveness of the firm at risk.

The innovation projects featured in this study are briefly presented below as well as in Table 1.

- *Alfa Project* is charged with innovating a new, high-price, high-quality, heavy-weight, machine aimed at mining industries. Alfa project is in project phase 3/7 at the time of the study, is high-performing on the capability deployment and on time and budget.
- *Bravo Project* develops a new, moderately priced, medium quality, medium-weight, machine to serve the forestry industry. Bravo project is in project phase 3/7 at the time of the study, is high-performing on the capability deployment and on time and on budget.
- *Charlie Project* aims to develop a new, moderately priced, medium quality, light-weight, machine for the infrastructure industry. Charlie project is in project phase 4/7 at the time of the study, is high-performing on the capability deployment and on time and on budget.
- *Delta Project* is developing a new, expensive, high-quality, light-weight, machine for the infrastructure construction industry. Delta project is in project phase 4/7 at the time of the study, is low-performing on the capability deployment and not on time and not on budget.
- *Echo Project* is charged with developing a new, high-price, high-quality, medium-weight, machine for the infrastructure industry. Echo project is in project phase 3/7 at the time of the study, is low-performing on the capability deployment but on time and on budget.
- *Foxtrot Project* aims to develop a new, high-price, high-quality heavy-weight, machine for infrastructure construction. Foxtrot project is in project phase 3/7 at the time of the study, is low-performing on the capability deployment and not on time or on budget.

Insert Table 1 around here

For collecting data, interviews were conducted with HQ executives as well as with innovation project managers and innovation project members at two sub-units of Atlantic Heavy Industries. Collecting

the majority of data through personal interviews enables asking follow-up questions, which is crucial when answering exploratory research questions (such as; why performance of HQ attempts to deploy the same capabilities may vary between different innovation projects) (Yin, 2009). Interviewing project members from both the innovation project and its' supporting network, which potentially perceive the deployment performance of the core capability differently, minimizes the risk of "impression management" and "retrospective sensemaking" (Eisenhardt & Graebner, 2007). Interviewing both innovation projects and their supporting network also gives the advantage of being able to triangulate the answers and thereby increase the study's construct validity, i.e. to check if respondents give conflicting or confirming answers (Gibbert et al., 2008; Yin, 2009). The interview data have been supplemented with Atlantic Heavy Industries internal project documentation about the projects, as well as its documentation about the core capability deployed by HQ. The interviews concern HQ attempts at creating value through the global deployment of a core capability on the one hand, and the deployment performance of the core capability on the other hand. The study comprises 73 interviews, on average 55 minutes long, divided into a pilot and a main study. The interviews with HQ managers were focused on the development and goals of the core capability. The interviews with innovation project managers and project members in the six innovation projects were focused on the deployment performance of the core capability, and were performed in a systematic manner, following the same semi-structured interview guide.

The structure of Miles and Huberman (1994) was followed to analyze the interview data. The aim of the analysis is to develop theory by identifying common concepts, logically explain their causal connection to deployment performance, and state these causalities in the form of propositions.

The first step in analyzing the data was taken after all interviews were finished and was focused on coding the interviews, case by case, to identify relevant concepts (Miles & Huberman, 1994). This was a valuable process in defining and delineating the concepts. As a second step, each innovation project was summarized in a detailed case description (Eisenhardt, 1989; Miles & Huberman, 1994). These cases encompassed both the coded interview data, and innovation project specific information from Atlantic Heavy Industries. The focus of the analysis revolved around the innovation projects,

and more specifically on the circumstances surrounding the deployment of the core capability. The third step consisted of making a within-case analysis of each case history (Eisenhardt, 1989; Miles & Huberman, 1994), focusing on how the project participants had experienced the deployment of the core capability and how this might relate to deployment performance. The within-case analysis was done through a process where the relationships between the concepts present in each case were analyzed along with the relationship between the concepts and the outcome in terms of deployment performance of the core capability. Having constructed preliminary models explaining the deployment performance of each case, the fourth step of performing a cross-case analysis (Eisenhardt, 1989; Miles & Huberman, 1994), compared and contrasted the preliminary models derived from the previous models. The cross-case analysis looked for similarities and differences between the two groups of innovation projects with high and low deployment performance to make the connection between certain concepts or circumstances of the projects on the one hand, and deployment performance on the other. The aim of this step was to derive propositions from the patterns of relationships for the lower-level components of capabilities and deployment performance that were present in all cases. The next section elaborates on the theoretical field of inquiry as well as integrates the empirical findings to derive a set of propositions.

THEORY DEVELOPMENT

The role of HQ is often approached from the perspective of it having an “entrepreneurial” role of value creation, and an “administrative” role of damage control (Chandler, 1991; Foss 1997). Focusing on the value creating role, the rationale is that HQ is the sole unit within the organization that has the formal authority required to coordinate the portfolio of businesses that often constitute large MNCs (Goold & Campbell, 2002). Creating value justifies HQ status within the MNC (Mudambi & Swift, 2011). HQ can be conceptualized as a hub-type unit with the task of creating value within the corporate network (Dhanaraj & Parkhe, 2006), i.e., HQ occupies a central position and has unique advantages (Dellestrand & Kappen, 2012), which should provide the so called "parenting advantage"

within the MNC (Campbell et al., 1995). The parenting advantage means that HQ creates greater value than other units would do just by themselves.

The parenting advantage is considered to be dependent on what is referred to as strategic fit, which in turn concerns to the ability of the parent to create "net" value for its' portfolio of sub-units (Campbell et al., 1995; Helfat & Peteraf, 2003). Creating value is argued to be a vital function for HQ as it holds the promise of reinforcing the competitiveness of its' sub-unit by means only available to the parent. Strategic fit is determined by the fit between; a) the unfulfilled needs of the sub-units (the parenting opportunity), and b) the ability of the parenting to fulfill these needs (the parent characteristics). Parenting opportunities can be addressed by, for example, creating linkages between sub-units or by deploying valuable capabilities across the portfolio of sub-units to make them more competitive. Achieving strategic fit is however very difficult and most parents are claimed to fail in doing so due to, for instance, the complexity and heterogeneity of the internal and external organization that constitutes the business network of MNC sub-units (Forsgren et al., 2005). A major challenge for the parent in achieving strategic fit is the identification and analysis of parenting opportunities. As knowledge is dispersed within the organization and it is not given to anyone (not a unit or an individual) in its totality (Hayek, 1945: 520), and because much of the sub-unit processes are often characterized by context specificity, the HQ faces many difficulties to understand and assess what is going on at the sub-unit level (Holm et al., 1995). Thus, lack of knowledge about for instance sub-unit resources and needs, context specificity of innovation projects and the complex and dynamic nature of sub-unit activities often conducted through intensive interaction with the external actors may cause a mismatch between the parenting opportunity and the parenting effort.

As one way to fulfill the parenting advantage is the HQ deployment of capabilities, it is important than to take into account which the capability microfoundations are. Capability microfoundations focus on the lower-level components of capabilities as sources for variation in capabilities within and between firms. The capability microfoundations literature has gained much traction as an analytical approach in research on the management and consequences of capabilities (Felin et al., 2012). The capability microfoundations approach has been argued to have strong

implications for research on HQ value-creation in terms of the management of capabilities (Foss et al., 2010). However, in the literature on HQ value-creation in general, and on HQ deployment of capabilities in particular, the microfoundations of capabilities have not been addressed by much research in terms of being able to explain the outcome of such attempts by HQ. Within the scope of this paper, the microfoundations approach serves as a lens through which we focus on how the "fit" between the differences of capabilities may explain the variation in performance of HQ deployment of capabilities. These microfoundations subsequently have implications for the HQ parenting challenge, i.e. HQ possibility to create value through deployment of core capabilities.

The potential differences between capabilities in terms of their microfoundations can also be argued to be implicit in much of the capability literature, as it rests on the idea of competition as a consequence of the differences between firms' capabilities (Barney, 1991). Competitive advantages based on capabilities imply that differences between capabilities can be both vast and impactful. According to the same logic, so could the difference in fit between an *a priori* capability and a capability deployed by HQ in order to replace it.

Research has found capabilities to often reside among sub-units both hierarchically below and geographically far from HQ (Birkinshaw & Hood, 1998). Capabilities have also been argued to sometimes be embedded in both the internal and external business relationships of these sub-units (Forsgren et al., 2005). It has furthermore been pointed out that capabilities can be difficult to manage (Collis & Montgomery, 2005) because of their heterogeneous nature (Grant, 1996).

The concept of different forms of fit of capabilities has several intellectual forbearers. Both Dierickx and Cool (1989) and Peteraf (1993) argued that the preexisting stock of knowledge had the potential to affect the ability of units to both learn and apply a capability. Dierickx and Cool (1989) further theorized that this could be caused by the characteristics of the capabilities themselves. A similar, oft cited, but more general version of this line of thought is the notion of "absorptive capacity" as a prerequisite for learning (Cohen & Levinthal, 1990; Lewin et al., 2011).

Based on our study, we have found that HQ deployment of core capabilities is dependent on the fit between the *a priori* capability employed by the innovation project prior to the deployment and the

core capability deployed by HQ, as depicted in Figure 1. This manifests itself in two new theoretical concepts that we introduce as the dimensions of activity fit and conceptual fit, which in turn are based on differences in capabilities microfoundations as will be elaborated on below.

Insert Figure 1 around here

Project Activity Fit

Activity fit is the extent to which the activities of an innovation projects' *a priori* capability correspond to the activities required by the new core capability deployed by HQ. Activity fit determine the extent of the practical competence-based, or "how", knowledge-gap of a project when trying to employ the core capability. In other words; the practical capability microfoundations.

The heterogeneity of capabilities between firms underpins the fundamental rationale why these are the determinant of competitive advantage (Barney, 1991). In large MNCs that have grown by acquisition, heterogeneity of capabilities also exists within the formal boundary of the firm (Grant, 1996). As the nature of capabilities is heterogeneous, a logical extension of that reasoning gives that so are the practical activities underpinning capabilities; otherwise they would not be heterogeneous in the first place. Helfat and Peteraf (2003) claim that one of the main components of capabilities are the set of tasks that together makes up the capability. These tasks are what we refer to as activities.

Furthermore, the idea that capabilities to a large extent may be dependent on activities performed by other organizations, within or external to the firm, has earlier been pointed out by Montgomery and Wernerfelt (1988). Although both the consequences of potential heterogeneity of activities for HQ deployment of capabilities, and the sometime interdependency of capabilities, has been noted by received literature, it has not been elaborated on or taken into consideration as affecting the ability of HQ to deploy capabilities across its sub-units. Our study has found that activity fit is a critical prerequisite for deployment performance of HQ core capability, as indicated by the experience of both high- and low-performing cases (see Table 2).

Insert Table 2 around here

The ability of project members to perform the activities pertinent to a core capability has been found to rest on the fit with the activities of the *a priori* capability residing within the project. The

innovation projects in our data where members had little or no experience of working with such activities as those that were required by the core capability were all low performing. This is captured in the quote by the Deputy Project Manager of the low-performing Echo project:

"[Project members] need more training because I don't see that anyone has the skill of doing [activity]"

As a contrast, the innovation projects that had a strong fit between the activities of their *a priori* capability and those of the core capability deployed by HQ were all high performing. As several of the required activities, or activities that required the same skill sets, were already practiced in these innovation projects, the adoption became a matter of adaptation, or fine tuning as in the words of the Deputy Manager of high-performing Charlie project:

"So now we need to reduce the gap between the formal procedures of [core capability] and our actual activities. There are some gaps that need adjustment, or fine tuning."

Our analysis, and as illustrated by the above quotes, indicate that the lack of fit between the activities of the *a priori* capability residing at sub-units and those required to implement the new core capability deployed by HQ leads to lower deployment performance. The heterogeneity between capability activities has earlier been pointed to in research on HQ value-creation in relation to innovation (Teece et al., 1994). The findings of our study further mirror the ideas of Teece (1986), who argue that the success of new activities mainly depends on their closeness to previous activities.

Another dimension of activity fit distilled from our data connotes to the fit between the skills required to perform the *a priori* activity compared to those skills needed for the core capability. If there is a mismatch between the skills of the project and those that the core capability require, then performance suffer as the project will either not be able to perform the capability, or will be severely delayed as they need to learn new skills. This kind of fit is exemplified by a quote from the Deputy Project Manager of the low-performing Echo project, where the projects' lack of the appropriate skills made performing the activities required by the core capability a struggle:

"The skills are very important."

Thus, if the activity skill fit is low, the engineers do not have the required skills and will not be able to perform the new activities related to the core capability deployed, leading to lower performance. Also, the fit between the practical knowledge required to perform the *a priori* activity and that needed to perform the activities of the core capability is of importance. The practical knowledge refers to the understanding of how the project participants should work together to successfully perform the activity. The Project Manager of the low-performing Foxtrot project made the following comment:

"I know right now that I have some pretty significant [knowledge] gaps in the project team on the [activities] we should be applying."

If knowledge is low, engineers do not have the required understanding of the activities to perform the activities, leading to lower performance. Finally, the fit between the resources required by the *a priori* activity as compared to those required by the core capability plays a role for deployment performance. Such resources may concern both physical resources, for example testing facilities, and the projects' time and funds. The importance of achieving an adequate fit of resources is pointed to in the following quotes from the Project Managers for low-performing projects Echo and Foxtrot:

"We struggle with investing a lot of time and money in this [core capability]."

"The resource gap may be too large."

This leads us to suggest the following proposition:

> *Proposition 1: The greater activity fit of the a priori capability of an innovation project with the core capability deployed by HQ, the higher deployment performance will be.*

Project Conceptual Fit

Conceptual fit refers to the conceptual ability of project participants to understand and employ a core capability and is argued to rest on its conceptual similarity to the *a priori* capability. The conceptual fit determines the extent of the conceptual challenge that project participants face in grasping the "what and why" of a core capability. In other words; the conceptual capability microfoundations.

By the same reasoning as the heterogeneity of capabilities logically should have implications for its' constituent activities, so could the same heterogeneity be expected to cause conceptual

differences between capabilities. Activity and conceptual fit are similar to what Helfat and Peteraf (2003) refer to as the coordination of tasks in their division of capabilities into the (practical) tasks or activities and the (conceptual) coordination of those tasks.

From the empirical study we found that conceptual fit is an important determinant for HQ deployment performance, as shown by the experience of both the high- and low-performing cases of deployment performance (see Table 3).

The ability of project members to conceptually grasp the core capability has been found to depend on the fit with the conceptual understanding required for performing the *a priori* capability. If the conceptual understanding required is similar, the projects members will be able to implement the core capability fairly easy, all else equal. If the conceptual requirements, as presented more in detail below, are different, the adoption of the new capability may be delayed. A lack of conceptual understanding can be a substantial obstacle to employing the capability, as indicated by the Project Manager of the low-performing Echo project who did not see the how the core capability made sense:

"To me, [core capability] is just shifting the work in the project. I have yet to see that bridge be gapped or that gap be bridged."

As a contrast, projects that had an *a priori* capability which had conceptual requirements that were similar to that of the core capability had an easier time performing the capability, as reflected in the quote by the Manager of high-performing Alfa project:

"So the [core capability] team said; "you're already using a principle almost similar to [core capability]."

A lack of fit between the conceptual requirements of the *a priori* capability and those of the core capability leads to a decreased ability to coordinate the activities that make up the core capability, causing lower deployment performance.

One example of research where the idea of a conceptual requirements of a capability has been stressed is in cases where scholars have studied differences between, for example, Western and Japanese ways of thinking about manufacturing or product development (Nonaka & Takeushi, 1995). The notion of conceptual fit can be seen as the relative fit of a higher level of knowledge than that of activates, indicating that capabilities consists of different levels of knowledge, as argued by Grant

(1996). Our finding suggesting that conceptual fit impacts deployment performance is mirrored by the reasoning of Teece et al. (1994), who argue that in cases where the conceptual differences between new knowledge and old knowledge is great, this difference may in itself diminish a units' ability to understand a capability, thereby lowering the rate of learning as a result.

In the cases of our study, the conceptual logic of the core capability was the opposite of the *a priori* capability of the low-performing projects. As the new capability severely changed the logic of the innovation process, this caused a domino effect of difficulties in the project. The reason why this happened is that when a core capability changes the logic of an entire innovation process, there are ripple effects affecting all activities of a project and its' network as they need to be adapted to such a new order. How these effects were experienced was well captured in this quote from an engineer working with the low-performing Delta project:

"We are flying an airplane and are trying to change wings in flight."

This implies that if the manager and engineers cannot grasp the logic of the core capability and thus will not be able to coordinate the activities to match, i.e., the fit is low then performance of the core capability deployed by HQ will suffer.

To perform a given capability a certain set of activities need to be coordinated. Our study indicates that a conceptual fit between the process behind the *a priori* capability compared to that behind the core capability is important. The conceptual understanding of the capability here refers to the understanding of the process of coordinating the activities of the capability. This conceptual fit was a major problem in low-performing Foxtrot project, as indicated by the Project Manager:

"We obviously have a lack of exposure and competency with some of these processes..."

Thus, if fit is low, the managers and engineers do not have the required understanding of the process required to coordinate activities as intended, leading to lower performance. Finally, the fit between the purpose of the *a priori* capability and that of the core capability plays a role for the conceptual understanding of the core capability, and thereby for the deployment performance. This kind of fit is exemplified by a quote from the Deputy Manager of the low-performing Echo project, where the lack

of understanding of the purpose of the capability deployed by HQ within the project made the implementation of the capability futile:

"No one has any idea what in the world [the core capability] is."

Insert Table 3 around here

In sum, the above leads us to postulate the following proposition:

> *Proposition 2: The greater conceptual fit of the a priori capability of an innovation project with the core capability deployed by HQ, the higher deployment performance will be.*

Network Activity Fit

Network activity fit refers to the projects reliance on other parts of the MNC, as well as on external organizations such as suppliers of various technical services, for inputs and support to their innovation process. These findings further echo research claiming that capabilities may be dispersed between units in a sub-unit network, as opposed to concentrated in one such unit (von Hippel, 1976; Forsgren et al. 2005). It has further been found that capabilities may also reside in the relationships between units inside or outside of the formal boundaries of a firm (Hedlund and Nonaka, 1991; Håkansson and Snehota, 1989)**.** While all the innovation projects of this study were reliant on their network for support, the projects that had difficulties getting adequate support from their network in employing the core capability deployed by HQ were all low performing (see Table 3). This difficulty, in turn, was identified as problems with bad activity and conceptual fit on behalf of the network. Deployment performance was also found to be influenced by the activity fit with the network - the extent to which the innovation projects' *a priori* cooperation with the organizational network can facilitate the cooperative or supportive requirements of the core capability. Our study indicates that a lack of fit between the activities that the employing of the *a priori* capability required from the projects network and the requirements from the core capability constituted a major obstacle for employing the core capability, as here indicated by the Project Manager of Foxtrot project:

"We are developing a pretty good understanding of how to do those [activities], but we haven't been able to really get that same understanding within the local organization."

Contrary to the travails of the low-performing projects, the projects that had little or no difficulties securing adequate activity support from their network were all high-performing. The projects that had a network already supplying similar support activities as those required by the core capability could easily explain and receive the required support, as explained by the Manager of Bravo project:

"I think more than 10 years we have done [such activities]. It means that the [organizational] environment are used to a lot of [such activities]."

These findings indicate that a lack of network activity fit causes an inability to perform the activities necessary to support the project in employing the core capability, leading to lower deployment performance. This leads us to suggest the following proposition:

Proposition 3: The greater the activity fit between the network requirements of the a priori capability and those of the core capability deployed by HQ, the higher deployment performance will be.

Network Conceptual Fit

The deployment performance of projects was also influenced by the conceptual fit with the network, i.e. the extent to which the innovation projects' *a priori* cooperation with the organizational network can facilitate the conceptual requirements of the core capability. Our study indicates that a lack of fit between the conceptual understanding that employing of the *a priori* capability required from the supporting network, and the conceptual understanding that employing the core capability required from the same, constituted a major obstacle for employing the core capability, This fact was stressed by project managers, as this quote from Foxtrot project suggests:

"It's a good [capability] in itself but we may not have the [surrounding] organization to support the process."

Meanwhile, projects that had an *a priori* capability which required a conceptual understanding that was similar to that of the core capability deployed by HQ had an easier time supporting the deployment, as indicated by the Manager of high-performing Charlie project:

"The surrounding organization has been doing [processes] this way for many years."

As an effect, the lack of fit between the conceptual understanding of the support that the network provided to the *a priori* capability and required of the core capability leads to a decreased ability to coordinate the activities that support the projects' attempts at employing the core capability, resulting in lower deployment performance. This leads us to suggest the following proposition:

> *Proposition 4: The greater the conceptual fit between the network requirements of the a priori capability and those of the core capability deployed by HQ, the higher deployment performance will be.*

DISCUSSION

Figure 2 integrates the four propositions and creates a model of the impact of capability microfoundations on the performance of HQ deployment of capabilities through the dimensions of activity- and conceptual fit. Key insights from this study is that such fit come in different dimensions, and emanate from both within the project and the internal as well as the external organizational networks of the MNC. Table 4 summarizes the theoretical framework.

Insert Table 4 around here
Insert Figure 2 around here

Microfoundational Capability Dimensions for Strategic Fit

A major challenge for HQ in achieving strategic fit is to correctly identify and analyze parenting opportunities, failure of which risks causing mismatches between the parenting and the opportunity (Campbell et al., 1995). Focusing on the deployment of core capabilities across sub-units, we contribute to research on strategic fit by identifying two dimensions of capability fit, activity and conceptual fit, and by analyzing the implications of these dimensions for the evaluation of parenting opportunities, for strategic fit, and for potential HQ value creation.

The dimensions of activity and conceptual fit reflect the thinking of Helfat and Peteraf (2003) in dividing capabilities into two types of underlying components; the (practical) tasks or activities and the (conceptual) coordination of those activities. Our findings suggest that both the dimensions of activity and conceptual fit consist of a further set of sub-dimensions.

The dimension of activity fit captures the degree to which the activities of an innovation projects' *a priori* capability match the activities required by the core capability deployed by HQ. The match between such activities, in turn, has been found to rely on the correspondence of the skills, knowledge, and resources underpinning them. Our findings of the underpinnings of activity fit mirrors research by Teece et al. (1994) in the cases of activity skills and activity knowledge. It further echoes research by Barney (1991) in the case of activity resources. Activity fit sheds light on how the practical lower-level components of capabilities can be detrimental to the success of HQ deployment of capabilities.

The dimension of conceptual fit refers to the conceptual ability of project members to understand and employ a core capability. This dimension is found to rest on the conceptual similarity between the *a priori* capability and the core capability. Underpinning this dimension is, more specifically, the logic, process, and purpose of a capability. These findings reflect earlier research on capabilities as follows. Conceptual logic has been pointed to by Abernathy and Clark (1985) as reconfiguration of firm knowledge into novel patterns of integration. Conceptual process has been discussed in the terms of knowledge integration by Grant (1996). Conceptual purpose echoes the reasoning about the path-dependence of development activities by Dierickx and Cool (1989). Conceptual fit thus illuminates the conceptual lower-level components of capabilities that may critically influence the performance of HQ deployment of capabilities.

By identifying the dimensions of activity and conceptual fit, we introduce a dynamic feature to strategic fit, as the dimensions of capability fit are not static, but rather the consequence of specific choices made by HQ with regards to what capabilities to deploy. In the framework of strategic fit, capability fit can be argued to effectively influence the parenting opportunity by determining what capabilities are more likely to, activity and conceptually, fit with the a priori capability.

The Network Dependency of Capabilities

Our findings further suggest a secondary influencing dimension on strategic fit which emanates from the internal and external supporting networks of the projects. This influence indicates that a core

capability needs to fit not only with the *a priori* capability of the innovation projects itself, but also with the ability of the projects network to support the project in employing the core capability. This finding echoes research on business networks, which shows that sub-units often are dependent on internal and/or external partners for the performance of critical activities (Forsgren et al., 2005). More specifically, this also corresponds to the findings of Hallin et al. (2011) that the degree of novelty in a transferred innovation critically affects the ability of sub-units and their networks to adopt it. Moreover, Hallin et al. (2011) found that if the innovation transferred was of manageable novelty, the reliance on the network improved the positive effects of the innovation as such reliance may aid sub-units in evaluating the consequences of the transferred innovation. As a contrast, and mirroring the findings of this study, transferred innovations which were very new to the sub-units were found to have negative effects on performance.

In the framework of strategic fit, the two dimensions of network activity and conceptual fit are argued to complicate the parenting opportunity in terms of HQ achieving strategic fit. This as HQ would arguably need to assess such fit between not only a core capability and an a priori capability of a receiving project, but also the, possibly even more complicated, fit between the requirements of the core capability and the abilities of internally and externally dispersed networks of supporting units.

Implications for Strategic Fit

An important contribution of our study is the insight of how lower-level components of capabilities can influence the strategic fit between parent and sub-unit capabilities. Research on strategic fit has traditionally focused on the fit between the abilities of the parent and the needs or opportunities present in the sub-unit (Campbell et al., 1995). This focus has mainly seen both the parenting opportunity of the business as well as the abilities of the parent as static and hard, yet possible, to change (Campbell et al., 1995).

For HQ, achieving a fit between capabilities is of critical importance for its' ability to realize parenting opportunities, and thus for its' ability to create and sustain MNC competitive advantage. Whether the capability deployed by HQ will actually have this desired effect is an interesting, yet

separate, question. Nevertheless, our study contributes with insights corresponding to the fact that it is of importance for HQ to consider microfoundations of capabilities when orchestrating the network for value creation. Supplementing the reasoning of Dhanaraj and Parkhe (2006), our case brings specific network features to the fore that are of relevance for HQ orchestration. If HQ is able to identify relevant microfoundations, it will have an easier time achieving the required fit, thus improving the deployment performance of HQ core capabilities. This contributes with explaining mechanisms for how HQ may create and extract value from the MNC network. A lot of earlier research has identified that one of the main role of HQ is to create value, but has not delved into the mechanisms that influence HQ possibilities for value creation. This study provides insights into the value creation process supplementing earlier research on strategic fit that mainly has focused on the strategic fit between the abilities of the parent and the needs or opportunities present in the sub-unit (Campbell et al., 1995). We contribute to research on strategic fit by expanding on how lower-level components of capabilities as well as the innovation projects supporting network may complicate a parenting opportunity, but also how such challenges may be dealt with by HQ.

Identifying a fit implies a path dependency within the organization, and that the evolution of the MNC cannot be considered in isolation at one point in time. First, it is likely that core MNC functions will have an influence of the core capability that HQ aims at deploying (Dellestrand & Kappen, 2011) suggesting that sub-units operating in MNC core functions are more likely to possess capabilities that fit better with those of HQ. This resonates with literature on diversification and its implications for performance (Bettis & Mahajan, 1985). Also, the sub-units performing core functions will become winners in the MNC, and have greater possibilities of evolving into advanced roles and functions (Birkinshaw and Hood, 1998; Blomkvist et al., 2010). Second, the path dependency and connectedness with MNC core functions is likely to influence HQ ability to understand what is occurring throughout its network (Forsgren et al., 2005). This reasoning further resonates with the literature on absorptive capacity and learning (Cohen & Levinthal, 1990; Lewin et al., 2011) and that HQ ability to evaluate fit is a function of prior related knowledge (Campbell et al., 1995).

Also, and more specifically, our study elucidates two dimensions of fit between the *a priori* capabilities of the innovation projects hosted by sub-units and the core capability replacing them as vital to HQ deployment performance. We contribute to research on strategic fit by identifying the dimensions of capability fit, i.e. activity and conceptual fit, as well as the reliance of these on the supporting networks of innovation projects. We argue that the dimensions of capability fit can pose serious challenges to HQ deployment of capabilities, but that they only risk doing so if disregarded in the evaluation of strategic fit. Since parents often fail to create strategic fit and considering that strategic fit in turn is crucial to creating value (Campbell et al., 1995), the identification and conceptualization of capability fit is an important insight which has implications for HQ-subsidiary relationships, MNC management, HQ attempts at value creation, and the role of the network.

CONCLUSIONS

This study contributes to an enhanced understanding of factors influencing HQ possibilities of adding value within the MNC by identifying activity- and conceptual fit as both critical foundations for its ability to achieve capability fit, as well as potentially dispersed in internal and external networks. This supplements the literature on parenting advantage by illuminating microfoundations of fit connected to capabilities. This study also advances the conceptualization of HQ as a key unit assigned with the task of orchestrating the MNC network, and how the microfoundations of capabilities impact the role and function of HQ, and its possibilities of carrying out expected tasks.

As with any study, this one is not without limitations. As any model attempting to capture the challenges of a complex phenomenon such as the impact of capability microfoundations on strategic fit, our model, and the proposition it rests on, warrant further investigation. Studying a large MNC in a newly consolidated industry may constitute an empirical setting with unique dynamics and features. It is in no way evident that the challenges to HQ deployment of capabilities across sub-units would face the same challenges in an industry that has grown organically, rather than through acquisitions. The focus on six cases from one MNC in the heavy industrial equipment industry may limit our ability to generalize the resulting model. Although a limited sample is necessary when performing

exploratory case-based research aimed at theory development (Eisenhardt, 1989), further study of the impact of capability microfoundations on strategic fit would benefit from larger samples representing several industries and firms.

An obvious avenue for future research is to test the propositions within this paper, using for instance a survey research design. The concepts and dimensions identified in our case study research provide valuable insights for future questionnaire development. In general, there is a dearth of studies addressing the role and function of MNC HQ, and future studies could also further address the ability of HQ of not only successfully deploying capabilities, but also of adding value by so doing, as well as whether or not HQ always has benevolent intentions when it involves itself in sub-unit processes. Such research could then address power struggles within the MNC as well as MNC evolution, although this would require a longitudinal research design. A further avenue for future research would be to look closer at the implications of the dispersion of the underlying components of capabilities in networks for strategic fit and for HQ attempts at value creation. For example, the findings of Hallin et al. (2011) imply that the dispersion of capability-related activities in the receiving units' network may in itself have important consequence for the performance of such HQ attempts. Furthermore, what types of such HQ attempts that actually create or destroy value as well as under what circumstances this is more or less likely are largely unexplored areas in great need of empirical investigation.

Our study has implications for managers in terms of highlighting the importance of microfoundations of value creation. However, as illustrated by our cases, achieving a fit between different dimensions is challenging. Managers need to take this into account and invest in reducing the friction that can occur when capabilities are deployed by HQ by pre-empting mismatches between capabilities. The activity- and conceptual fit identified in our cases, their subcomponents, as well as their potential reliance on internal and external supporting networks serve as points of departure for management when trying to improve capability alignment in the organization.

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Figure 1. A Priori Capability and Core Capability Fit

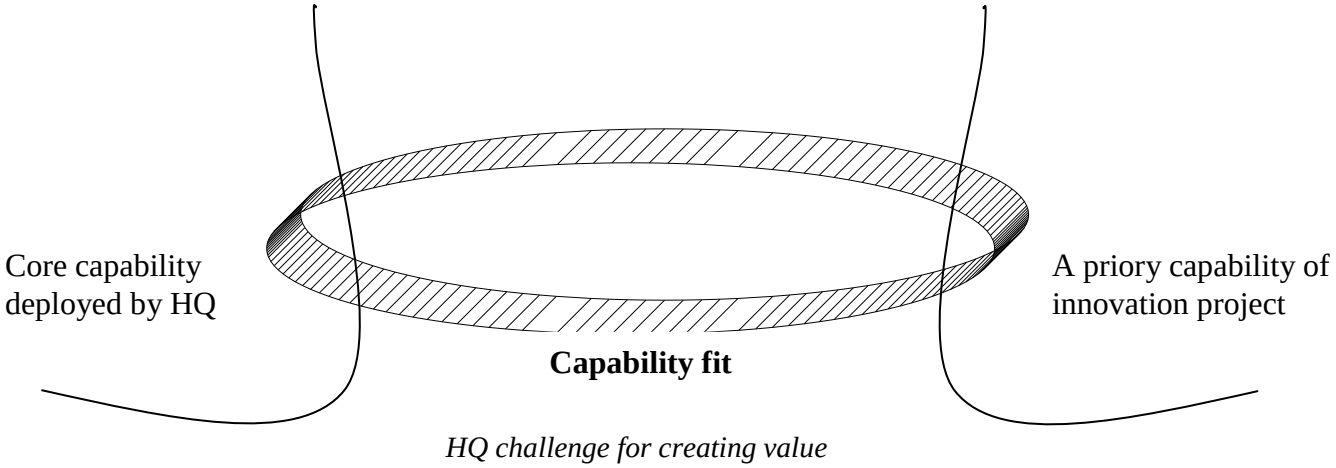

Figure 2. A Framework for Strategic Fit and Deployment Performance

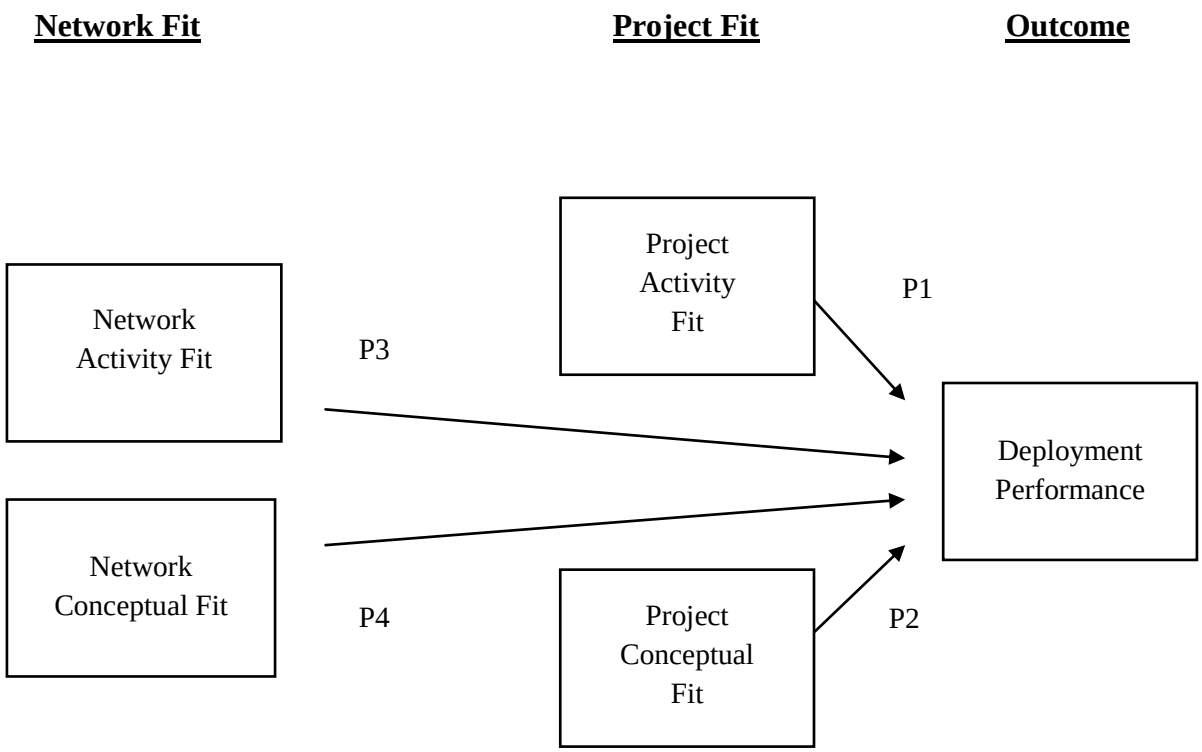

Table 1. Overview of Innovation Projects. *New Product Development

	Project Alfa	Project Bravo	Project Charlie	Project Delta	Project Echo	Project Foxtrot
Project Profile	Full NPD* project, on schedule and on budget.	Full NPD* project, on schedule and on budget.	Full NPD* project, on schedule and on budget.	Full NPD* project, not on schedule or on budget.	Full NPD* project, on schedule and on budget.	Full NPD* project, not on schedule or on budget.
Project Phase	Project Phase 3/7	Project Phase 3/7	Project Phase 4/7	Project Phase 4/7	Project Phase 3/7	Project Phase 3/7
Project Cost Category	Class 2/3	Class 2/3	Class 2/3	Class 2/3	Class 2/3	Class 2/3
Product Class	Heavy Machines	Medium Machines	Light Machines	Heavy Machines	Heavy Machines	Heavy Machines
Product Segment	High Quality & Price	Moderate Quality & Price	Moderate Quality & Price	High Quality & Price	High Quality & Price	High Quality & Price
Number of Interviews	8 Interviews	8 Interviews	7 Interviews	9 Interviews	9 Interviews	8 Interviews
	· 3: Proj. Manager	· 3: Proj. Manager	· 2: Proj. Manager	· 3: Proj. Manager	· 3: Proj. Manager	· 2: Proj. Manager
	· 1: Dep. Proj. Manager	· 1: Dep. Proj. Manager	· 1: Dep. Proj. Manager	· 1: Dep. Proj. Manager	· 1: Dep. Proj. Manager	· 1: Dep. Proj. Manager
	· 1: Eng. Manager	· 1: Eng. Manager	· 1: Eng. Manager	· 2: Eng. Manager	· 2: Eng. Manager	· 2: Eng. Manager
	· 1: Product Manager	· 1: Product Manager	· 1: Product Manager	· 1: Product Manager	· 1: Product Manager	· 1: Product Manager
	· 2: Engineers	· 2: Engineers	· 2: Engineers	· 2: Engineers	· 2: Engineers	· 2: Engineers
Deployment Performance	High	High	High	Low	Low	Low
Indicative Quote	"The last phase [of core capability] gave very good result and the project members were very happy." (Deputy Project Manager)	"I would say we have already implemented [core capability]." (Project Manager)	"We are following the project with [core capability] support now." (Deputy Project Manager)	"We drive [core capability] but again it takes a lot of effort and focus. It's progressing but it's a slow progression." (Project Manager)	"We're partway through [the project] and [core capability] really isn't part of it." (Project Manager)	"We try to apply [core capability], but we can't do everything." (Project Manager)

Table 2. Activity Fit of both Projects and their Networks.

	Project Alfa	Project Bravo	Project Charlie	Project Delta	Project Echo	Project Foxtrot
Activity Fit	**High**	**High**	**High**	**Low**	**Low**	**Low**
Description	The project and its network were performing several of the activities of the core capability since before the deployment.	The project and their organizational network had since earlier been following activities similar to those that were part of the core capability.	The project and their supporting network were already performing several acitvities that they found were part of the core capability.	The project or its network had not previously performed the activities that together make up core capability.	The project as well as its network had a lack of familiarity with the activities of the core capability.	The project had little, and its network less, experience or understanding of the activities required of the core capability.
Indicative Quote Project	"We only have to make some additional backup like [activity], which is really very different from what they're thinking, but the other [activites] are all the same." (Project Manager)	"If they refer to following all procedures and documentation strictly, we don't do [core capability], if it's about following the concepts or principles, then we already do it." (Project Manager)	"We have long done several activities that I now understand are included in [core capability]." (Deputy Project Manager)	"If someone has never done [activity] before, they need a coach and somebody to help them walk through it the whole way. " (Deputy Project Manager)	"We obviously had a lack of exposure and competency with some of the [activities]." (Project Manager)	"As a project manager, if I can't define within the project or with any organization who owns that activity, it's more likely not going to happen right? (Project Manager)
Indicative Quote Network	"All of the organization has been applying the [activity] since the beginning of 2000, more than 10 years." (Project Manager)	"I think more than 10 years, we have done [such activities]. It means that the [organizational] environment are used to a lot of [these activities]. " (Project Manager)	"All these [activities] were already introduced in our [R&D] organization." (Project Manager)	"We're not getting much buy-in on the technology side of multiple concepts with associated [activities]. In our project, it's not happening." (Deputy Project Manager)	"I've seen a lot of technology group and their engineers or designers, they need more training because I don't see anyone has a skill of doing [activity]." (Deputy Project Manager)	"We are developing a pretty good understanding of how to do those [activities], but we haven't been able to really get that same understanding within the local organization." (Project Manager)

Table 3. Concept Fit of both Projects and their Networks.

	Project Alfa	Project Bravo	Project Charlie	Project Delta	Project Echo	Project Foxtrot
Concept Fit	**High**	**High**	**High**	**Low**	**Low**	**Low**
Description	The project and their network were familiar with the concepts of the core capability from having applied it's principles since before.	The project and its network were already quite familiar with the concepts of the core capability.	The project and their network had previous experience with working according to a process much similar to the core capability.	Neither the project nor its network understood or acknowledged the conceptual logic of the core capability.	The project and their network did not see the value of the core capability, or its conceptual logic.	The project had difficulties in making its project members and organizational network embrace the concepts of the core capability.
Indicative Quote Project	"So the [core capability] team said; "you're already using a principle almost similar to [core capability].” (Project Manager)	"[Core capability] will be not that big difference concept wise we already do things. Formal wise there might be some small differences." (Project Manager)	"[Core capability], which is for me not new, we had already this kind of analysis because we have very long experience " (Deputy Project Manager)	"We’ve got massive numbers of issues and we haven’t even built a machine yet. That is a lot to throw these engineers and they’re getting frustrated. " (Deputy Project Manager)	" To me, [core capability] is just shifting the work in the project. I have yet to see that bridge be gapped or that gap be bridged." (Project Manager)	"You can’t take individuals who work a certain way for twenty years and take them through the two days of training and then say "go do", right?" (Project Manager)
Indicative Quote Network	"All engineers [involved with the project] understand that [core capability] is the right direction." (Project Manager)	“Actually, the [project and its’ network] has been doing [innovation process] this way for many years.” (Project Manager)	"The surrounding organization has been doing [processes] this way for many years." (Project Manager)	"We do not have a strong on-site support. So it’s again up to the project team to try to do the best they can." (Project Manager)	"What I found hard on this part was actually getting alignment on who is responsible. That was probably most the outside of the organization not being familiar with how to execute and do some of these [processes]." (Project Manager)	“It’s a good process in itself but we may not have the [surrounding] organization to support the process.”(Project Manager)

Table 4. Overview of Theory Development.

Dimension of Fit	**Activity Fit**			**Concept Fit**		
	The extent to which the activities of an innovation projects' *a priori* capability correspond to the activities required by the new core capability.			The extent to which the conceptual rationale of the projects' *a priori* capability correspond to those of the core capability.		
Underlying Dimension	**Activity Skill**	**Activity Knowledge**	**Activity Resources**	**Concept Logic**	**Concept Process**	**Concept Purpose**
Definition	The difference between the skills required to perform the *a priori* activity as compared to those required to perform the core capability.	The difference between the practical knowledge required to perform the *a priori* activity as compared to those required to perform the core capability.	The difference between the resources required by the *a priori* activity as compared to those required to perform the core capability.	The difference between the logic of the a priori capability as compared to that of the core capability.	The difference between the process of coordinating activities behind the *a priori* capability as compared to the process behind the core capability.	The difference between the purpose of the *a priori* capability, and that of the core capability.
Implications for Performance	If Activity Skill is low, the engineers don't have the required skills to perform the activities of the core capabilty, leading to lower performance.	If Activity Knowledge is low, the engineers don't have the required understanding of the activities and therefore won't be able to perform the activities, leading to lower performance.	If Activity Resources are inadequate, the engineers don't have the resources required to perform the activities, leading to lower performance.	If Concept Logic fit is low, the change in logic cause a domino effect of additional changes, overwhelming projects and their networks, leading to lower performance.	If Concept Process fit is low, the engineers don't have the required grasp of the process required to coordinate the activities, leading to lower performance.	If Concept Purpose fit is low, the engineers don't have the required grasp of the purpose for which they need to coordinate the activities, leading to lower performance.