

Energizing Dynamic Capabilities Through the Design of Organizational Architecture on Microfoundations of Routines and Capabilities

Palin Phoocharoon

National Institute of Development Administration, Business School, Bangkok, Thailand

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Abstract: Competing tensions and demands effort on accumulating organizational routines and capabilities to leverage existing resources comprehensively has become one of the most active in strategic management, critic have charged that it is plagued by confusion around the construct itself. What individual capabilities within a dynamic of the firms could built upon micro-level insights from psychology and philosophy to understand the nature and innovation management of varied competing demands. Recent responding empirical studies are limited and provides scarce insights into why and how one firm be able to thrive with tensions while others struggle. Focusing on the micro foundations of organizational routines and capabilities with a theoretical of organizational architecture model and robust design action on dynamic capabilities could unlock and facilitate individual, process and interaction practices to better performance.

Corresponding Author:

Palin Phoocharoon

National Institute of Development Administration, Business School, Bangkok, Thailand

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INTRODUCTION

Design choices of an organization's architecture represent as one of the most powerful strategic lever to leverage performance. However, concentrate focus too much on the competition has been shown an empirical evidences on leading many organizations to the "blinder trap" that simply moving organization toward the "dynamic inertia". Even though these fast moving trend has received considerable attention from most transformational leaders on the other hand, the architecture of antecedents of organizational learning process and consequence of those choices has been ignored. Driving superior performance demand for the optimum design choice which depend on the contingent of external change and internal fit considerations. In additional to that the precise configuration of organizational mechanism needs revisiting.

Recent two decades the dynamic capability of the firm has been well-accepted as one essential sources of firm competitiveness^[1] and also has been described as a promising perspective of strategic management scholars^[2-5]. However, it has been explained why some firms prosper and survive in turbulent operating environments but scholars have not explored how its design fits into the microfoundations of routines and capabilities of the firms. This study aims to identify the underlying of the design of organizational architecture to enhance management drivers energize enough power to overcome a "dynamic inertia trap" and/or "fitting-in trap" toward a long-term firm survival and sustainable growth.

In addition, this study is an attempt to revisit dynamic capabilities framework as it is generally, espoused in the literature and aiming at understanding processes behind and relating to sensing, shaping and seizing opportunities

and reconfiguring the firm's resource bases to achieve organizational survival and growth which referred to "intentionality in routine dynamics". To date, researcher's insights into these learning processes have been drawn heightened attention starting with an early conceptual work by Teece *et al.*^[6-8] to more structured empirical modeling and testing^[9-11]. However, few studies have captured on the influence of designing micro foundations of routines and capabilities on enhancing dynamic capabilities.

Current disruption that has turned a large multinational corporation into the crisis simply imply on in-depth ineffectiveness of organizational dynamic capabilities. It lead to the motive to investigate the solution that worth need to redefine an individuals, process and interaction that operate under organizational structure. Even as many scholars may empirically a specific type of dynamic capabilities through generalize approach across broad range of activities. This study follow specific approach with generalize management concepts, theorizing to explore whether organizational architecture be able to enhance employee to emphasize on individual and collective accomplishments^[12, 13], achieve performance and learning goals^[14] and demonstrate creativity and efficiency^[15] to cope with a host of pervasive tension change based on the extent to which microfoundations is the one that enhance of and energizing dynamic capabilities consequentially promote individuals leveraging processes and designed structure for better performance and innovation.

Literature review of dynamic capabilities framework:

Recently, the world has experiencing a competitive tensions strongly intensify under conditions of resource scarcity and disruption. Our increasingly fast-paced, global and complex world intensifies the stress of limited temporal, human and financial resources and provokes ever-greater and more varied competing demands. In this study, our emphasis is on energizing of the limited resources as well as growing tensions across employees over the persistent competing demands on executing through design processes and structure on individuals interaction now comprise the greatest challenges for better performance and innovation.

Scholar of strategic management have founded that routines and capabilities differences reported differently performance significantly^[8, 16]. Therefore, microfoundations of routines and capabilities constructs in a host of field in management research have played a prominent roles in the analysis of organizational competitiveness and competitiveness heterogeneity. It have also been closed related to the broad dynamic capabilities emphasis in the field of management. Nevertheless, this stream of research focused more recently on the importance of a specific set of capabilities and dynamic capabilities^[1, 6] including dynamic

managerial capabilities^[17] which empower to management to organize their organizational resources base in response to changing the competitive environment.

It happen that the critical factors to surviving on today competition is the ability to exploit the existing resources and capabilities which Teece^[4] defined as "identifying complementarities, buying or building missing assets and then aligning them" (p.1397). Traditionally, resources exploitation is primarily done by individual on the supervision of top management team^[4]. Empirically, this management practices can apply to many different types of informal organization and others intangible assets in order to reach full capabilities of the firms.

This study choose to focus on the critical internal factor "the design of organizational architecture" together with "microfoundations that that has not been received adequate attention recently. Argote and Ingram^[18] stated that to the extent of studying knowledge as the basic of dynamic capabilities of the firms embedded in individual that help perform the competitiveness of the firms. Argote and Ingram^[18] also states that "...it has been at the level of identifying consistencies in organizations' knowledge development and knowledge transfer" (p.156). To motivate this exploration, existing examples in the prior literature of the specific activities and process of dynamic capabilities embedded on human capital management^[19], social capital and organization^[20] have guided the basic concepts and the linkage of these constructs.

Helfat and Peteraf found that dynamic capabilities has less influenced directly on performance rather enhancing existing capabilities to coup with changing competitive environment that less predictable. Energizing firm capabilities from within or the collections of organizational routines as a source of superior performance become a critical challenge question in strategic management research. Traditionally, dynamic capabilities comprise with microfoundations of three combination: sensing; seizing; reconfiguration^[1]. The effective of all three activities are directly depend on managerial foresight in which recent studies on dynamic capabilities has focused on the top management. Core purpose is on design action of microfoundations of routines and capabilities that can be concluded of as the capabilities on sensing, seizing and reconfiguration of how firms organize and manage existing capabilities together with new resources for maximum value.

MATERIALS AND METHODS

Microfoundations of routines and capabilities toward routines dynamics: Truly understanding routines and capabilities requires more knowledge based work on establishing firm comprehensive outcome. Even routines and capabilities are theoretical linked, each of both

constructs are vary in multiple dimensions. Following Feldman and Pentland^[21], routines are “repetitive, recognizable patterns of interdependent actions, carried out by multiple actors (p.95)”. Routines are explicitly concern on collective activities rather than individual-basis phenomena which emphasis on interaction process and structure rather than individual that are interacting. Therefore, discussion of the microfoundations of routines and capabilities beyond common definitions of its constructs will broaden management perspectives to cover all.

In particular, discussion the hierarchy of routine and capabilities can be classified in two categories; zero-order routines and high-order routines in which both are associated on the extent to which rigidity or flexibility of the context. Zero-order routine or rigid routines consist of sequences of actions to address a specific manner. On the contrary, high-order routine, notably “dynamic capabilities”^[22, 8] are more collective and represents the characteristic of dynamic capabilities suggests that the construct primarily involve a performative aspect on organizing resources and knowledges into action at a place in time^[23].

Explaining variation of microfoundations of routines and capabilities needs to references a number of conceptually different processes and via. versa. Felin *et al.*^[23] suggest that the microfoundations of routines and capabilities can be grouped into the three core concepts: individuals, processes and interactions and structure. Therefore, design in action on organizational architecture of microfoundations of routines and capabilities within the social structure of organization is placed on an attention in the role of interaction effects within the processes that may affect routines and capabilities.

Dynamic capabilities and the role of individuals, processes and interaction and structure: Over the past two decades, the value and the importance of dynamic capabilities as a tools for better performance has been recognized and accepted by business and government. Recently, management scholars have focused on the role of design on dynamic capabilities as a tool for innovation in both products and services and also studied its impact on business performance^[24-26]. To the extent that enacting processes within organization draws on individual action and this action occurs within the formal and informal structure of an organization, this study focus more attention to the design action of interaction effects within the social structure. From the perspective that individuals in organization perform a microfoundations of routines and capabilities in various ways. Thus, understanding how individuals make choices based on the rational of their values, beliefs and norms that more or less informed which finally can affect their choices. In addition,

individuals still bring different human capital such as skills, knowledge and cognitive to an organization. Variation of these factors have influenced the routines and capabilities through their interaction as a members of organization. However, work on routines and capabilities suggest that individual level elements still matter less than processes and interaction and structure^[27]. Therefore, enhancing the processes of interaction on an aggregation with well-design organizational structure is proposed.

Management scholars found that design interaction between individuals and processes within organization determine the effectiveness on how routines lead dynamic capabilities^[28, 7]. Salvato^[29] found that the process-based origins of routines and capabilities are strongly support an evident in extant and emerging empirical performance. To energize dynamic capabilities, realized process is a sequence of interdependent events is the must. Thus, executing an effective process requires an intervention of both formal and informal form of coordination and integration^[30]. Srikanth and Puranam^[31] found that modularization, ongoing communication and tacit mechanisms are three core distinct coordination processes that presents a critical performance consequences. Other scholar illustrates that an integration of main organizational elements such as individuals, teams, departments or cross-functional knowledge resources^[32].

To ensure the smooth coordination between individual and processes, firms do needs to involve in the architecture of technology and ecology. Stream from the related research examines the role of technologies in shaping organizational outcome, the effective implementation through new technologies depends on the team learning processes^[33]. Based on these application to promote dynamic capabilities, establishing structure insights is required to ensure more flexibility in structures on the design of decision-right and decision-making activities of organization. However, structures may allow for autonomy and maximize the information held by member of an organization but also create problems for effective coordination. Therefore, the design of organizational architecture will close the loop of shared knowledge across part of organization and in turn be able to compromise coordination and integration^[32].

RESULTS AND DISCUSSION

Design of organizational architecture to energize dynamic capabilities through microfoundations of routines and capabilities: The value of design approach has influenced business processes and structure to perform their tasks. The purpose of this study is focus on the antecedents and consequences of architectural choices of these three core categories of the microfoundations of

routines and capabilities, individuals, processes and interactions and structure. In fact, organization does not operate within the vacuum, realized that each categories may have a causal effects toward routines and capabilities. It is therefore, reasonable to presume that substantial variation in those constituent comprising congruence format may yield better explanatory consequences.

Toward an organizational architecture approach to dynamic capabilities, integrating main concepts and propose a first step to energize those three core categories is involving multi-dimension perspective theories^[34]. To fulfill that, it needs for using an architectural approach and configurational approach. Consistent with Kor and Mesko^[28] who was concluded that "...dynamic managerial capabilities fail to capture how the firm's set of managerial capabilities drive and are influenced by the unique configuration of resources and competencies in the firm. Thus, an in-depth understanding of dynamic managerial capabilities requires new insight about how dynamic managerial capabilities themselves are configure and orchestrated and how executive's capabilities results in reconfiguration of a firm's resources and capabilities (p.234)".

The architectural to design microfoundations are contextually appropriate, the principle is to revolve around how to structure dynamic exchange systems to integrate different types of resources within the processes in order to affect the operational capabilities and ultimately evolutionary fitness. Configurations are specific combinations of causal variables that generate an outcome of interest^[35]. In addition, Burton-Jones *et al.*^[36] suggest that processes and interactions are assumed to exist within adequate structure to help resolving the constraint underlying resource-based logic to overcome the valuable, rare, inimitable and non-substitutable criteria for better performance.

Organizational architecture approaches also allow to assess complex interconnectedness of multiple system elements, nonlinearities and discontinuities^[37]. To integrate these ideas together in an optimum manner, the propose is to use the analogy^[38] of architecture through its "alignment" as a visualization of the various levels of analysis. Truly facilitating the internal interaction through routines and capabilities toward new architectural operational capabilities can enable and ensure firms maximum performance.

To achieve the full scale, firms must focus their intention in strategy and organizational behavior theories. Overall should formed by multiple theoretical areas related to the three primary microfoundations components. First drawing on behavioral theory of the firm and psychology, recent works shows that individual cognition contributes to differences in managerial and firm behavior^[39,40]. Secondly, other research considers

the process and interaction underlying routines and capabilities constituent with knowledge transfer, absorptive capabilities, learning processes and also firm's history highlight the different aspects of dynamic capabilities. Therefore, considering the role of individuals, processes and interactions in the development of organizational constructs requires comprehensive design action on the structural aspects such as integration and coordination mechanism in the merging of dynamic capabilities.

CONCLUSION

The basic concepts and the extensions discussed above inform the fast-growing literature on dynamic capabilities, microfoundations of routines and capabilities and specifically, organizational architecture. The open management perspective exhibits in this study bring more understanding of an antecedent and consequence of the firms to the study of dynamic capabilities research as individuals, processes and interaction and structure are constituted prior to contemporary changing environments. The importance of well-design structure and processes in the emergence and maintenance of complexity has recently been emphasized by some dynamic capabilities scholars^[1,4,41] but their work has not attempted a theorization of organizational differences, particular one key firm asset, individuals or human capital on design capabilities action for comparative analysis. Organization engage with architectural logics from a starting points and these initial design conditions will shape the nature and consequences of interaction within the processes on an insight central structure toward individual behaviors.

In sum, conceiving of organizations as an organic mechanism with distinct routines and capabilities structure and to some degree of organizational architecture to enhance dynamic capabilities depend on how management evolved design action features mediate the relationship between microfoundations of routines and capabilities and dynamic capabilities. Applying organizational architecture logic at a deeper level of organizational fields, it is necessary for such a new logic to be consider as an incumbent organization on promising to identify the levers by which organizational designer can influence the formation of an interaction of individuals, processes and well-design structure to enrich dynamic capabilities.

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