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**AN INTEGRATIVE MODEL OF DYNAMIC STRATEGY-MAKING:
A YIN-YANG PERSPECTIVE OF CENTRAL AND PERIPHERAL MECHANISMS IN (GLOBAL)
STRATEGY FORMATION**

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FORMATION**

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**AN INTEGRATIVE MODEL OF DYNAMIC STRATEGY-MAKING:
A Yin-Yang Perspective of Central and Peripheral Mechanisms in (Global) Strategy
Formation**

Abstract

The organizational capacity to cope with unexpected changes remains a fundamental challenge in strategy as global competition and technological innovation increase environmental uncertainty. Whereas conventional strategy-making often is conceived as a sequential linear process, we see it as a non-linear interaction between top-down and bottom-up mechanisms dealing with multiple actions taken throughout the organization over time. It is driven by intension but with a flexible balance between centralized (planned) and decentralized (spontaneous) activities where strategy formulation and implementation interact. We adopt the frame of complementary Yin-Yang elements and Zhong Yong balance to explain the time bound interaction between these opposing yet complementary strategy-making mechanisms where tradeoffs and synergies are balanced across hierarchical levels. The model outlines how the interaction between top-down and bottom-up mechanisms shape sustainable strategic responses.

Keywords: Responsiveness; Strategy-making; Top-down; Bottom-up; Uncertainty; Flexibility; Yin-Yang; Zhong Yong.

Introduction

The ability to renew strategy and adapt the organization to changing environmental conditions has been a central tenet of management studies for decades as businesses must somehow be able to adjust and reorganize to accommodate the competitive reality and stay ahead of the game. In the traditional strategic management paradigm corporate executives develop a strategy that fits the environmental context and then design an organizational structure to match it (e.g., Andrews, 1971; Chandler, 1990). As a consequence, the strategy and structure must be adapted accordingly when environmental conditions change. Hence, executive management essentially deals with the ability to cope with change and adapt the corporate strategy to dynamic changes in the business environment (Schendel and Hofer, 1979; Chakravarthy, 1982). This challenge has not diminished as environments are becoming more turbulent and globally competitive with frequent technological shifts and ongoing innovation that challenge existing competitive advantages (Illinitch, D'Aveni and Lewin, 1996; Thomas and D'Aveni, 2009; McGrath, 2013). Environmental conditions are increasingly uncertain and unpredictable, which calls for effective strategic response capabilities (Bettis and Hitt, 1995), adaptive capabilities (Volderba, 1996) and dynamic capabilities (Teece, Shuen and Pisano, 1997; Teece, 2007) to facilitate adaptation.

However, we do not really know what form these capabilities take and how organizations use them effectively in the complex strategy-making processes. Ideally the firm should somehow be able to anticipate environmental changes and adapt organizational activities in view of the new emerging conditions (Chakravarthy, 1982). Organization theorists suggest that informal organic structures with decentralized decisions and information sharing are better at accommodating adaptability compared to formal mechanistic structures. Yet, the issue is not that simple because strategic choices are made both in organic and mechanistic structures. Strategic decisions are traditionally conceived as central capital budgeting commitments derived from comprehensive analytical planning considerations (Ansoff, 1988). This contrasts the more spontaneous decentralized decisions made by dispersed managers as more immediate responses to emerging environmental

circumstances and events (Mintzberg, 1994). However, we know that many capital budgeting decisions below given threshold levels are delegated to managers within the organization as top managers are incapable of handling all investment decisions (Bower, 1982, 2005). So, all these decisions influence the way business evolves and thus determine how strategies arise in the organization but there is no clear theory to explain the underlying dynamic that makes it happen. Hence, the contradictory nature of planned strategies and emerging strategic actions spurred a heated debate between academic giants in the strategy field (Ansoff, 1991; Mintzberg, 1990, 1991).

Strategic management appears to have generally recognized that central and decentralized processes coexist as, for example, expressed by the concepts of intended and emergent strategies (Mintzberg, 1978; Mintzberg and Waters, 1985), middle-up-down strategy (Nonaka, 1988), induced and autonomous strategies (Burgelman, 1983; Burgelman and Grove, 2007). These contributions are largely based on anecdotal evidence, corporate insights and some detailed case studies with only a few empirical studies attempting to quantify the dual process effects (e.g., Andersen, 2000, 2004). Hence, the evidence seems to support that formalized and incremental strategy modes coexist (e.g., Brews and Hunt, 1999) and somehow complement each other but without a deeper understanding of the underlying dynamic. Strategic adaptation is often conceived as linear impact-response processes exemplified by a dynamic capabilities construct that refers to sequential steps of sensing, seizing and restructuring (Teece, 2007).

We contend that the key to understand dynamic strategy formation lies in ongoing interaction between different strategy-making modes without optimal equilibria but with continuous information exchanges across different hierarchical levels and time horizons where everything is in flux. We develop a theoretical model to understand the underlying dynamic of the complex strategy-making processes in an otherwise fragmented field scattered with anecdotes and case-based illustrations presenting diverse broad-based views. We adopt the principles and philosophical thinking behind the Chinese Yin-Yang and Zhong Yong balancing view to develop our theoretical reasoning. We use it as

inspiration to reconcile paradoxical opposites, such as, central versus decentralized, forward-looking versus retrospective, top versus bottom, long-cycled versus short-cycled, etc. These elements represent contradictory yet complementary mechanisms (Li, 2014a). Hence, the contradicting elements constitute a holistic, dynamic and paradoxical system where the individual parts interact and complement each other (Li, 1998).

In the following, the article provides an overview of the strategy-making processes and adopts the Yin-Yang and Zhong Yong balancing principles to reconcile the dualities in the strategy discussion outlining a dynamic interactive model of strategy formation. The model describes an interactive dynamic processing system where strategy is formed through the combined interplays between central and decentralized strategy-making modes. Finally, the application of the model and implications for future strategy research are discussed.

The strategy-making process

The dynamic process of making strategy has received notable little attention, although the concept is considered essential for the sustained success of organizations distinct from the more general phenomenon of strategic change. Strategy scholars often refer to strategy-making, but the concept is rarely defined. Research that refers to strategy-making frequently uses the term to present examples of strategic change in a broad sense with most cases highlighting organizational change processes. Agarwal and Helfat (2009: 281) describe the strategic renewal concept meticulously and suggest that the underlying strategy formation process has several important characteristics. First, the process relates to organizational factors with a potential to substantially affect the long-term prospects of the corporate business activities. Second, it is comprised by the formation process, the content and the outcome of the process. Third, the process encompasses the refreshment or replacement of exiting organizational attributes. Fourth, this replacement lays a foundation for future growth and development. Based on such characteristics, Argawal and Helfat (2009: 282) define strategic renewal as “*the process, content, and outcome of refreshment or replacement of attributes of an organization that have the potential to substantially affect its*

long-term prospects”. This definition is rather broad and focuses intentionally on refreshment and replacement rather than all kinds of change. In line with this view, Barr, Stimpert and Huff (1992: 15) conclude that “process hinges not so much on noticing new conditions, but on being able to link environmental change to corporate strategy and to modify that linkage over time”. That is, strategy is formed over time in a time-linked interaction between changes in the environment and corporate responses to those changes.

Binns, Harreld, O’Reilly and Tushman (2014) describe how IBM successfully modified their business activities over time employing responsive strategies to impending changes. In 1999, IBM announced that following a close-to-death experience five years earlier where the company had lost its ability to innovate, it was once again a stable enterprise. Over the prior 14 years, IBM became a new company. It successfully managed to depart from hardware and software to re-focus itself around consulting, analytics and industry-specific solutions. Based on empirical case studies of the strategy-making process in IBM and other organizations, such as, Ciba Vision, Analog Devices and Ball Corporation, Binns et al. (2014) developed a set of principles for how organizations can renew themselves in the face of market disruption. These include: Selecting growth aspirations that are consistent with the company’s sense of identity; treating strategy as fact-based conversations with employees as opposed to formalized planning; allowing experimentation to explore new business opportunities; establishing a leadership community with engaged managers at all levels in the organization. Hence, an effective strategy-making process requires commitment, engagement, open discourse with necessary dispersion of resource allocation.

The implied learning process associated with the interactive strategy-making process has been examined in several studies. Hence, organizational learning theory has been employed to understand knowledge creation (Nonaka and Takeuchi, 1995; Spender 1996), organizational memory (Casey, 1997; Walsh and Ungson, 1991) and mental cognitive changes (Barr, Stimpert and Huff, 1992). However, the extant literature has not addressed the fundamental tension between exploration and

exploitation, i.e., how firms develop new competencies while simultaneously exploiting existing ones. We attempt to deal with this shortcoming by examining the dual strategy-making paradox and provide a new model to balance creation and adaption in the formation of strategy.

The dual strategy-making paradox

The conventional strategic management model is conceived as longitudinal sequences of analytics-based planning activities, organizational execution, and performance monitoring repeated over relatively long time-intervals typically within the twelve-month time span of the annual budget. The formal strategy-making process consists of comprehensive environmental analyses, drawing strategic trajectories and developing initiatives for subsequent implementation to achieve objectives and monitoring subsequent performance outcomes (e.g., Anthony, 1965; Schendel and Hofer, 1979; Richards, 1986; Ansoff, 1988). This depiction generally applies to the so-called design and planning schools described by Mintzberg (1990). Deviations between planned and realized outcomes can be assessed through (diagnostic) strategic controls as a basis to consider the need for corrective actions (Simons, 1996, 2000). This process may foster learning about the changing environment and provide insights about means-outcome effects although often with delayed and uncertain feedback (e.g., Goold and Quinn, 1990, 1993; Simons, 1990). If the environment changes frequently and in unexpected ways, the corrective actions may be misinformed and come too late. This may be the case in environments characterized by ongoing innovation where competitive advantages are continuously challenged (e.g., Thomas and D'Aveni, 2009; McGrath, 2013). Hence, uncertainty and unpredictability require strategic response capabilities (Bettis and Hitt, 1995), adaptive capabilities (Volberda, 1996) and dynamic capabilities (Teece et al., 1997) to survive and thrive.

In turbulent hypercompetitive environments organizations are confronted with vast amounts of information involving a multiplicity of individual knowledge-based insights (Child and McGrath, 2001). In this situation the solution is to move decisions closer to the location of relevant operational information and individual managerial expertise (Daft and Lewin, 1993; Volberda, 1996).

The literature has described such a move from hierarchical organizations towards more decentralized structures with lateral communication and coordination (e.g., Galbraith, 1995; Achrol, 1997). However, central strategy creation, or planning, and decentralized adaptive strategic actions have typically been seen as contradictory approaches fostering ‘false’ either-or choices. On the one hand strategic planning is seen as a necessary prerequisite to comprehend the dynamic environmental changes that characterize the competitive reality thereby helping the firm steak out a proper strategic direction and innovate for future actions (e.g., Schendel and Hofer, 1979; Andrews, 1980). On the other hand, dynamic environmental conditions make the planned actions outdated before they are implemented by the organization, which may expose the firm to ‘false’ directions and impertinent actions. So, it is argued that the organization is better off adhering to emergent strategies and learning from developments as they evolve (e.g., Mintzberg, 1978; 1990).

These opposing views have enforced an either-or thinking as illustrated by the debate between the ‘father’ of corporate planning, Igor Ansoff (1965) and the ‘father’ of strategic emergence, Henry Mintzberg (1978). As a reflection of the dichotomous views, the final article in the dispute had in its title: “Learning 1, Planning 0” (Mintzberg, 1991). While the proponents seemingly renounced their respective views as the full and only truths, the debacle displayed a surprising conflict of positions and this dichotomy still looms under the surface.

Ansoff (1988) and others argue that the strategic planning process can better conceive of the changing environment with the aim of developing better strategies and fostering innovative solutions for future strategic actions. Mintzberg (1994) argues that strategies are partially formed through informal learning and individual visions where formal planning fails because it is detached from the operational activities that drive the actual business. Since major environmental changes cannot be accurately predicted, a highly formalized planning process can become inbred and succumb to stale thinking. Hence, the true role of strategic planning is more to support the adaptive strategic actions by providing useful analytical inputs and encouraging strategic thinking. Here, the planners feed important

information into the strategy process to encourage *thinking* and look for emerging strategies rather than outline detailed plans (Mintzberg 1999). So, despite the apparent contradictions it seems like the two opposing views can be reconciled as suggested by the Yin-Yang perspective.

The Yin-Yang and Zhong Yong balancing principle

The notions of Yin-Yang and Zhong Yong are at the heart of traditional Chinese philosophy. According to the Yin-Yang philosophy, the Yin element, such as, stability, exploitation, defensive, negative, etc., and the Yang element, such as, change, exploration, offensive, positive, etc., constitute a special pair that has simultaneous contradictory and complementary relationships between the two elements or forces. The contradictory relationship means there are trade-offs, or competition, between the two elements, whereas the complementary relationship means there are synergies, or cooperation, between the two that can, or should be enhanced. It is worth noting that the Chinese Yin-Yang philosophy emphasizes and prescribes coexistence of Yin-Yang elements in all situations.¹ Due to the paradoxical nature of Yin-Yang it has inspired and symbolized analyses of paradox (e.g., Chen, 2002; Lewis, 2000; Smith and Lewis, 2011; Li, 2012).

As Yin and Yang always coexist there is simultaneous contradiction and complementarity in their relationship at any time. Yin and Yang are always contradictory but they are also complementary because each of the two will have a positive spillover effect on the other when they coexist and when one is crowded out, or excluded, the other will ultimately suffer and become suboptimal. Hence, it is imperative to balance the Yin-Yang forces to gain a harmonious relationship between the two, where the contradiction, or conflict, between the two is minimized while the complementarity, or synergy, between them is maximized. This balancing view corresponds to the Chinese Zhong Yong philosophy. The essence of the Zhong Yong balance is that being excessive in a certain direction is as bad as being deficient in that direction. A mathematical expression of Zhong Yong balance can be seen in the inverted U shape relationships between dependent and independent

¹ This is in contrast to Niels Bohr's complementarity principle, known as 'contrary as complementary', that prohibits coexistence of two contrary properties of matter in a single observation.

variables found to describe many relationships in management and organization studies (Pierce and Aguinis, 2013). Due to the prescription of avoiding extreme, excessive or deficient, positions, the Zhong Yong solution is different from the ambidexterity approach to paradox. The ambidextrous organization prescribes separation of processes (Tushman and O'Reilly, 1996; Benner and Tushman, 2002; O'Reilly and Tushman, 2004, 2008), where Zhong Yong balance requires that the Yin-Yang elements are fully integrated. It is argued that the Zhong Yong principle is similar to Aristotle's 'Doctrine of the Mean' where virtue is seen as the 'mean' between two extremes, however, as Aristotle pointed out, the 'mean' is not the arithmetic mean but 'relative to us' which means contingent upon the specific situation under consideration (Losin, 1987). Hence, a Zhong Yong solution can prescribe different configurations or ratios between the Yin and Yang elements under different conditions and at different points in time. Similarly, a Zhong Yong solution can prescribe adjustments and changes to the configuration or the ratio between the Yin-Yang elements. So, environmental contingencies may require different weighting of the Yin-Yang elements as well as the relationship between them can be conditional and time dependent. The Yin-Yang philosophy is about how to balance contradictory yet complementary elements by dynamically adjusting the configurations or ratios between the Yin and Yang elements under specific conditions and given points in time. Hence, centralized and decentralized processes can be dominant and subordinate under different circumstances where the positional dominance may depend on the stage of the interactive strategy process, e.g., planning and budgeting, budget follow-up, short-term responses, strategic control, etc.

An interactive dynamic system

Even though complementary contraries by definition are opposed to each other, they can coexist and be mutually dependent. For example, central strategic plans and the thinking that goes into their making will change periodically as well as decentralized strategic actions change over time but at different organizational levels and with different temporal scopes. Poole and Van de Ven (1989) suggest that paradoxical conditions can arise from such spatial and temporal separation where we can emphasize

interactive processes to explain how they complement each other and drive dynamic change. We note that in the dual strategy-making paradox one process is top management driven whereas the other is anchored around operational activities at the bottom of the organization and that the first process is long-cycled proactive (planning) where the latter is short-cycled and reactive (emerging) as a Yin-Yang pair. These two strategy-making modes are distinct in terms of their anchoring at different organizational levels and adopting different time horizons, which is a key to explain the interaction between the two modes. Hence, it is argued that central top management driven long-cycled forward-looking strategy creation processes together with decentralized short-cycled strategic adaptation processes triggered by operational managers based on environmental stimuli can form a dynamic adaptive system (Andersen and Fredens, 2013). The preceding arguments suggest the following proposition:

Proposition 1: The combination of long-cycled forward-looking planning processes at the top and short-cycled strategic responses at the bottom of the organization forms a dynamic adaptive system that can drive persistent and sustainable performance outcomes.

Lewis (2000) argues that paradoxical tensions often derive from polarized cognitive and social constructs where defensive reactions can push these perceptions towards their extreme interpretations even though the “tensions signify two sides of the same coin.” (Lewis, 2000: 761). The tensions can be resolved so as to avoid the extreme and counterproductive effects by rethinking past perceptions and the practices driven by them (Lewis, 2000). This can be accomplished by discovering the links between the opposing forces, or the perceived contradictory processes, and open up for a new framework that can give meaning to the apparent contradictions. Paradox reflects dualities that are in opposition to each other, but that also are synergistic and interrelated within a more complete dynamic system (Smith and Lewis, 2011). The two contradictory elements, or constructs, can be seen as thesis and antithesis that can be resolved through synthesis, but where the synthesis becomes a new thesis, that eventually spurs an antithesis, and so forth. For example, a plan is based on expectations (thesis) that can be proven wrong in subsequent practice (antithesis) where the prior expectations are updated

based on analysis of the ongoing experiential insights (synthesis). By embracing the paradoxical tensions and resolving them in the form of iterative responses over time, it is suggested that the organization can create a so-called “dynamic equilibrium” that can foster sustainable performance outcomes (Smith and Lewis, 2011). Hence, resolving paradox is not a linear progression towards an optimal endpoint, but resembles a continuous ongoing cyclical process of inter-temporal peak performances.

The Yin-Yang symbol is often adopted to illustrate the tensions and signify the wholeness of contradictions (e.g., Lewis, 2000; Smith and Lewis, 2011). The Yin element is the black part that signifies stability, exploitation, defense, etc., and the Yang element is the white part signifying change, exploration, offence, etc. (Li, 2013). Adopting this symbolism to the dual strategy-making approaches, forward-looking strategic planning corresponds to the Yin element in so far as it represents a rational analytical approach to create a stable strategic direction for the organization, coordinating activities to exploit existing economies, and defending superior resource and market positions going forward. The emergent strategy approach arguably corresponds to the Yang element as it responds to changes in the environment as they arise, learns from trial-and-error and thereby explore what works and what does not in offensive moves that can uncover important future strategic options. So, one process is trying to proactively *create* strategy for the entire organization as seen from a top management perspective, whereas the other process is reactive and *adapts* strategy through many responsive actions taken at the bottom of the organization by operational managers and employees that gain new insights about the evolving environment from these ongoing activities.

The strategic planning process seeks to create a common understanding of the competitive environment in which the firm operates and give general direction to future activities where some investment decisions are planned and others are delegated for subsequent execution (Bower, 2005). After the planning process the organization executes the business activities in pursuit of the intended strategic direction while taking adaptive actions as and when conditions change dealing

with current strategic issues as they emerge. Here the underlying assumptions and expectations of the central top-down planning process constitute the thesis and the actual experiences gained in the subsequent decentralized bottom-up execution represent the antithesis as organizational members learn from ongoing actions. Synthesis arises when the experiential insights derived from the execution of ongoing business activities are referred back to the initial planning considerations to update the cognitive understanding of the competitive environment that can then be used in subsequent planning. Here we see a dynamic strategy-making process interacting between top driven forward-looking considerations and retrospective insights from trial-and-error experimentation at the bottom of the organization (Figure 1). In the initial time period (A) the planning process first dominates and is pursued at its highest level of intensity to displace the focus on execution (even though the business is still being handled) and once the planning process is completed strategy execution takes predominance and becomes the key focus. This cyclical interaction between the dual strategy-making modes of creation (planning) and adaptation (emergence) continues in subsequent periods B, C, D, and so forth.

--- Insert Figure 1 about here ---

This forthcoming dynamic process resembles the well-known interfaces between strategy formulation and implementation but serves to emphasize the importance of synthesis that must bind the two processes together to be effective. In strategy jargon this is typically referred to as the strategic control process, but this area remains grossly under researched in the strategy field (Simons, 1990, 1994). As mentioned an interesting artifact of the dual perspective is that the two strategy-making modes can be distinguished by their diverse locations at the top and the bottom of the organization as well as their differing time horizons where one is long-term forward-looking and the other short-term and retrospective (Figure 2).

--- Insert Figure 2 about here ---

Hence, the administration around top management at the strategic level of the organization tries to assess the environment and discuss this with internal operating managers and external peers to outline

an intended strategic direction several years forward in time. They enact the strategic path by committing some strategic investments and communicating the intended direction as managers and employees at the operational level deep down the organization subsequently take action and execute. The operating employees conduct all the current business activities within an existing organizational structure and resource investments committed by top management. They also take responsive actions when conditions change in unexpected ways and thereby test new strategic opportunities and learn about how the environment evolves. As they face changing conditions that challenge the strategic assumptions this constitutes opportunities to experiment and explore new ways of doing things that can adapt corporate activities to emerging trends. Hence, when, operational employees execute the intended, or planned strategy, they do two things: (1) they try to accomplish what the top-down strategic plan asks them to do, and (2) they do what bottom-up strategic emergence requires them to do when the real environmental context changes from the pre-planned assumptions and expectations. Hence, in reality the strategy execution as performed within the organization constitutes a mix of centralized top-down and decentralized bottom-up mechanisms that appear as a Yin and Yang pair.

This describes a virtuous cycle between the otherwise contradictory strategy-making modes of planning and emergence that can arise from interactive learning between top managers at the strategic level and managers/employees at the operational level to achieve a more updated and higher order synthesis at the strategic level. That is, the experiential insights gained from the responsive actions taken by managers and employees at the operational level are, or should be, communicated and discussed interactively between top management and the employees engaged in ongoing operational activities to ensure fully updated information and proper synthesis by engaging the diverse expert views and insights in the discussions. It is important here to be conscious of the Zhong Yong principle because defensive reactions otherwise might push prevalent perceptions towards the extreme interpretations of either strategic planning or responsive emergent actions where a cyclical combination of both is needed to achieve ongoing environmental learning. Hence, there should be regular

movements of emphasis and de-emphasis between planning and emergence over time as elemental parts of the Yin-Yang dynamic so they never get permanently stuck in the extreme position of either approach (See the center of Figure 2). A pure emphasis on planning will eventually lose touch with reality because there is no ongoing information updating from operational activities where things are actually done and experienced hands-on (Mintzberg, 1994). Conversely, a pure emphasis on emerging responses and learning is insufficient because it lacks synthesis to understand how things are changing with concerted efforts to integrate activities for economic benefits (Brews and Hunt, 1999). These arguments suggest the following proposition:

Proposition 2: A balanced interaction between long-cycled forward-looking planning processes at the top and short-cycled strategic responses at the bottom of the organization is associated with more persistent and sustainable performance outcomes over time.

Just as we argue that open exchange of information between forward-looking analytics based considerations around top management and current experiential insights gained from ongoing exploratory operational actions responding to changing conditions, there is also an issue of the frequency by which the information exchanges take place. Obviously it is possible to maintain open and informal communication lines within an organization. Since the dual strategy-making modes should be synchronized over time with interchanging periods of high and low emphasis, the length of those periods determine the frequency with which the formal information exchange in interactive learning processes take place. In highly turbulent environments with frequent and unexpected changes there might be a need for more frequent formal processes whereas the same requirement might not apply to relatively stable conditions. We can for example think of these process cycles as following monthly, quarterly or annual information processing sequences (Figure 3). The annual sequence is adopted in most firms as coinciding with the annual budgeting process, whereas the quarterly cycles would be

convoluted within the annual cycle, e.g., when the firm pursues quarterly rolling budgets. Similarly, the monthly cycles would be convoluted within both the quarterly and the annual cycles if the firm pursues monthly rolling budgets. We note that the information discrepancy between the top and bottom of the organization will be progressively higher the more long-cycled the process is. Hence, we can reduce this information gap by entertaining shorter information processing cycles, which might be highly pertinent in turbulent and unpredictable industries.

— — — Insert Figure 3 about here — — —

The previous discussion can be summarized in the following propositions:

Proposition 3: Informal and open communication links between individuals engaged in long-cycled forward-looking planning processes at the top and short-cycled strategic responses at the bottom of the organization is associated with more persistent performance

Proposition 4: In turbulent and unpredictable environments high frequency interaction between long-cycled forward-looking planning processes at the top and short-cycled strategic responses at the bottom of the organization is associated with more persistent performance

Discussion

It is argued that the strategy-making process must embrace both intended and emergent strategies (Mintzberg, 1978; Mintzberg and Waters, 1985). It is also noted that effective organizations conduct activities within central integrated processes (Hill, Martin and Harris, 2000) where decentralized decisions reach better outcomes under a rigid organizational structure (e.g., Jelinek and Schoonhoven, 1990). There is a need to coordinate dispersed organizational actions and integrate corporate activities in an efficient operational structure to gain economic efficiencies. Therefore, the challenge lies in effective combinations of central control features and decentralized responses initiated by low-level managers and employees where the effects of changing conditions are observed and sensed first, as

early as possible as things evolve, and before anywhere else in the organization (Hallin, 2012; Hallin, Andersen and Tveterås, (2013).

The potential importance of local responsive decisions are supported by a number of studies demonstrating how low-level initiatives build essential competencies and develop into important strategic options for the firm (e.g., Bower, 1982; Burgelman, 1983, 1988; Noda and Bower, 1996). The decentralized initiatives are a source of business opportunities where strategy-making derives from responsive actions taken by low-level managers and employees at the operational level as they engage in initiatives to develop opportunities that can turn into successful business ventures (Bower and Doz, 1979; Burgelman, 1996; Bower, 2005).

Conceiving strategy as the outcome of resource committing decisions at different levels of the organization that form a pattern of strategic actions over time essentially reflects dispersed decision-making with central coordination (Bower, 1982, 2005; Mintzberg, 1978, 1994). The dispersion of decision power allows lower-level managers and employees to take exploratory initiatives that may uncover new business opportunities. The strategic planning approach with related strategic control systems is used for forward-looking evaluations of new business ventures while monitoring ongoing business developments and performance outcomes (e.g., Ansoff, 1965; Richards, 1986). Hence, strategic planning can be used to integrate new projected business activities into the official corporate strategy including ventures developed from decentralized initiatives to ensure economies through better coordination.

The planning and control activities can also be seen as the means to form a shared cognitive understanding of the firm's competitive situation as a common backdrop to discuss forthcoming strategic actions (Ansoff, 1965; Andrews, 1980; Hill et al., 2000). Strategic planning including mission statement, environmental analysis, strategic controls, and updated action plans is typically a central process conducted to (primarily) update the cognitive strategic understanding of top management. However, to the extent other organizational decision-makers are involved in the

discussions it can also broaden the cognitive understanding of other important constituents in the organization. Hence, strategy-making is a process of discourse where planning activities reconcile diverse experiential insights to develop a common understanding of the competitive situation and strategic direction of the firm (Hendry, 2000).

Strategic emergence is driven by responsive initiatives enabled by a decentralized decision structure and management information systems that support the assessment of responsive actions (Burgelman, 1988; Mintzberg, 1994). The dispersed decision makers can use information and communication systems to coordinate initiatives with other functional entities in the organization as they experiment with new responses in an ongoing quest to find better solutions. Decentralized actions may lead to a wild 'goose chase' without any direction if not held at bay. However, a common cognitive understanding of the competitive situation and strategic direction of the firm can align the various initiatives towards common goals and aspirations. Hence, a more complete model of the complex strategy-making processes integrates decentralized decision structures with planning and management controls supported by management information and communication systems. Therefore, the organization should offer a degree of autonomy that allows decentralized experimentation and at the same time conduct central planning to integrate, coordinate and monitor corporate activities across levels and functions.

The dual concerns for integration and entrepreneurial behavior that are at center of the dual strategy-making conundrum are reflected in the conjoint needs for effective routines and exploratory search (e.g., March, 1991; Winter, 2003). It is also expressed as a need to configure ambidextrous organizational forms (e.g., Benner and Tushman, 2003; O'Reilly and Tushman, 2008). In strategy research, the attempts at optimizing and rejuvenating strategic business activities have variously been described as intended and emergent strategies (Mintzberg, 1978; Mintzberg and Waters, 1985), top-down and bottom-up strategies (Nonaka, 1987), induced and autonomous strategy processes

(Burgelman, 2005; Burgelman and Grove, 2007), and central planning and decentralized initiatives (Andersen, 2004).

The need for creative and adaptive strategy-making modes has been conceptualized as dynamic capabilities (Teece, Pisano and Shuen, 1997) defined as the organization's ability to sense emerging changes in the environment, seize new opportunities, and reconfigure the organization to exploit the new opportunities. Teece (2007, 2009) provides a comprehensive account of how dynamic capabilities enable organizational adaptation and ascribes this to the knowledge and creative activities of many often specialized actors in the organization. A number of authors have tried to develop a better understanding of the multifaceted dynamic capabilities construct with a broad palette of examples (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece and Winter, 2007). Since the complex strategy-making process comprises an amalgam of central and dispersed resource committing decisions (e.g., Bower and Gilbert, 2005) the dynamic capabilities apply to many decision-makers at all organizational levels. Hence, the ability to invoke dynamic capabilities is likely to require individual cognitive capabilities among executives as well as among operational managers and employees within the organization that have specialized knowledge. Accordingly, we claim that an effective strategic dynamic depends on a combination of central and decentralized processes where networks of top managers and operational managers and employees interact and confront their forward-looking cognitive understanding of the strategic context with the ongoing experiences gained at the operational level.

The dynamic discussed in this paper is likely to have some limitations in its application as different environmental contingencies may affect the relevance of the model. For example, differences in firm size and stages of the life-cycle may influence the ratios between central and decentralized strategy-making approaches. Small informal organizations operating at the start-up stage will probably adhere more to emergent and less to deliberate processes as the closeness of organizational members reduces the requirement for more structured and formalized approaches. However, as soon as the organization starts to grow beyond a certain size, the need for a more balanced combination of central

and decentralized strategy-making increases and is probably highest among large mature firms where there otherwise may be a tendency for top management to reinforce their own perceptions of the strategy. Hence, in all organizations above a certain size there is a need to challenge top management and provide them with experiential insights from dispersed operational activities to provide updated insights from reality that avoid getting stuck in self-reinforced perceptions about the strategic conditions.

Different types of industries may display different degrees of turbulence over time, where changes in the industry may follow punctuated equilibria, with stable periods and shorter abrupt periods of upheaval. Hence, we could envisage a need for different weights between central and decentralized strategy-making approaches during stable and unstable periods. Based on a single case study, Burgelman and Grove (2007) describe in detail how these environmental settings drive resource committing decisions and observe how the emphasis on central induced and autonomous exploratory investments evolve over time. They are interested in the balance between investments for exploitation and exploration that maximizes the firm's chances for survival and its ability to obtain sustainable performance outcomes. Here we should keep in mind that there seems to be value associated with inertial behavior as so-called architectural changes, where entire structures are adapted, will induce a cascade of additional and unforeseen changes that prolong the expected time of reorganizing. In the words of Hannan, Pelos and Carroll (2003: 399): "Limited foresight produces a systematic tendency to underestimate the length of reorganization periods and thus to underestimate the cost of change." This speaks against major revolutionary changes and calls for many smaller evolutionary changes along the way where more frequent interaction between central planning and emergent strategic actions responding to evolving environmental conditions is a potential recipe for a more balanced and durable approach to strategic process.

The strategy formation can fundamentally follow a discontinuous or incremental process where the incremental process is conceived a more proactive approach that "enable firms to cope with

changes in the external environment as they take shape, and thereby reduce the need for a much larger and more difficult transformation later on” (Agerwal and Helfat, 2009: 283). The incremental continuous process can eventually contribute significant organizational changes as “a series of small incremental changes can accumulate into a much larger change when viewed over a longer time span” (Agerwal and Helfat, 2009: p. 284). Burgelman and Grove (2007) show how the balance between induced investments, i.e., those imposed by top management, and autonomous investments, i.e., those committed by low-level operational managers, was important for Intel’s ability to respond to changes in the industry structure. Hence, even in relatively stable periods there must be considerable devotion given to initiatives taken deep down the organization because the experiences gained from these activities close to the real action can develop new strategic business areas to pursue when the industry structure changes. Yet, there is also a need for central investments to gain sufficient economies during relatively stable periods with a given industry structure where the competitive parameters remain fairly constant. However, there should be no moves towards retaining extreme positions on either of the two opposing resource committing processes over time whether it is in the form of centrally handled investment budgets or decentralized capital investments because it will eventually lead to suboptimal situations as the environmental context changes over time.

Hence, the Yin-Yang philosophy suggests that effective and sustainable strategy-making processes must be comprised by opposing, but complementary strategy-making modes of top-down forward-looking planning considerations that synthesize existing knowledge with updated experiential insights gained from responsive bottom-up emergent actions taken at lower-level operational entities. The Zhong Yong balancing principle tells us, that the two strategy-making modes must interact over time through both formal and informal communication channels with oscillating anti-modal emphasis and de-emphasis between the two modes in a way that none of the two come to dominate but retain a sound balance.

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Figure 1. Dynamic Interaction Between Strategic Planning and Execution

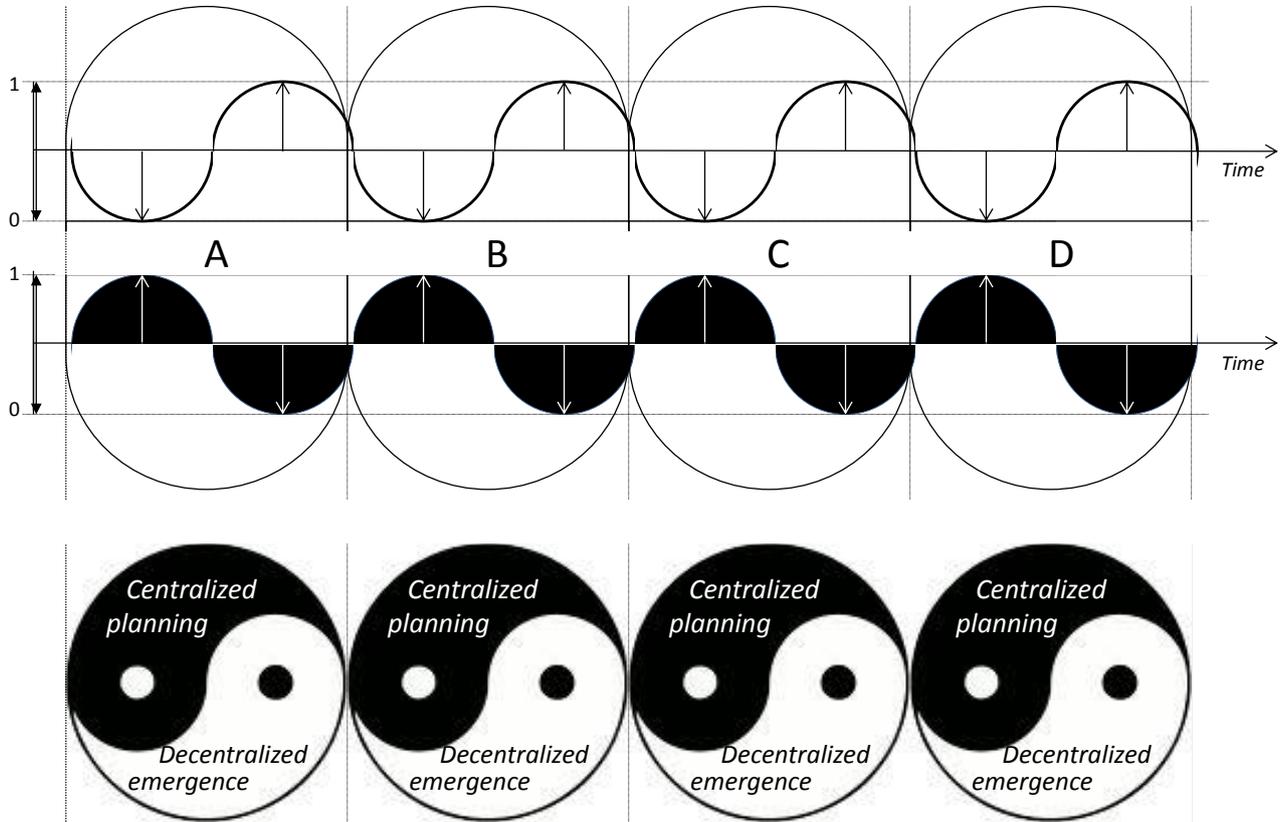


Figure 2. A Model of the Dynamic Strategy-Making Process

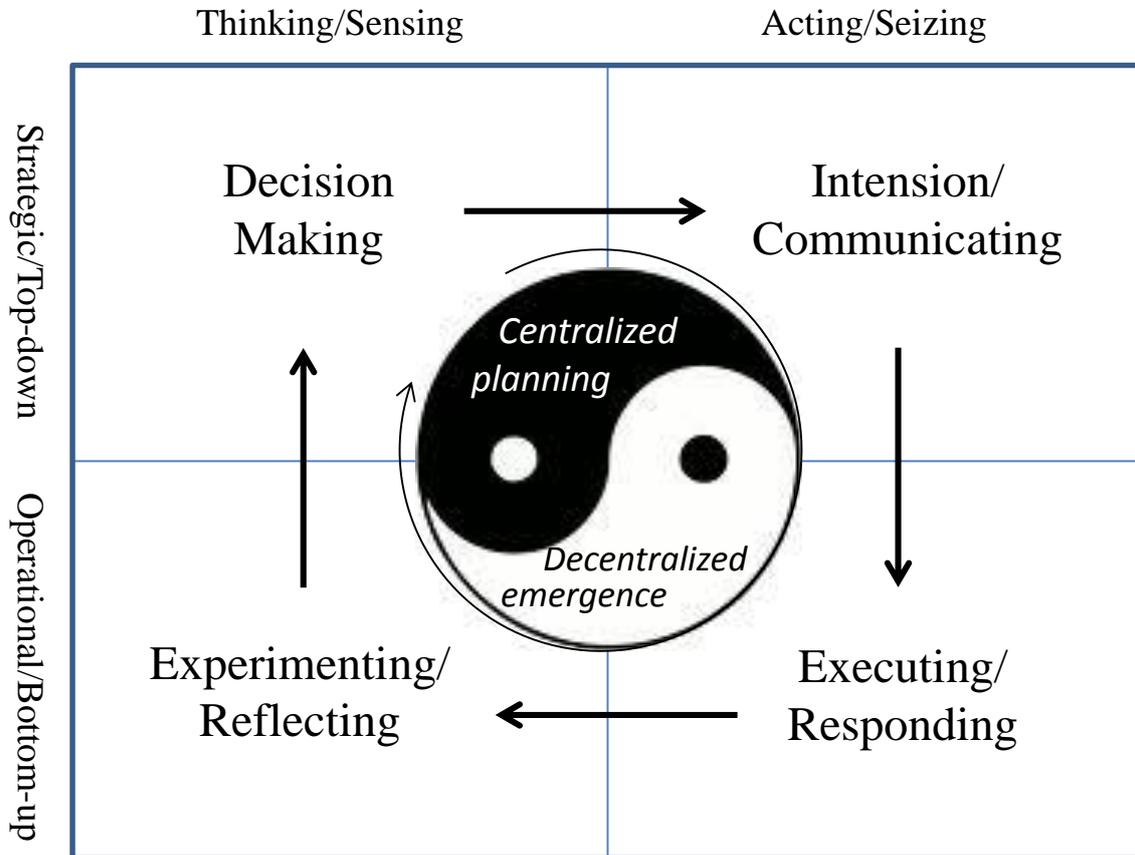


Figure 3. The Time Sequencing of Dynamic Interacting Strategy Processes

