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Integrating the content and process of capability development: Lessons from theoretical and methodological developments

ALIREZA J. KASHAN AND KAVOOS MOHANNAK

Abstract

The literature on capability development has focussed on either the content or process of capability development. Such a partial explanation of the capability development phenomenon has created some flaws in the literature. This paper argues that integrating the content and process of capability development is the way ahead in theorising in this field. Analysis of the methodological development in parallel to theory development reveals the critical role of microprocesses in such integration. To develop an integrative view of capability development we propose a conceptualisation of capability development processes through internal and external strategic fit and emphasise the role of knowledge and innovation processes. We also argue that a critical realism approach is of high relevance to researching such an integrative view.

Keywords: capabilities and capability development, dynamic capability view, ambidexterity, strategic knowledge capabilities

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The resource-based view (Barney, 1991) argues that organisational resources which are valuable, rare, inimitable and nonsubstitutable are sources of competitive advantage. It has been argued by Barney, Wright, and Ketchen (2001) that the major sources of competitive advantage are not the distinctive resources, but the organisational capability upon which the distinctive resources are made. Hence, when a firm's competitive advantage is eroded as a result of rivals' resource developments the firm will have to develop organisational capabilities in order to develop their resources and competitive advantage.

However, literature on organisational capability development has approached organisational capability development by emphasising either its content or process. Such a separation has created two different views within the literature: a *competence-based view* (Sanchez & Heene, 2004), which emphasises the content of capability development, including the entrepreneurial aspect of organisational capability development based on examining the impacts of external opportunities on capability development (Rice, Liao, Martin, & Galvin, 2012); and a *capability-based view* (Dosi, Nelson, & Winter, 2000), which address the process of capability development, focussing on the strategic aspects of organisational capability development by studying the impacts of past organisational capabilities (i.e., path dependency) on capability development (Zollo & Winter, 2002).

Each of these two views only partially explains capability development, which remains an oversight in the literature. This is why we find some inconsistencies in different studies made in the field of

School of Management, QUT Business School, Queensland University of Technology, Brisbane, Australia
Corresponding author: k.mohannak@qut.edu.au

capability development (Galvin, Rice, & Liao, 2014). This paper analyses the capability development literature and highlights the importance of developing an integrative and dynamic view of capability development. Such an integrative view would include changing existing organisational capabilities towards market requirements (Kashan & Mohannak, 2014).

This paper comprises three major parts. In Part A we analyse the literature and discuss the flaws in the extant literature in the area of capability development. Based on such analysis we address the necessity of integrating the content and process of capability development. In parallel to theory developments, in Part B we analyse the methodological evolution in researching capability development. Such a review of methodological advancements in the field highlights the critical role of microprocesses in integrating the content and process of capability development. Finally, in Part C we propose a conceptual view to integrate the content and process of capability development, building on the arguments derived from Parts A and B. In this regard, we also argue the methodological stance required for researching this phenomenon based on such an integrative view.

PART A: CONCEPTUAL ANALYSIS OF THE CONTENT AND PROCESS OF CAPABILITY DEVELOPMENT

The field of strategic management is essentially concerned with a firm's sources of competitive advantage, which are a vital factor for a firm's survival. However, in today's rapidly changing business environment the sources of competitive advantage change faster and faster. Within a resource-based view it has been generally accepted that organisational capabilities are sources of competitive advantage; however, they exist for a limited time and if not renewed the firm's competitive advantage will be eroded over time (Leonard-Barton, 1992; Tripsas & Gavetti, 2000). Accordingly, firms have to develop new capabilities which renew their competitive advantage (Grant, 1996; Spender, 1996; Helfat & Peteraf, 2003). With regards to renewal of competitive advantage, organisational capability development literature has pursued such an issue either through the competence-based view or capability-based view.

Dosi, Nelson, and Winter (2000) compared the two views and argued that while the competence-based view considers environmental requirements as the central concern of organisational capability development, the capability-based view has emphasised the role of path dependency in organisational capability development. Indeed, the capability-based view focusses on the roles of previously developed organisational resources and capabilities, whereas the competence-based view points to the roles of external opportunities. Taking this point as the basis for analysing the capability development literature we have found that capability development based on the competence-based view is mainly explained through ambidexterity theory. Ambidexterity theory looks to balance exploration and exploitation within the capability development process (O'Reilly & Tushman, 2008; Simsek, Jansen, Minichilli, & Escriba-Esteve, 2015). Simsek (2009) suggested that balancing exploration and exploitation involves a dynamic balance that stems from purposefully steering and prioritising each dimension to its inherent optimum as the environment demands. Therefore, ambidexterity frames capability development based on environmental requirements. This view points to the role of constructs such as absorptive capacity (Lewin, Massini, & Peeters, 2011; Backmann, Hoegl, & Cordery, 2015) or structural readiness (O'Reilly & Tushman, 2008; Jansen, Tempelaar, Van den Bosch, & Volberda, 2009; Tortorella, Marotta, Cruciani, & De Angelis, 2015) in capability development.

However, dynamic capability theory explains the capability development process based on a combination of internal and external capabilities to adapt with environmental change (Teece, Pisano, & Shuen, 1997). Zollo and Winter (2002) demonstrated such a role of dynamic capability as the evolution of organisational past capabilities based on integration with external stimuli. Hence, dynamic capability theory is oriented towards the capability-based view due to its emphasis on path

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dependencies. This view addresses the role of constructs such as dynamic capability (Schilke, 2014; Helfat & Peteraf, 2015) and knowledge integration (Gardner, Gino, & Staats, 2012; Hung, Lee, & Cheng, 2014) in capability development.

On the other hand, Chakravarthy and Doz (1992) argued that strategy content refers to strategy formulation, while strategy process is about strategy implementation. In this context, the competence-based view relies on a strategy content approach, focussing on resources' and capabilities' characteristics (Sminia, 2009) rather than how they are achieved. On the other hand, the capability-based view takes a strategic point of view closer to the strategy process view because it emphasises the events and processes through which such capabilities are developed (Zollo & Winter, 2002; Newey, Verreynne, & Griffiths, 2012).

Moreover, strategy formulation and implementation refer to external and internal fit (Henderson &Venkatraman, 1993). Strategic fit theory explains how a firm can achieve performance through establishing a fit between their resources and the environment (Chen & Liang, 2011) and argues that performance can be enhanced through a match between strategy and its context (Hofer, 1975; Olson, Slater, & Hult, 2005; Zaefarian, Henneberg, & Naudé, 2013).

On the other hand, Venkatraman and Camillus pointed out that 'The field of business policy is rooted in the concept of "matching" or "aligning" organizational resources with environmental opportunities and threats' (1984: 513). In fact, they argued that fitting organisational resources with the environment forms organisational strategy (Harmancioglu, Droge, & Calantone, 2009; Gabrielsson, Gabrielsson, & Seppälä, 2012). In this regard, strategic fit refers to how firms align their resources and capabilities with the opportunities and threats the environment presents (Ketokivi & Schroeder, 2004; Carmeli, Gelbard, & Gefen, 2010).

However, strategic fit has been pursued within the literature based on two perspectives: external-oriented and internal-oriented. Since a one-dimensional view emphasises either an external or internal fit there are two major criticisms which more holistic approaches (Jauch & Osborn, 1981) with multidimensional views do not attract. The first criticism relates to the partial (as opposed to full) explanations that one-dimensional studies of strategic fit provide. To resolve this issue two perspectives of strategic fit can be integrated based on principals of a contingency framework which are applied in both fields of strategy (Miles, Snow, Meyer, & Coleman, 1978) as well as organisational theory (Fry & Smith, 1987; Venkatraman & Prescott, 1990). In organisational theory, contingency theory (Lawrence & Lorsch, 1967; Thompson, 1967; Donaldson, 1995) emphasises environment–structure relationships (LaBahn & Krapfel, 2000; Saad & Siha, 2000; Houghton & Yoho, 2005; Bechor, Neumann, Zviran, & Glezer, 2010). Scholars of strategic management have broken down this direct relation between environment and structure into a fit between environment and strategy (Hofer, 1975; Jauch, Osborn, & Glueck, 1980; Anderson & Zeithaml, 1984; Hoque, 2004; Sha, Chen, & Chen, 2008; Bauer & Matzler, 2014), and an alignment between strategy and structure (Chandler, 1962; Vorhies & Morgan, 2003; Naesens, Gelders, & Pintelon, 2009; Hsieh & Chen, 2011).

Integration of environment–strategy and strategy–structure fits leads to developing strategic configurations which are achieved through expanding contingency frameworks from the bivariate level into the multivariate level (Dess, Lumpkin, & Covin, 1997; Hong, Doll, Revilla, & Nahm, 2011). In fact, integrating strategy formulation and implementation within a strategic fit model includes integrating a set of corresponding organisational variables associated with each strategy.

The second criticism of a one-dimensional strategic fit (with an emphasis on either the internal or external fit) is due to the static view of this perspective. To remedy this issue a dynamic view of strategic fit can be adapted based on incorporating both organisational resources and environment in managing the dynamics of fit (Zajac, Kraatz, & Bresser, 2000). In fact, based on different environmental situations, performance is achieved if an appropriate approach for strategic fit is taken (Venkatraman & Prescott, 1990). Reflecting and applying the dynamic view of strategic fit on the capability development field we may argue that a more dynamic view of capability development would

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TABLE 1. SOME STATISTICS ON EXISTING STUDIES

Research keywords	*Number of publications*
Capability-based view	573
Competence-based view	108
Capability- and competence-based view	24
Strategic fit	392
Strategic fit and capability	48
Internal and external fit	88
Internal and external fit and knowledge	13
Internal and external fit and capability	10

Source. ABI/Inform Collection, keywords search limited to the abstract of articles published in scholarly journals after 2010.

be one which combines the content and process of capability development to integrate internal and external fit. Based on this view, we have to predict in what direction and how firms should adapt their organisational capability development. This view of capability development is consistent with the definition of 'Strategic Capability Development' suggested by Kashan and Mohannak as 'renewing and changing organisational capabilities to the new capabilities which are sources of competitive advantage in a new environment' (2014: 1). Indeed, firms may know the performance implications of different types of organisational capability development approaches. Hence, organisational capability can be developed by managing organisational capability development based on applying multiple approaches for fit over multiple periods of time (Newey, Verreynne, & Griffiths, 2012). Overall, to overcome the problems mentioned above, this paper contributes to our understanding of capability development through integrating internal and external fit in the context of capability development. A recent literature search in this context has indicated very little studies on the integration of strategic fit theory with capability development theories (Table 1).

To achieve integration of internal and external fit we may refer to the development of a normative view of strategic fit, based on a process of formulation followed by implementation (Hendry, 2000; Tsoukas & Knudsen, 2002). Indeed, the integrated view of strategic fit refers to integrating the content and process view of strategy as well. Putting this intent into the context of capability development, the integrated view defines strategic fit as fitting organisational resources and capabilities with environmental requirements (Venkatraman & Camillus, 1984; Ketokivi & Schroeder, 2004; Harmancioglu, Droge, & Calantone, 2009; Gabrielsson, Gabrielsson, & Seppälä, 2012).

Since the content and process of capability development are addressed in competence- and capability-based views the importance of developing such a normative view of strategic fit necessitates the integration of competence- and capability-based views. In this regard, the competence-based view (which is content oriented), although examining characteristics of capabilities required by the environment, fails to explain the dynamics involved in building such capabilities. This comment by Regnér explains such limitations in strategy research: 'Strategic management theories have proposed grounds for competitive advantage (Barney, 1986, 1991) and there are in-depth, detailed descriptions of strategy development (Pettigrew, 1985; Johnson, 1987). However, there are limited accounts of the dynamics involved in the build-up, development and change of organizational assets (i.e. resources and capabilities) that provide for competitive advantage (Regnér, 1999; Cockburn, Henderson, & Stern, 2000)' (2008: 566). On the other hand, the capability-based view as a processes-oriented approach focusses on the processes and stages included in capability development; however, it does not take mechanisms underlying building such stages into account (e.g., in the dynamic capability view). In this

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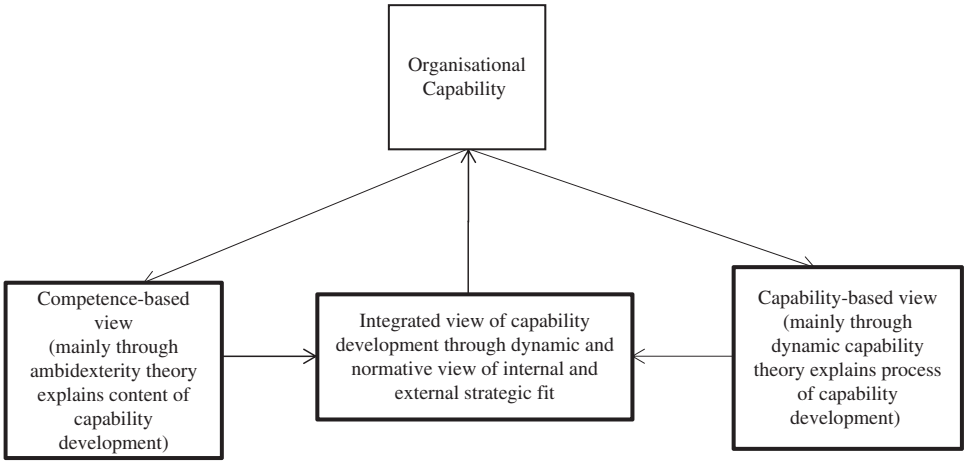

FIGURE 1. AN INTEGRATED VIEW OF CAPABILITY DEVELOPMENT

regard, Regnér commented: 'While extant works on dynamic capabilities address the question of how organizational assets are created and modified (Eisenhardt & Martin, 2000; Winter, 2003) the underlying organizational and managerial activities and mechanisms still remain unclear' (2008: 566).

Hence, by combining the content and process of capability development we can develop a normative and integrative model of strategic fit explaining capability development (Figure 1).

PART B: METHODOLOGICAL ANALYSIS OF THE CONTENT AND PROCESS OF CAPABILITY DEVELOPMENT

The conceptual analysis of the capability development literature presented above highlights the importance of combining the content and process of capability development (as a normative view of capability development). In this part, we analyse the methodological developments so far in the literature for researching the same phenomenon to gain some insights into how to integrate the content and process of capability development. In this regard, the following sections develop some insights out of the historical development of the research on the content and process in the broader context of strategy and how such a trajectory approaches the integration of content and process of capability development. Such analysis of the methodological evolution will allow us to accommodate the new research questions and methodological requirements of studying capability development.

Strategy content research

The initial view of strategy made by Porter (1980), based on the industrial organisation school of thought, dealt with how firms should position themselves within an industry to earn superior profit. Since the studies based on this view rely on external factors there is a common ground (the industry context which is independent of a firm's specific situations) for all of the firms within an industry for strategy formulation.

This characteristic has led this stream of research towards using quantitative methods which look for global variables and universal relationships. The studies based on the positioning school of thought are mostly focussed on verifying the relationships among some organisational-level constructs. Therefore, these studies are based on quantitative studies and statistical analysis of large sample sizes. The validity of such studies' findings is generally based on quantitatively aggregating responses for the purpose of

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theory testing based on establishing the inferences of common trends (Armstrong & Shimizu, 2007). Accordingly, because of the importance of the generalisability of findings of these studies this type of research falls into investigating a small number of variables and relationships which are global and have universal characteristics.

Although the traditional view of the strategy content and positioning school has discovered important concepts and insights for theory as well as practice this view, in the words of Johnson, Melin, and Whittington, 'has trapped itself into a cul-de-sac of high abstraction, broad categories and lifeless concepts' (2003: 6). This limitation, which comes from the preoccupation of the field with quantitative studies, seriously narrows the insights into strategy research. Later, scholars of the resource-based view regarded this limitation and the tendency for quantitative studies as resulting in ignorance of microaspects and internal factors at the expense of relying on macroaspects and external factors.

Problems of strategy content research

Scholars following traditional approaches confess that the field of strategic management's progression is not simply based on manipulating the theories at the existing level of abstraction; however, advances in the field can be achieved by delving into the complexities of building competitive advantage (Eden & Ackermann, 2013). Since competitive advantage comes from distinctive resources scholars search for evidence of idiosyncratic and context-specific characteristics of resource accumulation (Rouse & Daellenbach, 1999). However, quantitative methods often involve the use of proxy variables which may only capture tangible and visible aspects of a phenomenon.

The dynamic capability view is a perspective which looks to explain how companies achieve distinctive resources. So far research in this field has focussed on how resources are created or extended (Eisenhardt & Martin, 2000; Winter, 2003); the underlying firm-specific characteristics which can make such resources distinctive are still understudied. To explain context-specific attributes of resources, research needs finer-grained studies based on qualitative data from the contexts under question (Godfrey & Hill, 1995; Rouse & Daellenbach, 1999; Nordqvist, 2012).

The logical progression in research initiates from theory building, then testing the built theories based on verification of propositions and finally developing practical applications based on empirically tested results. This is why Danneels stressed that 'notwithstanding its current popularity, the notion of dynamic capabilities as "abstract and intractable" may remain true if we are unable to increase the number of qualitative field investigations' (2008: 536). Hence, based on the stage of theory development regarding building competitive advantage and distinctive resources, it is worth sacrificing the generalisation power of quantitative studies in order to gain more qualitative evidence of underlying mechanisms (Lockett & Thompson, 2001).

Strategy process research

Although the resource-based view has overcome the inefficiencies found in the positioning view this view itself still requires more in-depth development. Based on the resource-based view a firm's distinctive resources and capabilities are sources of competitive advantage. However, there has been less attention towards how these resources and capabilities are developed and accumulated over time (Dierickx & Cool, 1989).

A firm's specific processes for organisational capability and resource development are actually processes for building competitive advantage (Jarzabkowski, Spee, & Smets, 2013). On the other hand, the dynamic view of strategy (Porter, 1991) also looks for dynamic processes, which over a long time build the competitive advantage of firms. Accordingly, the dynamic view of strategy is a theoretical lens

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which can give the resource-based view more depth and enhance its traditional approach. This approach is concerned with long-term processes that create competitive advantage, rather than the causes of the process at a given point of time (Porter, 1991). Hence, this view can be distinguished from traditional alternatives based on having a process orientation rather than a content orientation.

In brief, applying the dynamic view of strategy to the resource-based view can advance this field in terms of finding the processes through which strategic resources and capabilities are built over time. Therefore, progress in the resource-based view ultimately needs to undertake a dynamic view of strategy and integrate strategy content research with strategy process research.

Problems in strategy process research

It is also recommended that in order to gain a fine-grained understanding of resource and capability dynamics and managerial actions close fieldwork and 'thick description' are needed (Rouse & Daellenbach, 1999; Vaara & Whittington, 2012). Research methods taken so far for strategy process research have primarily been longitudinal case studies full of descriptions; however, the type of research needed to take a microperspective and based on an activity-based view of strategy requires an extra step taken into the depth of cases. Resource-based theories so far have proposed grounds for competitive advantage (Barney, 1991) and there are in-depth, detailed descriptions of strategy development (Pettigrew, 1997; Johnson, 2007); however, there are limited accounts of the dynamics involved in the build-up, development and change of organisational assets (i.e., resources and capabilities) that provide competitive advantage (Cockburn, Henderson, & Stern, 2000). Aligned with this argument, Johnson, Melin, and Whittington (2003) have argued that case studies have provided rich descriptions, but largely left to the reader the hard work of interpreting these into practice. These process case studies may be good for reflection, but the fare has been pretty indigestible (Jarzabkowski, Kaplan, Seidl, & Whittington, 2016). The challenge for an activity-based view will be to transform descriptive contributions into more helpful models of managing.

Integrating the content and process of strategy research

Chakravarthy and Doz (1992) distinguished strategy content research from strategy process research, arguing that strategy content research is about what strategic position brings the highest level of performance and that strategy process research is more focussed on how a firm's processes build its strategic position. So far, strategy content research and strategy process research have been treated as being separate from each other. Pettigrew (1990) argued that the sharp edges between content and process research need to be blurred, perhaps even eliminated. Schendel also (1992: 2) rejected a dichotomy between strategy content and process and argued that these two views need to be integrated. He stressed that: 'What has played a strong role in revealing this is the development of the so-called resource based view of the firm. In this view, creative assets are seen as the source of competitive advantage. The creation of assets is recognized as an important aspect of managerial choice and as something more than an assemblage of mere physical assets, or individual human capital'.

In this regard, Van de Ven and Huber (1990) defined strategy process research as being concerned with understanding how things develop over time and why they develop this way. In their definition they emphasised events as the main unit of analysis. Langley (1999) argued that the boundary between variables and events in process research is not as clear. She found it important to consider the impacts of events on the state of a variable or the impact of a variable on the development of events. Therefore, she concluded that 'although temporal phenomena remain one of their distinguishing features, process data are not composed only of descriptions of discrete events. They also incorporate a variety of other types of qualitative and quantitative information' (Langley, 1999: 693).

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In studying effects of events on the state of process variables, as Langley (1999) indicated, there is always a trade-off in temporal embeddedness of events. Pettigrew criticised some studies on organisational change to be 'ahistorical, aprocessual, and acontextual in character' (1990: 269). He argued that these studies treat change as a unit of analysis and consider events as episodes of change rather than going into events in depth and finding out about the effects of factors specific to each event on the overall process of change. In dealing with this trade-off, Langley (1999) recommended that researchers can balance both intentions by using retrospective data versus using real-time data. While retrospective data gives more information about memorial moments and general trends real-time data delivers richer and finer-grained insights.

Necessity for a microperspective to integrate the content and process of strategy

The advances in the resource-based view not only require research to consider the processes involved in building distinctive resources and capabilities, but also require further in-depth studies in process research. The current stage of resource-based theory, in searching for processes underlying the building of distinctive resources and capabilities, looks for the emergence of such resources and capabilities out of continuous processes (Thomas & Ambrosini, 2015). This is consistent with Brown and Eisenhardt's (1997) argument recommending continuous processes for structural change of contemporary business in dealing with today's hypercompetitive environment.

Based on this line of thought, Eisenhardt and Santos (2002) presented a knowledge-based interpretation of the resource-based view which calls for a turn away from making theories of 'knowledge' to making theories of 'knowing'. In fact, they argued that instead of theorising about the distinctiveness of resources we should study the gradual emergence of this distinctiveness over time. This argument is aligned with a general movement in organisational change research and changing the focus of research from 'nouns' to 'verbs' as recommended by Weick (1979). In fact, instead of looking for 'being' we should study 'becoming', or rather than looking for an 'organisation' our focus should be on 'organising'.

Sminia (2009) referred to such a movement in research as replacing 'how' questions with 'how to' questions in strategy process research. He explained that, in research involving a resource-based view, instead of studying the characteristics of distinctive resources and capabilities and their relationships with performance, research should theorise about how these characteristics are achieved over time. He added that by studying 'continuity' and 'change' in such variables a researcher can find out about an underlying mechanism which has produced the continuity and change in these variables. Pettigrew (1990) referred to this underlying mechanism, which is the engine of continuous change processes, as a 'generative mechanism'.

Pettigrew (1990) argued that such generative mechanisms are influenced by specific situations faced during each event and influence change or continuity in process variables. Consequently, strategy process studies of such intentions need to get very close to the specificities of the events making up a strategy. This is why the recent trend in strategy research calls for taking microprocesses into account. The microperspective in strategy research is able to identify challenges and study actions at the periphery levels, not only the actions at the centre level (Rouleau, 2005; Jarzabkowski & Kaplan, 2015). This approach – called the activity-based view of strategy (Johnson, Melin, & Whittington, 2003) – investigates the impacts of microprocesses and activities on organisational-level outcomes. Thus, the activity-based view is concerned with the consequential details of organisational work and practice (Whittington, 2006). In brief, based on a microperspective it has been argued that studying the process for developing macrostrategy variables (such as organisational capabilities) necessitates studying building generative mechanisms based on organisational activities and microprocesses.

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PART C: TOWARDS AN APPROACH TO INTEGRATE THE CONTENT AND PROCESSES OF CAPABILITY DEVELOPMENT

In Part A we discussed the importance of integrating the content and process of capability development. We then reviewed the historical development in the methodologies used to study strategy in Part B and found that the microperspective is capable of integrating the content and process of capability development. In this final part the insights gained from prior studies will be used to propose an approach for integrating the content and process of capability development. In this regard we conceptualise capability development in an integrative way by applying a microperspective. We then discuss the methodological stance which fits with researching this phenomenon.

Conceptualisation of capability development

The theoretical analysis of literature in Part A suggested that we need to combine ambidexterity and dynamic capability views to integrate the content and process of capability development and better understand capability development. To integrate ambidexterity and dynamic capability views we use our findings from Part B, which point to the critical role of microprocesses. The microperspective is concerned with how and why some concrete microprocesses could be linked to strategic outcomes (Johnson, Melin, & Whittington, 2003; Jarzabkowski, Balogun, & Seidl, 2007; Johnson, 2007). By taking such a microapproach one might be able to obtain some concrete evidence of what dynamic capabilities look like in organisations, how they are deployed and how context may impact upon them. So, by looking at the detail of such strategic dynamics and how microprocesses can lead to macro-strategic outcomes, the mentioned deficiencies of the capability-based and competence-based views in explaining organisational capability development can be overcome (see for evidence, Lee & Chu, 2013; Kashan & Mohannak, 2015). By adopting microperspective 'episodic change' in the traditional view of strategy process is replaced by 'continuous change' (Brown & Eisenhardt, 1997). Accordingly, first, gradual emergence of strategy outcomes is informed by dynamics of microprocesses; second, the creation of episodes of change is explained based on underlying mechanisms called 'generative mechanisms'. Based on these generative mechanisms capability development can be conceptualised as a process of emergence of new capabilities at the organisational level based on the dynamics in the microprocesses within organisations.

Consequently, we argue that by revealing the generative mechanisms by employing a micro-perspective to explain the organisational capability development process we will be able to combine the competence and capability-based views. As suggested by Kashan and Mohannak (2014), knowledge processes and innovation processes are among the critical microprocesses of capability development. In this regard, the literature on organisational capability development points to the influence of the innovation context on the integration of resource and capability development with environmental requirements. Floyd and Lane (2000) referred, for example, to product innovation as the engine for capability renewal. Furthermore, Danneels (2002) stressed that product innovation is informed by environmental requirements. Hence, as suggested in previous literature, organisational capability development through innovation processes can be aligned with environmental requirements.

Moreover, the literature highlights the role of knowledge processes in integrating external and internal assets (Grant, 1996; Spender, 1996; Lin, Tsai, Tarn, & Hsu, 2014). Indeed, dynamics of knowledge processes can be managed in a way that a final organisational capability can be developed as a result of multiple periods of organisational capability development. Furthermore, Grant (1996) argued that such knowledge processes are dynamic (emphasising efficiency, flexibility or scope of knowledge integration) and are based on environmental requirements across multiple periods of time and can develop organisational capabilities.

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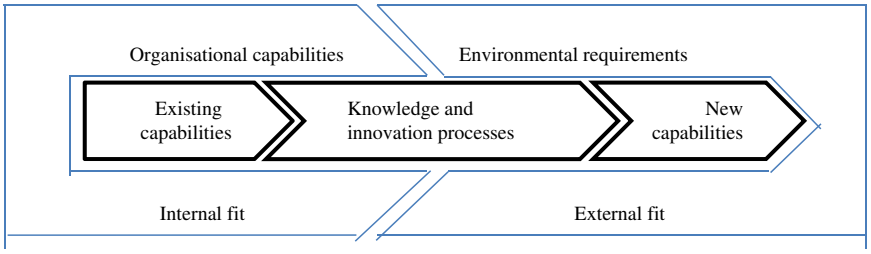

FIGURE 2. THE ROLE OF KNOWLEDGE AND INNOVATION PROCESSES IN INTEGRATIVE VIEW OF CAPABILITY DEVELOPMENT

Such arguments are consistent with Zajac et al. (2000), who believed that an integrative view of fit follows a dynamic view of strategy and explains how strategic processes (based on a static view and at a point of time) vary across multiple periods of time. Indeed, integrating external fit and internal fit in the context of organisational capability development boils down to using different knowledge processes and innovation processes to develop organisational capabilities (Figure 2). Ambrosini and Bowman (2009) added to this view and argued that this variation of strategic process across different periods of time leads, at a higher order, to developing what is actually called 'strategy'. He referred to strategy of firms at a point of time as what firms 'have' (e.g., certain capabilities required by the environment) and the strategic processes as what firms 'do' (e.g., employing dynamically different knowledge processes and innovation processes).

On the other hand, as discussed, an integrated view of strategic fit defines strategic fit as 'matching' or 'aligning' organisational resources with environmental opportunities and threats (Venkatraman & Camillus, 1984). Taken altogether, an integrated view of strategic fit is consistent with the dynamic view of strategy and we can conclude that fitting organisational capability with environmental requirements includes the gradual emergence of new organisational capabilities out of existing organisational capabilities by dynamically employing different knowledge and innovation processes. Apart from the static views of the positioning school and resource-based view, essentially the dynamic view of strategy points to the creation of a firm's current position in an industry and distinctive competences as the main source of competitive advantage (Porter, 1991). Ambrosini and Bowman (2009) also explained that the resources and capabilities which are sources of competitive advantage are accumulated across multiple periods of time and through strategy dynamics.

Hence, evolution of organisational capabilities based on knowledge integration processes across explorative and exploitative innovation leads to developing new organisational capabilities which are sources of competitive advantage. Accordingly, managing knowledge and innovation processes leads to developing competitive capability. Therefore, based on the above discussions, the following proposal can be suggested:

> Proposition: Understanding capability development at the firm level requires a focus on organisational processes at the microlevel. In this regard, studying knowledge processes and innovation processes, as organisational microprocess, may develop a microperspective of capability development and contribute to developing a normative view of capability development for the purpose of integrating the content and process of capability development.

Methodological positioning for empirical research

While ontological assumption is about 'nature of reality', epistemological assumption concerns 'knowledge of reality' and how the reality can be known. Different epistemological and ontological

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assumptions locate between objectivism and subjectivism (Crotty, 1998). Based on such a variety of ontological and epistemological positions different research paradigms have been formed, including positivism versus social constructivism. While the *positivist position* is based on 'an objective reality out there' waiting to be 'collected' (Boland & Tenkasi, 1995), *social constructivism* includes the assumption that reality is context specific and multiple realities can coexist (Creswell, 2012).

Research methods based on objectivism look for causes and effects, and explanation, while the methods with subjectivism rely more on language, consciousness, shared meanings, documents, tools and other artefacts (Klein & Myers, 1999). Within subjectivism understanding can be gained through reconstruction of the self-understanding of people who have dealt with that reality, and hence, some actions or actors of a specific context although could be taken as natural and obvious but they are actually artefacts of that particular contexts (Crotty, 1998).

The findings about methodological approaches from earlier stages of research in this field have so far indicated that, to contribute to this field at the current stage of theory development, researchers should focus on microprocesses, which gradually build competitive advantage. Analysing this trend shows that by changing the focus of research from finding the resource characteristics to finding the processes underlying such resource characteristics, the research paradigm has changed from taking a positivist stance towards an interpretive stance. Indeed, while earlier studies on strategic management were based on 'objective' ontological and epistemological positions later research has followed 'subjective' ontology and epistemology. This argument is consistent with that of Sminia (2009), who argued that strategy formation research has been informed by different streams of research based on different ontological and epistemological assumptions. He concluded that at the current stage, research needs to link and create new ontological and epistemological assumptions. In this regard, he proposed a middle-ground position on the objective–subjective continuum. This suggestion follows the theory-oriented explanation approach of Hall (2006) based on matching empirical evidence with theoretically derived process patterns. This approach is also consistent with Langley (1999), who suggested linking the stories from process data to process variables. She further argued that through this approach a researcher can relate the process theory to variance theory (Mohr, 1982) and that external validity of this research is at a moderate level because the number of cases is limited.

Indeed, the variance variables that emerge from the analysis of process data (based on theoretically driven patterns) are specific to the company in which they are found; they are manifestations of global variables and not the original global variables (generalisable variables). Yin (2003) suggested 'analytic generalisation' for such situations instead of generalisable findings. Accordingly, while the outcome variables themselves are not generalisable the logic through which they are achieved is applicable to other cases. In other words, in this form of research, while the ultimate 'reality' under investigation is not global the approach to such a reality is generalisable. Consequently, adopting a 'subjective' ontological assumption is associated with taking 'objective' epistemological assumptions. These ontological and epistemological positions fit 'critical realism', where the researcher is a 'mediativist', seeing social circumstances as mediating between reality and accounts of reality but not eliminating the effects of reality (Sminia, 2009).

In brief, since the current stage of theory building in strategic management and capability development necessitates integration of both the content and process of strategy it can be concluded that the methodological stance for such research may follow the 'critical realism' paradigm. This argument is consistent with Edmondson and McManus (2007), who argued that in the field of management research the methodology should fit the stage of theory development. Based on such an argument, a micro-perspective in strategy formation research may lead to better results by employing methodologies based on the critical realism stance. In this regard, this paper suggests that future studies intending to elaborate on analysis of capability development will be more likely to be positioned within a 'critical realism' methodological stance, aligned with the emerging trend of microperspective research in strategy formation.

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CONCLUSION

This study, by suggesting strategic fit theory as an analytic framework, analysed the existing literature and highlighted the need to develop a normative view of capability development. This view is argued to link the content and process of capability development by focussing on how organisational capabilities evolve to fit with the environmental requirements as the central phenomenon of research in capability development studies. Academically, such a perspective shed lights on the underlying mechanisms of the dynamic resource-based view (Helfat & Peteraf, 2003), where organisational resources and capabilities are argued to be continuously changing and adapting to environmental changes. Furthermore, it is consistent with the recent turn in the strategic management literature to acknowledge organisational adaptability as the major source of competitive advantage.

As such it is suggested that future research should emphasise the microperspective as a strong approach for such integration and focus on the interactions between critical microprocesses and organisational-level outcomes, such as capability development. In particular, this paper proposes that studying relevant microprocesses, such as knowledge integration processes within innovation projects and their impacts on the development of organisational strategic capabilities, is critical to understanding capability development within organisations. In other words, this approach would help scholars of the resource-based view to take the next step and understand how competitive advantage and distinctiveness in resources are built over the time and within firms.

It is also suggested that, in parallel to theoretical turns, some changes have occurred in the methodological requirements. In this regard, it is suggested that to elaborate such a perspective of capability development future research needs to follow aligned methodology and move from a purely positivism or interpretivism paradigm to a critical realism view. This study therefore builds on the suggestion of Sminia (2009), proposing that future research should pursue 'subjective' ontological assumptions along with 'objective' epistemological assumptions to understand how competitive capabilities are developed and renewed in coevolution by organisational microprocesses, such as knowledge integration within innovation projects. This form of research, focussing on the link between day-to-day processes within firms to the organisational-level outcomes, is capable of producing valuable practical outcomes such as frameworks for managers on how they can manage their organisational processes at lower levels towards their preferred goals and outcomes at the organisational level, particularly in terms of sustainability of their competitive advantage. In addition, such studies would enhance practitioners' understanding of the relationship between how they are managing their organisations and their expected outcomes and, as a result of that, they would be able to make more informed decisions.

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