

What are the sources of capability dynamism? Reconceptualizing dynamic capabilities from the perspective of organizational change

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Abstract

Purpose – The concept of dynamic capabilities emerged from strategic management theory, the aim being to determine how organizations can achieve and sustain competitive advantage in a continuously changing environment. It is widely accepted in the literature that this concept, although extremely popular and potentially powerful, still needs clarification and elaboration. The main criticisms are centered on the lack of understanding of where these capabilities originate and how their dynamism can be sustained in the long run. The purpose of this paper is to bring some novel insights into these issues in bridging the theories of strategic management and change management.

Design/methodology/approach – This paper is based on extensive literature review and bridges dynamic capabilities and change management literatures.

Findings – The paper proposes a distinction between domain-specific and generic dynamic capabilities and puts forward the concept of “organizational change capability” as representing a generic dynamic capability. The nature of such capability is discussed using the insights from organizational change theory.

Originality/value – This paper provides a novel way to examine the sources of capability dynamism both conceptually and empirically by integrating insights from organizational change and dynamic capabilities literatures.

Keywords Competitive advantage, Dynamic capabilities, Organizational change, Organizational development, Change capability

Paper type Conceptual paper

Introduction

Dramatic and continuous changes of business environment that contemporary companies face regardless of their size and location pose a number of problems that academics and practitioners have to address. In recent decades, strategic theory development has focussed on the search for sources of sustainable competitive advantage based on the firm’s unique organizational capabilities that allow receiving of Schumpeterian rents even in similar environments (Barney, 1991; Nelson, 1991; Prahalad and Hamel, 1990). Under conditions of continuous environmental change, especially in times of crisis, the organizational ability to sustain and renew competitive advantage becomes paramount. This notion has evolved into the dynamic capabilities concept, primarily developed in the works of Nelson (1991), Kogut and Zander (1992),



Amit and Schoemaker (1993), Teece and Pisano (1994), Henderson and Cockburn (1994), and Teece *et al.* (1997). In their seminal work, Teece *et al.* (1997) define dynamic capabilities as “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments” (p. 516). Alternatively, a dynamic capability has been defined as “a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness” (Zollo and Winter, 2002, p. 340). Intensive debate about the concept has been going on since its inception (e.g. Ambrosini *et al.*, 2009; Blyler and Coff, 2003; Danneels, 2008; Di Stefano *et al.*, 2014; Helfat *et al.*, 2007; Prieto *et al.*, 2005; Teece, 2007; Zahra *et al.*, 2006; Zott, 2003), and in current strategy research it is considered to provide significant insights into the creation of competitive advantage and thus to be very promising in terms of developing strategic management theory (e.g. Helfat and Peteraf, 2009; Teece, 2014). Given that dynamic capabilities are believed to contribute to organizational success even in very turbulent times, they are also of considerable interest to practicing managers, especially nowadays when most economies have recently faced major downturn.

Given the accumulation of contributions, the last few years have witnessed an explosion in the number of papers dedicated to reviewing the literature on dynamic capabilities and discussing the foundational approaches to the concept itself (Ambrosini and Bowman, 2009; Barreto, 2010; Cavusgil *et al.*, 2007; Di Stefano *et al.*, 2014; Easterby-Smith *et al.*, 2009; Teece, 2014; Wang and Ahmed, 2007). On the one hand, this is a sign of popularity and of a gradual movement toward conceptual maturity, but on the other it also indicates the lack of clarity around the concept. Some critical concerns have been voiced – both moderate (Kraatz and Zajac, 2001; Newbert, 2007; Zahra *et al.*, 2006) and severe (Arend and Bromiley, 2009) in tone. It is claimed that the concept still has some “blank spaces,” especially in terms of its practical application. As Zollo and Winter’s (2002) remark, for example, Teece *et al.* (1997) provide “the understanding why the company needs the dynamic capabilities and how they work, but not the answer where they come from” (p. 340).

In fact, the concept of dynamic capabilities has recently attracted well-justified criticism in terms of whether or not it is capable of explaining sustainable dynamism in organizations. According to Schreyögg and Kliesch-Eberl (2007), all organizational capabilities are fundamentally rigid because they are characterized by path dependency, structural inertia, and commitment. Dynamic capabilities – formally defined as capabilities that affect changes in operational capabilities (e.g. Winter, 2003) – encounter the same rigidity problem. This fundamental issue plagues all current perspectives, according to Schreyögg and Kliesch-Eberl (2007), regardless of whether they follow the “radical dynamization approach” (represented by, e.g. Eisenhardt and Martin, 2000), the “integrative approach” (e.g. Teece *et al.*, 1997), or the “innovation routine approach” (e.g. Zollo and Winter, 2002).

Taking the aforementioned conceptual ambiguity into account, it appears that there are important issues that still need to be addressed for the sake of the further development of the dynamic capabilities concept and its practical utility. One of the burning questions is: what are the generic sources of sustainable capability dynamism? And on the practical level, what managers can do to develop sustainable dynamic capabilities in their organizations? In the search for novel insights into this question we suggest turning to the established body of literature on organizational change, which we consider relevant to the current discussion for several reasons. First, given that there is already a vast amount of theoretical discussion and empirical evidence on the

focal problem (e.g. Palmer and Dunford, 2002, 2008; Romanelli and Tushman, 1994; Van de Ven and Poole, 1995; Weick and Quinn, 1999), it would be logical to turn to this specific body of literature for gaining insights into the debate on capability dynamism. Second, this stream of research deals directly with a number of questions that strategic discourse has barely addressed so far, namely, the question of “how” (Mellahi and Sminia, 2009; Mintzberg *et al.*, 1998). More specifically, we suggest that the literature on how organizations change (and what managers can do about it) may shed some light on the sources of sustainable organizational capability dynamism. Last but not least, change issues have always been “in the air” in discussions about dynamic capabilities, even though they have usually remained in the background. In other words, authors using dynamic capabilities concept have implied a relationship with change, but have sparsely explored this link. For these reasons we believe that the time is now ripe to bring this literature to the forefront of the debate, which is our aim in this study.

This study contributes to the theoretical development of dynamic capabilities in helping to explain the generic sources of the dynamism. We suggest differentiating between domain-specific and generic dynamic capabilities, and propose organizational change as an important, and empirically operationalizable generic dynamic capability. We argue that dynamic capabilities are often domain-specific, tied to a certain organizational or functional context, whereas generic dynamic capabilities, such as organizational change capability can be perceived as sources of long-term organizational dynamism. This distinction helps us to conceptually differentiate and assess the applicability and sustainability of various types of organizational capabilities, which is of major empirical and practical relevance. Furthermore, in linking the literatures on dynamic capabilities and organizational change, our study helps to bridge the strategy and organization streams of research, and paves the way for further cross-pollination between these disciplines.

In the following section we briefly review the concept of dynamic capabilities, discuss some unresolved issues concerning its nature, and make a case for distinguishing between domain-specific and generic capabilities. In the third section we discuss the relationship between organizational change and dynamic capabilities as portrayed in the literature, and introduce organizational change capability as an archetype of what we call generic dynamic capability. The paper concludes with a discussion and some suggestions for future research.

Contrasting domain-specific and generic dynamic capabilities

The nature of dynamic capabilities: some unresolved issues

A detailed overview of the existing literature on dynamic capabilities is beyond the scope of the current paper, especially as some very thorough reviews have been published recently (Ambrosini and Bowman, 2009; Barreto, 2010; Wang and Ahmed, 2007). In brief, although there are many discrepancies, most authors agree that: there is a hierarchy of capabilities, and dynamic capabilities represent higher-order capabilities (for a review of different hierarchical conceptualizations, see Ambrosini *et al.*, 2009; Hine *et al.*, 2014); dynamic capabilities can influence (directly or not) organizational performance (see Barreto, 2010 for a detailed discussion); they should be built within the organization rather than bought in (e.g. Makadok, 2001; Teece, 2007, 2014) because they need to be embedded in it (e.g. Eisenhardt and Martin, 2000). We use these ideas as a basis for our further discussion, and focus on some issues that still remain unresolved in the debate.

One of the key areas of disagreement concerns the nature of dynamic capabilities (Easterby-Smith *et al.*, 2009). Barreto (2010) sees this as a conceptual divide between

two views of their nature, unique vs common. Indeed, a number of authors refer to dynamic capabilities as idiosyncratic because they are based on firm-specific paths, unique asset positions, and distinctive processes (e.g. Makadok, 2001; Teece *et al.*, 1997). The firm-specific understanding derives from the resource-based view of the firm, according to which firms can achieve sustainable competitive advantage only if they have unique, inimitable resources (Barney, 1991; Gibbert, 2006; Levitas and Ndofor, 2006). Other authors, in contrast, maintain that there may be some commonalities in dynamic capabilities across firms (Eisenhardt and Martin, 2000; Wang and Ahmed, 2007), yet they could still bring competitive advantage because although they have common features they are still idiosyncratic in their details.

We suggest that there is yet one more – related but distinct – discrepancy in the literature, which mostly divides the conceptual and empirical papers and could be labeled generic vs domain specific. Although there are different approaches, all of the key definitions of dynamic capabilities (see, e.g. Barreto, 2010, p. 260) indicate their generic nature – meaning that they are not confined to any functional or task domain and apply throughout the organization. For instance, according to Zollo and Winter (2002), “dynamic capabilities constitute the firm’s systematic methods for modifying operating routines” (p. 340), which clearly highlights their generic nature.

We now turn to empirical papers that offer examples of dynamic capabilities in real-life companies. Clark and Fujimoto (1991) refer to Toyota’s superior product-development capabilities as dynamic. Dell’s changing business model is another example of a dynamic capability that promotes the constant segmentation of business operations to match shifting customer needs (Magretta, 1998). Similarly, some authors suggest that strategic decision making can be a dynamic capability by means of which managers pool their various business, functional and personal expertise in making the choices that shape their firms’ major strategic moves (e.g. Eisenhardt and Martin, 2000). Other more recent examples include the continuous transformation of organizational form (Rindova and Kotha, 2001), knowledge creation, absorption, integration and reconfiguration (Verona and Ravasi, 2003), the development and introduction of new process technologies (Macher and Mowery, 2009), and product-portfolio planning (Newey and Zahra, 2009). Furthermore, Danneels (2008) empirically operationalizes dynamic capabilities as “market and R&D second-order competences.”

Analysis of these examples reveals one of the significant problems with the theory of dynamic capabilities. Despite the fact that the definitions provided in conceptual papers clearly point to their generic nature, the examples given in empirical studies most often cannot be considered generic. They all represent capabilities that give special competitive advantage to a particular company, but are mostly very specific – in the context of the particular function or particular business task (to develop new products or create new marketing approaches, for example). In certain conditions they could become out of date and obsolete, and refer only to certain aspects of the firm’s activities. Consequently, they do not fit into the “pure definition” of dynamic capabilities. Schreyögg and Kliesch-Eberl (2007) refer to this problem as the “rigidity trap” of organizational capabilities.

The scope of dynamism in dynamic capabilities: resolving the conceptual ambiguity

Given that there are different levels of specificity and scope in dynamic capabilities, as suggested above, it is problematic that the literature often refers to the whole phenomenon as homogenous. In order resolve this conceptual ambiguity we suggest making a clear distinction between domain-specific and generic dynamic capabilities

(see Table I). We suggest that the former are applicable mainly within a given organizational domain, whereas the latter are – by definition – applicable within any organizational domain and thus may have common elements across firms and industries. We further suggest that domain-specific dynamic capabilities are a source of “functional dynamism,” which is bounded within certain limits determined by the function, process, and so forth, whereas the generic type are more a source of overall organizational dynamism. This conceptualization is in line with recent discussions of different types of dynamic capabilities, where higher-order capabilities are focussed on learning and creativity and lower-order dynamic capabilities to flexible execution of more defined tasks (e.g. Hine *et al.*, 2014; Schilke, 2014). On the basis of these distinctions we thus argue that domain-specific capabilities are a potential source of short-term sustainability in terms of competitive advantage in that they vary in their sensitivity to the “rigidity trap.” Generic dynamic capabilities, on the other hand, are a potential source of long-term sustainability because they are not confined to a certain domain and thus may be applicable across domains and functions as the need emerges.

The configuration suggested in Table I makes it easier to understand many conceptual problems concerning the nature of dynamic capabilities. In fact, we believe that the ambiguity over dynamic capabilities in the extant literature is largely due to the confusion between their results (the effects they produce), and their very nature. Let us consider the following example from another field. We might observe the development of a child, for example, and see that he/she learned to read very quickly and surpasses other children of the same age in this respect. The capability to learn quickly is only an applied manifestation, the result of some “internal” factors – such as an innate capability to acquire new skills – or of personality features such as persistence and diligence. It is these internal factors (although they are often invisible and can hardly be measured) that lead to the outstanding results in reading that we can witness. A significant feature of this example is that the factors discussed are generic – in the sense that they can be applied to the various activities of the child, not only to learning to read. Returning to the discussion of dynamic capabilities, we believe this example vividly illustrates in which direction we should search for generic sources of organizational dynamism.

One reason for the discrepancy between the conceptual and the empirical papers regarding the nature of dynamic capabilities may lie in the confusion of the terms (see, e.g. Ambrosini and Bowman, 2009 for a discussion on the misunderstandings around the term “dynamic”). In fact, empirical evidence in the literature, which gives examples such as alliance capability or R&D capability, relates to firms’ capabilities that become dynamic under the influence of or coupled with some other factor that is called a dynamic capability in the conceptual literature. Thus, theoretical papers usually refer to dynamic capabilities as higher-order, generic capabilities, whereas empirical case

Domain-specific dynamic capabilities	Generic dynamic capabilities
Applicable within a given organizational domain	Applicable within any organizational domain
The domain is determined by the function or process, for example	The domain is not restricted to a certain function or process
Source of functional dynamism	Source of organizational dynamism
Short-term sustainability	Long-term sustainability
Varying sensitivity to the rigidity trap	Avoids the rigidity trap

Table I.
Contrasting domain-specific and generic dynamic capabilities

studies tend to provide examples of capabilities that are specifically framed, in other words domain-specific dynamic capabilities. This difference between the conceptual and the empirical literature could explain much of the above-mentioned disagreement on whether dynamic capabilities are idiosyncratic to every organization, or whether they have some common features that are valid across industries and companies.

On the basis of above discussion we suggest that, in order to develop the theory of dynamic capabilities further the research needs to focus on distinctively generic capabilities with the potential to ensure the required changes in core capabilities and to maintain their relevance over a long period of time, irrespective of environmental changes and the industry. This will not only enhance understanding of the concept of dynamic capabilities, but will also facilitate the exploitation of its practical implications. Indeed, given that dynamic capabilities cannot be bought and should be typically built inside the company (e.g. Teece *et al.*, 1997; Teece, 2014), the question of what managers can do to develop them in their particular organization is extremely topical for practitioners. However, this practical side of the concept still remains under-developed (e.g. Arend and Bromiley, 2009; Wang and Ahmed, 2007). In part, the lack of practical recommendations for managers can be traced to the conceptual focus on idiosyncratic, domain-specific capabilities: if all dynamic capabilities are unique, how can one formulate any general recommendations for their development? (see Gibbert, 2006 for discussion of idiosyncrasy and generalizability). Another reason may be linked to the fact that a lot of authors do not go beyond identifying positioning of dynamic capabilities within the overall hierarchy of organizational capabilities, implying that this is enough to characterize the phenomenon. We therefore suggest that treating dynamic capabilities as a “black box” is inadequate in terms of understanding their essence and providing recommendations for managers.

In the remainder of this paper we utilize the concepts of domain-specific and generic dynamic capabilities in order to consciously distinguish between the two types, and focus especially on the latter.

In search of generic dynamic capabilities

The role and added value of the literature on organizational change in the discussion on dynamic capabilities

Wang and Ahmed (2007) suggest that all dynamic capabilities have three generic components – adaptive, absorptive, and innovative capability. They give two reasons for their choice: First, these capabilities are frequently mentioned in both empirical and conceptual studies on dynamic capabilities. Second, the studies in all three areas have a long-standing history and these streams have only recently been related to the resource-based view of the firm to provide new insights into the nature of dynamic capabilities. Applying the same criteria as Wang and Ahmed (2007) use, we identify the theory of organizational change as a feasible source for conceptualization of generic dynamic capabilities (Hannan and Freeman, 1984; Huy and Mintzberg, 2003; Palmer and Dunford, 2002, 2008; Romanelli and Tushman, 1994; Van de Ven and Poole, 1995; Weick and Quinn, 1999). Indeed, it can be suggested that organizational change is a serious body of the literature with a long-standing history of its own, that has been frequently mentioned in or linked to the debate on dynamic capabilities.

Whereas the first reason is quite evident and does not need further justification, there are some interesting observations to be made about the second one. On the one hand, most of the literature on dynamic capabilities mentions organizational change, and earlier works seem to target it implicitly. For instance, Galunic and Eisenhardt (2001)

relate dynamic capabilities to highly adaptive behavior, in other words organizations that possess them are also capable of change as and when necessary. Similarly, Wang and Ahmed (2007) include adaptive capacity in their list of constitutive elements. Many other works also imply some links to organizational change (e.g. Easterby-Smith *et al.*, 2009; Eisenhardt and Martin, 2000; Moliterno and Wiersema, 2007; Rosenbloom, 2000; Teece *et al.*, 1997). Some of the more recent papers address organizational change directly and quite explicitly. According to Zahra *et al.* (2006, p. 921), for example, “the ability to *change* [...] capabilities is dynamic capability” (italics in original). Barreto (2010, p. 261) notes that the central role of dynamic capabilities is usually seen “as related to the change of key internal components of the firm.” Furthermore, Ambrosini *et al.* (2009, p. 10), discussing types of dynamic capabilities, mention “different levels of change capability.” Very recently, Teece (2014, p. 332) summarizes the role of dynamic capabilities as enabling “continuous innovation and change.” Other DC literature discusses change more implicitly, using notions such as “experimentation,” “learning,” or “reconfiguring.” Marcus and Anderson (2006) refer to general dynamic capability, decomposing it into searching for new ideas and methods, comparing company practices to the best in the industry, evaluating practices in other industries, and experimenting. Teece’s (2007, 2014) framework of “sensing, seizing, and reconfiguring” suggests similar types of themes. Furthermore, Schilke (2014) and Hine *et al.* (2014) view higher-order dynamic capabilities as more or less generic learning capabilities in the organization (cf. Zollo and Winter, 2002).

On the other hand, although organizational change has always had a role in the discussion on dynamic capabilities, it has tended to be that of a stepdaughter. The theories of strategic management and organizational change have developed almost independently, and very few explicit attempts have been made thus far to link the concept of dynamic capabilities to the extant literature on organizational change. On the contrary, some recent work distances itself from that literature stream, claiming that it lacks the necessary strategic focus and thus is not so relevant to the discussion on dynamic capabilities (Helfat and Peteraf, 2009). However, we suggest that the issue is not that straightforward, because much of the recent literature on organizational change has a strong and explicit strategic focus (see, e.g. Kianto, 2008; McGahan and Mitchell, 2003; Ravasi and Phillips, 2011; Rouleau and Balogun, 2011; Sanchez-Burks and Huy, 2009; Sonenshein, 2010; Zajac, Kraatz and Bresser, 2000).

McGuinness and Morgan (2003) suggest that this gap between the two distinct streams may be attributable to the focus of strategic theories mainly on strategy formulation (i.e. seeking to answer the “what do we need to change?” question) rather than on problems of implementation (i.e. answering the “how can we do that?” question), whereas the theory of organizational change has the opposite orientation. Although the discussion on the need to integrate both the “what” and the “how” into strategic management theory has been going on for a long while now (Mintzberg *et al.*, 1998; Quinn, 1978), recent publications acknowledge that a lot remains to be done in this field (Mellahi and Sminia, 2009). Enriching the concept of dynamic capabilities through the literature on organizational change may be a first step in this direction.

Adding to Wang and Ahmed’s (2007) two criteria, we suggest a few more reasons for turning to organizational change theory in order to further develop the general concept of dynamic capabilities. First, in its very essence the literature on organizational change deals with the issue of organizational dynamics, in other words it addresses virtually the same problem. Second, as an established body of research with a long-standing history it has developed a huge number of theoretical

models that describe organizational change, and has accumulated extensive empirical evidence (e.g. Palmer and Dunford, 2002, 2008; Romanelli and Tushman, 1994; Van de Ven and Poole, 1995; Weick and Quinn, 1999). Therefore, taking into account the theoretical ambiguity in the concept of dynamic capabilities and the still under-developed body of empirical evidence, the literature on organizational change would seem a very solid basis on which to build. Third, this stream of research deals directly with a number of questions that strategic discourse, with its focus on “what” questions (Mellahi and Sminia, 2009; Mintzberg *et al.*, 1998), has barely addressed so far, namely, how organizations change and what managers can do to help. We suggest that the findings reported in the organizational change literature are relevant to the discussion on the sources of dynamism in organizational capabilities, and on what managers can do to develop dynamic capabilities in their organizations.

Organizational change capability as a generic dynamic capability

As we have demonstrated above, many authors agree that one of the distinguishing features of dynamic capabilities is related to the management of organizational change (Eisenhardt and Martin, 2000; Winter, 2003; Teece, 2014). The notion that it is difficult to maintain competitive advantage in the long term without developing the capability to change is embedded in the concept of dynamic capabilities. An emerging stream of literature has introduced the concept of organizational change capability or capacity, which helps to explain this feature (Bennebroek Gravenhorst *et al.*, 2003; McGuinness and Morgan, 2005; Oxtoby *et al.*, 2002; Judge and Blocker, 2008; Soparnot, 2011). As the concept is still in its’ infancy stage, its definitions vary (for a recent overview, see Heckmann *et al.*, 2016) but they all play around the idea of some special ability that allows organization to initiate, lead and implement change initiatives of various type and scope in order to fit with strategic needs and maintain its sustainable competitive advantage. A thorough look at this literature suggests that it mostly either explicitly separates the content from the process (“what to change?” from “how to change?”), and focusses solely on the latter (e.g. McGuinness and Morgan, 2005), or confines organizational change capacity to change process implementation issues on the level of the concept operationalization (e.g. Judge and Douglas, 2009).

Contrary to this idea we suggest that organizational change as a dynamic capability includes both components. We find support for such point of view in Barnett and Carroll (1995), who note that a valid and comprehensive study of organizational change should incorporate both the content and the implementation process, otherwise it will give only a one-sided narrow view of the problem. Eisenhardt and Martin (2000, p. 1116) express a similar viewpoint in suggesting that the efficient implementation of dynamic capabilities requires “both the ingredients (i.e. key commonalities of capabilities) and the recipe (i.e. order of implementation).” On this basis we suggest that the capability for organizational change means the capability of an organization as a whole to see new opportunities for development, to realize what internal changes are needed, and to implement them successfully. It is notable that this conceptualization resembles Teece’s (2007) disaggregation of dynamic capabilities into the capacity to sense and shape opportunities and threats, seize opportunities, and maintain competitiveness by reconfiguring the firm’s assets. However, the difference is that organizational change capability focusses explicitly on change, while Teece’s framework takes a broader outlook of “enterprise’s capacity to successfully innovate and capture sufficient value to deliver superior long-term financial performance” (Teece, 2007, p. 1320).

How does change capability correlate with dynamic capabilities? We propose that understanding change capability as a generic dynamic capability in an organization reveals its nature more clearly. As we have demonstrated above, only a generic capability that is not tied to a specific function or domain and can retain its value over a sufficiently long period of time can be considered a generic dynamic capability. We suggest that change capability represents an example of “pure” generic dynamic capability – since unlike domain-specific capabilities, it does not turn obsolete in a dynamic environment within a certain timeframe. We therefore suggest that organizational change capability represents a generic type of dynamic capability in its true conceptual and empirical sense.

In addition and in line with Wang and Ahmed (2007), we suggest that organizational change capability is a more generic term in that it involves both reactive (adaptive) and proactive (innovative) components. It also indirectly includes absorptive capacity. In other words, the concept covers more or less the same issues as raised by Wang and Ahmed (2007). However, applying it to dynamic capabilities allows us to access a very rich and thus far only indirectly linked stream of literature and practice, and thus it can provide fresh insights.

In the following we focus more closely on organizational change theory in order to enhance understanding of the origins and nature of the capability for organizational change as a dynamic capability.

Opening the “black box” of organizational change capability

Taking into consideration the arguments concerning the strong link between dynamic capabilities and organizational change, it would be quite logical to consult theories of organizational change in this context. This would especially help to understand the origins of the organizational change capability – which we postulate is a generic dynamic capability and thus the eventual essence of long-term capability dynamics of any organization – and it could also increase understanding of the ways managers can develop change capability in their organizations.

Let us start with an analysis of the underlying ideas about the nature of organizational change within the theory. A number of classic models (e.g. life-cycle, Greiner, 1972; population ecology, Hannan and Freeman, 1984; punctuated equilibrium, Tushman *et al.*, 1986) depict change in organizations as a discontinuous, rare event that happens due to environmental pressures resulting from a failure to adapt, mainly in the context of short-run adaptation. These models offer different recommendations on how to manage the change process, but most of them are based on Kurt Lewin’s (1951) three-stage “unfreeze-change-refreeze” model (see, e.g. Andreeva, 2008; Tushman *et al.*, 1986). This understanding of organizational change is close to what Winter (2003, p. 992) labels “ad hoc problem solving” (or “fire-fighting”), stressing that such changes do not require dynamic capabilities.

There is also another model – the model of emergent change – that conceptualizes change as a continuous and cumulative rather than a discrete process, which organizations use on a daily basis in order to achieve a fit with the fast-changing, unpredictable, and complex environment, and that focusses mainly on long-run adaptability (Weick and Quinn, 1999). According to this view, change is a flow of endless modifications in work processes and social relationships driven by natural organizational instability and alert reactions to daily environmental contingencies (Weick and Quinn, 1999, p. 366). On the application level, the model of emergent change accentuates “bottom-up” implementation processes (contrary to the “top-down”

approach of classical models), openness and environmental unpredictability. Proponents of this model believe that the static state is unnatural in any developing system, and that “freezing,” which Lewin and his followers refer to as an important stage of change management, is unacceptable for any organization. Recent empirical and conceptual studies in routine and capability literature have also argued for examining continuous, gradual, day-to-day change (e.g. Helfat and Winter, 2011; Pentland *et al.*, 2011).

We will now consider in some detail certain practical aspects of change management within these two distinct theoretical streams with a view to finding out what managers can do to develop generic dynamic capabilities in their organizations. A practical example of viewing change as discontinuous and reactive is the management of a project with a clear business objective, distinct time frames and a fixed list of stages to follow. Managing change as a project may well become an organizational routine within, e.g. a specific project context. However, it cannot serve as a basis for the long-term development of dynamic capabilities – exactly because the end of the project involves “refreezing,” which conflicts with their very nature. Thus, this model cannot guarantee that the company has the capability to transfer successfully from one change project to another (Brown and Eisenhardt, 1997). The approach may be efficient in an environment that is relatively stable, but as soon as it turns more turbulent the organizational risks related to rigidity increase dramatically: the business tasks may change again before the organization completes its “previous” change project, and after “refreezing” it may be too difficult to change something again in case the organization will need it once more.

The view of change as continuous and proactive emphasizes the absence of “project” time limits and the long-term orientation of the decisions and actions made. The model is less attached to a particular business task, thereby suggesting the development of some “general” skills that are of use not only in the “here and now,” but also in the future. We would describe the approach, in essence, as the development of change capability in an organization, or of search routines in terms of evolutionary economics (Nelson and Winter, 1982).

Despite the fact that the “change capability development” approach solves the problems of the “project management” approach, it also has its shortcomings. An organization focussing more and more on general future-oriented developmental tasks may lose the linkage to the real business tasks of the present. Furthermore, there is the risk of fostering in the minds of some managers a “schizophrenic” need to change for the sake of change, leading to unjustified investments. This reflects the saying “perfection is an enemy of good.” Other authors, referring to such risks, suggest that “overusing” dynamic capabilities can lead to the deterioration of basic competitive capability (Eisenhardt and Martin, 2000, p. 1118; Winter, 2003, p. 993). The above arguments are briefly summarized in Table II.

In summary, whereas the “project” approach represents organizational reactions to environmental events, the “change capability development” approach reflects the proactive logic of the organization’s behavior and leads to the development of special skills to renew core capabilities that serve as a basis for competitive advantage. In the context of dynamic capabilities, Pandza and Thorpe (2009) use the terms “selection-adaptation” and “path-creation” to refer to reactive and proactive mechanisms of organizational change. Referring to the earlier discussion in this section, we suggest that successful companies employ some combination of these models, given that both have their advantages and shortcomings. In other words, they

Table II.
A comparison of two different approaches to change management

Essence of the approach	Managing change as a project	Developing the capability for change
Change is	Discrete and reactive	Continuous and proactive
Key ideas	<ul style="list-style-type: none"> ✓separate project ✓related to short-term business tasks ✓limited in time ✓investments in “here and know” applied skills ✓focus on employee resistance 	<ul style="list-style-type: none"> ✓constant process ✓related to long-term development ✓unlimited in time ✓investments in “generalist” skills ✓focus on employee development
Shortcomings	<ul style="list-style-type: none"> ✓difficult to change anything after the project has been completed ✓business tasks can change before the change project is implemented 	<ul style="list-style-type: none"> ✓potential loss of linkage with everyday business tasks ✓risk of fostering a “schizophrenic” need to change for the sake of change

use the “project” approach for particular change programs, and at the same time take measures aimed at developing the capability for organizational change, a generic dynamic capability that will eventually support sustainable competitive advantage. This approach is in line with the recent discussions on organizational ambidexterity (Raisch *et al.*, 2009; Tushman and O’Reilly, 1996) and adaptive capacity (Staber and Sydow, 2002), as well as recent discussions in DC literature on non-routine managerial action in facilitating necessary discontinuities across organization to reallocate resources toward new paths while also retaining some resources within existing, slowly changing trajectories (Teece, 2012, 2014).

Integrating organizational change capability into the framework of dynamic capabilities

As we explain in the previous sections, we propose to define dynamic capabilities as a certain set of organizational properties that facilitate the renewal of organizational capabilities, or in fact, ensure their dynamism. Some authors note that the word “dynamic” in the term “dynamic capabilities” could cause confusion (Ambrosini and Bowman, 2008; Winter, 2003). In order to position ourselves clearly in this discussion we would suggest that the phenomenon that is commonly labeled “dynamic capabilities” represents the source of the dynamism of the organization’s capabilities.

We also argue that in order to sustain long-term competitive advantage (or a series of temporary advantages as D’Aveni *et al.*, 2010 suggest), dynamic capabilities should represent some generic qualities that are not confined to a specific function or a task. Drawing on existing literature, we have suggested that organizational change capability represents such a generic capability and thus can be treated as the essence of dynamic capabilities. Depending on the different uses of the term “dynamic capability” that we identified in the literature, one could use the term “dynamic” in two settings: first, to refer directly to organizational change capability as a generic dynamic capability, and second to refer to a domain-specific dynamic capability – or any other capability – which becomes dynamic under the influence of organizational change capability. Thus, we suggest that organizational change capability is helpful in situations in which domain-specific dynamic capabilities are constrained – and we expect that such constraints are more frequent than currently recognized in the literature.

Our proposal resolves the “commonalities paradox” (Barreto, 2010, p. 270) in that it integrates the existence of commonalities across firms and simultaneously

acknowledges the potential dual impact of dynamic capabilities on performance or competitive advantage. On the one hand, although it is generic in different firms, organizational change capability in each particular organization is built on idiosyncratic processes – here our proposal is in line with the ideas of Eisenhardt and Martin (2000), who claim that dynamic capabilities can exhibit some commonalities across firms but are still idiosyncratic in their details. On the other hand, as Wang and Ahmed (2007) explain in detail, common elements of dynamic capabilities (organizational change capability in our case) influence organizational performance indirectly through the idiosyncratic capabilities and activities they produce and renew, and modify.

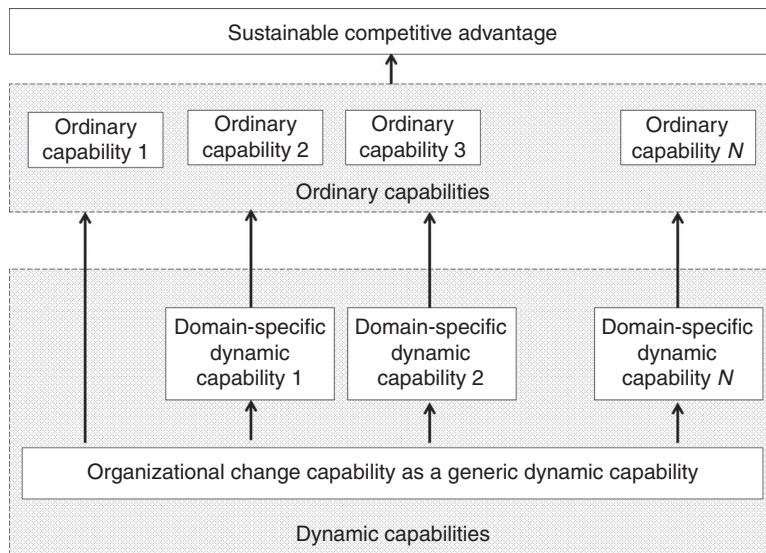
As an illustrative example let us take the case of an organization that invests a lot in research and development. State-gate processes and routines related to that company represent functional (operational) capabilities in such a company. Still, it is easy for competitors to imitate these procedures, which are narrowly functional, and cannot as such differentiate the company strategically. The “domain-specific dynamic capability” in this example refers to research and development capabilities including collaboration and connectivity with internal and external stakeholders, as well as management mechanisms related to firm-specific research and development activities. Such a capability is much more difficult to imitate because it is grounded in the complex networks and processes involving different stakeholders, both internal – like various departments within a firm, and external, such as universities, research institutes, consumers, suppliers, and subcontractors. In line with current empirical literature, this capability could be labeled as a “dynamic capability” (see, e.g. Danneels, 2008). However, despite its strategic importance, it is still fundamentally domain specific in nature since research and development cannot solve all the issues that firms encounter in dynamic and sometimes unpredictable business environments. For instance, sometimes a firm might have to change to a mode where resource efficiency and retaining existing customers is more important than creating new products. Or alternatively, it might be that firm’s research and development capabilities are targeted to the wrong technology or domain area altogether, and even the external networks are not suitable to provide the new knowledge needed in a changed situation. To cope with such environments, long term, generic dynamic capabilities – such as organizational change capability – are needed. Change which goes beyond domain-specificity would in this example touch upon the very nature of routines and processes themselves, and create fundamental changes on what and how organization’s employees conduct their activities. Such change might happen over the longer term or within a more disruptive change intervention, as discussed in connection to the archetypes of change management (see Table II).

Based on the above, we conclude that the essence of organizational change capability as a generic dynamic capability is its responsibility for the renewal of domain-specific capabilities. These arguments are summarized in the Figure 1.

Discussion and conclusions

This paper examines the nature of dynamic capabilities and the sources of the dynamism. We suggest that the nature of a capability that is able to bring about sustainable change and related competitive advantage should be generic. We also argue that such dynamic capabilities can and should exhibit commonalities across firms. For this purpose, we conceptualize existing perspectives under two categories: domain-specific and generic dynamic capabilities. We suggest that the former are

Figure 1.
The relationships
between
organizational
change capability
and other
capabilities



applicable mainly within a given organizational or functional domain, whereas the latter are – per definition – applicable within any organizational domain and may thus have common elements across firms and industries.

In bridging strategic management theory with the theory of organizational change we suggest that organizational change capability has this kind of generic nature and thus represents the fundamental essence of higher-order/generic dynamic capabilities (as defined by Winter, 2003). Building on the literature on organizational change we posit that it is necessary to find the equilibrium between the “project management” approach to organizational change and the “change capability development” approach in order to foster and sustain organizational capability dynamism.

Theoretical contributions and empirical implications

Our analysis contributes to the existing literature on organizational capabilities in several ways. First, it gives further insights into the “black box” of the essence of dynamic capabilities in distinguishing between domain-specific and generic capabilities, and proposing organizational change capability as a generic capability. This concentrates the focus on dynamic capabilities *per se*, rather than on their antecedents or consequences. Second, it connects the literature on strategic management with the previously neglected yet very rich stream of literature on organizational change, thereby shedding new light on the nature and origins of dynamic capabilities, as well as suggesting practical recommendations. Contributions bridging strategy and organizational research streams have been called for (Mintzberg *et al.*, 1998), and this study proposes an integrative view on the dynamic capabilities field in this regard. Third, this study operationalizes the concept of dynamic capabilities for the purposes of empirical research, and opens up new forms of measurement in line with instruments measuring organizational change capability that have been already developed and validated (e.g. Junell and Stähle, 2011; Judge and Douglas, 2009; Kianto, 2008). Fourth, on the practical level and based on the extant literature on organizational change and wide experience among both managers and

consultants in the field it opens a path to new insights and recommendations to decision makers on how to build dynamic capabilities in their organizations (e.g. Meyer and Stensaker, 2006; Klarner *et al.*, 2008; Shipton *et al.*, 2012). We would like to pinpoint, however, that our study is a conceptual one, and therefore the question about specific managerial activities aimed to develop dynamic capabilities deserves further research. The discussion in the remainder of this section pursues to bring about ideas in this regard.

Table III summarizes the key features of organizational change capability, and pinpoints the key theoretical insights for dynamic capabilities literature, alongwith suggestions for empirical implications.

First key feature is universal applicability, which means that organizational change capability is not constrained within a specific domain of activity (e.g. acquisitions) or a function (e.g. marketing). Conceptually it means that such capability does not necessarily have short-term performance consequences, but the longer-term consequences might be even more prominent, as they relate to the survival of the firm (see also Hine *et al.*, 2014). The empirical measurement of the effects of such capability for a specific firm should thus focus on long-term performance, growth, and survival. The evidence from the empirical studies on change capability demonstrates that generally it has a positive impact on performance (Judge and Elenkov, 2005; Judge *et al.*, 2009; Heckmann *et al.*, 2016). Yet change management literature also suggests that various types of changes, e.g. in terms of their speed, radicalism, or content of what is being changed – have differentiated effects on various types of performance, e.g. short term vs long term, or survival vs growth (e.g. Haveman, 1992; Hughes *et al.*, 2010; Shirokova *et al.*, 2014), and that these relationships are also moderated by contextual factors (e.g. Judge *et al.*, 2009; Shirokova *et al.*, 2014). These findings call for a more fine-grained, time-conscious, and sometimes also less positivistic approach to the measurement of the performance effects of generic dynamic capabilities.

Second key feature relates to the nature of the change process, which is constant and on-going, rather than a clearly specified change initiative. Theoretically this means that such change might be incremental and gradual – even invisible – in a specific point of time, and that the larger change can be observed over time and from a broader perspective. Therefore empirical measurement of such change needs to use “a magnifying glass” and focus on day-to-day change events over time, if it is to capture the fine-grained artifacts of generic change capability in action (see Helfat and Winter, 2011; Pentland *et al.*, 2011; on the occurrence of on-going change). A number of frameworks from change management literature can provide useful guidance on analyzing the detailed, daily process of change (e.g. Bennebroek Gravenhorst *et al.*, 2003; Soparnot, 2011).

Organizational change capability – key features	Theoretical insight for dynamic capabilities literature	Suggested empirical implications
Universal applicability, not constrained by domain or function	Linked to long-term – rather than short-term – performance and survival of the firm	Examination of survival rates of companies over long periods of time, panel data survey design
Constant process, rather than a project	Focus on change that is on-going, quite often incremental, and even invisible	Measure the day-to-day change events within the firm
Rooted in individual attitudes and behaviors	Micro-foundational source of dynamism (i.e. not only on managerial level)	Measure dynamic capabilities on the micro level (employees and teams)

Table III.
Organizational change capability as a generic dynamic capability: theoretical and empirical implications

Furthermore, change literature also offers advice on how such on-going change can be managed (e.g. Meyerson, 2001; Chia, 2014).

Third, an important feature of organizational change capability is its' embeddedness in employees' attitudes and behaviors. Conceptually this means adopting a bottom-up approach to dynamic capabilities, where change is examined from the micro-foundations perspective, rather than at top management level only. Empirically, it implies that the research attempts should not focus on the behavior and activities of (top) managers, but rather encompass all groups of employees. It may include the focus on individual- and team-level change, creativity and learning abilities (several authors advocate similar idea, e.g. Zollo and Winter, 2002; Schilke, 2014). Highlighting the importance of taking into account the individual level of analysis, Judge and Elenkov (2005) found that the gaps in the change capability perceptions of top managers, middle managers, and frontline workers significantly deteriorate firm's environmental performance. To that end, change management literature offers a variety of validated approaches for measuring change capability through surveying employees at the different levels of the organization (e.g. Bennebroek Gravenhorst *et al.*, 2003; Kianto, 2008; Judge and Douglas, 2009; Junell and Stähle, 2011). In addition, the research on employee resistance to change or readiness for change also offers a number of validated instruments that measure the individual-level attitudes to change (e.g. Oreg, 2003; for a detailed review, see Choi, 2011).

Connection to other perspectives on generic dynamic capabilities

Several other studies in dynamic capabilities literature have pursued to address the issue of general dynamic capabilities, and we discuss here shortly the linkages of our study with these approaches. The model developed by Ambrosini *et al.* (2009) takes a step in the generic direction in distinguishing three types of organizational change capabilities: incremental, renewing and regenerative. Similarly, Hine *et al.* (2014) distinguish between ordinary capabilities, dynamic functional capabilities, and dynamic learning capabilities. Furthermore, Schilke (2014) operationalizes second-order dynamic capabilities as "learning capability." All of these approaches can be linked to the concepts of first-, second, and third-order changes (e.g. Bartunek and Moch, 1994), as well as the capability hierarchy discussion (e.g. Collins, 1994; Winter, 2003), where higher-order capabilities are needed to enable change in the lower-order, more operational capabilities and routines. We believe that such frameworks do have potential in terms of enhancing both conceptual and practical understanding of generalist higher-order dynamic capabilities. We believe that linking such higher-order dynamic capabilities to organizational change theory, as well as measurement approaches, helps to address the pursuits to understand generic dynamic capabilities in organizations.

In particular, we believe that conceptualizing and measuring organizational change as a generic dynamic capability can provide important substance to the discussion on the levels of "capability hierarchy." Authors such as Schilke (2014) and Hine *et al.* (2014) suggest that "learning capabilities" could constitute the meta level, long term, and generic basis of dynamic capability development. While learning is indeed a very good example of a generic dynamic capability, organizational change capability, and different approaches to it could help to detail even further what specific issues are involved when generic dynamic capabilities are investigated. Furthermore, it should be noted that organizational change capability is best in explaining how the change itself unfolds, while other generic conceptualizations of dynamic capabilities take broader approaches (such as sensing, seizing, and reconfiguring, Teece, 2007).

Furthermore, there is increasing amount of discussion in dynamic capabilities literature on facilitating proactive discontinuity in organizations. In particular, Teece (2012, 2014) argues that non-routine managerial action is a necessary complement of organizational routines to break path dependencies and also to redirect resources toward new opportunities. Such perspective is complementary to the two streams in organizational change management which focus on change as a project or continuous change. Proactive discontinuity – at best – can combine the beneficial sides of both types of traditional change management into a dynamic capability where resources are allocated and re-allocated toward different change initiatives according to managerial judgment over emerging opportunities.

Further research directions

We also suggest some directions for further research. First of all, the question of how managers can develop organizational change capability (and thus a generic dynamic capability) in their organization deserves further detailed study. On the conceptual level, it would also be interesting to investigate further the links between different types of change capabilities (e.g. as formulated by Ambrosini *et al.*, 2009; Hine *et al.*, 2014) and lower- and higher-order change, and to draw some practical conclusions. Another promising area of inquiry at the intersection of dynamic capabilities and organizational change theory relates to the contingency models of organizational change (e.g. Andreeva, 2008; Burnes, 1996; Marshak, 1993; Palmer and Dunford, 2002, 2008). We suggest that their application could both enrich the theory of dynamic capabilities (and is in line with RBV requirements for idiosyncratic, situational advantages) and offer managers more realistic and efficient recommendations. On the empirical level, the proposed operationalization may stimulate further research into the influence of dynamic capabilities on organizational performance. One more conceptual question that merits further research arises from our discussion. Are there any other capabilities that are sufficiently generic in nature and have the capacity to preserve their value over a sufficiently long period of time to be incorporated as yet another element of dynamic capabilities? In seeking an answer to this question it would be worth further investigating the specific skills for investment decision making that were discovered among long-established companies (Collins and Porras, 1994; de Geus, 2002).

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