

Contributions to Management Science

Tomás Bayón · Martin Eisend ·  
Jochen Koch · Albrecht Söllner ·  
Markus Vodosek ·  
Heinz-Theo Wagner *Editors*

# Dynamic Capabilities and Relationships

Discourses, Concepts, and Reflections

 Springer

# **Contributions to Management Science**

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# Preface

These times are uncertain. The predictability of the future and control of the environment have proven to be illusions, as is currently evident during the Coronavirus pandemic and the struggle for the right way to deal with it. Discourses on globalization and de-globalization, the changing role of industrialized countries and the emergence of new superpowers, digitalization, and climate change also demonstrate the volatility of our age and point to new challenges. It is, therefore, not surprising that approaches that promise to successfully deal with uncertainty are booming. The dynamic capabilities approach is one that promises just that, and as a burgeoning and flourishing stream of research, it is still extending its claims to explanation. Some scholars might say this is due to its broadly acknowledged conceptual blurriness, while others might say it is despite that blurriness. Dynamic capabilities always exist, and they are everywhere; they are ultimately responsible for both success (in cases of available dynamic capabilities) and failure (in cases of their absence).

For the members of the doctoral program “Dynamic Capabilities and Relationships (DCR),” this volume is a great opportunity to put some thoughts and ideas about this approach on paper. Meanwhile, the scientific output of the group and its members is provided on the DCR homepage ([www.dcr-research.de](http://www.dcr-research.de)). This book is about taking a more playful look at the dynamic capabilities approach. To this end, some contributions take more of a bird’s-eye view, while other authors find it appealing to focus on specific aspects of dynamic capabilities research. Overall, the contributions are a plea for a pluralistic view of dynamic capability theory. It is precisely this idea that creates a scope for creativity and novelty and thus also an opportunity to react to completely unpredictable developments.

In the first contribution—“Celebrating the Plurality of Understandings of the Concept”—Abiodun Adegbile, Yevgen Bogodistov, Sadrac Cénophtat, Michael Hartmann, Madeleine Rauch, David Wagner, Matthias Wenzel, and Veit Wohlgemuth present six different personal reflections illustrating their struggles, interpretations, and contradictory conceptualizations of dynamic capabilities during their research. These different research narratives illustrate not only competing

reasoning but also a productive and positive discourse in favor of the concept of dynamic capabilities, creating new insights and prospects. In a supplementary note, Lachezar Ivanov advocates for interpreting the dynamic capabilities approach as a scientific method for use in firms. In the eyes of the author, this application-oriented view explains quite substantially the popularity of the approach.

An important observation comes from Michael Hartmann and Markus Vodosek, who emphasize the role of social relations in connection with dynamic capabilities. Key ingredients for successful change in unstable times—such as useful information, sound decision-making in groups, and the necessary support of strategic change—require managers to use a distinct combination of relational models. It also becomes clear that decisions must be made primarily in connection with a particularly valuable good: social capital.

Perhaps relationships and social capital are also helpful factors when it comes to overcoming a psychological barrier that Sadrac Cénopht and Abiodun Adegbile describe as “confirmation bias” in their contribution. Confirmation bias—a cognitive pattern that may well impair managers’ willingness to execute changes—will negatively affect dynamic capabilities. The authors deepen our understanding of the microfoundations of dynamic managerial capabilities and raise the question of how to dismantle confirmation bias. In a fast-changing environment, this seems to be crucial.

“Knowledge integration mechanisms” are a possible answer to this question, as Giorgi Shuradze and Heinz-Theo Wagner claim. They are especially interested in the extent to which these mechanisms affect the innovative performance of firms. Interestingly, their article empirically demonstrates that intra-organizational social relationships should be viewed as effective mechanisms for knowledge integration that facilitate innovative organizational performance. So, once again, it is the human dimension that plays the key role in staying dynamic.

In the end, however, it is the customer who decides whether suppliers are innovative enough to solve their problems. Yannick A. Mies, Heinz-Theo Wagner, and Markus Vodosek elaborate on the ramifications of digital innovation with regard to firms’ abilities to engage their customers in repeat business and lock-in. The paper shows that digital innovation reduces switching costs and the complexity of products and markets. Hence, firms will face difficulties with maintaining lock-ins through switching costs in a digital age. On the other hand, digital innovation creates opportunities to exploit network externalities.

Farid Tarrahi and Martin Eisend draw our attention to another—often neglected—aspect of the customer-supplier relationship. Customers know that suppliers try to persuade them, and they can identify advertising as what it is: advertising. This “persuasion knowledge” can be understood as a dynamic consumer capability. Consumers must, therefore, be seen as active participants in a dynamic persuasion process. The development of persuasion knowledge benefits consumers in the marketplace. Persuasion knowledge allows customers to deal with persuasion and helps them to make better buying decisions.

Last, but not least, it is Gaja Amigoni who reminds us of a fact that has moved to the center of many debates about the “home office” in the Coronavirus era. Her

contribution acknowledges that modern organizations require working conditions, spaces, and facilities that are suited to support the new needs and creative expressions of their employees. Her work provides important and empirically grounded guidelines for designing and using physical environments aimed at promoting creativity in employees and firms.

The editors, authors, and the whole DCR community gratefully acknowledge the support from the Dieter Schwarz Foundation, which has generously funded not only this volume but the collaborative DCR research program for more than ten years. We are very thankful for this unique opportunity that has not only helped to advance knowledge in this field but also provided an important experience in the academic lives of the members of the DCR community.

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# Dynamic Capabilities: Celebrating the Plurality of Understandings of the Concept



**Matthias Wenzel, Madeleine Rauch, Abiodun Adegbile, Yevgen Bogodistov, Sadrac Cénophtat, Michael Hartmann, David Wagner, and Veit Wohlgemuth**

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In keeping with an essayist style of writing, this chapter is purposefully written with partial irony, hyperbole, and narration in order to underscore the main argument.

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## Matthias Wenzel—Introduction, or Multiple Understandings of Dynamic Capabilities: What Is the Problem?

“Much has been written about dynamic capabilities.” This sentence introduces Peteraf et al.’s (2013, p. 1389) now-seminal bibliometric study of the literature on dynamic capabilities, which was published 15 years after the inception of the field (Teece et al., 1997) and soon after the inauguration of the Doctoral Program on Dynamic Capabilities and Relationships (DCR). Of course, with thousands and thousands of papers published on the topic (see Schilke et al., 2018 for a recent graph of the doubtlessly impressive but also somewhat frightening growth of this body of literature), it is difficult to disagree with Peteraf’s statement. What is striking, instead, is the soberness of the sentence. Although the journal genre pushes authors toward spurring enthusiasm about the relevance of one’s paper within the first lines in order to hook readers, the authors chose a rather cold and distanced style of introducing the study, one that anticipates the potentially worrisome result of their analysis of the field’s state at the time. In fact, Peteraf et al. (2013) found what is highly problematic for a concept or framework when measured against conventional yardsticks of theory (e.g., Bacharach, 1989; Suddaby, 2010); research on dynamic capabilities systematically reproduces varying, sometimes even partially contradictory understandings of the concept. Or, put more bluntly, scholars talk about very different things when talking about dynamic capabilities.

Peteraf et al.’s (2013) detailed analysis substantiated recurrent observations regarding the debate about dynamic capabilities; namely that rather than a single coherent understanding of the concept, there is a plurality of understandings (e.g., Ambrosini & Bowman, 2009; Arend & Bromiley, 2009; Barreto, 2010; Giudici & Reinmöller, 2012; Vogel & Güttel, 2013; Wang & Ahmed, 2007). Peteraf et al. (2013, p. 1396) and others have argued that this lack of agreement could “hamper future progress” of the field toward a grand understanding of the concept, one that unleashes the full potential to explain its core outcome variable (whatever that may be). Therefore, somewhat ironically, one of the strongest and most consistently recurring themes in the literature on dynamic capabilities is not the delivery of the almighty silver bullet that the concept originally promised (Eggers & Park, 2018, p. 358) but, rather, repeated calls for more work on generating a coherent understanding of what dynamic capabilities are (e.g., Ambrosini & Bowman, 2009; Arend & Bromiley, 2009). In response, scholars have begun to bring different understandings of the concept together by, for example, constructing a “house of dynamic capabilities” (Wilden et al., 2016) or riding a bicycle with an “organizational drivetrain” (Di Stefano et al., 2014). However, despite notable progress toward reaching convergence, Schilke et al. (2018) still recognizes that there are considerable unmet needs to achieve a consensus on what dynamic capabilities are. This diagnosis raises suspicions that the holy grail of dynamic capabilities is not the concept’s contribution to explaining its (again, ominous) outcome variable (Helfat & Peteraf, 2009, p. 91) but. Rather, the concept itself.

In this chapter, we propose a different approach to the uneasy lack of consensus about what, precisely, constitutes a dynamic capability. Rather than advocating a reconciliation of divergent understandings, we celebrate the plurality of understandings of the concept. In fact, instead of reducing the conceptual openness of dynamic capabilities, we further add to the multivocality in debates on the concept by eclectically sharing some DCR scholars' deeply personal, subjective stories of how they (came to) understand the concept and how it has advanced their research (or not)—excessive self-citations included, of course. In one way or another, these stories are characterized by various types of “struggles with finding a way” (Hjorth & Reay, 2018, p. 14) in their PhD time and beyond, which was/is invoked to a greater or lesser degree by the lack of clarity around the meaning of the label “dynamic capabilities.” And yet, all of them have managed to generate decent research results in their academic careers.

We argue in this chapter that these productive outcomes have emerged not in spite of but instead *because* of the struggles with fuzzy concepts such as dynamic capabilities. Rather than implicitly advocating the suppression of such struggles by working toward a widely shared consensus, we position conceptual struggles as a driver of reflection that spurs novel and useful insights. As we will discuss, this shift in perspectives has important implications for how the plurality of understandings of dynamic capabilities should be treated. We begin, however, by presenting the aforementioned stories by DCR scholars. Given our purposeful eclecticism, the order of these stories follows no deeper conceptual logic than the doubtlessly uncreative alphabetical order.

## **Abiodun Adegbile: Unpacking Dynamic Capabilities**

Dynamic capabilities are an elusive concept with different meanings to different people. In this regard, several researchers have tried to conceptualize dynamic capabilities, and some of their concepts overlap. While existing research appears to have provided a range of answers regarding what constitutes dynamic capabilities, there is no general consensus about the locus of dynamic capabilities, and this has led to debates on a specific definition. In this commentary, I attempt to build a case for understanding dynamic capabilities as a competitive strategy that is useful in different market environments beyond just high-volatility environments. I also review its distinctive definitions from the two seminal papers by Eisenhardt and Martin (2000) and Teece et al. (1997), from which the various definitions of dynamic capabilities emerged.

Looking at the definitions from Eisenhardt and Martin (2000) and Teece et al. (1997), along with the broader set of work that they represent, it can be seen that there is some convergence that is relevant to the debate about what constitutes dynamic capabilities. I observed that the conceptualization of dynamic capabilities draws from traditional work on resource-based view studies but is also highly influenced by systematic processes for value creation and sustained competitive

advantage. In other words, the fundamental similarity between the two conceptualizations of dynamic capabilities is related to the role of firms in creating value for a sustainable competitive advantage, irrespective of the market environment in which it operates. While it is widely acknowledged that the link between cause and effect is frequently elusive, I believe the term *dynamic capabilities* has in recent times come to represent the bridge connecting firms' abilities and processes to sustained competitive advantages in various market environments. I also believe that this causal link has served as not only a point of convergence for many debates on the conceptualization of dynamic capabilities but also the starting point for much theorizing about the cultivation of dynamic capabilities for sustained advantages in a competitive strategy. As such, dynamic capabilities are among the drivers behind a firm's ability to integrate, build, and reconfigure resources and processes for value creation and sustained competitive advantage. Therefore, I propose the following conceptualization of dynamic capabilities, which is intended to span the prior cross-thematic body of work on the topic:

*Dynamic capabilities are based on a firm's abilities to integrate, build, and reconfigure resources and processes for value creation and sustained competitive advantage in different market environments.*

Looking at this proposed definition, you can see that the concept of change/uncertainty was specifically left out. Bear in mind that most of the cited research in the literature indicated that sustained competitive advantage can only be obtained in environments characterized by change or uncertainty; in other words, a highly volatile environment. When looking at market dynamics, this can raise a particularly salient question: What about a nonvolatile market environment? Does that mean that sustained competitive advantage cannot be achieved in nonvolatile market environments? I believe that any sustained competitive advantage is based in the specific ways that a firm develops and employs resources and processes, and this variability gives firms a basis from which to pursue different types of competitive advantage. I argue that sustained competitive advantage can be found in every type of market environment. Therefore, my definition delineates dynamic capabilities as organizational capabilities that have come to embody successful value creation and sustained competitive advantage in both volatile and nonvolatile market environments.

Additionally, I argue that the influence of dynamic capabilities on achieving a sustainable competitive environment can be observed in the ways those capabilities inform and drive strategic competitive resources that cumulatively impact the sustainable competitive advantage over the longer term. This suggests that rather than directly resulting in a competitive advantage, dynamic capabilities tend to influence value creation by informing and giving form to strategic resources and processes that, in turn, cumulatively drive sustainable competitive advantages. In other words, dynamic capabilities lead to the generation of relevant resources and processes. I cannot safely argue that the extent to which strategic resources and processes impact sustainable competitive advantage is clear-cut because there has been no empirical evidence to suggest this can be observed in practice. Nevertheless, well-performing firms are more likely to engage in dynamic capabilities that

empower value creation drivers, which in turn help with achieving a sustainable competitive advantage. Thus, the definition of dynamic capabilities satisfies to a great extent the valuable, rare, inimitable, and non-substitutable (VRIN) tests for sustained competitive advantage (Barney, 1991). As a result, dynamic capabilities essentially converge with the original purposes for Eisenhardt and Martin's (2000) and Teece et al.'s (1997) conceptualizations.

## Yevgen Bogodistov<sup>1</sup>—Dynamic Capabilities: A Practitioner's Guide

A long time ago in a city called Frankfurt, far away from Frankfurt am Main... This is how I would start the story of my academic journey. In 2011, together with five fellows, I joined the graduate program called Dynamic Capabilities and Relationships. All my fellows and I have two things in common: We each enjoy swimming as a competitive sport, and we are all researchers. We are also all still eager to discover new phenomena and understand how firms and individuals work.

Dynamic capabilities were one of the most complex topics to research. The concept is so abstract and contradictory that even the inventors of the concept would contradict their own prior manuscripts with each new study. This made research in this graduate program very difficult, and discussions about dynamic capabilities, their measurement, and their microfoundations filled most evenings for our group in the city of Heilbronn and, later, in Frankfurt (yes, Oder).

Interestingly, although we took different paths to get there (positivist vs. constructivist, qualitative vs. quantitative, theory-driven vs. practice-oriented, for-profit vs. non-profit, individual-level vs. organization-wide), we all wound up with another thing in common besides swimming: we all became directly or indirectly related to the bounded rationality of individuals (employees, managers, or other stakeholders) involved in the dynamic capabilities of an organization. While I dedicated my career to the analysis of affective states and their influence on

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dynamic managerial capabilities (DMCs), my colleagues investigated areas such as the influence of power on dynamic capabilities; the role of social networks as an antecedent of dynamic capabilities; and the impacts of stereotypes and prejudices on decision-making, dynamic routine formation, and heuristics as a way to cope with environmental turbulence, to mention just some of the topics. The bounded rationality of an actor seems to be a dominant aspect of the program.

In this chapter, however, I would like to avoid theory. As my entire academic career is dedicated to theory building, I decided to do something different. In the following, I will propose a practitioner's guide to dynamic capabilities. It is not a spontaneous decision—at Frankfurt School, I interact with practitioners quite often, and I see what they struggle with. They ask us academics questions with answers that are not obvious and are well-hidden in the academic literature. Unfortunately, we can thus seldom provide them with an appropriate answer, particularly because the abstract concepts are hard to express in simple words. Nonetheless, I will try to do just that in this chapter.

## *Dynamic Capabilities: Theoretical Background*

Theory tells us a lot about dynamic capability—it is the ability of a firm to reconfigure its resource base in order to remain tuned in to the changing environment. The dynamic capability allows for adaptation to varying market circumstances and can even lead to the creation of market changes to force others to adapt (Eisenhardt & Martin, 2000). Assumedly, the dynamic capability allows for generating a sustained competitive advantage. The devil, however, is in the details: While some theorists focus on decision-making (Barreto, 2010; Teece, 2007; Teece et al., 1997), other scholars focus exclusively on dynamic routines (Pentland et al., 2012; Winter, 2003) or heuristics (Bingham et al., 2007; Eisenhardt & Martin, 2000). These research streams, which are contradictory in their premises (Peteraf et al., 2013) can certainly puzzle a practitioner. In the next section, I present my views on dynamic capabilities, translated into the language of business.

### **What Are They?**

Dynamic capabilities are a type of organizational capability. An organizational capability is what a firm can do with its resources, and the capability is different from the resources themselves (Grant & Jordan, 2015). A capability represents, mathematically speaking, a function of the resource. If a number of trucks represent organizational resources, logistics capability is broader and incorporates the trucks, their drivers, the drivers' skills, the developed routines delivering goods from point A to point B in different ways, and so on. A firm's logistics capability is, thus, a routine incorporating a bundle of resources. Here, one can see the complex truth: Every capability has a routine in its core, but not every routine is a capability.