Dynamic Capabilities: Celebrating the Plurality of Understandings of the Concept

Four Lessons Learnt from My Doctoral Journey and Some
Advice for Emerging Dynamic Capabilities Scholars

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Author's note: This is an excerpt of a joint book chapter with former colleagues of the doctoral program in dynamic capabilities and relationships (see reference below). This draft includes just my reflections, while in the full chapter all of us are sharing their views.

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David Wagner

When I joined the doctoral program in Dynamic Capabilities and Relationships in 2011, I was curious about the impact of social media on organizations. I had previously worked for a software company in the field of legal knowledge management and been responsible for the communication department of a bilateral chamber of industry and commerce. Both professional engagements had left me with the impression that digital technologies were having profound implications on the nature of work. The latter assignment, in particular, was a reason for my early exposure to social media. It seemed clear to me that social media had the potential to both transform organizations and allow them to engage different types of stakeholders, thereby making my dissertation project a worthy candidate for the doctoral program in Dynamic Capabilities and Relationships.

Let us start with my understanding of the term: To me, dynamic capabilities describe the capacity of an organization to adapt to a changing business environment. This capacity to change is a competence in itself or, in other words, a higher-order capability that guides the development of low-order capabilities. Dynamic capabilities allow organizations to adapt their routines, resources and competencies, thereby allowing them to achieve a competitive advantage over their rivals. My understanding of the concept has clearly been shaped by the readings in the foundational courses of our doctoral program; it is based on the works of Helfat et al. (2007) and Winter (2003).

I appreciate the diversity of the dynamic capabilities field. Researchers have approached the topic from multiple theoretical and empirical lenses, sometimes leading to confusion or even frustration for those involved. Schilke et al. (2018) provide a thorough review and analysis of the

field's current state. One of their main findings is that the field has made substantial progress, alleviating some of the recurring criticisms, e.g. regarding the underspecification of the concept and the lack of empirical studies. They also put forward an organizing framework for dynamic capabilities research, grouping existing contributions into antecedents, dimensions, mechanisms, moderators, and consequences.

The purpose of this commentary is not so much to advocate for a specific view on dynamic capabilities, but to stress four aspects which had substantial implications for my own research journey, while relating back to the above framework and other relevant literature to position my ideas. I hope that these insights will prove useful for emerging dynamic capabilities scholars, particularly for those with an interest in current technological developments.

Information Technology as a Driver for Strategic Change

Numerous antecedents to dynamic capabilities have been discussed in the literature. Some of those factors are classified as organizational, some as individual/team and others as environmental (Schilke et al., 2018). Given my professional background and experience, I felt that information technology, as an organizational resource, was clearly the most interesting and relevant one to investigate. In my case, of course, it was not just information technology in a general sense, but social media as a new and specific class of information technologies. Luckily, this was not just my impression. Several scholars have consequently highlighted the role and impact of social media for strategy research, more generally, and dynamic capabilities, more specifically (e.g. Haefliger, Monteiro, Foray, & von Krogh, 2011; Jarvenpaa, Staples, & Teigland, 2015; Mention, Barlatier, & Josserand, 2019).

Since I started my dissertation in 2011, several new technologies have appeared. Starting a dissertation in 2019, it would probably be of greater value for emerging dynamic capabilities scholars to investigate artificial intelligence (Haenlein & Kaplan, 2019), blockchain (Felin & Lakhani, 2018) or to analyze larger digital transformation initiatives, as Warner and Wäger (2018) have started to do. In consequence, I feel that the introduction of new information technology generally provides one of the most obvious points of departure when looking at antecedents for strategic change.

Spanning Boundaries from Strategic Management to Information Systems

While I acknowledge that the dynamic capabilities debate is firmly rooted in the strategy literature, I felt it was hugely beneficial to expose myself to the information systems community, too. The latter has a long history of scrutinizing new technologies and building theory around them (see, for example, Urquhart & Vaast, 2012). In fact, information systems scholars have a genuine interest in the nature and functioning of these technologies as well as how they are adopted by organizations. This is something strategy scholars are not naturally good at or even interested in. However, if we accept that new technologies are driving strategic changes, as suggested above, it seems desirable to gain a deeper understanding of them. Hence, an immersion into the information systems literature and its community may be hugely beneficial for emerging strategy researchers. Senior strategy scholars, such as Bharadwaj, El Sawy, Pavlou, and Venkatraman (2013), have called for this type of intermingling between strategy and information systems research as well. In the same vein, it is noteworthy that the dynamic capabilities perspective is also gaining traction in the information systems field (Vartiainen & Hansen, 2018), for which the reverse is true.

Focus on Knowledge Resources and Processes

Two streams of research that have grown out of the resource-based view are the knowledge-based view of the firm and the dynamic capabilities view. I feel that the former has not received sufficient attention given the relative importance of knowledge assets in today's economy. Knowledge resources and the processes involved in building, accumulation and recombining them could usefully be integrated into the dynamic capabilities research agenda. Evidence of this is the learning focus in both the procedural dimension of dynamic capabilities and as a consequence of change (Schilke et al., 2018).

In my own research, I have investigated how social media and their affordances affect an organization's knowledge creation efforts, ultimately contributing to a unique knowledge system that sets organizations apart from their competitors (Wagner, Vollmar, & Wagner, 2014). Even when framing outcomes of organizational engagement with social media in more traditional terms of sensing, seizing, and reconfiguration, it is still knowledge resources that serve as inputs for these processes (Wagner, Wenzel, Wagner, & Koch, 2017). Or, in the words of Majchrzak (2009, p. 19): "Researchers in other domains, such as dynamic capabilities models, [should] modify their theories to include information shaping as an important dynamic capability of a firm." Going beyond social media, we witness an extension of this line of thought in the debate around big data, another knowledge resource, for building dynamic capabilities (Mikalef, Boura, Lekakos, & Krogstie, 2019). It would be wise for future dynamic capabilities scholars to retain the focus on knowledge resources and processes.

The Hidden Value of Relationships

There is a steady stream of research on the benefits of social networks for both individuals and organizations (Borgatti & Halgin, 2011). These networks are based on the relationships people entertain. Yet, it seems that this network research has not had a significant impact on the dynamic capabilities field to date. Interestingly, Bharadwaj et al. (2013, p. 471) point out that "digital technologies are fundamentally transforming [...] firm capabilities and [...] key interfirm relationships in extended business networks". In light of this statement, it seems that the founders of the doctoral program chose wisely to combine dynamic capabilities and relationships; their choice was timely and forward-thinking.

In my eyes, social media plays a special role here. With help of social media, the formation and maintenance of ties, or relationships, with a variety of organizational stakeholders becomes possible (Wagner et al., 2014), albeit with its own set of challenges, e.g. the fluid nature of contributions (Wagner, 2014). Marketing scholars, such as Trainor, Andzulis, Rapp, & Agnihotri (2014) and Wang and Kim (2017), were quick to highlight the value of social customer relationship management, i.e. the use of social media in the management of customer relations, as a key capability, for example. This seems intuitive, as customers are the key stakeholder group in most organizations. Nevertheless, when we think about extended business networks in digital ecosystems, as suggested above, there is much more room to explore the relationships with other groups of stakeholders, of which contributors to open innovation contests, i.e. innovators, are but one example (for more details, see Wagner, Schnurr, Enke, & Ellermann, 2016).

I would like to conclude this commentary with a short note of appreciation. While I started the dissertation with a very specific interest, i.e. the use of social media by organizations, often associated with the term Enterprise 2.0, I have also come to notice that trends in business, and the

corresponding research, pass quickly. While still important to organizations - and society as whole - social media is no longer the latest fad. Enterprise 2.0 has given way to newer trends, such as artificial intelligence, blockchain and digital transformation. Even so, these terms, too, will soon fade. What I have found in the research community around dynamic capabilities is a group of scholars interested in strategic management, technology, and innovation. The group's effort to capture how organizations adapt to a changing business environment, with all its nuances, is a more persistent and impactful one than the analysis of any single technological trend or phenomenon alone.

With my thesis, I have contributed to an academic conversation that I deeply care about. I am fully aware that my peers in the doctoral program have taken different routes, yet, they too, have identified their own niches in which to do work and conversations to which to contribute to. Some of them are taking more interest in top management teams or managerial emotions, topics that fall in the sub-domain of dynamic managerial capabilities, others again are more focused on the conversations revolving around routines and heuristics, to name just a few. That is perfectly fine. Going back to the organizing framework by Schilke et al. (2018), each of us has picked a piece of the puzzle to address and thereby has contributed to the wider field of dynamic capabilities. That is the way normal science goes, unless, of course, one of us hits upon an anomaly that will cause a paradigm shift (Kuhn, 1970).

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