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# Organizational speed as a dynamic capability: Toward a holistic perspective

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#### Abstract

Current research on organizational speed has been disjointed, which has left organizational speed as an underdeveloped area of study. In this essay, we expand the view of organizational speed as a multidimensional gestalt-like construct that may influence firm performance and competitive advantage. We offer a capability-based definition of organizational speed and identify and review the building blocks of organizational speed. We propose new avenues and questions for future research based on our perspective.

Keywords <u>organizational speed</u>, <u>firm performance</u>, <u>competitive dynamics</u>, <u>decision-making</u>, <u>dynamic</u> <u>capabilities</u>

#### Introduction

As markets become increasingly hypercompetitive, organizational speed has become ever the more critical in achieving and sustaining competitive advantage in a wide range of contexts (<u>D'Aveni, 1994;</u> <u>D'Aveni et al., 2010;</u> <u>Wiggins and Ruefli, 2005</u>). For example, Blockbuster failed, in part, because the firm did not respond fast enough to the changes brought about in the industry by Netflix. General Motors (GM) recently acquired a small software firm to speed up its development of autonomous automobiles in order to compete more effectively with Google, which has already developed a driverless car. A high frequency start-up trading firm in Boston, called Domeyard, purposefully developed a flat organizational structure to speed implementation of good ideas. Domeyard feels it needs more than a good strategy and high-technology equipment to succeed. It also needs to be speedy from a regulatory, technology, strategy, human resource (HR), and legal standpoint to be successful (MIT Sloan Management Review, 2016</u>). Thus, in the face of (hyper)competitive environments, firms need to develop and leverage the capability to speed up relevant organizational processes that undergird competitive advantage.

Speed has long been an important area of inquiry in many domains of management research (<u>Albert</u>, 2013; <u>Albert and Bell</u>, 2002; <u>Ancona et al.</u>, 2001; <u>Bluedorn and Jaussi</u>, 2007; <u>Stalk</u>, 1988). For example, studies in strategic management, organizational theory and international business have examined speed to market (<u>Hendricks and Singhal</u>, 2008; <u>Schoonhoven et al.</u>, 1990; <u>Stalk</u>, 1988; <u>Vesey</u>, 1991), speed of competitive responses to a rival's actions (<u>Chen and Hambrick</u>, 1995; <u>Hambrick et al.</u>, 1996; <u>Katila</u>, 2002; <u>Smith et al.</u>, 1991), the performance implications of decision-making speed (<u>Baum</u> and Wally, 2003; <u>Eisenhardt</u>, 1989; <u>Judge and Miller</u>, 1991), the particular managerial attributes and organizational processes that impact decision-making speed (<u>Baum and Wally</u>, 2003; <u>Perlow et al.</u>, 2002), integration speed in mergers and acquisitions (<u>Homburg and Bucerius</u>, 2006), and speed of the internationalization process for start-ups and established firms (<u>Casillas and Moreno-Menéndez</u>, 2013; <u>Chang and Rhee</u>, 2011; <u>Oviatt and McDougall</u>, 2005; <u>Prashantham and Young</u>, 2011). Collectively, this research recognizes the importance of speed as a competitive advantage-enhancing attribute associated with a variety of organizational processes.

However, our survey of the literature reveals that the vast majority of studies have narrowly constrained the examination of speed to only specific and selected aspects of the firm's processes, activities, and/or outcomes. For example, studies that examine the performance outcomes of decisionmaking speed (e.g. Baum and Wally, 2003; Eisenhardt, 1989) have not taken into account behaviors of the firm that impact speed subsequent to the initial strategic decision. Similarly, studies on the performance implications of response speed to a competitive attack by a rival (e.g. Chen and MacMillan, 1992) are agnostic to the organizational processes that precede the quick execution of a competitive response. So, if scholars narrowly focus on the speed associated with particular aspects of the organization, we may know how and why the firm can be speedy in, for example, decision-making. But, this piecemeal approach to exploring speed is not likely to yield whole-organization insights. Furthermore, owing to the common fragmented view of speed, we may also become blind to important characteristics, drivers, and consequences of overall organizational speed that are hidden or underexplored. Thus, our evaluation calls for a view of organizational speed that does not seek to minimize or discredit existing research, but rather proposes a gestalt-like, multidimensional perspective of organizational speed. Such a perspective transcends the exploration and analysis of speed as merely an attribute of specific organizational processes, but rather establishes organizational speed as one of the firm's dynamic capabilities and thus a potential source of competitive advantage.

To better formulate and articulate our conceptualization of organizational speed, we synthesize a holistic perspective by taking the deficiencies, inconsistencies, and gaps in the prior literature into direct account. First, we review the existing literature related to organizational speed. We present our gestalt-like perspective of organizational speed, distinguish it from other related constructs in the management literature, and delineate unique characteristics of whole organizational speed that have been underexplored in prior research. We then identify opportunities for future research. Although we focus on organizational speed at the firm level of analysis, we acknowledge and integrate speed-related research at, for example, the product level of analysis, namely, studies of speed to product markets (c.f., Schoonhoven et al., 1990). Our main contribution is to move scholars and practitioners toward a perspective that reveals unique and interdependent qualities of organizational speed that challenge or extend existing definitions, conceptualizations, and measurements of organizational speed.

#### Literature review

The multidisciplinary study of speed has yielded a plethora of findings across diverse contexts. For instance, the new product development literature suggests that speed in research and development

results in a tradeoff between speed, cost, and quality (<u>Scherer, 1967</u>). In the strategic management domain, scholars and practitioners recognize speed as an important component of firm processes, such as manufacturing, planning, and distribution (<u>Stalk, 1988</u>; <u>Vesey, 1991</u>). In the strategic cognition and competitive dynamics literatures, scholars have studied speed in decision-making (<u>Eisenhardt, 1989</u>) and competitive response (<u>Chen et al., 1992</u>). Finally, organization theorists have examined the importance of clock speed as an industry-level phenomenon that influences aggregate adaptation and operations (<u>Fine, 1998</u>).

More specifically, existing research has examined the antecedents of organizational speed in different parts of the firm's operations. For instance, issues related to environmental scanning and information processing (c.f., <u>Hambrick, 1982</u>; <u>Smith et al., 1991</u>) influence the speed that firms and managers search for and recognize market opportunities. Prior findings suggest that greater industry munificence and dynamism are critical drivers of strategic decision-making speed (Baum and Wally, 2003). Scholars have found that the degree of centralization and formalization of organizational structures (Baum and Wally, 2003), the availability of alternatives (Judge and Miller, 1991), and the experience of decisionmakers (Eisenhardt, 1989) strongly impact decision-making speed. Decision speed is also influenced by higher levels of managerial cognitive ability, intuition, and risk tolerance (Wally and Baum, 1994), as well as greater top management team (TMT) potency (Clark and Maggitti, 2012). Relatedly, the availability of resources, such as slack and financial capital leads to greater speed of action (Cankurtaran et al., 2013). Furthermore, prior research has found that small firms can develop greater speed in implementing and responding to strategic actions because they are more nimble and flexible than larger firms (Chen and Hambrick, 1995). Internal organizational arrangements and orientation, such as greater technological capabilities, innovativeness, autonomy, aggressiveness, and integration lead to greater speed of action (Atuahene-Gima, 2003; Bauer and Matzler, 2014; Yang and Meyer, 2015). Finally, the characteristics of the firm's leadership team, such as greater experience, skills, and homogeneity of team members, speeds the implementation of organizational activities (Chen et al., 2010; Hambrick et al., 1996).

Aside from these findings, empirical explorations of the relationship between speed—both within and between firms—and performance have been mixed. Since <u>Eisenhardt's (1989)</u> seminal work, decision-making speed has been a significant area of study (<u>Baum and Wally, 2003</u>; <u>Judge and Miller</u>, <u>1991</u>; <u>Kownatzki et al., 2013</u>; <u>Souitaris and Maestro, 2010</u>), with current research suggesting a positive relationship between decision speed and firm performance (c.f., <u>Baum and Wally, 2003</u>; <u>Eisenhardt</u>, <u>1989</u>). Firms embodying this type of speed can make fast strategic decisions in order to respond to changes in the environment (<u>Baum and Wally, 2003</u>) or exploit temporary advantages (<u>D'Aveni et al.</u>,

<u>2010</u>). In terms of the speed of action between firms, research in the competitive dynamics literature finds that response speed has a positive influence on firm performance (c.f., <u>Smith et al., 1991</u>). If a firm responds quickly to the actions of its rivals, the firm can impede the success of its rival's actions or prevent the erection of barriers that are difficult to overcome (<u>Smith et al., 1991</u>). Relatedly, organizations that increase their speed of product introductions can gain returns from their investments more quickly and can rapidly launch additional new products to meet customer needs (<u>Jones, 2003</u>). Thus, speed in new introductions enhances firm performance (<u>Hendricks and Singhal, 2008; Jones, 2003</u>).

Other studies have failed to report a significant effect of speed on organizational performance, and some have even found negative effects. For instance, in the research related to the integration of a firm's merger activities, the relationship between integration speed and firm performance is non-significant (Bauer and Matzler, 2014). Furthermore, fast decision-making can lead to a "speed trap"; a syndrome in which fast decision-making is inadvertently reinforced to the detriment of decision content and ultimately performance (Perlow et al., 2002). This implies that speedy decision-making can lead to mistakes and errors in information processing, which diminishes performance. Finally, speed in new product introductions also has its disadvantages such as increased cannibalization, excessive product proliferation, or decreased product innovation and quality which may decrease firm performance (c.f., Jones, 2003).

Finally, some research on the relationship between speed and firm performance has explored the role of important contingencies. For instance, as firms expand their operations internationally, the effect of speed in the expansion process on firm performance is contingent on the firm's slack resources (<u>Chang</u> and <u>Rhee</u>, 2011). Slack provides the firm with the resource endowments to buffer itself against the risks of foreign expansion, such as the liability of foreignness (<u>Zaheer</u>, 1995). Similarly, speed has a negative effect on firm profitability in the context of strategic alliance expansion, but this negative effect can be mitigated by the regularity of alliance activities (<u>Hashai et al.</u>, 2015). That is, the more frequent an alliance, the more the firm can learn from its alliance activities and thus dampen the negative effect of speed on the firm's performance. Finally, in the context of mergers and acquisitions, speed may help or hinder firm performance depending upon the internal and external relatedness of the combining firms (<u>Homburg and Bucerius</u>, 2006). Internal and external relatedness refers to the similarity between the merging firms in terms of management styles and strategic orientations as well as target markets and product offerings respectively.

Although the findings and insights from prior research that commonly adopts a piecemeal, speed-asan-attribute view are interesting and important, we argue that our speed-as-a-capability perspective could further enhance our understanding of how the interdependencies among and interconnectedness across organizational processes give rise to competitive advantage. Indeed, strategic management's distinctive competence is reflective of such a holistic view of the firm's sources of competitive advantage. Furthermore, prior related speed-as-an-attribute research is necessarily constrained to a view of speed measured, for example, as elapsed time (i.e. minutes, hours, days, years), change in the rate of speed (i.e. velocity, acceleration), the duration of particular organizational events and processes relative to referent others (i.e. faster, slower, first, second, last), or the tempo, pace, or intensity with which organizational activities take place (i.e. rapid, slow, synchronous, rhythmic, syncopated). As we will discuss below, our concept of organizational speed accommodates the speed-as-an-attribute view. However, we argue that our gestalt-like, speed-as-a-capability view accommodates specific properties not associated with elapsed time, duration, tempo, or other common attributes. As we shall see later, this enables us to explore new questions that consider how organizational processes work interdependently and/or collectively to enhance firm performance.

#### Organizational speed as a gestalt

We believe that conceptualizing organizational speed in a holistic manner motivates a new definition and suggests multiple dimensions of speed.

#### New definition of organizational speed

We found no cogent or consensual definition of organizational speed in existing research. <u>Homburg</u> and <u>Bucerius (2006)</u> define speed as the shortness of time needed to complete an intended action, whereas <u>Kessler and Chakrabarti (1996)</u> define speed as the elapsed time between events. <u>Prashantham and Young (2001)</u> define speed as the pace of activity of the firm. These definitions cast speed as an *attribute* of a particular organizational process or outcome, which is measured using clock or calendar time. We propose a new definition of organizational speed: *the dynamic Gestalt-like capacity of an organization to quickly identify, assemble, reconfigure, modify, and deploy its organizational processes and activities*. We offer this definition to unify the processes and activities that create organizational speed.

#### Dimensions of organizational speed-as-a-gestalt

We suggest that speed is a gestalt-like construct comprising the following dimensions: (1) recognition speed—the speed with which opportunities and challenges are recognized, (2) decision speed—the speed with which decisions to act are reached, and (3) execution speed—the speed with which resources, processes and activities are mobilized for the execution and launch of an action. Dynamic capabilities are, in general, sensing what is needed (reading the environment), seizing a course of action (developing a business model), and mobilizing or reconfiguring resources, processes, and activities for action (actually doing something) Eisenhardt and Martin, 2000; Helfat et al., 2007; Teece et al., 1997). Our view of organizational speed simultaneously outlines and sequences the underlying processes (i.e. recognition, decision, and execution) that contribute to whole organizational speed. Eisenhardt and Martin (2000) state that "dynamic capabilities are often combinations of simpler capabilities and related routines" (p. 1116). Therefore, we believe our perspective lays the foundation to view organizational speed as a dynamic capability (Eisenhardt and Martin, 2000; Helfat et al., 2007; Teece et al., 1997). We embrace the capability-view of organizational speed to reflect the ability of speed to serve as the connective tissue, so to speak, that links serial or parallel organizational processes.

Our conceptualization of organizational speed is depicted in <u>Figure 1</u>. We discuss each component below.



Figure 1. Underlying processes and activities of organizational speed.

*Recognition speed* refers to how quickly the organization becomes aware of an environmental stimulus and determines whether it is an opportunity or threat that may require action, or whether it is a benign event to be ignored. Although not yet a recognized construct in strategic management research, key aspects of recognition speed can be drawn from prior research in strategic cognition, sense-making, decision-making, and entrepreneurship (c.f., <u>Daft and Weick, 1984</u>; <u>Kirzner,</u> <u>1997</u>; <u>Mosakowski, 1997</u>; <u>Tversky and Kahneman, 1974</u>; <u>Weick, 1969</u>). *Decision speed* refers to how quickly the organization moves from the identification of the need for action to the finite decision to carry out a specific action (<u>Baum and Wally, 2003</u>; <u>Eisenhardt,</u> <u>1989</u>; <u>Judge and Miller, 1991</u>). Decision speed is likely influenced by, for example, decision-making style (<u>Amason, 1996</u>), TMT dynamics (<u>Carpenter et al., 2004</u>; <u>Simons et al., 1999</u>), and decision comprehensiveness (<u>Eisenhardt and Zbaracki, 1992</u>; <u>Simons et al., 1999</u>)

Following the firm's decision to carry out a particular action, *execution speed* refers to how quickly the organization mobilizes the resources, processes, and activities necessary to support the action. Our view of execution speed extends <u>Eisenhardt and Martin's (2000)</u> concept to also include the speed with which the firm sets into motion and carries out the sequential "...processes that use resources— specifically the processes to integrate, reconfigure, gain and release resources..." necessary to carry out an action (p. 1107).

#### A re-examination of existing research via gestalt

We re-examined existing research related to organizational speed to evaluate how our more holistic perspective might be insightful. Here, we present several examples. First, we examined Eisenhardt's (1989) seminal paper on the antecedents and outcomes of decision-making speed. In this qualitative paper, Eisenhardt interviewed eight CEOs of microcomputer firms to assess the speed of their decisionmaking processes. Some of the comments from CEOs about decision speed actually refer to other types of speed. For example, one CEO in the study said "you've got to catch the big opportunities" (p. 570), which is recognition speed rather than decision speed. Another CEO in Eisenhardt's (1989) study said "the only competitive advantage is to move quickly" (p. 570), which is execution speed rather than decision speed. Similarly, in a paper related to merger and acquisition activity across firms in Central Europe, Homburg and Bucerius (2006) examine the relationship between merger integration speed and M&A success. They refer to speedy post-merger decisions as decisions that are "made and implemented quickly" (p. 350), which combines aspects of decision speed and execution speed. Finally, in a study linking problem-solving speed to product development and quality, Atuahene-Gima (2003) defines problem-solving speed as "the degree of speed associated with finding and implementing a solution" (p. 359). Such a definition integrates recognition and implementation speed. These studies are examples of scenarios where speed in one part of the organization has been confounded with speed in other parts of the organization, which overlooks the potential to know and understand speed as a gestalt-like firm capability.

#### The relationship between organizational speed and other related constructs

Organizational research has identified several concepts that are related to speed, but are conceptually distinct from our holistic perspective of organizational speed, especially in different types of environments. Rosabeth Moss Kanter's (1990) renowned book "When Giants Learn to Dance" studies how companies are successful in the rapidly changing corporate market place. In her book, she studies organizational innovation and adaptiveness, which incorporate elements of organizational speed. A popular topic in this domain, "organizational agility" is closely related to organizational speed. Tallon and Pinsonneault (2011) define agility as "the ability to detect and respond to opportunities and threats with ease, speed, and dexterity." In their work, two dimensions of organizational speed are intertwined in that their proposed concept includes both the speed with which firms "detect"—or recognition speed, and the speed with which firms "respond"—or execution speed. However, organizational agility leaves out a critical component of organizational speed—decision speed. Thus, while various elements of our holistic view of speed may be implied in the definition of organizational agility, we believe that our proposed perspective more fully delineates the elements necessary to achieve a whole organizational capability.

Organizational speed is also on the same conceptual plane as concepts related to organizational change, such as "continuous morphing" and "ambidexterity." Continuous morphing is the process of profound organizational transformations when competitive or external pressures warrant (<u>Rindova and Kotha, 2001</u>). Speed is an implicit element of continuous morphing. However, continuous morphing is more analogous to *flexibility* in reorganizing structures, beliefs, and operational routines (<u>Eisenhardt and Martin, 2000</u>; <u>Tripsas and Gavetti, 2000</u>). Similarly, firms may need ambidexterity as their environments change (<u>Duncan, 1976</u>; <u>Tushman and O'Reilly, 1996</u>). Ambidextrous organizations are organizations that are "aligned and efficient in their management of today's business demands, while also adaptive enough to changes in the environment that they will still be around tomorrow" (<u>Gibson and Birkinshaw, 2004</u>). Organizational speed is implicit in the literature related to ambidexterity because organizations often need to be quick in order to explore and exploit their environment simultaneously (c.f., <u>March, 1991</u>).

We also acknowledge that organizational speed can complement the construct of competitive inertia (<u>Miller and Chen, 1994</u>). At one level, the fundamental logic that connects inertia and speed is the managerial (dis)incentives to act. Because of satisfaction with achieving goals, confidence in past decisions, and organizational learning, firms that experience good past performance, for example, are less motivated to act (<u>Bandura, 1986</u>; <u>Levinthal and March, 1981</u>; <u>Vroom, 1964</u>). This results in inertia.

Similarly, high-performing firms have few incentives to execute strategic actions quickly (Yang and Meyer, 2015). At another level, however, competitive inertia does not capture the gestalt-like nature of organizational speed. For instance, inertia may not result from the managerial disincentive to act, but rather from the inability to execute the action. Hence, we argue that for action to occur—and occur quickly when conditions warrant—the firm must be alert to the need for action, quickly decide what to do, and have the capability to execute the action. In essence, organizational speed is an underexplored, but complementary element in the study of continuous morphing and ambidexterity (elements of organizational change), as well as inertia (elements of the organization's disincentives or inability to change). However, we believe that explicit attention to organizational speed throughout the organization is needful in order to more fully explain the influence of organizational speed on the organization's (in)ability to adapt and change with its environment.

#### Organizational speed and new avenues for future research

Beyond introducing the general concept of organizational speed, we are likewise motivated to articulate a [partial] roadmap for future research.

New attributes of organizational speed

We suggest that future research consider organizational speed as a higher order construct that has properties and attributes unrelated to the clock time of the individual parts. For instance, organizational speed may be greatly attenuated by the degree of entrainment among the firm's activities (<u>Bluedorn and Jaussi, 2007</u>). Entrainment refers to the processes and resultant situation in which two interacting systems (firm activities) assume the same speed or pattern of oscillation. A firm "running all cylinders" is indeed much like a car's engine: the individual cylinders (recognition, decision, execution) are sequentially firing at the same speed, and they are each connected to a single crankshaft that rotates at a particular speed (RPMs) that provides power to the transmission and, ultimately, the car's wheels (organizational speed).

Organizations can also have "slippage." This refers to a weakened state of connectivity between the sequential dimensions of speed. Degradation of organizational speed occurs when there is significant slippage between the constituent parts. A faulty transmission, for example, creates the slippage of power from the engine to the wheels of the car. Firms can reduce slippage between the emergence of new environmental stimuli and the firm's recognition speed, for example, by having competitive intelligence and mental maps that facilitate alertness and sense-making. Furthermore, operational

ambidexterity (<u>Raisch and Birkinshaw, 2008</u>; <u>Tushman and O'Reilly, 1996</u>) may reduce slippage between decision and execution speed.

New antecedents of organizational speed

We suggest that a holistic perspective of organizational speed infers new antecedents. For example, we see opportunity regarding how corporate governance factors, or those in the driver's seat, affect organizational speed. Does good governance impede organizational speed since it requires more diligence and oversight of decisions and processes? This line of research would include, but not be limited to, the relationship between TMT heterogeneity and speed. More specifically, the TMT can be considered as the aggregate informational and decision entity through which competitive moves are made. These moves depend on the team's scanning of the environment, recognizing problems and opportunities, interpreting external stimuli, developing potential moves, negotiating, refining, and selecting moves, and executing the resultant decision (Hambrick et al., 1996). Although it should be recognized that the TMT is likely to be involved in each of these processes, current theory positions TMT heterogeneity as a distal influence on competitive advantage and has not fully fleshed out the role of speed across each of these processes.

Moreover, we see an opportunity to evaluate intraorganizational networks as factors that influence holistic organizational speed. If people in organizations are informationally and socially disconnected from each other (i.e. siloed into their respective units, departments, or workgroups), then information and knowledge does not flow very well. Similarly, when human capital is compartmentalized, firms obtain ineffective outcomes (Krackhardt and Stern, 1988). However, when people are connected with each other across units, departments, and workgroups, knowledge and information flow more easily (Borgatti and Cross, 2003), which facilitates organizational speed. Future research could evaluate how the density of a firm's intra social network has an impact on organizational speed. Do structural holes in the firm's internal social network weaken entrainment and thus enhance or impede organizational speed?

Finally, we recognize that some of the antecedents of each individual element of holistic speed may overlap. For instance, current research suggests that organizational structure acts as an antecedent to recognition, decision, and execution speed (c.f., <u>Wally and Baum, 1994</u>, <u>2003</u>; <u>Kessler and Chakrabarti, 1996</u>). The implication is that organizational structure may act as an antecedent to our holistic view of organizational speed. Future research could examine what levels of the organization's structure (i.e. team, department, and division) have the most influence on organizational speed.

New perspectives on the speed-competitive advantage-firm performance relationship

With regard to the speed-competitive advantage-performance relationship, <u>D'Aveni (1994)</u> argued that organizational speed has replaced temporary inert factors, such as market position, mobility barriers, innovation, and knowledge (<u>Caves and Porter, 1977</u>; <u>Grant, 1996</u>; <u>Porter, 1980</u>) as a critical aspect of the firm's strategy and competitive advantage derived from it. Thus, speed and the organizational processes that enable it are essential for firm performance.

A gestalt-like perspective of organizational speed does not resolve or replace the mixed findings in the literature regarding the speed–firm performance relationship, but rather suggests novel ways to explain this relationship. For example, prior research has shown that the structure of a firm's alliance network impacts competitive behavior (Gnyawali et al., 2006). What are the implications for performance when the focal firm's alliance network consists of partner firms with different levels of organizational speed?

Future research could explore how a variety of organizational or situational factors give rise to "slippage" between the organizational activities that ultimately have a negative impact on speed, competitive advantage, and performance. In other words, despite the firm running on all cylinders, are there cognitive, deliberative, structural, or allocative factors that inhibit the purposeful enhancement of the organizational speed–firm performance relationship? For instance, of what use is a quick-accelerating car idling at a stop sign when the driver is unaware of a fast approaching vehicle behind it with a distracted driver?

We suggest that for organizational speed to have a positive effect on competitive advantage, it also needs to be tuned or calibrated to the context or environment. For instance, having organizational speed that matches or exceeds that of rivals—in the right conditions—is what brings about competitive advantage. Like a car's engine that delivers too much power and speed to the wheels on a slippery road (causing a loss of control), does competitive advantage and performance suffer when organizational speed is not sufficiently tuned or calibrated to industry clock speed (Fine, 1998) or the pace of competitive actions carried out by rivals? However, we recognize that speed has potentially negative consequences as well. Being too speedy may increase costs and thus decrease firm performance (c.f., Andrevski and Ferrier, 2016).

#### Methodological implications

The holistic interdependence among the dimensions of organizational speed that we outline requires a broader and more complex perspective regarding the measurement of organizational speed. For example, our view of organizational speed entails the concepts of slippage, external tuning, and entrainment which are not currently recognized in existing research. Because these concepts are unrelated to clock time, they require unique methodological approaches. Perhaps organizational speed could be measured as the additive of the individual components (recognition, decision, and execution speed), as a weighted average, as the coefficient of variation across the components, or as a factor-score derived from multidimensional scaling. Thinking more broadly, organizational speed could be measured as harmonic frequency among the three components or the degree to which they are "tuned" to the frequency of the external environment. We believe as a dynamic capability the measurement of speed needs to be holistic and at the organizational level. Although these measurement alternatives suggest a more precise calculation of organizational speed which may increase the credibility of reported findings and results, selection of the appropriate measure of organizational speed should be based on the context of study and the associated research question.

#### Conclusion

Our essay was motivated by a need to conceptualize the various facets of speed within and across organizations in a more holistic, higher order manner. Critically, we suggested a multidimensional perspective of organizational speed comprising recognition speed, decision speed, and execution speed. We argued that organizational speed is a unique and gestalt-like construct that is irreducible, consists of sequentially interdependent dimensions, and exhibits higher order properties beyond the clock time of individual components. We differentiated speed from other constructs in the existing literature by recognizing the similarities, but also critical aspects of the environment where speed, rather than concepts such as agility, may be more beneficial. We also sought to develop a new definition of organizational speed and embraced organizational speed as a whole organization-level dynamic capability (Helfat and Peteraf, 2009). We hope our work motivates scholars to extend and generate new theory and empirically test the drivers and consequences of organizational speed. We further hope our conceptualization of organizational speed stimulates research that explores new questions beyond those that seek answers to "how fast?" or "how long?"

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