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## Assessing the dynamic capabilities view: spare change, everyone?

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It is important to bear in mind, however, that capability building and change do not require dynamic capabilities... (Helfat and Peteraf, 2003: 1004)

*Why do some firms succeed in a dynamic competitive environment when others fail?*

Recently, concepts and models addressing this question have increasingly clustered around the dynamic capabilities view (DCV). Citation counts suggest that the DCV is the new touchstone firm-based performance-focused theory (Teece et al. [1997], for example, had received 1180 citations in the ISI Web of Knowledge as of June 2008), and case studies of innovative firms such as IDEO (Hargadon and Sutton, 1997) have fueled interest.

We take a step back to assess the ability of the DCV to explain successful change with logical consistency, conceptual clarity and empirical rigor, criteria suggested by Laudan (1977). Such an assessment is important not only because of the DCV's popularity, but also because of the theoretical and practical significance of the issues it addresses. While the arguably static resource-based view (RBV) emphasizes the value of *resources*, the DCV addresses the need to explain *changes in valuable resources*, e.g. the erosion of asset stocks (Dierickx and Cool, 1989) and the changes in asset values (Miller and Shamsie, 1996). The DCV also addresses a practical need to understand how firms can change effectively, given perceptions that many competitive environments now change at increasing rates, and that firms have difficulty changing successfully (Beer and Nohria, 2000; Strebler, 1996).

Our assessment identifies four major problems that limit the potential contribution of the DCV: (1) unclear value-added relative to existing concepts; (2) lack of a coherent theoretical foundation; (3) weak empirical support; and (4) unclear practical implications. Although potentially interrelated, each problem presents different difficulties and raises different questions.

### **DCV's characteristics and cousins – a question of added value**

With an intellectual ancestry that includes the resource- and knowledge-based views, evolutionary economics, hypercompetition, real options and the innovation

literature more broadly, the DCV attempts to explain how a firm can enjoy sustained superior performance in a rapidly changing industry through continuous proactive and reactive change (Teece, 2007).

Table 1 summarizes the DCV's main features as presented by major DCV articles. According to these papers, the core of the DCV – dynamic capabilities – shares some of the VRIO characteristics (i.e. value, rarity, inimitability and non-substitutability, organizational appropriability) of the RBV (Barney, 1996). Dynamic capabilities depend on firm history and influence the firm's future, and can provide (either directly or indirectly) competitive advantage (either temporary or sustained). Dynamic capabilities allow a firm to respond to change by altering operational capabilities, an effort that requires significant managerial involvement. Their value depends on the dynamism of the firm's environment; to justify the cost of developing and maintaining dynamic capabilities, firms must use them frequently to provide net benefits (Zollo and Winter, 2002).

Many established concepts, including *absorptive capacity*, *architectural innovation*, *intrapreneurship*, *strategic fit*, *first-mover advantage*, *organizational learning* and *change management*, address issues similar to the DCV. Collectively, these concepts cover issues of strategic change, whether based on external or internal sources, whether proactive or reactive, and whether focused on external-competitive or internal-organizational challenges. To add to our understanding, the DCV must contribute insights beyond those provided by available concepts. To be more than a rallying point for disparate measures, tactics and ideas about change, the DCV must provide novel theoretical predictions. To say some firms adapt to environmental change better than others is akin to saying firms differ in performance. We should reject any theory of strategic organization inconsistent with these statements, but since most theories *are* consistent with these statements, neither offers any novel insight.

### **Critiques, confusion and questions that shake a missing foundation**

The main theoretical and empirical concerns that have been expressed regarding the DCV – many of which resemble concerns also raised regarding the RBV – are summarized in Table 2.

Several of these concerns refer to how dynamic capabilities work. Figure 1 is a visual representation of the models from three significant DCV theoretical papers. In these and other DCV papers, scholars have portrayed dynamic capabilities as direct drivers of competitive advantage, as preconditions, moderators, mediators and mediated or moderated drivers of firm performance or firm change, and as combinations thereof. If theory does not reduce the number of potential relations somewhat, empirical work will have difficulty differentiating among the models. If researchers do not roughly agree

**Table I** Main theoretical features of the DCV

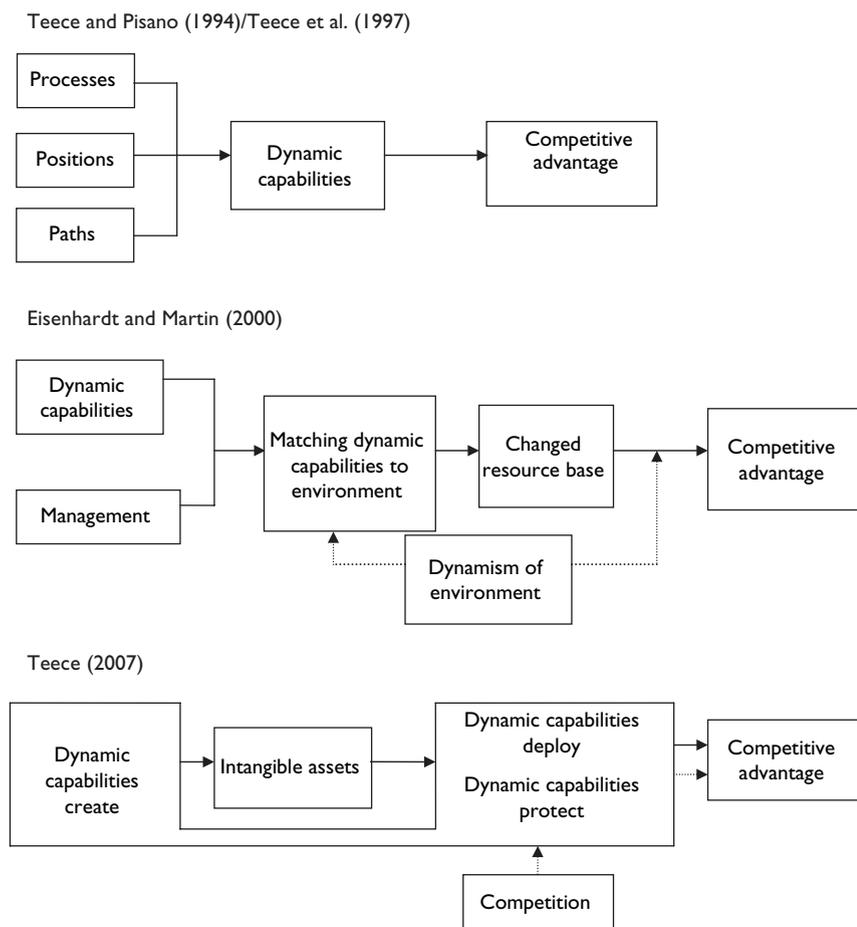
Characteristic	Reference
Basis in literatures of: resource-based view, knowledge-based view, Penrose (1959), Schumpeter, Teece and Pisano (1994), Nelson and Winter (evolutionary economics – 1982)	Teece and Pisano (1994), Teece et al. (1997), Zahra et al. (2007), Teece (2007)
Dynamic capabilities have some VRIO characteristics (at least one of value, rarity, inimitability and non-substitutability, organizational appropriability)	Collis (1994), Teece and Pisano (1994), Teece et al. (1997), Eisenhardt and Martin (2000)
Constrained by firm history (3Ps: processes, positions, paths)	Teece and Pisano (1994), Teece et al. (1997)
A way out of path dependencies	Collis (1994)
A direct source of (sustained) competitive advantage	Teece and Pisano (1994), Teece et al. (1997), Collis (1994)
An indirect source of (sustained) competitive advantage; a strategic factor	Eisenhardt and Martin (2000), Zahra et al. (2006)
Create new changes	Teece (2007)
Responds to exogenous and competitor-induced changes	Teece (2007)
Significant management involvement	Teece and Pisano (1994), Teece et al. (1997), Zahra et al. (2006)
Capability as a routine	Helfat and Peteraf (2003)
Alternatives to dynamic capabilities exist for change (e.g. that are ad hoc in nature)	Helfat and Peteraf (2003), Winter (2003),
Levels: a dynamic capability is at least one level above operational capabilities	Collis (1994), Winter (2003)
Contingent on the dynamics of context	Eisenhardt and Martin (2000)
An extension of or gap filler for the RBV	Eisenhardt and Martin (2000), Priem and Butler (2001), Helfat and Peteraf (2003)
Equifinality of outcomes (i.e. many paths to similar final states)	Eisenhardt and Martin (2000)
Dynamic capabilities are costly (to develop and maintain, involve long-term commitments to specialized resources; thus, not always good)	Teece and Pisano (1994), Zollo and Winter (2002), Winter (2003), Lavie (2006), Zahra et al. (2006)
Learning/ knowledge involved double-loop, etc.)	Zollo and Winter (2002), Zahra et al. (2006)
A dark side (rigidities) exists	Winter (2003)
Disaggregation possible (e.g. the micro-foundations)	Teece (2007)
There are triggers to use and development of dynamic capabilities	Zahra et al. (2006)

**Table 2** Main prior critiques and open questions

Concerns	Reference
<i>Existing Critiques</i>	
Inconsistencies of usage of the DCV concept	Zahra et al. (2006)
Problems in defining the DCV:	
• Tautological or circular definitions	Williamson (1999) Winter (2003) Zahra et al. (2006) Levinthal and Ocasio (2007)
• Definition overly inclusive, elastic	Williamson (1999)
• Definition mixes firm characteristics with context	Zahra et al. (2006)
Contradictions (general)	Zahra et al. (2006)
Infinite regress – capabilities come from capabilities, etc.	Collis (1994)
DCV lacks operational implications	Williamson (1999)
Insufficient concern for competition	Williamson (1999)
Prescription underdeveloped (e.g. how and when to reconfigure capabilities unspecified)	Williamson (1999)
Lacks underlying theory at micro-level	Salvato (2003)
Unclear what universal constructs it offers.	Collis (1994)
Definitions appear overly dependent on ill-defined local conditions	
Post hoc identification of dynamic capabilities in empirical work	Zahra et al. (2006)
DCV is a theoretical dead end (organizational adaptation)	Levinthal and Ocasio (2007)
<i>Unanswered questions</i>	
Is there a relationship between DCV and entrepreneurship?	Helfat and Peteraf (2003) no, Tece (2007) yes
What conditions bound the DCV?	Eisenhardt and Martin (2000)
Is the DCV consistent with related diversification or unrelated diversification?	Tece et al. (1997)
What are the fair examples of the DCV? (e.g. IDEO, Dell, Cisco, GE Capital, Intel, Yahoo!, Excite)	Eisenhardt and Martin (2000)
What causes a firm to develop and use dynamic capabilities?	Zahra et al. (2006)
What are the full costs, benefits and risks associated with dynamic capabilities?	Lavie (2006)
What is the best evolutionary path to create dynamic capabilities?	Helfat and Peteraf (2003)

on the place of dynamic capabilities in their models, they may be giving the dynamic capability label to very different constructs.

Such confusion raises troubling questions for the literature. For example, how should researchers identify firms with dynamic capabilities? If researchers identify firms with dynamic capabilities by their success, they raise definitional problems. If a firm has an ability or characteristic when it performs well, we must still say it has that ability when it performs poorly. Some raised similar issues about Peters and Waterman's (1982) *In Search of Excellence* and more recently Collins's (2001) *Good to Great*, particularly when their 'excellent/great' firms



**Figure 1** Alternative figures from core papers in the DCV

Note: Teece and Pisano (1994)

subsequently performed poorly. Rindova and Kotha (2001) argued that Yahoo! and Excite possessed dynamic capabilities. However, Excite never had positive operating income during their study period, and Yahoo! lost over 99 percent of its market value during the dotcom bust. A focus on high-change firms with high performance will yield biased results if firms with similar change profiles can have low performance. Logically, we must consider the possibility that firms with similar change processes differ in the success of their changes. If poor-performing firms cannot have dynamic capabilities, then the DCV risks tautology.

Helfat et al. (2007) attempt to clarify inherent problems in both the DCV and RBV by defining capabilities and resources broadly, and then arguing that only those dynamic capabilities or resources meeting the RBV's VIRO criteria create competitive advantage. They define dynamic capability as 'the capacity of an organization to purposefully create, extend, or modify its resource base'

(Helfat et al., 2007: 4) and quote dictionary definitions for resources. These definitions differ radically from prior practice. Using a conventional definition of resources (capital equipment, personnel, skills, etc.), all large firms have the capacity to modify their resources in thousands of ways. Instead of saying 'dynamic capabilities cause . . .' or referring to firms with dynamic capabilities, under the Helfat et al. (2007) definition, researchers must specify kinds of dynamic capabilities.

The Helfat et al. (2007) definition does not resolve the measurement challenges. Although changing may indicate a capacity to change, not changing does not indicate an inability to change. That a firm does not change does not demonstrate a lack of dynamic capabilities. Requiring purposeful change implies a researcher needs evidence that observed changes match managerial intention to demonstrate a dynamic capability. The presence or absence of change does not definitively demonstrate or rule out that a firm has dynamic capabilities.

Purposeful raises other issues. Helfat et al. (2007: 5) argue that emergent strategies are purposeful, but emergent strategies typically include changes that management did not intend *ex ante* (e.g. Honda's small motorcycle strategy, Intel's shift from memory to microprocessors). At the same time, citing Dosi et al. (2000), Helfat et al. (2007: 5) assert that routine behavior is not purposeful. As a result, repeated change accomplished by routines (e.g. new product development) would not constitute a dynamic capability. Many scholars of routines would strongly disagree (March, 1994; Feldman, 2000; Feldman and Pentland, 2003). Indeed, if routines do not constitute purposeful behavior, then little of what firms do is purposeful.

Beyond these issues, our main concern – that the DCV suffers from unclear or varying theoretical foundations – and its implications are outlined in Table 3. That DCV theorists have adopted various, contradictory basic assumptions reflects the lack of a coherent theoretical foundation. Absent clarity about theoretical foundations, theorists may combine theoretical models in illogical manners (see Bromiley, 2004; Bromiley and Fleming, 2002).

For example, Helfat et al. (2007) incorporate the heavily economic Barney (1991) and Peteraf (1993) derivation of the RBV, alongside behavioral and evolutionary economics, strategy process and organizational sociology. Economic analyses such as Peteraf (1993) assume an economic rationality and efficient markets perspective where the only bounded rationality lies with understanding the capabilities. However, other DCV discussions emphasize organizational routines and related constructs that make little sense in a world of economic rationality; for example, Eisenhardt and Martin's (2000) description of dynamic capability routines that range from heuristic-based in moderately dynamic markets to simple and experiential in very dynamic markets. Given the bounded rationality associated with organizational routines (Cyert and March, 1963; March and Simon, 1958), organizational routines are inconsistent with efficient markets. Analyses that casually mix economic rationality and bounded rationality approaches create intellectual confusion.

**Table 3** Additional DCV critiques

Critique	Example
Lack of theoretical foundation	Casual mixing of assumptions of rationality, market efficiencies, etc. across papers. Creates inconsistencies of assumptions across papers explaining the same view.
Incompleteness (specifics of DCV's incompleteness)	Need to explain when not to change. Need to align with a theory of the organization. Need to specify pricing, opportunity costs, competitive equilibrium of multiple parties holding dynamic capabilities. Need to address ACME (awareness for change; capability to change expected; motivation for change; executed efficiency and effectiveness realized) to be a better view.
Greater post hoc selection problem than reported previously	Implies choosing from those firms that not only successfully changed but also those that chose to change and had a change-induced performance benefit i.e. a multi-level selection bias at play.
Limits of effect	The possibility of weak ties between dynamic capabilities and successful change. Human capacity for change (in firm and in its supply chain), bounded rationality, etc. limit the ability to realize any changes intended (e.g. Tan and Mahoney, 2005).
Need for definitional bounds	Bounds unspecified, making dynamic capabilities appear everywhere (although some regarding dynamic environments, above-operational levels, etc.).
Logical inconsistencies (specific)	Don't need a dynamic industry to value dynamic capabilities when they can generate change within that industry.
Halo effect of past research	For example, Zott's (2003) discussion of timing as an important element explaining performance heterogeneity is well known in game theory (Stackelberg); interpreted in citing works as a choice but <i>not</i> modeled as one in his paper.

The lack of underlying theory has resulted in the isolation of the DCV from related organizational theory. This results in DCV offering an incomplete theory, oversimplifying a complex phenomenon and not clearly defining its domain of relevance.

To the casual observer, issues of dynamic capabilities appear closely tied to issues of organizational change. Yet, by focusing on direct associations between change and performance, the DCV cuts itself off from organization theory in general, and theories of organizational change in particular, that might help illuminate these issues. As numerous scholars have noted, a theory that explains when firms change must likewise explain when they do not (March, 1981; Hernes, 1976; Pettigrew, 1985; van de Ven and Poole, 1988). A theory of organizational change must therefore align closely with an underlying theory of

organization. A rigorous theory of successful organizational change starts with a theory of organizations, within which a theory of organizational change that explains the performance consequences of change constitutes a coherent part. The DCV jumps directly to modeling the change–performance relationship without the context, creating a solid appearance, but one without foundation.

The DCV oversimplifies the dynamics of strategic change. Consider a population of firms. One set of the firms decide to change. Another set actually changes. These two sets may only partially overlap; some firms that decide to change may not, while some may change without deciding to do so. A third set of firms subsequently has higher performance. While the Helfat et al. (2007) definition indicates dynamic capabilities include all firms that decide to change and change, others appear to characterize (perhaps causally explain) the intersection of sets that include firms that decide to change in strategically important ways, actually change and experience performance improvements as a result. Modeling such activities presents great difficulties. Relations between firm/industry characteristics and firm change/performance should differ between firms with and without dynamic capabilities, and even across firms with differing dynamic capabilities. The empirical model must therefore specify interactions between the explanatory variables and dynamic capabilities, making simple efforts to link firm characteristics directly to successful change problematic.

The literature on organizational change covers an expansive territory with numerous, distinct perspectives including life cycle (a cycle of firm birth, aging, etc.), teleological (consciously chosen change to reach specific goals), dialectic (change from political interactions), evolution (variation and selection by the environment) and routine (van de Ven, 1985). Consider one exemplar of interest. Work on major strategic change argues that well-managed firms make such changes infrequently (Mintzberg and Waters, 1982; Pettigrew, 1985). The political difficulties alone may make frequent major strategic change largely impossible. Furthermore, a firm undergoing repeated major strategic change cannot develop skills at any strategy, and would generally confuse management systems and employees. While firms can adapt readily in directions supported by their management systems and cultures (e.g. adding new products or services in a growth-oriented firm), this is tactical adaptation rather than strategic change. The DCV assumes a teleological stance and so misses many important factors that influence change (and must be considered to differentiate teleological – DCV – explanations from other explanations).

The term dynamic capabilities itself also creates a distortion in theorizing by suggesting discreteness – that dynamic capabilities are features that firms either have or do not have. Scholars who examine organizational change generally agree that a variety of firm behaviors interact with the firm's condition and environment to influence the likelihood of performance-enhancing change. Particularly for complex changes, few can say *ex ante* whether the firm will or will not achieve a particular result. Firms often change successfully in some

ways, but not in others. They often change successfully one time, and unsuccessfully another. The term dynamic capability suggests a much clearer set of behaviors or practices that have a much more reliable association with outcomes than organizational change researchers have found. Indeed, if researchers cannot identify dynamic capabilities without seeing if the firms change, then they are looking at firms that did X and saying, 'they have the capability to do X'.

The dynamic capabilities concept thus suggests greater tangibility and coherence in desirable features than the reality of complex, interacting firm behaviors. Firms may have the ability to do things they do not do frequently. Firms may use these abilities ineffectively or incorrectly. A firm might have abilities that could enhance performance under some conditions but the firm may use them in situations where they have a neutral or negative impact on performance. If we want to explain variation in firm performance by differences in firm decisions, we must allow for firms making errors (Bromiley, 2004).

The lack of theoretical foundation also obscures the boundaries of the DCV. Development from foundational models clarifies required assumptions, and those assumptions define the limits of application. Current developments of the DCV appear to define the boundaries somewhat arbitrarily. For example, some researchers define dynamic capabilities as the ability to change (with particular outcomes) in a specific firm context (i.e. rapidly changing industries). However, the ability to change successfully differs from the frequency with which the firm chooses to change. The firm's capability cannot depend by definition on its environment (i.e. only existing in dynamic industries). If a firm in a stable industry exhibits identical observable behaviors to a firm in a dynamic industry, defining them as having different firm characteristics (dynamic capabilities) seems illogical. As already noted, defining dynamic capabilities according to their outcomes borders on tautology.

Taken together, these questions of foundation and clarity render the DCV susceptible to halo effects. As with the RBV, the DCV may become a talisman. Just as some researchers may ascribe anything regarding inter-firm differences to the RBV, others may ascribe anything that refers to change to the DCV, weakening the rigor and credibility of both perspectives. Such casual analysis also results in claims that earlier studies made claims or demonstrated evidence they did not. Several studies, for example, refer to Zott's (2003) simulation study as a demonstration of the importance of timing in the use of dynamic capabilities. Zott's simulation did not, however, include timing as a choice variable. Moreover, because many theoretical models point to the importance of timing, a general ascription to DCV is specious.

### **DCV empirical support – not yet measuring up**

The DCV presents substantial empirical challenges. Table 4 summarizes our assessment of peer-reviewed empirical studies self-identifying with the DCV.

**Table 4** Empirical DCV concerns

Empirical issue	Observed	Concerns raised
Data sources	70% of studies used survey and case-based data	Subjectivity of assessments inter-rater reliability editing out of non-fitting observations etc. Need a balance of primary and secondary data studies.
Number of observations	32% of studies had fewer than 10 observations	Small samples may give less reliable and less generalizable results than large samples.
Longitudinal analysis	Only 20% of studies had longitudinal data	An inherently dynamic theory, the DCV should most obviously be tested on longitudinal rather than cross-sectional data. Heavy preponderance of cross-sectional analyses is problematic.
Validating that change created resources	Only 1% of studies considered whether a change resulted in VRIO <sup>a</sup> resources	In DCV approaches based on RBV, dynamic capabilities must be or create VRIO resources to create value. Almost none of the studies check whether this happens. The VRIO conditions are an important test for RBV-related explanations.
Ex ante costs of dynamic capabilities	Only 1% of studies addressed ex ante costs	Theoretical arguments on DCV emphasize the cost of creating them, and the view emphasizes net benefits. The overall profit impact of dynamic capabilities must balance the historical costs of creating the capabilities against the benefits derived from the capabilities.
Proxies for dynamic capabilities	13% of studies with unusual proxies	Researchers have used a plethora of proxies for dynamic capabilities managerial decisions about rewards, downsizing and choice to implement just in time inventory processes. Such diversity makes inferring about a single construct questionable.
Application contexts	18% of studies used unusual contexts	Many studies used either industries that do not appear turbulent enough to benefit from dynamic capabilities (e.g. the oil industry and call centers) or simply unusual industries such as professional baseball. The samples need to be ones where the DCV says dynamic capabilities should appear and have value. Using unusual samples increases generalizability questions.

*(Continued)*

**Table 4** (Continued)

Empirical issue	Observed	Concerns raised
Positive findings bias	Only 5% of studies reported negative findings	Given the diversity of methodologies, measures, etc., the certainty of measurement error and numerous other empirical problems, we should expect a substantial number of negative or non-positive findings. For example, Camuffo and Volpato (1996), note that if dynamic capabilities are like R&D, then they might show a negative short-term impact but a positive long-term impact.

<sup>a</sup>VRIO stands for the necessary conditions for something to be a RBV resources – value, rarity, inimitability and non-substitutability, organizational appropriability.

Despite the dynamic structure of the DCV, only a minority of the studies used longitudinal, time series data. Cross-sectional tests of dynamic theories suffer from numerous, well-known problems. Additionally, a relatively large number of studies relied on small samples, raising questions about the reliability and generality of results. Such small samples often explicitly reflect careful selection of firms that researchers believe should or do possess dynamic capabilities. Such sample selection is unlikely to be blind to subsequent performance, raising sample selection issues.

In addition, the studies rarely assessed dynamic capabilities in terms of their VRIO characteristics. If the underlying theory assumes that dynamic capabilities are VRIO resources or that they create new VRIO resources, then adequate tests must check for the fulfillment of such characteristics. Likewise, few studies measured the cost of creating dynamic capabilities. If a firm invests to create dynamic capabilities at  $t - I$ , the resulting capabilities could improve performance from  $t$  to  $t + I$  but still have negative overall value. Absent consideration of the cost of creating dynamic capabilities, researchers cannot assess the overall benefit of dynamic capabilities.

A non-trivial number of studies examined empirical settings where some DCV theorists suggest dynamic capabilities should have little value (e.g. stable industries, telephone call centers), or examined unusual industries (e.g. professional sports teams). Positive findings in settings where the underlying theoretical argument does not predict them raises questions concerning the theory (and where it applies), and the methodology. Positive findings in unusual settings raise questions of generality.

We found a lack of consensus on how to measure dynamic capabilities, with studies adopting a wide range of proxies for dynamic capabilities. These differences in measurement raise doubts about whether the measures really reflect dynamic capabilities, or even if they address the same construct. Traditional measurement approaches expect high correlations among different

measures of the same construct, but the measures used for dynamic capabilities appear quite unrelated. Exactly what kinds of measures reflect dynamic capabilities remains unclear.

Despite these problems, the vast majority of published DCV studies report positive results, giving us further cause for concern. Given the theoretical and methodological problems noted earlier, it seems unlikely that the radically different models, research domains and measures would consistently give positive findings that truly reflect the same construct. Sample selection, measurement and numerous other factors may create false positive results. Development of sophisticated theories usually depends on having both positive and negative findings that illuminate appropriate limitations and contingencies for the theories. Perhaps with greater commonality and clarity in models and measures, such mixed results will appear more often. Despite our concerns, we believe that the type and focus of empirical work on the DCV offer a rich and relevant base from which to advance our understanding of strategic organizational change.

#### **A successful DCV – when we will know we are there?**

Our primary concern with the DCV rests on our belief that it has yet to advance a coherent theoretical framework. Although we think extant organization theory can provide such a foundation, other theoretical bases may work (assuming they can be reasonably and consistently applied). Absent a core theory of organization, however, the DCV serves mainly as a label for an area of study – a label some will mistake for a theory. The DCV must say something more substantive than firms differ in their ability to adapt and, for some firms, adaptation helps performance.

What would constitute success for the DCV? Aligned with Laudan's (1977) criteria, the DCV's progress should be measured against the traditional objectives of social science research:

1. The DCV must clearly, specifically and consistently define its terms.
2. The DCV must make non-trivial, refutable predictions that differ from those of other theories.
3. The predictions must find support in well-designed empirical studies.  
Depending on one's view of the need for scholarship to provide prescription, a final criterion might be needed.
4. The DCV must provide guidance to firms regarding their choices about change, and about how to deal with dynamic competition.

#### **Summing up our minds' bearing of the DCV**

The DCV tackles a complex set of problems. Its focus on explaining differential success rates in firm change is an enticing and exciting subject for scholarship. If

we had reliable results regarding dynamic capabilities, they could form the basis for extremely important practical prescriptions. So far, the DCV does not have a coherent set of underlying assumptions, let alone a coherent theory. Basic assumptions about rationality (bounded or economic), the firm and markets remain unspecified or inconsistent across the literature. While theories do become elaborated over time, they need to start with something that looks like a theory or model. Without such a foundation, the DCV will remain a label with an implied coherence it does not possess.

If the DCV does not quickly develop a theoretical foundation, the field should move away from the DCV and toward work on strategic change tied to fuller theories of strategic organization. Such ties will help scholars develop theory, improve empirical work and produce much-needed practical insight. More generally, we think an integrated scholarship will serve the field of strategic organization better than a set of quasi-independent views.

The DCV poses numerous challenges for scholars, some of which will remain even if the DCV is abandoned. As many have noted, we, as researchers, need to change our capabilities and methodologies to better handle change and dynamic environments. We also need to progress toward coherent theories rather than taking complex and multidimensional phenomena and claiming to handle them by attributing to firms some entity encompassed within some view. If we can develop our own dynamic capabilities as researchers, we may improve the DCV and address its core research question. But, we suspect researchers will be well, perhaps even better, served by other approaches to strategic change.

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