

FORUM

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MNEMONIC CAPABILITIES: COLLECTIVE MEMORY AS A DYNAMIC CAPABILITY

Capacidades mnemônicas: Memória coletiva como capacidade dinâmica

Capacidades mnemônicas: Memoria colectiva como capacidad dinámica

ABSTRACT

Dynamic capabilities (DCs) are the processes that organizations develop to remain competitive over time. However, in spite of the importance of temporality in the development of DCs, the roles of time, history, and memory remain largely implicit. In fact, most studies focus on the past as a source of constraints and limits for managerial action. Alternatively, we advocate for a social constructionist view of the past. Our core argument is that the capacity to manage the past is a critical competence of modern organizations. We argue that organizations can manage their collective memory as resources that aid the objective reproduction and exploitation of existing routines, the interpretive reconstruction and recombination of past capabilities for adaptation to environmental change, and the imaginative extension and exploration of collective memory for anticipated scenarios and outcomes. This renewed view of time, history, and memory is better suited for a dynamic theory of competitive advantage.

KEYWORDS | Dynamic capabilities, mnemonic capabilities, collective memory, competitive advantage, core competences.

RESUMO

Capacidades dinâmicas (CDs) são os processos que as organizações desenvolvem para se manter competitivas ao longo do tempo. Entretanto, apesar da importância da temporalidade no desenvolvimento das CDs, os papéis do tempo, da história e da memória permanecem, em grande medida, implícitos. Na verdade, a maioria dos estudos concentram-se no passado como fonte de restrições e limites à ação gerencial. Alternativamente, defendemos uma visão construtivista social do passado. Nosso argumento central é que a capacidade de gerenciar o passado é uma competência crítica das organizações modernas. Argumentamos que as organizações podem gerenciar sua memória coletiva como recursos que auxiliam a reprodução e exploração objetivas de rotinas existentes, a reconstrução e recombinação interpretativas de capacidades passadas para adaptação a mudanças ambientais, e a extensão e exploração imaginativas da memória coletiva, para cenários e resultados antecipados. Esta visão renovada de tempo, história e memória é melhor adequada a uma teoria dinâmica da vantagem competitiva.

PALAVRAS-CHAVE | Capacidades dinâmicas, capacidades mnemônicas, memória coletiva, vantagem competitiva, competências centrais.

RESUMEN

Las capacidades dinámicas (CD) son el proceso que las organizaciones desarrollan para mantenerse competitivas con el paso del tiempo. Sin embargo, a pesar de la importancia de la temporalidad en el desarrollo de las CD, los papeles del tiempo, la historia y la memoria continúan siendo ampliamente implícitos. En realidad, la mayoría de los estudios se concentra en el pasado como fuente de restricciones y límites para la acción gerencial. Alternativamente, abogamos por una visión constructivista social del pasado. Nuestro argumento central es que la capacidad de administrar el pasado es una competencia crítica de las organizaciones modernas. Sostenemos que las organizaciones pueden administrar su memoria colectiva como recursos que ayudan a la reproducción y explotación objetiva de las rutinas existentes, a reconstrucción y recombinação interpretativa de capacidades pasadas de adaptación al cambio ambiental y a la extensión y exploración imaginativas de la memoria colectiva para escenarios y resultados anticipados. Esta visión renovada del tiempo, la historia y la memoria más adecuada para una teoría dinámica de ventaja competitiva.

PALABRAS CLAVE | Capacidades dinámicas, capacidades mnemônicas, memoria colectiva, ventaja competitiva, competencias centrales.

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INTRODUCTION

This essay intends to assert the important but overlooked roles of time, history, and memory in creating sustainable competitive advantage. Our core argument is that the capacity to manage collective memory is a critical competence of modern organizations. We draw from two previously unrelated streams of knowledge in strategic management. First, we engage with burgeoning literature on dynamic capabilities, which describe the capacity of some organizations in adapting internal and external resources to the demands of their environments (Teece, Pisano, & Shuen, 1997). The literature on dynamic capabilities contains implicit references to time, history, and memory, which we elaborate upon below. Second, we draw from the emergent “historical turn” in management theory (Clark & Rowlinson, 2004; Mills, Suddaby, Foster, & Durepos, 2016), which argues for a more nuanced and constructivist view of the past as a fundamental competitive resource of modern organizations.

We present our argument in three stages. First, we briefly outline the central elements of dynamic capabilities and make explicit the somewhat hidden roles of time, history, and memory. Second, we describe the emergent interest in history and collective memory as a core, but understudied organizational resource. Finally, we present our core thesis, i.e. that the capacity to manage the past is a dynamic capability of the modern firm. We identify three key competences in managing the past. First, the objective use of collective memory to reproduce existing routines. Second, the interpretive reconstruction of collective memory to allow adaptation to environmental change. Third, the imaginative extension of collective memory into the future in an effort to articulate internal proactive reconfiguration in the face of anticipated external change.

DYNAMIC CAPABILITIES AND THE IMPLICIT ROLES OF TIME, HISTORY, AND MEMORY

The concept of dynamic capabilities originated from the firm’s resource-based view, or “RBV” (Barney, 1991; Penrose, 1959; Peteraf, 1993; Wernerfelt, 1984), which perceives organizations as bundles of heterogeneously distributed resources that persist over time. Firms that possess resources that are valuable, rare, difficult to imitate, and for which few substitutes exist are likely to hold a powerful and sustainable competitive advantage (Barney, 1991). The dynamic capability construct extends this argument by suggesting that differential access to key resources is perhaps less important than the ability to combine resources in unique

ways that generate novel and value-generating capabilities in response to changes in the external environment (Grant, 1996; Pisano, 1994). Thus, dynamic capabilities refer to the routines by which firms achieve new resource configurations in response to changing environmental conditions (Teece et al., 1997).

Three main components define the antecedent conditions to developing dynamic capabilities—the identification of new opportunities or threats in the environment, the identification of existing resources within the firm, and the development of new capabilities in response to changes in the environment (Penrose, 1959). Each of these conditions is realized through systematic procedures or routines “that emerge from path-dependent histories of individual firms” (Eisenhardt & Martin, 2000, p. 1108). At any moment in time, organizations are engaged in an ongoing process of achieving a fit among their historically determined internal resources, the current demands of their external environments, and their expectations of what those demands might be in the future (Winter, 2000).

An implicit temporal element exists in this description of dynamic capabilities. Firms must attend to resources that have been accumulated in the past, and adapt them to present environmental pressures as well as anticipated future demands. The construct also has an explicit historical component. Capabilities and the resources that underpin them accumulate slowly over time, in a historically deterministic path dependence process that resembles “a chain of reactions triggered by an initial event, thereby establishing a capability trajectory” (Schreyögg & Kliesch-Eberl, 2007, p. 916). Once established, capabilities become temporally embedded in organizations through the reproduction of routines, which depend on past managerial experience (Penrose, 1959) and the increasing reliability of habituated action (Nelson & Winter, 1982). Therefore, capabilities are a product of two temporal elements in a firm: its history of resource allocations and its ability to remember and faithfully reproduce routines.

Each of the aforementioned activities requires organizations to possess a distinct historical consciousness (Suddaby, 2016) or sensitivity to mnemonic processes’ effects. For example, converting historically determined resources into reliably reproducible routines requires a highly functional organizational memory (Walsh & Ungson, 1991). Similarly, an organization must be able to distinguish between the temporal dynamics of stable and high-velocity environments to adapt current resources to changing demands in the external environment (Eisenhardt & Martin, 2000). Further, the ability to effectively reconfigure existing capabilities to meet future demands requires a clear understanding of which routines are so historically embedded or “imprinted” that they are incapable of change (Sapienza, Autio, George, & Zahra, 2006).

While time, history, and memory clearly play an important role in dynamic capabilities, they remain undertheorized. Indeed, history is typically viewed as a limiting factor or a constraint in most dynamic capability research. History imprints some organizations with resources or managerial expertise that is not available to all organizations in a field (Barney, 1991). Moreover, the sedimentation of resources and capabilities and the imprinting of routines create a high degree of structural inertia (Hannan & Freeman, 1989; Oliver, 1991), which limits an organization's ability to adapt its resource configurations to new demands in the external environment. Thus, history is perceived as a path dependence process—namely, a series of strategic choices that evolve over time through a process in which past choices constrain future choices.

These three constructs—imprinting, structural inertia, and path dependence—believe an implicit view within dynamic capability literature of history as a constraint on strategic choice. The past is typically viewed as a Weberian iron cage that constrains firms' capacity for strategic choices. This limiting perception of history is reinforced by an equally restrictive view of organizational memory as a “retention bin,” in which brute facts of the past are acquired, stored, and retrieved just as a museum might acquire, store, and retrieve physical archives.

However, this view of history and memory is, at best, seriously naïve and, at worst, grossly inaccurate. It assumes that time is linear, memory is archival, and history is objective. This view ignores a growing body of research that demonstrates time is subjectively perceived, both by individuals and collectives (Bluedorn & Denhardt, 1988; Eliade, 1954, 1963; Kaplan & Orlikowski, 2013); that memory is more than a mere recollection of facts, but rather, a process of social construction (Cubitt, 2007; Halbwachs, 1992); and that history is a narrative practice (Spence, 1982; White, 1973; Zerubavel, 2003). Although organizational literature acknowledges the difference between procedural and declarative memory (Moorman & Miner, 1997), scarce understanding exists of the distinction between the cultural and communicative modes of remembering (Assmann, 2011).

We advocate for a more nuanced and sophisticated understanding of history and memory, not as an objective routine that constrains strategic choice, as it is characterized in the current dynamic capabilities literature, but as a creative act of social construction that can become an organization's core competence when properly managed. We draw from prior research that defines history not as a single method of a faithful reproduction of the past, but as a varied interpretive process (Coraiola, Foster, & Suddaby, 2015). Thus, we assume that an organization's history is as a unique and critical firm resource (Foster, Suddaby, Minkus, & Wiebe, 2011) that can be creatively

reconfigured through rhetoric as a means of creating sustainable competitive advantage (Suddaby, Foster, & Trank, 2010). We also believe that a firm's implicit theory of history as either objective or interpretive profoundly influences its capacity to reconfigure resources and adapt to changes in the external environment (Suddaby & Foster, 2016). More importantly, and as we elaborate in the next section, we argue that the capacity to manage a firm's collective memory is a critical but unexplored dynamic capability.

MNEMONIC CAPABILITIES: COLLECTIVE MEMORY AS A DYNAMIC CAPABILITY

Prior research and theory on history's role in processes of organizational change suggests that history is not a unitary construct, but can be conceived as a range of approaches to history that exist on a continuum, from a high degree of objectivity—or history as fact—to a high degree of social constructivism—or history as narrative (Coraiola et al., 2015; Suddaby & Foster, 2016). We adopt this perspective in a dynamic capability context to describe the following three perspectives of how collective memory can be understood as a core competence in organizations. First, we describe how organizational memory can be understood as an objective capability, through which elements of the past are faithfully preserved and reactivated in an effort to consistently reproduce past routines. Second, we describe how organizational memory can be understood as an interpretive capability, in which elements of a firm's history are creatively reconstructed to allow the firm to adapt past resources to changing present demands. Finally, we describe how organizational memory can be perceived as an imaginative capability, relatively untethered from the brute facts of the past, to create an imagined collective future.

Mnemonic capabilities as an objective capacity

Considerable research has demonstrated that objectively archiving the past plays a critical role as an organization's dynamic capability. Similarly, Helfat and Peteraf (2003) demonstrate how mnemonic capacity matures with the organization. The authors argue that organizational learning highly depends upon an organization's ability to remember. The capacity to acquire, store, and retrieve information from the past is highly routinized in an organization's early development. However, its organizational memory becomes less overt as it matures, and the process of acquiring, storing, and retrieving elements of the past can become more tacit in nature. According to Zahra and George (2002), the routinization of memory is an important component of an organization's “absorptive capacity,” or its ability to learn.

Thus, mnemonic capabilities viewed objectively can contribute to a firm's sustainable competitive advantage by ensuring that an organization retains the capacity to fully exploit the collective experiences of the individuals, teams, and groups within the firm. The past is understood as an objective resource that can be exploited to suit present demands. For example, [Kline \(2000\)](#) demonstrates the power of a firm's mnemonic capability in managing patents, and particularly those that were previously shelved. [Foster et al. \(2011\)](#) similarly demonstrate the mnemonic capability of exploiting a founder's personal history. Negative illustrations of mnemonic capability also exist, including the need to manage an organization's history of forced labor ([Janssen, 2012](#)) or its involvement with the Holocaust ([Booth, Clark, Delahaye, Procter, & Rowlinson, 2007](#)).

Mnemonic capabilities as an interpretive capacity

An alternative view of the past is not as an immutable account of objective events, but an interpretation of past brute facts, which offers a limited degree of agency—if not outright creativity—in the hands of a skilled manager or corporate historian. The mnemonic capability is less focused on the ability of an organization to faithfully archive and reproduce the past, and more its capacity to creatively manage and select elements from the past to meet the organization's present environmental demands. This suggests an interrelated process of custodianship, curation, and narration grounded in the organization's capacity to remember and forget ([Anteby & Molnár, 2012](#)).

However, it more often involves the creative capability to skillfully restructure past resources to meet the demands of a constantly changing present. For example, there is a growing recognition of managers' purposeful engagement with the past to encourage innovation in organizations ([Brunninge, 2009](#); [Maclean, Harvey, Sillince, & Golant, 2014](#); [Ybema, 2010](#)). In their study of the LEGO Group, [Schultz and Hernes \(2013\)](#) demonstrate how the company's new strategy is based on a historical rediscovery of the firm's original purpose and identity. Similarly, [Lamertz, Foster, Coraiola, and Kroezen's \(2016\)](#) research on Canadian microbreweries suggests that entrepreneurs can use recovered remnants of resources from a firm's forgotten past to create new markets and products within established organizational fields.

Mnemonic capabilities as an imaginative capacity

We assume that organizations have more agency over their pasts than traditional path-dependence and dynamic capabilities literatures would recognize. In other words, we argue that managers and organizations develop purposeful attempts at constructing

their pasts. Organizations typically have practices and routines in place that generate material and symbolic resources to (re)create their pasts in the future. If the core idea of dynamic capabilities concerns the organization's ability to adapt and reinvent itself by considering environmental changes, this then raises the ultimate question of what capabilities will be valuable in the future and how organizations can seed them in the present to harvest them in the future. While the traditional capabilities approach defines this as a random output of multiple path-dependent, evolutionary, and self-reinforcing processes, we argue that attached to these processes are self-conditioning mindsets and frameworks for action that create future expectations. The capacity of creative imagination is thus central to organizational strategizing through time. This way, an enhanced theory of the firm that takes history seriously can provide the basis for a new understanding of the way organizations develop capabilities to cope with influences from both projected futures and present practices in the (re) production of the past.

[Bátiz-Lazo, Haigh, and Stearns' \(2015\)](#) compelling research on the "cashless society" concept demonstrates how a collectively shared view for the future guides the development of new organizational forms and technologies. Moreover, we argue that this view of the future develops in tandem with a view of the past, and materializes in the present as the processes and routines aimed to not only justify and support past and present actions, but also align present views with expected futures. History's importance in this case is threefold. First, to the extent that it freezes time, history serves as a basis of comparison and grounds expectations for the future. Second, it provides a reservoir of past futures to inform and justify managerial action. Third, history becomes just as much the past that defines the possibilities of action in the present, as well as the future, which opens up new pasts and presents. Similarly, [Cattani, Dunbar, and Shapira's \(2017\)](#) analysis of Steinway and Sons' craft-based differentiation strategy serves as an interesting example of how an organization's commitment to craftsmanship has projected into the future a tradition based on tacit knowledge, craft-production methods, and high-quality products. This legacy therefore becomes something expected by internal and external audiences, and demands continuous effort in the present to build the resources and capabilities for a future past.

CONCLUSION

At the core of the capabilities approach lies the intention to create a theory regarding "the sources of enterprise-level competitive advantage over time" ([Teece, 2007, p. 1320](#)). The focus on the

creation and recreation of value places the notion of time and history at the center of the explanation of the organizations' differential abilities in generating competitive advantage. Despite the importance of this concept, scarce debate exists on the nature and importance of temporality in the dynamic capabilities approach. Our approach to the mnemonic capabilities of the firm provides an important corrective and expansion to the path-dependence endogenous theory of change. One of the core implications of our revised view of temporality is that while more contemporary knowledge and capabilities (i.e., communicative memory) seem to contribute to incremental change and exploitation, historical knowledge (i.e., cultural memory) might provide alternative paths for capability renewal, thus fostering exploitation (March, 1991). In this sense, the reproduction of and change in capabilities involve more than the processes of sharing and socializing content, values, and practices in the present. Further, this involves practices to recover and retrieve, and the actual ability to (re)produce, things in the present that were done in the past, as well as establishing in the present a bountiful past for the future.

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