

## **STRATEGIC TRANSFORMATION AND THE PROBLEM OF INERTIA**

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## INTRODUCTION

The challenge of strategic transformation lies at the heart of strategic management. Unless firms can successfully adapt and change, they are unlikely to survive and prosper in the long run. The Achilles heel of strategic transformation is the tendency of organizations to remain in their current state. Richard Rumelt's (1995) chapter on "Inertia and Transformation" lays out key sources of inertia, tackles the question of how firms might overcome inertia, and proposes a simple model that suggests how strategic transformation may need to proceed within organizations.

Rumelt's chapter was published in a book edited by Montgomery (1995) that brought together the resource-based view of the firm (e.g., Wernerfelt, 1984; Rumelt, 1984; Barney, 1991; Peteraf, 1993), which was gaining steam within strategic management at the time, with evolutionary economics (Nelson and Winter, 1982), which was also attracting attention within strategic management (e.g., Kogut and Zander, 1993; Helfat, 1994). The resource-based view emphasized the potential for competitive advantage through difficult-to-imitate firm resources, and evolutionary economics directed attention to routines that underpinned difficult-to-imitate firm capabilities as well as the challenges of organizational and technological change.

Around this time, it had become clear that established companies sometimes encountered great difficulty adapting to technological change, as some previously highly-successful firms failed to survive. Scholars of technology and industry evolution had investigated the challenges that difficult-to-change competences posed for firms. For example, Tushman and Anderson (1986) and Anderson and Tushman (1990) distinguished between competence-enhancing and competence-destroying technological change, and Henderson and Clark (1990) called attention to competence-destroying architectural innovation. Christensen and Bower (1996) and

Christensen (1997) subsequently argued that additional difficulties stemmed from disruptive low-end technological innovations. In light of these challenges, Tushman and O'Reilly (1996) proposed that firms could employ ambidexterity as an effective means of strategic transformation, in which firms “simultaneously pursue both incremental and discontinuous innovation” by “hosting multiple contradictory structures, processes, and cultures within the same firm” (p. 24). At the same time, drawing in part on ideas from evolutionary economics, Teece and Pisano (1994) and Teece, Pisano, and Shuen (1997) introduced the idea of dynamic capabilities that could enable firms to successfully adapt and change.

Against this backdrop, Rumelt took a broad look at the fundamental sources of inertia that impeded strategic transformation, and proposed a sequence of changes in capabilities, coordination, and incentives that would be required for firms to successfully renew themselves. In what follows, I first discuss the sources of inertia that Rumelt identified, which is what his chapter is best known for. Most of the citations to Rumelt's (1995) piece reference his typology of inertia. Then I turn to his competence-based model of strategic transformation, in which cross-departmental coordination plays a prominent role, and the conclusions that he drew from the model. Given the recent uptick of scholarly interest in organization design, this model is especially timely and merits renewed attention. Future scholarship would benefit from additional theoretical work and empirical analysis motivated by Rumelt's propositions about the way in which successful strategic transformations are likely to proceed.

Since Rumelt wrote his chapter, a substantial amount of research has dealt with strategic renewal and impediments to it (for a partial overview up to 2009, see Agarwal and Helfat, 2009). As part of the discussion below, I provide selected guideposts to research since Rumelt's piece that relates to the issues that he examined.

Strategic transformation is a topic about which people tend to see the glass as either half empty or half full. I readily admit to being a glass half-full person. I view strategic and organizational change as difficult but possible, and I therefore seek to understand what makes organizations more likely to succeed in transforming themselves. Having said this, I recognize that major transformations take time, and firms faced with sudden existential threats to their businesses (such as the threat faced by airlines due to the near total disappearance of passenger air travel during a worldwide pandemic) may be unable to adapt quickly enough to survive. When firms have some lead time to adapt to and even create change, I am interested in what enables firms to do so. This perspective likely comes through below.

## **SOURCES OF INERTIA**

Rumelt (1995) defined inertia as “the strong persistence of existing form and function” (p. 103). He noted that inertia is not necessarily detrimental; if a firm’s attributes enable it to perform well, inertia helps to maintain this success. Similarly, Hannan and Freeman (1984) argued that environmental selection favors firms with high inertia. However, Rumelt was concerned with inertia that is counterproductive, namely, under circumstances when organizations need to change in order to survive and prosper. He identified five key sources of inertia: distorted perception, dulled motivation, failed creative response, political deadlocks, and action disconnects.<sup>1</sup>

As Rumelt (1995) correctly observed, “change begins with perception” (p. 106).

Deliberate efforts to make changes require that organizations, or parts of them, perceive the need

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<sup>1</sup> For an interesting study that surveyed Spanish companies about the relative importance of the different sources of inertia identified by Rumelt (1995), see Pardo del Val and Martinez-Fuentes (2003). The study found that the difficulty of dislodging deep-rooted values (part of political deadlocks), capabilities gaps (part of action disconnects), and departmental politics topped the list of inertial forces.

for change in the first place. By highlighting the importance of perception, Rumelt was ahead of his time. Today a thriving stream of research on behavioral strategy addresses the effects of cognition on firm strategy. Although Rumelt focused on sources of distorted perception such as myopia that lead to organizational inertia, subsequent research has also examined the flip side that accurate perception can help organizations to change (Helfat and Peteraf, 2015).

In addition to considering cognitive elements of perception, Rumelt took the notable approach of examining how factors within the organization, such as control systems focused on short-term performance and managerial turnover, lead to myopia. Rumelt noted that if a manager expects to leave the firm relatively soon, he or she is likely to place less weight on factors that affect future profits. Further investigation of sources of distorted (or accurate) perception from within the organization would be a promising approach for future research. For example, Gavetti (2005) proposed that where a manager sits in the organizational hierarchy affects the accuracy of managers' cognitive representations of strategic problems.

Another source of distorted perception that Rumelt (1995) flagged is hubris (“overweening pride in past accomplishments” p. 107) and denial. In line with behavioral learning theory (e.g., Skinner, 1948), Rumelt suggested that hubris might be due to superstitious learning, referring to learning that attributes past success to factors that were coincidental with the success but did not cause it. Other research related to strategic change that draws on behavioral learning theory, such as work on mergers and acquisitions by Halebian and Finkelstein (1999), has found evidence that managers may inappropriately generalize from past experience. This suggests that improving the accuracy of learning from past experience together with more accurate perception of the need to change might improve the odds of successful transformation.

Rumelt's discussion of distorted perception included factors at both the managerial and organizational levels of analysis. Notably, he considered how organizational factors such as control and planning systems affected myopia by individual managers, and how factors at the managerial level such as anticipated turnover affected decisions pertaining to the organization. In considering these interactions, Rumelt was again ahead of his time, predating research on the microfoundations of organizational capabilities that has argued for the importance of interactions between factors at the individual and organizational levels of analysis (Felin and Foss, 2005; Felin, Foss, Heimeriks, and Madsen, 2012; Felin, Foss, and Ployhart, 2015). Not long after the publication of Rumelt's piece, Ocasio (1997) also identified the need for scholars to better understand how interactions between individual and organizational factors affect attention (closely related to perception), inertia, and strategic change. This still remains an important task for future research.

Beyond distorted perception, Rumelt went on to note other impediments to strategic change, including: dulled motivation to change, for reasons such as the high cost of abandoning sunk assets; failure to craft a creative response, due to problems such as inadequate strategic vision; and political deadlocks within the organization. Rumelt pointed to departmental politics, differing beliefs, and emotional attachments and differing values as sources of political deadlocks.

Rumelt ended his list of sources of inertia with what he called action disconnects, referring to forces that prevent firms from taking action. These forces include: "leadership inaction, embedded routines, collective action problems, and capabilities gaps" (Rumelt, 1995, p. 113). Of these, the first is fairly intuitive, stemming from the unwillingness of leaders to change. Rumelt also noted that the difficulty of changing organizational culture, a well-known

impediment to strategic change, can be viewed as a collective action problem. The other two factors, embedded routines and gaps in capabilities, received additional attention in Rumelt's modeling of transformation discussed below.

It is worth saying more about the nature of the routines that Rumelt analyzed, before turning to his model of strategic transformation. Organizational routines are the foundation of the evolutionary economic theory of the firm (Nelson and Winter, 1982), which featured prominently in the volume in which Rumelt's (1995) chapter appeared. Rumelt focused on the routinization of work, where work referred to production tasks and methods for accomplishing tasks. He emphasized aspects of production routines that foster organizational inertia, such as their habitual nature and their interconnectedness, which makes it difficult to change only one routine at a time.

In examining strategic transformation, it may be helpful to go beyond Rumelt's analysis and consider routines other than those that underpin production capabilities. In particular, some types of routines are directed toward strategic and organizational change, such as routines that underpin capabilities for innovation, mergers and acquisitions, large scale chain expansion, and the like – which today we call dynamic capabilities (Teece et al., 1997; Winter and Szulanski, 2001; Helfat et al., 2007; Nelson et al., 2018). For example, routines directed toward scanning the external environment for changes in technologies and customer demand have the potential to aid rather than retard strategic transformation.

As the concept of dynamic capabilities suggests, whether routines impede change depends in part on their purposes. Rumelt (1995) perhaps implicitly recognized this in saying that “macro-routines for creating novelty” may be required for strategic transformation, but he nevertheless expressed doubt as to their utility in referring to “all their slowness and cost” (p.

114). For Rumelt, inertia is hard to dislodge. From this perspective, he went on to consider what it might take for firms to transform themselves.

## **STRATEGIC TRANSFORMATION**

Rumelt (1995) defined transformation as “the process of engendering a fundamental change in an organization leading to a dramatic improvement in performance” (p.117). I offer the friendly amendment that if a firm undertakes a transformation proactively before performance has begun to decline, we may not necessarily observe a dramatic improvement in performance. Indeed, this is preferable to waiting until a dramatic improvement in performance is required.

It is also worth noting that a transformation can be gradual rather than sudden. If an organization undertakes many gradual shifts in its products, or customer base, or resources, or capabilities, an organization may end up substantially transformed. This is one of the key implications of evolutionary economic theory, in which path dependent change through incremental alterations – such as in a firm’s product and geographic markets, resources and capabilities, technologies and more – can lead a firm to a very different place than where it started. This sort of more gradual but transformative change is also highlighted by research on ambidexterity (Tushman and O’Reilly, 1996), in which continual efforts to develop new products and markets can prevent the need for a discontinuous transformation. Regular communication and coordination across departmental units may also lead to a convergence of beliefs, thereby reducing political deadlocks and facilitating gradual change.<sup>2</sup> As Agarwal and Helfat (2009) document, a gradual approach to strategic transformation is more common than is often assumed.

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<sup>2</sup> I thank an anonymous reviewer for suggesting that cross-departmental communication and coordination may have this effect.

Rumelt's model of transformation deals with situations in which firms have not undertaken continual efforts at strategic and organizational change. Rumelt (1995) distinguished between recovery – “the process of regaining lost (relative) efficiency” (p. 119) – and renewal – “the process of developing new skills and resources or of discovering new uses for extant skills and resources” (p. 119). In what follows, I focus on renewal, since research on strategic transformation typically focuses more on renewal rather than recovery.

To examine how organizations might renew themselves in the face of inertia, Rumelt developed a model anchored in what he viewed as first principles of the structure of firm competencies (also termed skills and capabilities), and the relationship to organizational coordination and incentives. Research on coordination and incentives today is seeing a resurgence in models of organization design (e.g., Kretschmer and Puranam, 2008). Other work has addressed integrative capabilities for coordination and communication across organizational units (e.g., Chen, Williams, and Agarwal, 2012; Helfat and Campo-Rembado, 2016; Helfat and Raubitschek, 2000), reminiscent of the coordination skills in Rumelt's model. However, relatively little research has brought together capabilities, organization design, and strategic transformation as Rumelt did.

Rumelt distinguished between task (production) skills and skills for coordinating productive tasks, and their underlying routines, and built a simple model of how these two factors would affect strategic transformation. Based on this model, explained in more detail below, Rumelt argued that strategic transformation entails a specific staging in which firms must first break down their production departments into smaller units, undo existing coordination between units, and increase the incentives provided to productive units in order to combat inertia. Then firms must routinize new task skills within departments before firms can rebuild

coordination across departments, after which incentive intensity to the departments can be reduced. In what follows, I examine the first principles and assumptions of Rumelt's model, their relationship to the conclusions of the model, and how altering these assumptions might alter some of the conclusions of the model.

Before delving into the assumptions of the model and their implications, I take a slight digression to consider why firms need coordination between departments to begin with. Rumelt (1995) observed that "coordination is team production" (p. 122). Classic early work in economics on teams noted that the output of team production "by definition...is not a sum of separable outputs of each of its members" (Alchian and Demsetz, 1972, p. 779). If team production would produce greater output than separable production, we would expect that two (or more) departments would be combined to begin with. This raises the question of why there should be any coordination between departments. One answer is that it may not be possible to cleanly divide tasks such that all tasks that might benefit from coordination are within a single department. In this case, after tasks that require the greatest coordination are grouped together within departments, the question remains as to whether additional coordination between departments will add value (see Kretshmer and Puranam, 2008). Rumelt considered the situation in which such coordination may be beneficial.

Rumelt began with the premise that basic skills must be developed before they can be combined (coordinated) into more advanced skills. Applying this premise to firms, Rumelt argued that coordination across departments is layered on top of more basic within-department task skills. This leads to the first assumption of Rumelt's model that task skills within departments must be routinized before the skills for coordinating these activities across departments can be developed. That is, there is an ordering of skill development. A second

assumption is that coordination skills are specific to the tasks and methods of the departments within which the tasks take place. This second assumption is important for the first assumption to hold. If instead coordination skills are not specific to the task skills of a particular department, then new task skills need not be fully formed (i.e., routinized) in order for the firm to develop new coordination skills or mechanisms. These first two assumptions together have a clear implication that Rumelt drew for the staging of strategic transformation, namely, that task skills must be transformed and routinized before coordination is transformed. In addition, the requirement that task skills must be routinized before coordination can take place suggests that transformation may be a long process.

The extent to which these assumptions hold is an empirical question. Even if there is no such thing as a generic coordination skill regardless of what is being coordinated, it is possible that a single coordination skill may apply to several related types of task skills. For example, consider the situation where the coordination of software programmers across departments rests on a coordination skill (a set of routines) for assigning programmers to different cross-department teams. A coordination routine might require a team manager to specify the types of programming skills required, which would then be matched to the skills of programmers who have availability to take on additional projects. This sort of coordination mechanism would apply equally well to programmers with different software expertise and intended project outcomes. In cases like this, it is possible that new task skills can be adapted to a type of coordination skill rather than the converse, and task skills and their underlying productive routines need not necessarily be developed or transformed before coordination can occur.

Rumelt included two additional assumptions in his model. One assumption is that it is costly for departments to coordinate, for two reasons: 1) coordination creates additional work,

and 2) coordination reduces the gains to specialization of tasks within departments. Clearly, coordination entails costs of time and effort, so the benefits of coordination must exceed the costs. If coordination takes place across departments on a regular basis, a firm may even develop an integrative capability for coordination and communication that brings down the costs of these activities (Helfat and Campo-Rembado, 2016). Whether coordination necessarily reduces the gains to specialization, however, depends on what is being coordinated.

In many cases, it is logical to assume, as Rumelt did, that coordination requires departments to do something differently and therefore less efficiently than they would otherwise. However, some types of coordination may improve rather than impede the operations of individual departments. Specialization of tasks within departments does not imply perfect efficiency. Smoothly functioning routines can and do go awry (Nelson and Winter, 1982). Suppliers change, workers turn over, and machines malfunction. Consider the situation in which two departments discover that they can help one another solve task-related problems or otherwise make their operations more efficient by learning from one another, as documented by Martin and Eisenhardt (2010) in their study of several software companies. This type of coordination can help departments improve their task skills, including on an ongoing basis. If the improvement in task skills is large enough, then the costs of coordination are worth bearing. Moreover, in this situation, coordination necessarily comes before the change in task skills, not afterwards.

More generally, if one department has valuable skills and knowledge that other departments can benefit from, transformation may benefit from coordination first rather than later. If we expand the type of coordination in question beyond routine productive tasks, this statement may hold even more strongly. For example, technological innovation may require

coordination between departments, such as departments in charge of engineering and manufacturing (see e.g., Iansiti and Clark, 1994). This coordination leads to within-department changes in the engineering of the innovation and in manufacturing task skills (Monteverde, 1995). Additionally, in a study of strategic transformation, Taylor and Helfat (2009) documented the importance in the early computer industry of internal company mechanisms that linked the new core technology with complementary assets such as manufacturing, marketing, and service (Teece, 1986). In one of the firms that transitioned most quickly and successfully to the new technology, some of the coordination mechanisms were developed before the new task skills within departments became fully routine. Moreover, the resulting coordination facilitated within-departmental development of task skills.<sup>3</sup>

Rumelt's final assumption is that the performance of individual departments can be measured more precisely than can the contributions to coordination of each department. This assumption relates to a proposition that Rumelt develops with respect to the role of incentives. In particular, he proposes that increases in the intensity of incentives to individual departments reduce coordination activity. Intuitively, if incentives cannot be easily provided for coordination due to measurement difficulty, and if there is a tradeoff between task skills within departments and coordination between departments, then providing stronger rewards to department-specific task outcomes will reduce the amount of cross-department coordination. Whether this holds true depends on whether coordination harms or improves within-department task skills. In the latter case, incentives provided to departments for department-level outcomes may not necessarily

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<sup>3</sup> In a related study, Stan and Puranam (2017) investigated a technological shift that changed the nature of the interdependence between distinct organizational functions in fertility clinics. The study found that individuals who integrated activities among different functions were critical to the successful adaptation of clinics to the technological change. This study highlights that some transformations may entail primarily changes in coordination rather than within-department changes. Theoretical research has also dealt with the implications for organizational change of interdependence across organizational units (e.g., Rivkin and Siggelkow, 2003; Siggelkow and Levinthal, 2003).

harm coordination, and can even promote coordination if coordination improves within-department task skills for which departments are rewarded (Eisenhardt and Galunic, 2000).

Ultimately, the impact of coordination on department task skills is an empirical question, and the answer may well vary across organizations.

Overall, Rumelt's model provides a provocative starting point for thinking more deeply about the capability and organization design elements of strategic transformation. Rumelt had in mind a specific type of coordination across departments that is layered on top of task skills within departments, and in which coordination interferes with the routine use of these skills. Strategic transformations then require that firms break down coordination in order to permit the development of new task skills before rebuilding coordination. Alternatively, the discussion above suggests that coordination across departments may facilitate changes in task skills during strategic transformations. Scholars wishing to model the effect of organization design on strategic transformation could dig deeper into these issues to consider a variety of relationships between within-department task skills and across-department coordination during strategic transformations, as well as the role of incentives. In addition, more empirical work is warranted to assess the different types of relationships and their implications for strategic transformation.

## **CONCLUSION**

Rumelt's chapter on inertia examines the disparate underlying sources of organizational inertia and their implications for strategic transformation. For scholars wishing to better understand the impediments to strategic transformation, Rumelt's typology and discussion of the sources of inertia is a valuable resource. For scholars who are interested in dynamic capabilities, which are directed toward strategic renewal and transformation, further considering how

dynamic capabilities might enable firms to overcome the different sources of inertia identified by Rumelt would be a useful exercise. For example, some of the sources of inertia on Rumelt's list such as political deadlocks have received relatively little attention in the dynamic capabilities literature.

Rumelt's model, which links capabilities and elements of organization design to strategic transformation, also merits more attention from scholars interested in these areas of research. For theorists, the model provides a starting point for analyzing the ways in which productive task skills, coordination (and coordination skills), and incentives affect strategic transformation. Empirical researchers also have much to learn about how interactions involving elements of organization design and capabilities affect the process and outcomes of strategic transformation. In addition, the literature today contains more studies of both failed and successful strategic transformations, as well as more studies that document how start-up organizations develop task and coordination skills, than when Rumelt wrote his piece. Undertaking a systematic investigation of what these studies show with respect to the development and change of task skills, coordination, and incentives could prove helpful in new modeling efforts and empirical research on strategic transformation.

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