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Corporate foresight: Its three roles in enhancing the innovation capacity of a firm

René Rohrbeck *, Hans Georg Gemünden

Berlin, University of Technology, Chair for Technology and Innovation Management, Strasse des 17. Juni 135, 10623 Berlin, Germany

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ABSTRACT

In the last three decades much knowledge has been produced on how best to conduct foresight exercises, but little is known on how foresight should be integrated with the innovation effort of a company. Drawing on empirical evidence from 19 case studies and 107 interviews, we identify three roles that corporate foresight should play to maximize the innovation capacity of a firm: (1) the strategist role, which explores new business fields; (2) the initiator role, which increases the number of innovation concepts and ideas; and (3) the opponent role, which challenges innovation projects to increase the quality of their output.

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1. Introduction

When asked about what direction research on foresight should follow, scholars come to different conclusions. Some argue that new tools are needed [1]. Others point to the lack of help for practitioners to find the right tools [2], concluding that education is needed to create foresight literacy [3,4]. A third group highlights the need to develop mechanisms to allow for more participation of stakeholders [5–7] and thus increase the impact of foresight activities [8–13].

This paper agrees on the importance of these suggestions, but argues that none of them can ensure the success of foresight exercises in a corporate context. This article argues that it is important to view matters from the perspective of the users of the results of corporate foresight exercises. Only then will it be possible to create a holistic understanding of possible impacts and drive the discussion on how to use foresight to create value and increases the competitiveness of a firm.

Based on our literature review in the strategic management field, we argue that corporate foresight should be expected to support the renewal of the portfolio of strategic resources. These strategic resources have been highlighted as the basis of the competitive advantage of a firm [14]. The ability to renew the portfolio of strategic resources when faced with external (discontinuous) change has been described as 'dynamic capabilities' [15]. We therefore propose to judge corporate foresight on its contribution to this ability.

More specifically we aim to explore the ability of corporate foresight to increase the innovation capacity of a firm. We differentiate into the capacity to innovate incrementally, i.e. enhanced or new products and services within current business field and the capacity to innovate radically, i.e. creating products and services in new business fields often using new technologies.

* Corresponding author.
E-mail addresses: Rene.Rohrbeck@tim.tu-berlin.de (R. Rohrbeck), Hans.Gemuenden@tim.tu-berlin.de (H.G. Gemünden).

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The literature review provides guidance to observe the impact of corporate foresight on the innovation capacity of a firm.

To explore the impact of corporate foresight on the innovation capacity we collected empirical evidence from 19 multinational companies. Of a total of 107 interviews, 42 were conducted with internal stakeholders, generating insight into how foresight results are used within the company. Through cross-case analysis, we are able to create an understanding of the ways in which corporate foresight activities can contribute to the innovation capacity of a firm.

2. Literature review

2.1. Creating and sustaining a competitive advantage

Research following the resource-based view has shown that companies use certain strategic resources to out-compete their rivals. To be of competitive value, these resources need to have three characteristics. They should be (1) appropriable–i.e., difficult to imitate, substitute, or transfer; (2) scarce; and (3) in demand–i.e., the resource needs to yield a competitive advantage [14].

Research on dynamic capabilities has shown that these resources lose their competitive relevance over time [16–18]. Thus, companies need to develop new resources in order to maintain their competitiveness [15,19]. This renewal of resources needs to follow the rate of corporate change, which has been shown to occur in long periods of slow, incremental change and short periods of rapid discontinuous or radical change [20–22].

Studies have repeatedly emphasized that companies find it difficult to adapt quickly enough in times of discontinuous change and can find themselves in life-threatening situations [23–25]. One study calculated the average life expectancy of Fortune 500 companies to be less than 40 years. This high mortality rate was the result of their failure to adapt in a timely manner to discontinuous change [26].

2.2. Why firms find it difficult to renew their products and organizations

Research on innovation management, strategic management, and corporate foresight has pointed to three major reasons why companies fail to adapt to external change in an effective and timely manner:

2.2.1. First, the high rate of change

In the past three decades, various empirical investigations have been conducted to prove the normative perception that the rate of change is increasing. Some evidence has been identified, for the following:

- Shortening of product life cycles [27,28]
- Increased technological change [29]
- Increased innovation speed [30–32]
- Increased speed of the diffusion of innovations [33]

2.2.2. Second, ignorance

Many organizations fail to perceive discontinuous change. This ignorance has been attributed to four underlying reasons:

- A *time frame that is too short*, so that the corporate strategic-planning cycles, which are still coupled with the fiscal-year cycle, fail to produce a timely response [34].
- Announcing signals may stay undetected because they are *outside the reach of corporate sensors*. This failure has been attributed to the nature of corporate sensors, which need to focus on a search area and thus by their very nature leave spaces undetected that are at the periphery of the search focus [35–37].
- Top management suffers from an overflow of information and *lacks the capacity to assess the potential impact* of the issue at hand [38,39].
- *Information does not reach the appropriate management level* that can understand the impact of an issue and/or that has the hierarchical power to decide on appropriate actions [40].
- *Filtering by middle management*, which may follow its own agenda, aiming, for example, to protect its own business unit [41].

2.2.3. Third, inertia

If a company has perceived a change in the environment with a potentially high impact, it needs to (1) define and plan appropriate actions and (2) implement them. Research has pointed to four underlying reasons for the inertia of large companies:

- *Complexity of internal structures*. Most large companies have to deal with two types of complexity: regional reach (forcing firms to build complex multinational sales structures) and product range (forcing firms to build, for example, regionally differentiated product portfolios) [42].
- *Complexity of external structures*. In recent decades, cost pressure has forced companies to outsource parts of their production to other companies and thus forced them to build complex supply-chain networks in which they are bound to several companies [43–45]. Today, this networking with other companies has reached beyond supply chain and production to include research [46] and strategic new-product development [47].

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