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Creating value with Innovation in downturn

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Abstract

Innovation remains a high strategic priority for most organizations, and many see it as a strong contributor to growth. While organizations should certainly take a critical look at their innovation spending in the recession, they should not make blanket reductions or adopt too defensive strategies. But, recession offers an excellent opportunity to make bold strategic moves that can position an organization for an economic rebound and fundamentally strengthen its long-term competitive advantage.

Keywords: *Innovation, strategic priority, recession, defensive strategy, long-term competitive advantage*

1. Introduction

In the context of globalisation, innovation is a key factor for enhancing the competitiveness of firms. There is general consensus that high profit companies of our times rely heavily on innovation to maintain their efficiency and survivability, with innovation being defined as the process from an idea to the introduction of a novelty into the market (Mumford 2000, Basadur 2004). Novelty and usefulness are in fact the two characteristic parameters to differentiate true innovations from me-too products and purely artistic achievements (Ford 1992, as cited in Scott 1995). Although an innovation is often a technologically different (and, in the best case, superior) product, it may also take the form of a new design, service or business process (Mumford 2000).

Technological inventions have changed the pattern of human lives. In the present global and competitive environment in which customers' aspirations are increasing day by day, every forward looking company is trying to satisfy its customer's needs in innovative ways. Innovation is the process of creating and doing new things. It is said when things slow down, that's when true winners emerge and they almost always beat the competition by creating something new, something unique. Topping the list is Apple, Inc. In the year of 2001 Apple introduced i-pod and the rest is history. When the going gets tough, the tough innovate. Smart organizations

know very well that bad times give you a free playing field. When there is less noise in the market, only you can sound louder. After the 9/11 incident, most airlines honchos just shrunk into corner rooms. Investment budgets were cut. Marketing budgets disappeared, salaries were frozen…all the now familiar stuff. Most were dead certain that the world will stop flying from 12th September. In the face of this gloom, a certain Mr. Ahmed Makhtoom ordered $26 billion worth of aircrafts and also upped his marketing budgets. Emirates haven't seen a drop of red ink since then.

The successful design and implementation of a process that allows the creation, access and transfer of knowledge for global new product innovation is not well understood, yet the importance of such a process is well established (Cohen and Levinthal, 1990; Nonaka and Takeuchi, 1995; Subramaniam and Venkatraman, 1998; Leonard and Sensiper, 1998). There is general agreement that new product innovation is an important source of competitive advantage for companies (Leonard and Sensiper, 1998). But, managing new product innovation has never been more complex. Not only have firms become more and more widely dispersed around the globe, but so too have the resources and knowledge these companies need to succeed in new product innovation. Knowledge is perhaps the most critical resource required to successfully execute the new product innovation process globally. Companies are faced with the challenge to create, access, transfer and integrate knowledge that exists in the firm's globally dispersed business entities as well as in the organisations with which these firms collaborate or compete including suppliers, customers, universities, research institutes and rivals. As needed knowledge becomes ever more widely scattered in individuals and organisations across the globe, it has become increasingly difficult for companies to tap into that knowledge and effectively employ it to develop global new products.

Radical innovations offer significant performance features, dramatic reductions in cost, or create new lines of business based on new ideas or technologies (Leifer *et al.*, 2000). The need for firms to invest in new technologies and develop radical innovations is well-recognised (Tushman and Nadler, 1986). However, such innovations are often developed within the context of great market and technological uncertainty resulting in high costs, high risks and long development times (Abernathy and Clark, 1985; Utterback, 1994). To reduce the multiple uncertainties associated with radical innovations, a high degree of collaboration is required among a firm's highly diverse functions.

Innovation management in uncertain and ambiguous environments

Product innovation management has attracted particular attention over the last 30 years because of three factors:

1. The importance of new products to achieving superior customer value (Tomkovick and Miller, 2000)

2. Increasing failure rates of new product developments (Cooper, 1982)

3. The increasing problems of product innovation management in uncertain and ambiguous environments (Ozomer *et al.*, 1997).

2. Relationship between strategy, innovation, and performance

Interest in the contribution of innovation to national economies has been increasing (Romer, 1994; Grossman and Helpman, 1994; Barro and Sala-I-Martin, 1995; Shefer and Frenkel, 2005). Endogenous growth models assume that firms invest in new technology if they perceive an opportunity to earn a profit. Innovation can lead to increased market share, greater production efficiency, higher productivity growth, and increased revenue (Shefer and Frenkel, 2005). Innovation enables firms to offer greater variety of differentiated products that can improve financial performance (Zahra et al., 2000). Barney (1997), Peteraf (1993) and Grant (1991) emphasised that firms can gain a competitive advantage through intangible resources that competitors do not possess.

Geroski et al. (1993) stress the importance of innovation as well as the learning process within the firm associated with innovation. From a resource-based view of the firm, innovative capability is critical to firms achieving strategic competitiveness (Conner, 1991). Innovation enables firms to achieve higher financial performance by offering a greater variety of valuable, rare, inimitable and differentiated products (Zahra et al., 2000).

Although several studies found a strong positive relationship between innovation and growth (Roper et al., 1996; Roper, 1997; Moore, 1995), the results are not conclusive. Geroski (1994) suggested two views on the relationship between innovation and growth. First, the production of new products or processes strengthens a firm's competitive position, but only if the innovating firm can defend its position against rivals. Alternatively, the process of innovation enhances the firm's internal capabilities, making it flexible and adaptable to market pressures. Cainelli et al. (2004) and Regev (1998) found that innovating firms had higher labour productivity and sales growth than non-innovating firms. A study on British firms by the Cambridge Small Business Research Centre (1999) showed that 80% of the companies that developed innovation activities improved profits, market share, and new markets penetration. Geroski and Machin (1992) did not find permanent growth differences between innovators and non-innovators. Heunks (1998) found that profits derived from innovation initiatives may not be apparent in the short term, but may take time to be realised. Olav and Leppälahti (1997) found that innovating Norwegian firms with more than 50 employees experienced higher profits than non-innovators firms, but did not find profit differences for firms with less than 50 employees. Yamin et al. (1999) examined relationships between organisational innovation and performance among Australian companies and found that innovative companies are more profitable, though highly innovative companies may not outperform average innovators. Kemp et al. (2003) found that innovation was associated with turnover and employment growth, but not profit and productivity among Dutch firms.

Types of innovation

-Technology

-Product/ Process

-Radical/ Incremental

-Business model

-Market-driven

Low cost/ diff / focus

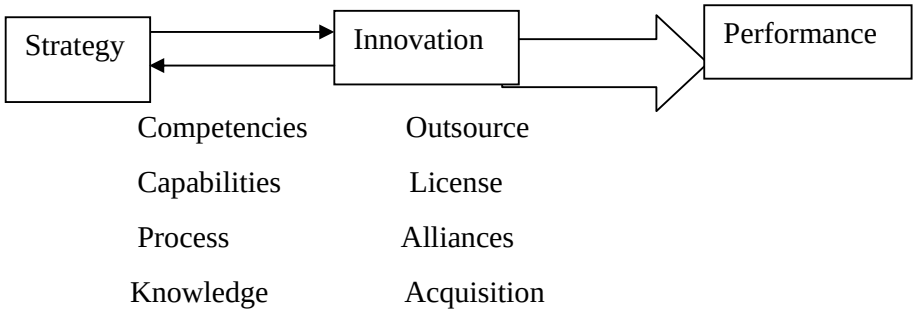


Fig 1: Business strategy, innovation, and performance

2.1 How does the firm's strategy explain success in commercializing technological innovations with respect to the customer groups the firm targets and its approach to being market oriented?

Based on their strategy, firms develop skill sets associated with success for some (but not all) types of situations in commercializing technological innovations (Slater & Mohr).

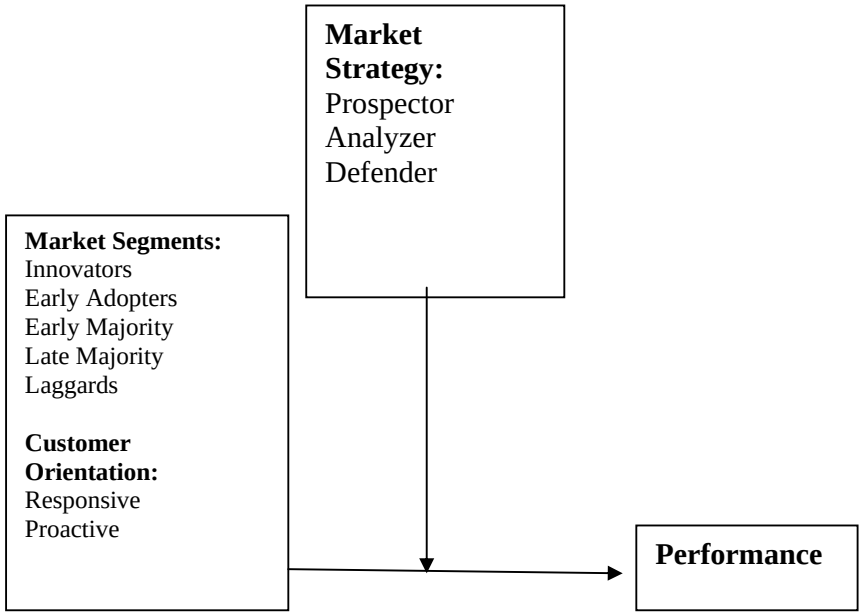
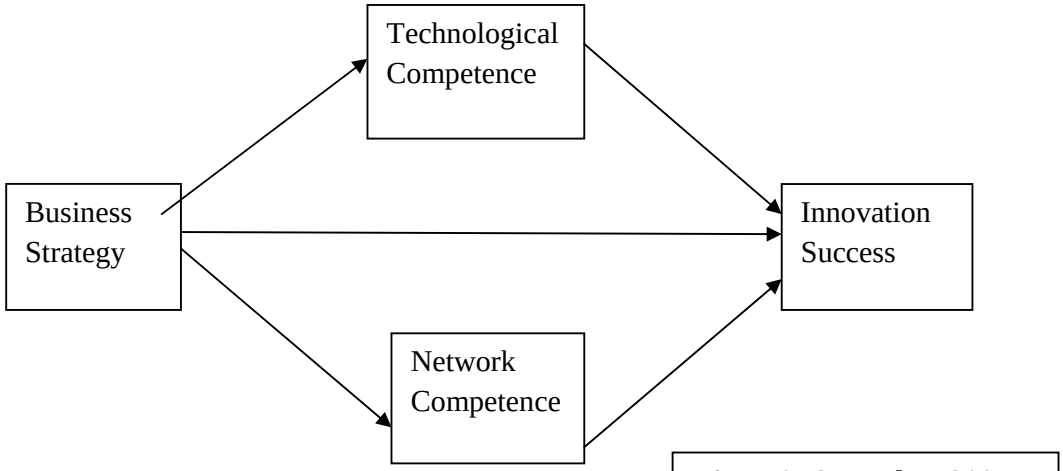


Figure 2

Slater & Mohr, 2006

2.2 Which competencies does a company need to achieve innovation success? What role does a company's business strategy play in competence development and innovation success?

Both technological competence and network competence have a positive impact on a firm's innovation success. Business strategy influences innovation success through competence development, but not directly.

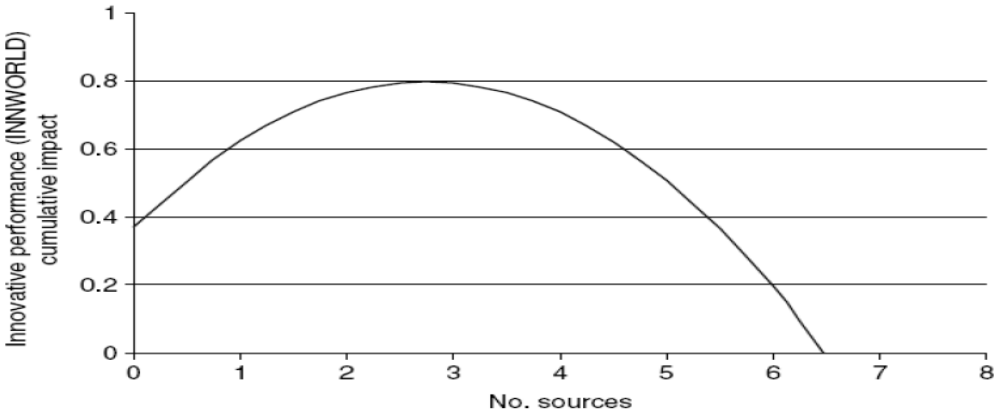


Ritter & Gemuden, 2004

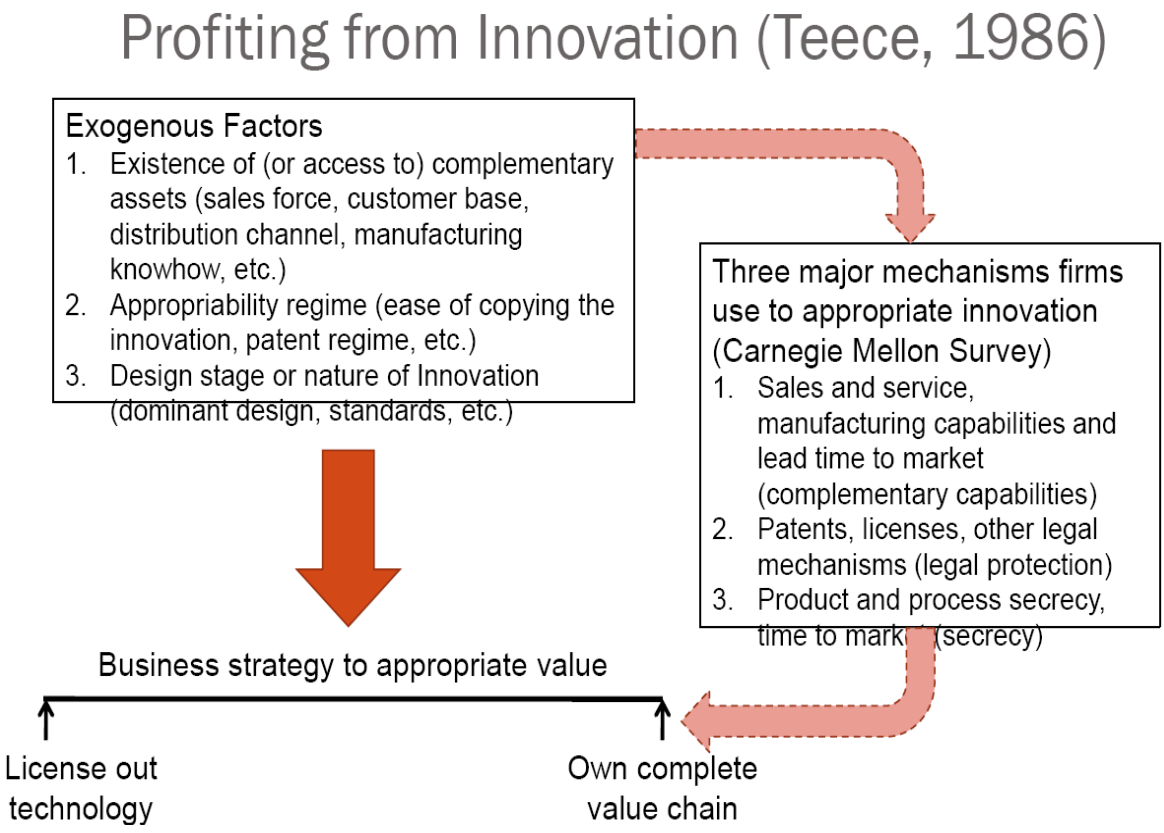
Fig 3

2.3 What is the relationship between the openness of firms' search strategies, and their innovation performance?

According to Laursen & Salter, openness (breadth and depth) leads to greater innovative performance. Benefits to openness are subject to decreasing returns.



Laursen & Salter, 2006



3. Research methodology

One random sampling frame of adult-aged individuals who reside within India was used to recruit participants to this web survey. My randomly selected sampling frames were selected from different industry professionals. I completed the survey within 120 days period with a sample size of 183.

4. Objective of my research

The results of my research on corporate innovation shed light on a range of topics central to the pursuit of innovation in 2009, including the one foremost on people's minds: the current economic crisis. What impact will it have on organization's strategies and objectives? What will it mean for innovation investment, a critical measurement of long-term competitiveness? How are leading organizations counteracting and even taking advantage of the challenges they face?

This research discusses these and many other issues related to innovation.

5. Research Findings

Exhibit 1: Innovation remains a top strategic focus for the majority of companies

Current economic uncertainty notwithstanding, innovation remains a top focus for the majority of the organizations. Fully 67% of respondents identified it as one of their

top-three strategic priorities, and only 8 percent said that innovation was not a priority.

Table 1

Top priority	27%
Top-three priority	40%
Top-ten priority	25%
Not a priority	8%

Exhibit 2: Return on innovation spending

Fifty-eight percent of respondents mentioned that they are satisfied with their company's return on innovation spending.

Exhibit 3: Raise in innovation spending

Most organizations expect to raise innovation spending in 2009, but they are growing increasingly cautious. Sixty-one percent of organizations plan to raise spending in the year ahead. And significantly, sixteen percent of companies expect to reduce innovation spending in 2009.

Table 2

Raise innovation spending	61%
Remain the same	23%
Reduce innovation spending	16%

Exhibit 4: Measuring innovation

How do organizations determine whether and to what degree their innovation investments are paying off? Most organizations use a fairly short list of metrics. The two most widely used matrices are customer satisfaction and overall revenue growth.

According to the survey, the ranking of the matrices are:

1. Customer satisfaction
2. Overall revenue growth
3. Percentage of sales of new offerings
4. Increased margins
5. New-product success ratios
6. Number of new products or services

Exhibit 5: Type of innovation

Organizations can direct their innovation efforts at a range of objectives, from small upgrades to existing products to new offerings that spawn entire industries.

1. "New to the world" products or services that create entirely new markets. Eg ipod
2. New offerings that allow expansion into new consumer groups.
3. New offerings for existing customers
4. Incremental changes to existing offerings
5. Lower production costs for existing offerings

My question is "what types of innovations does your organization pursue?

- Product innovation (72%)
- Service innovation (64%)
- Process innovation (60%)
- Business model innovation (51%)

The examples of product innovation are Apple, Nokia, Tata group (Nano). Google and Amazon are the best example for service innovation. Cisco systems and Intel Corporation are the examples of process innovation. ITC's e-chaupal is offering product to BoP (Bottom of the pyramid) and this is an example of business model innovation.

Exhibit 6: What role does M & A play in your company's innovation strategy?

Mergers and acquisitions do indeed play a key role in many companies' innovation strategy. Only 16 percent of respondents said that M&A does not play a significant role in their innovation strategy. Thirty-one percent of respondents said their company engages in or has engaged in M&A to get access to new markets. Twenty-nine percent of them mentioned that they look to acquire businesses that will give them access to new markets in which they can deploy their innovative products.

Exhibit 7: The CEO is the biggest driver of innovation

Thirty-one percent of them mentioned that the CEO is the biggest driver of innovation. Nineteen percent of respondents mentioned that the President is the driver of innovation of their organizations. Ten percent of them told that the Chief Operating Officer is the driver of innovation.

Table 3

CEO	31%
President	19%
COO	10%
VP/ R&D	9%
CIO	8%
CTO	7%
VP/ Mktg	6%
CFO	5%
VP/ Strategy	5%

Exhibit 8: Barriers to innovation

The questionnaire defines ten barriers to innovation. Taking into consideration the focus of this paper, a set of eclectic factors that restrain innovation is considered according to three different categories:

1. Economic

2. Internal

3. Other factors.

First, the economic factors are viewed as a barrier when the firm's staff considers the risk and the innovation cost as too high.

Second, the internal factors are related to different strategic issues, such as the lack of financing sources and of skilled personnel, as well as the inflexibility of organizational practices and incomplete information about technology and the market.

Third, other restraining factors are associated with the non-responsiveness of the customers and the public regulation of innovative activities. Towards an analysis of the barriers to innovation and of the restraining factors of innovation at the firm level, a typology is proposed in Table 4.

Table 4: Typology of factors and barriers to innovation

Factors	**Barriers to innovation**
Economic	The high economic risk The high cost of innovation
Internal	The lack of financing The organisational rigidities The lack of skilled personnel The lack of information about technology The lack of information on the market
Other	The lack of customers' responsiveness The government regulations

The firms were qualified as innovative if they introduced in the market or firm products or processes that were technologically new or improved during the period of 2005–2009. As observed in Figure 1, from the sample of 20 firms, all answered that they had innovated products or processes. In accordance with the total of the sample firms and the analysis of Table 5, we observe that the main barriers to innovation are economic factors, namely the high innovation costs, the lack of financing sources and the high economic risk. Concerning the internal factors, the lack of skilled personnel and organisational rigidities should be stressed. The obtained results are similar to those of other previous researches carried out for the Portuguese manufacturing firms. The factors associated with the lack of information on technology and the lack of information on the market are less restraining to innovation.

Table 5

The high cost of innovation	30%
The lack of financing	21%
The lack of skilled personnel	17%
The high economic risks	10%
The organisational rigidities	8%
The government regulations	7%
The lack of customers' responsiveness	4%
The lack of information technology	2%
The lack of information on the market	1%

6. Conclusion:

Organizations can take steps that will vastly improve their standing amongst competitors, and they can position themselves optimally for an eventual economic rebound. Innovation can and should play a key part in that effort. Below are some innovation strategies that companies should consider implementing now, even though things continue to look very uncertain.

Stay aggressively invested in innovation. For organizations not fighting for immediate survival, now is the time, first and foremost, to sustain or even increase their commitment to innovation-especially since their competitors may be unable or unwilling to do so.

Change your business model in strategic ways. The perfect time to create a new business model is during a financial downturn, when it's harder for competitors to see, understand, copy or adequately respond to changes. Innovative approaches to rethinking not only which activities a company should engage in, but also how it should do so and who should take these initiatives on, are particularly likely to pay off during downturns, when creative moves are difficult to follow by the less courageous (or flexible).

Acquire or do M&A. The plunging stock market may offer a great opportunity to buy innovative companies- and their people, patents, products and competitive position- at steep discount. M&A activity will likely continue to increase as the recession drags on, with assets continuing to be available at significant discounts.

Recruit your competitors' talent pools. Exceptional people are always a scarce resource. As R&D budgets are cut and as funding tightens and job security rises, a

stable company with deep financial resources will find its drawing power disproportionately enhanced-and it should leverage that advantage aggressively.

Use innovation to attack competitors' profit strongholds. A company we will call Wolf was a large, diversified organization with strong positions in all sectors in which it competed. Another company, which we will call Sheep, was smaller, and its business was driven by a dominant position in a single sector. When a tough economy put Sheep under financial pressure, Wolf decided to attack Sheep's stronghold. Wolf used its strong innovation skills and excess production capacity to create a product line that competed directly with Sheep's 10 most profitable SKUs. Wolf's product line offered much lower prices and in some cases, better performance. Unable to profitably compete, Sheep was put up for sale- and bought by Wolf at a bargain price.

In times of crisis, leading companies take a more sophisticated and proactive approach. Organizations that win with innovation see the downturn as a chance to re-create their industry- on their own terms.

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