Innovation in a Re-emerging Economy: Lessons from the Hungarian Experience

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Abstract

A substantial body of literature exists on the role of innovation in stimulating growth. This paper examines the link between innovation, marketing strategy, the external economic environment and culture. It considers the experience of Hungary, a post-socialist country, which acceded into the EU on May 1, 2004, as an interesting environment to examine the relationship between these variables. The preliminary findings of qualitative research in this area are presented and these findings are extended to address potential implications for public sector initiatives in two areas; program design and management education and training.

Introduction

It is generally accepted that innovation is a key requirement for economic success (Hamel & Getz, 2004; Audretsch, 2004; Dixon, 2000). It has even been argued that the most dramatic examples of growth have been based on a platform of 'disruptive innovation'. (Christensen, Johnson, & Rigby, 2002)

While much has been written on the role of innovation on economic growth, including the influential work of Schumpeter from the 1930's and 1940's, only recently has there been a compelling case made to argue that external environmental factors are at least as important as internal company factors in stimulating innovation. In particular, certain location based advantages, as represented by elements such as preferential access to information and local institutions, and proprietary information flows can constitute competitive advantages that are difficult to overcome by those outside a given region (Porter and Stern, 2001).

The purpose of this discussion paper is to examine the types of innovative activities commonly observed in Hungary prior to its accession into the EU, and develop implications for the type of public programs needed to support innovation in Hungary, and possibly in the other countries which were part of the recent EU enlargement.

The preliminary findings are based on qualitative research conducted in 2003. These appear to indicate that the combination of significant changes in the economic environment and the entry of large foreign multi-national firms have contributed to suppressing product innovation and yet have driven market innovation in Hungary. This represents both an opportunity and a challenge for the public sector in terms of programs to encourage research and development as well as education needed to create the climate to stimulate various forms of innovation.

Background

What makes 'innovation' a fascinating research topic is that in spite of the significant research and analysis on this topic, we still have so much to learn in this area. Although both the academic and business literature abounds with studies of innovation, there is no clear, universal agreement of the precise definition of innovation. Nevertheless, innovation is widely viewed as the core component of a healthy organization and a primary source of competitive advantage which promotes wealth creation (Christensen, Johnson, & Rigby, 2002; Calantone, Cavusgil, & Zhao, 2002)

However, what's interesting is that everyone can recognize innovation when they see it. Innovation must involve a creative thought process, it must be unique, and it must generate observable, measurable value.

Arguably, one of the more cogent definitions of innovation is to be found in Theodore Levitt's work. According to Levitt, "To be innovative, an idea must be creative and it must be implemented" (Levitt, 2002). It is this definition which was adopted in the preliminary research discussed below.

There is even more to learn with respect to the link between innovation, marketing strategy, the external economic environment and culture. The experience of Hungary, a post-socialist country, which acceded into the EU on May 1, 2004, presents an interesting environment to examine the relationship between these variables.

Why consider innovation in Hungary? It is proposed that the nature of innovation may be somewhat special in the economic environment which has prevailed in Hungary over the past decade. Since 1989 there have been significant structural changes in Hungary; including, but not limited to, the collapse of traditional markets, the entry of large foreign multinational companies and the creation of a broad range of joint-ventures. This has contributed to increasingly intense competition in a period of economic recession, high levels of unemployment and the lack of ready access to capital. These factors and others have led to severe pressure on efficiency, forced entrepreneurship, structural, managerial and cultural changes in companies, more demanding customers, less purchasing power and greater price consciousness. (Beracs, Bauer, Kenesei and Kolos, 2002)

Hungary is arguably the most successful of former Soviet Bloc countries in transitioning from Communism to a market economy in a democratic society. The 2002 World Fact book indicates that Hungary has recently enjoyed strong economic growth. It is estimated that the private sector generates over 80% of GDP and foreign ownership and investment in Hungarian firms is fairly extensive, with cumulative foreign direct investment totaling more than $23 billion since 1989. (World Fact Book, 2002)

Since 1996 growth has averaged 4.5% and inflation has fallen to below 7%. Further, Hungary has been one of the leaders in attracting foreign direct investment (FDI) capital and boasts one of the highest levels of Information and Communication Technology (ICT) in the region (Radosevic, 2002). Indeed, ICT contribution in Hungary to both GDP growth and labor productivity over the period 1995-2001 has been impressive. It has been reported that the contribution of ICT-producing sector in Hungary to GDP growth for the period 1995-2001 was 43.2% and the contribution to labour productivity growth was 28.4%. Accordingly, Hungary ranked ahead of many other counties in the region, such as Poland and Slovenia, while just behind the Czech Republic. (Piatkowski, 2004) It is also noteworthy that the contribution of ICT to growth in Hungary over this period was higher than the average for the EU-15 nations and almost as high as that in the USA for the same period (Piatkowski, 2004).

Hungary is now considered to be one of Europe's fastest growing and open economies. But there has been a price to pay for this growth, especially in terms of the impact of foreign ownership, as foreign owners now control 70% of financial institutions, 66% of industry, 90% of telecommunications and 50% of the trading sector. (US Dept of State, 2004) It is this combination of major structural and economic change, when considered in the light of this nation's strong track record in attracting foreign direct investment, and solid advances in technology which makes this study of innovation interesting.

While some may believe that Hungary just has a little way to go before it accedes into the EU as an equal, others point to growing potential threats. Hungary has struggled in fully addressing problems related its budget deficit, balance of payments deficit and foreign debt. (Buss, 2000) Also, there have been recent reports of a drop in FDI, and western firms such as Phillips moving facilities to other lower labor cost location such as China (Horvath, 2003).

So, given the scope of change and anticipated future change in the environment, a number of questions present themselves: What can we learn about the relationships between innovation, marketing strategy, the external economic environment and culture based on the experience in Hungary? What encourages innovation during a period of significant structural change during which many companies were either transformed from a government owned company to private ownership, or were newly developed in the transition from a centrally controlled economy to an open market economy? Do companies in Hungary now have more aggressive goals? Do these goals require creative, new ideas? Do they encourage employees and top management to find new opportunities and significantly alter their business approach?

The preliminary research described below was conducted in order to gather general data and provide a basis for narrowing the scope for more substantive future research.

Research Method

The method for the initial qualitative research consisted of in-depth interviews with senior executives in a cross-section of Hungarian companies. A non-probabilistic sample was selected. The intent was to cover a broad range of industries and sectors. There was no intention to draw a representative sample but rather to cover the broadest range of companies possible in the most efficient manner.

Fourteen interviews were conducted in 2003. Of these, four were with executives in larger corporations and ten were with executives from small and medium size companies (SMEs). Interviewees came from industry sectors as diverse as pharmaceuticals, telecommunications, agricultural machinery, manufacturing, and software – data security service providers.

The topics covered during these interviews were influenced by a review of recent work done by Hamel, Drucker and Sutton on this topic. In determining the areas of focus from an internal perspective, particular emphasis was placed on Hamel's 'Design Rules for Innovation' and Drucker's comments on industry and market changes, demographic changes, and changes in perception (Hamel, 2000; Drucker, 2002; Sutton, 2001). This emphasis was balanced with consideration for the external environment, including factors such as preferential access to information and information flows (Porter & Stern, 2001).

An attempt was made to explore four main areas of interest during the interviews;

1. What has been the evolution of strategy formulation over the past decade with specific reference to the role of marketing strategy?
2. What changes in strategic objectives have occurred over the past 5-10 years?
3. What changes have materialized in the perception of business scope?
4. What has the company's experience been with respect to the use of creative ideas, innovative solutions?

In reviewing the process of strategy formulation today versus 5-10 years ago, questions were designed to reveal whether Hungarian firms have adopted techniques commonly used in Western counties and whether there has been a significant change in terms of who is involved in strategy formulation.

With respect to changes in strategic objectives, an attempt was made to determine the relative degree of aggressiveness of strategic objectives. Were they sufficiently aggressive to require a radical change or could small, incremental improvements meet strategic objectives?

In terms of exploring the perceived scope of the business, the intent was to examine whether the definition of business scope was sufficiently elastic and flexible to enable and even to require innovation.

Finally, with respect to the use of creative ideas and innovative solutions, an attempt was made to discover what was considered to be creative, what was perceived to be innovative, what type of innovation was perceived to be most common. Understanding of course, that respondents had differing views on what 'creative' meant.

Preliminary Findings

Recalling that the objective of these interviews was simply to gather data for use in determining the direction of more substantive future research, it is important to emphasize that one should exercise caution in generalizing from the observations cited below.

With respect to the evolution of strategy formulation over the past decade respondents from both large corporations and SMEs reported that, during the period from 1989 through to the early to mid 1990's, the significant structural end economic changes which occurred in Hungary drove firms to focus on survival. Not surprisingly, strategy formulation and innovation took a back seat to consolidating operations and taking action to assure continued existence during this period. Several respondents reported market innovation, though. These innovations involved changing the approach how they serve market segments, or shifting their definition of their market segments.

The respondents' comments are confirmed by other researchers (Chikan, Czako, 2002). Researchers have stated that the transition period was over and market economy arrived to Hungary by 1996. "The firms perceived their economic and political environment as being more predictable" and that the market conditions were consolidated. Successful Hungarian firms were considered to reflect many of the characteristics of successful western firms; including but not limited to, strong leadership, a customer orientation, the effective application of technology, teamwork, and relationships with research institutions (Beracs et.al, 2002; Hooley and Beracs, 1999).

A significant change was reported to have occurred in the area of strategy formulation over the past decade, with the largest changes occurring in the mid and late 1990's. While many companies didn't have well thought strategies ten years ago, the majority of respondents reported that their companies are now engaged in formal strategy process today. Respondents from larger companies, with parent companies in Western Europe, reported the existence of an agreement on a decentralized strategy formulation process based on a set of negotiated parameters with their headquarters. Respondents from SMEs reported that there is a systematic method of strategy formulation has evolved in their firms over the past few years.

In smaller and medium sized companies the centralized strategy formulation was reported as common practice. Although management was perceived to be familiar with the modern strategy formulation methodology, (Porter, 1996) the top-down method was cited as most frequently used, especially in the case of small and mid-sized manufacturing companies. One reason for this is the question of responsibility. Respondents implied that middle management did not take the responsibility to make decisions, rather leaving it to the owner-top manager group. However, distribution companies were reported to be visibly relying on their sales people's knowledge even though the final decision was typically made by the top management. Understandably, the general sense was that a larger change in terms of strategic planning practices took place in the mid 1990's than there has been in the past five years.

With respect to the question of ambitious strategic objectives, none of the respondents reported having sufficiently aggressive strategic goals which would demand radical innovation. There was general agreement on the view of having small but consistent growth from year to year. After surviving the best part of a decade in a somewhat unstable business environment, respondent mentioned that it was reassuring to be in a fairly stable position and they wished to preserve that position by sustaining a small, incremental growth rate.

In terms of changes in the perceived business scope the intent was to determine whether companies define a broad enough scope of business to enable innovation. Generally, respondents indicated that their firms stayed within their industry boundaries, but in some cases, additional industry related businesses were defined within scope. While this reflects some level of flexibility; however, one might wonder whether that will be sufficient to significantly stimulate innovation. Further, respondents reported that the scope of the business in Hungary is largely determined by two major factors: accumulated knowledge within a firm, and market forces.

With respect to exploring the use of creative ideas, innovative solutions, the intent was to investigate any prevalent trends. Respondents clearly indicated that new product innovation was infrequent in Hungary over the past decade; however product modification and market approach innovation was more common.

Respondents did not talk extensively about new product or process innovation. In the process area, most of the new technologies had come to Hungary in the first part of 1990s. These technologies were not new to the world but were new to the companies in Hungary. Joint ventures were reported to have played a key role in this respect.

It was reported that new product and process innovation was most frequently done by the headquarters of parent companies or joint venture partners. Often Hungarian subsidiaries provided new ideas for innovative products, but those were evaluated and decided by the headquarters.

However, several of the respondents did report some form of market innovation. This involved changing the approach in how they serve market segments, or shifting their definition of their market segments. Respondents claimed that their companies would now like to develop deeper customer relationships through product modification, and higher quality of products, and move beyond simply competing on price. The increase in innovation appeared to be largely in the area how the companies approached marketing their products and services. Respondents reported that their companies are now attempting to make available valuable information on different approaches to need satisfaction and define customer segments in this way. It was also reported that innovative techniques were used to find new applications for their traditional products and create new markets in this way.

The implication of these preliminary findings is that Hungary will need to harness and nurture its capability to innovate. Hungary, as part of the EU, will need to build this innovative capability in part to address fundamental issues of productivity and cost containment, but it will also need to bolster its performance in new product and process innovation to stimulate growth.

Implications for Public Sector Programs

These preliminary observations trigger certain implications for public sector programs in two areas; program design and management education and training.

With respect to public sector programs to motivate business to innovate, one might conjecture that public sector programs need to focus on encouraging applied research with rapid commercial feasibility as opposed to fundamental research where it may take years to achieve commercial results. Why? Simply because Hungary needs to rapidly develop the capability to compete within the EU.

This appears to fit in with the type of research capability presently in place. Among larger corporations; especially those owned by foreign corporation, one would typically find relatively small research groups. The bulk of the research resources are frequently located at the parent companies' headquarters or research centers. Similarly, for SMEs, one would find relatively small groups of resources dedicated to research. When considered in the light of Hungary's recent entry into the EU, one might argue that a series of quick wins would be more productive than a major find which requires long term effort.

Further, public sector program designers should note that Hungary is one of the few post-socialist countries (as well as Poland) which offers tax incentives for R&D and the designers of other public sector programs should be familiar with those incentives to avoid redundancy. (Euroabstracts, 1998) A further point to note is the apparent lack of legislation to protect intellectual property rights which appears to be an issue and a risk worthwhile for program designers to bear in mind. (CORDIS, 2002)

Public sector programs can also have a significant impact in the area of senior executive training and education.

It is generally accepted that innovation thrives in a corporate environment where there is openness to considering new ideas. This calls for a corporate climate in which there is co-operation and collaboration across levels and divisions, and an atmosphere where innovation is prized and failure is not fatal (Glor, 1998).

More recently, Hamel has made a compelling argument for the need to create an open market for ideas, talent and capital (Hamel, 2000).

Yet the majority of current senior managers in Hungary grew up in a Communist system and then experienced a difficult transitional period during the past decade. Given this background as well as the information provided by respondents, it appears that the prevalent management style in Hungary is still characterized by the type of command and control behavior which may constrain the desired range and type of innovative activity.

Public sector program designers already know that management typically determines the organizational characteristics, sets the mood for corporate climate, and determines whether or not the organization is profoundly interested in innovation. Management also has ultimate power over whether there are investments made in capable project management, appraisal, and resources (Glor, 1998).

Accordingly, public sector educational and training programs on both contemporary leadership styles and advanced project management, while not likely to have immediate results, are likely to add value in paving the way for the creation of a future, innovation friendly, business environment.

Summary

The preliminary findings of this research are very much in line with Porter and Stern's contention that the external environment for innovation is at least as important as internal factors. These early findings appear to indicate that in the case of Hungary, and possibly other post-socialist countries in Eastern Europe, where there have been fundamental structural and economic changes, location *really* matters with respect to innovation.

Innovation was considerably suppressed due to the significant economic, structural, and political changes which occurred in Hungary in the early 1990's, as firms struggled for survival.

More recently, while the market environment has not been favorable for new product or process innovation in Hungary, the environment is practically forcing new idea generation and execution of creative solutions regarding a firm's market approach and marketing practices.

The implications for public sector programs are most evident in two areas, program design and education. While additional work is needed to confirm these preliminary indications, it is proposed the interests of Hungary, and potentially other Eastern European countries, which were part of the May 2004 EU enlargement, would best be served by public sector programs which encourage and provide financial support for applied research with *rapid commercial feasibility*. Further, four decades of management experience in a centrally controlled economy, complemented with the experience of the early 1990's has done little to create the type of contemporary management environment needed if innovation is to thrive. Accordingly, there is an apparent and imminent need to develop educational programs in the areas of *leadership and project management* which are needed for innovation to thrive and flourish.

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