

# Transition to Innovative Company – the Case of Slovenia

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## Abstract

The common characteristic of companies in the transition countries is that they attained competitiveness by low prices and not by new designs, a product innovation or new manufacturing methods. It was the reason that we investigated the current capabilities of Slovenian companies to reveal the major reasons for such situation. Taking into account the main obstacles for Slovenian companies to innovate we determine and describe the theoretical model which could facilitate the transition process of Slovenian companies to innovative companies.

**Keywords:** innovative company, transition, human resources

## 1 Introduction

The need for companies to become more innovative has probably never been greater. It seems to be the only way for them to successfully compete on markets where dynamics of competition has never been greater. According to D'Aveni (1994) an entirely new competitive situation has arisen. It is nicely summarised under the concept of "hyper-competition" where the key competitive success factor is the company's ability to constantly develop new products, processes or services providing the customer with increased functionality and performance. In a hyper-competitive environment, companies cannot count on a sustainable competitive advantage, but must continuously develop themselves in new directions.

Bolwijn and Kumpe (1990) investigated the evolution of market requirements and consequently the evolution of industrial performance criteria on the sample of multinational producers of high volume and mass products. They revealed that these companies have passed through various stages of the same development (see Table 1).

During each phase successful companies grow mainly by quickly and adequately responding to the new market requirement. A company's transition to the new phase is possible only if it possesses all capabilities required for the previous phases and starts to develop newly required capability. Although each phase differs considerably from previous ones, newly acquired capabilities contain the previous ones and reinforce them. Therefore, there is a little chance for companies that they can skip a phase, or

starts on the next phase while still heavily involved in the transition from the previous phase.

**Table 1:** Evolution process of large firms in the period 1960 – 2000

	Market requirements	Performance criteria	Ideal type of firm
1960	Price	Efficiency	The efficient firm
1970	Price, quality	Efficiency + quality	The quality firm
1980	Price, quality, product line	Efficiency + quality + Flexibility	The flexible firm
1990	Price, quality, product line, uniqueness	Efficiency + quality + flexibility + innovative ability	The innovative firm

Source: Bolwijn and Kumpe (1990)

The objective of the paper is to assess the current capabilities of the Slovenian companies and to compare them with those significant for innovative company. The paper is organised as follows. In Section 2 current capabilities of Slovenian companies are described. Desired capabilities are presented in Section 3. Some ideas for further research are given in conclusions.

## 2 Current capabilities of Slovenian companies

The common characteristic of the countries in transition is that the value added is stagnating on a level which is only a fraction of that in the EU, return on capital is low, and does not allow investments in new technologies. Competitiveness is attained only by low prices and not by new designs, a product innovation or new manufacturing methods. One of the reasons for low value added is the technological gap between the transition countries and their counterparts in the EU. The lag behind the EU has been increasing since the growth rate in countries in transition is too small to catch up with the EU (Kos, 1999).

The level of innovativeness of Slovenian companies is low (Bučar, Stare, 2002). The most important impediments to successfully converting the inventions of small businesses into market products were: limited funds for the financial support of inventors; a serious lack of knowledge related to the evaluation and marketing of innovations; and the deficient entrepreneurship culture and mindset of innovators. Let us illustrate this finding with some data.

A quarter of Slovene companies have not introduced any new product or service in the last two years. Medium companies lead in innovativeness, in which almost a half of these companies have introduced two or more new products or services. New production processes have been introduced in half of Slovene companies in last two years (Rebernik et al., 2000).

Slovenian companies applied quite different ways to achieve product advantage than the companies in the developed countries. The share of companies which successfully

compete with unique new products is very small. The superior benefit to cost ratio was the main source of the product advantage of their new products. The lack of market information was probably one of the reasons that other possibilities which were successfully applied in the companies in other countries were not used to achieve the advantage of Slovenian new products. Slovenian companies did not use enough detailed market studies and researches but get the market information at fairs and exhibitions, followed by competitors, suppliers and consultants outside the company. Research institutions and the universities are less likely to provide them with information. It seems that the only way that Slovenian companies can compete on their target markets is to satisfy their customers by offering them more than their competitors within a competitive price of a new product (Mulej et al., 2001).

The lack of innovation culture hampers innovation orientation not only in companies but also in public sector institutions and in the administration. To a certain extent, this is related to the lack of entrepreneurship in the past economic system and to the prevailing value system in Slovenia, which is risk averse (Bučar, Stare, 2002). The biggest gap Slovenia faces with regard to innovative activity is not in creating inventions but in generating market value out of them.

Also the results of the empirical study regarding strategy types as well as the activities in the field of human resource management showed the lack of innovative approaches in Slovenian companies. Using Miles and Snow strategic typology (1978) with four strategy types (reactor, defender, analyzer, prospector) the assessment of strategic types in Slovenian economy showed that the majority of companies considered did not pursue the proactive - innovation strategies significant for prospectors (74% companies) in spite of the fact that the environment is becoming more and more turbulent (Leskovar-Špacapan, 1997). There are several reasons for that situation. One reason could be human resource management. Some of the human resource practices were evaluated by Slovenian human resource managers (Leskovar-Špacapan, 2001, 2002). Considering these results it is obvious that the majority of companies paid little attention to activities such as: selection of employees according to strategic needs, training programs according to strategic needs, training to increase flexibility, motivation and commitment of employees, rewards based on competence, rewarding promote innovation, appraisal based on results, reward based on long-range results, training for changing culture and values, flexible promotion, promotion based on wide-range experience and team-work, human resource planning part of strategic planning etc. We can conclude that human resource activities in Slovenian companies did not support innovation strategies. Therefore managers need to rethink the role of these practices. They could have a lot of difficulties by ensuring supportive human resource activities in a short time.

Taking into account all empirical results available we assume that the majority of the Slovenian companies can be classified as quality company (Table 1). That means that for companies in Slovenia and in other developing countries is very important to find fast enough and successful way of their transition to an innovative company.

### **3 Desired capabilities of an innovative company**

A company's capacity to innovate can be thought of as the potential of that company to generate innovative outputs. As such it is dependent upon the resources and capabilities that the company possesses. Review of literature and especially the results of the empirical studies provide evidence that innovation strategy, culture, internal processes and capability of understanding the characteristics and trends of external environment are the key determinants of an innovative company.

#### **3.1 Innovation strategy**

In new competitive situation, a key role of management is to deploy resources available to the company in a way that minimizes the impact of environmental threats. Through its strategic posture, a company selects and interprets its environment, responds to those elements it considers fixed, and adapts its strategy to the requirements of the environment. Companies with an aggressive strategic posture are the ones that initiate actions to improve their competitive position rather than react to competitive actions. Companies that have a new product strategy in place are more successful than those that do not (Scott, 1997). In the pursuit of innovation, companies should develop innovation strategy by which top management needs to: create a sense of urgency; develop a customer focus at every level; provide employees with the skills they need to work effectively; allow the company to absorb one challenge at a time; and establish clear milestones and review alternatives. The goal is not competitive imitation but competitive innovation. Informal structures, speed of response and free sharing of information are necessary.

Neely (2001) found in their study that innovative companies had a strong culture, a clear sense of mission and purpose, a well thought out strategy and business philosophy of continuous improvement, driven by total customer satisfaction and total quality management.

A new products vision and strategic roles help a company specifically identify the areas in which new products will compete and the potential ways they can help support existing business lines and establish new markets. Requisite roles direct a company to develop new products that defend and bolster its current line of products. These are generally line extensions, revisions and new-to-the company products. Expansive roles direct a company to think outside the box and develop products that will truly expand the business in which it competes. Expansive roles, most often, direct a company to look at new markets, new benefits, new technologies, etc. Obviously, the returns are greater when developing expansive products, but so is the level of risk (Scott, 1997).

Ideally, a new product strategy should include: a desired three-to-five year new product revenue target from new products; a specific vision and strategic roles that new products will fill for the company; an estimate of development expenditures and investment capital needs for at least the next two to three years; and top management's expectations for, and commitment to, new products.

Developing breakthroughs necessitate a totally different type of orientation that requires much time, resources and dedication. Breakthrough management, thus, is proactive and strategic rather than being opportunistic (Samli et al., 2000).

The characteristics of innovation best practice are: leadership by visionary, enthusiastic champions of change; knowing the customers; constantly introducing new, differentiated products and services; delivering products and services that exceeded customer expectations; unlocking the potential of people by good communications, team work and training, flattering the organisational pyramid and creating the customer focused culture.

### **3.2 Innovative culture and climate**

Culture is a primary determinant of innovation. It is defined as the deepest level of basic values, assumptions and beliefs, which are shared by the company's members and are manifested by actions especially from leaders and managers (Cook, 1998). Organisational culture is perceived as a set of collective norms, which influence the behaviour of members within the company. These values, assumptions and beliefs are manifested in many ways such as routines that take place within a company, the language used, the stories, legends and myths that are told and retold and finally the symbols that are found through the company. Organisational culture should nourish innovative ways of addressing problems and finding solutions. To encourage creativity the culture need to be »innovative« (divergent and learning) and »supportive« (empowering and caring) (Brand, 1998). Every employee needs to understand and accept the core principles and values, which apply to everyone in the company. Culture that encourage and support risk-taking also enhance creativity. People are generally risk-averse and reluctant to change despite the fact that the majority claims to value novel ideas. People like most that which is familiar to them. Creative culture also should encourage self-initiated activity, where individuals and teams own problems and their solutions, so that intrinsic motivation is enhanced. The employees should be encouraged to challenge their assumptions and perceptions regarding procedures, products and processes. Individuals and teams should have relatively high autonomy regarding their work and a sense of ownership and control over their own work and own ideas (Amabile, 1996). It is also suggested that employees can be encouraged to think creatively if they are not afraid of criticism and punishment. Top-management must take a long-term view in order to tolerate some mistakes. Creativity should be considered as desirable and normal and innovators considered as role models to be identified with.

Because culture can directly affect behaviour it can help a company to prosper. An innovative culture can make it easy for senior management to implement innovation strategies and plans. Innovative culture can do things that formal systems, procedures or authority cannot. Senior managers play a critical role in shaping culture, since they are able to give priority to innovation.

Also organisational climate which is concerned to a large extend with »atmosphere« is important for innovation. The climate of company is inferred by its

members through the company's practices, procedures and rewards systems deployed and is indicative of the way the business runs itself on a daily and routine basis. Scheider et al. (1996) define four dimensions of climate: nature of interpersonal relationship, nature of hierarchy, nature of work, focus of support and rewards.

Leadership style also influences innovation. There is a consensus that a democratic, participative leadership style is supportive to creativity, whereas more autocratic styles are likely to diminish it. Leader's vision is a key factor when managing creative individuals. Vision represents shared values and provides meaning. It reflects what the company's future could and should be. Leaders must effectively communicate a vision through any available formal and informal channel of communication and constantly encourage employees to be creative. The vision must be communicated from the highest to the lowest levels of management. The leaders should possess the ability to constitute effective work groups. Work groups should reflect a diversity of skills and consist of individuals who trust and communicate well with each other, challenge each other's ideas in constructive ways and are mutually supportive. Leaders should be able to balance employees' freedom and responsibility, to show concern for employees' feelings and needs, recognise creative work, encourage employees to provide feedback and facilitate skill development (Amabile, 1998).

Creativity/innovation is truly enhanced when entire organisation supports it. Structures in creative companies tend to be flexible, with few rules and regulations, loose job descriptions, and high autonomy. Companies should adopt flat structures since this enable for important decisions to be made at all levels. Organisational structure refers to the way employees are organised into teams (informal or formal), and interact within teams; the set of roles and goals of each team, and how it is being related to organisational strategy.

### **3.3 Internal processes**

They influence the company's capability of integrating information from different sources and encouraging personnel to work together to generate innovation (Neely et al., 2001). We assume that innovation, knowledge and human resource management are the most important internal processes.

#### **3.3.1 Innovation management**

Innovation management is defined as the set of managerial activities that together attempt to control the process of innovation. It can be described by the following activities:

1. Technological integration. This refers to the integration between technologies and the product-markets of the company and emphasizes the importance of satisfying the customer with the innovations of any company – technology development needs to be integrated with product development also at the strategic level.

2. The process of innovation. By this is meant the cross-functional process of activities that create innovations across departments of the company.
3. Strategic technology planning. This refers to the planning of technology and/or competence projects with the aim of maintaining a balanced portfolio of technologies and/or competencies.
4. Organizational change. Innovation is closely related to organizational change. Now matter how small or large the innovation, it will affect the organization with needs for new knowledge, new markets, new employees and so on. Thus, it is difficult to speak of innovation without considering organizational change.
5. Business development. Innovation should be seen as a means for creating new and improved business for the company.

### 3.3.2 Human resource management

Organisational creativity/innovation also requires companies to make strategic choices with regard to their human resources. Creative companies must explicitly strive towards the attraction, development and retention of creative talent if they want to remain competitive. Company should hire people who are knowledgeable, intelligent, creative in their thinking processes and willing to work tenaciously to attain their goals (Brand, 1998). Hired people should have broader interests, are eager to learn and prepare to take some risks. In order to develop and retain their employees companies must provide sufficient resources and training, encouragement for developing new ideas, time to work on projects and financial support.

Companies need people with different kinds of skills to succeed in all steps of innovation process: idea generators who create new insights, information gatekeepers linked with knowledge sources, product champions who advocate adoption of new practices, project managers who undertake the technical functions needed to maintain an innovation project on track; and leaders who actively encourage, sponsor and coach others to pursue innovation (Roberts, 1988). Innovative companies need innovative people to work and cultivating innovators is one of the most important things that companies can do to make sure that they lead and not lag change (Kanter, 1997).

If successful creativity and innovation can lead to manifold benefits for a company there are important implications for training and development. The process of stimulating creativity and innovation is fundamentally based on building the intellectual capital within the company, that will yield the competencies and capabilities for improved performance. In this respect learning organisation and the core activities of training are important: needs identification, setting objectives, designing and delivering content, getting feedback, evaluating results. Learning organisation, knowledge management and training itself has a central role.

Communication and collaboration are well recognised factors in stimulating ideas since individuals, groups and company can learn from each other only if they communicate (Nonaka and Tekeuch, 1995). Thus cross-functional communication, by means of internal communication or cross-functional teams, enables people to become involved in all parts of the company and makes innovation useful to everyone.

Openness, sharing and knowledge transfer are crucial factors in ensuring that ideas are implemented into valuable organisational innovations, by increasing the quantity and quality of information and helping people to gain different perspectives. The flow of ideas across a company needs to be facilitated by participative management and decision-making.

Creative ideas can arise from anywhere, at any time, but if managers seek to harness creative individuals to foster innovation, they should not only provide a company structure in which innovation ideas are encouraged to appear but also ensure an appropriate reward system is in place. The range of rewards that innovators are likely to value are important for a number of practical reasons such as their performance attainment, retention and recruitment. Content of reward packages might include (Adair, 1990): stimulating contacts through colleagues able to provide intellectual stimulation; the encouragement of creative individuals to take calculated risks since they respond well to this environment; the company should provide the freedom to innovators to work in the broad areas that interest them, provided that the company's mission is properly focused and communicated; recognition since appreciation can be much more important to the individual than money. It is important to create a culture of pride by relating success stories and inspiring employees through charismatic leadership. Individuals often want acknowledgement for contribution, recognition, power, or independence as much as money.

### 3.3.3 Knowledge management

Knowledge management is often cited as an antecedent of innovation (Carneiro, 2000; Dove, 1999). Knowledge comprises data, information and tacit knowledge. Knowledge management is the management function that creates or locates knowledge, manages the flow of knowledge within the company and ensures that the knowledge is used effectively and efficiently for the long-term benefit of the company (Darroch, McNaughton, 2001a).

Before it can be managed, knowledge must first be created and applied in a company. The knowledge creation process demands interaction and involvement of people, technology and information. If a company wants to become a knowledge organisation, it must start with quality training. Establishing a quality culture among the people is greatly needed. When the management and employees acquire the general understanding of quality concepts, it will initiate the organisational learning process, which leads to continuous improvement. If the company has already achieved a quality standard, then knowledge creation could be achieved through promoting employee creativity and excellence.

### 3.4 External environment

There is no doubt that the most important impact on innovation comes from the company's capacity to understand environment (business implications of technological and market trends). Therefore, the main role of environmental analysis is to detect,



monitor, and analyse those current and potential trends and events that will create opportunities or threats to the organization. Managers require complete and updated information and, according to their level of activity, they hope to rely on their knowledge workers.

Companies make business in different environments. Environmental uncertainty is characterized by the rate of change and innovation in the industry as well as the uncertainty or unpredictability of the actions of competitors and customers. More specifically, it is the »amount und unpredictability of change in customer tastes, production or service technologies, and the modes of competition in the company's principal industries (Özsomer et al., 1997). Environmental hostility refers to the degree of threat to the company posed by the multifacetedness, vigor, and intensity of competition and the cycles and swings of the company's industry. A hostile environment is characterized by intense price, product, technological, and distribution competition, severe regulatory restrictions, shortages of labor and/or raw materials, and unfavorable demographic trends.

Behind the whole process of the successful innovation is the company foresight. This is partially related to what Calantone and Li (1998) call market knowledge competence. They define it as the processes that generate and integrate market knowledge. The market knowledge competence in new product development is defined as a multidimensional structure comprising three processes that generate and integrate market knowledge: learning about customers, learning about competitors, the marketing-R&D interfaces.

Learning about customers generates knowledge that allows a company to explore innovation opportunities arising from emerging market demand and reduces potential risk of misfitting customer needs. This process refers to the set of behavioral activities that generate knowledge pertaining to customer current and potential needs for new products. The process has three aspects: customer information acquisition, interpretation, and integration, as proposed by organizational learning theory (Huber, 1991).

Cooper (1992, p. 124) identifies learning about customers a major contributor to a company's new product advantage. Therefore the company's ability to conduct market analyses is decisive for the company's consumer focus.

Market research results frequently produce negative reactions to discontinuous new products (innovative products) that later become profitable for the innovating companies. Companies which listened to their customers and provided more and better products of the sort they wanted lost their position of leadership. Trott (2001) mentioned two main reasons which limit the effectiveness of any market research. The first is a high installed base effect. It is the massive inertial effect of an existing technology or product that tends to preclude or severely slow the adoption of a superseding technology or product. Switching costs may also be a significant impediment to the adoption of a new consumer product. The second factor is information symmetry. The low information symmetry between buyer and consumer will limit the usefulness of any market research undertaken. Knowing what customer

think is still very important, especially when it comes to product modification or additional attributes.

Learning about competitors, on the other hand, enables a company to understand weaknesses and strengths of rivals, and to create benchmarks for new product development. From an information perspective, market knowledge generated from the two processes creates an information asymmetry in favor of companies that are more intensive in customer and competitor learning. This process refers to the set of behavioral activities that generate knowledge about competitors' products and strategies. Similar to customer learning, it involves information acquisition, interpretation, and integration. In a given product market, companies generally can be classified into one of three positions: inferiority, parity, and superiority. In the first instance, a company is inferior to its major competitors on key dimensions of product innovation, such as technology ownership, resource control, and product characteristics (functions, forms, performance). In the second case, a company gains comparable footing on these dimensions. In the third case, a company is superior to its major competitors. A company with more competitor information can turn its knowledge to product advantage in a number of ways.

The marketing-R&D interface is the process in which marketing and R&D functions communicate and cooperate with each other. This process is critical because it integrates knowledge about market needs with knowledge about how to create a product to meet the needs. A close interfacing improves the prospect of new product acceptance in the market, whereas lack of integration increases the degree of the mismatch between market needs and what is developed. A close marketing-R&D interface allows a company to realize its technological capability more efficiently.

Understanding external environment refers on technological trends, too. Technological changes are sustainable or disruptive. The sustainable change corresponds to a situation where a series of technologies replace one another within the same type of S-curve, i.e. measured by the same performance parameter over time. Thus, the technologies can easily differ from one another, but many other things are constant over time. Focus is typically on developing the technologies of which the products consist in order to offer new generations of improved products as measured on the same performance parameter as the old products (products that get lighter, stronger, smarter). Even though products or processes are to solve the same problem as earlier, new technologies may offer add-on features and new market opportunities. The speed of technological changes is the most defining feature of how innovation management should be carried out in the sustainable situation.

Disruptive changes appears when technology on which the products are based changes disruptively, leaving the field open for an entirely new kind of products and rendering the old products obsolete one stroke and destroying entire industries in the process. Because of the surprising nature of such changes, established companies in the old industry rarely see the change coming and go under as a result of creative destruction. The creative part of this process is that a new industry is created with new companies taking advantage of the new situation. Christensen's empirical evidence (1998) clearly shows that disruptive technological change favours new companies,

whereas sustainable change favours established companies. The innovation process is an implicit activity in the thinking of a very small number of key individuals applying and building tacit knowledge and experience in the process. The innovators are themselves representatives of the customers, thereby having a unique understanding of the market side of integration. Strategic technology planning is not a formal activity at all. Companies in this situation usually develop entirely new company.

## 4 Conclusion

Slovenian empirical studies regarding innovation were carried out in different times, with different samples and mostly on macro level. There is no doubt that Slovenian companies will have to attain innovative capabilities. The theory presented in this paper will be translated into a form that can be tested by structural modeling using data from Slovenian companies. The model is supposed to show some important significant statistical relationships. The results of the empirical research will help Slovenian managers better understand the most important determinants of the innovation, their interdependence as well as their influence on the competitive advantage of the companies.

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