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Regional entrepreneurship dynamics: the case of the Czech Republic

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Abstract

The company, at any time of its existence, finds itself in a situation in which it is needed to react to sudden changes in the company's environment, whether caused by the political situation, economic crisis or a change in market environment of the company. Each adaptation in business is an impulse to change and may cause unexpected behavior inside or outside the company. This article aims to present innovative thinking bond, investment success in overcoming the crisis, based on the results of a carried out research. Using knowledge of current methods of management and business management services in general it can be inferred that the enterprise can develop an open system that is capable of rapid adaptation to the external positive and negative influences.

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1. Introduction

In the changing world economic environment, characterized by continuous structural changes and enhanced competitive pressures, the importance of small and medium enterprises (SMEs) increased. The sector of small and medium enterprises in the economy has a very important place, it is the driving force of business, growth, innovation and competitiveness. It plays a crucial role in job creation, and is generally a factor of social stability and economic development. In Czech Republic, SMEs contribute 61.52% to 54.57% of employment and in value added (MIT, 2011). In the period 2002 - 2008 SME worked as an "engine" which created new jobs. The SME sector in this period increased annually an average of 1.9% of positions in large enterprises while only 0.8%. SMEs are an essential part of the companies, employ 80 million EU citizens, generate every second newly created job and produce nearly 60% of EU GDP. However, even small and medium-sized enterprises did not avoid the crisis. Last year, their production decreased on average by 5.5%, which is reflected in redundancies. European SMEs currently employ about 3.25 million fewer people than before the crisis. Crisis situations and phenomena are naturally reflected in the service sector, including tourism, hotels, restaurants, spas and other areas of the tertiary sector. Tourism is influenced by the standard of living of the population. The financial situation, education, social and employment structure of the population and also the degree of culture. Tourism is not immune to the economic crisis, but much more resistant to these economic fluctuations compared with the industrial production (CSO, 2011).

2. Adaptability as a manifestation of new business strategy

There seems to be a widespread belief that new business formation leads to economic growth (Wennekers and Thurik, 1999). This has belief has motivated politicians in many countries to promote entrepreneurship in order to stimulate growth (see for example the contributions in Audretsch, Grilo, and Thurik, 2007; and Leitao and Baptista, 2009). Remarkably, however, the theoretical as well as the empirical foundation for this belief is rather weak. Empirical research on the issue started quite late and only recently the researchers assess the effects of new businesses on economic development in more detail. Having in mind Schumpeter's entrepreneurs examples of innovative that initiate radical changes with important indirect effect on other firms and other sectors of the economy (Schumpeter, 1939), the development of start-ups only tells part of the story. Hence, even if the number of jobs provided by the gazelles or the amount of the value they add does make up a considerable part of a region or sector, attempts to assess the impact of new business formation on development should try to account for indirect effects also. Most studies simply regress the effect of the indicator of new business formation activity on a performance measure with some control variables, however, some studies have applied an explicit production function framework That also contains indicators for the contribution of other inputs to growth (Audretsch and Keilbach, 2004; Audretsch et al., 2006, Wong et al., 2005).

2.1. Innovative behavior as the basis of adaptability

The basis of maintaining adaptability to environmental changes, growth, business competitiveness and long-term business growth is the ability of firms to innovate. Just as innovative organizations differ, the innovations itself will be much different from each other (to the extent, nature, extent of novelty, etc.). Each sector has different characteristics and priorities - some are sensitive to the scale of production, other to scientific research or the range or sensitivity to demographic changes. Small firms differ from large for example in access to resources, and must therefore create more supportive relationships and closer approach to creating customer base. Degree of novelty associated with continuous or discontinuous (discontinuous, incremental) innovations will require sensitive and dynamic approach to the organization

and management of innovation. Innovation is so enormously different - in size and type (technology, product, marketing, organization). In this sense we can say that a positive attitude to changes in the organization of work itself is a factor in business survival changes in the region. You can observe a convergence of two key points (Rylková, 2011):

- Innovation is a process, not a single one-off event or events, and as such must be organized and controlled.
- Factors that determine this process can be influenced (both external threats and sources within the company), and thus affect the result - or the process of innovation can be managed.

A positive relationship between the regional level of start-ups and subsequent growth was confirmed by Ashcroft and Love (1996) for the United Kingdom, by Acs and Armington (2002) for the United States, by Brixy (1999) for East Germany, and by Fölster (2000) and Braunerjhelm and Borgman (2004) for Sweden. But a number of other studies could not identify such a positive relationship between the level of start-ups and regional employment growth (Audretsch and Fritsch 1996; Fritsch 1996, 1997; EIM 1994). Thus the conditions for consistency of adaptability, innovation and strategy are fulfilled. Without these components, the firm cannot adapt to changes in the regional environment.

3. Case study of the adaptability of firms in the Czech Republic

The project was authorized by a questionnaire survey in order to describe the ability to adapt business, particularly in the SME sector to the current economic-political-social changes related to the economic crisis. It focuses on the elasticity of the proceedings that were not quantified in the theoretical literature. Quantification of elasticity 2005-2010 management is a challenge for this project. The flexibility of management will be monitored particularly in the areas of: crisis and risk management, strategic and project management, personnel policy, production and services and innovation activities, drawing on subsidies, energy savings and renewable sources. Survey will be implemented at the department of management and entrepreneurship.

An interpreter is a sample picture of the situation in 206 enterprises in the Czech Republic. The legal form of the sample surveyed 206 companies outweigh legal persons and 60% of the individuals who were in the sample represented 37%. An interesting fact is that the ratio of natural and legal persons in the Moravian-Silesian region is 79: 21, in the Olomouc Region 82: 18 and 81 in the Zlín region 81: 19 To assess the adaptability of firms, however, this sample in an appropriate ratio, since the questionnaire is dealing with strategic management, personnel management policy or crisis situations. The sample included companies with at least ten years in acting on the market, which has a high explanatory value of his position (companies up to 10 years 31% 10-15 years - 30% over 15 years - 38%). It can be assumed that this is a company with good background and strong management that keeps the company in good shape, so that it has practical experience in terms of managing changes in regional structure.

The central part of the research was focused on whether the company is changing the situation compared to the path of innovation. The answer was very surprising. In the evaluation of their situation, 53% of businesses stated, that they find themselves in the growth phase! The real bottom recorded only 4% of businesses, 34% of companies stated that they saw their status in decline, the rest of them reported they went through the period of stagnation. Following the innovative activity the causal chain was investigated - investment in innovation activities, type of innovation or receiving European subsidies. Most companies surveyed (33%) reported that they hardly innovate, because they invest in innovation less than 1% of turnover. The close linkage of the respondents reported 32% of firms that innovate and pay only a minimum of 1 to 5% of turnover. Less than a quarter said that investing in innovation 5 to 10% of its turnover. Only 15% of firms invest in innovative activities more than 10% of turnover. If we

compare it with previous results on the global business situation, we can come to this relationship:

- adaptable business is the one that recorded in the crisis the phase of growth (53% sample), or belonged to the group, where it invested in changes to more than 10% of turnover, the end point represents 5% of turnover as the ideal value for this sample.
- In contrast, the stagnation experienced firms that invest in innovation between 1-5% of turnover, in fact, were in the lower half of the span.
- Decrease in total and the crisis was experienced in business enterprises that invest in innovation less than 1% of turnover.

Out of the total sample, only 77 companies benefited from European subsidies. These businesses were located in the adaptive group of companies. Most companies, 38% drew a total of subsidies or grants only to 100 000 CZK, the second drew 26% of companies grant or grants of up to CZK 10 million and 23% of companies benefited from a subsidy to 1 000 000 CZK, other amounts over CZK 10 million represent only a fraction of firms, 13%. Most drew on the technology and rehabilitation equipment, a total of 33%. They also received a high proportion of funding for education and human resource development in the amount of 29%. Real estate purchases and subsidies for energy conservation (green savings) helped in a very close ratio of 16% and 15%. In the final part the business were supposed to assess in which areas was the greatest innovation. As shown in the table below, to the greatest extent during the crisis period they did not innovate, but rather benefited from the investments that are induced. The results thus showed that most firms innovate in processes and technology, this type of most frequent innovation reported 33% of firms. In close pursuit, 31% of companies reported that mostly innovated the product itself. Learning organization as a marketing concept and innovation was found in 14% of most companies. Hit strategy could be the most important thing that drags on business forward. Innovative strategy, only 8% of businesses surveyed, which resulted from other sub-questions. Adaptability factors clearly support the sort of change in the organization or changes in strategy, which develops incentive for the management of the innovation process.

3.1. Selected tests of hypotheses

The main objective was to define the elements of the adaptability of the literature search and then adapt to the conditions of surveyed small and medium enterprises (SMEs). Partial objective is to characterize the current state of business on the basis of the criteria type of auxiliary financial situation, personnel changes, boundness in support programs. The empirical study is the confirmation or rejection of the fundamental hypotheses resulting from the comparison of the analyzes already. These are the following hypotheses:

H1: The business plan is not in writing form.

H2: Innovation activities in this period will be concentrated mainly on product or service.

H3: Enterprises will be in the top-phase of stagnation.

H1: The business plan is not in writing

Table 1: Result of the question whether the company has developed a business plan

No formulation	Brief	Detailed	Other
36,2%	34,3%	17,9%	11,6%

Source: own processing

Businesses, though not specified, use really a written form, at least in a summary. Adding up the two versions of a document, a hypothesis is not confirmed. If we hesitated about what not written form and brevity is, we would have to ask more specifically. However, the questions that have been evaluated, we can determine the dependence of the strategic document on the legal form of business, as the following table.

Table 2: Dependence of the legal form of a strategic document

		Type of strategy			Total
		No formulation	Brief	Detailed	
Legal form	Self employed	41	24	2	67
	Ltd.	27	34	25	86
	Corp.	4	12	8	24
	Other	3	1	2	6
Total		75	71	37	183

Source: own processing

Partial analysis shows that the strategy in document of not written form prevails among self employed, with the growing size of the business, plan must be at least partly formalized in writing.

H2: Innovation activities in this period will be concentrated mainly on product-a product or service.

The result shows that 70.1% of enterprises did not innovate, 29.9% of enterprises innovated. Only 12 cases upgraded to something else, and indeed the rest concentrated on the product. Hypothesis is confirmed and supported by the following table.

Table 3: In what areas of the product has been upgraded?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No innovation	136	65,7	72,7	72,7
	Products	13	6,3	7,0	79,7
	Products, Services	3	1,4	1,6	81,3
	Products, Technology	1	,5	,5	81,8
	Services	20	9,7	10,7	92,5
	Services, Quality	2	1,0	1,1	93,6

	Services, Technology	1	,5	,5	94,1
	Quality	4	1,9	2,1	96,3
	Quality, Technology	1	,5	,5	96,8
	Design	2	1,0	1,1	97,9
	Technology	4	1,9	2,1	100,0
	Total	187	90,3	100,0	
Missing	System	20	9,7		
Total		207	100,0		

Source: own processing

H3: Enterprises will be in the top-phase of stagnation

The hypothesis was not confirmed. As shown in the analysis, firms are in the extreme. They either overcame the crisis and began to grow, or belong to the group that still did not overcome the crisis...

Table 4: Comparison of legal forms of business vs. cycle phases

		At what stage of the business cycle the company found itself at the end of 2010?					Total
		Unfilled	Growth	Top	Decrease	Bottom	
Legal form	Self employed	5	33	9	25	4	76
	Ltd.	2	49	5	38	4	98
	Corp.	0	17	4	4	0	25
	Other	0	4	0	3	0	7
Total		7	103	18	70	8	206

Source: own processing

Barometer survey, which makes annual Economic Chamber, engaged, inter alia, assessments of the economic situation. Evaluation took place on three levels, favorable situation, same, worse. The results were evaluated in February and September. In February, 35.3% of companies reported that their overall economic situation was more favorable in the second half of 2010, than it was in the first half of 2010. In a survey conducted last September, when companies compared their situation in the first half of 2010 with the previous second half of 2009, reported a positive change in 32.4% of enterprises. In contrast, negatively on the development of their economic situation in the second half of 2010, the survey expressed by 30.4%. In a survey conducted in September 2010, in the overall situation of their enterprises expressed a negative 32.7% for SMEs. In February 2010, there were 42.1% and in September, a year ago, even 56.3%. By contrast, in September 2008 when the crisis started knocking on door of the global economy, the economic development of their negatively expressed only 9.1% of enterprises.

Table 5: Assessment of economic situation according to the Economic Chamber of the Czech rep.

Assessment of economic situation - the number of firms in percentage						
	IX.08	II.09	IX.09	II.10	IX.10	II.11
Favorable	54,9	26,4	11,7	19,5	32,4	35,3
Same	36,0	34,3	32,0	38,4	34,9	34,3
Worse	9,1	39,3	56,3	42,1	32,7	30,4

Source: Economic Chamber, 2011

If we evaluate both studies, our sample is somewhat more optimistic, but still follows the general trend. This corresponds to the development of personnel policies, which have been carried out in the big hits and the result is as interesting and copies the result of questions about the phase of the business cycle, when 46% of companies interviewed had not registered any change in the four-year period, only 26% of companies have dismissed the 30% of its employees and only 3% of firms laid off more than 30% of employees. On the contrary, it showed that 25% of companies in "crisis" accepted other employees.

Now is therefore the final strategic dilemma: how is it that the absence of long-term strategic document, drawn up (at least in points) analysis of the risks these businesses not only survived, but was also for its development? As can be seen from the investigations carried out, it was just the high level of adaptability (annual plans), employee participation in business operations and a strong corporate culture that saved them.

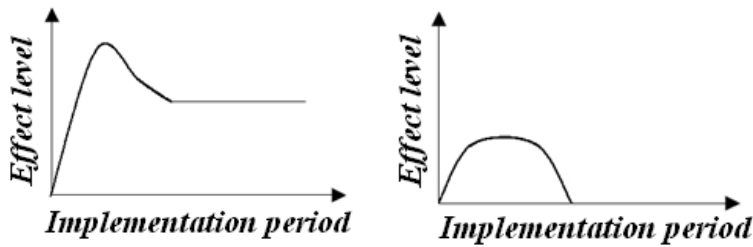
4. Discussion and Conclusion

Adaptability to changing conditions is a necessary feature of any company in order to be able to respond. Monitoring the degree of flexibility can encourage greater creativity and focus on strategic planning and management in small and medium enterprises, which is so often underestimated. Subsequent delay introducing changes could cause major changes in behavior and may influence the ultimate effectiveness of the strategy (Green, 1977). Using the methodology of the measured effects were defined as follows (Sebestova, Cooney, 2011):

- **Delay effect** - if the effect is measured only as the difference before and after the change process and the resulting effect may be higher because it is the main added value of process innovation and new activities (point-measurement results of the initial state). This approach is then used as a model for the factors that influence the strategic behavior. The disadvantage is that the distortion effect due to the entrepreneur have the impression that the situation was resolved successfully and on time and the company begins to stagnate (see Figure 1).

- **Effect of "Half-Life"** (impact decay, Figure 1 b), arises when the adaptability is measured after the project, working up of the ongoing process (where efficiency is measured), so deviations compared with the plan and the resulting effect of changes equals almost zero. Correction without its monitoring influence the management of strategic planning in a negative way - the plan always comes out. The maximum possible use is in custom work or in budgeting, it is desirable that this dynamic effect of factors was null.

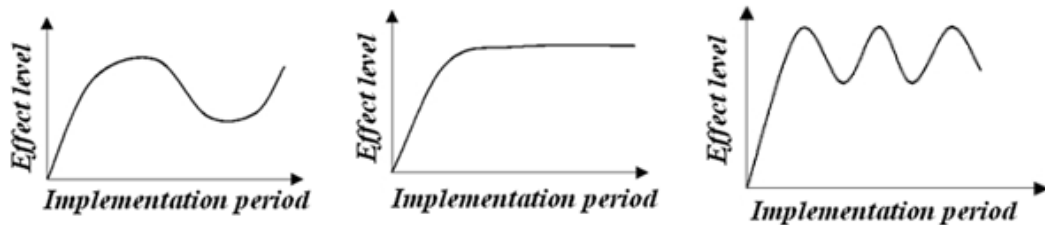
Figure 1: Delayed effect (a) and Half-Life effect (b)



Source: own processing

- **The activation effect** (borrowing from the future, Figure 2a), companies are prepared for some problems due to the existence of their business and internal and external procedures and improve their leadership, strategy and goals. The activation effect of using a change management which sees that reach the bottom, and intervention in the management of the business plan similar to the reprocessing by market analysis, price analysis, customer analysis and evaluation of other factors. This is a solution to the crisis.
- **Reactionary effect** (Figure 2b) occurs while drawing up strategies of companies using customer segmentation and price in order to spread the risk. It is especially seen in innovation - to see the effect on dynamic decision making in the monitored group and would then be used as a strategy as a whole, it occurs in business services with a portfolio of complementary activities.
- **An opposite effect** (host effect, Figure 2c), the plan and implementation do not join together in the future. This effect is referred to as the negative impact of uncontrolled strategic management, which would affect the company's strategic crisis.

Figure 2: Activation effect (a), reactionary effect (b) and opposite effect (c)



Source: own processing

These reactions can help to model changes in the behavior of individual actors in the market and thus contribute to a better understanding of the importance of strategic planning, innovative thinking in the process of adaptability of SMEs. Now there is the final strategic dilemma: how is it that the absence of long-term strategic document, drawn up (at least in points) analysis of the risks these businesses not only survived, but also underwent development. As can be seen from the investigations carried out, just a high degree of adaptability, employee participation in business operations and a strong corporate culture was saving them which is an important feature of these type of businesses.

The challenge for the next stage of analysis is to find a metric to measure the adaptability, the impact of strategic decisions and delays on the behavior of firms. This could enrich both theory and practice crisis scenarios preparation, content strategies, as well as simplifying forms of entrepreneurship

so that in case of crisis were adaptable to changing conditions. Furthermore, the time delay is an obvious reaction to the crisis that came, also meaning that if there is confusion between strategic and operational management, problems and difficulties are addressed immediately so that not so major crises could occur from a business perspective.

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