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Foresight in a small enterprise. A case study

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Abstract

The main purpose of the paper is to present a case study of the implementation of foresight research into the doors and windows industry on the basis of a small enterprise from Poland. The case was based on the concept of business foresight which embraces a triad of assumptions, namely: anticipation, innovativeness and communication of the future. The research process comprised of logically linked research methods including: an in-depth interview with the presidents of the company, business coaching workshops with the company's employees, STEEPVL analysis, scenario analysis, *future box* technique, Porter's five forces analysis, a survey carried out among the enterprise's customers, and strategy formulation. The main results of the research have enabled the authors to determine the company's foresight maturity level, the most important factors influencing its activity, possible areas of improvement and to set strategic goals in the fields indicated by the presidents and the employees of the company.

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Introduction

In the face of accelerated change manifested by shorter production cycles, new customer demands, entering of the Y generation into the labor market, political volatility as well as the need for the processing and interpreting of information coming from majority of sources, foresight research in enterprises comes into prominence. Rohrbeck (2011) perceives business foresight as *an ability that includes any structural or cultural element that enables the company to detect continuous change early, interpret the consequences for the company and formulate effective*

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responses to ensure the long term survival and success of the company. Potential benefits of the application of foresight in business practice include: the ability to spot and interpret environmental changes (Tsoukas and Sheperd 2004); enhancement of the strategic planning process (Roney 2010); growth of innovative capabilities (Rohrbeck and Gemunden 2011; Vishnevskiy, Karasev and Meissner 2015), increased ability for organizational learning and the implementation of strategic decisions (Rohrbeck and Schwartz 2013). These advantages can apply to large corporations as well as small and medium-sized enterprises operating in various sectors of the economy (Paliokaitė and Pačėsa 2014; Jannek and Burmeister 2007). In the existing published works on foresight carried out by enterprises great attention is paid to foresight research led by such corporations as Deutsche Telekom, Shell, Lufthansa, PandG, Volvo, DB, IBM (Becker 2002, Neef and Daheim 2005). Foresight research carried out by small companies is rare. Neef and Daheim (2005) state that: ‘small and medium sized enterprises (SMEs) are a white spot in foresight research carried out in enterprise, even though their contribution to employment, value creation, and innovation is well recognized. Jannek and Burmeister (2007) further add that SMEs may have substantial foresight needs due not so much to long-term planning cycles, but rather to high market and business environment dynamics and actors’ shifting strategies. In this context, the main purpose of the paper is to present a case study of the implementation of foresight research into the doors and windows industry on the basis of a single company from Poland. The selection of the enterprise representing this sector was the result of several factors. The doors and windows industry has become one of the most developed and competitive sectors of the national economy of Poland (Szympańska, 2012). Manufacturers within this sector have developed the best methods of making their products, because they base their production on the newest, very effective technologies and solutions. This does not mean, however, that business activity in the joinery sector free of unexpected events. Current situation of the doors and windows industry is dependent on the situation in the construction industry as well as on the conditions associated with that branch, such as tax regulations (Szympańska, 2012). Against the background of Europe, Polish manufacturers of windows and doors present themselves exceptionally well, especially in terms of the value of exported products. For the last two years Poland has become an undisputed leader in this market (Furman, 2014). Export is fueled by ecological trends which are very popular in Western Europe – citizens of rich countries replace their doors and windows with energy-efficient ones. Owing to the factors mentioned above manufacturers are recording new growth despite stagnation on the Polish construction market. Although, the market seems to be reserved for large and medium companies, there is still room for small businesses since they compete on slightly different markets, mainly catering to individual recipients both in Poland and abroad. The authors of the article wished to present possibilities of the inclusion of foresight research into the activities of such companies with the purpose of increasing their strategic capacity and agility on this still promising, but highly competitive market.

1. Methodology

The main research method used in this paper is a case study describing the process of foresight implementation in a small manufacturing enterprise. The presented case was based on the concept of organizational foresight which embraces a triad of assumptions, namely social anticipation of the future, innovativeness and communication of the future (Hiltunen, 2013). Social anticipation of the future was manifested by the inclusion of presidents and employees of the enterprise in the identification of factors influencing enterprise development and areas of potential changes and benefits related to them. Communication of the future was achieved by the employees’ involvement in the process of mission and vision building. Innovativeness was reflected in the implementation of new ideas into the organizational routine such as business coaching workshops to indicate indispensable changes needed in the enterprise. The entire research process is presented in Table 1.

Table 1. The research process

Stages	Research methods	Author (year)
Foresight maturity of company	An in-depth interview with the presidents of the company, 25 questions	Grimm, 2009
Business coaching	A structured focus group interview	Scoular, 2014

workshops	with employees	
From STEEPVL to scenario analysis	A process involving presidents, employees, foresight researchers and students of management	Ringland, 1998, Kononiuk&Nazarko, 2014
Future box technique	The involvement of employees in vision and mission statement creation	posited by authors of the paper
Porter's five forces analysis	A questionnaire completed by presidents and key employees of the company	Gierszewska, Romanowska, 1998
Survey research directed to the customers	Customers completed questionnaires at their homes during the process of windows replacement	Keller, 1993
Strategy formulation		

The aim of the research process was to incorporate the dimensions of foresight research proposed by Hiltunen (2013) which was achieved by the introduction into the research process logically linked research methods such as: the assessment of foresight maturity level of the enterprise through an in-depth interview with the presidents of the company (Grimm, 2009), business coaching workshops with employees of the company (Scoular, 2014), a STEEPVL analysis (Kononiuk, 2010), scenario analysis (Ringland, 1998, Kononiuk and Nazarko, 2014), future box technique, Porter's five market forces analysis (Gierszewska, Romanowska 2007), survey research carried out among enterprise's customers and strategy formulation. The research process was carried out within the *B+R platform – an innovative model of cooperation among science, business and administration in podlaskie region* project coordinated by the Bialystok Foundation for Staff Training in which the authors of this article took part as grant-holders.

2. Results

In the first stage of the research process, assessment of the foresight maturity of the investigated enterprise was carried out in accordance with the Grimm model (Grimm, 2009). Enterprise maturity was determined on the basis of an in depth structured interview consisting of 25 questions with the presidents of the company addressing such dimensions as: leadership, framing, environmental scanning, forecasting and vision building. According to the model foresight maturity level may vary from 1 to 5. On the basis of the interview results foresight maturity level for the company being assessed was set at 1 and was determined by components for forecasting and vision building presenting the lowest level of maturity. Analysis of the human resource potential of the investigated company allowed the authors of the article to suggest attainable notes for all of the components of foresight maturity, fulfillment of which would place the company at level three.

In the second stage of the research process coaching workshops with the employees of the company were conducted with the aim of identifying the desirable changes in the enterprise. The introduction of business coaching is a new concept in foresight studies, but one that is very promising as it refers to the unharnessed potential of human resources (Scoular, 2014). Eight employees who represented various departments of the company such as: the financial department, the sales department, the production department and the windows installation department participated in the workshops. The workshops were based on a structured group interview. The participants were acquainted with the importance of change management in an enterprise and were then divided into two groups. Their aim was to submit a proposal for changes and possible benefits in three areas: 1) communication, 2) organization and 3) marketing including promotion and advertising. In the communication area the company's employees proposed such changes as: appointment of a production manager, intensifying activities connected with the employees' motivation, clear definition of the employee's responsibilities and a replacement of the warehouse manager. The changes suggested by the employees in the area of organization concerned the need for training of window installers, assigning responsibility for overall work of the sales department to one person as well as the introduction of a clear payroll system. The employees emphasized the need for training in communication

techniques as well as the need for more frequent meetings with the presidents of the company. They also communicated a need for a system to control drivers and a social package embracing non-wage benefits. In the marketing area, including both company promotion and advertisement, the employees found a need to introduce sales innovation, advertising warm installation of windows, introduction of new promotional gadgets for the customers, implementation of changes and updates to the company’s webpage, updating of the banner and radio advertising, better marking of the company’s headquarters, introduction of leaflets, emphasis on advertising in Sweden and Belgium as well as introducing official attire for windows installers.

In the third stage of the research process, a STEEPVL analysis (Kononiuk, 2011) was used for the identification of factors influencing the investigated company’s development. A STEEPPVL analysis may be treated as a checklist of social, technological, economical, ecological, political, value-related and legal factors influencing a given activity. The presidents and employees of the company, authors of the article and students of the Faculty of Management (Bialystok University of Technology) were all involved in the process of identifying these factors. The students had an additional task which was to prepare a SWOT analysis for the company and present it to the presidents of the enterprise. As the result of the analysis 36 factors influencing the enterprise’s performance were identified. In the fourth stage of the research process the factors were ranked using three criteria: importance, uncertainty and the company’s influence (Fig. 1). Factors ranking by importance and uncertainty have also been promoted by others including Ringland (1998) and Kononiuk & Nazarko (2014).

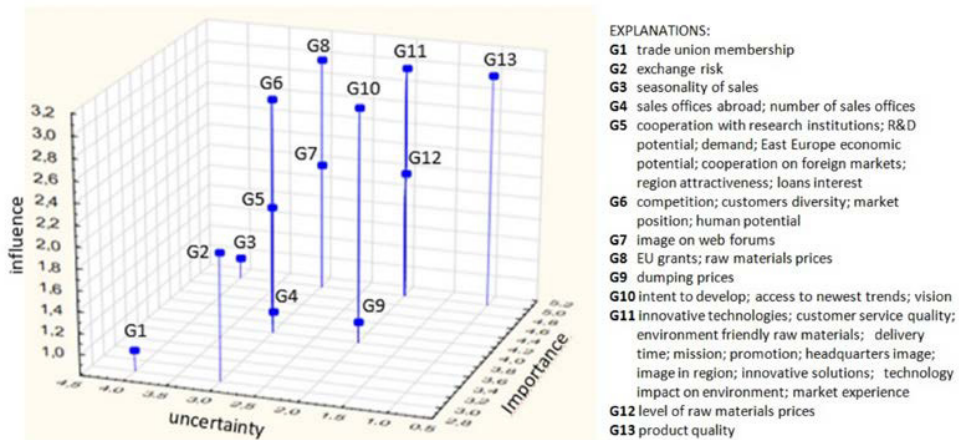


Fig. 1. Factors’ ranking by influence, uncertainty and importance

In order to involve the company in the process of change more actively and consciously the authors of this article added a new dimension to this analysis, namely the company’s influence. This activity revealed two factors which were both the most important, and the most uncertain but which have the greatest influence on a company, namely EU subsidies and the price of raw materials. Introduction of a system of extreme factors such as high EU subsidies, low prices of raw materials; high EU subsidies, high prices of raw materials; low/no EU subsidies, high prices of raw materials; low/no EU subsidies, low prices of raw materials) enabled the authors to conceive four scenarios of the company’s development, namely: a prosperity scenario, a new possibilities scenario, a *status quo scenario* and a crisis scenario with the most desirable scenario being that of prosperity. The analysis also identified factors that are both highly important and upon which the company has the greatest impact. These factors include: the use of innovative technologies, product quality, customer service quality, client-friendly use of raw materials, delivery time, market experience, the company’s mission, the image of headquarters, the image of company within the region, the impact of the technology used on the environment.

The fifth stage of the research process was devoted to the development of the enterprise business mission using the *future box* technique introduced by the authors of this article. The workers of the enterprise were asked to submit their proposals of a mission and vision statement of the company. Their task was to answer two simple questions

such as: *Why does the company exist?* and *What will the company be like in ten years?* They wrote their answers on separate sheets of paper and put them into the *future box* that was placed in one of the departments of the company. The workers' participation in this experiment was voluntary with the exception of production workers who were obligated to complete this task. The final mission and vision of the company were formulated on the basis of their proposals and a review of some missions and visions of other companies operating within the sector. Great emphasis was placed on such elements as: brand recognition, speed of reaction to market trends in the doors and windows industry, concern of diverse groups of clients as well as the well-being of workers.

In the sixth step of the research process, Porter's five forces analysis was carried out with the presidents and key workers participating. In order to obtain more precise information, each of Porter's forces was defined by specific factors according to the guidelines established by Gierszewska and Romanowska (2007). Subsequently average values of the scores were calculated enabling the authors of the article to present the differences in the evaluation of the individual forces deciding upon the competitiveness of the analysed company (Table 2).

Table 2. The results of Porter's five forces analysis

Specification	The assessment of Porter's five forces impact on the company (scale 1-5, where 1 stands for very low score, 5 stands for very high score)	Importance within doors and windows industry (scale 1-5, where 1 stand for very low importance, 5 stands for very high importance)
Bargaining power of suppliers	3,3	3,8
Bargaining power of buyers	3,0	3,5
Rivalry among existing companies	3,8	4,4
Threat of new substitutions and producers	3,3	4,4
Threat of new entry	3,6	4,5
Exit barriers	3,25	3,75

The results of the Porter's five forces analysis indicated that the rivalry among existing companies in the sector as well as the threat of new entry have the highest impact on the company's performance. The lowest impact was exerted by bargaining power of buyers. The scores for importance of individual forces in the sector represent much higher average values. The highest values were attributed to the threat of new entry, the threat of new substitutions and producers and rivalry among existing companies. The lowest importance value was attributed to the bargaining power of buyers. The results of the analysis indicate relatively high attractiveness of the sector in the perception of president and key workers of the company. Despite generally high and very high levels of importance assigned to individual forces in the development of doors and windows industry, the impact of individual components of the competitive environment on the analyzed company was rated as moderate to low.

Only 19 respondents agreed to take part in the final stage of the research process which was a survey directed to the customers of the company. The questionnaires were distributed by window installers. The largest group of participants were people between 26 and 35 years of age. Almost 2/3 of those surveyed purchased windows for their flats while the rest purchased them to be installed in single-family houses. The customers surveyed purchased mainly windows made of plastic (PVC) and ordered the installation service to be conducted at the same time as the delivery. The participating customers were guided mainly by low prices, quality of the products and timely delivery. The success of the company's brand is associated with its brand awareness on the market, as well as with a set of associations that its name inspires among customers (Keller, 1993). The main traits/associations that were connected with the company by those who made the purchase included: affordable price level (the strongest association, 70% of responses), the range and variety on offer (a much weaker association, 40 % of responses) as well as the speed of reaction (33% of responses). Traits least indicated by the company's customers included such attributes as efficiency and modernity. The results presented above gained through the involvement of many players involved within the doors and windows industry enabled the authors of the article to prepare an organizational strategy of the company's development based on three main pillars: social anticipation of the future, communication and innovativeness. For

each dimension two strategic goals were identified. The authors developed thirty eight specific recommendations for the achievement of goals and three periods for their realization. Special emphasis within the strategy was put on the marketing campaign. Analysis of the sectional reports enabled the authors to indicate specific guidelines of strategic interventions directed to the customers of the company.

Conclusions

The model of foresight in enterprise embracing such dimensions as anticipation, innovativeness and communication of the future (Hiltunen, 2013) has proved to be very useful as a framework for the organization of the research process for the investigated company. The main results of the research enabled the authors to determine the foresight maturity level of the company and to set strategic goals as well as directions of strategic intervention in the fields indicated by the employees as the most urgent. Innovative elements such as the introduction of Porter's five forces analysis into foresight research as well as two new concepts, namely business coaching and a *future-box technique* into the process of mission and vision statement creation were added to the research process. Thus, the paper might increase the stock of knowledge of business foresight research in management science. The practical implications of the article are manifested in the presentation of a case study as a basis for the development of the company's long term strategy, taking into account the opinions of its employees, managers as well as external stakeholders such as customers and foresight researchers. In addition, the presentation of foresight implementation to a small business enterprise representing a rather traditional manufacturing sector presents an added value to the research. The synergy of academics and industry specialists in one foresight exercise enabled the academics to get acquainted with the possibilities and limitations of foresight research in a small enterprise and offered an 'outside of the box' perspective for the presidents and the employees of the company on its activity and the trends shaping its development.

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