

Adaptation Actions in Companies as Theoretical and Practical Aspects: A Case Study of a Food Ingredients and Additives Producer

Maja Sajdak

Abstract—The aim of this article is to identify the measures companies undertake in order to adapt to the environment as well as discussing their diversity and effectiveness. The research methods used in the study include an in-depth analysis of the literature and a case study, which helps to illustrate the issue in question. Referring to the concept of agility, which is firmly embedded in the theory of strategic management and has been developed with the aim of adapting to the environment and its changes, the paper first examines different types of adaptation measures for companies. Then the issue under discussion is illustrated with the example of the company Hortimex. This company is an eminent representative of the world's leading manufacturers of food additives and ingredients. The company was established in 1988 and is a family business, which in practice means that it conducts business in a responsible manner, observing the law and respecting the interests of society and the environment. The company's mission is to develop a market in Poland for the products and solutions offered by their partners and to share their knowledge of additives in food production and consumption.

Keywords—Adaptation measures, agile company, flexibility, unanticipated changes.

I. INTRODUCTION

IN order to achieve consistently good results and be successful, companies need to skillfully adapt to the competitive environment and search for an attractive market space in which they can build a competitive advantage. This is the primary purpose of any business strategy.

The competitive landscape has been shifting in recent years more than ever. Globalization, rapid technological changes, codification of knowledge, the Internet, talent and employee mobility, increased rates of knowledge transfer, imitation, continuous changes in customer tastes, obsolescence of products, market and business models—have all caused a turbulent and unpredictable environment, accelerating changes and disruptions. These trends are expected to continue in the future, producing ever more rapid and unanticipated changes [13].

The adaptation measures that companies can take range from striving to be flexible, adopting the practices characteristic of lean enterprises, or adopting a holistic approach to the issue through implementing the concept of agility. In previous publications, the author conducted in-depth analyses of three concepts: agile, lean and flexible; proving

they are not synonymous. These concepts are often confused with one another, but in fact, each constitutes a separate issue. Nevertheless, the basis for their use is the desire to adapt to the environment, which is a common aspect of these three concepts. The conclusions drawn in the article made it possible to formulate the thesis that agility is the broadest of the concepts analysed, while leanness and flexibility are prerequisites for agility.

Organizations with high levels of sustained performance have the capability to continuously adapt to their environments, see and exploit opportunities before others, and address threats quickly. Superior performance is possible only when there is a high degree of fit between the requirements of the environment and the capabilities of the firm. In increasingly turbulent environments, this fit can be temporary at best. Agility is a dynamic capability that allows best-performing firms to sense and respond to their environments and to rapidly reallocate resources, build new capabilities, and, perhaps most importantly, reduce the assets and activities that no longer create value. In a world where organizations are pressured to be predictable and reliable, these organizations have found a way to change and perform. Agility is a dynamic capability that allows an organization to make timely, effective, and sustained responses to environmental change. It also allows an organization to adapt, over and over again, in meaningful ways to sustain above-average performance over a long period of time [9].

The success of enterprises in coping with the contemporary challenges of the environment largely depends on their adaptive capacity; this attribute is essential for success and effective management in a changing and unstable environment. The case study included is an interesting example of a company which through undertaking adaptive measures can successfully compete in a very unstable environment.

II. ADAPTIONS AND ITS ROLE FOR CONTEMPORARY ENTERPRISES

The idea of an adaptive organization has originated from the contingency approach in organizational research. Contingency theories are a class of behavioural theory which contend that there is no one universal way of managing or organizing a company, and that the organizing style is dependent on the situational constraints of the environment in which a company operates. This view is based on the approach that treats organizations as open systems that have to interact

with their environment in order to be successful. Thus, in order to maintain effectiveness, organizations have to adapt over time to fit changing contingencies. The environment, organizational size, and organizational strategy are considered as the main contingencies that shape an organization.

Investigation into the relationships between environmental characteristics and organizations determined two main types of organizational design, structure and form: mechanistic and organic. The findings showed that in relatively stable and predictable environments organizations tend to have a mechanistic design. Organizations that operate in unstable, changing, and unpredictable environments usually have an organic design, which is less formal, less hierarchical, and less mechanistic. The organic design has a less precise division of labour, a wider span of control, more decentralized authority, fewer rules and procedures, and more personal means of coordination [6].

TABLE I
 CHARACTERISTICS OF MECHANISTIC AND ORGANIC DESIGNS

Mechanistic design	Organic design
Hierarchy of authority	Less adherence to authority and control
Hierarchical communication	Network communication
Centralized knowledge and control	Decentralized knowledge and control
Insistence on loyalty and obedience to organization	Loyalty and commitment to project or group
High degree of formality	High degree of flexibility and discretion
Formal and impersonal coordination	Informal and personal coordination
Many rules and procedures	Few rules and procedures
High tasks specialization	Shared tasks, employee contribution to a common tasks

Hage and Dewar have already shown [2] that decentralized organizations having low formalization and high complexity (trained workers with high expertise) lead to higher innovation rates. It was concluded that organic design is more innovative, flexible, and more capable of adapting to change, thus it is appropriate for unstable and continuously changing environments.

Competitive advantage driven by changes in the environment depends largely on a company's ability to respond to those changes. Every external change creates profit opportunities by creating opportunities for new business initiatives, which stimulates the entrepreneurial spirit and promotes innovative ideas as well as more effective methods and tools for their implementation. The ability to respond comprises two key skills. The first is the ability to anticipate changes in the environment, and the second is the ability to quickly react to changes. These features are the principal challenges for modern enterprises since the currently used methods of environmental forecasting often do not render satisfactory results, and rapid response capabilities are restricted by the danger of inertia, mentioned by J. Wells [8]. He defines three types of inertia, which, if not identified, can lead to the company's collapse. Strategic inertia is a problem in companies that do not regularly modify their strategic objectives. Structural inertia affects firms that are aware of the

need for change but are hindered by their organizational structure. Finally, human inertia refers to the resistance of individuals and groups towards change.

Modern companies are forced to make strategic decisions in extremely difficult circumstances, not only because of the unpredictability and turbulence of the environment, but mainly due to the dual nature of enterprises which is necessary to succeed in today's business reality. Complexity resulting from the relationships between the events, processes and activities of business enterprises plays a vital role in key decision-making within companies. On the one hand, firms are required to develop strategic plans which will include the corporate vision and mission, strategic objectives, as well as plans relating to the entire organization, its functional units, strategic business units, and geographic markets. On the other hand, enterprises are expected to respond quickly and come up with alternative ideas in the event of unforeseen events. Thus, in their activities, companies seek to find an equilibrium between ensuring the stability of operations and survival. Moreover, they also make an attempt to find balance between developing strategic plans and chaos in the environment. This can be a source of threats and concerns for companies but at the same time provides unlimited possibilities in terms of creating and exploiting opportunities [5].

III. ADAPTATION PRACTICES

The last 2-3 decades was the time when new concepts and methods of management have appeared and boosted the spectrum of so called modern instruments of management. These are used for creating and achieving flexibility. They include such methods as: CRM – Customer Relationship Management, JiT – Just in Time, TQM Total Quality Management, Lean Management, VBM – Value Based Management, BPR – Business Process Reengineering. The appearance of new concepts as a product of management evolutionary development is a natural process which has speeded up lately. As noticed by [11], operational effectiveness has improved a lot as a result of their implementation, however, numerous companies are not satisfied due to the lack of the effect of these attempts on the long-term growth in profitability.

On one hand, when functioning in difficult conditions, companies need to be able to implement adaptation changes which will adjust them to the changing environment; they cannot be rigid. On the other hand, they must have a capability to dynamically control their environment in order to avoid chaos and maintain a necessary level of stability [12].

Organizational flexibility is considered as the organization's ability to adjust its internal structures and processes in response to changes in the environment. Several different taxonomies of organizational flexibility have been proposed in the literature. The most commonly used taxonomy distinguishes numerical, functional, and financial flexibility [6].

Flexibility refers to a company's ability to swiftly move from one task to another within the framework of the routine procedures adopted by the company. These tasks are

predefined, which makes it possible to use the necessary procedures. The traditional dimensions of flexibility include those connected with products or services (e.g. value, product mix, flexibility specification) and those connected with processes (e.g. equipment replacement, planning or innovation flexibility). Agility, in turn, refers to a company's ability to cope with unexpected market changes. Agility can apply to every dimension of flexibility. The key difference between the two notions is the ability to quickly respond to unexpected market changes, which is linked with agility [3]

The term agility first appeared in the business literature in relation to the flexible manufacturing system (FMS) in which agility and flexibility were often used interchangeably. The flexibility–agility association is similar to the competency–capability relationship. Agility is an externally focused capability, while flexibility is an internally focused competency, an antecedent of agility [7]. In this sense, agility has a unique property as a market-sensing capability to explore and exploit opportunities for market arbitrage. This perspective is consistent with the understanding of agility as a dynamic capability [4].

Taking into account the different strategic orientations of companies connected with adopting different business models, one can also distinguish, in addition to an agile enterprise, the concept of a lean enterprise. The origins of the agility paradigm can be traced back to the theory of a lean enterprise, which comprises concepts and methods which aim to minimise waste and consequently maximise efficiency as the company uses fewer resources (capital, financial, human, organisational) and less time to achieve the same goal [10].

As Trzcieliński [10] points out, leanness is a precondition for a company's agility. He also indicates that the concept of a lean enterprise is predominantly used by companies with a high manufacturing potential, which provides them with considerable autonomy in reaching their goals. This means that demand for the products which are manufactured as a result of this potential must remain relatively stable over a long period of time.

IV. CASE STUDY

A case study of the Hortimex Company has been developed based on the company's website www.hortimex.pl and direct interviews with the president and co-owner of the company – Mateusz Kowalewski. These interviews were conducted in January and February 2015 in the form of two face to face meetings through the use of an open-ended questionnaire. The interviews were recorded and transcribed, thereby creating an interview protocol.

Hortimex is an eminent representative of the world's leading producers of food ingredients and additives. The company's mission is to develop the Polish market for the products and solutions of the company's partners and share their knowledge about additives in food production and consumption. To accomplish its mission, Hortimex created and developed an organization whose main elements are the following: responsibility, the team, tools and knowledge. Based on its knowledge and experience the company offers its customers – food producers in Poland – technology consultation and assistance in choosing the most effective solutions. Hortimex is a medium-size company which employs approximately 35 people, but operates on a national scale. Its partners, however, are foreign companies, which gives the company's operations an international dimension.

The goal of the Hortimex Company is to support food producers in the process of creating unique food products. The distribution of the products the company implements is an important element in its business activity. Due to its cooperation with renowned logistics operators, the company provides a high-quality service, safety, and timely delivery. The Hortimex Company has existed since 1988 and is a family business, which in practice means that it conducts business responsibly, complying with the law, and in accordance with social, and environmental values.

The company's offer addressed to producers in Poland includes a range of products and services supporting the creation and production of diverse and unique foods. The offer is based on seven key elements (Table II).

TABLE II
 KEY ELEMENTS OF HORTIMEX'S OFFER

Key elements of the offer	Description
Balanced portfolio of products	Built on the basis of offers from companies representing Hortimex which are bound by an exclusivity agreement, and a range of products that Hortimex purchases on the open market from verified suppliers. The company's offer includes over 500 different kinds of ingredients and food additives
Consulting	The company helps customers choose the best solutions. Every year Hortimex technologists and traders provide a large amount of effective advice on food technology as well as the use of additives and ingredients in food production. Hortimex cooperates with customers on more than 150 new product launches annually
Experience of partners	The support it offers also includes the potential of companies with which Hortimex cooperates. Annually it organizes around 100 meetings during which the partners present their latest innovative achievements. Thus cooperation with Hortimex means contact with the leaders in the field of food additives
Confidentiality	The company guarantees the confidentiality of the data it receives. Only the data which is necessary to ensure proper operations will be transferred to selected partners. The data obtained will not be shared with any other clients
Retail network	Covers the area of the whole country, the company supplies more than a thousand customers in Poland. These are food producers from almost all sectors of the food industry
Logistics	The products offered by the company may be sent to end users directly from suppliers, or in convenient packages that are shipped daily from the warehouse located in Modła Królewska near Konin
Quality	Complaints on the quality of supplies concern less than 1% of completed shipments; whereas quality complaints are below 0.01% of the volume of products sold. The certification systems ISO 9001:2008 and HACCP guarantee safety. During external audits the company receives high marks

Following a thorough analysis of its business model, the company management came to the conclusion that, from the point of view of building a value proposition, it is not the product buyers that are the most essential, but the manufacturers of ingredients or food additives. They are the key recipients of the value offer proposed by Hortimex.

The company's co-owner Mateusz Kowalewski identified three possible models for the operation of the firm's partners on the external market:

- a straightforward commercial offering – putting products on the market and selling them to interested buyers,
- creating own sales structures,
- securing one partner in a given country and establishing a relationship based on an exclusivity agreement.

Another merit of the relationship between Hortimex and its partners is transparency: “our business partners know where we launch products, how many products we launch and what

problems we encounter, and they support us in solving these problems. The partners present us with their targets defined within KPIs (Key Performance Indicators) and we commit ourselves to achieving them. Evidently, this is working with external commercial structures. The model of cooperation that we have developed with our partners is unique and means that their perception of us has changed significantly. They themselves declare that they no longer refer to us as distributors but as partners; they acknowledge this feedback between our businesses.”

The company invites manufacturers of food ingredients or additives interested in entering the Polish market, those who wish to explore it and build long-term relationships, providing advice and delivering their products to customers without a simultaneous expansion of their own structures. All Hortimex’ partners are welcome to start the cooperation and use various interesting opportunities (Table III).

TABLE III
 BENEFITS FROM COOPERATION WITH HORTIMEX

Market development	Hortimex develops a market for their partners' products in Poland. Buyers are found among their current customers or by establishing contacts with new customers
Launching products	The company has experience in launching products with varying degrees of sophistication. It deals with both specialized and mass market products
Joint visits	The company's partners have the opportunity to contact customers directly. Hortimex organizes annual meetings during which the partners may present their latest innovative achievements
Sampling and feedback	The company delivers samples of products promptly: 80% of them are sent to the customer within three days after the order has been placed. Hortimex attaches great importance to comprehensive feedback information on the performance of the products offered
Transparency	Exclusive cooperation is based on the company's commitment to reporting and supplying information about the market situation. All necessary information about customers and their activities is provided
Support for clients	The offer of the company's partners is addressed to food producers in Poland. Hortimex provides the highest quality of service. In its business activities Hortimex promotes a positive image of the companies it represents
Distribution	Product availability is an important element of cooperation with a partner. The company offers both shipments from the warehouse and direct deliveries from producers to consumers
Support sales service	The company cares about customer satisfaction even after the transaction has been completed. Complaints are handled quickly and objectively, with a view to the genuine interests of all parties
Financial security	Products are offered to customers whose financial condition is carefully verified. This allows the company to minimize the financial risk

The manufacturers of ingredients or food additives want to have a presence on the Polish market, launch their products, offer a superior service to food producers in Poland, and then assist them in product marketing and provide them with the appropriate sales and after-sales service. Initially, the company treated partners like regular suppliers, based on the flow of goods and cash. However, after a detailed analysis of the business model as well as a value proposition analysis, the owners of the company realised that the appropriate targeting of its activities would turn the manufacturers of ingredients or food additives into key clients of Hortimex.

Adaptation to the environment begins when a company, using creativity and curiosity, begins to look for opportunities in the environment, the exploitation of which forces the company to take adaptive measures. This process requires an initial assessment of whether a given opportunity is within the company's reach in view of the resources at its disposal, as well as of the value and the potential risk associated with the opportunity. The president of Hortimex, Mateusz Kowalewski, points out that in their company adaptive capacity is a process initiated by him and his father, “which is first and foremost the open-mindedness of the entrepreneur and the culture they create in the company. My father has always had wide

horizons, he spotted various amazing opportunities. He believed that it is good to listen and observe, and that general curiosity is a very useful feature. If someone raises the price of a product we buy, we do not take offence but we try to discover why this has happened, what are the reasons for this decision.” Such an attitude allows the management to continuously analyse the business model adopted: “We ask ourselves how far our model will reach, what its limits are. We realize that the sources of our competitive advantage are not permanent; they are bound to run out some day. It is important, especially in this day and age, to be aware of the inevitability of change. I assume that in two to five years our business model will have to be rebuilt. In fact, it has to undergo continuous changes in order to meet changing market conditions. The key issue is to constantly assess the value we have and to whom it is addressed, as well as what our offering is and what it should be. In my opinion, the most important thing is what our value proposition is and for whom it is intended. And as long as we are able to perform an accurate analysis in this respect, there is a chance that we will survive in the market.”

So far, Tomasz Kowalewski and his son Mateusz have been the pioneers of change in the company, the visionaries whose

goals and ideas were implemented by the staff. Now Mateusz Kowalewski wants to reverse this process: "I want suggestions for changes to come from the employees. We are working to develop and stimulate the curiosity and creativity of our workers."

Hortimex's flexibility is largely due to its leanness: "Every day between 30 and 50 pallets of goods leave our warehouse. The next day they reach the customers and we do not have a single vehicle left. The concept of lean in our company means that we do not have fixed assets. Our company has the know-how, the brand and a good team of workers, and is able to adjust its activities at any time. Outsourcing is part of our business. In Hortimex we do not have offices – we rent them, we do not have warehouses – our sister company takes care of that, we do not have vehicles, we do not have an IT department, and soon we are going to get rid of the accounting department. We have a few people responsible for logistics and a team of salespeople who showcase our company in the market; these are people with knowledge and experience, who are able to find solutions for the recipients of the value we offer." According to the president, the key resources of the company are people and knowledge. Knowledge is an element which currently requires some work to systematise it and make it more useful and easier to absorb for other users. To achieve this, the company has made it obligatory for people who take part in training courses to prepare a workshop on their return in order to share the knowledge with the other employees. "The resource which is the most difficult to make flexible are people, who are inherently inflexible – this is related to the organizational culture. Today, our greatest challenge is to implement a kind of organizational culture in which changes are initiated not only by me, the way it has been so far, but in which the employees come up with new ideas, creative solutions. The team I work with regard change as something natural, and although they often resist it, they know that change is inevitable. Change requires effort, greater commitment, but if for some time our company does not implement any changes, the employees themselves come to me and ask what is going on, why no changes have been introduced recently."

Hortimex is characterized by a high degree of flexibility, which consists in its ability to reconfigure the available resources and to initiate and modify the necessary actions. In the words of the company's president: "If I wanted to go into manufacturing, I would not have to buy the production premises; it would be just a matter of finding the right partner and signing the right agreement to secure my interests. When running a company, it is important to decide what my core business is and develop these resources and these competences; the rest can be bought outside. What my company sells is so specific that we must rely on the salespeople, who know, for instance, how to launch an emulsifier." The succession process forced a change in the company's structure: "My aim is to have in the company a few people who will be able to work in various positions (multitasking). The company structure is a consequence of the business model (in our company ISO supports flexibility).

Next year, when we are planning the strategy for the coming years, the structure will have to be altered again, not the whole of it but some parts."

Initiating and modifying business projects requires an analysis of whether the emerging opportunity is financially attractive for the company. Hortimex, because of the size of the company, does not perform financial analyses of investment profitability but adheres to the principle of D. Eisenhower: "Plans are nothing; planning is everything. We are beginning to introduce such an organizational culture – the plan cannot tie our hands; we can change it at any time. Agility does not mean a lack of strategy or lack of long-term planning. Today I assume that in five years our plans may change, we may live in a different world than we are living in now. The strategy which was developed in 2010 has changed in the course of its implementation, but if we did not have it, we would not be where we are. A new strategy will be formalised through being based, among others, on KPIs."

V. CONCLUSION

The company Hortimex is an example of a firm in which adaptation measures are organised in the form of a process and supported by agility providers, which make it possible to achieve and retain the necessary agile skills [1]. The company uses Total Quality Management (TQM), Continuous Improvement (CI) (Kaizen), Outsourcing (OS), Supply Chain Partnering (SCP), Team-Based Working (TBW), Empowerment (EMP), and Integrated Computer-Based Technologies (ICT). The implementation of these practices supports the company's ability to adapt and helps it to faster and more efficiently meet the demands of today's customers and business partners. The managers emphasise that the process of adaptation to the environment starts with identifying the opportunities and threats in the environment. Their analysis and evaluation allows the company to respond with regard to exploiting the opportunities or protecting itself against the threats. In the process of adaptation speed is crucial. Hortimex has achieved this speed because of its leanness. Unburdened by high fixed costs generated by assets, the company is able to quickly change its strategic course and search for more effective and cheaper solutions for its business operations. The kind of organizational culture prevailing in the company is also highly significant. The culture should support the mission of the company, as well as being an important binder for the firm's philosophy and values. This is an area that Hortimex is constantly developing through promoting courage in the sense of seeking, accepting and facing challenges, as well as courage to speak one's mind without fear of causing offence.

ACKNOWLEDGMENT

Literature studies in the area of agility were conducted within the research project "The agility of enterprises in the process of adapting to the environment and its changes," financed by the National Science Centre (funds allocated on the basis of decision No. DEC-2013/11/D/HS4/03858).

REFERENCES

- [1] N. Dahmaradeh, S.A. Banihashemi, "Organizational agility and agile manufacturing", *European Journal of Economics, Finance and Administrative Science*, Issue 27, 2010, pp. 178 – 184.
- [2] J. Hage, R. Dewar, "Elite values versus organizational structure in predicting innovation", *Administrative Science Quarterly* 1973, 18, pp. 279 – 290.
- [3] R.J. Vokurka, G. Fliedner, "The journey toward agility", *Industrial Management & Data Systems*, 98/4, 1998, pp. 165 – 171.
- [4] N. Robert, V. Grover, "Investigating firm's customer agility and firm performance: The importance of aligning sense and respond capabilities", *Journal of Business Research*, vol. 65(2012).
- [5] M. Sajdak, „Zwinność przedsiębiorstwa jako koncepcja zarządzania między stabilnością a chaosem”, (w:) Romanowska, M., Cygler J., Granice zarządzania, Oficyna Wydawnicza Szkoła Główna Handlowa, 2014, Warszawa.
- [6] B. Sherehiy, W. Karwowski, J.K. Layer, "A review of enterprise agility: Concepts, frameworks, and attributes", *International Journal of Industrial Ergonomics* 37/2007, pp. 445 – 460.
- [7] P.M. Swafford, S. Ghosh, N.N. Murthy, "A framework for assessing value chain agility", *International Journal of Operations & Production Management*, vol.26 no.2, 2006, pp. 118 – 140.
- [8] J. R. Wells, "Inteligencja strategiczna, Jak stworzyć mądrą firmę", *Rebis*, Poznań 2014.
- [9] Ch.G. Worley, T. Williams, III E. E Lawler, "The agility factor. Building adaptable organizations for superior performance", *Jossey-Bass*, 2014, USA.
- [10] S. Trzecieliński, Przedsiębiorstwo zwinne", *Wydawnictwo Politechniki Poznańskiej*. 2011.
- [11] M.E Porter, „What is strategy?", *Harvard Business Review*, 1996, nr 11-12.
- [12] H.W. Volberda, "Building the flexibility firm. How to remain competitive", *Oxford University Press*, New York 1998.
- [13] Y. Weber, S. Y. Tarba, Strategic Agility: A state of the Art, Introduction to the special section on strategic agility, *California Management Review*, 2014 vol. 56, no 3, pp. 5-12.