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# Compilation of operational and strategic agility for ensuring the highest efficiency of company operations

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ABSTRACT
The author of the article, using the analysis of the literature, presents the two perspectives of company's agility – the strategic and the operational ones, and tries to make the compilation of them in order to obtain the highest effectives of the company's performance. The article shows that on the strategic level an outwards-oriented attitude is required which involves scanning the environment and assessing the likely impact of the trends in a given industry, as well as the technological possibilities, competitive forces, market changes, and market segment dynamics. Referring to the literature the operational level agility refers to changes which occur within an organization, particularly with regard to the processes of manufacturing and innovation. Adopting an agile strategy involves a new type of activity - a transformation of internal operations. The practice shows that only the implementation of both presented perspectives of agility may lead the company to the outstanding results and ensure competitive advantage in the unstable market. The aim of this article is to identify the determinants for strategic agility and the operational agility of companies as well as attempting to combine the two areas in order to ensure the highest efficiency of enterprises.

KEY WORDS
**operational agility, strategic agility, adaptation, flexibility, efficiency, change**

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## Introduction

Modern enterprises make strategic decisions in extremely difficult conditions, not only because of unpredictability and a turbulent environment, but mainly because of the dual nature of enterprises that is necessary to succeed in today's business reality. On the one hand, they are required to define a long-term vision, the mission of the company and create strategic plans; on the other hand, they are expected to react quickly and come up with alternative solutions to unforeseen events. Thus, companies strive to reconcile ensuring operational stability, survival and creating the necessary strategic plans with the chaos in the environment, which is both a source of threats and concerns for businesses as well as providing endless possibilities for innovation and using the opportunities which emerge (Sajdak, 2014).

A synthesis for an increase in environmental turbulence can be based on four key trends in the environment which were first presented by Ansoff (1985) in the late 1970s and which are still valid (Trzcieliński, 2011):

- a growth in the novelty of change, which means that past experience becomes less useful,
- a growth in the intensity of the environment, where the intensity can be measured through the volume of resources allocated to marketing and innovation activities,
- an increase in the speed of environmental change, manifested in a shortening of the period of time between the emergence of a new technology and its commercialization,
- the growing complexity of the environment, manifested in the blurring of boundaries between an enterprise and the environment as well as an interactive and synergistic impact of various factors on different areas of companies' operations.

This complexity, resulting from the relationships between events, processes and the activities of enterprises, is imperative for making key decisions within the business enterprise.

Thus, achieving agility by companies has a direct impact on creating a competitive advantage in order

to meet faster and more efficiently the demands of the market in a turbulent environment. If a company is capable of quick responses and has the appropriate competences, it can exploit the opportunities which appear in the business environment, thereby attaining a privileged position in relation to its competitors.

There are two separate aspects of agility: strategic and operational (Meredith, Francis, 2000). On the strategic level an outwards-oriented attitude is required, which involves scanning the environment and assessing the probable impact of the trends in a given industry, as well as the technological possibilities, competitive forces, market changes, and market segment dynamics. On the operational level agility refers to changes which occur within an organization, particularly with regard to the processes of manufacturing and innovation. Adopting an agile strategy involves a new type of activity - a transformation of internal operations. An example of this dimension of agility is Dell Computers, a company, which through its innovative use of IT tools and organizational procedures, has achieved agility in many organizational aspects such as customer orientation, cooperation with suppliers, customisation, just in time production, and creating a virtual enterprise.

Strategic agility is fundamentally different from manufacturing agility in that the former one is knowledge-based and proactive, while the latter one is flexibility-based and reactive. Strategic agility relies on gaining knowledge to anticipate market changes through interfirm collaboration, while manufacturing agility relies on manipulating the speed (number of products) or nature of products (product mix) offered once a change is detected in the market (Ojha, 2008).

The aim of this article is to identify the determinants for strategic agility and the operational agility of companies as well as attempting to combine the two areas in order to ensure the highest efficiency of enterprises.

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). The research assumes that the concept of an agile enterprise requires a holistic approach which combines the strategic and operational spheres because only such a broad scope of analysis can ensure the highest efficiency for business enterprises.

## 1. Financial market determinants of operational agility

Agility which involves a reactive approach to meeting the needs of customers (exploiting opportunities) has been recognized as the first level of a company's agility. The distinguishing feature of this level is the response of a company, particular in its qualitative aspect that is the extent to which the expectations of the market are reflected in the quality of a product. Another feature is reaction time, which relates to the development and manufacturing cycle of products. Trzcieliński indicates three groups of methods and technologies which support operational agility; these include identifying the needs of the market, shortening the technical cycle of developing a product, and shortening the cycle of manufacturing a product while maintaining the flexibility of the production system in terms of product range (Trzcieliński, 2011).

The objective of an agile enterprise is the satisfaction of its customers and employees and through acquiring the necessary skills a company can appropriately respond to changes in the economic environment. To achieve the desired level of agility, organizations usually use agility enablers which allow them to acquire and retain the necessary agile skills (Dahmardeh, Banihashemi, 2010). The most common agility enablers include Total Quality Management (TQM), Continuous Improvement (CI), Outsourcing (OS), Supply Chain Partnering (SCP), Team-Based Working (TBW), Just in Time (JiT), Empowerment (EMP) and Integrated Computer Based Technologies (ICT). The implementation of these practices promotes the agility of enterprises and helps them to satisfy the requirements of modern customers faster and more efficiently.

Nowadays, companies are expected to be able to adapt to the changes originating in the business environment as well as being proactive in terms of the offerings marketed to consumers. Thus, the emerging paradigm is agile manufacturing, which is understood as the ability to deal with changes and finding in them the opportunity to gain a competitive advantage. This is possible through the implementation of appropriate methods and tools necessary to achieve manufacturing agility (Zhang, Sharifi, 2000).

The term agile manufacturing (AM) was first introduced in 1991 by the Agile Forum at the Iacocca Institute, Lehigh University, USA. The manufacturing agility paradigm is based on encouraging manufacturing companies to prepare an offering which would satisfy the changing requirements of individual customers.

Agile manufacturing is a new manufacturing model which is the result of changes in the environment (Goldman, Nagel, 1995). Gunasekaran (1998) defines agile manufacturing as the ability to survive and cope in a competitive environment full of unexpected changes, which requires swift and efficient responses to market changes. In order to meet customers' requirements in a constantly changing market a company must undertake swift actions aimed at maintaining their competitive advantage; companies introduce innovations in the manufacturing process as well as information and communication technologies, which require a reorganisation of the company and new marketing strategies.

The origins of the agility paradigm can be traced back to the theory of lean enterprises, which comprises concepts and methods which aim to minimise waste and consequently maximise efficiency and cost-effectiveness as the company uses fewer resources (capital, financial, human, organisational) and less time to achieve the same goal. As Trzcieliński (2011) points out, leanness is a precondition for a company's agility.

An agile manufacturing process is characterised by six attributes:

- producing to order, as opposed to the traditional manufacturing process where large quantities of goods are produced and stored,
- meeting customers' specific needs, as opposed to the mass manufacturing process where goods are produced for the "average" customer,
- ensuring speed and flexibility in the manufacturing process,
- mobilizing and managing all kinds of knowledge intelligently in order to support an agility strategy,
- adopting new ways of working which facilitate agility (moving from functional to team working),
- creating "virtual" projects and ad hoc organisations in order to utilise the requisite capabilities when necessary (Meredith, Francis, 2000).

According to Dove and Kidd, the concept of enterprise agility involves two principal aspects:

- responding to changes (anticipated or unexpected) in proper ways and in due time,
- exploiting changes and taking advantage of changes as opportunities (Dove, 1996; Kidd, 1995).

Agility is a company's response to changes in the business environment and is a function of changes in the environment and the situation of the company.

A company's ability to come up with a strategic response to any new criteria of the business environment in practice involves the use of methods, manufacturing and organisational processes, practices and tools, the majority of which have already been developed. The available tools and methods are usually used in manufacturing companies for specific tasks, while others have to be altered or enhanced to develop the skills necessary to achieve agility. One of the major differences between an agile and a traditional enterprise is that the former one uses an integrated information system (one of the enablers of agility) intensively which provides the most up-to-date information, effective communication, wealth of data (Sajdak, 2013).

The objectives behind creating and developing an agile enterprise include: achieving a faster response to different patterns of demand; more effective customer and market orientation; a better understanding of customer needs and a closer relationship with customers; manufacturing flexibility for different product batches; manufacturing flexibility for unique products; manufacturing flexibility for a broad range of products; the ability to respond quickly to new market opportunities and to create virtual corporations; as well as coping with changes and being more inclined to take risks (Rudnicki, 2014).

## 2. Determinants of strategic agility

In a chaotic environment in which markets emerge, collide, split, evolve, and die, one of the primary determinants of a firm's success is strategic agility - the ability to remain flexible in facing new developments, to adjust the company's strategic direction continuously, and to develop innovative ways to create value. The competitive landscape has been shifting in recent years more than ever. Globalization, rapid technological change, the codification of knowledge, the Internet, talent and employee mobility, increased rates of knowledge transfer, imitations, changes in customer tastes, the obsolescence of products and business models have all caused a turbulent environment and accelerated changes and disruptions. These trends are expected to continue, producing ever more rapid and unpredictable changes (Weber, Tarba, 2014).

Companies which through creativity and innovation can create market opportunities represent the second level of agility. Creating market opportunities through generating new needs is a qualitatively different approach than responding to opportunities by identifying and satisfying the needs which appear on the market. This is a proactive model of enterprise agility, in which research and development is a key function (Trzcieliński, 2011). It requires from employees a broader and deeper knowledge, new ideas, systematic research and creativity. Such a company

not only keeps pace with the needs of customers, but it can also create new needs which customers have not been aware of before (Maskell, 2001).

Traditionally, strategic management has been commonly associated with the ability to ensure long-term security for an enterprise. However, as observed by Banaszyk (2013), the notions of 'long-term' and 'security' are gradually becoming degraded and obsolete. Thus, strategic management ought to focus on identifying opportunities in a nexus of random phenomena. The basic instrument is no longer preparing plans but recognizing the probability for the occurrence of various events. It is very important to find or create a market opportunity. The most valuable employees are those characterised by a very high degree of creativity and innovation. What is needed, therefore, is a culture conducive to learning collaborative forms of work and knowledge management.

Weber and Tarba (2014) claim that strategic agility is not about one particular change that an organization deals with – for instance, as a response to a major threat or crisis. Instead, strategic agility implies that a firm possesses a constant ability to effectively change its course of action in order to sustain its competitive advantages. Agile organizations have the ability to initiate continuous renewal that includes adapting existing competencies to an ever-changing environment and simultaneously reconfiguring themselves in order to survive and thrive in the long term.

Strategic agility requires inventing new business models and new categories rather than rearranging old products and categories. To cope with growing strategic discontinuities and disruptions, scholars have suggested the creation of strategically agile companies including: new ways of managing business transformation and renewal; developing dynamic capabilities; creating imitation abilities; maintaining a high level of organizational flexibility; developing learning and knowledge transfer skills; using adaptive corporate cultures; and devising post-acquisition integration approaches.

Attention is also paid to management levels, distinguishing the strategic level which involves strategic flexibility, i.e. the ability of an organization to actively anticipate the allocation of resources, modification of business partnerships, market opportunities, changing environmental conditions, and technological needs (Krupski, 2005).

According to Doz and Kosonen, strategic agility results over time from the combination of three major meta-capabilities that provide its foundations:

- strategic sensitivity (both the sharpness of perception and the intensity of awareness and attention) combines early and eagerly the awareness of incipient trends and converging forces with intense real-time sense-making in strategic situations as they develop and evolve. Strategic sensitivity is fostered by the combination of a strong externally orientated and internally participative strategy process, a high level of tension and attentiveness, and a rich, intense, and open internal dialogue,
- leadership unity involves the ability of the top team to make bold decisions fast. The leadership team's unity allows decisions to be reached at lightning speed once a strategic situation has been understood and the choices it opens or closes have been intellectually grasped,
- resource fluidity involves the internal capability to reconfigure business systems and redeploy resources rapidly, based on businesses processes for operations and resource allocation, people management approaches, mechanisms and incentives for collaboration that make business models and activity system transformation faster and easier.

The authors emphasize the importance and compatibility of all these three competences. Making good decisions is not enough; only the possibility of their implementation will produce the desired effect. Companies should intensively develop all three areas as only then can they achieve strategic agility and gain a competitive advantage over their rivals.

Also, Mavengere (2013) presented a strategic agility construct. His research expanded the dimensions of strategic agility to include strategic sensitivity, strategic response and collective capabilities. According to this author, strategic sensitivity is the ability to draw usable data from the environment, convert data into information, interpret and analyse it to acquire knowledge and then detect opportunities and threats in the business environment. Strategic response is the ability of an organization to reconfigure precisely and quickly its resources and processes to react or proact to the demands of the business environment. Collective capabilities include the ability of an organization to take advantage of the synthesis of its resources, for example employees, infrastructure or partners, and to derive benefits from working together, which are likely to be greater than the sum of individual benefits from each resource.

## 3. A COMPILATION OF PROACTIVE AND REACTIVE ACTIONS

It is obvious that strategic agility requires operational agility, only a combination of both of these perspectives creates an agile enterprise and ensures its highest efficiency. Reactive measures alone do not create a new business model and thus will not

ensure a privileged competitive position for a company. Enterprises need to develop the necessary skills in terms of strategic sensitivity as well as the competences related to strategic leadership. In this way, by going far beyond the boundaries of the enterprise, they are able to better understand and take advantage of changes in the environment.

Operational agility is the ability to adapt a company's business processes so that it can quickly, accurately and effectively exploit market-driven innovation. Operational agility enables companies to reconfigure existing processes quickly and create new ones to take advantage of dynamically changing market conditions. Therefore, in order to meet this requirement, companies should exhibit the capability to reconfigure existing resources and the ability to initiate and modify the necessary measures as well as appropriately control their implementation (Trzcieliński, 2011). This ability is related to a company's flexibility and in particular to the so-called flexible manufacturing system. This is a system in which the manufacturing processes of a wide range of products with varying production programmes has been automated in conditions that can be considered similar to mass production, with a lower or similar prime cost and higher productivity (Krupski, 2008). Information technology enables modularization and integration of business processes as well as their configuration and reconfiguration in order to create new processes. Operational agility enables a company to reduce information asymmetry between buyers and sellers by immediately providing comprehensive information, often through the use of electronic distribution channels (Sambamurthy et al., 2003). Another important feature is the ability to assess the adequacy of resources and to obtain them from the environment. The ability to identify the necessary resources in order to exploit market opportunities involves assessing the adequacy of a company's own resources (development of existing resources) as well as a possible decision to acquire resources from the environment. Through the use of the knowledge and competences of suppliers, distributors, manufacturers and logistics operators in the process of seeking the necessary resources, a company builds strategic networks or virtual strategic partnerships in order to find opportunities for innovation and competitive actions. However, reactive actions alone are not sufficient to create the same added value that companies, which also use a level of strategic agility, can achieve. Enterprises with a high level of strategic agility are characterised by high levels of acuity – the ability to perceive market opportunities and risks resulting from the environment quickly. They are able to categorize them, allowing them to be classified as opportunities or threats. Because of the innovativeness and creativity of employees, they can also create their own opportunities. Thus, strategic agility is manifested in the ability to perceive quickly any market opportunities and threats resulting from the environment, as well as the ability to classify situations as favourable or unfavourable. This feature is also based on the ability of companies to identify market opportunities through conducting strategic analyses, the use of early warning systems, or developing their own effective methods of seeking opportunities for their operations in the economic environment (Trzcieliński, 2011). It also involves the ability of enterprises to create their own opportunities through innovation and creativity. An extremely important component is also working with customers to explore and discover opportunities in the environment for the use of market-driven innovation and rapid competitive actions (Sambamurthy et al., 2003). It involves cooperating with customers in order to achieve market acuity (noticing events in the environment and categorizing them as favourable or unfavourable situations) and identify opportunities for competitive actions. Information technology (e.g. CRM – Customer Relationship Management) enables companies to build and improve a virtual community of customers. Not all opportunities can be used; therefore it is crucial to be able to prioritize market opportunities, bearing in mind the resources and capabilities that a company possesses or is able to "generate from the environment".

## Conclusions

It is necessary to conduct further research with regard to the impact of operational agility and strategic agility on the efficiency of enterprises as well as building a competitive advantage. The studies conducted up to date are rather general in nature, and they do not clearly indicate which type of agility, or rather what combination of different types, is crucial for improving performance. The existing research output ought to be used as a basis for further explorations into the impact of operational and strategic agility on the processes of building assets and attaining a favorable competitive position. It seems vital to identify those areas from both these perspectives, which through the use of agile competences, are likely to result in the better performance of a company. Finally, it is also necessary to improve the operationalization of the issues under discussion because the measures of agility proposed in the literature are initiatory in character and do not provide a set of precise tools which would make it possible to measure the agility.

## Literature

Ansoff H.I. (1985), Zarządzanie strategiczne, Państwowe Wydawnictwo Ekonomiczne, Warszawa

Banaszyk P. (2013), Zmiana kluczowych problemów strategicznych, in: S. Trzcieliński (ed.), Wybrane problemy zarządzania. Teraźniejszość i przyszłość, Wydawnictwo Politechniki Poznańskiej, Poznań, pp. 20-27

Dahmaradeh N., Banihashemi S.A. (2010), Organizational agility and agile manufacturing, European Journal of Economics, Finance and Administrative Science 27, pp. 178-184

Dove R. (1996), Agile and otherwise, Production Management, November - July

Doz Y., Kosonen M. (2008), The Dynamics of Strategic Agility: Nokia's Rollercoaster Experience, California Management Review 50 (3), pp. 95-118

Goldman S.L., Nagel R.N., Preis K. (1995), Agile competitors and virtual organizations. Strategies for enriching the customer, Van Nostrand Reinhold, New York

Gunasekaran A. (1998), Agile manufacturing: enablers and an implementation framework, International Journal of Production Research 36 (5), pp. 1223-1247

Kidd P.T. (1995), Agile Manufacturing. Foreign New Frontiers, Addison-Wesley, London

Krupski R. (ed.), (2005), Zarządzanie przedsiębiorstwem w turbulentnym otoczeniu, Polskie Wydawnictwo Ekonomiczne, Warszawa

Krupski R. (ed.), (2008), Elastyczność organizacji, Wydawnictwo Uniwersytetu Ekonomicznego, Wrocław

Maskell B. (2001), The age of agile manufacturing, Supply Chain Management: An International Journal 6 (1), pp. 5-11

Mavengere N.B. (2013), Role of Information Systems for Strategic Agility in Supply Chain Setting: Telecommunication Industry Study, The Electronic Journal Information Systems Evaluation 16 (4)

Meredith S., Francis D. (2000), Journey towards agility: the agile wheel explored, The TQM Magazine 12 (2), pp. 137-143

Ojha D. (2008), Impact of strategic agility on competitive capabilities and financial performance, Dissertation, Graduate School of Clemson University

Rudnicki, www.log24.pl [20.05.2014]

Sajdak M. (2014), Zwinność przedsiębiorstwa jako koncepcja zarządzania między stabilnością a chaosem, in: M. Romanowska, J. Cygler (eds.), Granice zarządzania, Oficyna Wydawnicza - Szkoła Główna Handlowa, Warszawa

Sambamurthy V., Bharadwaj A., Grover V. (2003), Shaping agility through digital options: reconceptualizing the role of information technology in contemporary firms, MIS Quarterly 27 (2), pp. 237-263

Trzcieliński S. (2011), Przedsiębiorstwo zwinne, Wydawnictwo Politechniki Poznańskiej, Poznań

Weber Y., Tarba S.Y. (2014), Strategic Agility: A state of the Art, Introduction to the special section on strategic agility, California Management Review 56 (3), pp. 5-12

Zhang Z., Sharifi H. (2000), A methodology for achieving agility in manufacturing organizations, International Journal of Operations & Production Management 20 (4), pp. 496-512