Enterprise agility – Modern Term or Future Trend for Successful Company Development?

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ABSTRACT

Today's dynamic environment requires changes in all aspects of management. Company reaction on changes and demand and supply should be faster and faster. Therefore, discussions about enterprise agility are becoming more topical today. The article is devoted to discovering the term "enterprise agility" which is based on analysis of company processes. The theory of Value Chain developed by M. Porter is taken for the description of enterprise processes and their agility. By applying mixed methods, the concept of enterprise agility is described through literature review and case studies. The research confirmed that there are many variations of the term "agility" and it is a future trend for a successful company.

Keywords: Enterprise Agility, Agile Management, Business Process Agility.

1. INTRODUCTION

Today's business environment is characterized by growing competition, shrinking cycle time and the accelerating pace of technological innovation [1]. In this ever-changing environment, keeping a competitive advantage requires a company's management to develop organizational practices that can sense an environmental change and quickly respond to the unpredicted change. As a result, interest in organizational agility has grown exponentially for researchers and practitioners [2]. The above-mentioned factors force managers at all levels to increasingly use intuition in making decisions. The rapidly changing environment leaves no room for long-term analysis and the decision must be made, reviewed and adjusted quickly. The demand for fast adaptation to new business conditions opens a new era of the corporate agility and management.

There are decades of studies done and thousands of books written describing how to create a well-structured company with the right bureaucracy, internal rules, corporate policies and instructions. The purpose of these actions was and still is to try to organize companies and processes similar to conveyors in factories. However, the assembly line breakthrough at the beginning of the 20th century does not fit the reality companies (including manufacturing) face more than 100 years later. Most of the processes prevailing in modern companies include a lot of interactions and co-working of different departments and communication with a variety of stakeholders within rapidly changing environments. Thus, any rigid frameworks of corporate operations cannot apply anymore.
In the fast-growing business environment, the term "Agile management" is becoming more and more popular. What does it mean and is this term just fiction – these are the questions the authors would like to find the answers to.

The aim of the research is to show variations of the term "agility" in modern business. The research methodology applied for this is mixed methods – combination of systematic literature review and case studies, followed by pragmatism.

2. THE TERM "ENTERPRISE AGILITY" AND ITS DEVELOPMENT

Agile attributes were originally conceived as core concepts of agile manufacturing. The researchers of the Iacocca Institute at Lehigh University were the first ones who coined the concept of agile manufacturing in 1991 [3]. Around the same time, the agile approach began to rise in prominence in software development resulting in the publishing of Agile Manifesto in 2001 [4]. The authors of the Agile Manifesto were united by the belief that, to succeed in the new economy, to move aggressively into the era of e-business, e-commerce, and the web, companies must rid themselves of make-work and arcane policies and place individuals and interactions over processes and tools, working product over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan [5].
The origins of agility in the organizational management context can be traced to the developers of Contingency Theory. The Contingency theorists opposed the notion of the one best structural form; instead they sought to identify the particular alternative structural form that was most appropriate under a specific set of conditions [6]. F. Fiedler (1964) determined that there was no one best leadership style, while the effectiveness of the leader was based on the situation. Further development of the Contingency Theory was summarized by J. Galbraith (1973) making two basic assumptions. Firstly, there is no one best way to organize. Secondly, any way of organizing is not equally effective [7]. I.C. Adizes (2004) found that younger organizations showed more flexibility, while as they were aging the controllability increased on account of flexibility. As a result, the organization increasingly loses touch with its environment, the environment changes faster than the organization's ability to adapt. He determines "Prime" as the optimal position on the lifecycle, where the organization finally achieves a balance between control and flexibility. In other words, we can summarize that there is no one universal way of structuring and managing an organization. Even more than that, the company's staff should apply different approaches and patterns reflecting the factors and challenges that affect the organization or its part from ever changing internal and/or external environments [8].
The recent study of McKinsey (2015) found out that the concept of agility has spread across different industries and sectors, the attributes of agility have been extended to the company's business processes and the entire supply chain. The agile companies design their structures having a backbone of stable

elements and dynamic capabilities to reflect unexpected challenges [9].

Despite the fact that there is a variety of definitions for "agility" and the term "enterprise agility" could be found in the literature, there is no commonly accepted definition and no consensus on the meaning of the term. Agility has been defined concerning the products, cooperation, organization, people and knowledge as important dimensions related to enterprise operation. It is a complex, multi-dimensional and context-specific concept [10]. The main points of the definitions of various authors may be summarized as follows:

1. an enterprise's ability to quickly respond and adapt in response to continuous and unpredictable changes in internal and external business environments [11, 3, 12, 10];
2. the ability to function and compete within a state of dynamic, continuous and often anticipated change [10];
3. the ability to sense environmental change [10] and act proactively to changes [12];

Apart from the academics mentioned above, there are plenty of researchers (Adizes, Gothelf, Mergel, Francis, Atkinson& James Moffat, Aghina, De Smet & Weerde, Pal & Pantaleo, Cappelli and Tavis and etc.) who consider agility as a very important and modern corporate pattern that has to be deployed by any organization to stay competitive. Agility is not a set of particular rules sent down from the board and written in some sacral corporate scripts of quality management that nobody reads. Just the opposite, it is an ability of the company to quickly adapt and adjust all of its elements, goals and core competences to the unstoppably and hardly predictably intrinsic and extrinsic dynamic challenges. There is a relatively limited room for the company to run as a mature structured enterprise on the one hand and keep its start up's flexibility and flat structure on the other hand. The main goal of the top management is to set the path and lead the company to an agile position.

3. AGILITY IN COMPANIES' SUPPORT ACTIVITIES

According to M. Porter's (1985) Value chain model, each enterprise has primary and support activities [13]. "Primary activities are those involved in the physical creation of the product… while support activities provide the inputs and infrastructure that allow the primary activities to take place…" [14]. Primary activities vary from industry to industry and there is no one comprehensive formula how to make them "agile". It does not mean that they cannot or should not be agile; on the contrary, it is the primary task of the company to protect its core business by making it less sensitive to the unexpected changes and dynamic influence from both internal and/or external processes. However, it is clear that a heavy trucks' plant shall use totally different tools to reflect the change than a tax consultant who possesses almost zero fixed assets and should deal mainly with intangible ones. Therefore, primary activities are excluded from the current study. Support activities include firm infrastructure, procurement, HR and Technology. In its turn, "firm infrastructure" consists of a number of activities such as general management, planning, finance, accounting, legal, government affairs and quality management. The general management (GM) and planning, business processes (BP) and quality management (QM) will be discussed under separate chapters, while governmental affairs are integrated in all support activities.

The authors of this article, by analyzing the Value chain model and researches done on the agility concept, found out that all support activities in large companies should and could be organized in an agile manner.

Firm Infrastructure (legal and financial departments)
Legal departments. According to R. Martin (2017), D. Ertel and M. Gordon (2012), there is a frustration from legal corporate functions [15, 16]. Nowadays executives feel decrease in both quality and accountability, which does not correspond to the costs of these departments. The accountability and understanding of the overall corporate targets are the key words. The lawyers should be part of the business processes, they have to understand that the main purpose of their services is not limited by never-ending disclaimers or explaining why this particular deal/clause is dangerous, but to come with the solution(s), to understand the balance between the imaginary zero risk deal and realistic business aims. Risks in business will never be nulled, but they should remain reasonable. Legal counsel must advise the decision-maker having in mind that aiming to have the "perfect contract" may kill the "good deal".

Bookkeeping and financial departments**.** The notorious Enron company and Arthur Andersen are the first names that come to mind when talking about financial "thinking out of the box" and "flexible" accounting. However, agility is not about fraud. It is about adaptation and cancelling unnecessary bureaucracy. However, it is rarely found in routine operations such as accounting [17]. Bookkeepers and accountants are very focused and systematic by nature. None can manage the huge data of numbers and operate with big amounts of incoming and outgoing money without any work frame and rules to follow. However, even this department can turn to be "agile". The first step is to make them understand that the organization does not exist for the sake of reports and balance sheets, what is important is corporate goals. In terms of bookkeeping the primary task of keeping financial flows and transactions – transparent, controllable and according to the laws and standards – remains in front. However, it should be accompanied by personal involvement and liability. Of course, unlike lawyers, bookkeepers are usually not directly involved in negotiations and deals closing. Nevertheless, there should be one responsible representative from the financial department to have a direct communication with the Project Manager. Such an approach must ensure both the double check of the team by the financial department and minimization of bureaucracy, thus enhancing personal involvement. Another important issue is that the senior executive must stop giving command and control orders to what the team should be doing, but oversee and delegate [18].

Procurement departments. According to M. Eatough (2014), procurement teams are often disconnected from the functions they serve and the markets they engage [19]. Too often, they are not fluent in the nuances of the business and therefore lack the expertise and authority to challenge or influence spending decisions. This often frustrates sales and the revenue-generating front lines, further isolating procurement. Procurement should be familiar and identify themselves with both the corporate goals and needs of a particular project. The special or individual procurement should have a detailed task/description from the project team that places the order. The representative(s) of the project team should take part in the negotiations and final decision making. Such symbiosis should lead to the best price and conditions for the product. So, procurement managers will have to change the way they approach suppliers and business

peers; being a strategic business partner means so much more than negotiating a discount [20].

HRM departments. The human resources (HR) managers operate in the field where all rigid rules and instructions usually have poor impact. According to Huzooree, G., & Ramdoo, V. D. (2015), companies are craving for the HR that may respond not only quickly, proactively and flexibly and but also following the corporate strategy [21]. Traditionally, the HR department focuses on personnel functions [22], while in an agile organization, it is being done in ways that are responsive to the ongoing changes in the culture and work style of the organization [23]. The communication in agile organizations is not only top down, but open communication and feedbacks from the employees to the team leaders and top management are highly valued [24].

Technology departments. The centerpiece of agile technology development, be it knowledge, procedures, or technology built in the process equipment, is the focus on shorter development phases and radical collaboration with the client in each phase [25]. According to Meyer & Marion (2016), the following elements characterise the agile technology development process: rapid prototyping, fluidity, user-involvement, coupling internal resources with external sub-contractors, own developed innovation framework, team self-governance and strong discipline. Additionally, knowledge management, in the form of continuous learning, knowledge exchange and building of communities of practices, is regarded as a high-value vehicle for agile technology development [26]. This view is also shared by Zollo & Winter (2002) who claim that experience accumulation, knowledge articulation and codification are focal to the organizational learning [27].

Organisational learning is connected with the development of so called dynamic capabilities, "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" [27]. Dynamic capabilities are unnecessary in a relatively static environmental, but in a context where technological, regulatory, and competitive conditions are subject to rapid change, persistence in the same routines quickly becomes hazardous. Systematic change efforts are needed to track the environmental change [28].

Business process and quality management
According to G. Bruno (2011), "Business Process Management (BPM) is called agile when it is able to react quickly and adequately to internal and external events. Agile Business Process Management requires putting the lifecycle of business processes on a new paradigm" [31]. Business processes are the nerves of the corporate ecosystem. No company can exist without the processes. Most of them are cross functional and guide both individuals and whole departments how to cooperate and to interact to fulfill tasks and achieve the previously set goals, alerting if any of them are violated. S. Nurcan (1998) classifies business processes into two categories: well-defined and often repetitive processes and loosely structured processes (knowledge-intensive) [29]. Setting and describing processes in both primary and/or support activities the management should maintain the basic principle of the minimally necessary bureaucracy. If the processes are too complicated or they are hard to follow, informal bypasses will be implemented, that in its turn will lead to the increase of bureaucracy and decrease of agility since it will require double work of real doing and

covering it with the necessary papers according to the formal procedures.
To become agile, the BPM lifecycle has to achieve integration and responsiveness, as shown in Figure 1 below.
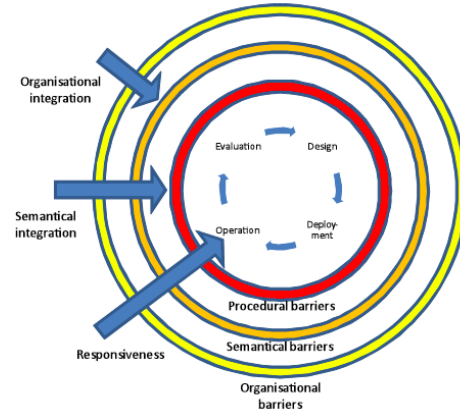

Figure 1. Business process management lifecycle adopted from Bruno, et al. (2011) [31]

By eliminating/improving the factors above, improving the understanding of corporate ecosystem among the employees and making the latter to identify their personal goals with the corporate targets, the company's agility will be enhanced and its development will be promoted. Agility is not about mess, Agility is not about chaos and anarchy, Agility is about minimization of the bureaucracy and adapting both the procedures and the employees' behavior to achieve the corporate goal in the most effective way.
Quality management is integral part of business process management. Quality managers are rarely loved in any organization, as they are a sort of a watchdog of the company with the main task to find and talk about the deficiencies and failures rather than success stories. However, their work is very important because without rules and procedures the chaos will take the lead. Like other firm's infrastructure departments, Quality management should have extensive knowledge of the factors shaping corporate ecosystem and to have general understanding of each project's issues they supervise. The rules and instructions they develop should be as close as possible to the processes in the real life. The involvement of the respective departments is a must. On the other hand, it is important to back up quality controllers. QM should not go into details of each project, and this is an important thing to observe, otherwise the number of controllers will exceed the number of employees. QM should have their tools (depends on the prime activities of the organization) to be able to check several projects in parallel identifying problematic and risky topics, reporting, but not doubling the PM or any other team member. The primary task of QM is to find the equilibrium between formally required actions and the way staff wants to operate to maintain the corporate goals and values. There should not be any discrepancies between those two approaches in an ideal world.

Strategy, general management and planning
The ideal agile structure assumes that information should flow in a precise and fast manner, decisions are made efficiently and quickly, the organization quickly adapts to ever changing environment and overcomes internal challenges. To evaluate the impact of agility on the strategy, the definition of strategy should be explored. According to M. Porter (1996), it is: "the creation of a unique and valuable position involving a different

set of activities" [32]. R. Rumelt (2011) considers that strategy is about how an organization will move forward. Preparing a strategy is figuring out how to advance the organization's interests [33]. Agility is not a lack of strategy or a lack of planning, but a road map that could and should be relatively quickly changed or amended to respond to the new factors (internal or external) or situations. According to M. Accardi-Petersen (2011), the strategy should not be changed every time someone new comes into your office, and it is not allowing you not to plan. Planning for change is the paramount rule of agile [34].

General management's prime tasks are to deploy flexible procedures and shape a flexible structure within the organization. On the other hand, leaders of organization have to invest in the Human Capital, develop it and embed the agile achievement orientation and broad thinking in all levels. According to the interviews performed and personal experience of the authors, the Human capital should advance the corporate structure. One of the most vivid problems of agility, especially in the big companies, pointed out during the interviews was conflict/contradiction between internal procedures and real-life processes. One of the companies solved it by implementing the system of adjusting its internal procedures (in cooperation with the relevant departments and stakeholders) to the real-life, day to day processes. The other companies' representatives claimed that instructions are developed on the group's level and cannot be adjusted, thus a system of informal relationship was developed to bypass the rules. Figure 2 below shows a well-balanced structure of an organization. Ashby (1956) claimed that the larger the variety of actions available to the control system, the larger the variety of perturbations it is able to compensate [35] or, in other words, as defined by P.M. Hildret & C. Kimble (2004) the entity can control something as long as it has ample internal variety represented within the organization [36].
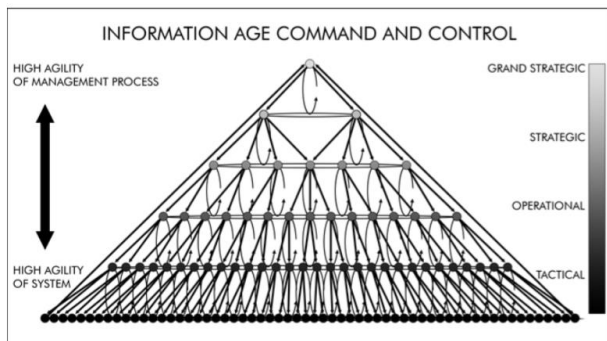

Figure 2. Information Age Management applying Ashby's Law [37]

S. Atkinson and J. Moffat claimed that management had to have lateral and vertical agility and interactivity, across and through the different levels as shown in the figure above [37]. Each unit/team/person is not limited and is capable to solve the problem using alternatives and nonstandard options, whilst keeping the total hierarchy in place. The structure depicted in Figure 2 supports and maintains the agility, reaction time and adaptation ability of both the whole system and its subunits for the changes to come.

Burke and Litwin in their Model of organizational performance and change claimed that all factors are interconnected and affect each other [38]. Thus, deployment of the agile strategy will require evaluating its effect on the whole corporate governance and management.

Summarizing the problems and challenges of the agility in planning, general management and strategy, the authors would like to outline the importance of balance and common sense when implementing any organizational change. Highly changing environment, internal challenges, limitations set by the peculiarities of a particular industry or market, cultural clashes and etc. – all these should be evaluated and the chaos should be avoided. However, both empiric and academic studies prove that substantial changes in the way the organizations being managed and led are essential. The millennium generation does not accept anything but instant response to their needs and this trend will progress. The easy access to information, data, geographical places, resources, globalization of the business have made a switch in mind of all human beings of all generations, races and professions. Agility in both personal and corporate perspectives has become a matter of survival, the next level of evolution.

4. ENTERPRISE AGILITY - CASE STUDIES

The authors interviewed the top management's representatives of four companies operating in different industries. The interviews were carried out during the time period from December 2017 to March 2018. Small and micro enterprises are excluded from the research. The small size in terms of the number of employees and/or turnover does not allow evaluating the effect of agility. These companies usually are not big enough to have separately operating support departments or a big bureaucratic structure, since the owner or the CEO are involved in both macro- and micro-level management and operations.

Company A (as of 03/15/2018).
Interviewed persons: Head of operations materials handling, Vice president of sales, materials handling, Sales director, materials handling

1) Industry: international manufacturer and supplier in special and large-scale plant construction as well as naval shipbuilding
2) turnover: 5522 million EUR (2016/2017)
3) number of employees:19 602 (2016/2017).

Mother company
1) Industry: steel, stainless products, automotive technologies, plant technologies, elevator systems, marine
systems, shipbuilding, services
2) turnover: 41447 million EUR (2016/2017)
3) number of employees – 158 739 (2016/2017)

Company B (as of 01/08/2018)
Interviewed person: CEO
1) Medical services
2) turnover: 25 million EUR (2017)
3) number of employees: 750 (2017).

Company C (as of 12/27/2017)
Interviewed person: Director of Manufacturing.
1) Beverage production;
2) turnover: 47 million EUR (2017);
3) number of employees: 200 (2017).
Mother company
1) Industry: beverage production
2) turnover: 350 million EUR (2017)
3) number of employees – 1700

Company D (as of 04/032018)

Interviewed person: Board member
1) manpower and personnel rent
2) turnover: circa 20 million EUR (2017)"
3) number of employees: 900 (2017).

Dept/Company	"A"	"B"	"C"	"D"
Legal	◉	◉	◉	◉
Financial	○	●	◉	◉
Procurement	◉	◉	●	◉
HR	◉	◉	◉	●
Technology	◉	◉	●	●
QM & BP	○	●	◉	◉
GM & planning	○	●	◉	●

○ - not agile

◉ - room to improve agility

● - agile

5. CONCLUSIONS

The research confirmed that **there are many variations of the term "agility" in modern business. R**esearch findings put forward that companies and their management strive for agility. At the same time the researchers observed that currently there is no common understanding on what agility is. The dominant view is that sophisticated management systems, formal procedures and different standards kill agility and do not correspond either to the needs of a modern company or to the ever-changing business environment. This challenge is more common for larger size companies as they tend to be more bureaucratic and procedure-based. At the same time, proactive planning, open direct communication, delegation and wise control combined with the freedom to make decisions lead to overall better performance and increased corporate agility in general and support activities in particular.

Further research should focus on agility of the primary activities within the limits of one particular industry. The potential findings could be analyzed and their implementation for similar industries may serve for future researches as well.

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