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**Business Agility – the Key for Building Innovative Solutions  
in an IT Organization**

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**Abstract**

*With technology advancing so fast, the Agile way of working has become the norm for most companies in the IT market. Faster time to market, flexibility, and better predictability are known to be just a few of the benefits generated by the Agile approach. Nevertheless, many companies are still struggling to apply Agile in a successful way. While many factors can cause this, this article focuses on a crucial, yet not an intensely debated mistake - applying Agile only at the operational level, without extrapolating it on the strategy, tactics, and culture.*

*This article is a case study based on two-year qualitative (>300 observation and interview sessions) and quantitative (> 220 respondents at a survey) research carried out inside two IT organizations, Metro Systems Romania and Metronom Germany, during their business Agility transformation. Based on this practical example, the article illustrates that Business Agility is very hard to achieve by adopting Agile only on the operational level. For that reason, organizations need to consider innovative practices like an outcome-driven, flexible objective definition, empowered teams, a data-driven mindset, and behaviour, flat structures, mastery of the product management discipline.*

**Keywords:** Business Agility, Agile strategy, Agile culture.

**JEL Classification:** C90, D02, D80

**1. Introduction**

The Manifesto for Agile Software Development (Kent et al., 2001) arose as a response to a series of limitations of the traditional way of working, known as Waterfall. A few of the waterfall methodology's most common limitations are the long time to market, poor customer collaboration, limited flexibility, and customer-centricity.

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The Manifesto defined the Agile way of working as a set of values and principles that support risk mitigation, effective customer collaboration, faster time to market, and the ability to adapt to customer-evolving needs.

Considering the pace of change in the IT industry, more and more companies realized the urgency to respond faster to customer changing desires, without having the luxury to wait a few years in order to build a perfect product, which by the time it is ready, will become obsolete. Since the Agile way of working seemed to address these needs, it became prevalent for the software development industry companies.

However, many companies have started a transition program from Waterfall to Agile, without truly understanding its value. This approach led to resistance to change, decreased motivation, and ultimately to unmet expectations. While many factors can impact Agile adoption's success, this article focuses on a specific one - adopting Agile only on the operational level, without extrapolating it on organizational strategy, tactics, and culture.

For better exemplification, the article focuses on Metro Systems Romania and Metronom Germany, two companies with more than one thousand employees that work together to provide Metro Cash and Carry with the needed IT solutions for 26 countries across Europe and Asia. The article is a case study that reveals these companies' journey towards true business agility - their limitations in applying agile only at the operational level and the steps they need to perform to overcome them.

## **2. Problem Statement**

Since Agile methodologies like Scrum, Kanban, SAFe, and XP became more and more accessible for the IT organizations, they started to be mistakenly perceived as the only step that needs to be considered for successfully adopting Agile at the organizational level.

According to the 14<sup>th</sup> Annual State of Agile Report (Version One, 2020), the main reasons for adopting Agile are accelerated software delivery, enhanced ability to manage changing priorities, increased productivity, better alignment between business and IT, and increased software quality. All of these benefits influence the delivery teams' way of working, helping them to improve their efficiency, predictability, and flexibility. On the other hand, applying Agile methodologies only on the delivery teams level means to achieve just an operational Agility, without considering other organizational dimensions like strategy, tactics, and culture.

By neglecting these essential dimensions, organizations may fall into the trap of having Agile teams in a Waterfall organization, which may lead to limitations, confusion, and conflictual situations. It may happen to have Agile delivery teams that can generate value very fast but are slowed down by the organizational procedures, management decisions, and rigid strategies.

The 14<sup>th</sup> Annual State of Agile Report also presents the main challenges and barriers in adopting Agile successfully. According to the study, the most cited challenges relate to the internal culture of the organization: resistance to change, poor leadership involvement, and inconsistent processes across teams.

Many Agile specialists agree that Agile is, first of all, a mindset that should be extrapolated at all levels, and culture seems to be a well-known challenge for successful business agility. However, many organizations, Agile coaches, and organizational change agents treat the Agile methodologies' adoption as the final destination of their Agile journey.

While adopting Agile methodologies on the team level is very thoroughly described in the published literature, there is still much room for exploration when it comes to Business Agility and how to successfully achieve it.

### **3. Research Questions/Aims of the research**

This research aims to describe what business Agility is and how to apply it not only on the operational level but also on the organizational level, including tactics, strategy, and culture. It should act as a practical guide for all the Agile practitioners that are interested in getting the most out of their Agile adoption. Firstly, the article will describe the characteristics of Agile organizations that apply Agility at all levels. The second step is to describe the concrete steps that organizations need to make to extrapolate Agility from operational to organizational levels in order to eliminate the risk of having high performing teams working in rigid organizations that are slowing them down. The article presents how to overcome some conflictual situations like:

- Rigid processes and business flows which contravene with some agile values and principles that promote transparency, fast feedback loops and direct communication with the customer;
- Delivery teams not collaborating directly with the customers since some intermediate roles receive the requirements and are responsible for stakeholders' management;
- The old tools, technologies, architecture, and technical dependencies between teams which limit teams' innovation and creativity;
- The decision-making process and objectives setting which are rigid and top-down, without considering teams' lessons learned.

### **4. Research Methods**

The foundation of this study is the theoretical research which drafts a comprehensive understanding of Business Agility. The article summarizes some thought leaders like Marty Cagan, Melissa Perri, Felipe Castro and Eric Ries, who promote very innovative and practical approaches in the art of product management and business Agility.

The study's central pillar is the 4gile Minds Digital Conference organized together with the 4gile Minds community from Metro Systems Romania in May 2020. During the conference, great Romanian and international Agile leaders shared their experiences and created an overall picture of business agility and how to achieve it.

The research's roof is exploratory and practical research - a case study carried out for Metro Systems Romania and Metronom Germany, which reveals the journey

of these two IT companies towards Agility true business. The case study is based on a survey done by the German company – Die Produktmacher – and my personal research, working as an Agile coach for these two companies.

Information about the survey:

- Research methods: Online surveys and interviews with employees;
- Period: September 2019 - April 2020;
- Two different companies – Metro Systems Romania and Metronom Germany, working together in the same group, to achieve the same vision;
- 180 teams included in the survey, >220 respondents;
- Respondents have roles like Product Owner, Developer, Agile Masters;
- Distributed teams across five different locations: Romania (Cluj, Bucharest, Brasov), Germany (Dusseldorf and Berlin), and India (Pune);

Information about my personal research:

- Period: April 2018 - August 2020;
- >50 interviews with Product Owners from Metro Systems and Metronom;
- >100 interviews with team members from Metro Systems and Metronom;
- Participation as a silent observer in more than 200 team meetings to observe their dynamics and way of working;
- >20 interviews with the most essential stakeholders, including management board of the teams to understand their pain points and expectations.

## **5. Findings**

### ***5.1. Characteristics of an Agile organization at all levels***

A successful Agile adoption requires applying this way of working at all levels: operational, tactics, strategy, and culture.

The principles that describe an Agile culture are:

- Fail-fast: “A modern company rewards productive failures that lead to smart changes in this direction and provide useful information” (Ries, 2017, p. 40);
- Autonomy, transparency, and accountability at all levels;
- Continuous inspection and adaptation and short feedback loops.

The principles that describe an Agile strategy are:

- Iterative, empirical and flexible planning, which allows fast adaptation;
- Defining and validating hypothesis very fast, in a Lean Startup way;
- Flexible and outcome driven process for objectives definition
- The principles that describe Agile tactics are:
- Data-driven decisions and validated assumptions;
- Continuous-improvement approach;
- Experimentation and lessons-learned.

**Table 1. Operational Agility vs Business Agility**

|                      | <b>Operational Agility</b>                    | <b>Business Agility</b>                                   |
|----------------------|---|---|
| Culture              | Top-down, Command and Control                 | Autonomy, Transparency and alignment at all levels        |
| Strategy             | Annual, Static Planning                       | Empirical and iterative, Data-driven planning             |
| Tactics              | Big, non-validated bets, long feedback cycles | Experiments, fast feedback loops, Lean Startup principles |
| Operational/delivery | Agile Development                             | Agile Development   |

Source: adapted from Felipe Castro (2017),  
 URL: [https://felipecastro.com/en/okr/okr\\_and-agile/](https://felipecastro.com/en/okr/okr_and-agile/)

The above table describes the difference between an organization that applies Agile only at the operational level and an organization that values Agility at all levels - including culture, strategy, and tactics.

Given that culture is the only intangible, unmeasurable aspect, it is also the hardest one to be influenced. In this context, organizations can focus on concrete, practical actions that will generate a change in employees' behaviour and create discipline and success stories.

Once these practices are integrated into the way of working, they will also trigger a cultural change. As Kotter and Cohen (2012) said, "In a change effort, culture comes last, not first."

The attempt to change the organizational values and principles before enabling an environment to support them will cause confusion and frustration.

Nevertheless, culture is a crucial element that should be considered right from the beginning. In a change process, we should have a clear vision about the culture that we want to nourish on the organizational level, without waiting to figure it out on the way. Our culture should guide our strategy, tactics, objectives, and day to day activities.

Understanding that the cultural change comes last will help the organization define the right priorities and expectations during their transition process. It is vital to find a balance between our vision - where we want to go - and how we communicate it to the company, supporting it with the rights methods and behaviours.

In this context, the next part of the article is a detailed description of the steps done by Metro Systems and Metronom on their journey towards business Agility.

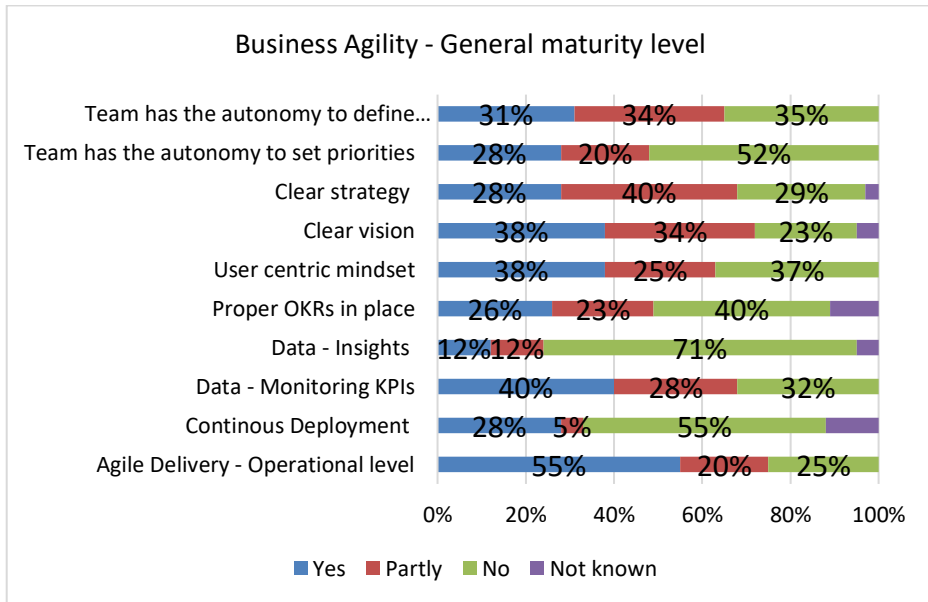
## ***5.2. Applying Agile at operational level in Metro Systems and Metronom***

Metro Systems Romania and Metronom Germany started their transformation program from Waterfall to Agile in 2015.

Even if they faced significant resistance to change initially, the most common Agile methodologies like Scrum and Kanban are integrated now by the delivery teams in their day to day work easily and naturally.

However, many teams do not succeed in creating solutions that truly address their customers' needs.

Even if adopting the Agile methodologies at the operational level generated significant benefits, the General Maturity level after five years, in terms of business agility, shows that there is much room for improvement in some specific areas. Figure 1 reflects the results of the survey and the maturity level on each dimension.



**Figure 1. Business Agility level in Metro Systems and Metronom**

Source: adapted from Die Produktmacher survey

### 5.3. New vision and actions towards Business Agility in Metro Systems and Metronom

Two years ago, Metro Systems and Metronom started their journey in extrapolating Agility at all levels. In this context, they started to explore a new challenging perspective - to switch for a purely IT-driven organization to a Product driven organization, led by business agility. Instead of being a demand-driven organization that implements all the customers' requirements, they want to be a value-driven organization that understands customers' needs and come up with innovative ideas on how to solve them.

The main steps done in the last year by these two companies, in achieving their vision are:

- **Adoption of the OKR (Objectives and Key Results) methodology at the company level**

Organizations should adopt a customer-centric culture in a very competitive market, which enables them to value the outcome more than the output. This way,

they avoid falling into "the build trap," which makes them create more features to respect their deadlines instead of meeting their customers' needs (Melisa Perri, 2018). OKR is a methodology that promotes alignment, flexibility, and a sense of purpose and helps the teams understand how they can contribute to the company's overall vision by setting outcome-driven objectives based on their specific context.

Defining the same set of OKRs, Metro Systems and Metronom managed to bring more clarity at all levels, improved the alignment between dependent teams, and between the teams and the higher levels (vertical and horizontal alignment).

Moreover, OKR methodology enables short feedback loops and a higher degree of flexibility since the objectives are planned only for six months iteration. Each iteration ends with a progress review meeting, followed by a retrospective.

- **Involving customers in the OKR definition**

Once Metro Systems and Metronom applied OKR at the organizational level, they also managed to extrapolate it at the customers' level. Instead of placing requirements about the concrete features that the teams need to implement, customers define objectives and key results that describe the expected outcome (value), not the output (features delivered).

Once the customers' needs and expectations are precise, the teams can decide how they can contribute to achieving them, and adjust their set of OKRs based on it.

- **Defining VMOSA (Vision, Mission, Objectives, Strategy and Actions)**

A strong product organization, led by business agility, needs effective product management. "Product management is an interdisciplinary role that enables teams to plan, design, and continuously bring better products to the market" (Moore, 2019).

Instead of being just an intermediate between the business and the IT teams, translating their requirements into a product backlog, the product owner role starts to earn more autonomy and ownership. The product owner should continuously engage in a discovery process to understand the customer needs, desires, and pain points and define, together with the team, which is the best way to solve them.

### ***5.3. Recommendations for Metro Systems and Metronom***

Considering the results of the survey and the steps that the Metro Systems and Metronom already did toward business agility, there are still some vital dimensions that they can improve.

- **Enable a data-driven mindset and behaviour at all levels**

Business Agility promotes continuous exploration and adaptation, failing fast, defining, and validating hypotheses in a Lean Startup way, maximizing value, and minimizing waste. For that, companies need to make informed decisions based on real-time, objective metrics.

An essential process that can be applied is called The Lean Product Analytics, described by Olsen (2015): Define your key metrics, measure baseline values for them and evaluate ROI potential for each one of them. After that, you need to decide



which is your top metric to improve and focus on improving it while iterating and learning.

- **Improve teams' autonomy to make decisions**

Currently, the requirements coming from the stakeholders have priority in teams' backlog. Even if the teams define concrete OKRs, based on customers' OKRs, there are still other requirements that appear during the iterations, which were not included in the initial planning.

The trust level between business and IT needs to be improved and, as Cagan (2019) said, product teams should be “empowered to figure out the best way to solve the problems they’ve been asked to solve.”

For that, the companies need to grow effective product management skills, to improve delivery and the discovery process.

- **Improve product management skills**

The product owners from these companies are currently highly involved in the delivery part: write down and prioritize the user stories, their acceptance criteria, and how each feature should look like in detail. Companies that value true business agility empower the teams, give them the freedom and autonomy to decide how the best solution should be designed and developed, while the product owner is highly involved in the discovery part. This part is about exploring the customers' needs, behaviour, pain points, and desires, interviewing them, empathizing with them, and understanding what is going on in their daily activities. The product owner is responsible for defining the right product, while the development team is responsible for developing it right (Cagan, 2017).

Engaging the product owners in the discovery process is an essential part that needs to be improved in Metro Systems and Metronom - it may be the key to achieving the business agility that these companies are looking for.

## **6. Conclusions**

Agile methodologies adopted at the team level help companies achieve great benefits like faster time to market, better flow efficiency, predictability, and the ability to respond faster to the customer changing desires. Moreover, they create discipline, transparency, and improve team motivation. Nevertheless, applying Agile at the operational level, without extrapolating it at all levels of the organization, may generate confusion and limitations and become an obstacle for successful business Agility. While adopting the Agile methodologies (like Scrum, Kanban, SAFe, XP) generates excellent improvements on the delivery level, discovery is another essential dimension that needs to be considered to achieve real business Agility. For that, organizations need to focus more on defining an insightful vision and mission for their products, adopting a flexible and iterative objective definition process (OKR methodology), make informed decisions based on data (Data-Driven mindset and behaviour), empower the product teams to come up with innovative solutions and improve the product management discipline on the organizational level. Autonomy, alignment at all levels, fast feedback loops, validated experiments, and transparency



are the vital elements that characterize the culture, strategy, and tactics of an Agile organization and define business agility as a direction, not a place.

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