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Application of the agile methodology in a Hungarian financial institution¹

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Abstract

In today's rapidly evolving, highly digitalized world, due to frequent changes in the market environment and often fierce competition, it has become an important requirement for companies to respond to emerging challenges in the shortest time and to meet the new customer needs. To this end, it may be expedient to reorganize and renew the structure and internal work processes of the organizations as well. The agile approach, which started from the world of IT and is now widespread, and which is also used by Hungary's market-leading retail financial institution, OTP Bank, can provide a solution for this. But what does an agile approach mean? What makes an organization agile? And how can a financial institution take an agile approach from the world of informatics? In this study we try to answer these questions.

Keywords: agility, change management, flexibility, cooperation, OTP Bank

1. Introduction

Change and its appropriate management is one of the great challenges of the 21st century. Digitalisation and innovation competition can sometimes put companies under pressure and pose significant challenges, but if they manage to overcome these obstacles successfully and in the shortest possible time by operating efficiently and with sufficient flexibility, their efforts can lead to a competitive advantage and a stronger market position. It is with this aim and intention that the agile approach, which originated in the field of computer software development, and an organisational model based on agile values and principles, are starting to be applied in more and more areas around the world.

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2. The emergence of the agile approach

Project management, like so many professions and disciplines, has undergone a major transformation and evolution in recent decades. As pointed out by Špundak (2014), the principles of modern project management, established in the 1950s, led experts at the time to believe that the methodologies known and applied - i.e. the set of processes, practices, techniques and rules used in projects - should be applicable to all projects (Špundak, 2014). From the 1960s onwards, quality became an increasingly important aspect, which implied an increase in time and cost requirements. This led to the creation of the so-called waterfall model in 1970, which is considered the first published system development model. The sequential development model, named after the American computer scientist Winston W. Royce, was published in Royce (1970). It consists of dividing system design into distinct, strictly sequential steps: the imaginary steps are sequential, and the next step can only be taken when the previous step is complete (Royce, 1970). This approach was essentially based on the idea that projects are clearly definable and predictable, since they are a series of linear steps that build on each other. They are therefore detailed, simple to plan and do not require major changes during implementation. A major advantage of the model is that it is easy to manage thanks to clearly separated phases, and the final result will be well thought out, free of redundant elements and easy to maintain thanks to detailed, clear and unambiguous documentation. However, it has the disadvantage of requiring well-defined, final requirements at the very beginning of the process, before system design. If any changes are required afterwards, this may mean starting the design process again, which can result in significant time loss and increased resource requirements.

Conversely, in recent decades there has been a growing recognition that a given methodology may not be applicable to all projects. The main reason for this is that the range of technical conditions has broadened and expectations have increased dramatically; projects have become much more complex, in many cases with a multitude of tasks, a large number of stakeholders and considerable complexity. This is in contrast to the previous approach, which was mainly based on hierarchical and linear relationships. A further problematic element of the so-called classical approaches is that they separate and treat the project separately from its environment, whereas changes in requirements often result from changes in the project environment, and therefore require the ability to adapt. Growing criticisms of the classical project management approach and the increasing need for innovation have been a harbinger of change. This was catalysed by the spread of cost-cutting trends. This in turn led to the emergence of new project management methods, which started and spread from the field of software development.

In the second half of the 20th century, the field of computing began to grow by leaps and bounds. As computers and hardware became more widespread, software proliferated and was developed to meet the needs of an ever-wider range of customers. At the same time, the software industry became increasingly competitive. However, as the complexity of the various software products increased, their development became more complex, costly and time-consuming, and required the involvement of more and more people. When a team of software developers set out to create new software, the process from the conception of the idea, through its refinement and detailed documentation, to its development and delivery for testing - a process defined by the waterfall model - required considerable resources and could take up considerable time. At the end of the process, the final result, the working software, was delivered, but it could easily turn out to be unsuitable for the customer. It could be that the product was not, or not entirely, built to the

original requirements due to some misunderstanding, or that the original requirements had changed due to some internal change in expectations (e.g. a new idea that seemed better) or some external factor (e.g. a competitor had finished earlier and needed to be improved and surpassed).

The above has led to the need for a more appropriate approach than the inflexible and iteration-free waterfall model, which facilitates closer contact between project members and with the customer or client, and thus better manages changes and possible modifications and supports the processes more efficiently. This is how computer software development has pioneered new approaches and methods of project management. Although some of the details of the new non-traditional ideas and approaches were already used in the past in various forms and depths, they were basically summarised in the lines of the Agile Manifesto (Beck, Kent et al., 2001), which was drafted and published in 2001 (just twenty years ago) and has largely been the reason why they have spread worldwide. The document was produced at a conference in the US in February 2001, where professionals with significant practical experience from leading software development companies met and summarised the key ideas and key elements that they considered important and fundamental to the Agile movement. The manifesto identified four core values of the agile approach: that individuals and personal communication between them are more important than the methods and tools used; that working software is more important than detailed documentation; that collaboration with the customer is more important than contract negotiation; and that effective change management is more important than full adherence to plans. These core values are detailed in the Agile Manifesto in twelve principles: delivering valuable software, change management, frequent delivery, continuous communication, motivated team members and trust between them, personal communication, progress, sustainable improvement, technical excellence, simplicity, self-organising team and frequent fine-tuning.

These four values and twelve principles are the basis of the agility mindset. These characteristics help to identify what is and can be considered agile, and from these can be derived the various agile approaches, techniques and methods used. Although the ideas summarised here are related to the field of computer software development, they are not exclusively applicable to this sector. There have been several studies on the extent to which agile methods, which are increasingly used in software development, can be implemented in other industries. For instance, Conforto et al. (2014) conducted a survey of 19 Brazilian companies of different sizes to investigate whether the criteria for the applicability of agile approaches in other industries exist; the final result was a positive response (Conforto, et al., 2014).

3. The agile organisational structure

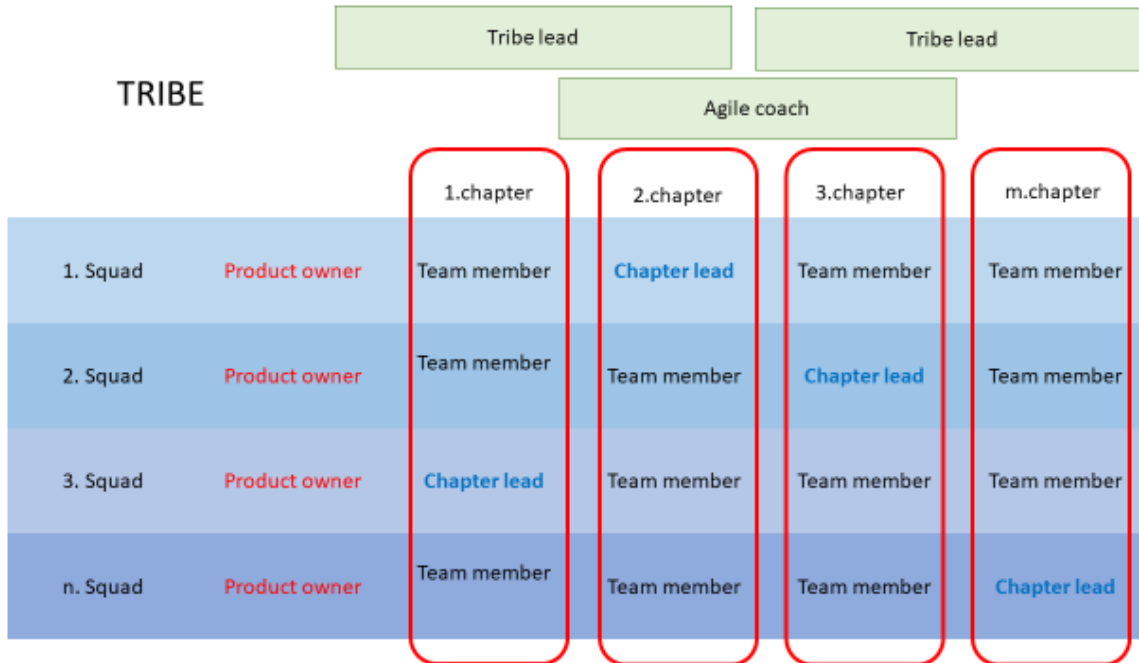
For an organisation to operate in an agile way, it is necessary that its members adopt and identify with the agile mindset. In order to be able to implement the agile methodology in their operations and processes, it is also recommended that the structure of the organisation is adapted. It was along these lines that the global music-streaming success Spotify created the organisational model that has since been adopted and applied by many organisations implementing agile transformation. As Patil et al (2016) show, the basic unit of the organisational structure created by Spotify is the team, the so-called squad. (Patil, 2016) The model is based on the premise that an organisation can optimise its operations to create value for the customer or user if all the necessary knowledge is in one place. Therefore, these squads, usually consisting of 6-12 people, contain within a team experts in IT, business and, if necessary, other skills relevant to the production of the

finished product. Team members are at the same level in the organisational hierarchy and members of a given squad work physically sitting next to each other in an agile way to facilitate and support communication between them. This shortens consultation time, enables them to make decisions more quickly, and gives them full joint responsibility for the end product: they work together as a team, in a true value-creating process, towards a common goal.

Several squads, closely linked and interdependent, working towards the same business goals, form the largest unit in the organisation, the so-called tribe. Working together in this way, usually between 100 and 150 people are collectively responsible for the customer experience and the delivery of the product or service.

Within a tribe, chapters are made up of professionals from different squads with the same competencies: they are in effect the equivalent of a traditional business unit organised by functions. Each squad member is also a member of a chapter. This structure is illustrated in Figure 1. The purpose of these groupings is to provide the necessary expertise and quality, and to continuously develop the skills and expertise of their members. The chapter leader is responsible for this and for the way the chapter works.

Figure 1: Agile organisational structure based on the Spotify model



Source: own editing, 2021

Agile coaches ensure that the framework is adhered to, and are responsible for maintaining, improving and developing the process, while removing obstacles so that team members can focus on improvement. In addition, they organise and moderate the team's meetings and discussions, with the ambition that at a level of agile maturity the team will be able to do this on their own.

The product owner is responsible for assessing the customer's needs and, on that basis, for drawing up the requirements specification. During implementation, he is responsible for the successful development of the product and for maximising its value. It is important that, in order to avoid confusion between business and subordinate responsibilities, the roles of product owner and chapter leader should be separate: one person cannot be both at the same time.

There are a number of practices, techniques and tools available to help organisations adopt an agile methodology. This is achieved by allowing for the possibility to mix and match different methods and thus tailor them to the specific process. Six different techniques, tools and practices specific to the agile approach have been collected by Conforto et al. (2014): these are visual tools (e.g. the use of boards, drawings, post-its); the use of simple, transparent processes and tools; the iterative, iterative design process; the use of autonomous teams during development; the use of autonomous, dedicated teams to monitor and update the project plan; and the continuous monitoring and updating of the project plan (Conforto, et al, 2014).

Scrum defines so-called ceremonies as its tools: these include sprint planning, daily stand-up, and review and retrospective. The set of tasks to be completed during a given sprint is determined with the team based on the prioritisation of the task list by the product owner, so that they can be completed within the given time frame (usually 1-4 weeks). Thus, it is important to plan sprints properly.

One of the most important methods of scrum is the stand-up, which is a daily meeting of about 15 minutes, always held in the same time slot during the sprint. Its purpose is complex: on the one hand, it helps to check progress towards the sprint goal and, if necessary, to define changes and actions; on the other hand, it facilitates and regularises communication between team members, increasing their cooperation. Each team member informs the others on three topics: what has been completed since the last meeting, what they plan to complete before the next meeting, and what distractions are holding them back. The sprints will end with a review (also known as a demo) meeting to present the results. The retrospective provides an opportunity to discuss the experiences and lessons learned during the sprint, which can be used to identify any operational flaws, areas for improvement or areas for improvement.

4. Agile in practice

Over the past twenty years, the values and principles set out in the Agile Manifesto have become increasingly widespread around the world, with successful companies such as Google, Netflix and the aforementioned Spotify, among others, operating in an agile way. Seeing examples from abroad, more and more companies in Hungary are adopting agile methodologies and tools. One of them is OTP Bank, the largest member of the Hungarian commercial banking sector, which has recently implemented a significant agile transformation in some of its departments, the first among the region's credit institutions, in order to increase its efficiency and manage change more effectively.

4.1. OTP Bank has implemented an agile transformation in order to

OTP Bank Plc. is Hungary's largest commercial bank with a history dating back more than 70 years. Over the last two decades, it has become a dominant player in the Central and Eastern European banking market through its continuous expansion abroad and its transformation into a banking group: today, it serves almost 19 million customers in 11 countries through more than 1,700 branches and nearly 5,000 terminals, with a growing number of online services, and employs approximately 40,000 people. OTP Bank Group's mission is to provide its retail and corporate customers, as well as local authorities, with a full range of outstanding and high-quality financial services in Hungary and Central and Eastern Europe. The liquidity and capital position of the Group is currently very stable, despite the current epidemic situation: the net loan-to-deposit ratio is

currently 78%, the consolidated capital adequacy ratio (CET1) is expected to reach 14.6% in 2020, compared to the minimum requirement of 9.7%, and the adjusted ROE ratio is expected to be above 10% in 2020 (László Bencsik, 2020).

4.2. Agile transformation

In addition to the above, OTP has achieved excellent results in recent years, outperforming its sector. In the light of this, the question may arise: why would such a successful company embark on a large-scale organisational transformation, introducing a completely new approach, which involves a significant initial investment and may even entail considerable risk? The first reason is innovation. It would be easy for a market leader, in any sector, to become complacent. However, the fierce competition for innovation in recent years does not allow this, as it makes it difficult to maintain market share and profitability, forcing operators in the sector to be open to innovation. It is therefore important that the organisation is always ready to adapt quickly and flexibly to innovative solutions, and the Bank's management has seen the need to create a more open structure for the central units concerned than was previously the case. Another important factor is the time needed to launch new products and bring them to market, as it makes it difficult to meet customer needs as quickly as possible and can therefore lead to a competitive disadvantage, while at the same time potentially jeopardising the ability to meet new regulatory requirements within the timeframe in which they arise. Thus, process efficiency needs to be improved in order to operate more effectively.

Overall, therefore, this major strategic move to an agile methodology was expected to enable the Bank to adopt a forward-looking operating model: minimising time to market for new products, maximising customer satisfaction, having the best possible technological capabilities and, in addition, being the employer of choice as a place to work. All of this in a new approach that helps speed up processes, increases work efficiency and improves business effectiveness.

During the agile transformation, part of OTP Bank's development and management centre was reorganised, creating three tribe units with a total of around 600 employees. The official date of the organisational transformation is 1 January 2019, but a change of this magnitude is not something that can be done at the push of a button: it has been preceded by months of preparation and training.

However, the use of an agile approach was not entirely unknown to the Bank's management: agile principles have been applied in several product development projects in recent years and elements of the methodology have been incorporated into the processes that have been set up for this purpose. This has led to first-hand experience, which has led participants and managers to conclude that the approach has accelerated processes, improved work efficiency and effectiveness, and has been successful in applying the elements of the methodology. These positive experiences have greatly assisted the Bank's management in committing to the move to agile methodologies and their wider adoption through organisational transformation.

For a transformation of such magnitude as the move to agile principles-based methodologies, it is therefore essential that there is a real commitment from senior management and a belief at all levels of the organisation in the effective application of the new approaches and their contribution to future success. In addition, it is important to ensure employee flexibility,

appropriate change management and the right working environment and operating conditions, as well as thorough preparation and in-depth training.

One of the foundations for practising agile principles is to ensure that managers are empowered: they must accept and accept that agile approaches are a completely different way of working and therefore require a different management style and management approach. As agile principles support self-organising teams and give their members more empowerment and freedom - and therefore more responsibility - team members need to learn and dare to make decisions, and to be able to accept the consequences. Senior managers need to provide maximum support to staff in this learning process. Everyone involved must constantly bear in mind that a few small, easily correctable mistakes are far less of a problem and loss than a few small, easily correctable mistakes that, without intermediate testing, would reveal an unsatisfactory result at the end of the process and would be difficult to change. Therefore, these errors should be seen as lessons to be learned and as leading closer to the right end result. Thus, in this operating model, the subordinate is not a boss but a supportive leader: one who, while adhering to agile principles, ensures the basic conditions of work and removes obstacles, focuses on the development of his colleagues and seeks to improve the quality of their professional work, while reinforcing the project vision.

As with change in general, a degree of fear was to be expected from the colleagues involved in agile transformation. The deepest root of this fear is the novelty of change itself, as change always involves risk, which in itself creates a feeling of resistance in many people. This is true of agile transformation in many ways: in addition to the new organisational structure, new roles, new processes, new methods, tools and ceremonies, the working environment has also changed significantly, with the development of single-user open offices fully compliant with agile principles. Although this is initially an unusual working environment, once the benefits are experienced it becomes easier to accept and get used to. In particular, there are a number of modern and well-equipped rooms next to the office, as well as cubicles for meeting a few colleagues, and communal spaces for more informal individual and collective reflection.

The move to Agile principles and methods and the organisational restructuring required a complete restructuring of processes, which has led to significant changes in operations. Thanks to the application of agile principles, collaboration has become closer and more efficient: previously, communication by e-mail had proved cumbersome and slow, with average response times of several days. For those working in the tribe, the possibility of face-to-face meetings in close proximity to each other has reduced the time needed to obtain information to a few minutes, and knowledge sharing between experts from different disciplines has become much smoother. In addition, whereas in the past, responsibility was not always clear and there was a tendency to point fingers, in the mixed squads of an agile organisation, the sense of shared interest and responsibility fosters cooperation. But it is not only within the tribe that there is a positive change for colleagues practising agile methodologies: many of those working in non-agile departments also understood why it is particularly important for tribe members to respond as quickly as possible, as a two-week sprint does not have the time to take days to get the information they need.

As well as speeding up processes and increasing efficiency, there are tangible results for customers from successful transformation. Thanks (also) to agile operations, OTP Bank was the first bank in Hungary to make Apple Pay available, the first to offer the possibility of applying for a baby loan to encourage and support young people to have children, and the first to introduce an

online home loan. In addition to the successes achieved, agile operations also successfully passed an unforeseen and unplanned "test": the COVID19 pandemic made it necessary to quickly switch to home office-style working in 2020, but the organisation successfully overcame this obstacle thanks to its infrastructure and the attitude of its staff, among other things, and proved that the system is still viable.

The above facts have also helped to ensure that the application of agile methodologies at all levels of the Bank is considered a complete success. The clearest possible sign of this is that, in addition to the three tribe already in place, a new tribe of nearly 300 people was formed on 4 January 2021, after almost a year of preparation. So the transformation will continue, the agile approach will spread.

5. Summary

Since the Agile values and principles were first formulated exactly twenty years ago, the approach has spread worldwide. Although the methodology originated in the field of computer software development, it is now being applied and benefiting many other sectors. One of them is OTP Bank, which was the first credit institution in Hungary to introduce the agile organisational model in some of its central units in January 2019. In the two years that have passed, the transformation has already yielded several tangible positive results, and the confidence in agile principles is demonstrated by the fact that the approach has been extended to other areas of the bank.

However, agile principles are not only spreading within OTP Bank: in recent years, the approach has also been applied more widely in Hungary in the hope of contributing to more efficient and effective operations, and agile coaches with theoretical and practical knowledge of agile methodologies are increasingly sought after on the labour market.

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