# Delighting Vodafone Turkey's Customers via Agile Transformation

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## Introduction

**Vodafone** is one of the world's leading mobile communication providers operating in more than 30 countries and partner with networks in over 50 more. Incorporated by the Vodafone Group, **Vodafone Turkey**, founded in 2006, that is **Turkey's second largest mobile communication company** since 2014, provides services to 20.4 million subscribers. As the second biggest direct international investment of Turkey, Vodafone TR's investment has exceeded 12 billion Turkish Liras since 2006. Currently Vodafone TR has more than 3300 employees, 1200 retailer stores and 43K stakeholders. Vodafone TR, whose goal is to promote Turkey to the global league in mobile communications, will continue to **inspire and lead the digital transformation of Turkey.**

Telecommunication industry in Turkey is highly competitive and it emphasizes Time to Market (T2M) pressure. Therefore, inside the Vodafone TR IT, Agile transformation has started to **shorten T2M and enhance quality** in order to be able to provide competitive advantage to the business. Under this vision, **Agile transformation** inside Vodafone TR IT has been set as **three steps**.

In the **first step, a pilot team** was established and for several Sprints its progress had been tracked. Due to the observed improvements of the pilot team especially in **productivity**, the pilot team had tripled its throughput rate at the end of its first three months, then, it had been decided to move forward with the **second step, scaling step**, via establishing new Scrum teams. Around five months after moving forward with the scaling step, Scrum teams' throughput was observed to be two times more than before. In addition to that, **significant reductions** were observed in **defect rate & customer complaints** inside these Scrum teams. These success stories of Agile teams then lead to an organizational change, and an **autonomous Agile unit**, which is called **Agile Solutions,** was established. Currently, Agile Solutions is actively working with its six Scrum teams inside and new Agile teams with new responsibilities is on the way to be established. Next step is to **grow and empower the Agile Solution**s and then, to move forward to the **third step, enterprise adoption**, in order to grow Agile

culture enterprise wide to be able to achieve more benefits out of it.

This white paper tells the details of the story of how **Vodafone TR IT** started its **Agile transformation** which had been kicked off as a pilot and then **turned into an organizational change**. Vodafone TR IT's experiences are shared throughout this white paper in order to support any other big companies in their Agile transformation efforts.

# 1. Main Drivers for Agile Transformation

The main drivers, which lead to Vodafone TR IT to its Agile transformation, can be summarized as the need to shorten T2M and enhance quality in order to improve productivity, which then may lead to competitive business advantage.



Figure 1: Drivers for Agile Transformation

*Productivity*

Three main situations were putting pressure on productivity to be increased;

- T2M pressure due to increased market competition,
- Increased business expectations due to the technical transformation project that had been completed for enterprise business unit side,
- Suffering Average Handle Time (AHT) due to usability and performance leakages.

Due to these facts, business side was in demand of higher throughput from IT teams.

*T2M*

The second main driver was the unacceptably long time to market period, which is mainly due to latency in waterfall silos. The problem was that the software developers and testers were separated units, so, the hand off between these two silos was leading a significant delay in the production and decreases the responsiveness of IT.

*Quality*

Lastly, communication gap between analysts, developers & testers due to silo structure and lack of having a common goal among them were causing defects to increase. Even, because of the time to market pressure and the unacceptably long time to market period, some of the business demands had been delivered rapidly which then unfortunately caused an increase in customer complaints.

# 2. The Agile Vision

The Vodafone TR IT's Agile vision is;

*'Delivering the leading products to the market with the best T2M and quality in order to provide competitive advantage to the business to enhance customer delight.'*



Figure 2: Vodafone TR IT's Strategy

In order to create customer delight, the focus set on T2M and quality under four dimensions; people, efficiency, operational excellence and being proactive. These four dimensions can be named as Vodafone TR IT's strategy to improve T2M and quality to support the main vision of delighting customers. On the other hand, on tactical side, Scrum as a management framework has been chosen to execute and support this strategy. Scrum, via its transparency, data driven experimentation, empowered people and the rhythm enabled the Vodafone TR IT to reach its vision.

# 3. Agile Transformation Steps & Achievements

Vodafone TR IT's approach for its Agile transformation was planned on three steps; pilot, scaling and enterprise adoption. The first step was experimenting using Scrum in a pilot team. The main goal for this step was to explore the potential benefits of Scrum for Vodafone TR IT and to decide whether to plan to scale it as a bigger transformation or not. For the case of the 'go decision' at the end of the first step, scaling step via increasing the number of Scrum teams was the next step in the plan. The main goal for this step was to establish an autonomous organizational unit, which includes only Scrum teams inside, in order to create a protected area to grow the Agile culture. The plan was to position this unit as a role model for the remaining IT organization and its wide range Agile transformation. Finally, the last step of the transformation plan was set as the enterprise adoption, which aims to transfer agility and its benefits across the other organizational units of the enterprise. In order to do that, the plan had been set as establishing an internal Agile coaching & consulting team, a team of internal change agents called enterprise adoption, which will lead the

transformation through the whole enterprise working together with an external team of experts.

i) Pilot Step:

Serious problems showed themselves with the decision to run the first pilot team. First of all, the decision about in which business area the pilot team was going to be established had lots of question marks since there were many projects and lots of different units running in parallel. Then, when all the projects inside the IT had been explored, B type[1] business demands, which are in size of under 50 days of development, seemed to be a good start. B type demands were mostly outsourced to third parties and also were not prioritized due to the on going technical transformation project for the nearly last one year. Therefore, lots of business demands were on hold. In this regard, it was decided to begin with B type CRM & Billing type requests. Running a pilot Scrum team for this type of requests would create a significant business impact in the case of a successful implementation.

Second problem was finding the related team members to create a dedicated and cross-functional Scrum team. It was challenging since there were limited number of in-house experts who can work on these demands due to the outsourcing policy and these in-house experts were already so busy with other projects at hand. Anyway, with the strong sponsorship of management for the pilot step, establishing a dedicated cross-functional Scrum team was prioritized and the related in-house experts quickly moved from their projects at hand.

Finally, the pilot team, whose name is Cheetah, size of seven, including the Scrum Master and the Product Owner, had been formed in December 2013 and started to run bi-weekly Sprints.

*Teamwork and Transparency*

In this pilot team, focus set on creating teamwork and enhancing transparency. The aim was to increase the

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[1]A-type projects: Projects that are bigger than 50 man/day effort

B-type projects: Projects that require development and less than 50 man/day effort

C-type projects: Projects that are included only configuration demands

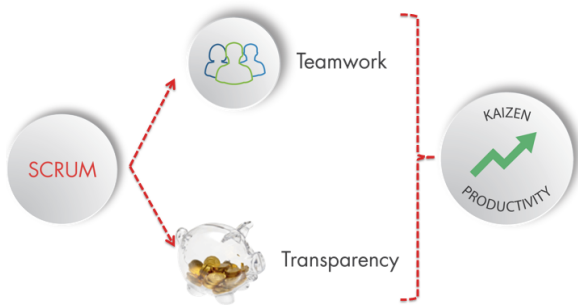throughput rate together with the Kaizen approach based on teamwork and transparency.



Figure 3: Team Cheetah's Focus Areas

Team Cheetah members were working co-located around a table inside a meeting room, which was specially reserved for the team. Normally in the organization structure, developers and testers were separated as different silos and therefore there was a very little direct communication and collaboration between them. In this pilot team, they started to share everything inside their team room and begun to learn working as a team. This strong communication and collaboration together with dedication and the rhythm, quickly lead to a faster delivery as a result. As seen in the below graph, the Sprint velocity had been nearly doubled just after the fourth Sprint and tripled at the end of their first three months.
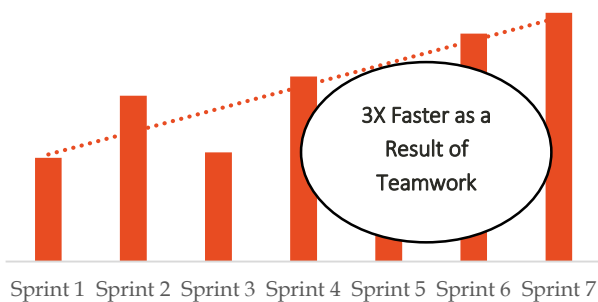


Figure 4 Team Cheetah's Sprint Velocity

On the other hand, enhanced transparency and improved planning increased the team motivation and focus. Before, there was a little planning due to high emergency in business and a huge lost because of

context switch. Together with Scrum, prioritization that was being done by the Product Owner and planning at the beginning of every Sprint, helped to reduce that chaos. For the team, knowing what to do for the next 2 weeks also ensured team's self-confidence. The business started to plan itself better after few months and emergency rate[2] decreased to zero (where, the aim is to have an emergency rate under 10%).

*Achievements of the Pilot Team*

Team Cheetah, together with its teamwork, enhanced transparency and Kaizen culture achieved a significant success for the pilot step. The achievements can be basically listed as:

- Significant Cost Saving:
  Implemented 11 business requests were projected to bring few millions of annual cost savings.

- 3X Faster:
  At the end of its first 3 months of transition, Team Cheetah started to produce approximately 120 man / days of work request in its each Sprint by spending only around 40 man / days.

- 2.4X Improved Itself:
  Team Cheetah started its journey with a Sprint Velocity of 75 points and reached 180 points at the end of its first 3 months.

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[2]Emergency rate shows the rate of emerged business requests that occur during a Sprint and which are not planned at the beginning of the Sprint.
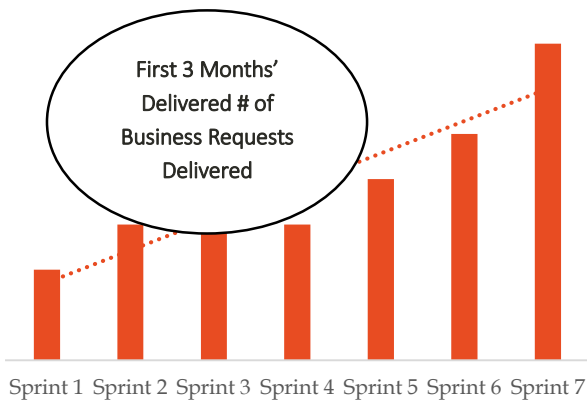
Figure 5: Team Cheetah's Number of Business Demand Delivery

- Satisfied Business:
  Stakeholders of the team Cheetah were satisfied with these results and started to support wider range Agile transformation

As a result, in the pilot step success was quickly achieved and around February 2014, move toward step 2 had been started

### Learnings of the Pilot Step

| DOs | Start small with one or two teams |
|---|---|
| | Focus on creating teamwork and transparency |
| | Focus on delivering quick win |
| DONTs | Look for perfection |
| | Work with long Sprints |
| | Be a flaccid Scrum |

### ii) Scaling Step:

After a successful pilot step, the sponsorship for Agile transformation got stronger and scaling the transformation via increasing the number of teams had been started. The target had been set as the transformation of configuration management team, which deals with the C type business demands.

On the other hand, new teams came with new problems. One of the most serious problem was finding more dedicated team members (especially testers). Testers were working separately under testing unit and dealing with lots of projects at the same time. So, the first thing was to move some of the testers near to developers and create cross-functional, dedicated and co-located Scrum teams.

Another problem was to find trained, capable new Scrum Masters. At that time, there was only one Scrum Master working with the team Cheetah. But, for the new Scrum teams there was a need for more Scrum Masters. Therefore, after organizing foundation level Scrum trainings for all the new team members, external Agile coaches started to work with some of the team members who were willing prospects to be a Scrum Master.

Finally, the entire configuration management unit turned into four Scrum teams, sized between six to eight, in addition to this, another Scrum team which is dealing with the business demands for online channel had been established. So, in total, the transformation had grown to six separate Scrum teams.

### Teamwork, Transparency and Standardization

For the new Scrum teams, it was determined to focus on three areas to improve productivity: teamwork, transparency and standardization.
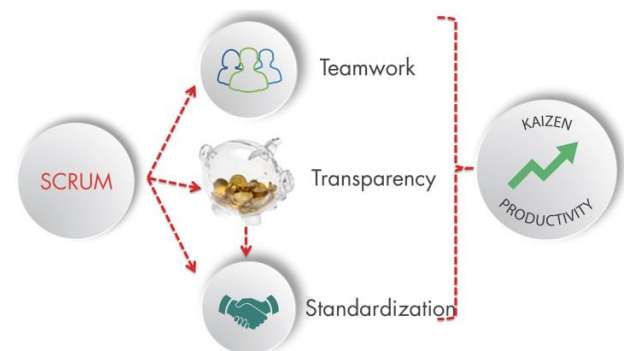


Figure 6: New Focus Areas

Teamwork and transparency were same as it was in the pilot step. In addition to these areas a third focus area set for standardization with the purpose of

creating working standards in order to enhance quality.

All of the teams started to experience teamwork through Scrum practices like co-location, daily stand up meetings, committing to a Sprint goal as a team and etc. Being team, working all together, self-organization and dedication resulted in two times of productivity increase as can be seen in the below chart.
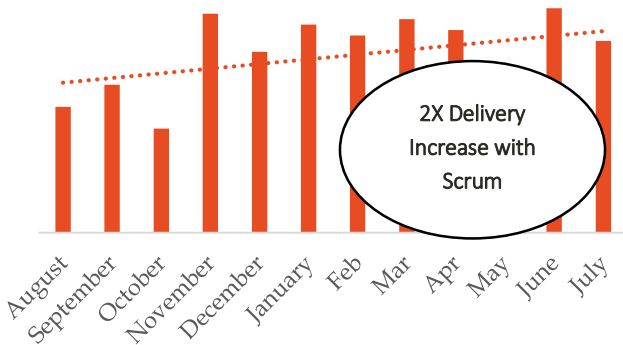


Figure 7: C Type Throughput Rate

On the other hand, in order to enhance transparency and trigger Kaizen, basic yet powerful metrics had been established. All of the teams followed these common metrics, which are;

1. Productivity Metrics
   - Number of Delivered Business Demand
   - Sprint Velocity
   - Commitment vs DONE ratio
   - Emergent Demand Ratio

2. Quality Metrics
   - Defect Rate
   - Customer Complaints

Throughout the Sprints, all of these metrics were tracked and announced by the Scrum teams to their stakeholders. By this way, it was aimed to create awareness about the results in both Scrum teams and the business side. While creating awareness via transparency, the data out of these metrics showed significant reductions. As a side effect, achieving

awareness about these reductions also created motivation inside the teams.

The main reasons for these significant improvements can be summarized as a result of teamwork, increased commitment and standardization efforts for establishing a working standard.

### Scaling to Autonomous Unit

After achieving the above success figures, the number of Scrum teams had been increased to eight. However, just increasing the number of teams was not enough since a more significant change was calling; establishing an autonomous unit. The need for such an autonomous unit, where knowledge for creating a sustainable advantage is rapidly disseminated, can be explained as follows:

- Protecting the new Agile culture and growing it without any outside disturbance,
- Building an experience center with a body of knowledge,
- Creating a role model unit to support Agile adoption through the remaining IT organization



Figure 8: Agile Solutions

As a result, Agile Solutions unit was officially established inside the Vodafone TR IT organization structure. This unit was structured totally align with business by having mainly two types of teams, which are focused on whether consumer side demands or enterprise side demands. This organizational unit is running totally in line with Agile and Scrum values with its six Scrum teams and more than its 30 members.

Figure 9: Organization Structure of Agile Solutions

*Learnings of the Scaling Step*

| DOs | Focus on creating transparency inside the teams & between business and teams |
| --- | --- |
| | Align with business |
| | Create standards among different teams |
| | Create basic yet powerful metrics |
| | Go for autonomous unit to protect & grow Agile culture |
| DONTs | Rush and lose control while scaling |
| | Underestimate the power of capable Scrum Masters |
| | Forget that this is a transformation of culture and it will be hard |

# 4. Next Steps & Enterprise Adoption

First step as piloting and second step as scaling were successfully implemented till now. Currently, the next step is to grow and empower Agile Solutions via succeeding in new significant achievements in order to create more interest for a bigger, enterprise wide change. If it can be succeeded with creating that interest, Enterprise Adoption will be the lead for the remaining transformation.

## Empower & Grow the Agile Solutions

Agile Solutions unit is positioned as a role model for change & success inside the company. Agile solutions should be empowered and grown before starting to expand this culture inside the whole IT and enterprise.

In order to do that, now it is time to focus on three improvement areas inside the Agile Solutions. These areas are; transparency, empowering the Scrum Masters and communication.

Transparency focus area is about planning actions to improve Agile Teams' transparency in order to be able to better align & communicate with business. For example, as seen in the below picture, moving Scrum boards from windows to wall created ease of use and comfort. Status reports that summarizes team performance metrics are sent by team for every sprint. Furthermore monthly progress report which summarize KPI's status is sent by Agile Solution unit helped to improve transparency between IT and business unit and customer complaints are evaluated over business surveys. As in this example, there are many more new actions planned for the near future like defining new team metrics, working on a new type of performance assessment, creating automatic dashboards.



Figure 10: Scrum Boards

The other focus area is empowering the Scrum Masters that is about improving Scrum Master skills in order to enable a learning organization that continuously improves itself. In terms of this, a special training program is planning to start soon in the near future.

Lastly, another focus area is communication since it is all about change and communication for leading this change, managing the perception is very important. Therefore, communication and experience sharing

between Scrum teams, communicating frequently with business teams for better alignment and etc. are in the plans for the near future.

In parallel with these empowerment actions on three focus areas, growing the skills and responsibilities of the Agile Solutions is also important. In the near future, Scrum teams are being planned to gain new skills in order to decrease their external dependencies. Also, focus on automation and leading the innovation in IT is yet another important aspect of the growth since enhancing productivity and quality are still the main parts of the strategy. By all these improvements, the purpose is to grow Agile Solutions unit as the single responsible of all the C & B type business demands, which in total accounts for the 60% of the all demands in IT.

### Further Vision: Enterprise Adoption

Agile Solutions is currently leading the change inside Vodafone TR and creating a knowledge base with its experiences and success stories achieved. On the other hand, the change is limited only inside some part of the IT for now. However, because of the achieved success and the current interest, it can be predicted that soon this change will spread across all the IT and also to the other units of the enterprise. In that case, Agile Solutions will be a good example of change but it cannot lead all these new efforts by itself. That's why; a separate, dedicated team of internal change agents is going to be needed soon. This is called as enterprise adoption which is an internal unit of coaches and change agents leading the enterprise agility transformation while working together with external consultants. The responsibilities of enterprise adoption can be summarized as follows:

- Grow Agile culture enterprise wide
- Establish body of knowledge & standards
- Support Scrum Masters and their teams
- Rollout new Agile teams

So, basically the transformation in Vodafone TR IT is on going and hopefully is about to spread among the whole enterprise.

## 5. Final Takeaways

Summary of what have done so far could be listed as below:

- Establishment of scrum teams have triggered change at organizational structure and processes to the team focused way.
- Improving processes with kaizen culture, team play and transparency comes within scrum led to achievement of success.
- Organizational change took place and Agile Solutions have been established to protect and empower the agile mindset.
- Within organizational change enterprise and consumer unit has splitter in order to align with the business unit.
- While efforts on transparency, kaizen culture and communication are consistent, improving business involvement become the main focus.
- With regard to share achievements and experiences obtained and to lead change among the whole enterprise, Enterprise Adoption will be established in the next phase.

Lastly, some key factors for Vodafone TR IT's success in its Agile transformation can be listed for a guidance as:

- A strong management sponsorship is critical for success, get it before starting to any kind of transformation,
- A strong collaboration between the leaders that will be responsible for the transformation is also critical; it is teamwork at the end. So, focus on creating a great but small team of leaders for the transformation responsibility,
- Create a partnership with experts that are already experienced in many different Agile transformation. Their guidance and support are critical for achieving your targets.
- Agile transformation is all about culture and people. Work closely with your people and invest in them.