

# Trends & Benchmarks Report Switzerland

*Where are we and where are we heading*



**Digital Product  
Development**

- Transformation
- Agile
- Product Engineering
- Testing

**2020**





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# Agile transformation: What successful companies have in common

Second Issue

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*The coronavirus pandemic is first and foremost a human tragedy, affecting hundreds of millions of people. Organizations had to adjust to a new regime and way of working within days. Business leaders now have a better sense of what can, and cannot, be done beyond the realm of their companies' customary processes. Many are beginning to appreciate the speed with which their organization can move by changing the way things are usually done. In short, the pandemic is forcing both the pace and scale of change. These changes dovetail with ongoing digital and agile transformation efforts. As businesses are forced to do more with less, many are finding better, leaner, less expensive, and faster ways to operate.*

*As a modern leader, you are aware of the importance of transforming your organization to become more agile. Indeed, you have been successful already in implementing first steps. But things are not moving forward as quickly as they should, especially in the current situation. The leadership behaviour of your colleagues is only changing slowly, while the adjustments and decisions needed to drive the transformation forward get stuck in the cog works of the organization.*

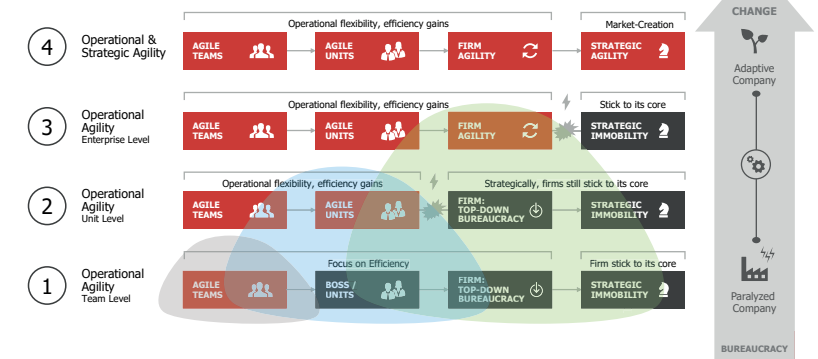
*In this article, we shed light on agile transformation from three perspectives: executive management, middle management, and teams and individual contributors. To set the scene, we will first explore the concept of "the three waves of agility" and how it affects your organization.*

## The basics: The three waves of agility

The first wave of agility began in Europe around 2009 and spread quite slowly. But gradually, software teams began to switch to agile processes. Thus began the victory parade for Scrum, and for a long time Scrum was synonymous with agility. The impulse to change the way of working usually came from the team itself, and once the fuse was lit, there was no stopping the agile fire in the IT department. Scrum Master became (if only just for a while) a dream job. Developers were (and still are) enthusiastic. Others reluctantly followed. IT operations saw agility as a threat and dug a deep trench to stop the wildfire. Business did not see much of a change, as the PO (Product Owner) role was usually held by the IT department or the supplier.

The second wave followed in 2014 and made an even bigger impact. More complex programs and product developments were no longer able to ignore the agile approach and sought ways to be agile in a construct involving many teams. This was the birth of scaled agility and along with it the increasing use of SAFe (Scaled Agile Framework). Many are still attempting to use a hybrid approach in their projects (a combination of waterfall and agile, or vice versa) and some even manage to combine the advantages of both methodologies and not the disadvantages. However, this approach cements the existing company silos. Perhaps that is exactly why this methodology is popular. Even with SAFe, the silos need not necessarily be torn down. But due to the close cooperation of Biz (Business), Dev (Development) and Ops (Operations) - along with others - the question soon arises as to what their raison d'être should be.

## Operational Agility vs Strategic Agility



Whereas the first wave of agility set off a trend towards self-organized, interdisciplinary teams, and consequently to people and skills, the second wave is strongly focused on processes and methods. Experienced Scrum Masters become Agile Coaches and seek to keep the focus on agile principles and the team. Often unsuccessfully, because the strong emphasis on IT gets in their way. But now everyone wants to be agile – no one wants to lag behind. Operations waves the flag of DevOps and the role of Product Owner or Product Manager is now also highly regarded in Business. HR and portfolio management are also becoming more agile.

This is the starting point of the third wave. Known as BizDevOps or Business Agility, it now rolls over the rest of the company. There is a lot of talk about a necessary change in the corporate culture and the agile mindset. It, however, bumps up against the most resistant group to change within companies: the middle management. The bottom-up approach that worked well in the first and second wave meets its limitations. If you want to be successful, then agile transformation must be something taken up by management (see Trends & Benchmarks Report 2019, From Agile Rebel to Agile Executive). You can only succeed here if you take a radical approach, slice and realign the organization structures, and turn the existing power dynamics upside down. It sounds dramatic. And it is.



## The Executive Management Perspective

### *Not (yet) as agile as you thought*

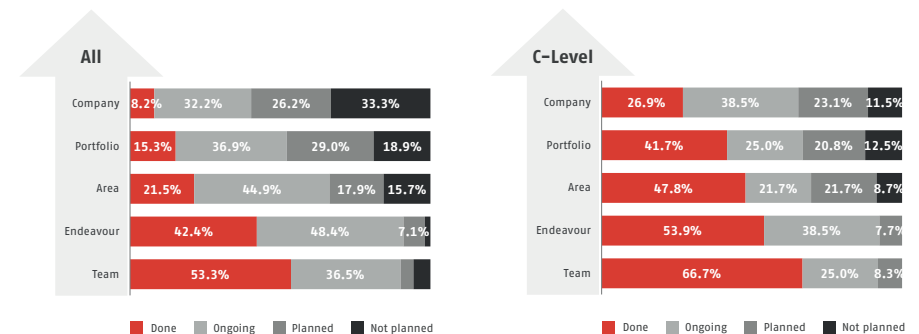
***In this section, we share some of our latest insights on the state of (strategic) agility. We start with where organizations really are and explain why executives overrate the progress of their agile transformation. We then highlight the key actions successful companies take: build a new leadership team; appoint an agile executive; tackle the hard questions for defining new organizational structures, budgeting and portfolio management; implement a new understanding of leadership on all levels.***

## *Agile: Where we are, and where we are heading*

The agile approach continues to spread rapidly around the world: 89.8% of all teams have already adopted or are in the process of adopting agile methodology, a considerable number. On the other hand, organizations are still struggling to build greater company-wide agility and only a few have already adopted agility on a portfolio (15.3%) or strategic level (8.2%). The good news is that many companies have started transformation initiatives or are planning to do so in the near future.

As the survey was conducted just before the coronavirus pandemic, the authors

### At what Levels is Agile introduced?



anticipate that the agile trend will accelerate. The pandemic's impact on all aspects of life, together with the altered economic conditions, put increased pressure on the need for a wider digitalisation of processes and services and thereby a significantly greater focus on agility. In other words: the spotlight will be on agility, but it will still need to prove its value to the company. Accordingly, we expect that in some companies the scope of the agile transformation will shift in order to be able to deliver benefits faster.

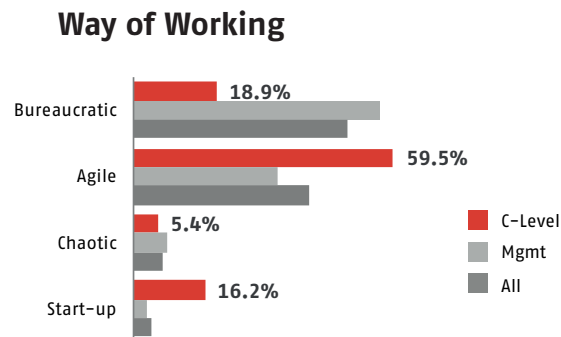
## Achievement bias

Although C-level executives are given the warm feeling that when it comes to agility, a lot has already been changed and accomplished, the reality is actually quite different. Initial success in the agile world unfortunately does not mean that the transformation has been achieved. Agile transformation means difficult

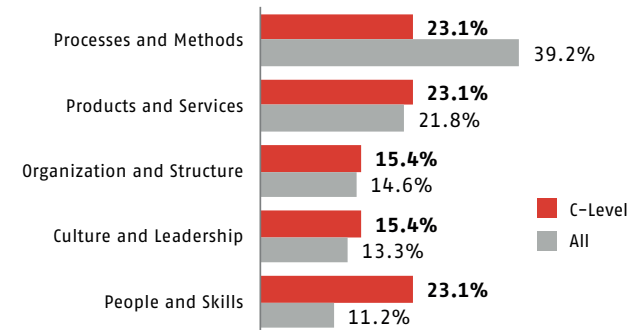
changes on all levels. As a C-level leader, you have only a limited perception of the extent of these changes. This explains the somewhat faulty impression among executives about agility. Many projects may have been implemented in an agile way, but only because they were allowed to ignore existing structures and processes. As the current crisis demonstrates well, transformation does not succeed because of agility, but rather because a project is assigned the highest priority – while the others are placed on the back burner. The rapid progress is then perceived as the result of agility, because the outcomes were achieved faster. While little to nothing changed in the organization itself.

This divergent viewpoint is also evident when assessing the way of working (chaotic, startup, bureaucratic, agile). The introduction of agility is viewed as "completed" far more often by upper management than it is by middle management or employees. So it seems that

the perception of the agile transformation on the upper management level is different from that on the other levels of the company; while the executives see a balanced approach across all



### Main Focus of Agile Transformation



elements of the transformation, in reality, the focus is often on processes and methodology. The changes to organizational structures, corporate culture, management behaviour and the workforce are neglected.

As the report shows, the changes to date have taken place far too superficially. What remains virtually untouched is the culture, i.e., the DNA of the company. And yet the impact of the culture on an agile transformation cannot be emphasized enough. That is because agility is a mindset. Without altered attitudes, companies and employees will not be able to make full use of the advantages that agility has to offer and the considerable added value it ultimately delivers.

## *Tackle the hard questions*

While the first two waves of the agile journey may not have been entirely painless, the changes at team level and to processes and roles merely scratched the surface. The really big questions are now being addressed with the third wave of agility. In concrete terms this means: a deep impact on the self-definition of individual silos and managers, and therefore considerable pain. It is little wonder that many executives have avoided these decisions until now.

Successful transformation at the company level requires a radical reorientation of the organizational structure. This means not only breaking down silos, but also disassembling power structures that have reigned for years, an act which is bound to lead to considerable resistance in various ivory towers. Agile portfolio management should be seen as equally important, as it not only provides greater transparency and steering capabilities, but also redefines the budgeting process within the company – and thereby redesigns one of its main governance systems. Executives need not only make the necessary decisions to achieve this new operating model, but must also ensure that the business continues to run without major disruptions. It would not be

the first time that transformation brought a company to a near standstill. What is more, executives must have the courage to take these big decisions, to implement them, and even more importantly: they must make real use of these new corporate governance tools. Only then will these changes have an impact on the rest of the organization. To be specific, we are talking about significant changes to budget allocations, management roles, as well as new salary and career models. In other words, radical changes across the entire organization.

## *Building a new leadership team*

One issue that has only been reluctantly addressed, but which counts among the key success factors, is the appointment of management positions. A manager who himself has designed and built up a system himself over years may not be the right person to alter it completely. Executive management must therefore have the courage to call for a greater replacement of middle and lower management, even if this means parting from long-serving confidants, even friends.

Companies that successfully achieved agile transformation are those that have taken significantly stronger action than their market peers in terms of leadership

roles and the choice of management. A reduction and exchange of up to 50% or more of the management team is not unusual.

## *Appoint an agile executive*

If you want to be successful in the future, then agile transformation must become a top management topic (see Trends & Benchmarks Report 2019, From Agile Rebel to Agile Executive). However, most executive roles, such as CEO, COO or even CIO (where the topic of agility is currently situated in most cases) have neither the capacity nor the political freedom to delve deeply into agile transformation. Successful companies often appoint an “Agile Executive” to drive the transformation across departments. This person need not necessarily be a typical agile leader, but must have thorough knowledge of agility, have an agile mindset and be able to quickly get up to speed. They should also speak management language and know how change takes place successfully in a company. An Agile Executive has no problem with breaking up structures and patterns; he or she can win management over to their side, understands how to pull the strings, and is an integral part of the top and mid-management clique.

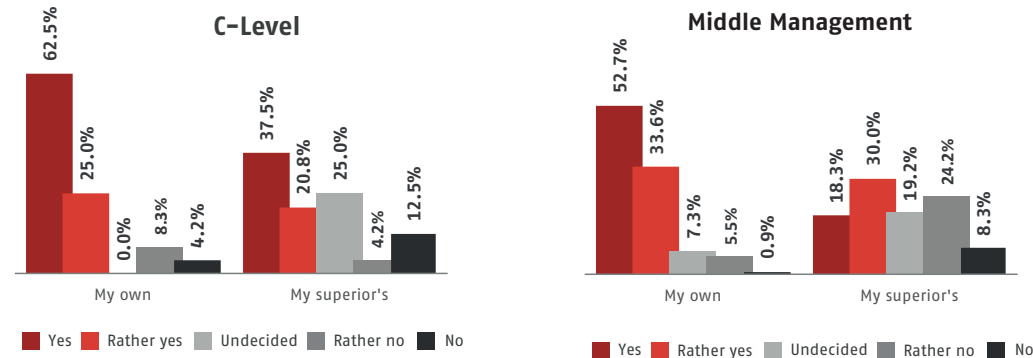


## Implement a new understanding of leadership on all levels

A new understanding of leadership is crucial to a company's agile (and digital) transformation. With this in mind, many managers have sought solutions in internal training or at top executive schools such as IMD or INSEAD. The question is whether this training has indeed led to a change in their leadership behaviour. Managers say that it has. Their staff, however, only partially share this optimistic self-appraisal (62.5% of executive management vs. 18.3% of middle management).

It is apparent from this, that among the winners of the transformation, HR can provide a valuable contribution as an inspiring role model and with initiatives that go well beyond simple training offers. They assess morale through employee surveys and with dedicated KPIs, and play an important part in the evaluation and further development of leaders at all levels of the company.

## Change in Leadership Behaviour



## Conclusion

**Agile transformation has stalled during the second wave in many companies, because only individual elements of the third wave, such as portfolio management, have been tackled. At the same time, transformation has often only occurred on the surface; the company's DNA and culture have not (yet) adapted to the new era. Executives must now take on the hard topics, such as new organizational forms, management behaviour, dedicated agile executives and make difficult and painful decisions regarding new leadership teams.**



Agile Executive

Agile Coach

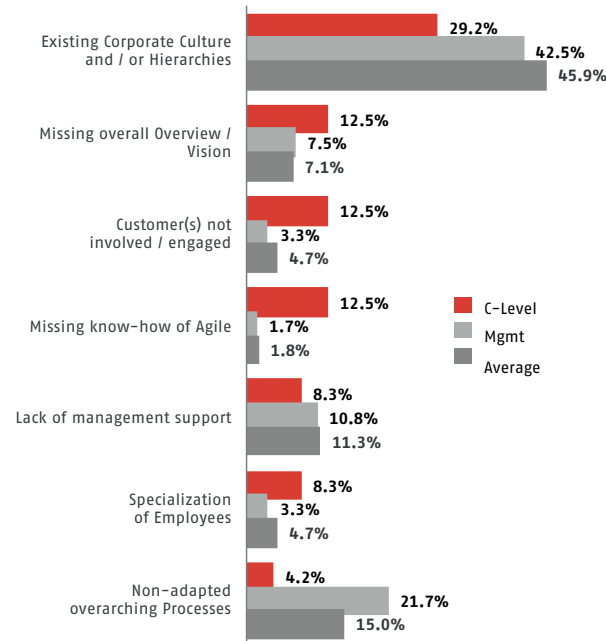
## Middle management

### *Will I survive? Reorganization in middle management*

***Have linear careers become obsolete? This segment addresses the balancing act between governance and new freedoms that agile transformation requires. Seen from the perspective of middle management, it looks at the opportunities and threats that the system builders of yesteryear face, weighs them up and shows strategies to overcome the dilemmas. In addition, the success factors in leading a successful transformation are presented. Among these are a lean agile portfolio management, a stable product team and suitable concepts for replacing the hamster wheel with an effective customer-centred working method.***

The company needs new heroes! The role of the middle manager takes centre stage in the anticipated upheaval that comes with the third wave of agility. Until now, it was quite possible to work your way up

## Main Obstacles for Agility



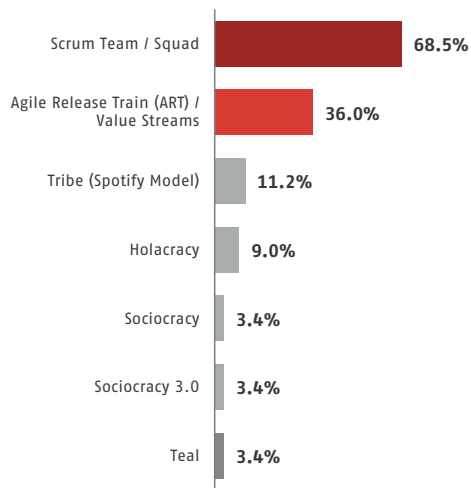
step by step by delivering solid work and elbow grease, to make a name for yourself as a director, and to garner respect with a lot of knowledge and experience as a specialist or expert. Suddenly, all of this is worthless. Career paths have become obsolete. The transformation dilemma has middle management in its grasp: stuck in the old processes and existing hierarchical mindset amidst loud cries for more agility. According to the latest „Trends and Benchmarks Report“, „exis-

ting corporate culture and/or hierarchies“ are the biggest obstacle to agility. Because of its sandwich position between executive management and employees, middle management suffers particularly from „overlapping processes that have not been adapted“. Especially at the beginning of a transformation, the existing governance processes are still in operation. You are measured using the tried and true KPIs. At the same time, employees demand the freedom they need within the agile setup to be able to deliver accordingly. They have little understanding for the corporate constraints of the existing organization.

## *Wait and hope?*

A new (product-oriented) organizational structure offers new opportunities. New roles arise that require distinct leadership qualities: Portfolio Manager, Solution and Release Train Engineer (RTE), Product Manager, Tribe Lead and People Coaches. Many of the traditional leadership tasks will ultimately disappear in an agile organization. Budgeting takes place in an ongoing and essentially leaner manner; many planning, reporting and coordination tasks are eliminated. The bad news: If you speak with managers from companies that

## Organisational Approaches



have already carried out an agile transformation, they will paint a dismal picture. 50% and more of the managers are either no longer needed or have already been replaced. An icy wind is blowing. Managers with many years of experience are no longer trusted – perhaps rightly so – to be able to reorganize the system of which they are supporting pillars and some of which they may have even created themselves, within a feasible period of time. Rather than being part of the solution, they become part of the problem.

How should a manager behave in such a situation? Wait, sit it out, in the hope that the wind will change and blow in

your favour again? Or is it better to proactively take your fate into your own hands? The good news is: if you switch to another organization unit or even to another company, you often have fewer problems finding your way in the new world or in the new role. On the contrary: change can even be really fun! Freed of all old habits and constraints, you can start anew. You have no “history”, are free to work towards and co-design the future, without being dragged down by the ballast of the past. One alternative might be to switch to an organization that is still based on the old principles, but the chances are great that it too will find its way into the new world, and you will be confronted with the same challenges again. So, take off into the new world, on a thrilling journey into a foreign land, full of adventure and new experiences.

## Products over projects

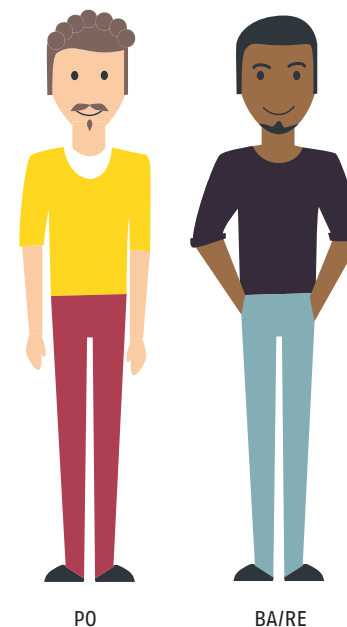
There is no way around it: successful transformation at the company level requires a radical realignment of the organizational structure. The longer a functional organization works with Biz, Dev, Ops, etc., in separate units, which temporarily pull together the necessary resources on a project basis, the less effective it becomes. First of all, at the end of the project, valuable knowledge is lost, and little profit is derived from the good and bad experiences made. To put it

bluntly, you are doomed to repeat past errors. Even the best project handbook and well-intended „lessons learned“ sessions are no help. Secondly, there is the tendency to pour project after project into the seemingly well-oiled machinery, only to later determine that no added value has been created. No wonder! All the experts are booked for at least five projects at the same time, and have hardly any time to do the work because of the many meetings and the required multitasking – the infamous task switching.

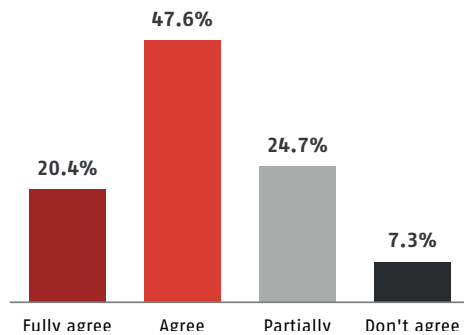
If you begin to introduce a lean agile portfolio management, and consistently prioritize the projects, you quickly notice that the procedures currently in place are like a hamster wheel, which rotates quickly, but in which you make no progress. The answer to this is stable product teams or team of teams, which replace cobbled together, temporary project teams. Instead of bringing people the work (the projects), you bring the work (the requirements) to the people. With Scrum teams or squads on the team level and Agile Release Trains (ART), value streams or tribes on overlapping levels, agility offers suitable and meanwhile widespread concepts, often in combination. Of course, the key to this is how you divide and align these units. What are our products? In this context, ‘product’ is a catch-all term for all services and things that are offered to the customer. This is a question that often is not at all easy to answer. To which product does CRM belong, for example?

## Conclusion

***In conflict between existing governance and the new world, middle management is coming under increasing pressure. New organizational structures offer opportunities – but more likely for new roles. To remain in the old structures is not an appropriate response. Proactive and goal-oriented people can shine in a new working environment with their skills and without inherited burdens.***



## Is your job fulfilling/motivating?



Tester

DevOps Engineer

## Team – Individual contributor

### *Happier after the change?*

**Employees are generally happy with the change that agile transformation brings. However, the change often does not go beyond an initial application of the methodology – the SHU. DevOps and PM/PO activities gain in importance. The Scrum Master changes to a supplemental role in the team. A fact that is often not well liked by seasoned ideologists, which is why everyone now wants to be an agile coach. Can that turn out well?**

The agile transformation is a major shift in thinking for executives, a seemingly insurmountable change for managers. But what do employees, engineers, marketing staff, Product Owner and Scrum Masters have to say about it? Are they happier in the agile world or would they rather return to the old world?

### *Positive impact on employee motivation*

If you speak to colleagues from teams that have made the transition into agile, and who have already overcome the initial starting difficulties, you nearly unani-

mously receive positive feedback. While they will admit that the starting phase of the transformation to agility was strenuous – they had a feeling of being lost, of uncertainty and insecurity, as is often the case in change processes – once they arrive in the new world, no one really wants to go back to the old way of working. Appreciated is the work in multidisciplinary team, the result-oriented tasks and the short feedback loops. This significantly boosts motivation, as the figures from the current Trends & Benchmarks Report confirm. An impressive 68% say they are satisfied or even very satisfied with their job in the agile world. These are top results, particularly in light of the fact that worldwide only 13% of employees are considered to be „engaged“, 63% are „not engaged“ and 24% are „actively disengaged“ (Gallup Study 2017 – not adjusted by country or business sector).

It goes without saying that not everything that glitters in agile is gold. After the employees have been trained, have solidified the new way of working over months – something that may even take one or two years – and results have been achieved in previously unheard-of speeds, a period of sobering often occurs. This shows that an agile transformation is not completed with the training of staff and the introduction of processes and methods. These elements comprise merely the beginning. The two most frequently mentioned obstacles on the way to greater agility are

consistently the existing corporate culture and (non-adapted) overlapping processes. Only companies that have tackled these issues are able to reach the next stage of agility and can keep their employees onboard. Otherwise, there is a risk that they will seek an employer who has already advanced on the path to agility.

### *Doing agile versus being agile*

The question is how strongly agility has really been integrated into the company's DNA and whether a learning organization has been established. One may perhaps follow the basic principles of agility, living the Scrum events and being disciplined in maintaining task boards or Kanban boards. Although a new way of working was introduced (“doing agile”), it doesn't feel very agile (“being agile”).

As the Trends and Benchmarks report shows, the majority of employees stick largely or entirely to the standard. After the initial learning of agile practices, these are often applied 1-to-1, but not further adapted to the company's own situation. This is not what is desired in the medium term. A learning and adaptable organization should arise, one that seeks and finds its own way – again and again. After all, the market and the technology available are also changing constantly.

The transformation therefore never ends; the path is the proverbial goal. Only in this way can the full potential of agility be achieved.

What is needed to free oneself from the textbook and to adapt the methods to one's own situation? One possible answer lies in Shu-Ha-Ri. This old Japanese learning technique is undergoing a renaissance. It means: "First learn, then detach and ultimately master".

In "Shu" one learns the practices and begins to apply them. Once the practices are understood, in "Ha" they can be adapted to one's own situation. Ultimately one goes their own way in "Ri". Agile teams and coaches attempt to use this concept to understand where a team currently stands in the development. Based on this, one can consciously decide on measures and thereby prevent a slowing or even a standstill of

the transformation on the team level over a longer period of time.

## Commoditization of the Scrum Master

While the teams gather more and more experience with Scrum, the central role of Scrum Master also changes. In the beginning filled with a dedicated person - often project, quality

or line manager - the understanding of Scrum Master as a role will evolve. A role which not only acts as a moderator and guardian of the Scrum values, but

also takes on responsibility and actively takes care of the removal of impediments. In the end, the team is independent enough to take over these tasks itself. While this represents a welcome addition for the team members, "professional" Scrum Masters will not like this change. Instead of fighting the development, the positive aspect could be seen: the team was successfully empowered. It stands on its own feet and can focus on its own further development. For an Agile Coach, this can mean accompanying the agility on an organizational level - or taking on a new role.

守 破 離

SHU = protect, defend, obey, follow

HA = detach, break down

RI = remove yourself, separate, cut-off

## Focus on DevOps and Business Agility

In order to overcome the next hurdle, companies must extend the scope of agility. Two of the key hot topics in this context are DevOps and Business Agility. Many people talk about them, everyone understands them differently. There is no uniform definition, nor is there a general understanding of what this means in concrete terms. Common to both approaches is that the existing functional silos are to be overcome.

DevOps strives for closer cooperation between Development (Dev) and IT Operations (Ops). According to the figures from the report, in 28.7% of cases development teams take over Ops tasks, in 45.5% of cases Ops employees are integrated into the teams. There are still few companies that have many years of practical experience with DevOps. Many of them struggle with the necessary automation of Continuous Integration (CI), Continuous Testing (CT) and Continuous Delivery (CD). An even higher hurdle is the merging of the different cultures of Dev and Ops.

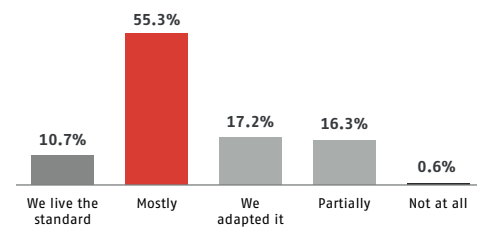
Business Agility (also BizDevOps) is also still in its infancy. One reason for this is that the well-known agile practices like Scrum cannot be applied one-to-one from IT to business. There is no standard approach

that one can simply start with. In many cases Kanban is suitable because you start from the existing process and improve it in small steps. However, it does not feel very agile at the beginning; and it also requires a lot of discipline. In addition, it is not always easy to involve the business. In this context, one of the most important factors is the clarification of the roles of the product owner and product manager, to have a common understanding of how the individual units of a company should work together in an agile context. Where should these roles be assigned, what tasks and competencies characterize them, which persons should fill these roles and how do we deal with power conflicts in this new constellation? These questions must be answered if the leap into the next level of agility is to be successfully mastered.

## Conclusion

**Employees are happy with the change and do not want to go back to the old world. However, the change often does not go beyond a first application of the methodology (SHU). The Scrum Master role changes, which is not always welcome. DevOps and PM/PO topics become more important. The biggest obstacle for employees is at the same time the biggest challenge for leaders: a culture that promotes a learning and adaptable organization and its own agile way of at all levels.**

## Following the Approach



## Silvio Moser

### CTO SwissQ

For the 12th time, I would like to present the SwissQ Trends & Benchmarks. As always, it took much blood, sweat and tears before the final result was available. I think it was worth it. You will come across familiar graphs that have accompanied us for years, but there are also a number of new additions to this year's report. With this, we want to give you new perspectives on the development of digital products without neglecting the tried and true.

Almost 500 people from various companies and industries in Switzerland contributed to this report. A few answers have also reached us from foreign countries near and far. To encourage even more participation from outside Switzerland, and as you may have already noticed, the study is now published in English. In Switzerland we have also broadened our horizons and for the first time it was possible to answer the survey in French. Merci beaucoup to all who took part.

#### Transformation

Our lead article covers the aspects of transformation in detail, mainly from a management perspective. Our survey shows that agile is still happening mainly in IT and hasn't yet reached the Business, even if there is much talk about Business Agility.

#### Agile

Going fully agile is challenging and sticking with waterfall is not an option. This has left many, about 40% to be exact, stuck in a hybrid approach, i.e., a combination of waterfall and agile. This is not necessarily a bad thing, if you manage to get the best of both worlds.

Kanban offers an easy start with agile and unlike Scrum is applicable to any process. As our numbers show, it is becoming more and more popular. But remember, it is not Kanban if it doesn't have WIP limits. There is also a trend towards stable product teams that extend their responsibilities beyond those of "just" the development of a solution or service.

#### Product Engineering

This leads us to Product Engineering. Following the above trend, we extended the report to address the entire lifecycle of requirements from idea to story. Being the link between Business and IT, this is a key success factor for agility. As such, the role of PO is becoming more popular, extending beyond the original definition in the agile team and taking over more responsibilities previously owned by other roles in the business. Still only few question the value of what is being developed for business or end users.

#### Testing and DevOps

As mentioned before, quite a few choose a hybrid approach. Unfortunately, that often means that agile testing is actually not that agile. Early involvement of testing, another key success factor, often does not happen, leaving testing to become the bottleneck before deployment. A feeling all too familiar to many testers. DevOps promises to resolve this issue. But similar to Business Agility, many talk about DevOps, but few have implemented it fully or have much experience. As test automation efforts often fall short of expectations, lacking integration into the deployment pipeline, there is still much manual testing going on.

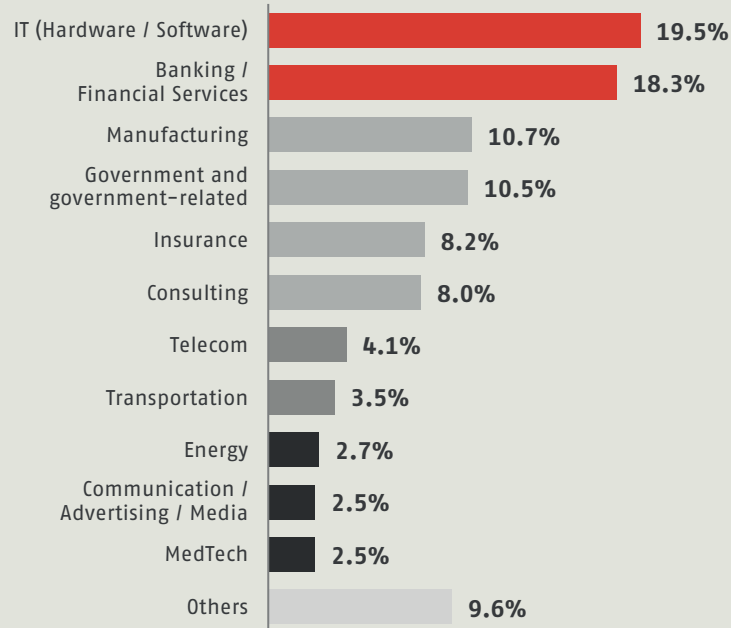
#### Until next year

This study is intended to give you an indication of where we are heading in digital product development and what challenges need to be tackled next.

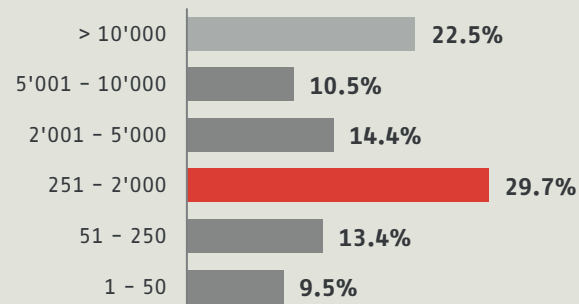
Please do not hesitate to contact us if you have any questions or suggestions. We would also be happy to present the results of the Trends & Benchmarks report within your company: at a management meeting or brown bag session for example. Looking forward to hearing from you.

## Industry

Participants hail from a range of industries, with IT and Banking topping the list.

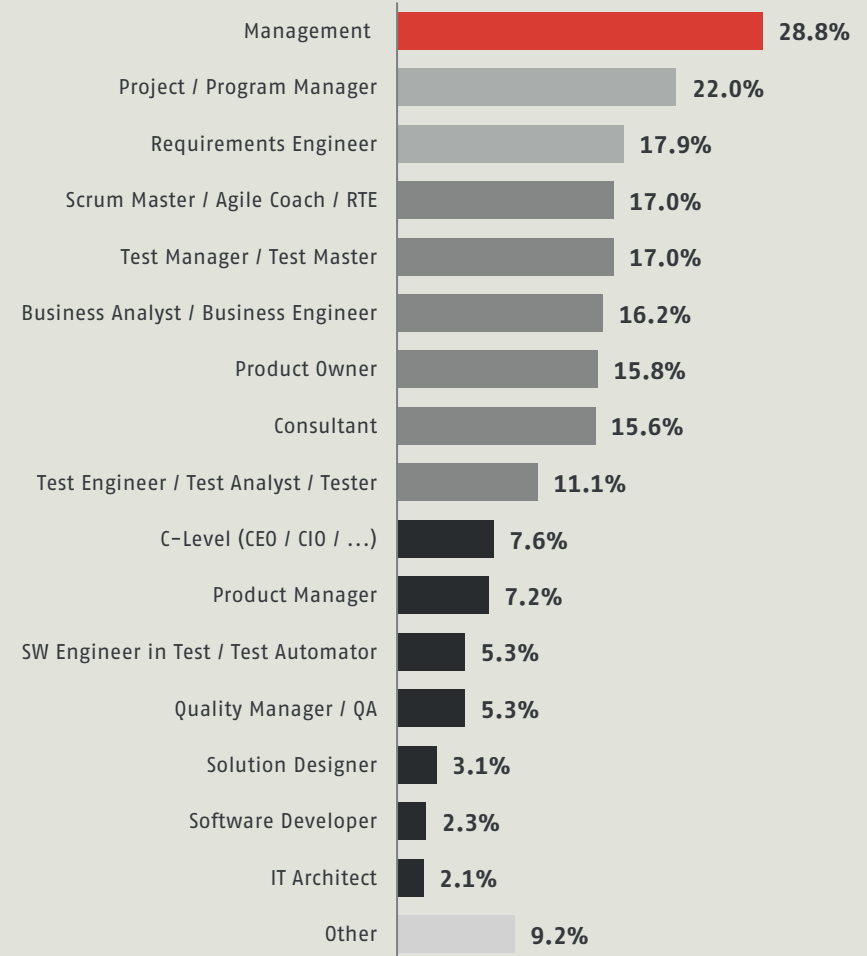


## Number of Employees



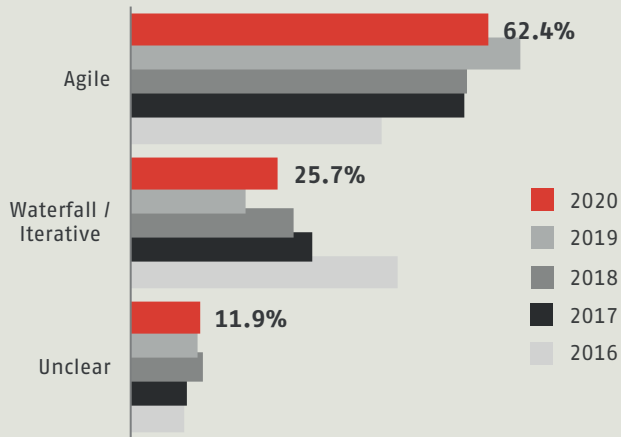
## Roles

Several participants have more than one role.



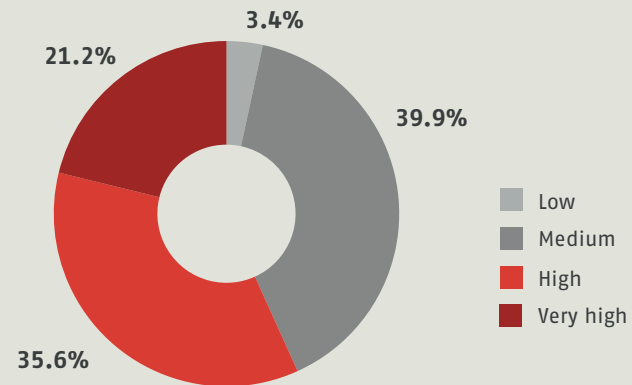
### Main Project Approach

There has been a slight decrease in the adoption of agile as the main approach. A quarter of projects follow waterfall.



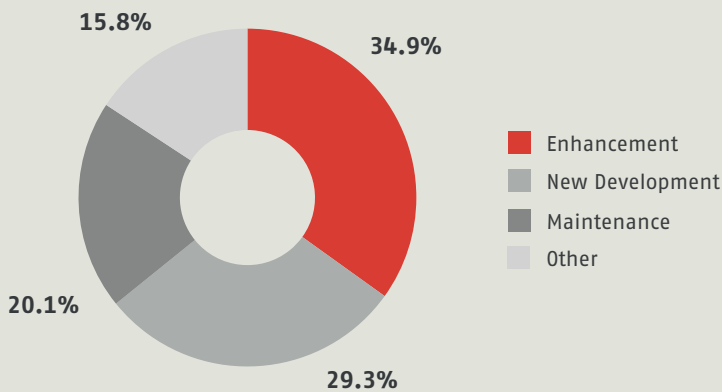
### Project Complexity

Over half of the projects are of high or very high complexity.



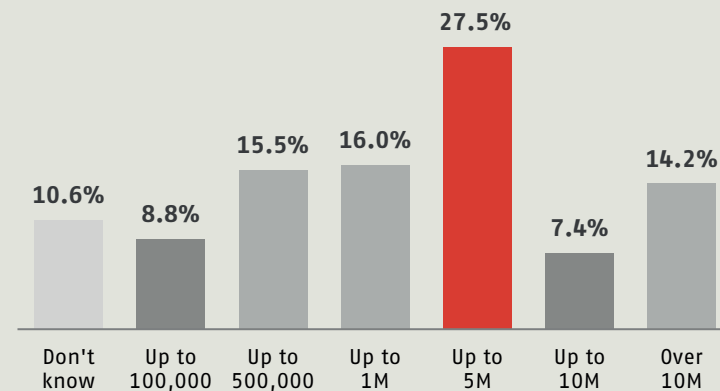
### Project Type

The enhancement of existing solutions is mentioned most often, followed by new developments.



### Project Size (in CHF)

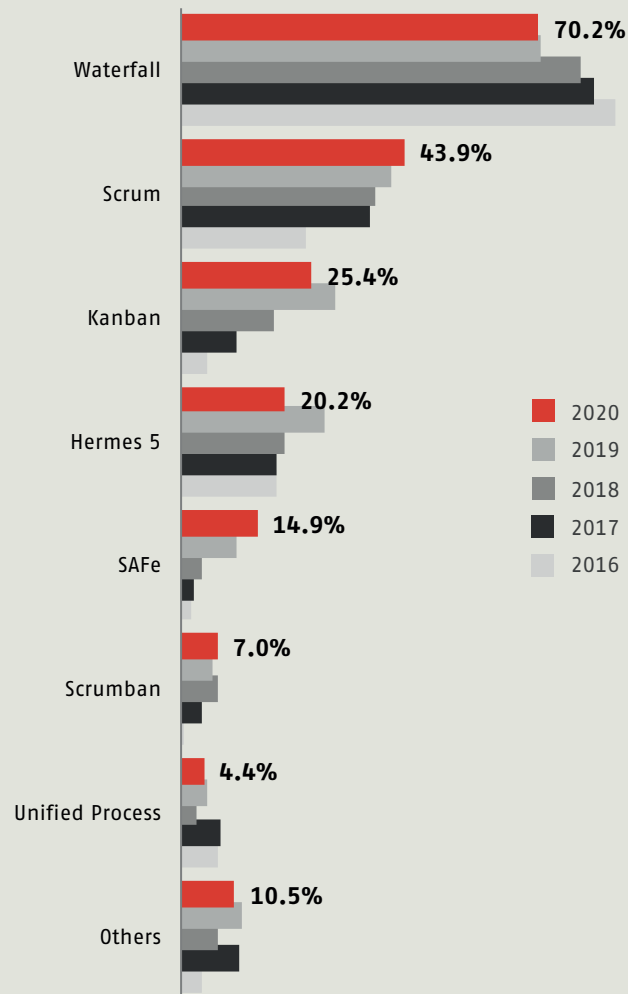
Almost half of the projects have a budget exceeding 1 Million CHF.





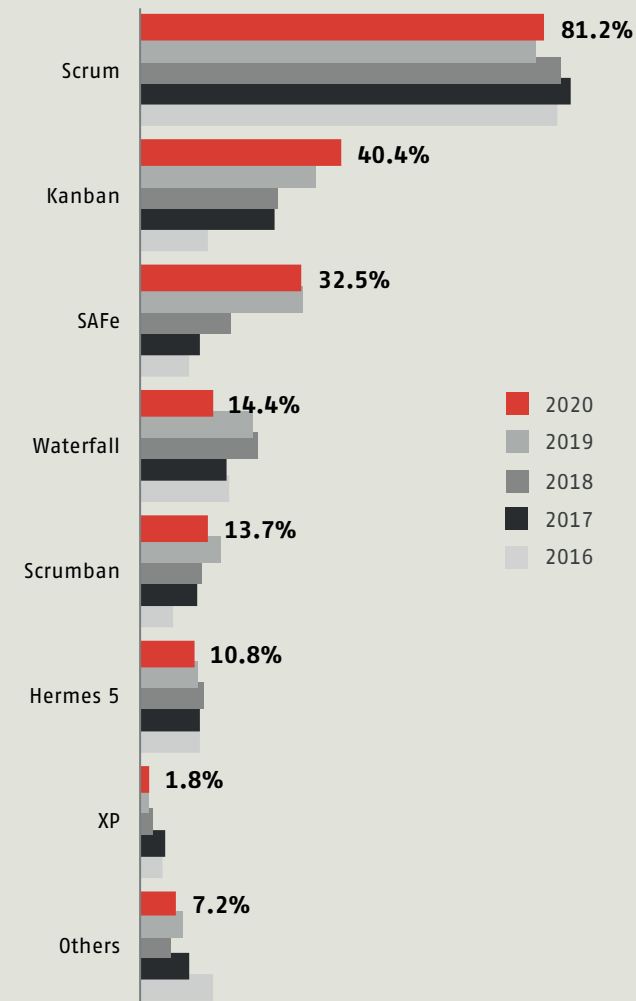
### Waterfall Development Life-Cycles

Not much has changed compared to last year, with the exception of SAFe becoming increasingly popular.



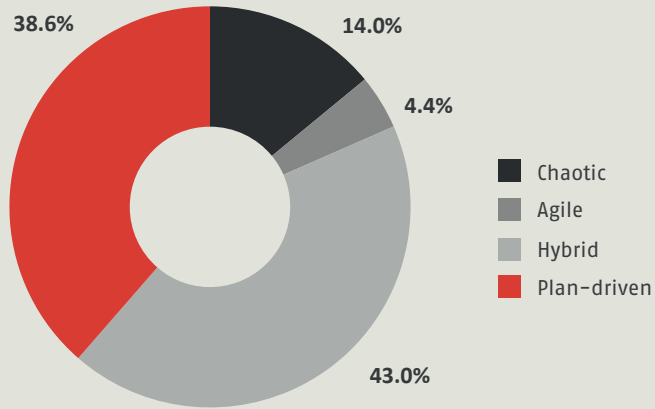
### Agile Development Life-Cycles

Kanban has again gained ground, while Scrum and SAFe remain stable.

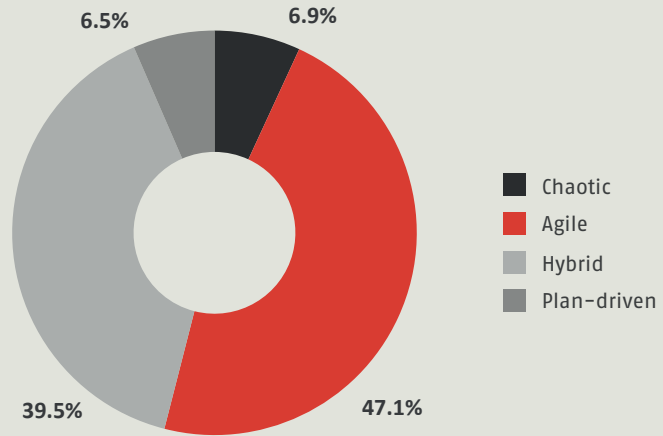


Trends & Benchmarks 2020

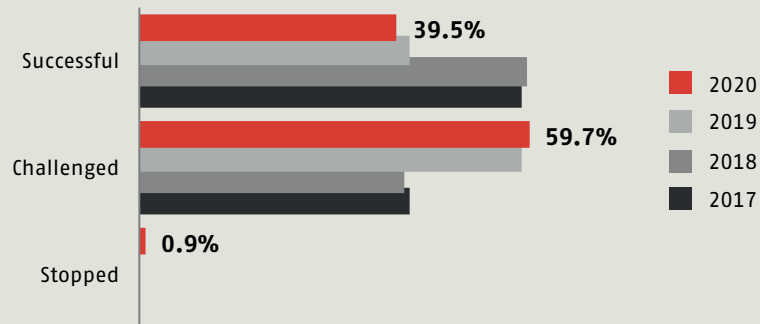
### Approach in Waterfall



### Approach in Agile

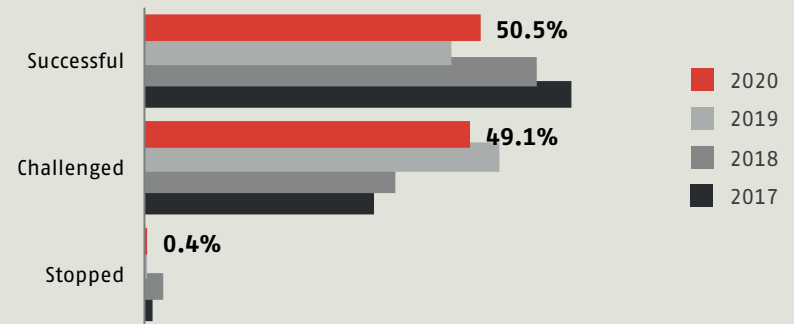


### Success in Waterfall



**Successful:** targets met on time and within budget  
**Challenged:** over budget a/o over time a/o targets only partially met

### Success in Agile



**Successful:** targets met on time and within budget  
**Challenged:** over budget a/o over time a/o targets only partially met

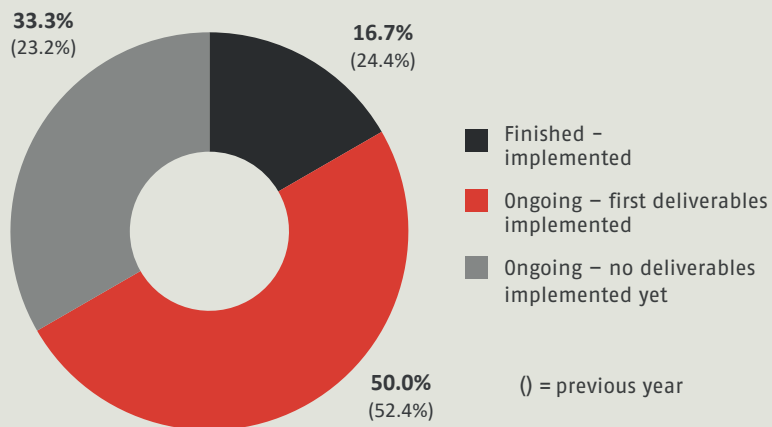
### Handling in Waterfall



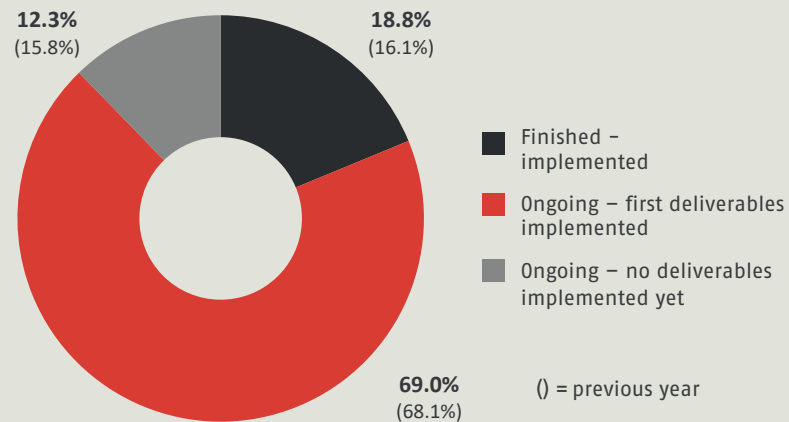
### Handling in Agile



### Status in Waterfall



### Status in Agile





# Transformation

# Transformation

Agile Transformation is  
**happening  
 mainly in IT**  
 and hasn't yet reached  
 the Business

Going fully agile is  
 challenging and sticking with  
 waterfall is not an option  
 Leaving many stuck in a  
**Hybrid Approach**

**Agile  
 Development  
 is more  
 successful**  
 than waterfall

**Satisfaction**  
 with the agile way  
 of working  
**is high**  
 with the transformation  
**is low**

Leadership and culture  
 are the main  
 success factors  
 Yet focus is on  
**Processes  
 over People**

**Team  
 Accountability**  
 needs to be improved  
 But decentralisation  
 of decisions is too  
 hard for many



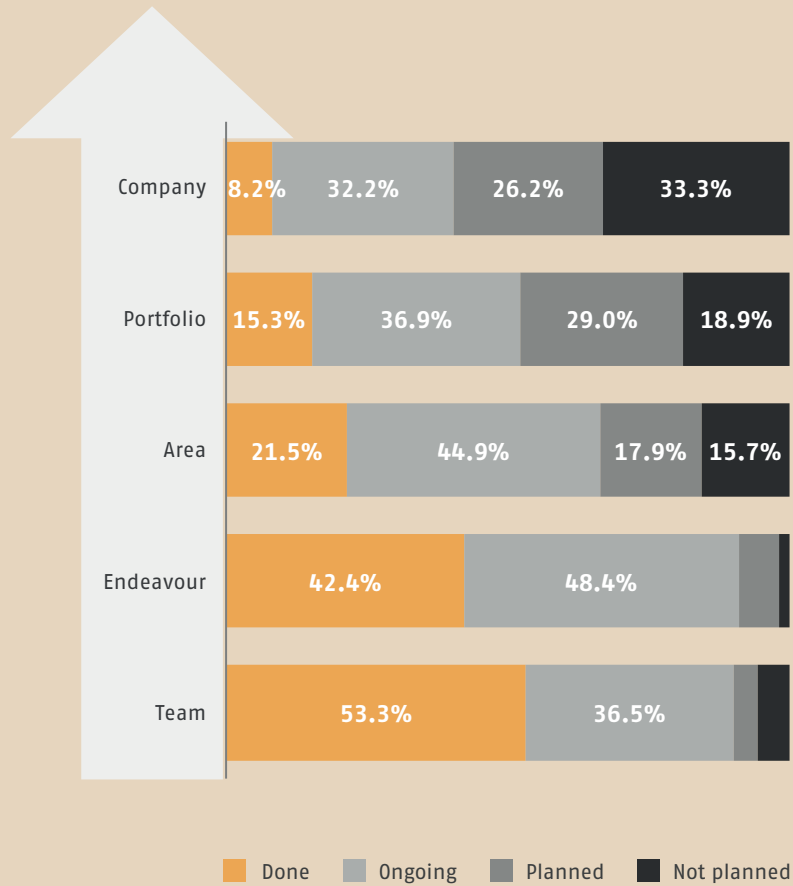
CEO

CIO

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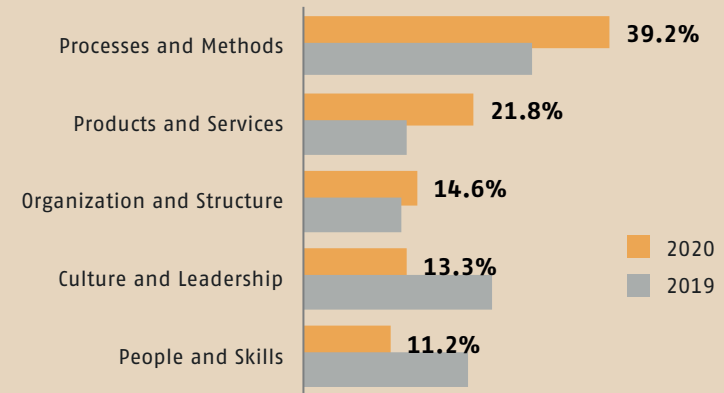
### At What Levels Agile Introduced?

Agility has either already been introduced or is being actively promoted mainly at team and project levels.



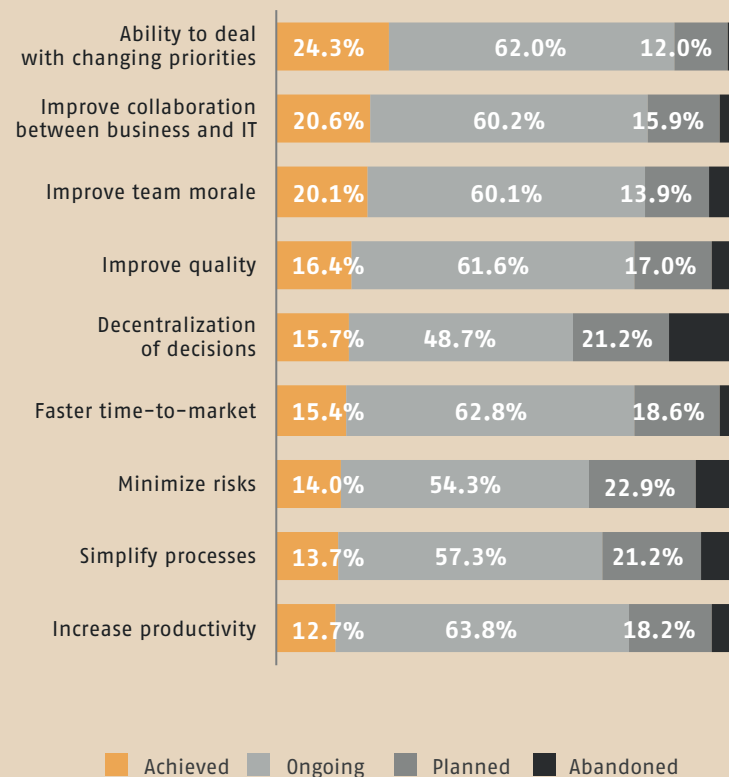
### Focus of Transformation

People claim that agile transformation is all about culture. Yet in practice the focus is increasingly on processes and methods.



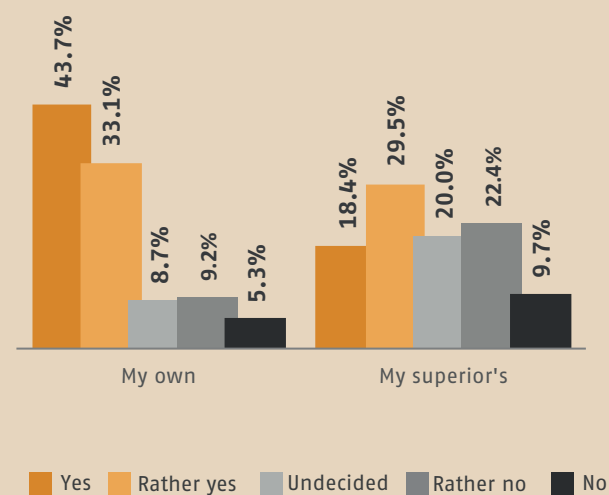
## Goals of Agile

The ability to deal with changing priorities comes first, while the decentralisation of decisions is the goal abandoned the most.



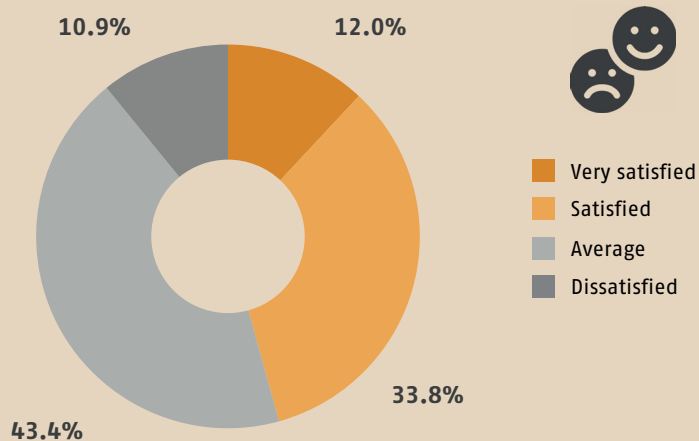
## Changes in Leadership Behaviour

While many say that their own leadership behaviour has changed, they don't think the same of their superior's.



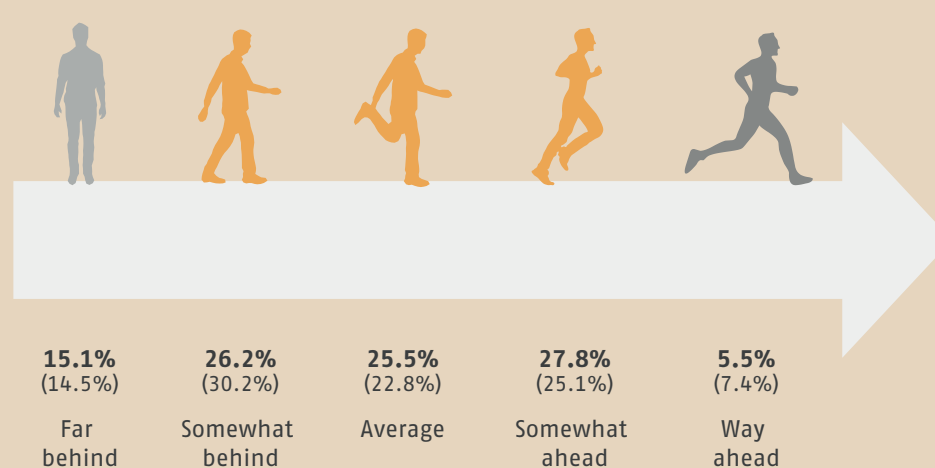
## Satisfaction with Agile

Satisfaction with the agile approach is limited. Over half of respondents are averagely happy or are even dissatisfied.



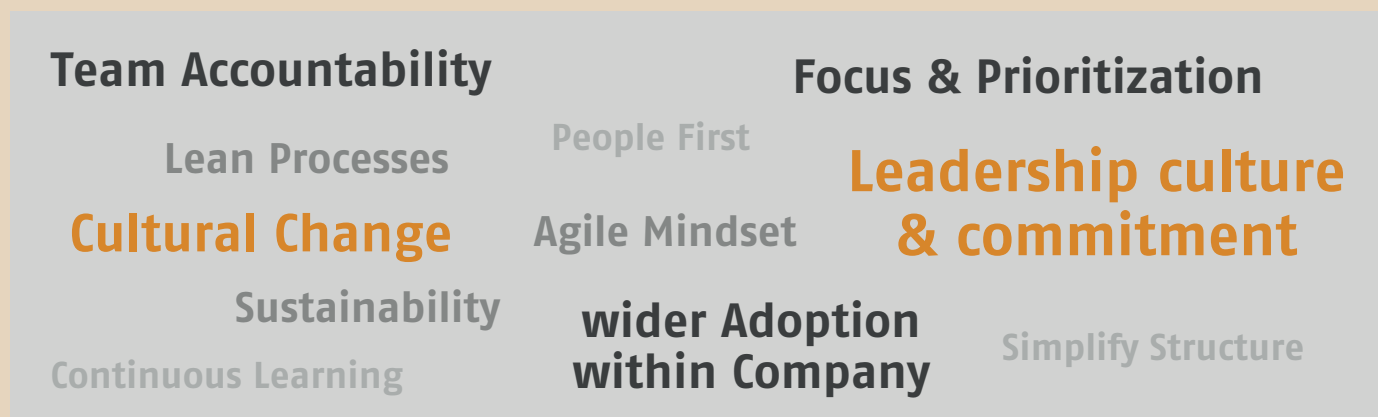
## Level of Agility in Relation to Market

About a third of respondents think their company is ahead of the rest of the market when it comes to level of agility.



() = previous year

## What could be improved?

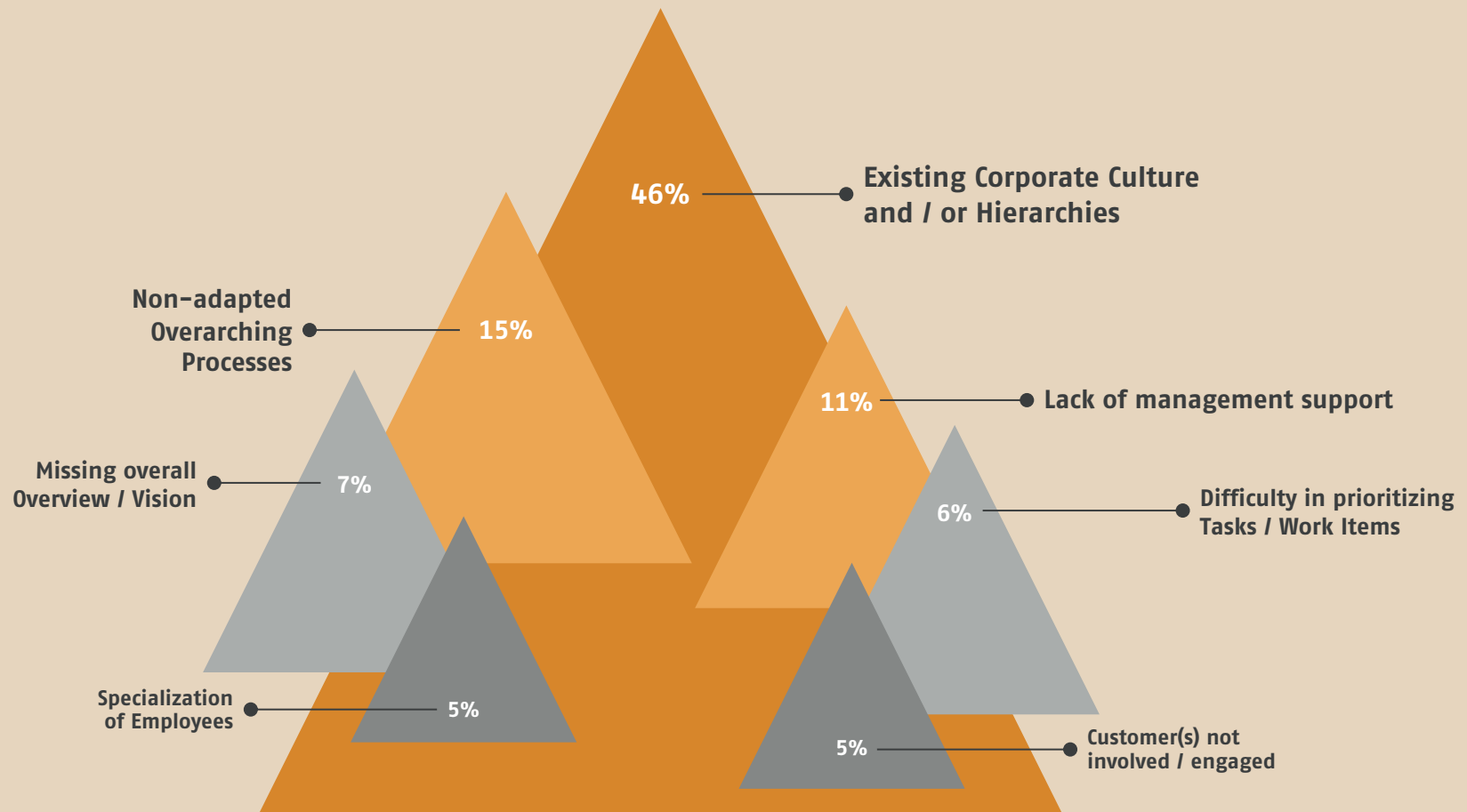


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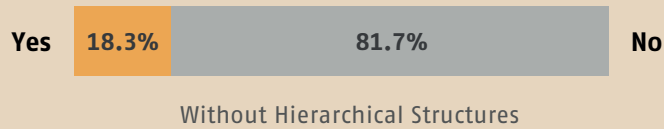
## The Biggest Obstacles for Agility

By far the greatest challenge for more agility in the organisation are existing corporate culture and hierarchies. This goes hand in hand with the fact that many overarching processes, such as human resources or portfolio management, have not been adapted to the Agile Way of Working.



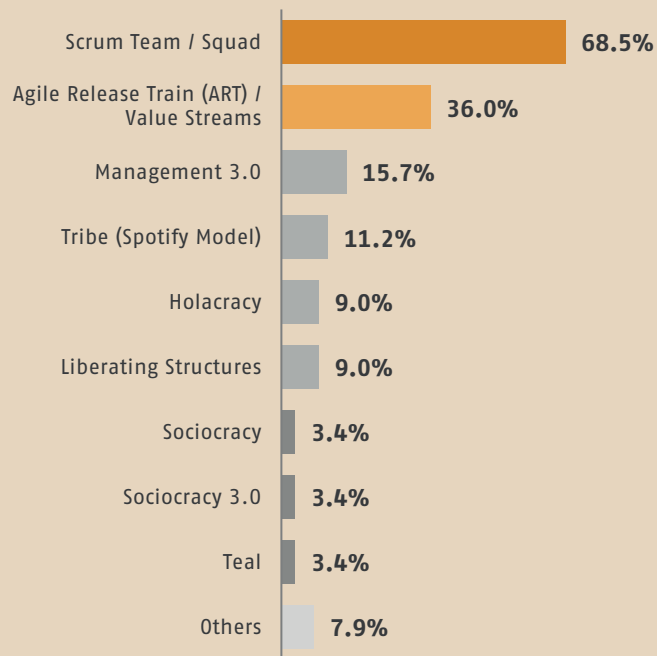
## Teams without hierarchical structures

Slightly more than 18% of respondents work in a team without hierarchical structures, i.e. without a direct superior.



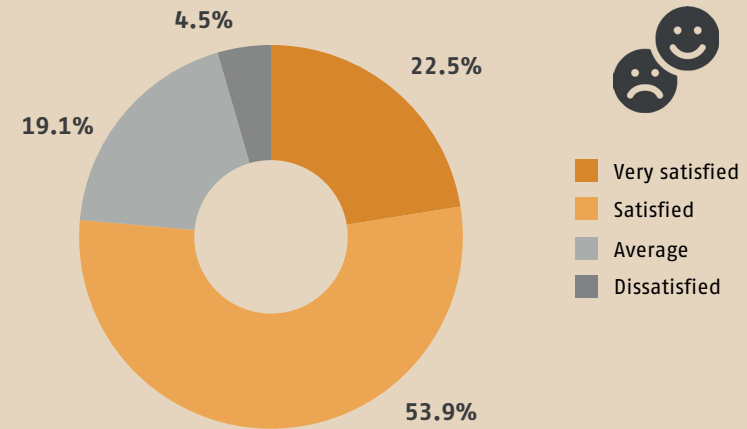
## Organisational Approaches

In most cases, the chosen team setup is Scrum Teams, sometimes in combination with other approaches.



## Satisfaction

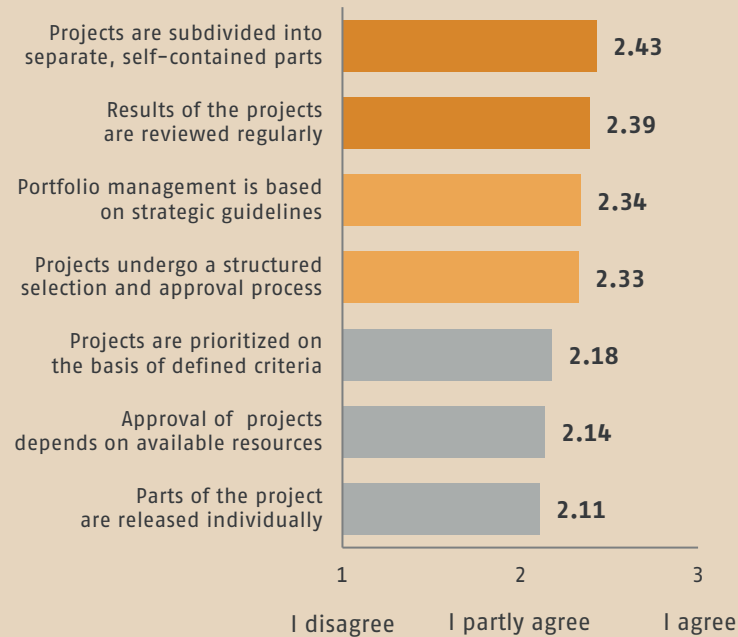
Over 75% of participants are satisfied or even very satisfied with their new way of working.



- Very satisfied
- Satisfied
- Average
- Dissatisfied

## Portfolio Management Application

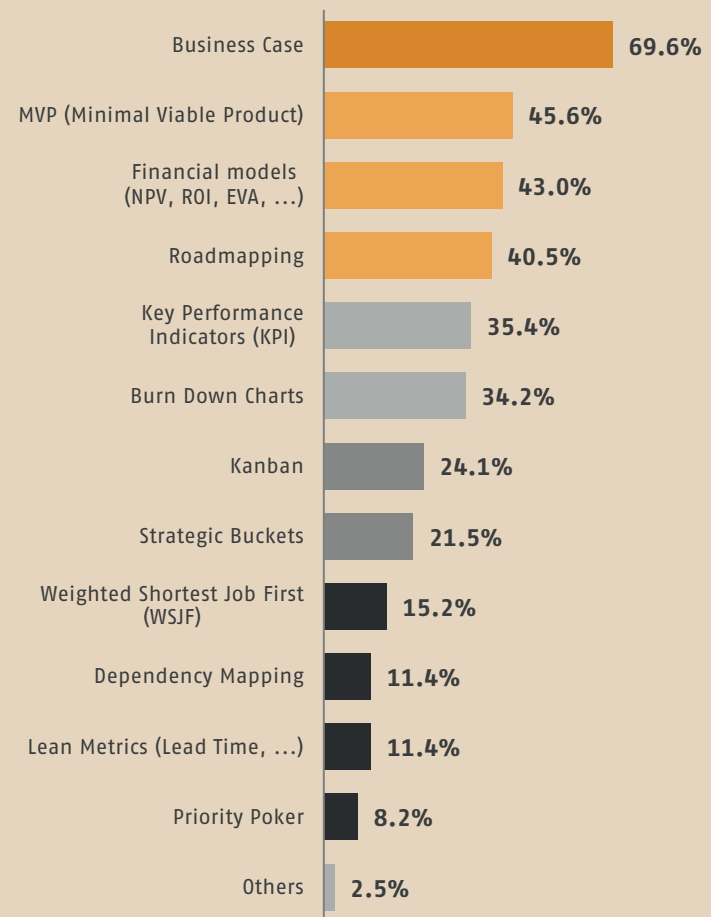
In general, the application of portfolio management works well. The "advanced" practices are the hardest to implement.



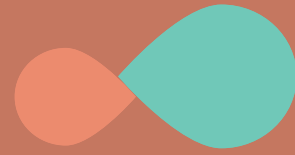
**Portfolio Management:** selection, approval and monitoring of endeavours (project, program, product development)

## Portfolio Management Techniques

Classical techniques continue to make up the major share. With the MVP principle, however, an agile technique has established itself.



Source: Trends & Benchmarks 2019



Agile

# Agile

## Waterfall fights back

and is becoming more agile

Easy to start with,

## Kanban is a rising star

just don't ask about WIP limits

Agile frameworks focus on IT, there is

## no established solution for the Business

Everyone wants cross-functional teams, yet

## T-shaped remains elusive

With agile come new roles

## Coaching beats command & control

## Stable Product Teams

are more productive than temporary project teams

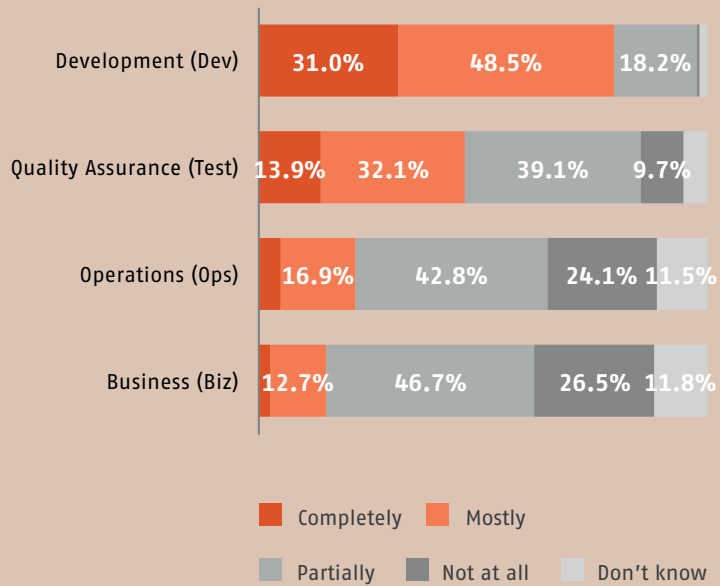


Agile Executive

Agile Coach

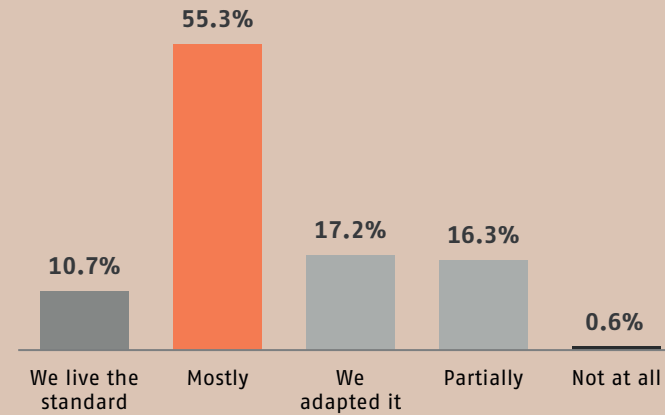
## Adoption of Agile

Agile is prevalent in Development and has been adopted to some extent in Quality Assurance. Operations is slowly catching up.



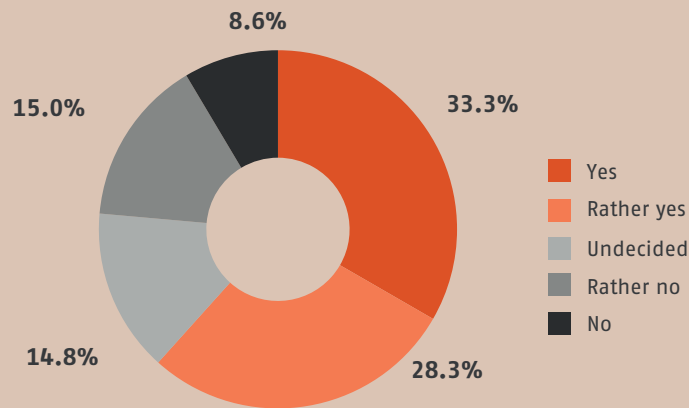
## Following the Approach

Most follow the chosen approach fairly closely. Surprisingly only 17% say they adapted it.



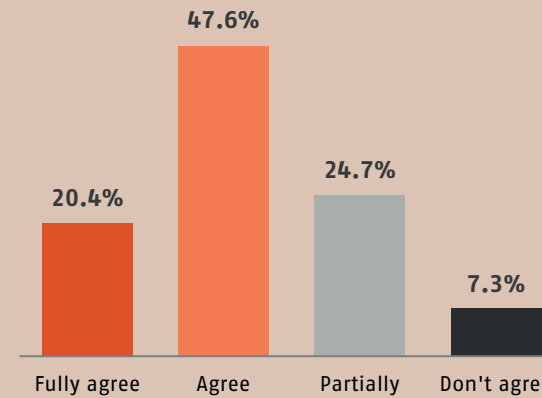
### Has your role changed with Agile?

About 2 thirds say that their role has changed with the introduction of Agile.



### Is your job fulfilling/motivating?

An impressive 68% say that they are satisfied or even very satisfied with their job in the agile world.

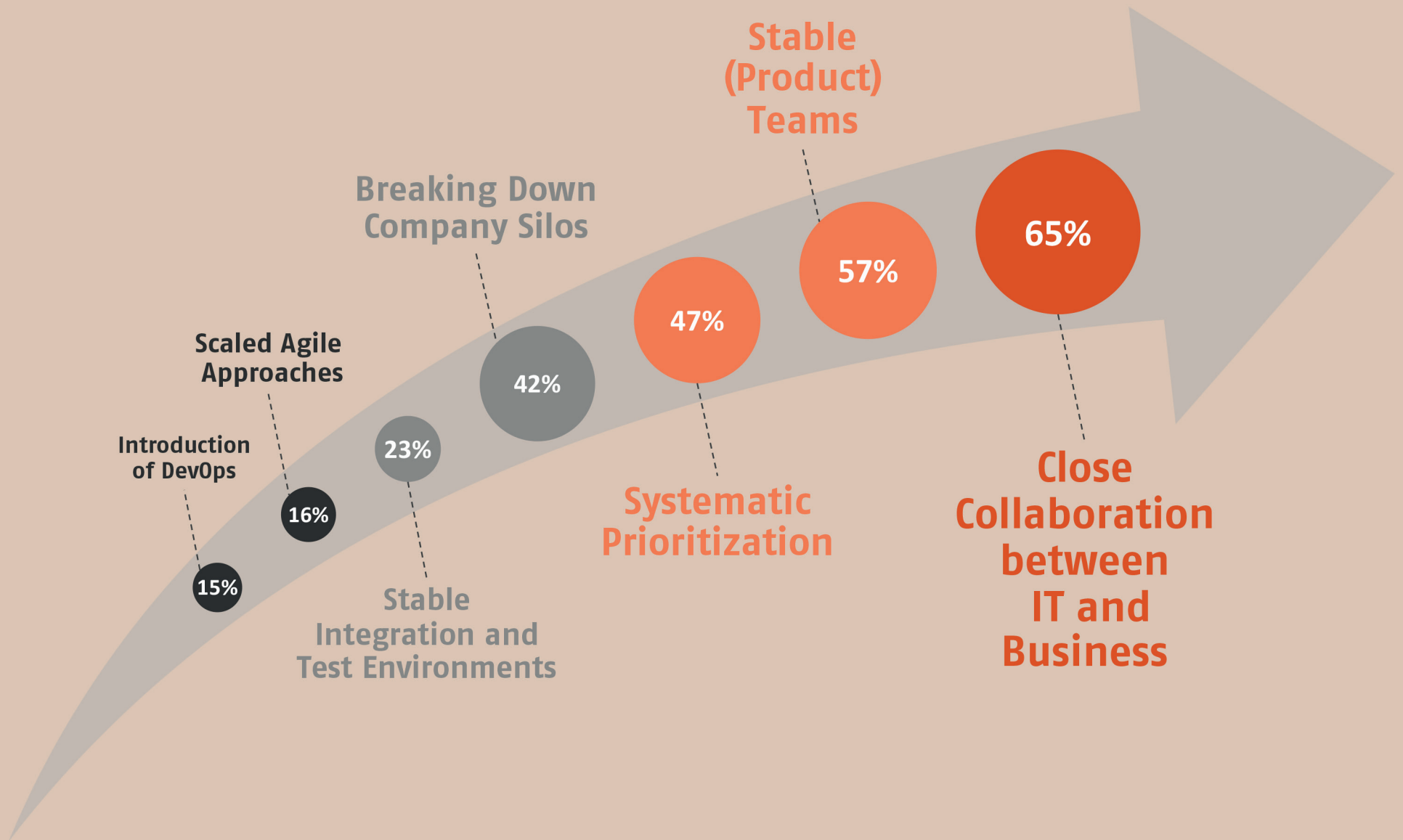


### If so how?



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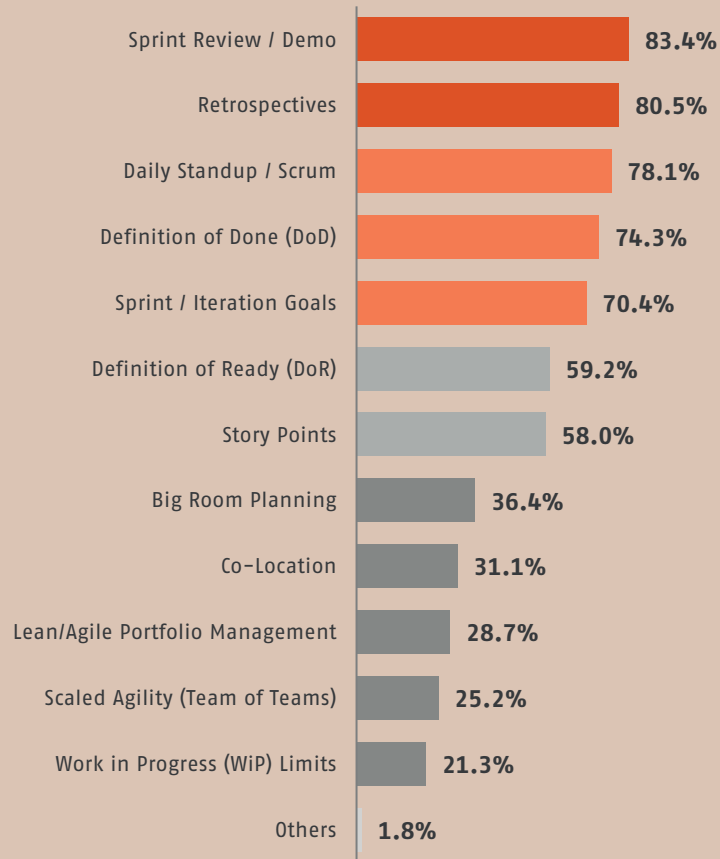
## Agile Key Success Factors





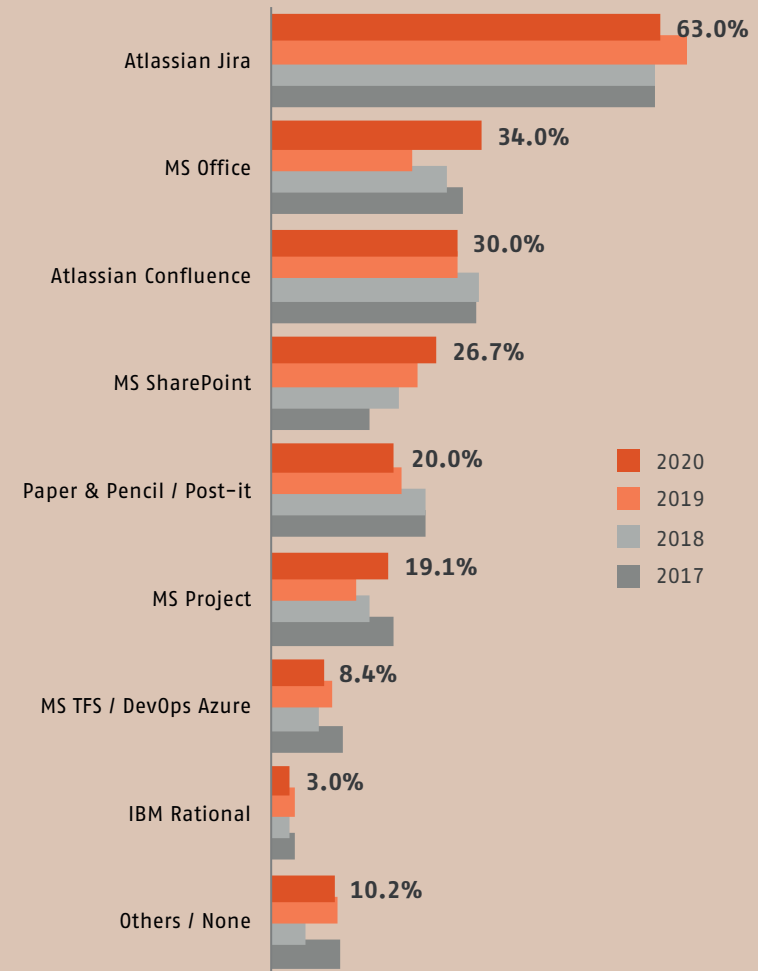
## Use of Agile Practices

The Scrum events top the list.



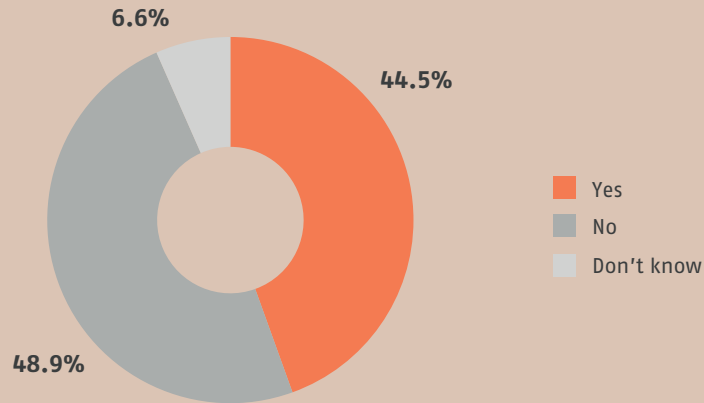
## Tools Used for Task Management

Jira remains the most-used tool by far.



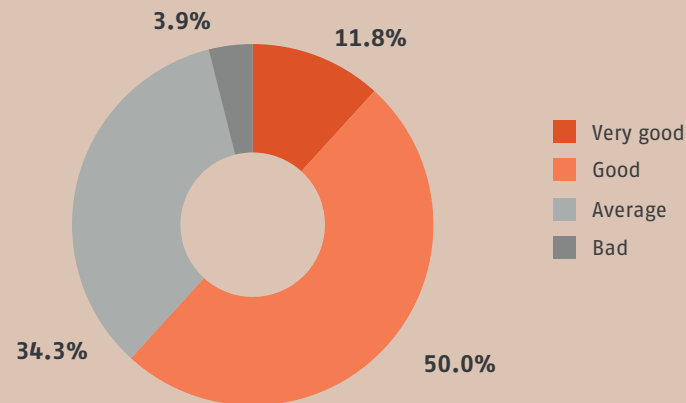
### Applying Scaled Agility

Nearly half the respondents report that their company uses scaled agility.



### Team Collaboration

The degree of cooperation varies widely across companies.



### Success Factors of Scaled Agility

Ensuring alignment – for example with a product vision – is key.



Font size = number of mentions

Responses taken from the 2018 survey





# Product Engineering

# Product Engineering

Product Engineering, the link between Business and IT, is a

## Key Success Factor

for Agility

## 2/3 are not satisfied

with Product Engineering activities  
There is ample room for improvement

## Use of the MVP Concept has spread

but MVP is often misunderstood or misused

## Without a clear Vision

even an agile approach cannot save you

## The role of the PO is becoming more popular

extending beyond the original definition in the agile team

## Only a few question the Value

for the Business or end users

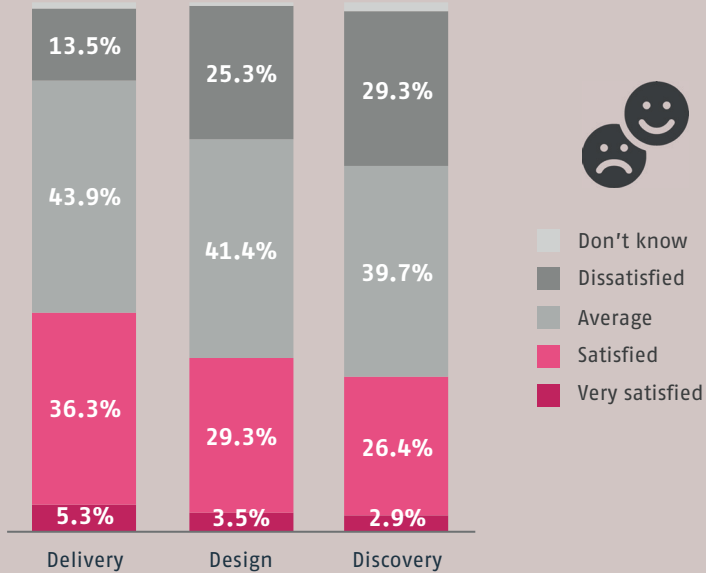


PO

BA/RE

## Satisfaction with Product Engineering

In average 2/3 of the respondents are not satisfied with the Product Engineering activities. At least, about 40% are satisfied with Delivery.



**Discovery:** continuous innovation, identifying customer needs  
**Design:** solution options, design business processes, business req.  
**Delivery:** solution design, technical requirements

## Success Factors for Product Engineering

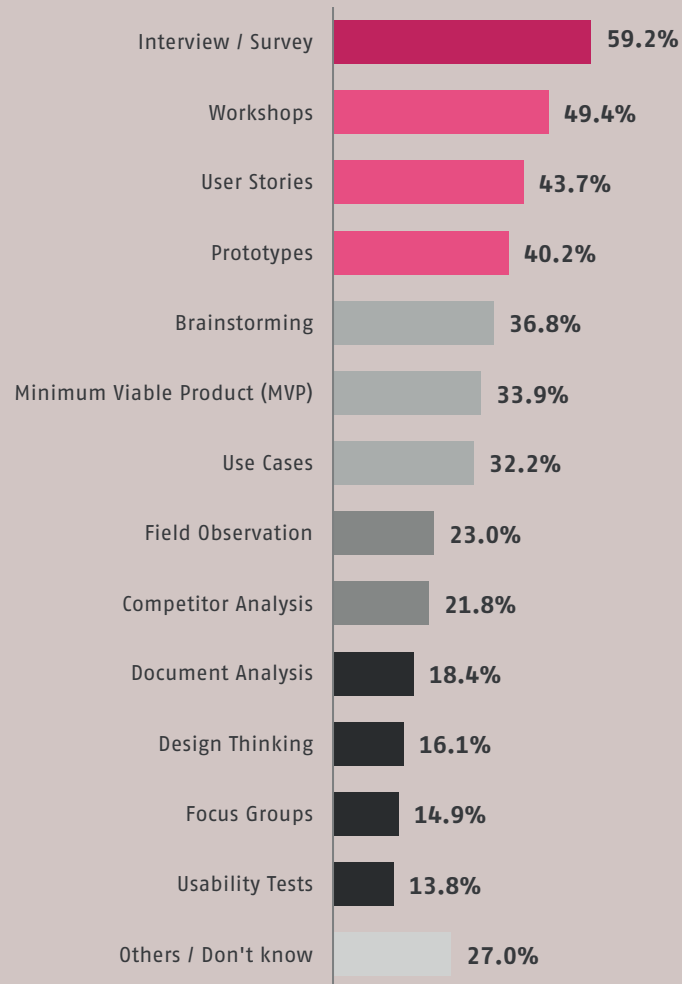
A clear vision and communication are the two top success factors for Product Engineering.



Font size = number of mentions

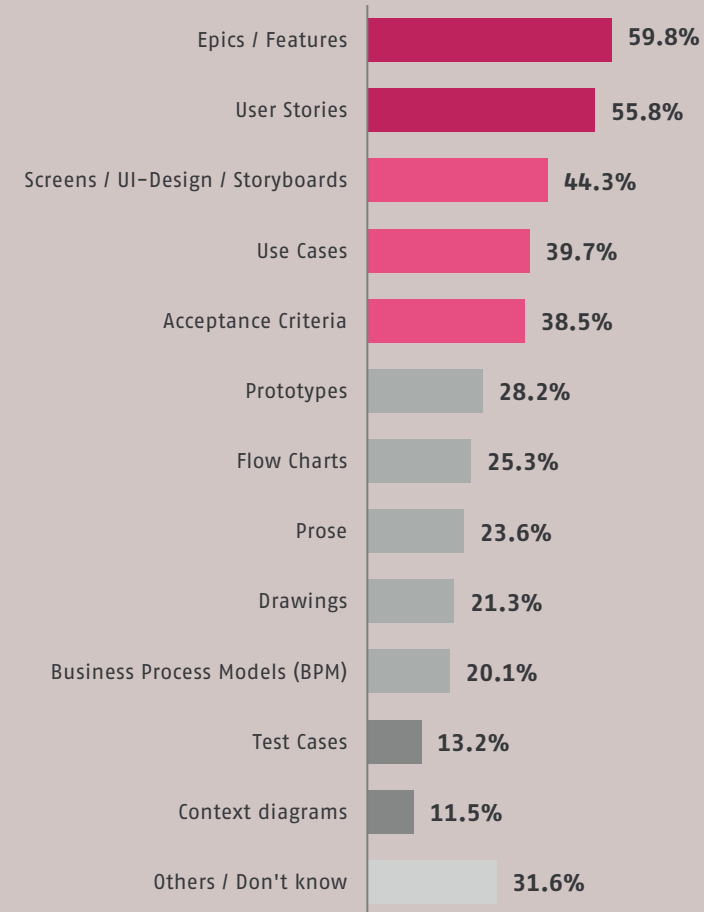
## Elicitation Techniques

Interviews / Surveys are the most popular technique, followed by Workshops and User Stories.



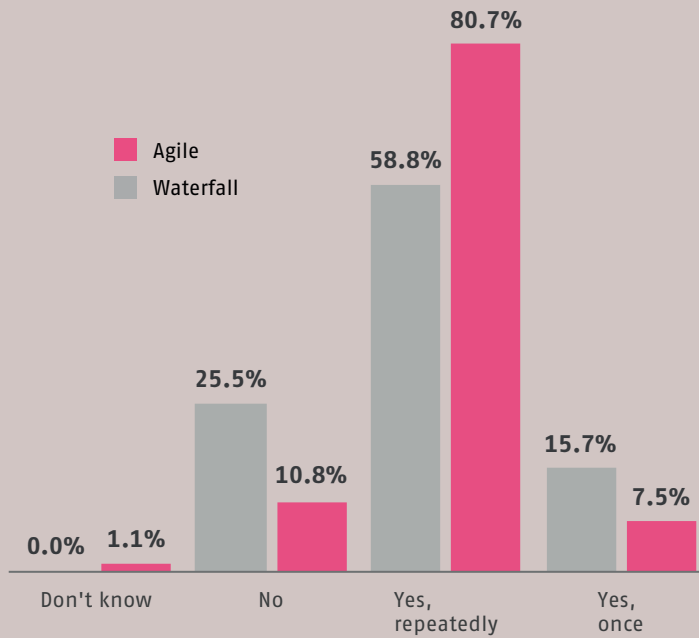
## Documentation Techniques

Epics, Features and User Stories have become the most popular forms of documentation.



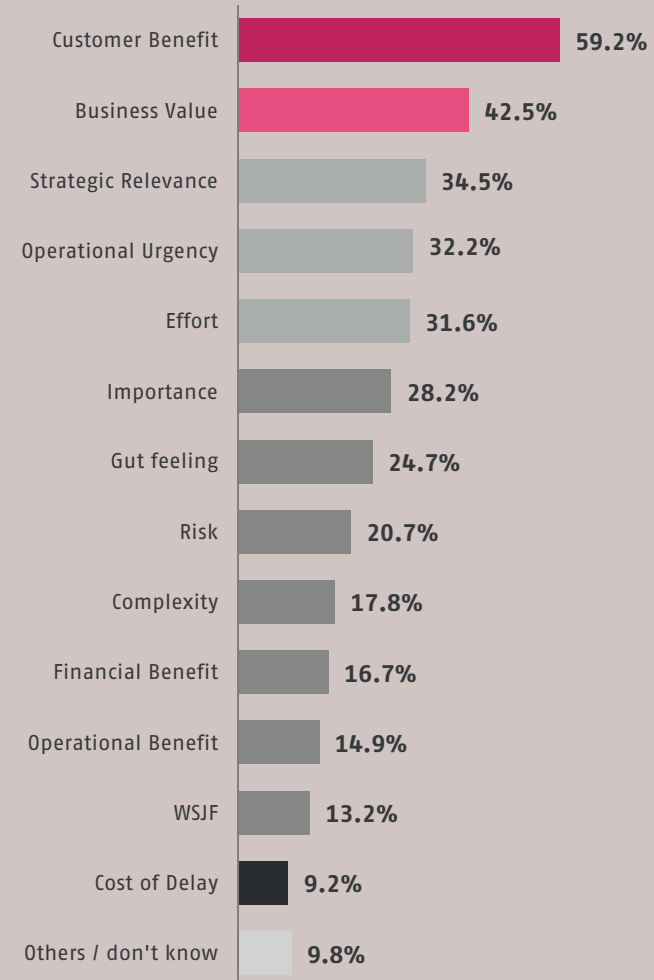
## Prioritization

Not surprisingly, prioritization occurs more frequently with Agile. But what is surprising, is that in 25% of the cases with Waterfall (and still in 10% with Agile), there is no prioritization at all.



## Prioritization Criteria

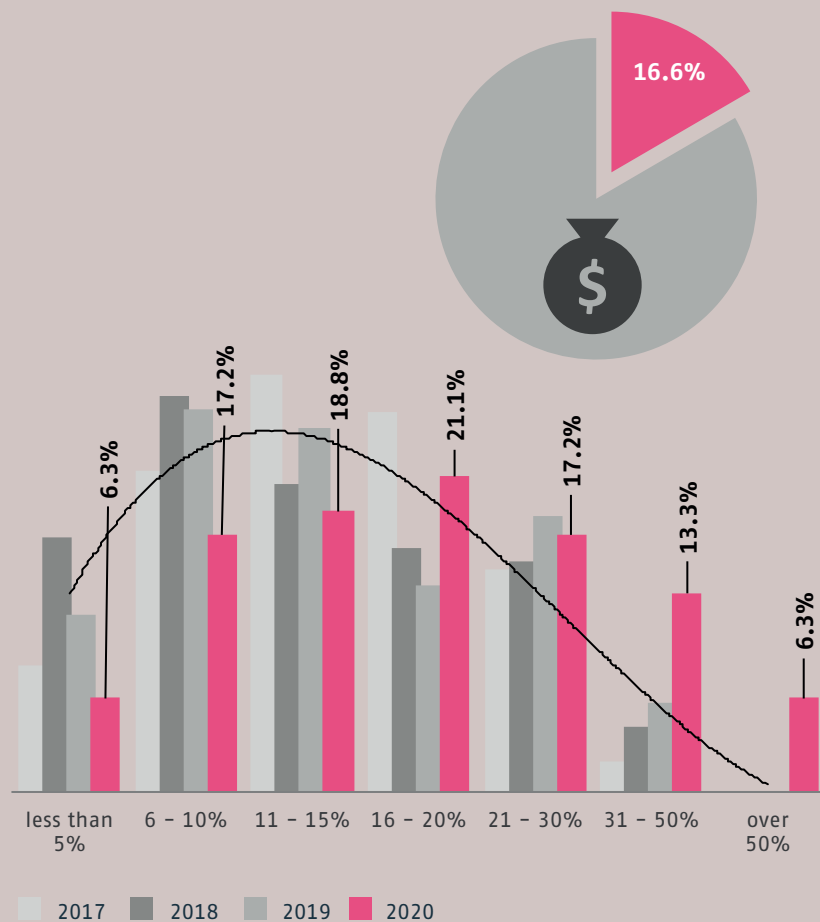
Customer Benefit and Business Value top the list, while Strategic Relevance, Urgency and Effort also play a key role in prioritization.





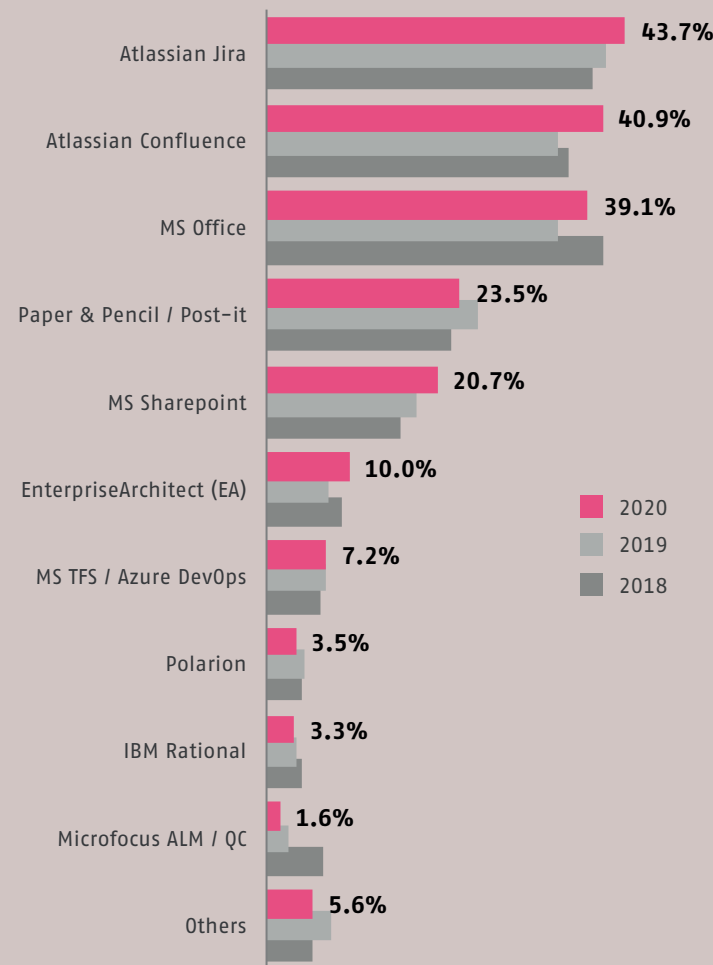
## Product Engineering Effort

For the second year in a row, the **Average Product Engineering Effort** in relation to overall cost has increased, from 11.3% in 2018 to 16.6% in 2020.



## Tools for Requirements Management

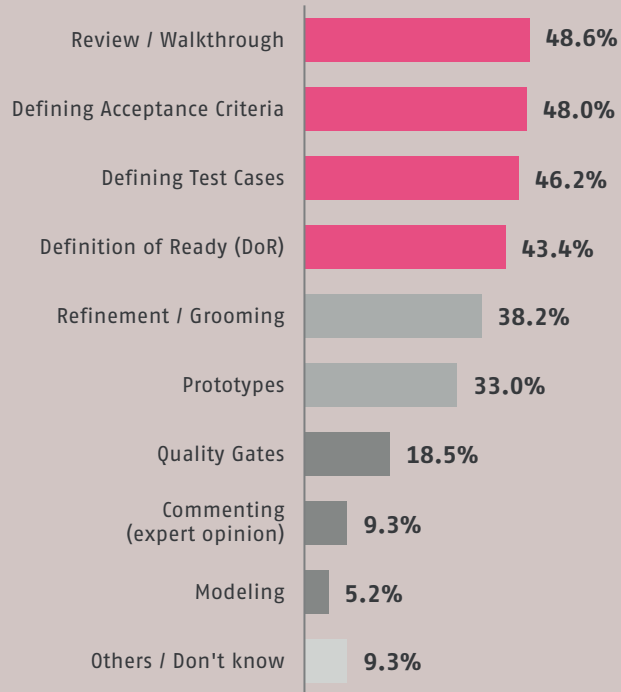
Jira, Confluence and MS Office are the top tools for requirements management. Not much has changed in the last couple of years.



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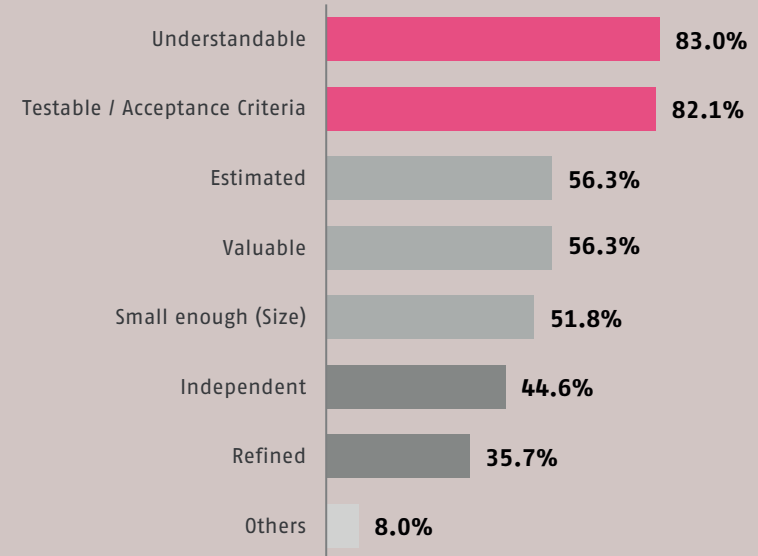
## Ensuring Quality of Requirements

A wide variety of techniques are used, and often combined, to ensure quality.



## Definition of Ready (DoR) Criteria

The DoR in most cases primarily focuses on clarity and testability.

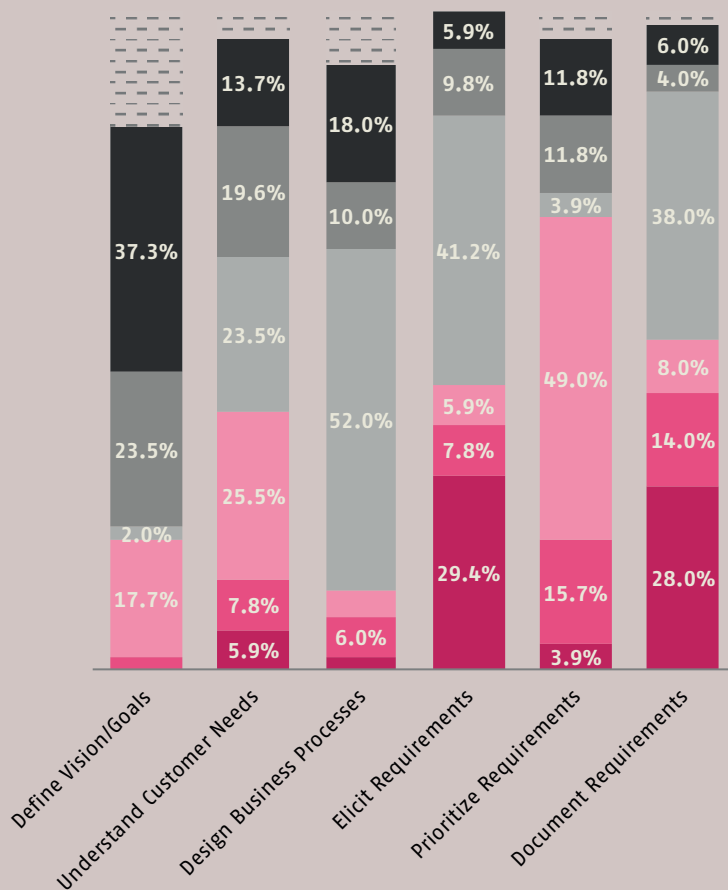


*Responses taken from the 2019 survey*

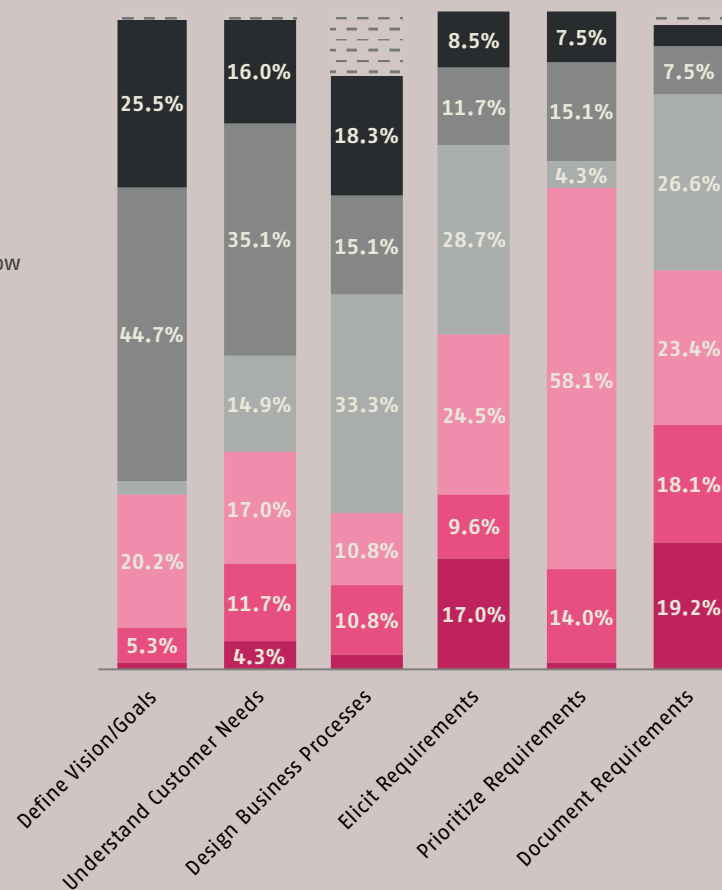
## Responsibilities

The PM plays a more active role in Agile, especially in defining a vision and goals. The same is true for the PO in the elicitation and documentation of requirements. In general, PM and PO take over responsibilities from RE and BA, and partially from the business.

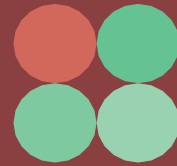
### In Waterfall



### In Agile



PM=Product Manager; BA=Business Analyst; PO=Product Owner; RE=Requirements Engineer



# Testing & DevOps

# Testing & DevOps

As 40% use a hybrid approach

**Agile Testing is not that Agile**

**Acceptance Criteria**

are more and more being used as a starting point

**for Testing**

Only

**31.8% are confident**

they tested enough before deployment

**Early Involvement**

a key success factor, even more so in agile, often

**does not happen**

Many

**talk about DevOps**

few have implemented it fully or have much experience

There is still much **Manual testing**

as test automation efforts often fall short of expectations



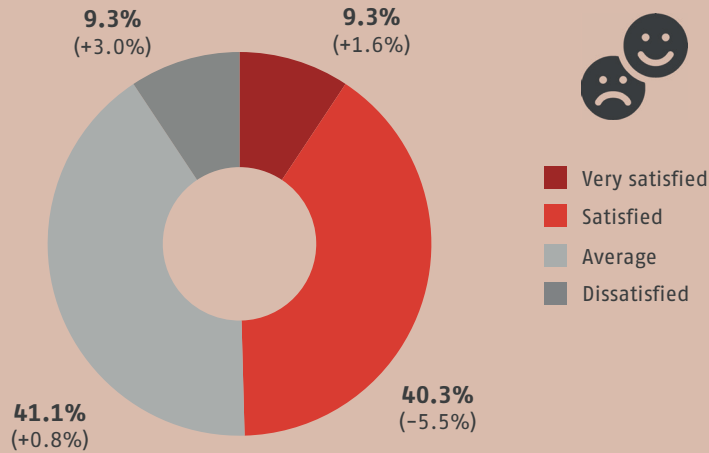
**Tester**

**DevOps Engineer**

Trends & Benchmarks 2020

## Satisfaction with Testing

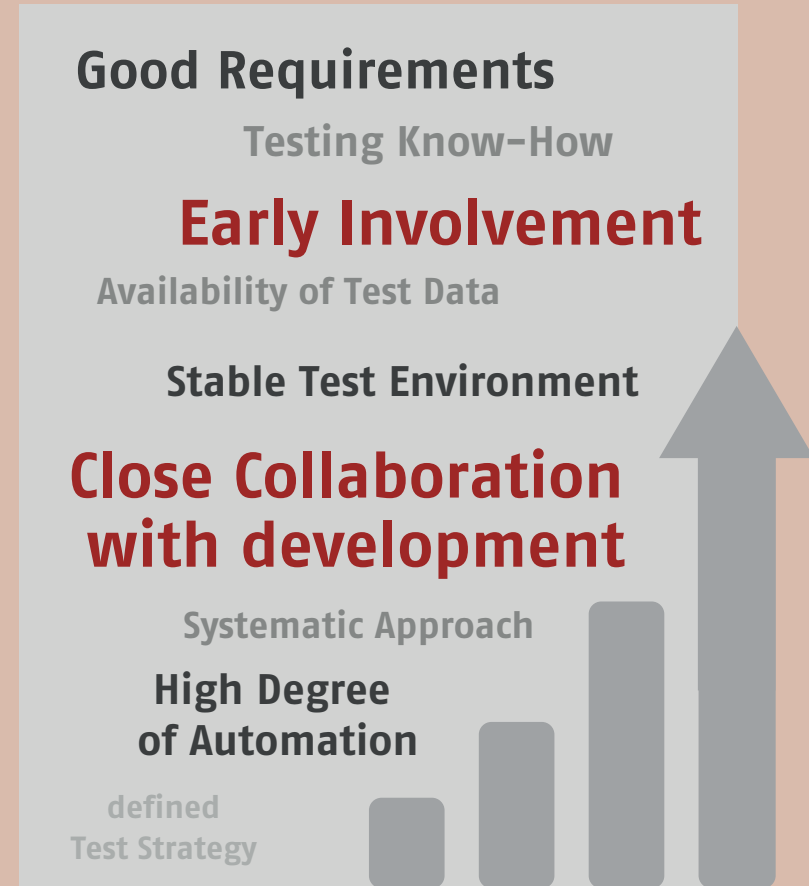
About half of all respondents are satisfied with the testing in their organisation. Which also means that the other half is not.



() = Change over previous year

## Success Factors in Testing

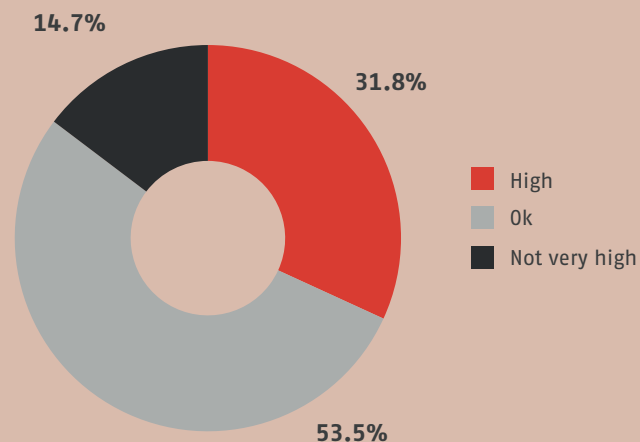
Early involvement of testing and a close cooperation with development are the main success factors.



Font size = number of mentions

## Confidence before Deployment

Most respondents think they could have spent more time on testing and debugging, while just over 30% think they deliver good quality.

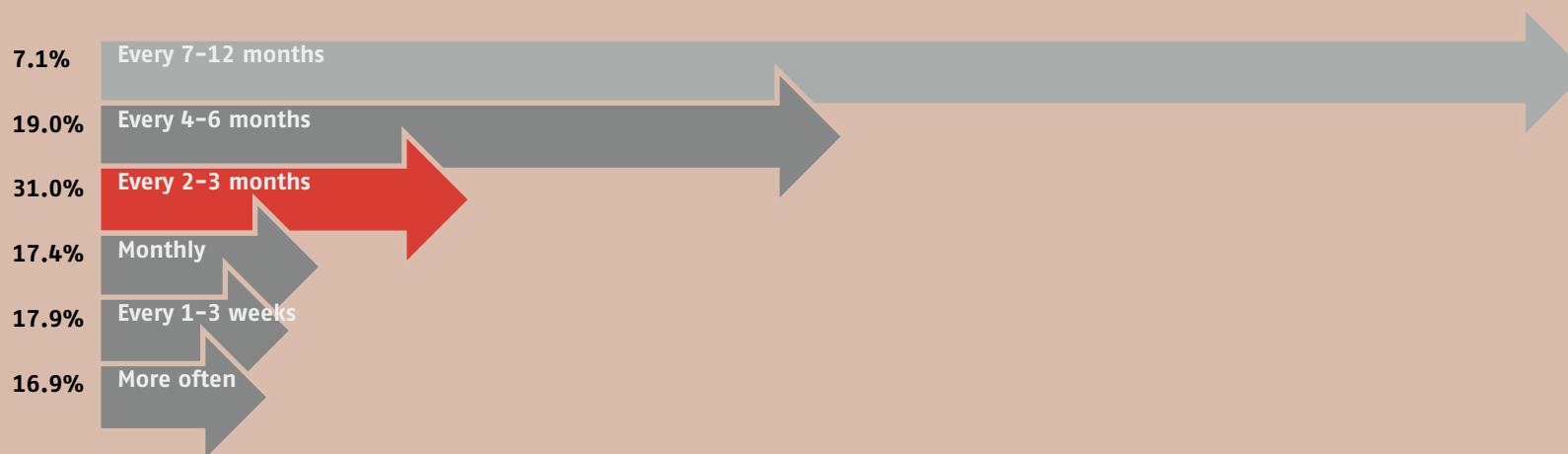


## Satisfaction with Quality

In the opinion of the respondents, most customers are quite satisfied with the quality of the product.

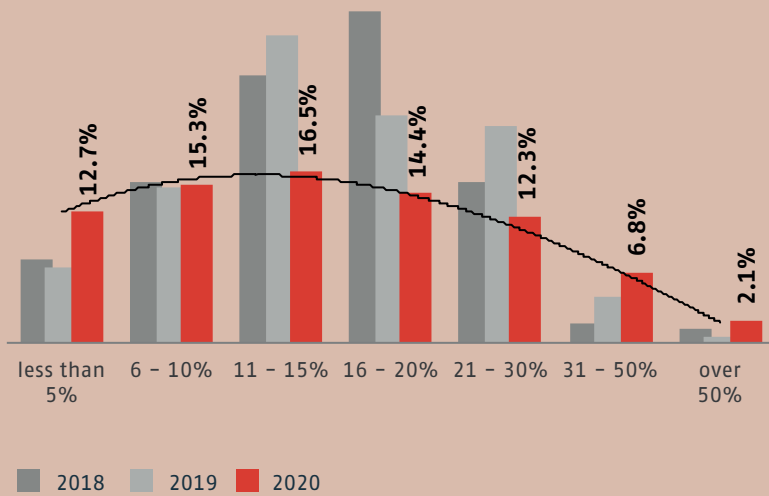
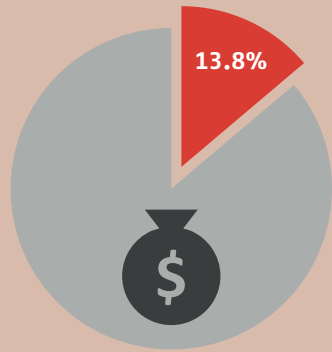


## Frequency of Deployments into Production



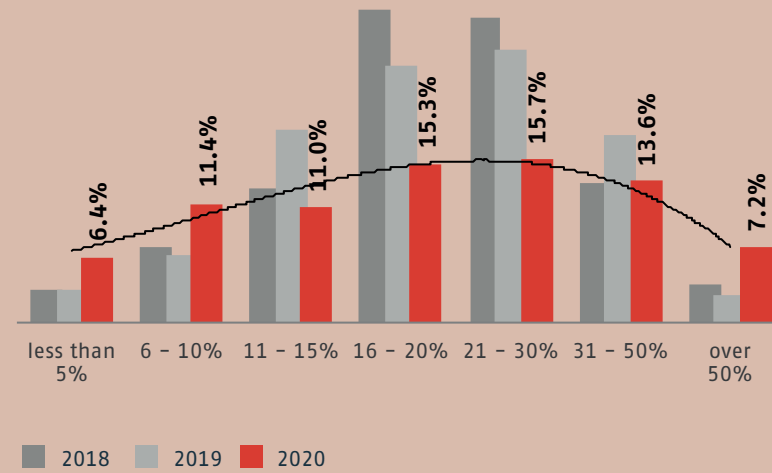
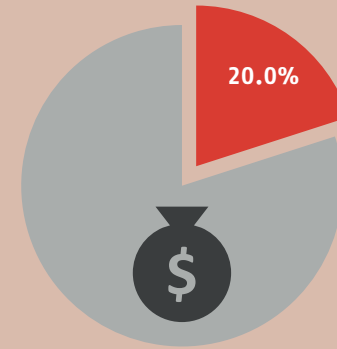
### Test Effort in Relation to **Total Effort**

The **Average Test Effort** in relation to total effort remained virtually unchanged compared to 2019 (14.1%).



### Test Effort in Relation to **Development Effort**

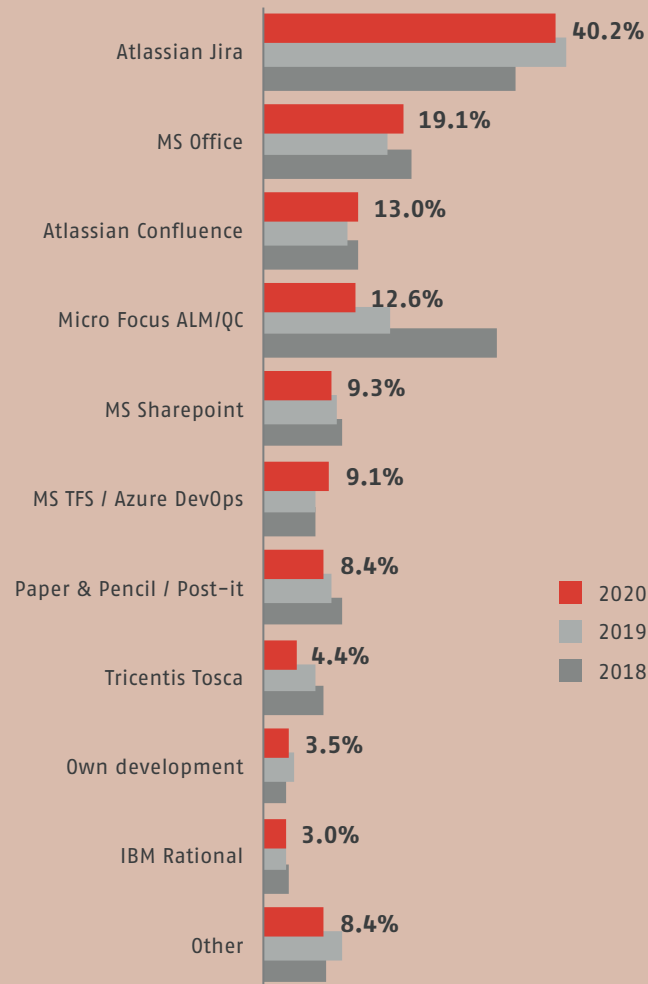
The **Average Test Effort** in relation to development effort remained virtually unchanged compared to 2019 (19.5%).





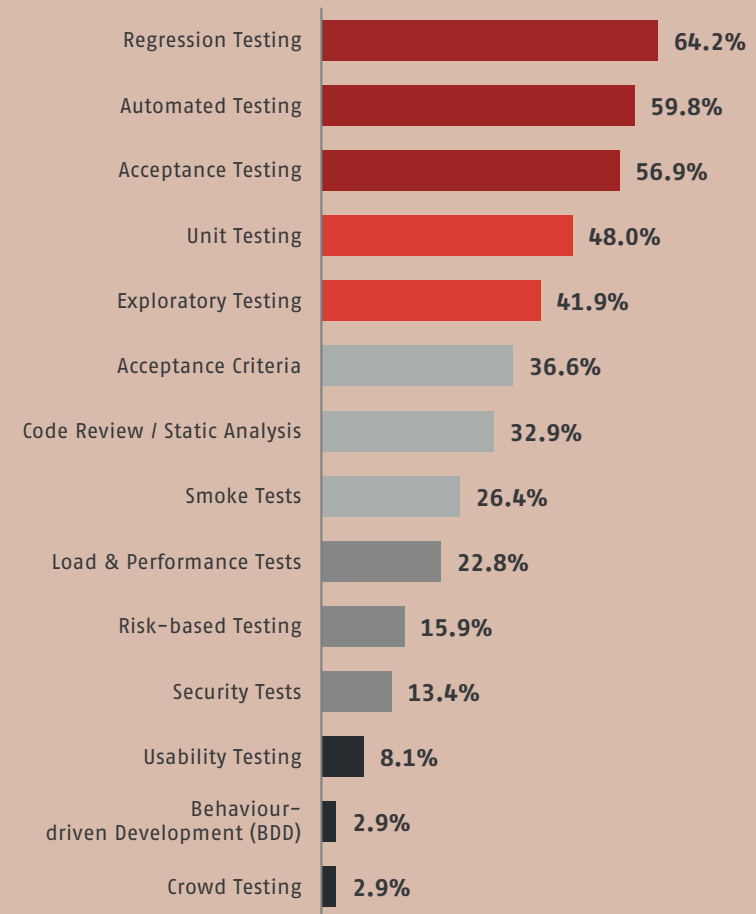
## Test Management Tools

While Atlassian Jira continues to be at the top of the list, Micro Focus ALM/QC is losing ground.



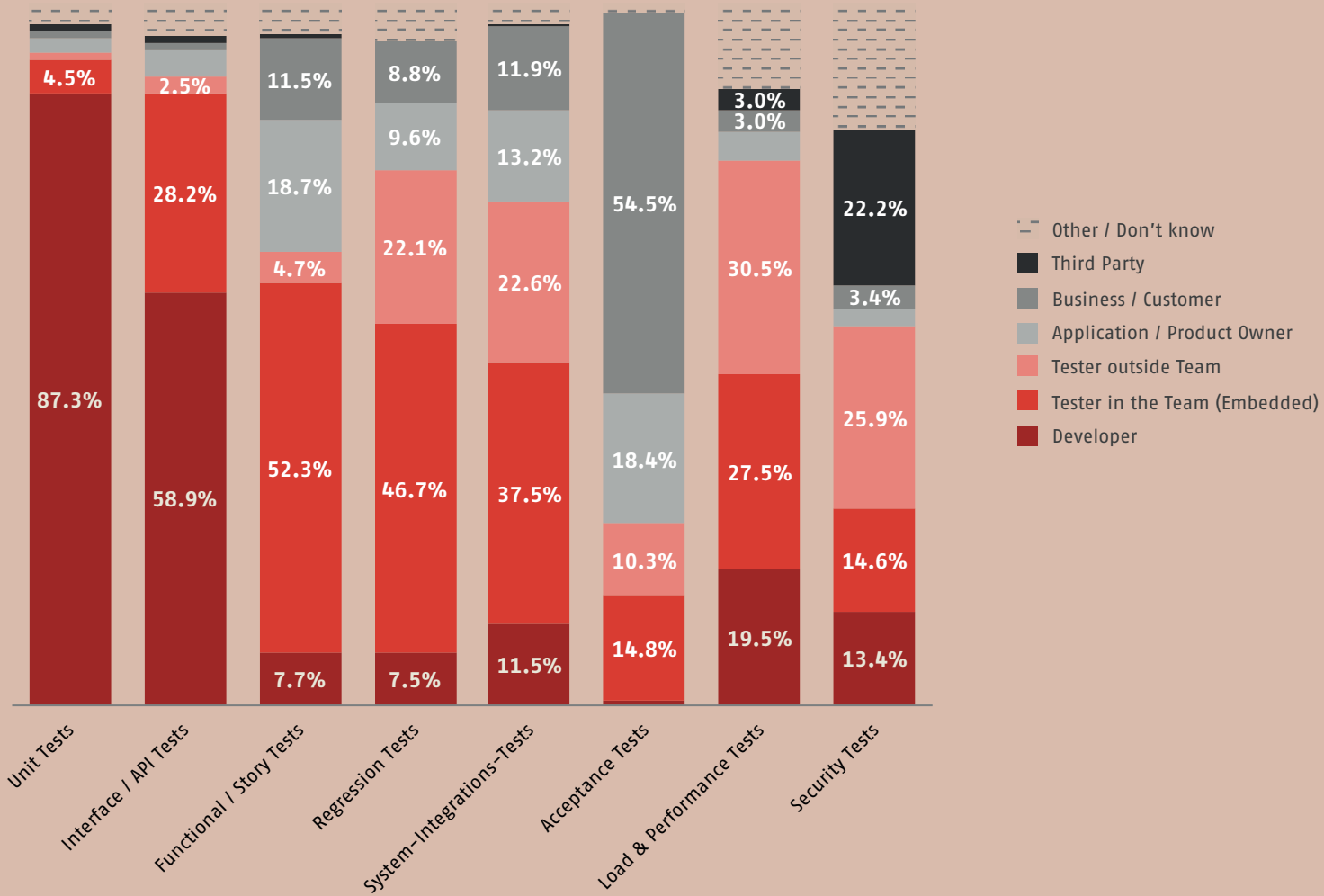
## Test / QA Practices

Regression testing is at the top of the list, while non-functional tests are in the bottom half.



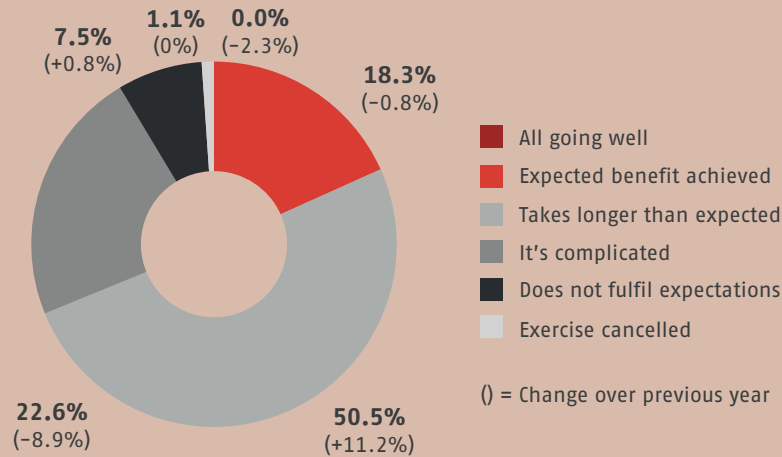
## Responsibilities

No surprises here. While White-Box tests are done by the developers, Black-Box tests are done by testers, and acceptance tests by the business or customers.



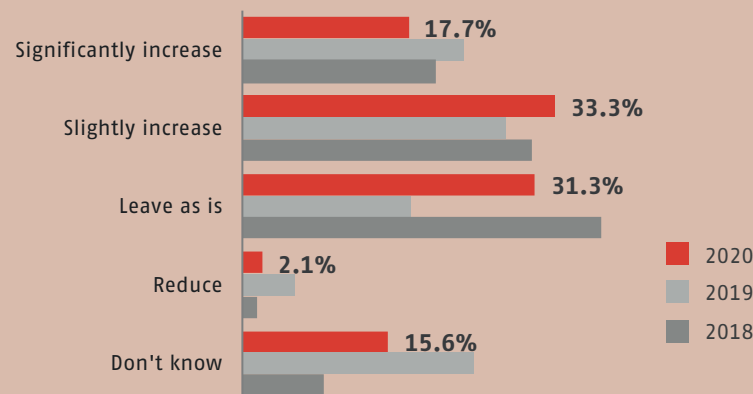
## Satisfaction with DevOps

For half of survey participants, implementation takes longer than expected. Less than 20% have achieved the expected benefits from DevOps.



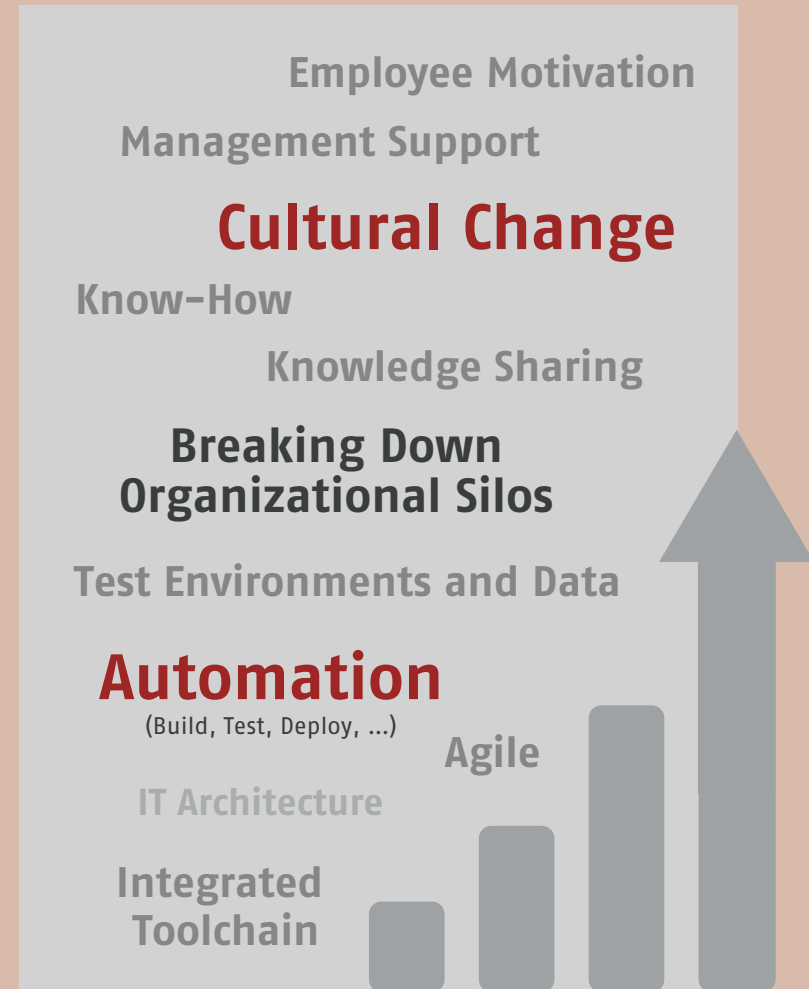
## Investments in DevOps

Most are investing in DevOps, but not as significantly as in the past.



## Success Factors in DevOps

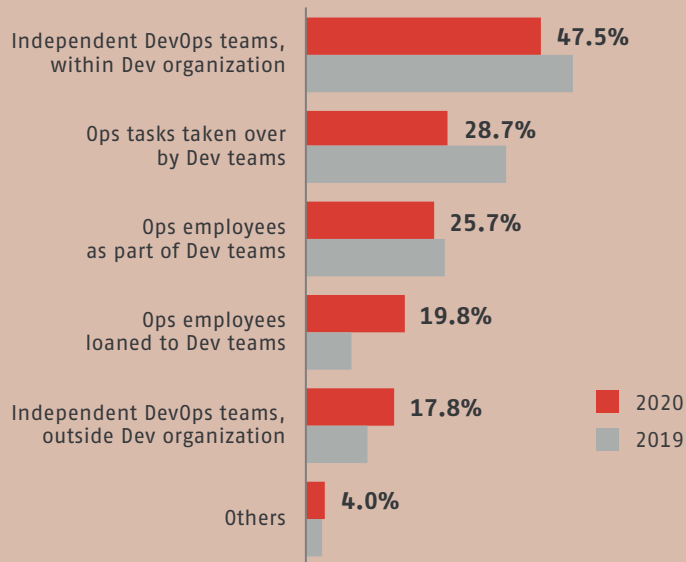
Cultural change and automation are still considered to be the most important success factors for DevOps.



Font size = number of mentions

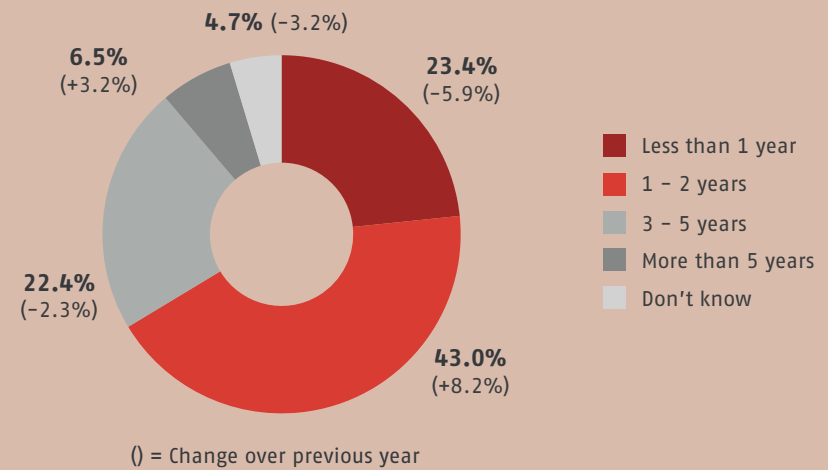
## DevOps Organization

Compared to last year, there has been a shift away from Dev teams taking over Ops tasks, to Ops employees being loaned to Dev teams.



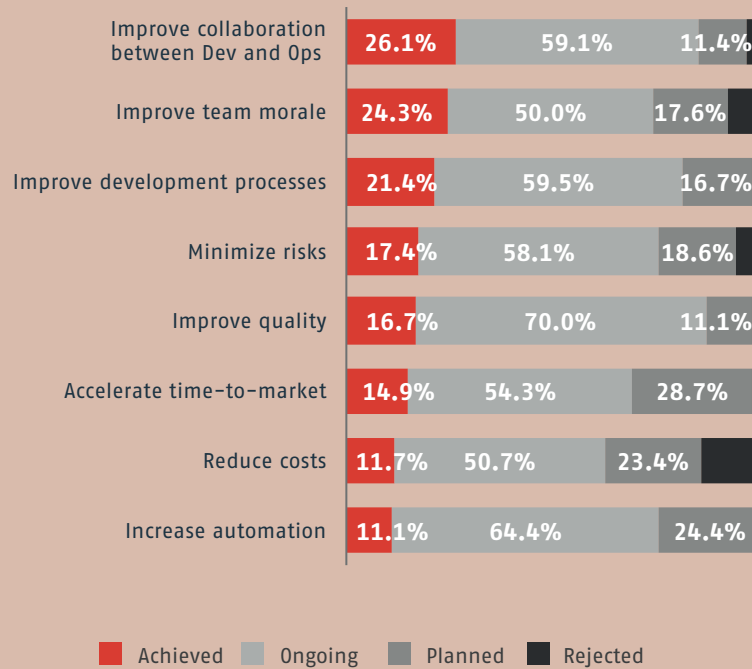
## Experience in DevOps

Experience in DevOps has increased slightly compared to the previous year, yet 2/3 of respondents have worked with DevOps for less than 3 years.



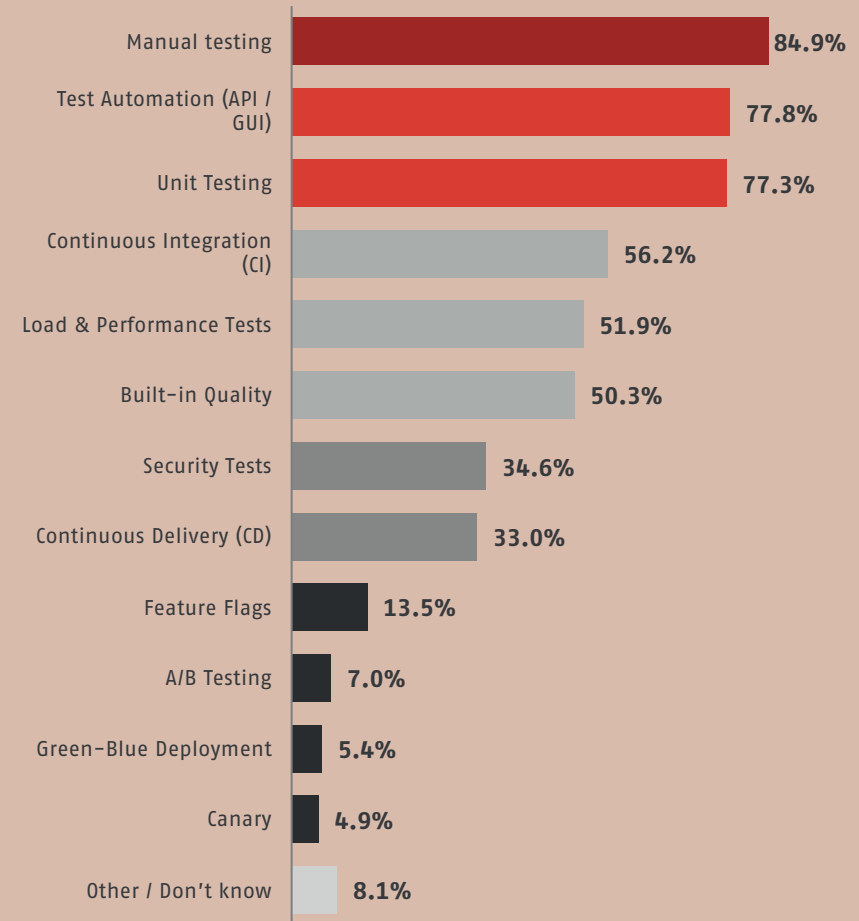
## Objectives of DevOps

Improving quality seems to be the biggest challenge, as for 70% this is still an ongoing task.

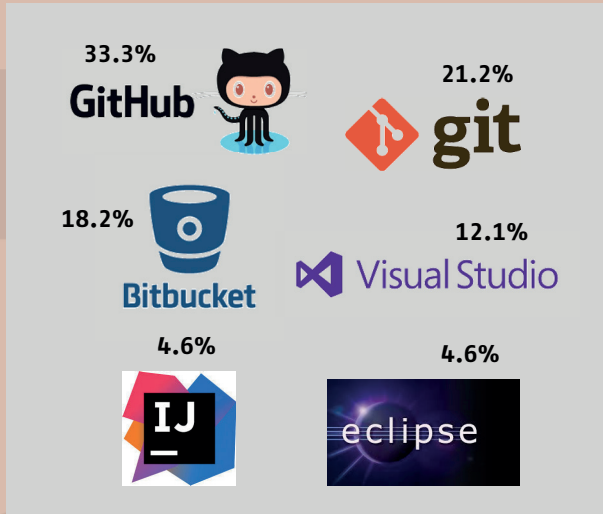


## DevOps Testing Practices

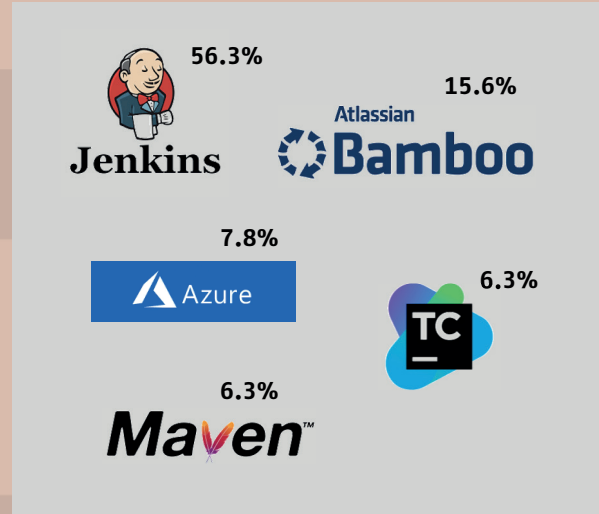
Surprisingly, manual testing is at the top of the list, closely followed by test automation and unit testing.



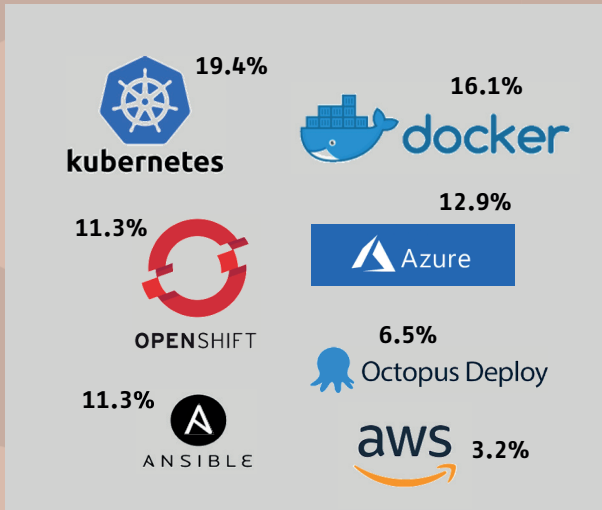
### Development & Source Control Tools



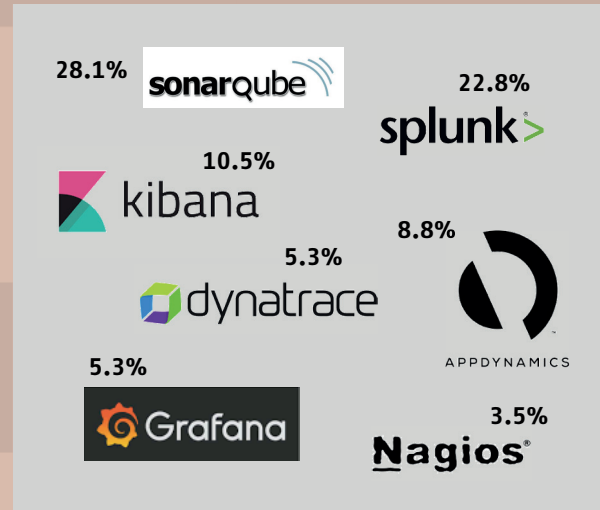
### Build & Integration Tools



### Deployment & Release Tools

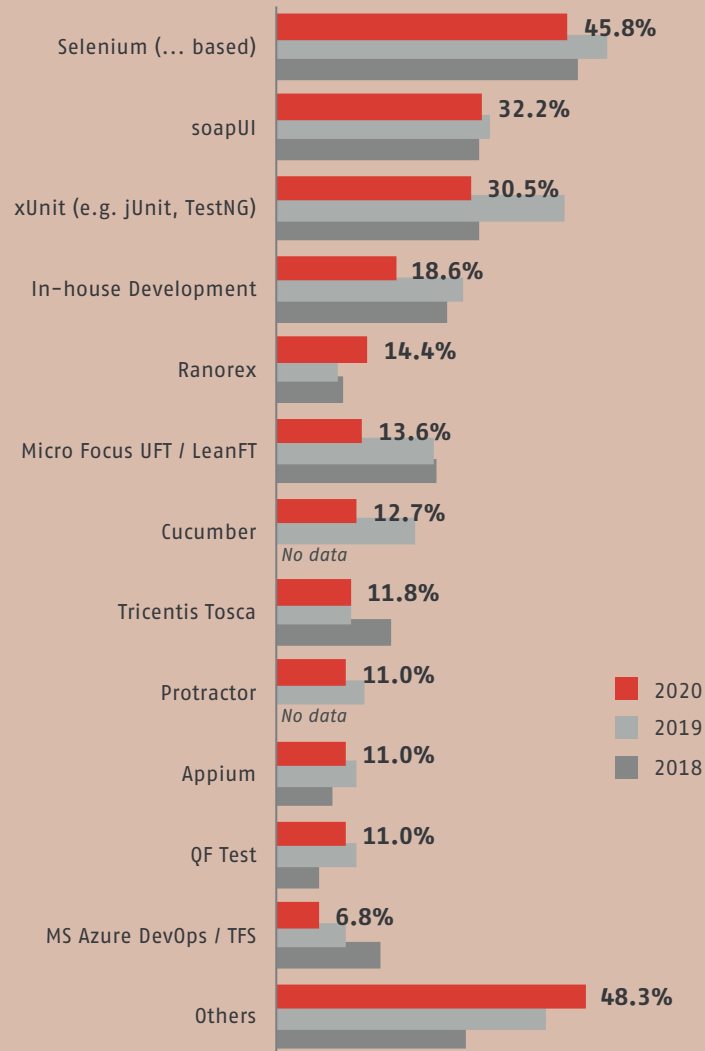


### Analytics & Monitoring Tools



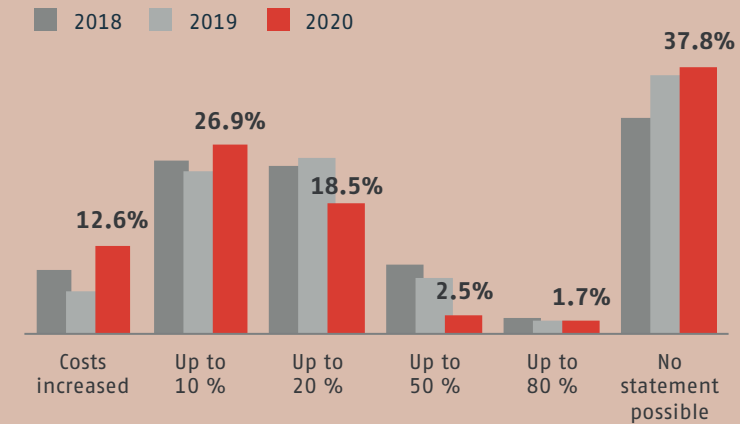
## Automation Tools

The market is getting more and more fragmented, as a large number of different tools are being adopted.



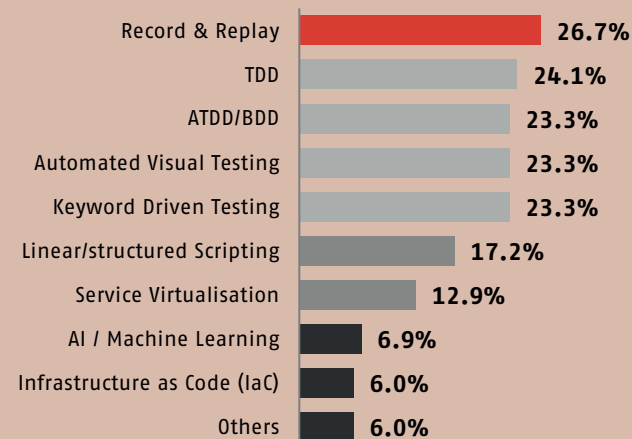
## Cost Savings with Test Automation

Cost savings up to 20% are possible, but most respondents are unable to say if any savings were possible.



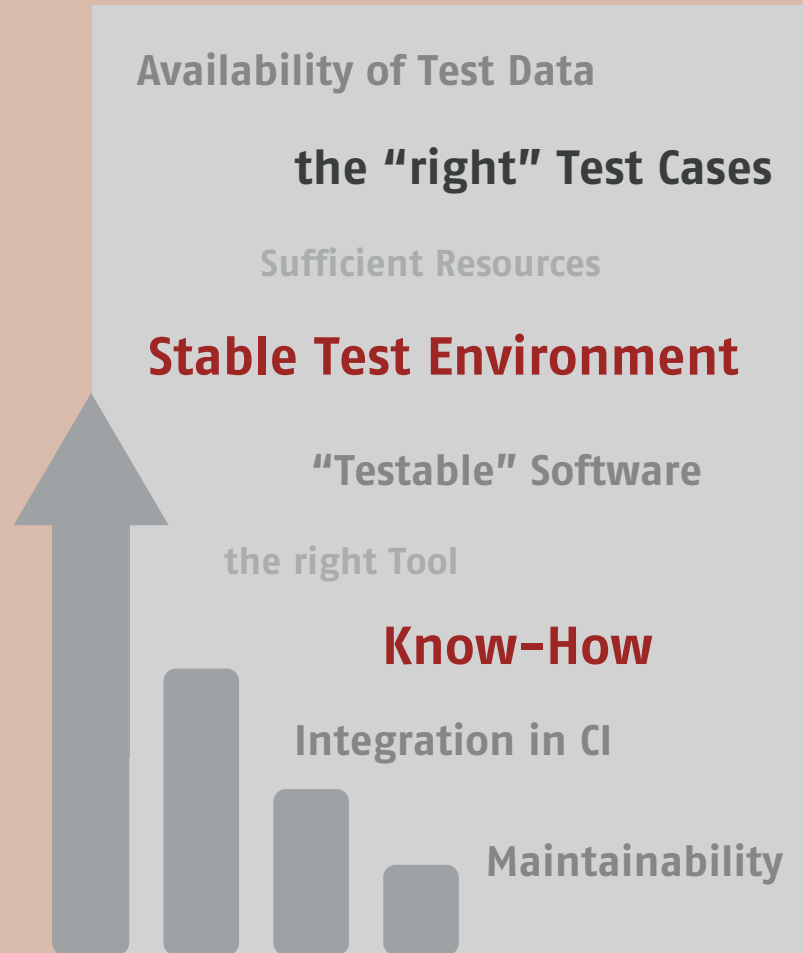
## Practices / Techniques in Test Automation

Record & Replay continues (unfortunately) to play a central role.



## Success Factors in Test Automation

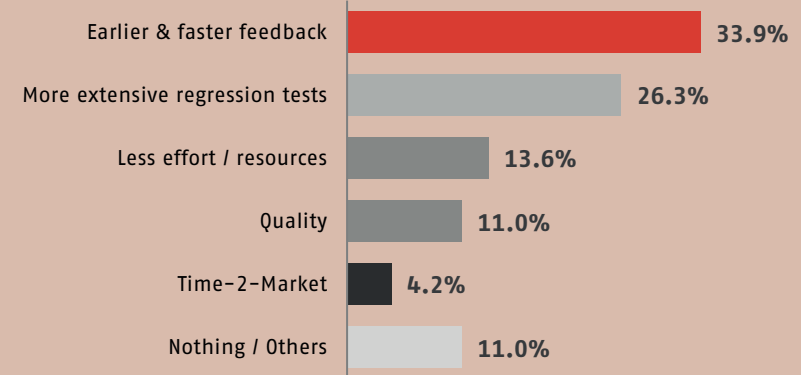
A stable test environment and good know-how are the main success factors in test automation.



Font size = number of mentions

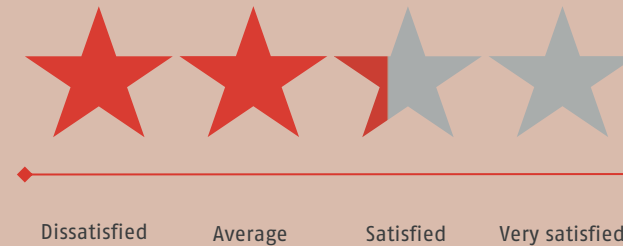
## Improvements Through Test Automation

Test automation provides early and fast feedback on quality, but does not increase time-to-market.



## Satisfaction

Satisfaction with test automation is just above average.







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