

Agile -

Quality hallmark of the future



Fragile context: The Agile approach



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Foreword

What does Agile mean?

Agile is a term we associate with various qualities in everyday life: being flexible, overcoming obstacles, finding unusual solutions, being able to quickly adapt to new situations.

But how should this term be viewed in a business context? 'Agile' has not always been such an important concept in businesses. If it comes down to continually manufacturing products which always fulfil the same requirements, then stability, minimised variation and efficiency are the most important qualities.

But in many cases a mindset seems to have become established that might cause difficulties in establishing necessary changes quickly and flexibly:

An area of tension which gives rise to contradictions?

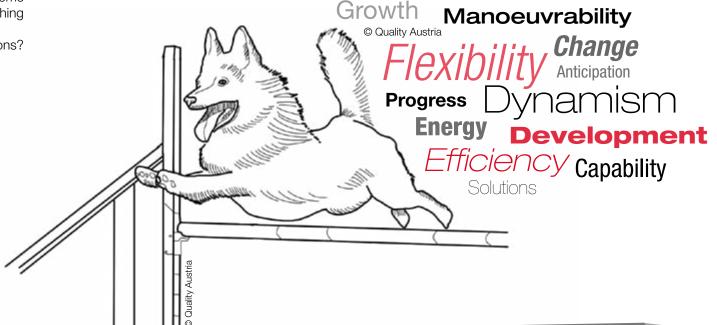
More likely an indication that depending on the task undertaken within a company, stability may sometimes be of greater importance, while at other times agility is more important.

When we talk about agility in a company, we are referring to a management system which supports people and enables them to act in a flexible and anticipatory way in order to implement necessary changes – but without losing sight of the idea of reliability and stability (it is a management system after all, not a method of herding cats).

Adaptivity Mobility

Versatility Variability

Adaptability Agility

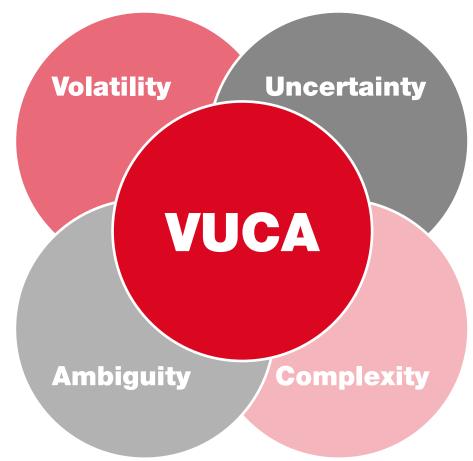




The wider context for organisations: VUCA world

Just why has Agile become so important over the last few years? We are currently experiencing first-hand how unpredictable our world has become. We are living in a totally **VUCA** world:

These four letters stand for four characteristics which are typical of our current situation and can massively influence our everyday life.





Volatility

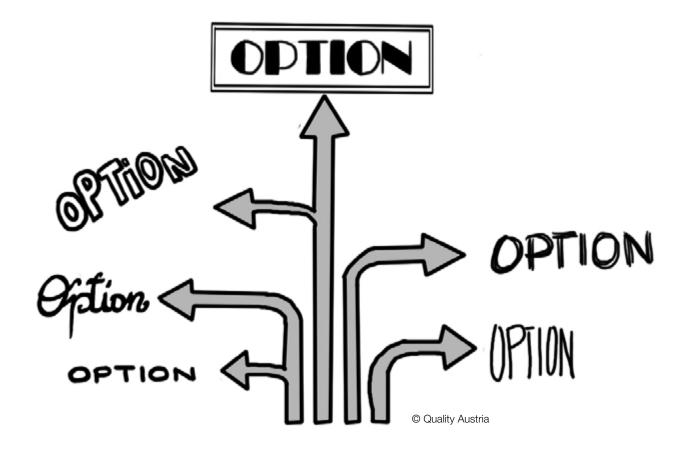
We live in a volatile world, i.e. in a world which is unstable because it is incredibly dynamic and therefore unpredictable and constantly evolving at a rapid pace. We have many facts at our disposal, i.e. knowledge, in order to understand these dynamics and this change. But we need to accept even more ignorance or even erroneous knowledge – or, to use a current term: alternative facts – about our parameters. We are partially aware of it, but to a great extent we are not. In other words, we live in a world which we have created yet which we can barely control any more due to the pace of change.

Can a **quality management system** which traditionally primarily consists of planning, execution and monitoring help us now? Plans which are aimed at execution should in principle help us find the easiest and safest way to get from A to B. It is vitally important to include the adjective 'safe' here, because, for example, the easiest and quickest way to get from the 23rd floor to the ground is to just jump down from the balcony. The only thing you can safely say about this method is that you'd get to your destination very quickly.

Entirely new methods of navigation might be needed on the basis of specifications or requests in order to move away from A. But whether this means that we get to B, the notified destination, or whether the destination has perhaps changed completely somewhere along the way - that's not so easy to say.

It is and remains dynamic, and nobody can predict what will happen in the near, or indeed immediate, future.

'Proceed' does not necessarily mean going forwards i.e. towards innovation. It can also mean going 'backwards'.



For example: Who would have predicted the vinyl revival? In 2006, sales of vinyl records reached six million euros. In 2016, despite the wide range of download options and the continued existence of CDs, this number increased almost tenfold! How can something like this develop and who on earth can predict such a sudden backwards trend in such a volatile world?



Uncertainty

If a world can be described as volatile, then it is obvious that it is also uncertain. And it is therefore very difficult to make reliable prognoses, and produce plans based on them, in a volatile and complex world.

Is planning possible?

Firstly, a plan is nothing but generally sufficient preparation for the upcoming future – a basic tenet of quality management. But it is becoming increasingly difficult to predict what the future holds. And thanks to volatility, we are talking not about the distant future, but rather the **immediate future**.

Parameters can change dramatically, radically and at high speed. Barely any experts predicted that the credit business would implode; the so-called housing bubble. Or the current coronavirus crisis: barely anyone predicted that a virus would paralyse the whole world for months.

Or was it more a case of 'wilful blindness'? In a complex world, made small by a multitude of 'weak ties', the spread of such a virus with all the consequences we are currently experiencing was/is more a question of 'when' rather than 'if.'

Complexity

Complexity and volatility

Complexity and volatility are very closely related. One is a catalyst for the other and vice versa. We are confronted with a plethora of available facts about a given situation. These cannot be controlled in theory and certainly not in practice, even with the involvement of all possible experts.

Let's take the aforementioned subject of COVID-19: it is simply not possible to grasp the global consequences in their entirety. Many politicians express this by saying: "We are proceeding with caution." Further examples include our climate, the weather, the progress of a football or ice hockey match, the market acceptance of new, innovative products by customers, the establishment of products in general, such as electric cars, for example why a song becomes a hit, especially one recorded on vinyl.

Flexibility as a keyword

The solution often heard from so-called or self-proclaimed 'management visionaries', which involves being able to or even being forced to forego plans in a complex world is so absurd that it is laughable! On the contrary, it all comes down to flexibility and therefore the agility of the plans and the implementer. It is important to be aware that one plan might not work and that a second plan is therefore needed – and perhaps even a third.

Or, in the words of Churchill: "The best generals are those who arrive at planning results without being tied to plans."

Ambiguity

There are **two sides to every coin**. This makes decisions difficult. **'Evidenced-based decision making'**, an established principle of quality management, would not be too much of a challenge if all the facts pointed in one direction.

An example

Buying an electric car, which is generally regarded as environment-friendly. It would seem as if there are only arguments in favour of it. Or perhaps not? Unfortunately not: It is comparatively expensive. The range is not comparable to cars with combustion engines. Electric charging stations are not yet very widespread. As long as electricity is produced with fossil fuels, CO₂ will still be emitted – just not directly by the car. If no mineral oil duty is levied on electric cars, then a source of funding for roads will be lost.

The demand for lithium and cobalt will increase.

There will not be enough cobalt as a resource if demand

increases. Mining conditions for people in developing and emerging countries are known to be poor. The disposal of electric car batteries is not yet completely clearcut...



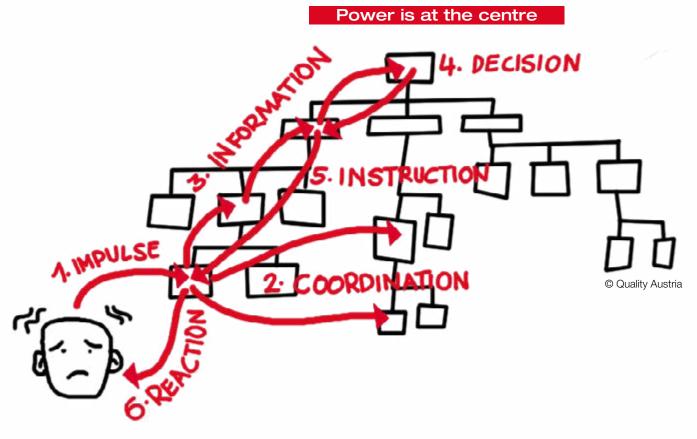


Are organisational structures still in step with the times?

Are command structures able to keep pace in an accelerating world? This is a significant question and if we look at the caricature, it quickly becomes clear how much time is lost through internal consultations and reporting to the next highest management level – not to mention the 'Chinese whispers' dilemma.

Complex decisions in particular often exceed the decision-making powers of those employees who are closest to the customer. This leads to decision-making processes with their superiors, and once again, they often need to take it a level higher to get 'approval'...

Of course, this all takes time and requires flexibility. And that is precisely what is needed: **Agile, fast and flexible action**. In this respect, command structures are rightly being questioned in some sectors. Later, we will look in more detail at the idea that new organisational forms such as Agile are not the key to success everywhere. Even in dynamic and complex environments, there are some sectors where Agile is not the key to success.



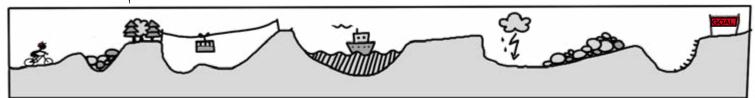


Plan versus reality

YOUR PLAN



REALITY



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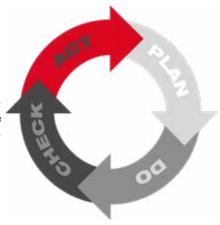
Ballad of the Inadequacy of Human Planning by Bertolt Brecht:

"Yes, just make a plan!" Try to be a big shot! And then make a second plan, neither one will work."

We are all familiar with this situation from a variety of different projects. If we are dealing with unknown issues and challenges, then we don't

have the knowledge at the start to be able to plan the project in detail. Challenges then need to be overcome with new and creative solutions. But this does not mean that we don't need plans, but rather that the 'PLAN' in the PDCA quality approach (Plan-Do-Check-Act) needs to be assessed within a short-term context. Plans are constantly adapted on the basis of experiences and details are only formulated

when we have an overview of the situation. PDCA needs to gain speed and decentralisation to be able to deal with the reality in the cartoon above, but the basic approach remains the same.





Agile in companies

Agile is an important future quality hallmark for many companies. But is it a universal solution? No – traditional business forms may still be the most appropriate, depending on the type of company, type of product and specific requirements. But don't just rest on your laurels because of that knowledge. The last few months in particular have shown that there are barely any companies that do not need agility and the ability to make quick adaptations.

If, when faced with sweeping changes to parameters, I do not successfully react to these changes and adapt my portfolio or processes accordingly, I will fall behind the competition.

Agility is going to become more important for all companies. However, every company first needs to assess the extent to which the concept should be implemented in order to stay on the ball while

at the same time also assess whether the conditions are met for the project to succeed at all. There is no 'one size fits all' solution.

The Harvard Business Review article by Rigby et.al, gives the following important conditions for agility within a company:

	Conducive factors for Agile	Inhibiting factors for Agile
Market environment	Customer preferences and solution options change frequently.	Market conditions are stable and predictable.
Customer involve- ment	Close collaboration and rapid feedback are feasible. It becomes increasingly clear to customers what they want as the process progresses.	
Innovation type	·	Similar work has been done before, and innovators believe the solutions are clear. Detailed specifications and work plans can be forecast with confidence and should be adhered to. Problems can be solved sequentially in functional silos.
Modularity	Incremental developments are valuable and beneficial for customers. Work can be broken into parts and conducted in rapid, iterative cycles. Late changes are manageable.	Customers cannot start testing parts of the product until everything is complete. Late changes are expensive or impossible.
Impact of interim mistakes	They provide an opportunity for valuable learning.	They may have catastrophic effects.

Source: DARRELL K. RIGBY, JEFF SUTHERLAND, AND HIROTAKA TAKEUCHI (2016): "Embracing agile: How to master the process that's transforming management" in Harvard Business Review.

These contrasts and opposites are by no means new to anyone who has had experience with TQM, Lean or Learning Organisations over the decades: In fact, it is an evolution and/or crystallisation of ideas and concepts – which do not 'end' with Agile.

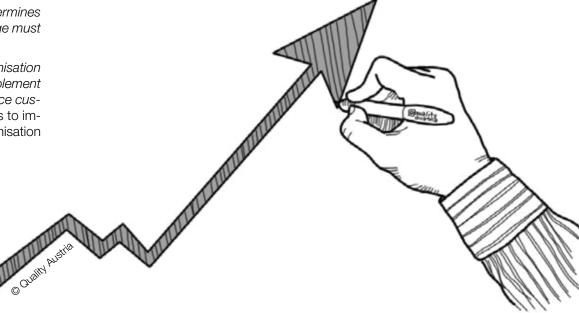


What has Agile got to do with quality?

Quality in a broader sense can be understood as 'meeting requirements'. In a VUCA world, where rapid adaptation to changes is necessary time and time again, being Agile is therefore an important part of quality. To some extent, the concept is also covered by the **ISO 9001** standard:

- Clause 4 of the standard requires the 'context' of the organisation to be understood, specifically: "The organisation shall determine external [...] issues that are relevant to its purpose and its strategic direction and that affects its ability to achieve the intended results of its quality management system." It is precisely at this juncture that we are called upon to draw the conclusions from our VUCA world and react to them.
- Section 6.3 deals with Changes: "Where the organisation determines the need for change to the quality management system, the change must be carried out in a planned and systematic manner..."
- Section 10.1 deals with the topic of 'Improvement': "The organisation must determine and select opportunities for improvement and implement any necessary actions to meet customer requirements and enhance customer satisfaction," whereby this does not only involve small steps to improvement, as groundbreaking changes, innovation and reorganisation are also explicitly mentioned.

An ISO 9001-certified management system and Agile ways of working are therefore not contradictory. Even if the issue of 'Agile' is still somewhat hidden within the present standard, companies for whom Agile is a must for the fulfilment of customer requirements are well supported by the ISO 9001 when implementing their transformation into an Agile company.





The Agile manifesto

- INDIVIDUALS AND INTERACTIONS OVER PROCESSES AND TOOLS
- WORKING SOFTWARE/PRODUCTS OVER COMPREHENSIVE DOCU-MENTATION
- CUSTOMER COLLABORATION OVER CONTRACT NEGOTIATION
- RESPONDING TO CHANGE OVER FOLLOWING A PLAN

Source: www.agilemanifesto.org

The Agile manifesto and its guidelines and principles were drawn up and signed in 2001 by a group of IT specialists – exclusively for software development projects.

In the meantime many places are trying to transfer this manifesto (guidelines, principles and values) into organisations/companies in general, including quality management as well.

As you can see, it is not just about abolishing values, but creating a new 'framing' i.e. bringing other values to the fore-front.

Processes and tools are, from an Agile point of view, tools which serve a purpose (preserving nature for future generations, customer benefits, company profits,...) and are only used if they really benefit these purposes.

We all know the results of an approach where these tools and processes become an end in themselves: The meaningless piles of forms in a checklist culture driven by a tick and cross mentality.

In quality management in particular, we are required to constantly monitor our tools and processes for added value in relation to the achievement of the company's targets.



The Agile manifesto

An Agile organisation is characterised by Agile values which are also applicable to non software companies:

Industrial Section 2 and Control of Association	
■ COMMITMENT	■ COMMUNICATION
■ SIMPLICITY	■ COURAGE
■ FEEDBACK	■ OPENNESS
■ FOCUS	■ RESPECT

Source: www.agilemanifesto.org

- Commitment: Willingness of everyone to commit to a goal
- Simplicity: Simplification, facilitation, automation to achieve the maximum benefit and value for everyone
- **Feedback**: Continuously actively gathering feedback from stakeholders and adjusting procedures correspondingly
- **Focus**: Focussing efforts and skills to achieve commitments
- **Communication**: Constant communication and cooperation of stakeholders to find the best solutions.
- **Courage**: Courage to speak the truth! No cover-up tactics, etc.
- **Openness**: Ensure transparency and deliver (all!) necessary information promptly and comprehensibly.
- Respect: Respect, and above all value, different personalities in their diversity.

cf. Valentin Nowotny: Agile Unternehmen, Göttingen 2016; p. 74ff

TO SUMMARISE:

Organisations need to be PREPARED at all levels. In addition, these values need to be upheld at every level.

Agile does NOT work with roles and responsibilities or a belief in command structures (the knowledgeable and important members are at the top and the further down you go, the less knowledgeable and less important the organisation's members become).

All of this is contained in a central principle of ISO 9001:2015: In Section 7.3 - AWARENESS



Agile methods

How important are Agile methods?

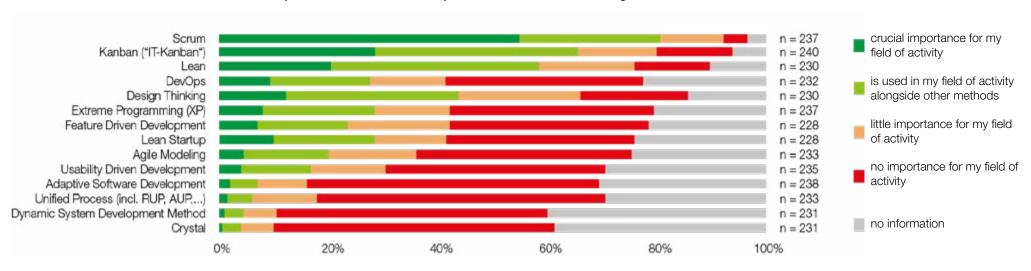
Agile is a behaviour, not a toolkit. But behaviour can be supported, sustained and promoted by tools.

As shown in the table, **Scrum** is one of the most used tools. Scrum was created for autonomous teams. **Kan-Ban boards** support joint task planning, where everyone can maintain an overview of progress and pinch points. **Design thinking** is a method which was specifically developed for the quick and goal-oriented preparation of creative solutions.

DevOps (DevOps describes a process improvement approach from the fields of software development and system administration) or other methods are still primarily used in software development.

As companies become increasing virtual, the question is whether these tools will also become accessible to a broader group of companies in the future.

How important are the respective methods for your area?



Source: Status Quo Agile 2016/2017



Agile is not a walk in the park

2024

In general, organisational agility can be viewed as a company's ability to identify changes in the market quickly and respond to them accordingly. There are, however, various problems and challenges which companies need to address when implementing Agile.

Agile is not a walk in the park, but a **continuous journey and advancement**. In this respect, **organisational culture** is probably one of the most underestimated problems which can impair the agility of an organisation.

Converting a traditional company into an Agile company means changing the culture. This can be an arduous process.

Old habits need to be given up and new routines are not yet established. Prepare for a period of setbacks and anticipate a longer project horizon. **Stamina** and the **clear commitment** of the entire management team are absolutely essential.

As the culture is intended to be aligned with your company, your purpose and your goals, you will need to look for an **individual path**. Yes, you can certainly learn from others, but you cannot simply transpose culture or use methods to enact it. It needs to grow and spread through the company organically. This means being 'Agile' here too, with a focus on continual improvement to allow for a series of adaptations along the way.

What is the alternative to adapting culture to the new challenges? We would like to answer this with an illustrative quotation:

"Change is never painful.

Only the resistance to change is painful."

(Buddha)

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"It doesn't make sense to hire smart people and tell them what to do; we hire smart people so they can tell us what to do."

Steve Jobs

How can we support you?

Use the qualityaustria service – we are happy to assist you as a point of contact.

If you have any questions about our services, our customer service centre will be happy to help you. Here are our contact details: Tel: +43 732 34 23 22 or office@qualityaustria.com.



The background to the **Quality 2030 study** can be found here: https://www.qualityaustria.com/news/qualitaet-2030-was-steckt-dahinter