

Agile (Project) Management NOT a contradiction



Barbara Roberts Agile Business Consortium



Michael Young Australian Institute of Project Management



Peter Coesmans International Project Management Association (IPMA) and Agile Business Consortium







Introduction

Nowadays, we see many discussions between the project management community and the agile community, often focussing on agile versus "traditional" (we prefer to call them waterfall or linear) approaches. In the project management community, we hear ideas like "agile is only a hype, it will pass", or "we've been doing this for many years", or "this is only useful for IT". In the agile community we hear "In agile we don't need (project) management", or "project management is only about command and control" or "project management is not relevant to agile".

As project managers, we have a tendency to gravitate towards a particular method or approach. We often learn and practise specific disciplines and use particular tools and techniques, and over time this becomes our default way of working. It also becomes our world-view and perspective, and in doing so, creates a frame of reference that we use to judge what we believe is the best way to do things.

Irrespective of whether we are strongly rooted in IT or another discipline, or are strongly rooted in agile or linear project management, each of us can acknowledge that there is more than one way to manage change successfully, and that given the nature of the change, we should use the most appropriate approach and tool for the job. Sometimes this may be an agile approach, and in other instances it may be traditional project management; it all depends on the circumstances. However, some people take the view that either an agile approach has no place, or that traditional project management doesn't work.

We have ample experience that basic misconceptions are the root cause for these ideas; that they are, in fact, keeping us from developing better and stronger ways to enhance "project" success, thereby delivering more value to our customers. Which is arguably why we do what we do.

We don't just believe that "agile development is THE way to develop", nor do we believe exclusively in project management. We believe that, in the end, the key to success is people cooperating and interacting to provide customer value; and these people must be facilitated by processes, tools, techniques, governance etc. to be more successful.

VUCA world

The world is becoming more VUCA: Volatile, Uncertain, Complex and Ambiguous. Volatile in in that what is important is changing all the time. Uncertain about what the "correct" way forward is. Complex in that solutions are not straightforward, and depend on and are influenced by many often inter-related factors (like chaos theory). And Ambiguous in that there is no consistent right or wrong way, that is, it depends. The VUCA world is not everywhere, not all the time. For building bridges, the world is still usually a relatively stable place. But for the development of products and services there is more uncertainty, customers change their minds (often for very good reasons) and are often also influenced greatly by peers and the media; "the Truth" is ever more difficult to find. Is an electrical car good for the environment or bad for the environment?... Actually it's both at the same time; how ambiguous is that? In such a world, a major risk is doing full, detailed analysis up front to define the perfect solution for a problem that no longer exists.

Experience has shown that to be successful in a VUCA world, organisations need to be radically customer value focussed and deliver added value regularly, reliably and flexibly. Success is based on embracing change and constantly adapting to changing circumstances. The days of the laminated 3–5-year plans are history, as the plans that are developed are out of date before execution is started, and even potentially out of date before the laminate has cooled! Not all projects that are executed in a VUCA world seem to embrace this viewpoint, which is one of the reasons why these projects are not successful in the end.

Small incremental change is very useful for delivering IT systems, but when delivering other types of solutions, change usually has a higher impact. For instance, when delivering a security system for a subway, or a new baby formula for a specific market, change and implementation is much more complex. These kinds of solutions have been successfully delivered using agile approaches, and one could argue that, with proper project management, agile ways of working

could be successfully adopted in many more sectors, to deliver more business and customer value. More and more non-IT solutions are successfully delivered using agile approaches, where the organisation can iteratively develop and learn, and incrementally deliver value and decrease risk.

When running projects in relatively stable environments, planning can be done using previous successful projects. Within margins, the projects are comparable. The less a project resembles another project, the more difficult planning becomes. And in a VUCA world, where at the start we don't know what we will end up with, it is even more difficult to plan. Through their research, economists Lovello and Kahneman identified that people are generally poor at planning and estimating, and in doing so, identified that a planning fallacy exists. That is, planning and estimating when you execute a certain task for the tenth time is easier than when you do it for the first time. Planning and estimating what you will do today, or this week, is simpler than planning and estimating what you will do in three months' time. So, within the modern world, we have to expect and accept that planning the full project, over a long period of time, will not work. However, planning for very short periods of time and delivering customer value regularly, allows for testing assumptions, for learning, and results in only running small risks. This does not negate the need for longerterm plans — these still exist in agile, but the plans covering a longer timeframe should contain limited detail, and focus on the "big picture" items.

Agile Manifesto

More and more organisations use agile methods or frameworks to develop and deliver solutions. Whilst the term "Agile" was first defined in the field of software delivery, it has proved to be equally effective in other areas. The agile style of working started long before the word "agile" was defined in a workshop in Utah in 2001. At its heart, agile is about being pragmatic, flexible and using common sense. Which of course is also why many people claim it is nothing new. For many organisations this has always been their natural style. The Agile manifesto (www.agilemanifesto.org) has four values and 12 principles (see Figure 1 below).

Quick note: this manifesto and the values are targeted towards *delivering* solutions (or, when it was written, developing software). None of it refers to how to *manage* the delivery!

4 AGILE VALUES

We are uncovering better ways of developing solutions by doing it and helping others to do it. Through this work we have come to value:

INDIVIDUALS AND INTERACTIONS

over Process and Tools

WORKING SOLUTIONS

over Comprehensive Documentation

CUSTOMER COLLABORATION over Contract Negotiation

RESPONDING TO CHANGE

over Following a Plan

That is, while there is value in the items in black, we value the ones in Orange more.

12 AGILE PRINCIPLES

1. SATISFY THE CUSTOMER

Our highest priority is to satisfy the customer through early and continuous delivery of valuable solutions.

4. WORK TOGETHER

Business people and developers must work together daily throughout the project.

7. WORKING SOLUTIONS

Working solutions is the primary measure of progress.

10. SIMPLICITY

Simplicity – the art of maximizing the amount of work not done – is essential.

2. WELCOME CHANGE

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

5. MOTIVATED INDIVIDUALS

Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

8. SUSTAINABLE DEVELOPMENT

Agile process promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

11. SELF-ORGANIZING TEAMS

The best architectures, requirements, and designs emerge from self-organizing teams.

3. DELIVER SOLUTIONS FREQUENTLY

Deliver working solutions frequently from a couple of weeks to a couple of months, with a preference to the shorter timescale.

6. FACE-TO-FACE CONVERSATION

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

9. CONTINUOUS ATTENTION

Continuous attention to technical excellence and good design enhances agility.

12. REFLECT & ADJUST

At regular intervals the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

Figure 1: Agile Values and Principles of the Agile Manifesto

An example of developing a new product for a specific segment of the market, using an agile and a linear approach

Using a linear, waterfall-based approach, the product development team would conduct market research to determine the needs of the customer and identify the potential problem that the product can solve, or need it will meet. In some instances, there is little effort expended in market research with a series of untested assumptions being made instead. The team then starts designing and building the product and then launches the product into the market, only to find that the product is not really what people want, need or can use. Customer feedback, which often comes in the form of a lack of sales, is then taken on board and the design and development of next version of the product is undertaken. This is fundamentally a large batch approach where the product is delivered in total, at the very end of the process, often after a protracted period of time. Each subsequent version of the product is then delivered after an equally long period of time.

Using an agile approach, by comparison, the product development process would start with some market research, in the same way as the waterfall approach above. However, it is at this point things significantly differ. The product team design and build a small, limited functionality product, known as a Minimum Viable Product (MVP), to test the market assumptions and to also validate the research and customer needs and demands. Through market and customer feedback, a series of versions is incrementally developed and released. This approach is a small batch approach with a series of smaller and more frequent releases. It is based on a rapid process of building, measuring and learning. The measuring and learning steps are critical, as they allow the product development team to adapt and adjust in each successive iteration.

With agile ways of working, organisations adopt:

- » small, focussed, self-directed, dedicated teams;
- » visual management;
- » the ability to adapt to change;
- » learning explicitly incorporated in the delivery cycle;
- » prototyping; failing fast;
- » drumbeat-paced incremental delivery of business value;
- » and more goodies.

These are all good things. However, when starting or continuing their agile journey one thing organisations should be very careful about is to focus on what they want to achieve and why. Do you embark on the journey to become more customer focused, to speed up your delivery process, to align your organisation, to ensure more quality? Knowing why you want to improve something helps to define the next step of the journey, and safeguards against blindly follow the handbook "because that's what we've decided". Maintaining focus on the "Why" is key.

When the world in which the organisation operates is more VUCA, agile delivery is better suited than the linear "think, analyse, build, deliver". Success is not guaranteed by thorough in-depth analysis up front, but rather by "enough design up front" and by the customer accepting the added value incrementally.

Delivering Change

Organisations, in the private and the public sector, are - or should be - focused on delivering increasing customer value. This results in renewing, improving or changing the offer to the customer continuously. Change is the new normal. Just delivering the same value for a long time is no longer acceptable, not in the private sector, not in the public sector.

We see three types of change: continuous or incremental change, transitional change and transformational change. Of course, this is a gradual scale, but let's have a look at these changes.

Change can be continuous or in small increments, based on relatively stable solutions and a relatively stable situation. Examples are adding new features to a stable system, adding a new layer of paint on a house, improving the performance of a car by adding a new exhaust system, and having to change the settings of the ignition, changing the operating system on a phone or computer. These changes do not

require a big change in the usage, nor do users have to be trained; the organisation's processes just require minimal adaptation. In other words, it's business as usual. This style of change does not typically require the discipline of a project (something with a beginning, a middle and an end).

Change can be transitional. The status quo is changed, processes need to be adapted or new processes defined. New products are delivered in old markets or old products in new markets. Examples are a new roundabout, a fully new user interface, changing the place of the kitchen in the house. Changing the way things work, usually using training, needs to be part of the successful delivery of the change. Or it might require the organisation to shift to a new mode of operation. This is what we call transitional change; it is a transition from a relatively stable situation to the next relatively stable situation. Delivery is done with customer involvement. Projects (and programmes) are common in this space; the project to deliver the solution, hopefully in an iterative and incremental way, and the programme to coordinate the changes in the most effective way.

And then change can be transformational. Disruptive change is the trendy word for it. Examples are a new product to a new market, building a new energy neutral house on the South Pole, becoming the world's first energy neutral city. Unpredictable. Learning as you go. Trial and error. Learning while you're developing. Values change. Transformations can be initiated by new technology, by societal change, by (threatening) disasters. However disruptive change does not always end well (despite the hype in seeing disruption as a good thing). Typically, transformational change may still need to be based around projects, programmes and portfolios and because of the inherent uncertainty, volatility, ambiguity and complexity, using an agile approach here is highly beneficial, and, in reality, offers the best chance of success. It will help support and embed on-going learning — that is what an agile approach is all about.

Approaches to the different types of change

In a stable incremental change environment, an organisation can use "factory type" approaches. In banking, we see software factories, SAFe/Less frameworks etc which adapt standard line management for facilitating the agile delivery framework. Also we see Lean approaches and Theory of Constraints ensuring day-to-day improvements to the processes,

removing unnecessary work and increasing value delivery to the customers. Usually, only complex changes in an environment like this require project or programme management. To deliver customer value at scale, the delivery has to be carefully managed and not just left to chance.

In a transitional corporate change environment, project and programme management may be more appropriate. Agile development approaches fit very well in this environment, because of their openness for learning and change. Regular project and programme management approaches need to be adapted for facilitating the agile delivery framework if this is used.

In a transformational corporate change, "crisis" — or "turn around" approaches may be used for negative cases, start-up and scale-up approaches will be used in the positive cases. An agile development approach can be helpful; project management will only help for those parts of the change that are more transitional than transformational.

In general, however, it is important to remember it is not "methods" that deliver change; it is competent people that (deliver) change, supported by methods, processes, tools and decision structures. "Individuals and interactions above processes and tools".

Agile Project Management

Agile is all about empowered self-organising teams of professionals regularly delivering value to the customer. In a simple situation, where objectives are clear, where the environment of the team is stable, where the team or organisation is small, where the customers know how to use the solution without extensive training, then project management may not be needed. Small teams are able to disperse the management competencies amongst themselves, hence become self-steering.

In some organisations, for delivery of solutions in a "business as usual", incremental change situation, a project-based way of working was (or is) used. In those cases, continuous improvement, LEAN approaches might be much better suited. Project managers are not useful in these situations. (Project) management competences in such a situation are taken up by product owners, SCRUM masters, tribe leads etc etc.

However, if the situation is more complex, management is needed to organise the many interactions and to provide direction in the event of changes that occur outside the project. Often this management keeps the "environment as simple and balanced as possible so the teams can deliver". This is the role of management within an agile delivery framework – to facilitate the delivery team (those that are delivering the value). Management facilitates the delivery of business value, ensures the engine keeps running at optimal speed, and steers the vehicle towards optimal value. Whilst management may be considered an overhead, it is useful if it provides the environment for teams to deliver. It may even be necessary where strict governance is required due to regulatory requirements. In this environment, and to get the best out of an empowered team, a facilitative style of management is key. A "command and control" style will stifle the team, and limit the value to be gained from their collective knowledge and experience.

When scaling up an agile delivery framework to a corporate scale, the need for coordination and communication is vital. Fast decision making, fast and transparent communication, and negotiating interfaces become of utmost importance, especially when there is flexibility in the delivery process. And because the organisation is continuously learning, the framework needed for communication and decision making has to be adaptive as well. All decisions are valid until new information and learnings create a better one. Again, (agile) project management competencies help deal with the on-going volatility.

For transitional change in a project environment, simple Agile development methods typically don't provide help for embarking resources, managing budgets, managing risks and issues or delivery against specific milestones. Even more importantly, the impact of change might be neglected. For transitional change, someone needs to carefully engage with stakeholders and manage expectations around what will be delivered when, and often also has to explain how the solution will be developed in lay-terms. Project management competencies are needed here.

Project management competencies therefore are needed to create and facilitate the right environment for the teams to deliver transitional change. These might be delivered in any role, or split over many roles, or combined in one person, and the role might have any name. Of course, "Project Manager" would still do ... The project management style for agile needs to be supportive, empowering, facilitating, communicative, holistic and cooperative. Far from the "command and control", "risk averse", "divide and conquer", "communication on

a need-to-know basis" style some people attribute to project managers.

Delivering several types of changes

Many organisations deliver transitional change and incremental change at the same time to their customer base. In such cases, the organisations need to keep track of investments, risks, and resources to deliver customer value. Tracking the change portfolio needs to be adaptive and focused on customer value, facilitating the initiatives to adjust to changing needs as fast as possible.

Unfortunately, many organisations have adopted a portfolio management approach which does not allow for speedy, adaptive decision making. Rather, quarterly decision making based on extensive reports is used. It goes without saying that in such an environment, it is difficult for initiatives to deliver value. In other organisations, different portfolios are used for incremental change and transitional change. In such cases we regularly see that customers are overloaded at some times and at other times do not get value. Or we see that incremental value already delivered to the customer is overridden by a transitional change. Using agile portfolio management supports the project teams and delivery teams to stay focused and deliver.

Conclusion

Just because you use an agile development approach doesn't mean that project management is not necessary or is no longer required. Some agile coaches suggest that project managers are not needed, arguing that the scrum master (or even the product owner) does the job of the project manager. And in a relatively stable environment, delivering relatively small changes, they are right. In the same way, managing smaller, more simple projects using traditional project management may not be the most efficient management approach.

However when delivering transitional change in a VUCA world, we argue that project and programme management com-

petencies are needed to consistently deliver customer value. Project and programme managers performing this role should be fully aware of the agile mindset and the style needed to support the agile delivery teams. This mindset also applies to line management — when needed — the style of management needs to be adapted to an agile delivery process.

"Agile" encompasses a way of working, a delivery method, a mindset. Despite the first agile value being "we value individuals and interaction over processes and tools", in reality we encounter many organisations focusing on "implementing agile processes and techniques". Becoming more agile is a never-ending journey in which people (in teams) are constantly learning how they can provide more value to their customer. Management is there to support them in this journey. And when implementing more complex change, management is needed.

Project Management is also a way of working, a way of planning and managing, focused on delivering change successfully. We see many project managers focusing on process rather than on facilitating people, customers, stakeholders and teams. We also see organisations that, in order to overcome the challenges of operating in a VUCA world, try to simplify and control their environment. Rather than developing capabilities to sense and adjust to the inevitable changes that will occur, they attempt to control and restrict these changes and often increase the processes and procedures that need to be used, or attempt to plan in ever increasing levels of detail. In doing so, they become even more risk- and change-averse. This approach will never lead to success, nor to optimum delivery of value to the customer; it will lead to controlled failure. Embracing flexibility, adaptation, and constant change to provide customer value is difficult but necessary to deliver in the VUCA world.

We strongly advocate that the best of the agile techniques and mindset, combined with the best of the agile project/programme management techniques and mindset, will help small and large organisations to increase the success of delivering value to customers, for every type of project. And as we have stated before: customer value is delivered by collaborating, competent people (in teams). Methods, tools, techniques, processes are all necessary to facilitate these people to actually deliver.