

# Managing Agile Projects Effectively

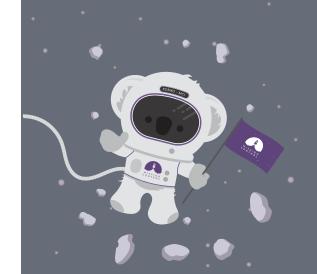
EBOOK SERIES - VOLUME 2



# ■ Contents

Introduction	3
What is Agile?	4
Principles of Agile	7
Agile & Innovation	12
Agile & Kanban	13
Agile & Scrum	18
How to get started	23





Established in 2010, Aprika Business Solutions started as a Salesforce consulting practice, which evolved into software development building high quality solutions for the AppExchange.

Mission Control is built natively on the Salesforce platform, and has grown into one of the top Project Management and Professional Services Automation (PSA) solutions supporting a wide-range of businesses across the globe.

Earlier this year, the <u>Project Management Institute</u> (PMI) released its latest '<u>Pulse of the Profession 2020</u>' research paper, which was full of interesting insights about the future of business and the role of project management. Within this paper, executive leaders in business identified the top three factors to achieve future success:

- 1. Organizational agility (35%)
- 2. Choosing the right technologies to invest in (32%)
- 3. Securing relevant skills (31%)

It is clear that as workplaces are changing in how they approach business this has a direct effect on project management. We thought it would be useful to look deeper at the best methodology that will support this change in how we operate - Agile project management.

Within this ebook we will review the Agile methodology and how it fits with future-focused organizations wanting to adapt, innovate, expand and thrive. We will also look at the best technologies to support the implementation of Agile.

CEO & Co-Founder, Aprika Business Solutions















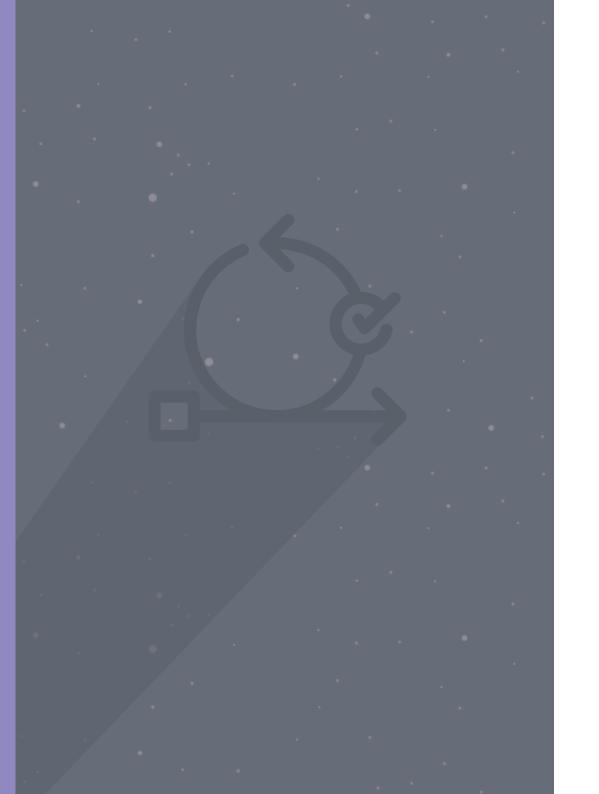












What is Agile?



## Overview

Agile is a methodology that is based on developing an adaptive workflow, allowing for an evolution towards the end result through a collaborative process. In every aspect of the project from planning to development and evaluation it requires flexibility that aims for early delivery and is always open to change if that leads to improvement.

Agile makes planning an iterative process throughout the project lifecycle rather than a standard process of gathering all requirements and getting them approved before build activities can begin. Agile is more practical and efficient, engaging the product owner and key stakeholders in the build and testing process as the product is being developed.

This started out as a methodology attuned to software developers and engineers who needed a more flexible way of managing projects in order to produce the best outcomes. Nowadays, this is a method adopted by numerous industries and businesses who are trying to solve complex problems where the work is based on consistent feedback, risk and innovation.

Agile methods have been adopted by industries that have a focus on innovation and where there is a level of uncertainty around the end products, such as computers, medical devices, food, clothing and more; and it's also being used in other types of projects that need a quick and responsive production schedule, such as marketing.







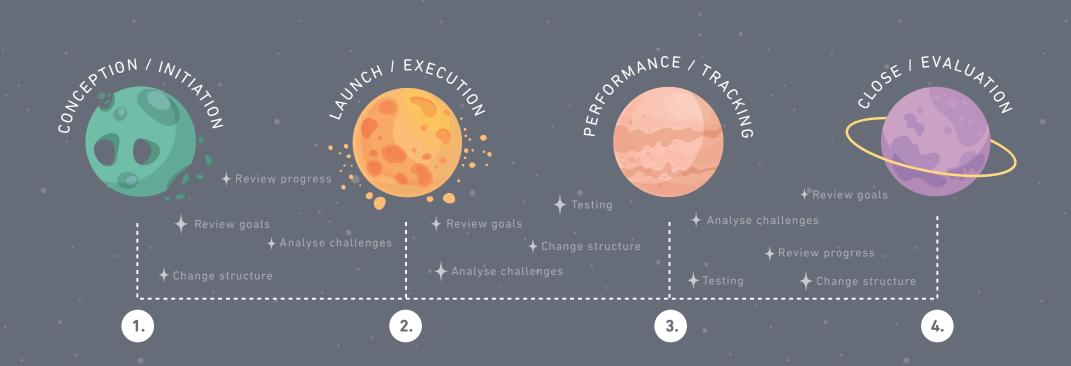






# ■ The Agile Process

Whilst an Agile methodology can follow the same project lifecycle phases as traditional methods, the difference lies in the flow of this process and the ability to intersect and change aspects of the project plan throughout:



In 2001, the <u>Agile Manifesto</u> wanted to change the software development process and lists 12 principles to guide teams on how to execute with agility. Whilst this was originally for software, the main ideas from this manifesto are potentially still relevant and so we've asked ourselves how can we adapt for 2020 future-focused business?

We've taken the 12 principles below and updated based on how we think they can inform a more general viewpoint and implementation of Agile methods for a variety of industries.

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

Customer-centric solutions and performance is becoming the lifeblood of projects in whatever industry or type of business. It is a methodology in itself (CCPM) referenced as an adaptation to traditional methods that only focus on delivering the outcomes of time, budget & goals.

Customer-Centric Project Management allows you to be more strategic within the process and decision making by integrating customer needs and requirements to increase positive outcomes.



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

This is a keen component of the Agile methodology as you are able to shift and adapt the outcome based on the continuous provision of customer or stakeholder input. This can also now be achieved with larger scale projects in manufacturing and construction thanks to advances in technology. With software programs that can bring designs and vision to life as well as AI technologies, the customer experience is enhanced and these types of projects are realised digitally prior to physical construction allowing a stronger competitive advantage.

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

By adopting Agile methodologies most of our customers have seen projects reduce in the amount of time to complete. By being able to flag and address issues quickly and efficiently through flexibility it means that hold ups or pauses in workflow do not occur. This is mainly done through frequency of communication and the SCRUM method (referenced in detail below) through regular and open communication. Any concerns around parts of the project can be dealt with as soon as they are realised and due to the adaptability of the framework solutions can easily be filtered into the remainder of the project.



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

Collaboration is what we believe is the cornerstone of the Agile methodology and doesn't have to just be the people implementing the project but includes all stakeholders within the business. For an Agile framework to be successful every person that has an involvement within the project must be engaged and open to all collaboration efforts.

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

As is the case within most businesses, utilizing your most valuable assets (employees) to become the motivational drivers and set the pace of the work for others has always been a strong ideal. With the right data and understanding of your resources, skill sets and history of efficiency in getting tasks complete you can make informed decisions about who to assign work to in order to keep workflow moving in the right direction.

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

Despite technology making processes and workflow more efficient it can never replace the importance of face-to-face discussion and communication. With implementation tactics such as Scrums, which are short meetings held daily as part of an Agile methodology, this is a popular way of ensuring you can keep the conversation flowing around the project.



7. Working software is the primary measure of progress.

This indicates the importance of using 'working' software to manage the entire project, which means software that adapts, that can be flexible with the program and not static just holding information. It also alludes to the importance of testing when it comes to the product itself and having software that can showcase the improvements and progress.

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

Ensuring that the project moves along effectively means that there needs to be a pace set for everyone that ensures all activity is carried forward in a sustainable way. This creates an environment that is professional, consistent and measurable whilst constantly moving forward.

9. Continuous attention to technical excellence and good design enhances agility.

It's so important with the Agile method to focus on the quality of the product being developed throughout the project. This means that you can continually be looking to improve the product and enhance its performance via the iterative process, which in turn also keeps the project agile.



### 10. Simplicity -- the art of maximizing the amount of work not done -- is essential

This can be tough for project managers who are used to more traditional methods, by being able to put aside what are deemed less priority tasks and in some cases recognising that they are not necessary at all means you can streamline the entire project. Focusing more on the priority elements of the development and simplifying the workflow.

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

A self-organizing team is one that can work autonomously and not have to wait for senior approvals and sign off to push forward. The idea being that the teams find, progress and manage their own workflows all ensuring the end goal in mind. In terms of design and development this can support creativity and ensures that enhancements don't get stifled by bureaucracy.

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

This is the epitome of the Scrum meeting element to Agile methods, rather than joining together to discuss tasks and workflow the focus becomes about improvements, effectiveness and behaviour. All in which everyone works to support each other to ensure the project maximises its outcomes.



## Agile & Innovation

Through a system where the purpose is to constantly challenge, assess and improve then the Agile movement goes hand in hand with innovation. Being innovative is to be agile, to be able to think on your feet and make constant improvements that keep up with an ever-changing world and its demands.

In <u>KPMG's</u> The Future of Project Management: Global Outlook 2019 research paper there are some key indicators of how Agile will support the industry of the future. We agree to a certain extent that there is a strong role for Agile in the future of project management, particularly for industries where innovation is at its core.

The research found that successful project managers were already implementing and understanding the need for adaptable frameworks and an increase in collaboration. The role of the project manager is becoming more strategic in its need to answer to the entire organizations needs and not just project delivery therefore also looking for PMOs that can be adaptable and innovative.

To be truly innovative an organization must also be creative and flexible to the needs of the customer, which creates a perfect environment for Agile methods of project management.













Agile & Kanban



## ■ What is Kanban?

Kanban is Japanese for "visual sign" or "card." It is a visual framework used to implement Agile and shows what to produce, when to produce it, and how much to produce. It encourages small, incremental changes to your current system and does not require a certain set up or procedure (meaning, you could overlay Kanban on top of other existing workflows).

Kanban helps improve inefficiencies by story-boarding through problems and identifying roadblocks visually for everyone. Almost anyone can plan with Kanban boards, adding cards to represent project phases, actions, deadlines, people, ideas and more.

A Kanban board is a feature of many project management software solutions, allowing users to visually see the status of work and move things around seamlessly. It's one of the most popular features of Mission Control particularly for teams that are implementing Agile processes.



## Rules of Kanban

When using Kanban as a framework it is argued that there are only two rules:

- 1. Minimize Work in Progress activity
- 2. Visualize the Work

As a starting point this works well to ensure Agile methods are being implemented and workflow is continual so nothing gets held up. However, we believe there needs to be some more structure around supporting teams that want to bring in Kanban as their chosen framework.

We like to employ the thoughts of one of the pioneers of Kanban, <u>David J Anderson</u>, who has his own School of Management with the Kanban University supporting business through these techniques. Anderson believes there are six general practices to implementing Kanban:

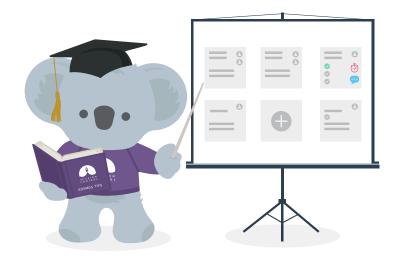
#### 1. Visualize

This is the area that sets Kanban apart from other methods in that you can easily see elements of the project and where they sit. Kanban uses visual cards with all Actions for the project on each one and once on the board this helps everyone involved in the project understand progress.

## 2. Limit Work In Progress (WIP)

It is important to minimize the amount of cards that can be in one column at one time on the Kanban board. When the column is at capacity the entire team needs to step in moving the Actions forward before new cards can be placed in that stage of the project. This is a well-known tactic for identifying bottlenecks easily and ensures the entire team is supportive in moving the project along.





#### Rules of Kanban

### 3. Manage Flow

You will notice on a Kanban board a certain amount of columns which identify sections of the workflow and status of Actions. The visual cards move through the workflow until completion and the columns can be headed with simple stages such as 'Planned', 'In Progress', 'On Hold', 'Complete', 'Cancelled'.

## 4. Make Policies Explicit

Before starting a project it's imperative that there is an explicit understanding of how things work and how tasks should be completed. This ensures there is a more rational and objective discussion and collaboration if issues arise in the project and therefore more success and consensus when it comes to improvement ideas.

### 5. Implement Feedback Loops

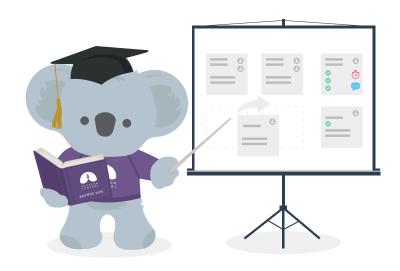
An iterative process cannot work without feedback loops and so these need to be built into the processes of the project. With Kanban there are usually a few ways to implement these loops, including 'the Scrum meeting', the delivery review, the operations review and the risk review. For the project to succeed it's important to compare expected outcomes with actual outcomes and make adjustments.

### 6. Improve Collaboratively, Evolve Experientially

The role of the team is crucial when it comes to implementing Kanban and it is important to establish a shared understanding about workflow, processes and risk from the outset. By doing this, teams are more likely able to build a shared understanding of a problem and suggest improvement actions which everyone agrees on. Setting this up from the start eliminates roadblocks and hold ups in the flow of work.

'

•



■ How Kanban works with Agile

✓ Increases flexibility of workflow
✓ Easy to understand
✓ Improves delivery flow
✓ Minimizes cycle time
✓ Overall visualization of workflow
✓ Limits WIP to increase speed of project
✓ Continuous improvements



# Agile & Scrum



## ■ What is Scrum?

Scrum is a process that can work alongside Kanban for managing Agile projects. It is a staggered approach to the management that works well for small teams. The project is generally broken down into ongoing two-week cycles with short daily meetings known as 'Scrum meetings'. During these sessions teams are encouraged to learn through experiences, self-organize whilst working through problems and reflect on challenges and wins to continuously improve.

It is a great way for teams to feel more connected and a focus is put on collaboration and working together to achieve the goals of the project. The Scrum process is based on continuous learning and adjustment to ever-changing factors. It is an evolutionary experience for the team members and is structured so that teams can naturally adapt to the requirements of the project and re-prioritise effectively.

Ken Schwaber and Jeff Sutherland created the <u>Scrum framework back in 1995</u> and it has continued to evolve over the years and be refined in its process, however the main principles and values are still at the core of its success.



## Roles within Scrum

To operate Scrum effectively there must be different roles carved out within the Scrum Team, consisting of a Product Owner, Development Team and a Scrum Master. These teams are self-organizing, where they work together to choose how best to do their work and not be directed by others outside the team.



#### **Product Owner**

Is responsible for the end product and ensuring the team keeps this front of mind throughout the development.



### **Development Team**

This is the group responsible for the body of work.



#### The Scrum Master

Is in charge of implementing the Scrum process by ensuring everyone understands the theory, practices, rules and values.













## Components of Scrum



#### **Scrum Events**

These are the sections of the project and are used to create regularity and to minimize the need for meetings not defined in Scrum.



#### **Sprint**

At the core of the process is the Scrum Sprint, which is a time-focused period set out at the beginning of the project during which a "Done" element of the product is created. Sprints include different phases including, planning, Daily Scrums, the development work, the Sprint Review, and the Sprint Retrospective.

#### Throughout the Sprint



- No changes are made that would veer from the Sprint Goal;
- The time-frame of the Sprint cannot be changed;
- The quality of the objective does not falter; and,
- Scope may be clarified and re-negotiated between the Product Owner and Development Team as more is learned.

A Sprint can be canceled by the Product Owner and only in certain circumstances such as significant changes to the organization as a whole or the market shifts.



### Components of Scrum



#### **Sprint Planning**

The team works together for a set period of time to work out the details of what needs to be delivered within the Sprint and how it will need to be delivered to meet the Increment of the project.



#### **Daily Sprint or Scrum**

This is a 15-minute maximum gathering for the team that has to occur every single day of the Sprint and the next 24 hours of the project are planned out together. Typically this meeting focuses on 3 core items, which are:

- What did you do yesterday?
- What are you doing today?
- What roadblocks do you have?



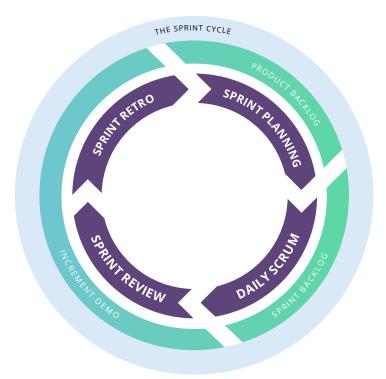
#### **Sprint Review**

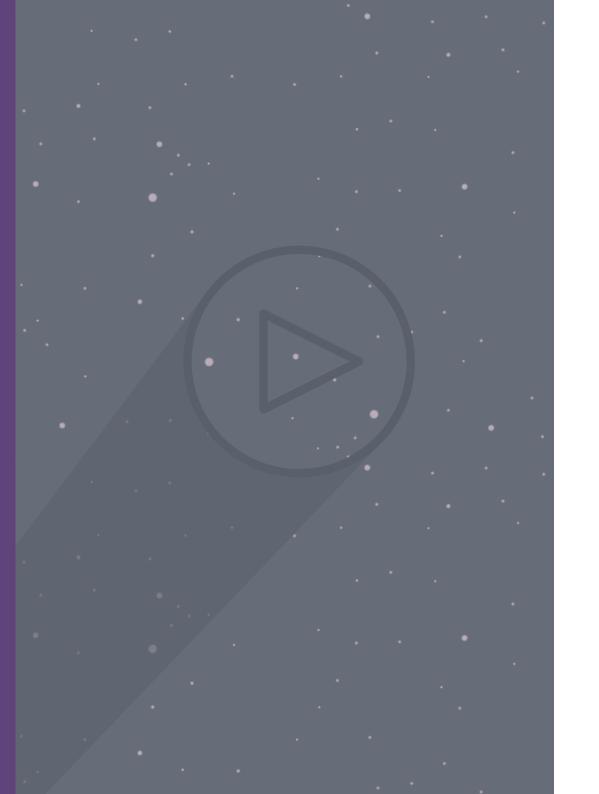
This is held at the end of the Sprint to check on the Increment that was aimed to be delivered and adapt the Product Backlog if needed.



#### **Sprint Retrospective**

This is the opportunity for the Scrum team to review the experience and work out a plan for improvements for the next Sprint.





How to get started with Agile



## ■ Getting started with Agile

#### 1. Evaluate Team Roles

Ensure you have the members involved to take on the different roles within the Scrum process and make a team decision on who should perform those roles. Bear in mind to keep things flexible you don't have to retain those roles throughout the entire project, however each 'Sprint' must have the same person in the role.

Keep top of mind the collaborative nature of the practice and the voices involved from everyone in the team.

#### 2. Find The Best Software Solution

Project Management software will ease the ability to operate these practices. There is a misconception that technology can be rigid and hinder the ability to be flexible, however this is not the case. Many products, such as Mission Control have the capabilities of implementing Agile methodologies and include the features that enable these practices. When choosing a project management solution make sure you keep an eye out for the following capabilities in order to practice Agile effectively:



## ■ Choosing a Project Management Solution



#### **Collaboration And Communication Features**

Don't assume that Agile projects need to be implemented with a team that can meet face to face. With the advances in technology we know that Scrums can occur just as effectively via online communication platforms, therefore your PM solution should also include features that allow ease of collaboration. Within Mission Control we include a 'Chatter Feed' against each Action which allows for comments and questions to be part of the workflow.



#### **Work Visualization**

Managing Agile effectively also requires the ability to have oversight of progress that can be used as the discussion point of Scrums each day. Your PM software should include features that allow you full oversight of the entire project in order to keep track of the workflow, just like the Project Overview within Mission Control.



#### Adaptable And Comprehensive Kanban

Utiliz ing this feature is paramount but not every Kanban board is equal. It is important to look for the detail in the software solution around Kanban and how intricate it is. For example, does it allow you to be able to move the actions around easily, reassign resources, collaborate and edit all in the one place? The adaptability of the Kanban board and ease of use can make or break your attempt to run an Agile methodology.



## ■ Choosing a Project Management Solution

#### 3. Get Started

Remember that Agile is a team focused process and it is best to gather as a team straight away and get started! Together the team can start to plan out the first Sprint and break the work into simple Actions and compose the workflow/columns you need on the Kanban.

It is important to establish the creation of new Actions (cards to add to Kanban) and what the process is for the team to add new ones, e.g. will one person be responsible for adding them all or does each individual set up their own? Following this it is about agreeing on the scope of the Actions and how large and complex you want each card to be. It may be best to identify more challenging Actions and break them down into multiple cards. Alternatively, if your PM software has the ability to add checklists to Actions this is another way to break down the card.

Once your cards are organized and ready for the first Sprint, it is best to decide on a delivery point you are working towards and from there ensure there is a consistent approach to improvement along the way. Remember the roles you have as part of the Scrum process and that both practices involve commitment and teamwork for success.



**At Mission Control** we are committed to supporting organizations with whatever project management methodology they choose to practice. We invite you to fly around our website to discover all the features of our software that can help you with this!

