

**NTT DATA**

# How to change through adaptive methodologies

Agile as enabler of change



**Advisory Services,  
together we innovate**

**In a continually evolving landscape, IT projects are innately challenging.**

**The successful completion of any project is directly dependant on the ability to achieve defined objectives and create genuine business value.**

**Thanks to its vast experience and use of applied methodologies, NTT DATA adopts an approach that allows for appropriate responses to the market's everchanging conditions.**

## The market

In a market that is increasingly dynamic and characterised by unceasing demands for flexibility, it is necessary to consistently evolve and adapt to changing conditions as they arise.

Projects that are created and developed in this type of complex environment can be affected by numerous different factors. They therefore require structured oversight and guidance to be successfully completed.

## Why adopt an adaptive and agile approach?

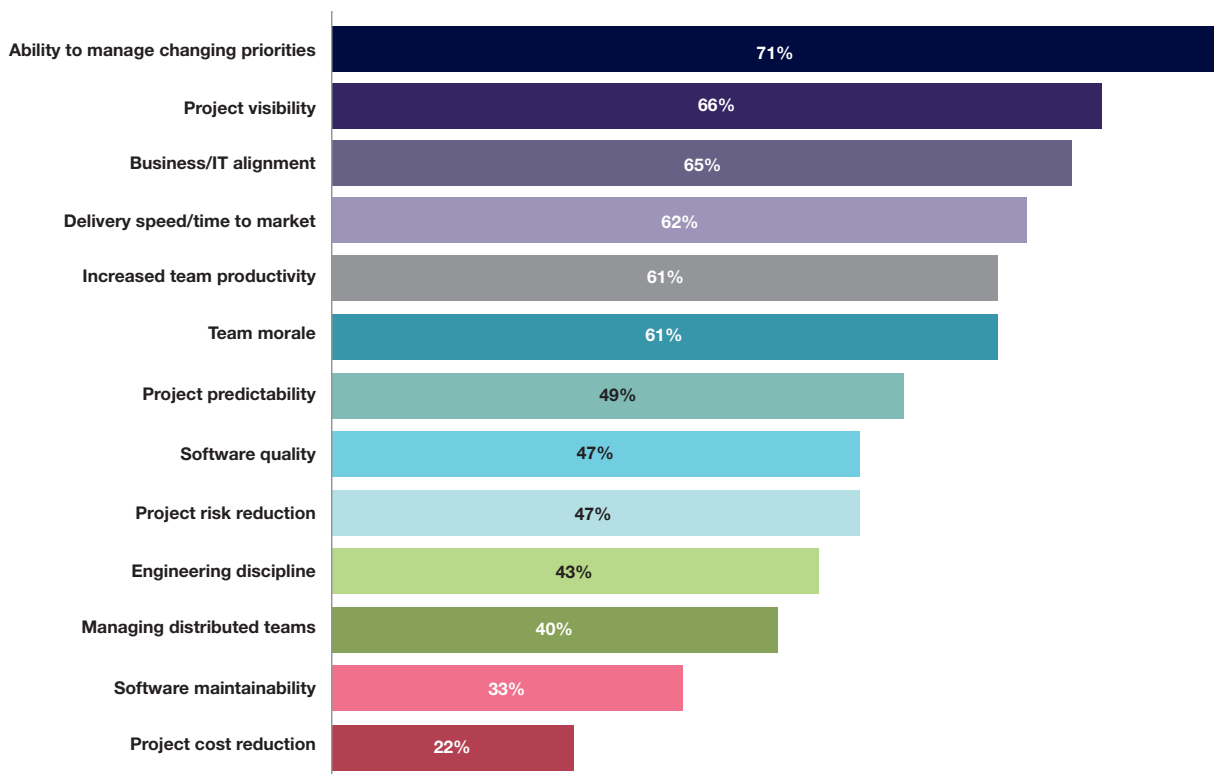
In situations where goals and objectives are not clearly defined, the implementation of Agile methodologies is vital.

The scope of an Agile project must be flexible and adaptable. Likewise, any chosen solution must be developed in an incremental and structured manner.

At the start of a project, a roadmap of macro-activities should be drawn up, without too much detail, and the goals of each short timeframe, or sprint, established. These objectives should always be fully aligned with the project's vision.

This will ensure that value based objectives are reached through targeted and punctual processes that achieve important elements of the final product, while limiting any waste related to time, cost and resources.

The benefits of an Agile approach are outlined in the VersionOne annual report, which has been the authoritative survey of Agile basic themes for more than a decade. It highlights how increased productivity and the creation of value can be achieved through a combination of efficiency, collaboration and teamwork, thanks to greater stakeholder commitment and involvement<sup>1</sup>.



# The principles

Agile methodologies are rooted in lean or just-in-time approaches. These were developed after World War Two by Toyota's manufacturing division and are described in the Agile Practice Guide by the Project Management Institute<sup>2</sup>.

The same aspects were also implemented in 2001's Agile Manifesto<sup>3</sup>, and later in all Agile frameworks developed on similar principles.

**Focus on value:** An overriding focus should be on creating value through the reduction of waste and keeping documentation to a bare minimum. This does not mean, however, that it is not produced or little consideration is given to it, just that it is generated only when needed. For example, in IT surveys more than half of the achieved efficiencies were underused or not used at all – highlighting the need to focus on what really is required.

**Pay attention to people:** Motivated colleagues, who actively participate in the creation of value, can independently manage activities, problems and criticisms in the context of an organised and clear methodology. Your people are your project's value – they can make a significant contribution to the attainment of any objectives.

**Stakeholder engagement:** When users, experts and sponsors collaborate to achieve a goal, it creates a win-win situation that benefits everyone. Regardless of the Agile framework employed, participants must remain involved throughout a project's entire development, not just in its initial phases. Ownership guarantees alignment with a project's aims and will help to support it at all stages.

**Face to face communication:** An Agile approach favours minimal adoption of technology such as email and telephone, and focuses on personal, open and interactive communication. Tools such as Post-It notes, flipcharts and whiteboards should be key features of an 'Agile room', where a team works together. This area should also be used for development and for administration, with private spaces set aside for specific requirements.

In some cases it is necessary to work with teams whose members are not present in the same place. Here, the use of technology and infrastructures to improve or facilitate an interactive exchange of information is advised, and devices that permit visual interaction, such as webcams and teleconferencing, are useful. Communication must be managed on a case by case basis, using the solution best suited to guarantee the availability of information at appropriate times.

## An agile for every need

Many frameworks satisfy Agile principles – some are in the Agile Manifesto and other similar documents. Various Agile frameworks have been developed for specific needs and contexts.

Agile frameworks are characterised by small teams comprising only a few people. In this context, Scrums provide the best solution and form the basis of many other models.

More complicated frameworks can be developed for more complex challenges, such as major projects. This maximises the benefits of an Agile approach through methods such as the Scrum of Scrums and the Scaled Agile Framework (SAFe).

Some businesses are even beginning to use Agile management throughout their entire organisations, using models such as SAFe.

**The Scrum** is considered one of the more robust and widespread Agile methodologies – its market presence accounts for about 60 per cent of all Agile projects to date.

The Scrum is based on principles outlined in the Agile Manifesto<sup>3</sup>, giving priority to business value and is expressed in case studies. It is updated with each iteration (or sprint). These sprints (each lasting 2-4 weeks) bring satisfaction to both users and sponsors, while the Scrum Master maintains careful attention of defined timelines.

The Scrum is the technique most commonly used for managing development teams in which the benefits of adaptive approaches can be tested.

**Scrum of Scrums** is the simplest and most widely used methodology for large scale project management. Several teams, based on the Scrum, are managed in an orderly manner through coordinated meetings, so as to reach a defined goal. The solution is simple and easily applied by those that wish to 'scale' in a simple way and therefore utilise any benefits on less complicated projects.

**LeSS** is the method used to manage complicated projects, enriching the Scrum of Scrums framework. It has two different versions, differentiating 'large' from 'huge' projects. In addition to different aspects relative to team management, it contains a detailed description of roles for product owners and their organisations.

**Agile Portfolio Management.** All business or IT projects can be managed by prioritising them based on necessity and management control. Through frequent analysis the totality of actual and projected activities can be updated in keeping with changing contexts.

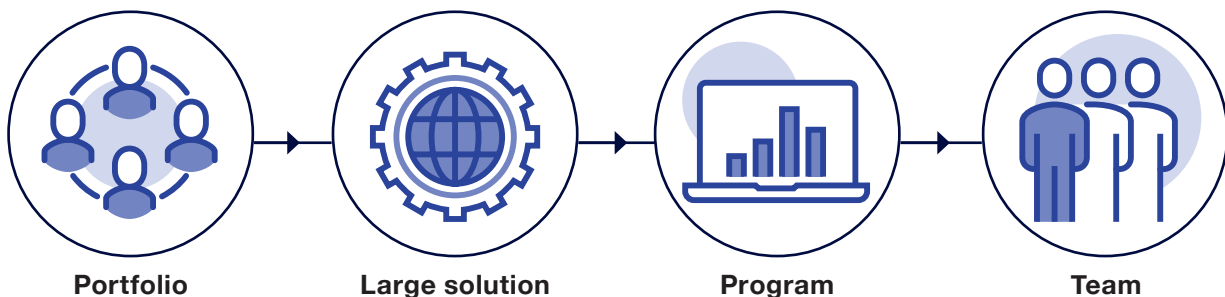
**Scaled Agile Framework (SAFe)** gathers all the managerial needs of an entire structure, guaranteeing proper management of projects from portfolio management to the running of single teams. SAFe is an increasingly requested model for businesses that wish to maximise the benefits of projects of all sizes.

## Beyond development

Lean and Agile approaches are now being applied not only to development projects, where they are well established, but also to other project phases.

**Agile Business Analysis** permits objectives to be reached through a 'timeboxed' secure system. It allows needs to be explored and developed using design thinking techniques and the establishment of 'personas', which make effective needs visible. Such techniques use Hackathon and Workshop in order to guide people through a structured and organised process, in line with what is set out in the Agile Extension of BABoK – the reference book of the IIBA for business analysis.

Another term often associated with Agile is **DevOps** and its principles are applied in relation to development and delivery. A DevOps model integrates solutions such as that proposed in **Spotify Engineering Culture**<sup>4</sup>, while automated processes and smooth organisation aid the completion process to ensure maximum value.



# If a business is not agile ... can this method be applicable?

Yes - absolutely! Not all businesses are Agile, but they can become so. Although most start-ups are born Agile, many large established businesses have accepted the challenge and are progressively appreciating the benefits of this approach by adapting their own processes to the best Agile solution for their needs.

Movement from Waterfall methodologies to Agile ones demands a major cultural change and a strong commitment, not only from top management but by all stakeholders.

Change can often cause alarm, especially in a project's initial phases, so it's good to understand how Agile methodologies create value. This can be achieved by altering a project's scope when necessary, rearranging the stages or simply embracing change!

Rigidly sticking to an established pattern of behaviour is not an efficient way to address the constantly evolving requirements of businesses and the markets they operate in. Time is an important factor – something that was satisfactory a few months earlier might not be appropriate now.

Courage is needed to close down projects that are no longer capable of creating value, instead of investing repeatedly in something that will not deliver desired results.

When a business fully appreciates the benefits of creating value, an Agile approach is possible and sustainable. It is important to remember that it doesn't matter if a business was born Agile – it can very quickly adapt and, as a result, enhance its ethical values, trustworthiness, reputation, credibility and integrity. Accepting the challenge is the first step towards a more Agile business.

# Why NTT DATA

NTT DATA is able to suggest the best methodologies, whether Waterfall or Agile, on the basis of a business's characteristics, needs and real-life setting.

For years, NTT DATA has developed great expertise in the management of Agile projects for large-scale clients who, through this methodology, have successfully adapted to meet changing needs. This is made possible thanks to NTT DATA's broad knowledge of these areas. Many of the company's professionals have obtained **SAFe, PMI-ACP, PSM I and PSPO I** certifications, and are fully familiar with Agile methodologies including **Scrum**, as well as more complex ones like **Scrum of Scrums and SAFe**, when large-scale projects require their use.

The creation of an Agile environment involves a process that combines experience and theory. It means knowing how to utilise the best solutions for proper project management, and isolating the key points to unlock in order to permit peak execution, even in complex situations such as those of major multinational corporations.

NTT DATA has its own **Agile Professional Centre** (APC) for sharing Agile expertise worldwide. It has constructed maturity and readiness models to evaluate the level of business readiness in the adoption of emerging methodologies. It has carried out, while keeping a vigilant eye on the market, the scouting of commercial and open software platforms in order best to support clients' requests, suggesting the most suitable choice for specific contexts.

## Key takeaways

➔ **Innovation** is made effective through **Agile methodologies**, allowing efficient project management in challenging contexts.

➔ **Value creation** through careful management permits the optimisation of activities, while closely monitoring possible risks.

➔ **Scrum** is an Agile framework widely used today for project management, introducing guidelines for more complex situations.

➔ **Agile Scaling** manages complex initiatives and maximises benefits, allowing different frameworks to be chosen in relation to various needs.

➔ **Portfolio management** is changing the mindset of the entire IT structure in order to make it smooth and adaptive.

### Sources

1. Annual state of Agile - 2018 - VersionOne.
2. Project Management Institute – The largest Project Management association, with more than 800,000 associates around the world, and producer of PMBoK 6.
3. <http://Agilemanifesto.org>
4. <https://labs.spotify.com/tag/engineering-culture/>

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