Agile Service Projects

An Integrated Approach

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EXIN

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Introduction

Run a service organization and deliver the added value the business requires. It is certainly not a new theme, but still something that many service managers are struggling with. Similarly, project managers find it difficult to timely deliver what the business needs. Often projects take a long time to make an inventory of all requirements and take even longer to deliver them. By the time the business gets what they asked for, a common response is often: "Why didn't we get that sooner" or: "We don't need that anymore and why didn't you deliver the highest priority items sooner? And, by the way, the IT operations manager tells me, she is not ready to support my users with the new stuff."

There is a need to adjust the pace of change to reflect the business needs: a speedy delivery of the business case, and stable operations!

If we look at projects in software development for example, we see that users often don't know exactly what they want until they see the working product. This is an important reason why software development is more unpredictable than managers would like. The reality is that changes come naturally as time passes by. However, we all know that the availability of both financial resources and time is not limitless. All project activities must be justified businesswise and need to be controllable by investors, not only today, but also in the ´serviced´ future.

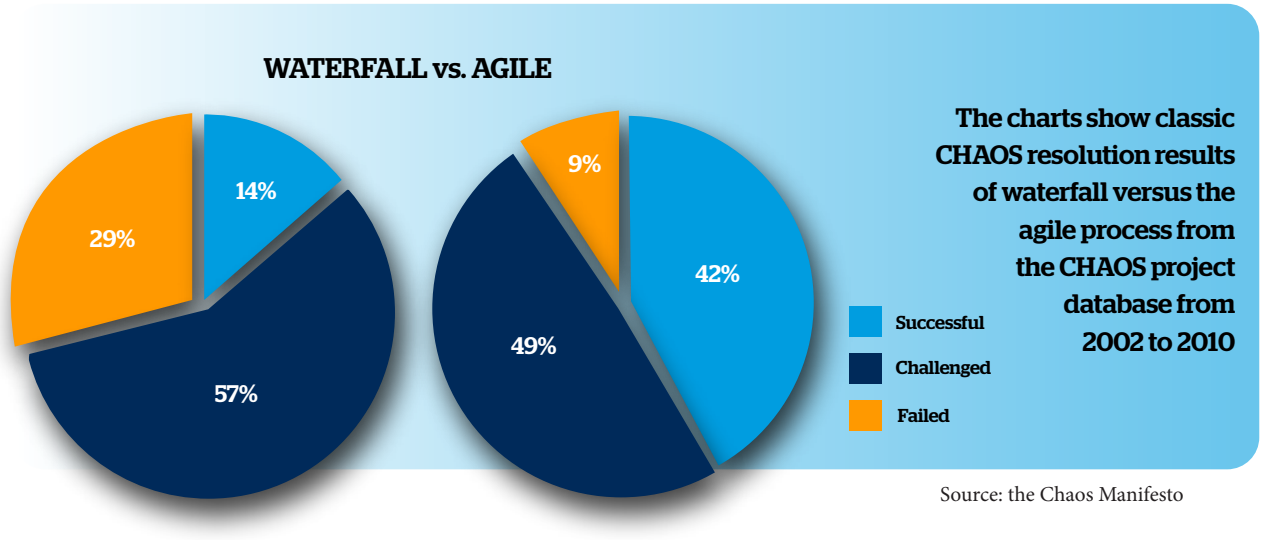
Agile approach is succesful

In Project Management one of the most important developments in the last couple of years is the emergence of agile frameworks besides software development. Regular delivery of high priority requests is a tempting prospect. Short time-boxes like sprints in Scrum that produce customer quality every time are very welcome in a world where we are used to waiting for functionality to be delivered.

One of the causes for slow delivery can be that Best Practices for IT Service Management and Project Management are often implemented in such a fashion that the focus is on "what" should be done and not on "why". Too much of "what" leads to internally oriented, inflexible procedures and a lack of alignment with the business and thereby a lack of agility.
Research on software development (CHAOS research) has shown that agile projects deliver higher success rates as opposed to projects delivered via the traditional waterfall approach. The Standish Group publishes a yearly report called the CHAOS Manifesto.

CHAOS states that Agile projects are successful more often than non-agile projects: "The agile process is the universal remedy for software development project failure. Software applications developed through the agile process have three times the success rate of the traditional waterfall method and a much lower percentage of time and cost overruns." The difficulty in being able to adapt to change is ultimately the primary reason why projects continue to fail.

Chaos Resolution by Style



Source: the Chaos Manifesto

There is also a clear call in the CHAOS Manifesto for Project Management expertise as provided by Best Practice Management such as PRINCE2®. In addition to the obvious need for executive management support, user involvement and skilled resources, The Standish Group points out in the CHAOS Manifesto that expertise in managing projects is essential to controlling the progression of the project and the collaboration of the stakeholders and team members.

Agile Operations

Agile frameworks and methods such as Scrum do not describe the operations environment, yet this is the place where the solutions will provide the added value to the business. In operations the deliverables of a project need to be managed on a daily basis. Therefore, building a relationship between IT solution development and operations is a necessary step in the growing maturity of an organization. A strong focus on changing customer requirements and stability in managing the delivered services is an important aspect of quality.

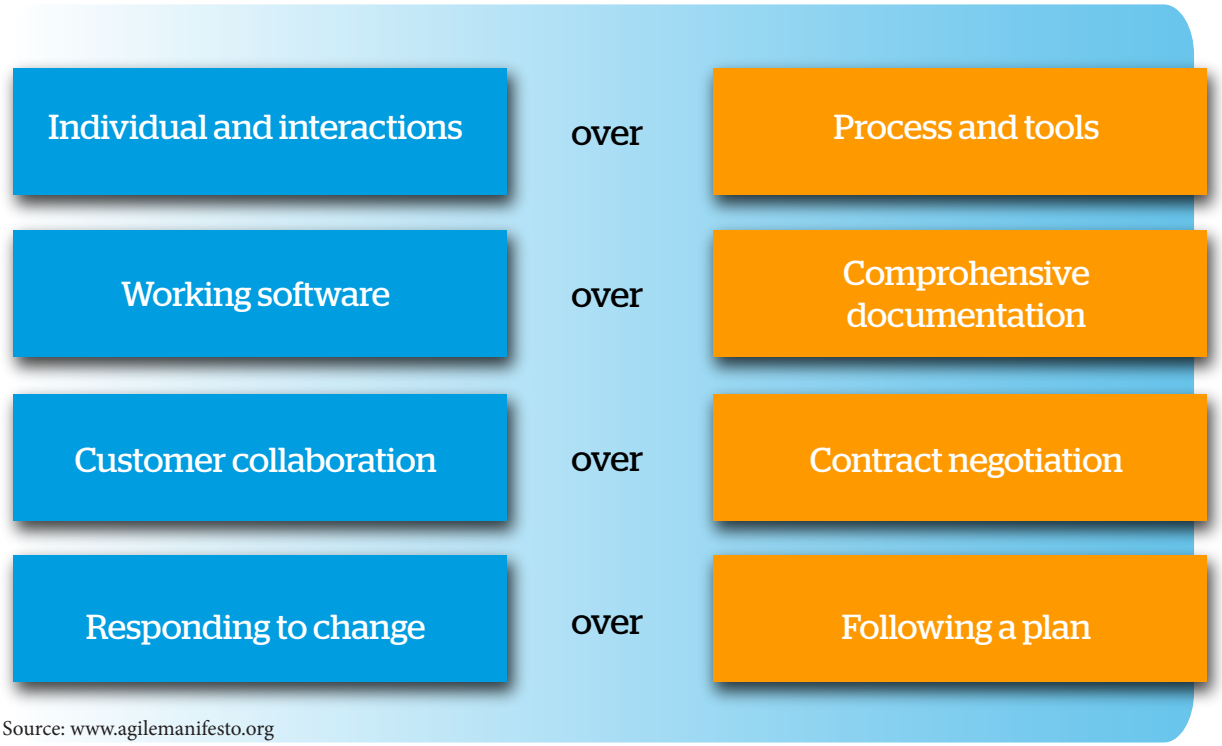
After 25 years of IT service management (ITSM) frameworks, there is also a broad understanding that the day-to-day management of deliverables after handover to business-as-usual requires a structure as provided by the Service Management System. The focus on managing services to deliver customer quality continually is an approach that is not only underpinned by ITSM but is in the hearts and minds of many.

The Agile Manifesto

In February 2001 –some years after Scrum was introduced- a group of creators and supporters of various light methodologies met in Utah with the primary objective to determine whether they had anything in common.

The output from the meeting of this international group was the creation of the "Agile Manifesto" and a set of guiding principles for Agile software development methods. The meeting resulted in the agreement between the attendees that software development methods needed to be designed so that they were able to respond to change during the project.

Agile Manifesto



Source: www.agilemanifesto.org

At first the Manifesto was the source of many polarized discussions, because people tended to overstress the importance of one side or the other. Agile increasingly became a professional anti-movement while others, mainly budget oriented project and service managers, hardened their opinion that thoroughness, role-definition and manageability were highly appreciated values.

Since a few years the stormy debates have tempered and the true essence of agile came into attention. Discussions became balanced again. The 'agile-ists' pointed out that while there was value in the items on the 'right', they valued the items on the 'left' more". The service and project managers also had to admit that although the items on the 'right' are essential, the true value is in the items on the 'left'. And as often this was where the true silver bullet was hidden. ITIL® and PRINCE2® cover the right side of the model, Scrum is the most frequently used framework that covers the left side.

In line with the agile way of thinking, a combination of dominant best practices will ensure the best results for our customers from each framework. Projects can be governed by applying PRINCE2®, while Scrum practices safeguard the delivery of prioritized products. Involving service management knowledge will increase the acceptance of new products and services and will warrant a quality delivery of service.

Covering the complex world and coping with the fast moving environment of IT

Scrum, PRINCE2® & IT Service Management

Covering the complex world and coping with the fast moving environment of IT, a broad range of frameworks are available from which Scrum, PRINCE2® and ITIL® are most common and most widely adapted. All three originated around 1985 and were revised 10 years later which drastically increased success. Contrary to its current popularity, Scrum had a rather slow start compared to PRINCE2® and ITIL®.

SCRUM is a way for teams to work together to develop a product. Product development, using Scrum, occurs in small sprints, with each new sprint building upon the results of the previous sprints. Building products one small piece at a time encourages creativity and enables teams to respond to feedback and change, enabling them to build exactly what is needed without unnecessary by-products.

Scrum is built on these foundations:

- Users do not know what they want until they see working products.
- Software development is inherently

unpredictable and is therefore almost impossible to plan using traditional methods, such as waterfall.
- The structure of an organization will be embedded in the code. This means that lack of effectiveness and inefficiencies will be reflected in the products that will be delivered.
- Value creation should be the focus across the entire process.

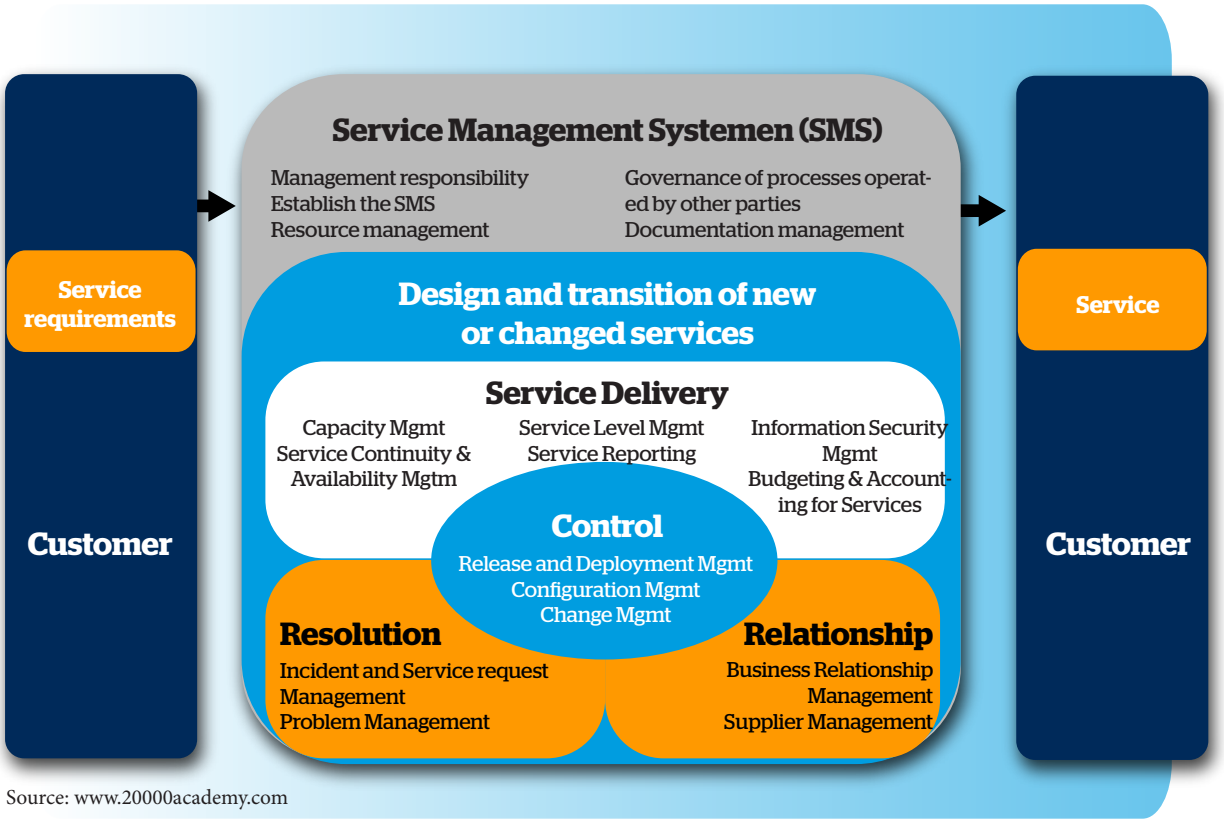
The team is the central entity and is multidisciplinary. Other roles are Product Owner and Scrum Master, of which the Product Owner is essential.

PRINCE2® is short for Projects IN Controlled Environments. PRINCE2® is a Best Practice framework that helps managers delivers projects on time and within budget. It divides projects into clearly defined stages. It focuses on the delivery of products rather than carrying out activities. Every project must have a business case and plan that is periodically reviewed to check if the project is still viable.
PRINCE2® is a widely used project management method. It envisages a governance structure, which prominently includes all of the project's significant stakeholders in what is going on.
Thus a Project Board is effectively set up, with these three roles – "Executive", "Senior User" and "Senior Supplier" – which incorporates representatives from all important stakeholder groups. The division of power and tasks between the Project Board and the Project Manager is effectively developed through escalation mechanisms for risks, problems and exceptions. Also, the roles, authorizations and boundaries between the Project Manager and Team Manager are defined.

IT service management frameworks and standards provide an organized set of core IT concepts, practices and processes. Each of the core concepts and process groups inter-relate, with input and feedback linkages. Each concept is designed to create order from chaos, improve service delivery and customer service, increase productivity, reduce complexity, and streamline costs.

The ISO standard for service management, ISO/IEC 20000, describes the minimum requirements for a coherent management system, as well as best practices which can be used to fulfill/implement the requirements (see figure next page).

ITIL® describes five phases in the lifecycle of services: 1) Strategy, understanding why particular types of services should be delivered. This phase includes the Demand Management process. 2) Design, designing the services that fulfill the need of the business.



Source: www.20000academy.com

This phase includes the Service Level Management process. 3) Transition, building the services and deploying them into daily operations. This phase includes the Change Management Process. 4) Operations, delivering the promised added value by supporting and operating the services. This phase includes the Incident Management Process. 5) Continual Improvement, keeping an eye on continual quality improvements of services and all supporting functions and processes. This phase includes a 7 step Improvement Process.

Balanced PRINCE2®, ITSM and Scrum practices can provide clever and sustainable solutions to issues in delivering business value, project management and delivery of services. The bottom line is that the combination of these three Best Practices can add value in these situations:

- Planning & Timeframes
- Scope of work
- Managing Workload
- Business Involvement
- Operations Involvement
- Continual Quality Improvement

Using a way of planning that is used in Scrum while maintaining governance as in PRINCE2® will help in prioritizing the products that are most needed and thereby delivering the highest possible quality on short notice.
The choice which set of guidelines –or parts of it- to use is very much a matter of understanding the character of a project. The table below shows when mainly elements of Scrum or methods like PRINCE2® should be used.

Success is when heavy and light methods cross reference.

Know what framework to use

IT professionalism surfaces when one knows how to decide at different moments and in different situations. Our acts are only valuable when they satisfy clients and colleagues, both in the short and long term. The choice which framework to use is very much a matter of understanding the project context.

Scrum is based on sharing what has been done and what needs to be done. Issues can be solved, obstacles discussed and thereby facilitate the effectiveness of the team. Issues concerning timely delivery of products can be addressed. The sprints of Scrum and the management stages of PRINCE2® can be combined; for the meetings at the beginning and end of a sprint the process "Managing Stage Boundary" can be used. The key to unlocking PRINCE2® with Scrum is to use Scrum in the "Managing Product Delivery" stage. Here, Scrum helps the team to focus on delivery every sprint in line with PRINCE2® management reporting requirements and projects' committee meeting cycles. In PRINCE2® the business is involved by being a part of the Project Board. This ensures that

When to mainly use elements of light weighted methods like Scrum	When to mainly use elements of heavy weighted frameworks like PRINCE2® and ITIL®
Scope is not clearly defined The product will gradually appear during the project	Identical projects were done before
Requirements change frequently Customer learns more about what they want as the project goes on	Requirements are well defined up front or frozen in for instance safety standards. Few changes are expected during the project
Activities cannot be well defined upfront Estimating (planning) is difficult	Activities can be well defined upfront Estimating is possible and reliable
Process is iterative (numerous cycles) Each cycle heavily depends on the previous ones	Process is more long term, and might be split into phases
Success is mostly measured by customer satisfaction	Success is mostly measured by achieving the project goals for time, cost, scope etc.
Incremental results have value and can be used by users	Users cannot normally start using the products until the project is complete (e.g. a bridge)

business cases are taken care of and priorities set. Still there is some distance to the actual delivery. Scrum provides extra guidance in prioritizing and short term delivery by involving the business more regularly.

A healthy Product Owner-Scrum Master relationship leads to business involvement, but operations needs to be involved in delivering change as well. ITSM guidelines have much to offer on this topic. Specifically Change and Release Management describes best practices on the acceptance of change as produced by project management.

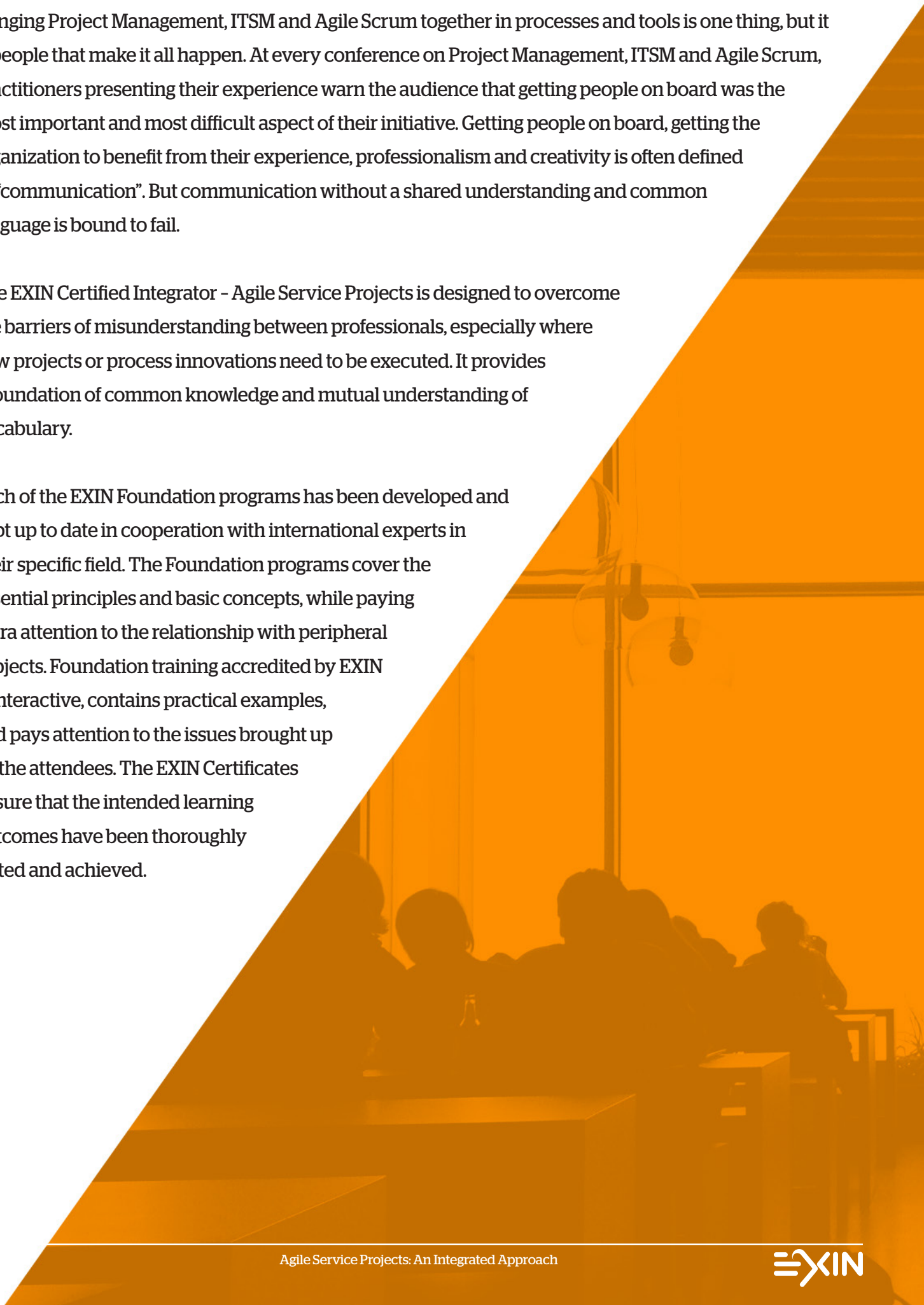
In ITIL® there is very specific and detailed guidance on how to improve services. Interestingly enough the approach looks very much like a (continual) Waterfall project. It may be a good idea to perform these quality improvement projects in a more Agile fashion. Choose items that are up for improvement, write a user story. The next step then could be prioritize these items, conduct a planning session and start a sprint to deal with it.

The people factor

Bringing Project Management, ITSM and Agile Scrum together in processes and tools is one thing, but it is people that make it all happen. At every conference on Project Management, ITSM and Agile Scrum, practitioners presenting their experience warn the audience that getting people on board was the most important and most difficult aspect of their initiative. Getting people on board, getting the organization to benefit from their experience, professionalism and creativity is often defined as "communication". But communication without a shared understanding and common language is bound to fail.

The EXIN Certified Integrator – Agile Service Projects is designed to overcome the barriers of misunderstanding between professionals, especially where new projects or process innovations need to be executed. It provides a foundation of common knowledge and mutual understanding of vocabulary.

Each of the EXIN Foundation programs has been developed and kept up to date in cooperation with international experts in their specific field. The Foundation programs cover the essential principles and basic concepts, while paying extra attention to the relationship with peripheral subjects. Foundation training accredited by EXIN is interactive, contains practical examples, and pays attention to the issues brought up by the attendees. The EXIN Certificates ensure that the intended learning outcomes have been thoroughly tested and achieved.



Generalized expert knowledge

The next generation of professionals in Information Management, including those defining their roles as IT experts, will have a flexible approach and a capacity to exploit the evolving business needs and opportunities offered by IT. They will need thorough knowledge, skills and attitude to ensure that their organization's performance becomes more efficient and effective . Furthermore, they need to explore possibilities of established and novel ways of conducting IT solutions. There is a growing need in the market for experts that understand the general principles of not only service management and project management, but also Agile frameworks like Scrum and vice versa.

Certified Integrator

The EXIN Certified Integrator is a structured program of related certificates. This EXIN certification focuses on the interconnection of three IT domains: Service Management, Project Management and Agile Scrum. When a candidate finishes three examinations in these fields he/she receives the EXIN Certified Integrator Agile Service Projects certificate automatically and free of charge. The diagram below shows the eligible certifications for each domain.

Domain	Certificate
(IT) Service Management	EXIN IT SERVICE MANAGEMENT ISO/IEC 20000 and/or ITIL®
Project Management	EXIN TRACKS. and/or PRINCE2®
Agile Scrum	EXIN AGILE SCRUM

ITIL® and EXIN IT Service Management Foundation based on ISO/IEC 20000 can be replaced by Microsoft Operations Framework.
EXIN TRACKS - Project Management and PRINCE2® can be replaced by PMI or IPMA.

Authors

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Maarten Bordewijk is an experienced professional in personal and organizational development. He has lengthy experience in putting to practice frameworks such as ITIL®, ISO/IEC 20000 and Scrum. In 2013 he founded Bordewijk Training & Advies. He works for organizations such as Heineken International, Ziggo, Dimension Data, Sogeti and Pink Elephant. He also lectures at several Universities, such as the University of Applied Science in Utrecht.

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