



Coaching Is the Key for Scrum Success

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This whitepaper describes common Scrum implementation problems. It includes real-world case studies of organizations who received coaching, including the problems they were experiencing and how having a coach helped them. It explores why hiring a coach is an effective way to solve Scrum problems, what to look for in a Scrum coach, and reasons to hire a Certified Scrum Coach.

Coaching is Key for Scrum Success

Organizations eager to solve the problems they see in their projects or processes often decide to adopt Scrum in the belief that it will immediately solve all those problems. Although Scrum can and often does resolve some problems immediately, it also has the potential to expose or exacerbate other existing problems and can even appear to create a few problems of its own.

In some cases, this can be seen to be a “failure” of Scrum, even when implemented by an organization that was initially enthusiastic and determined. This perceived failure can cost the organization considerable time and money if the Scrum team continues along the same path they are on, despite the unresolved problems. These costs, as well as frustrations and even pressures from inside or outside the Scrum team can cause Scrum to be abandoned without ever demonstrating its full potential.

How can an organization maximize the benefits of Scrum while minimizing its learning curves and stumbling blocks?

Common problems when implementing Scrum

It's common to have some issues when first implementing Scrum, especially for the first Scrum teams within an organization. These problems can continue to plague the organization until they are addressed and they can compromise the success of Scrum across the entire organization.

Some common issues are:

- Teams are unable to achieve success but claim to be “doing Scrum.” Upon closer examination, these teams are shown to be using something only half-jokingly called “Scrum-But.” Scrum-But is where one or more key facets of Scrum are dropped, in whole or in part. This can happen for many reasons including not seeing the value in the parts of Scrum they have not implemented, an inability to see how to implement Scrum for their specific situation, or even because Scrum has exposed problems and impediments they feel they have no control over.
- Teams adopt Scrum and see some small changes but not as much as they hoped and, over time, the culture of their organization pulls them back into their pre-Scrum methods and techniques. This can happen for many reasons. The team may revert to the old way of doing things when faced with only a partial success; the team may react to Scrum's exposure of existing problems and issues by going back to methods and techniques designed to hide or work around those problems
- Teams try to adopt Scrum based on self-education or a limited amount of training, but their organization does not empower them to do so with time, education and support. Organizations can even sabotage a team's Scrum efforts by requiring

adherence to seemingly arbitrary reporting, workflow or organizational rules despite evidence of how changes could be highly beneficial.

Common efforts to resolve these problems that don't work

As common as some of these problems are, many organizations or teams have attempted to resolve these problems on their own, usually with mixed results, at best. These resolution attempts vary in their base goal and their execution but they share the fact that they do not work.

Some common resolution attempts are:

- The organization insists that the Scrum team follow an arbitrary list of criteria or processes, no matter how compatible those are with the team, the project or the organization itself. This creates immediate friction and extra work and tends to sabotage the Scrum team from the start.
- The organization provides the Scrum team with additional training classes, either internal or external. While Scrum training is important, the Scrum team may still not be able to apply the Scrum facets to their own project, team or organization correctly.
- The Scrum team performs ad hoc alterations to Scrum itself in order to attempt to fix the identified problems. This, in turn, creates more problems because the team ends up implementing Scrum-But instead of Scrum.
- The organization or Scrum team gives up on Scrum entirely. Not only are the benefits of Scrum not realized but the team members consider themselves a failure and are frustrated. The organization has now spent money on a “failed” process and will be extremely hesitant to try Scrum again, despite evidence of how it can benefit them.

What is the most effective way to resolve Scrum problems?

Call in a Scrum coach

One of the best decisions an organization can make when faced with Scrum “failure” is to realize that there are problems occurring that the organization may not be able to identify or resolve on its own. These organizations will certainly benefit from the services of a Scrum or Agile Coach.

Benefits of Scrum coaching

Making use of a Scrum coach brings with it a number of significant benefits that go beyond what can be achieved with other attempts at solving Scrum problems.

Among these benefits are:

- Coaches give the Scrum team the best chance to combine immediate Scrum success with on-the-job training and growth.
- Coaches bring both tried and new practices and processes to the team and organization reducing the degree of trial and error commonly found in homegrown experimentation.
- Coaches take time pressure off the managers and supervisors by providing extra guidance and management of the Scrum process on a day-to-day basis until the Scrum process is running well.
- Coaches bring an outside view of the organization, team and individuals and remove intrinsic bias and interpersonal issues.
- Coaches provide needed learning and mentoring opportunities to the employees.
- Coaches collaborate with the managers and leads to help the careers and growth of the organization's employees with feedback and suggestions.
- Coaches are organizationally agnostic and are not subject to the same pecking order, enabling them to tell the hard truths that may need to be said.
- Coaches work on themselves and their craft continuously to bring with them the latest thinking and tools so companies benefit from their continuous improvement to get the best and latest.
- Coaches create an environment that allows teams to address the difficulties they face rather than sweep them under the rug.
- Coaches embrace the need for continued learning and strive to lead teams into embracing continued learning as well.

What does a Scrum coach do?

Scrum coaches tailor their actions and deliverables to the organization and situation they are called in to assist with, but they bring with them a broad range of insights and guidance.

Some of the things Scrum coaches do are:

- Coaches examine organizations, teams and individuals to see what they are doing and how, both in Scrum implementation and in other processes or facets of how they do their jobs.
- Coaches teach Scrum practices but also teach a variety of other methodologies that may be needed to help the team or organization succeed.
- Coaches challenge teams and individuals to do their best work and to become the best agile practitioners they can be which, in turn, enables them to do their best work and fosters mindsets that make that best work sustainable.

- Coaches lead by example by modeling the core behaviors of excellent, successful agile practitioners in order to allow the team to learn and internalize these behaviors.
- Coaches mentor individuals for personal and professional growth, including Scrum leadership roles when appropriate.
- Coaches bring with them a better view of the “big picture” than people within the organization or team, because they are coming in from outside.
- Coaches facilitate change, not just within a team but across multiples teams and disciplines within an organization.
- Coaches work at many levels, from individual coaching to that of entire organizations.
- Coaches advise the organizational leadership and management as needed to ensure Scrum success.
- Coaches question assumptions and the status quo in order to discover the actual needs and requirements behind them.
- Coaches foster continuous improvement and learning.

What to look for in a Scrum Coach?

There are a number of things an organization needs to look for when they hire a Scrum coach in order to get the best results. With the growing popularity of Scrum and Agile methodologies, there are also a growing number of people advertising themselves as Scrum or Agile Coaches.

A good Scrum coach should be able to demonstrate the following:

- 1) Good Scrum coaches are experienced. They have “been there, done that” and tends to write about or offers presentations about it. They are an active member of the Scrum community where they both learn from others and share their own experiences.
- 2) Good Scrum coaches are knowledgeable. They have a breadth and depth in both the tools and techniques they have learned and have a proven track record that demonstrates continuous improvements in their own skills such as learning new techniques or disciplines on a regular basis.
- 3) Good Scrum coaches are enthusiastic. They enjoy coaching, teaching, mentoring and helping teams achieve success. They love and believe in Scrum.
- 4) Good Scrum coaches are collaborative. They like to work with teams instead of dictating pat answers. They know how to build the team’s collaborative ability.

- 5) Good Scrum coaches are communicative. They tend to listen first and ask more questions rather than making immediate statements or decisions.
- 6) Good Scrum coaches are responsible. They take responsibility for educating and mentoring clients on processes.
- 7) Good Scrum coaches are organized. They can prioritize both their own work and assist in prioritizing the team's work, taking into account risk, effort, and dependencies. They are also able to prioritize process improvements and work with clients to get the most improvement for the least cost.
- 8) Good Scrum coaches are inspirational. They are able to inspire teams and individuals to rise to the occasion and try new things. They celebrate both successes and the small failures that prevent bigger failures at the end of a project.
- 9) Good Scrum coaches are respectful. They respect the team and the individuals and never lose sight of the fact that these are intelligent people who are striving to do the best job they possibly can, despite any obstacles.
- 10) Good Scrum coaches are open. They are transparent and upfront about not just what to do but why. They are open to criticism and constructive feedback and willing to listen to other ideas and give those ideas due consideration. They are willing to try something and fail and be transparent about what might not have worked so everyone can learn and move forward.
- 11) Good Scrum coaches help the organization find its own best answers to its own problems to create sustainable changes.

Problems solved by Scrum Coaches

The following are some real world examples of problems addressed and solved by Scrum coaches.

Transparency and education bring together the development team and the stakeholders.

At be2, the product development process was under continual scrutiny. Many stakeholders were dissatisfied with the time taken to deliver minor marketing-related changes to the product. Due to separation of the product management team and the technical team, requests were often raised with one organisation after the other in the hope that action would be taken.

Following the transition to Scrum, although the majority of the work delivered by the product development process improved, the delivery time of these minor marketing requests actually decreased. The product owners were simply not prioritising the small marketing tasks, therefore the tasks never entered a sprint backlog and were never delivered.

There remained considerable distrust across the company in the teams and the Scrum process simply because these small requests, which came from all over the marketing organisation, were not being delivered.

The coach recommended increasing transparency around these marketing requests. First, there was better communication regarding the need for prioritisation of requests to prevent direct requests for tasks or their status going to development teams.

Second, the transparency on the many task requests which were not considered for the next sprint was increased, providing a clear message that the following tasks were not being considered by the product management team for the next release sprint.

Finally, the many stakeholders were educated again on the importance of prioritising efforts on tasks that provided high return-on-investment.

At first there was a concern that the change would increase conflict between the organisations, since the message was clearly that the marketing requests were receiving no attention whatsoever. However, the education on return-on-investment placed the decision in context and decreased the low value requests and increased the quality of the high-value requests so that the product owners could better prioritise the requests.

Simply increasing transparency would not have been sufficient. However, in combination with the education on prioritisation and return-on-investment, the result had a number of benefits.

- Outstanding items were reduced by the task owners themselves. As they understood the need for value, they made their own cost/benefit analysis and removed many low-value requests.
- Requests for information or action made directly to the development team, leading to task-switching and low-value changes being made, disappeared almost completely.
- The deeper understanding of value-driven development brought the marketing managers more closely behind the Scrum transition. The significant gains in productivity and quality in other areas of product development were recognized and the minor task requests were placed in context.
- The role of the product owners in prioritising requirements and ad-hoc requests was more clearly understood and accepted. High-value requests were more likely to formally be assessed in the Business Value game, and low-value requests were significantly reduced.

All of the changes introduced to resolve this impasse had already been done as part of the original transition. The transparency into the product backlog was in place and available to all. The principles of value-based product development,

including prioritisation based on return-on-investment had been clearly communicated. However, the marketing managers had not heard or understood the changes in context of their own unique experiences with the product development process. Reiterating the information and transparent communication in the context of their needs helped cement the change in their minds.

Having access to an impartial expert observing from outside with strong experience to make the big calls proved invaluable and is essential for the ongoing continuous improvement of our practices.

Dave Sharrock, IT Director

An unconventional application of Scrum principles allows a Scrum Coach to manage workload

Several years ago, I was coaching a new Scrum team and a new Scrum Coach at a Fortune 500 Insurance company. This new coach was bright, energetic and pragmatic, allowing her to adapt well to a new process. She used her role as Scrum Coach to act as the change agent in her organization in more ways than one.

Getting her team acclimated to this new process was a challenge as people adjusted to this new level of interaction with the Product Owner and delivered in a time-boxed period. The Scrum Coach dealt with the chaos as well or better than can be expected. But even after a few months, as her team started to operate more smoothly, own the process, and iron out some of their issues, her job continued to be a struggle.

As the change agent and Scrum Coach for the pilot team in the organization, she quickly found herself working 14-hour days and weekends to keep up with the new team processes, her PMO requirements, education of external groups about her team's new processes, and some additional department responsibilities outside her role as Scrum Coach.

Reflecting on how well Scrum was working for her team, she decided to try applying the techniques of Product Owner, prioritization and estimation to her everyday work. She listed out all of her responsibilities on a daily, weekly and monthly basis. She estimated the amount of time it would take to complete each one. She took this list to her "Product Owner", her manager, and asked him to prioritize each and decide what wouldn't get done. Her "Sprints" were 1 day in length, as she and her manager reviewed and prioritized daily.

The new Scrum Coach began to feel clarity and a sense of accomplishment in place of her previous feelings of discouragement and being overwhelmed. Her manager also bought into these unconventional applications of Scrum. He had so much visibility into the root cause of her current unsustainable pace that he asked all of his direct reports to begin this type of daily interaction with him.

Ultimately, both this Scrum Coach and her department received much help and business benefit because of this unconventional application of Scrum.

Tiffany Lentz, Consultant, ThoughtWorks, Inc.

Tackling triage carries unexpected benefits

At Aconex, operating an effective triage function has always been a challenge. Due to the co-location of development, support and helpdesk teams, when helpdesk came looking for assistance with a problem, anyone who made the merest eye contact was chosen to help. Communication was poor, there was no focus on the issues and, worst of all, clients received mixed and confusing messages about when their problems were going to get fixed.

Following our transition to Scrum, the issue got worse because the team's focus shifted to sprint backlogs and greater scrutiny was put on any activities that were outside of the sprint. Strangely, it was still assumed that triage would get adequate attention as well as sprint commitments being met. What happened was that the triage queue grew and grew, sprint work was compromised whenever team members were distracted onto triage and clients were no happier.

During one of our coaching sessions, triage grabbed his attention and he immediately recognized the issue and proposed a solution. He proposed the creation of a dedicated team that focused solely on triage issues. It was to be resourced by members of the sprint team who were rostered into the team for an entire iteration.

At first the change seemed radical because we were suggesting taking resources away from building new functionality and placing them in a non-productive team. This was a tricky sell to the business, but it was done with the justification that team productivity would get better and client dissatisfaction would reduce. This proved to be correct.

What also transpired was that the true cost of triage was made very visible, but the improved customer feedback heightened the value of doing it right and doing it well.

Once implemented, the solution had a number of immediate benefits.

- Outstanding triage items were reduced. Due to the focus on triage items by dedicated resources, average triage queue length dropped from 20 to 3 items.
- Sprint commitments were less likely to be compromised because sprint teams were no longer being distracted by triage queries and task-switching waste was minimized. Teams were more productive.
- Clients were now given clear and concise feedback on the status of their issues and clear understanding of priorities and fix times.

- By rotating sprint team members into triage, it gave them empathy with clients and gave them a better appreciation for the necessary quality of released software.
- It gave team members a break from project work and a chance to develop their investigation and problem-solving skills.
- It gave them the opportunity to work with members from other teams, helping to develop cross-team interaction and collaboration

On retrospect, the problem and the ultimate solution was pretty obvious. However, at the time we were all so blinkered on the implementation of our agile practices that we missed it. Internal pressures meant that making the hard decisions was too difficult.

Having access to an impartial expert observing from outside with strong experience to make the big calls proved invaluable and is essential for the ongoing continuous improvement of our practices.

Simon Birstow, Engineering Manager, Aconex

Agile coaching facilitates the first ever completion of master's course project

In 2008, one of the largest universities in the world set out to teach Agile Methods to its master's level graduate students. The setting was the final capstone course towards a master's of science degree in software engineering.

The primary objective was for the students to apply the traditional methods they'd been taught over the two years of their coursework to the design of a real-world software-based system for a real client. The secondary objective was to use agile methods, namely Scrum, so that the students could gain some experience with agile methods and determine how many traditional methods and practices would be necessary as stop-gap measures.

Three teams of five students signed up for the course. The teams were assigned a customer, an agile coach, and instructed to build competing electronic commerce website designs. The objective of the final product would be for the customer to successfully purchase an electronic textbook using an actual credit card. The students were assigned customer requirements, given ample background material in agile methods, a modicum of training in agile methods, and little else.

The students had no formal training in agile methods during the coursework period of their degree. All of them were working professionals and many of them were newly-minted project managers, technical leads, analysts and other functional specialists. These students were steeped in traditional methods and were faced with building an operational e-commerce website for a real-world customer using agile methods in little more than 13 weeks.

The first three weeks were spent forming teams, self-selecting roles, familiarizing themselves with agile methods and receiving just-in-time training

and education in agile methods from an agile coach. Many of the students had selected roles such as project manager, tester and quality assurance analyst and few had selected roles as developers or programmers.

Much of this time was spent mapping traditional methods and practices to those of agile methods (i.e., project plans to release and iteration plans, requirements to user stories, etc.). This was probably the most critically important and tension-filled part of the course.

There were also competing interests and objectives among the instructional staff. The senior instructors encouraged the students to question everything in order to intentionally stoke the coals of a fierce debate between traditional and agile methods. The agile coach, on the other hand, was trying to help the students acclimate to the culture of agile methods, answer questions, prepare the students for their journey and, of course, quench the fire started by the senior instructors.

At the end of the third week, the three teams were formally introduced to their customer and provided identical lists of high-level customer requirements. The teams were asked to develop release plans, iteration plans, user stories, development tasks, unit and integration tests and, of course, a working operational software.

Then the next phase of the program began, which was the first iteration. We could also call this “Iteration 1” since this was the first of three iterations in which the student teams would begin applying agile methods to the development of their websites.

The first team used Iteration 1 as their Iteration 0, adopted an agile project management tool to help them along, and demonstrated their basic website at the end of the sixth week.

The second team also used Iteration 1 as their Iteration 0, used a Wiki for managing release/iteration plans and user stories and also performed a basic demonstration.

Team three had actually started Iteration 0 activities prior to Iteration 1, set up their web servers, selected their technology stack, and put up a simple website with a splash screen before meeting with the customer.

The third team had already demonstrated their basic website earlier, also used a Wiki for release management, began in earnest to implement their user stories and demonstrated a slightly more advanced website at the end of Iteration 1.

The first team had the most talent, including the most developers and applied Scrum to the letter-of-the-law. However they also had a very traditional adversarial relationship with their customer, to which they attributed to their real-world jobs. They decomposed all of their user stories into technical tasks, discarded their user stories and scheduled out their development tasks for the remainder of the term. The agile coach gently asked them to reconstitute their

user stories and use these as a basis for their demonstrations, which they promptly did.

The second team insisted upon translating all user stories into wire frames, getting the customer buy-in on the designs along with screen shots before actual implementation. The agile coach gently reminded them to take more responsibility for design-level decisions.

The third team was led by their primary developer, who start out quickly but grew frustrated with the rest of the team who had roles such as tester, quality assurance, analyst, etc. The third team began implementing the website the way they saw fit, ignored their user stories and started grinding to a halt. The third team required a lot of care and feeding by the agile coach. The agile coach gently reminded the third team to adhere to the user stories, as agreed upon. The agile coach also had to mentor the third team's lead, primarily on the merits of teamwork, and gently guide the lead away from their fiercely individualistic nature and qualities.

The agile coach established virtual pair programming sessions using WebEx and Skype to bring all of the third team's members together, share the burden of Web development, and encourage the team lead to keep moving forward and not give up, because of the perception of unfair burden.

The first team really hit stride by the third iteration, completed all the user stories and demonstrated the most mature website design enabling the customer to purchase and download an e-book.

The second team did similarly well and developed a website enabling the purchase of an e-book.

The third team stayed together in spite of their difficulties, began depending on one another instead of leaning on the agile coach all of the time and completed a website as well. In the end, all three teams completed their websites without having to employ traditional practices, as desired by senior instructors. Furthermore, all three teams wrote case studies of their experiences, praising the merits of agile methods including teamwork, flexibility and intensive customer collaboration.

Of the 15 prior capstone courses, this was the only semester in which an operational product was ever completed. Prior semesters had made it as far as producing project plans, implementing the tenets of traditional methods (i.e., processes, documents, etc.).

Having a full-time agile coach available to the teams on a 7x24 basis, with a vested interest in the success of agile methods was probably the single most important element of success that brought everything together. The agile coach was able to plan for as many contingencies as possible, observe the teams, gently guide them when they steered off course, run interference for the teams when their success was being undermined, set up safety nets to minimize the impacts

of falling, improvise new tools and techniques when all else failed, and assume a vested interest in individual success as well.

All of the students passed this course and earned their degrees.

On a side note, the agile coach spent a lot of time mentoring the lead of the third team. That lead probably learned more about agile methods than the other 14 students. The lead went on to become a web developer for the IT department of a small U.S. government agency's field office. In little more than 90 days, the lead transformed the IT infrastructure, bringing it into the 21st century. The lead could have spent years documenting every conceivable requirement or embody the principles of agile methods and focus on delivering business value. In this case, the lead focused on the latter.

Dr. David F. Rico, PMP, CSM

Instead of just any Scrum coach, consider hiring a Certified Scrum Coach

The Certified Scrum Coach (CSC) certification is only available to coaches that have already proven themselves to both customers and peers. In hiring a CSC, an organization knows they are hiring someone who meets the criteria of what to look for in a Scrum coach. A CSC takes some of the guesswork out of knowing who is an effective and proven Scrum coach – before an organization invests any time or money in the coach or their changes.

What is a “Certified Scrum Coach” certification?

Certified Scrum Coach (CSC) is a certification program for Scrum Coaches, administered by The Scrum Alliance.

The Scrum Alliance is a nonprofit membership organization with a mission to increase awareness and understanding of Scrum, provide resources to individuals and organizations using Scrum, and promote the iterative improvement necessary to succeed with Scrum. The Scrum Alliance hosts Scrum Gatherings and supports Scrum User Groups, providing a forum for interactive learning throughout the world.

A CSC certification is intended for experienced Scrum Professionals who have guided one or more organizations in applying Scrum effectively. These are individuals with a diverse experience across multiple organizational systems such as multiple teams, products, project cycles, environments and/or technologies. These are also individuals who have a deep knowledge of Scrum and related practices, are able to advise organizations and leadership, facilitate diverse stakeholder discussions, retrospective in their own learning, lead by example and challenge the status quo.

What makes a Certified Scrum Coach certification worthwhile?

CSC certification has a strict acceptance criteria

In order to be eligible for CSC certification, a candidate must meet the following criteria:

- The candidate must be a Certified Scrum Professional (CSP).
- The candidate must demonstrate (through a comprehensive application) at least 1,500 hours of Scrum coaching over the last 5 years, as distinct from the role of ScrumMaster, Scrum Product Owner, or Functional Manager.
- The candidate must have experience coaching Scrum across multiple teams and/or organizations.
- The candidate must have two different client references who can verify the candidate's coaching experience and skills.
- The candidate must be actively engaged in, and contribute to, the Scrum community over the last 3 years.
- The candidate's application must pass a peer review conducted by a pool selected by The Scrum Alliance.

CSC has equally strict requirements for continued education, practice and re-certification

- A CSC's certification must be renewed at least every 3 years.
- A CSC is required to obtain at least 60 PDUs over the three year certification period. PDUs may be earned for Scrum coaching, professional activities, self-directed learning, professional education and Scrum community involvement.

Active support of a community of Certified Scrum Coaches

In addition to the requirements for certification or re-certification, a CSC has the support and feedback of an active community of Scrum coaches. The drive to teach and learn new techniques and ideas is very much a part of what makes a Scrum coach effective and this community of other CSC certified Scrum coaches can be an integral part of making sure the organization that hires a CSC gets every benefit of a community-worth of knowledge.

When is the best time to hire a Certified Scrum Coach?

The best time to hire a Certified Scrum Coach is right now. Don't wait for a Scrum project to fail or be in trouble before your organization considers hiring a Scrum coach. Scrum coaches can provide extremely valuable insight and assistance when an organization

decides to implement Scrum. Many problems are easier to prevent than they are to resolve after they have occurred.

If an organization has a Scrum project already in trouble or just has the nagging feeling that they could get more benefits from Scrum than they are currently seeing, hire a Scrum coach to assist the organization in resolving the problems and increasing the success and benefits of an already running Scrum project.

When you hire a Scrum coach, be sure to find one with a Certified Scrum Coach (CSC) certification from the Scrum Alliance to reap the benefits of the Scrum Alliance's stringent certification requirements and a community of active Scrum coaches.