

Tips and Tricks for Successful Offshore Project Management

Prepared by:

James Buchanan

**May 15th, 2014
Version 4.0**

Executive Summary: 3
Leadership and Values in Working with Offshore Teams 3
Soft Skills to help the Team 4
Practices specifically for off-shore projects with a significant time zone difference..... 4
U.S. Management of Offshore Projects 5
Offshore Management of Offshore Projects 6
Agile principles which work well regardless of offshore situation 7
Summary 7

Executive Summary:

This Brief is intended to be used as an aid in project management practices with Multi-Site development in Agile teams. This is not intended to be a process guide, but simply a series of tips and tools to improve output and reliability. This document is meant to be consumed along with the Agile Values and Leadership brief that set the foundation of agile behavior and leadership. These practices must be used in conjunction with this process relegated tools.

Multi-site development with Agile has become common in the agile world as a way to reduce costs, and provide companies the ability to flex in their dev team capacity as needs rise and fall. This current situation has not come about without its share of hiccups, bumps and jolts along the way, nor is it by any means without its challenges. It is not a turnkey or automatic process by any means. Close attention must still be paid to current status, project velocity, risks and issues. Constant communication of progress, requirements, risks, changes in scope, status, personnel and architecture must still flow back and forth in a timely manner in order to maintain this level of performance.

This brief is intended to offer guidance on Multi-Site development challenges, and offer some tips and tricks that will help in the process.

Leadership and Values in Working with Offshore Teams

This document will not go into a detailed discussion of Agile leadership and cultural values that are effective, but will only touch briefly on a few fundamentals that should be considered. For more insight into leadership please see the Agile Leadership and Values brief.

One of the principle problems with working with offshore teams is that people on both sides feel uncomfortable with communication, cultural and language boundaries, and the general hassle and problems with the tools we use to collaborate more closely like video chat. These issue create a white elephant in the collaboration of the team that is often ignored due to the discomfort of addressing it. This is the principle issue with forming human connection in the team. A connection that agile relies upon for trust and high communication.

Instead of avoiding talking about the challenges, the team needs to put them front and center so that they can be addressed. It is also a known feature of human psychology that adversity often bonds us when we face it together. Working as a team to address things that are uncomfortable will take the power out of challenges, and instead turn them into factors binding the team together.

The Leaders of the team need to focus on leading by example in allowing the team to feel safe at addressing any issues that make their interaction less comfortable.

The following chart shows the difference between Command and Control style leadership, and the Servant Leadership values of Agile.

Differences in Leadership

| | Command & Control | Servant Leadership |
|--------------------------|--|--|
| Business Metaphor | Organization is a machine; Focus on process over people | Organic structure of relationships; Focus on culture over process |
| Authority | Directive and controlling; Top down | Participation by entire group; Bottom Up. |
| People | Instruments of production; Mechanistic view | Greatest assets and sources of creativity; Humanistic View |
| Leadership Style | Distant and detached; Authoritarian, Autocratic Leadership Style | Connected and present; Democratic or Laze-fair leadership Style; Adaptive Leadership |

| | | |
|-----------------------------|---|---|
| Supervisory Approach | Dictate, control, punitive | Listen, facilitate, encourage |
| Service Orientation | Self-serving - What can you do for me and the organization? | Other serving - what can I do to help you fulfill your goals and mission? |

Soft Skills to help the Team

The following tips are focused on EQ, or soft skills that will improve the function of your teams.

- **Language:** A very common issue is that teams do not understand each other well due to accents or poor language skills. Often people feel embarrassed about asking for others to repeat themselves, especially when they have to act multiple times. Often people will just pretend they heard or understood to avoid this discomfort. The team needs to strive to make it okay to ask for clarity whenever needed, and with no embarrassment. Talking about this is often all it takes to make this acceptable. If the team has members that have a very hard time communicating designate the best communicator on the team as a translator, and allow the challenged members to communicate thorough them to add clarity.
- Spend time with the team if possible. This is mentioned later again in process, but its value is discussed here. A great deal of human discomfort comes from the unknown. By bringing the offshore team to the US or together at least once for the first project kickoff will build understanding, and friendship that greatly reduces discomfort with each other and the human challenges that arise. Teams that have spent time together will joke about and address their challenges instead of being overwhelmed by them.
- Acknowledge that building friendship and relationship is a benefit to bridging the gaps between the team. Our teams are human beings, by being human and social we gain a great deal of the interaction needed in agile. Use group IM, or frequent phone calls or video calls to not just talk about the product and work, but to share the kind of chatter that normal collocated teams exhibit with each other. The scrum master especially should make an effort to know all his team members and to be comfortable with them.

Practices specifically for off-shore projects with a significant time zone difference

The following practices are designed to minimize the impact of great time differences in Agile development practices when teams are separated by great distances and time barriers. Since Agile relies on strong communication, and team interaction a degree of additional planning and predictive style work is needed to support disparate teams.

- **Have a Primary and Secondary PM Role.** Regardless of the lead PM being with the offsite team, or in the USA, often support help is needed across the ocean from the lead PM. It is helpful to have a designated go to person to help with minor tasks like waking people if support is needed, or coordinating calls and meetings. The roll of the support PM is to provide value wherever possible. This is mostly in being able to run through a series of tasks coordinated with their counterpart that allow more work and coordination to be done when the other PM is sleeping. It is not unusual that a task or email could be sent that sits for a full 12 or 24 hours waiting on a slight point of clarity in what is needed. If a support PM is present those types of delays are rare. It is the role of the lead PM to clearly communicate what help they need to the support PM.
- **Product/BA/UI personnel should work ahead of the Dev/QA team as much as possible to improve the efficiency of the Iteration.** Complete User Stories will minimize Q&A time and changes to code. This is not entirely essential for standard Agile practice, but it is absolutely essential for offshore project velocity. Every question has the potential of delaying the iteration velocity by ½ to 1 day. This also provides a reliable backlog for the Dev & QA team to review for the next iteration.

More clarity on stories provides higher waste in documentation, but is offset by productivity not being delayed.

- Product/BA/UI personnel should provide quick turnaround (same day) on requirements questions keeps the iteration velocity going forward. This may require a daily early morning or mid-evening check of email and a quick reply. This is not entirely essential for standard Agile practice, but it is absolutely essential for offshore project velocity.
- The QA lead should send test scenarios to the Product/BA/UI personnel within the first few days of the iteration, for review and traceability. This minimizes missed requirements and/or test cases and gets questions answered ahead of time with the goal of completing testing within the iteration.
- The autonomy and authority of the offshore DBA team to make DB architecture decisions reduces or eliminates the time needed to coordinate with USA resources for DBA review and approval.
- The use of Code Collaborator or other code sharing tools for code reviews minimizes the turn-around time needed for this effort. This also increases the code transparency between the two sites. Schedule code reviews earlier in the iteration to minimize the impact of turn-around time of Q&A.
- It is greatly preferred for the Dev and QA resources to be in the same location so that one team's questions can be answered by the other team; Dev work can be tested in the same day rather than waiting for the QA team to come on-line; bugs found by QA can be fixed immediately. In short, true Agile capability is lost if the Dev and QA teams are not in the same location.
- Bring newly formed project teams to US for the Project Kickoff meeting and the first two iterations (0 and 1). Teams that have been working together for a long time can skip this step. This enables the entire team to get to know each other face-to-face and understand the non-verbal aspects of each person's communications. This also facilitates the initial steps of the project where the team is defining the architecture, hardware, environments and other items critical to the rest of the project. Most times this requires multiple discussions with several different support groups. There is no substitute for minimizing the time required to complete these tasks.
- Group IM Chat Room – A group chat room with logging can be a great tool for keeping up with what each part of the team is working on. Formal changes or request scan be documented in the agile tools used, or in email, but chatter in the team can be in group chat. This exposes to all the team. Even if there is a time difference the team when they log in can quickly review the discussion the other part of the team had in their day. I have seen this work especially well when teams strive to have discussions in this medium to make sure all discussion is available to the other half of the team.

U.S. Management of Offshore Projects

The following section describes best practices for providing management support for disparate multi-site teams.

- Give the team the responsibility and authority to move forward and get the work done. The more roles of the team you empower in the offshore team the more they can continue to act rather than being blocked waiting for US resources or assets.
- Set the software requirements and the project team expectations and guidelines and give the team the leeway to estimate the work and follow through with it. The team needs room to be creative in its approach to solutions and develop the team cohesiveness and maturity to meet its commitments. Be on the constant lookout for hidden or emerging dependencies, risks, and issues but do not set limits or controls on the team in such a way that it stifles their flexibility or creativity to solve the problems and challenges handed to it.
- Trust the team to be motivated and do what is in their power to be successful. The offshore teams are composed of professional software engineers who have done hard time in college and who are usually self-motivated to work hard and be successful. The PM needs to trust the team to do its job, if the software requirements and project team expectations and guidelines have been set adequately. Questions about team or individual performance should only be raised to the

appropriate functional manager only after adequate time has been taken to document any irregularities or deficiencies.

- Treat the team with respect. Sometimes it's easy to forget that the folks on the other side of the planet are living, breathing humans too, and not just disembodied voices or an email address entry or homogenous team "black box" that somehow produces code. Get someone in the Offshore team to take pictures of each person and sent them to you to post in your cubicle.
- Manage with positive reinforcement. Management by fear, fault-finding and intimidation is the most limiting form of motivation, and in the end always backfires. Yes, it can produce results, but the long-term damage to people and the overall team will produce less overall results and increase personnel turnover. People will end up resenting you, producing the bare minimum to meet the established requirements, and will not be motivated to produce anything else. It takes more heart, energy and thought to manage positively, but if you start off thinking positively with a vision of success, the steps to achieve that will come to you more naturally. If you can motivate people with a positive attitude, a vision of success, with constant positive reinforcement, they will not only respect you but be willing to autonomously put in the extra time to meet a milestone or resolve an occasional issue on-schedule.
- Manage by example. Put in the extra hours; treat people with respect; trust the team ... by doing this you will lead by example, earn the respect of the offshore team, and motivate them to do likewise.
- Be committed to working a long day or off-shift day per week per offshore project. Be committed to checking email and following up with an email or phone call either early in the morning or mid-evening every day while the Offshore team is still in the office. Require the same for the Product/BA personnel and to some extent Dev & QA managers in Denver. There will be at least one iteration planning meeting every two weeks and hopefully a touch-base meeting every other week where everyone is present to keep on the same page and discuss and resolve issues. Constant velocity and forward progress and a minimal loss of time will simply not be attainable without this commitment of support by the U.S. side.
- Use the telephone often, especially for off-shore projects. A 2-minute phone call can prevent 2 hours of back-and-forth misunderstanding in an email thread. Or prevent a loss of ½ or 1 day of duration on the project, waiting for someone to get back to you.
- Always be thinking 12-24 hours ahead. The SL team is already in that timeframe. Action Items, Q&A, and documents may have due dates which require thinking ahead to allow enough time for adequate action by the SL team.
- Use video group conference such as Skype or Goggle Hangouts as much as possible in ALL communication. Do not underestimate the power of face to face interaction in building connection, and the ability to communicate well. If your company does not have tools that support this, use any of the free tools like the ones mentioned to make your team successful. Do NOT settle for sub-standard conference call quality, or poor communication technology in any form. Without the ability to communicate with good voice quality your job of building a team becomes almost insurmountable.

Offshore Management of Offshore Projects

The following section describes best practices for providing management support for disparate, multi-site teams.

- The Offshore PM will occasionally ask the U.S. PM to "do the legwork" in communicating risks or immediate needs with the appropriate functional group manager for high-priority / fast turnaround items. Ex: Coordinating with matrixed release resources, or an architecture or security group for environment setups or other immediate needs. Needs should be communicated clearly and concisely so that a supporting PM can know what is being asked of them.
- Conduct pre-Iteration Planning meetings to review the backlog for potential user stories for the next iteration and provide sizing estimates. Develop a candidate list of User Stories for the next iteration, including an assessment of team velocity and capacity. Provide feedback to the Product/BA in time for them to assess and update the user stories before the Iteration Planning

meeting. If possible, discuss Lessons Learned before the meeting so this will proceed quickly and smoothly during the meeting. This should start 2 or 3 days before the end of the iteration.

- M-W-F Daily Status Updates sent to the U.S. PM, BA and PdM substitute for attending the Daily Scrums and help the U.S. folks maintain a working knowledge of how things are going. Many questions are queued off of these reports regarding potential risks or blocks which are immediately addressed.
- A documentation site or Wiki facilitates general project information as well as the potential for communicating daily hand-offs of tasks or data between the two site shifts. This is essential for keeping an offshore project on track.

Agile principles which work well regardless of offshore situation

- A high amount of Dev Unit Testing provides a high amount of visibility into the quality of the code and is ultimately reflected in a low number of bugs found in QA testing.
- Product and BA should work 2-3 iterations ahead of the Dev and QA teams in defining User Stories in detail. It is even preferable for the User Stories to be completely fleshed out as soon as possible. This will yield a more confident release date.
- Smaller User Stories leave time for Dev to pick bugs and fix them while QA tests the user stories. Also, smaller User Stories lead to a higher Iteration success rate since a small incomplete User Story does not have the impact on velocity as a large one.
- Give the Offshore team dedicated release resources, or the ability to at least move their code into the QA environment so they can test and troubleshoot without US release resource intervention.
- Consistent Iteration Planning: sizing of user stories and acceptance of points helped keep expectations in line and consistent progress.
- Accurately reduce the number of User Story points in the iteration to account for holidays and vacations of the foreign country. Do NOT deny the offshore team these holidays.
- Be conservative in the points committed to for an iteration. This allows for unknowns and sets the team up for success. Other user stories can be pulled in if the team finishes early. In order for this to be successful, the PM must know the makeup of the team well enough to know if they have the drive to do this on their own or need to be pushed a little. This only works in which the rules of scrum have been relaxed enough to allow this scrumban style additions.

Summary

Agile teams that are distributed can be effective, but since communication is a foundation of reduced planning in Agile, the separation creates a need for more planning upfront, and greater documentation to ensure everyone is aligned on understanding and goals. All practices that increase communication reduce this need for more structured planning.

It must be accepted that Agile development done multisite is always going to incur a roughly 30% drop in efficiency. Many of these tools can lesson that impact, but there is no substitute for face to face interaction in Agile practices. Even video chat is not a substitute for being in close proximity to each other, and hearing all the conversations as problems are solved.