

Agile at Scale - Implementing the Discipline in State Government (webinar)

| Questions | Responses |
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| What is the scale of the projects that have been used? Under \$1M? have any projects over \$50M leveraged this approach? | Keir Buckhurst: In the discussions I've had across the US I've seen projects at both ends of that scale. (Cliff Luckey agrees) |
| | Attendee: Ohio Department of Taxation ran an Agile project that approached (if not exceeded) that amount. Reach out to Mark Walker - Deputy Tax Commissioner/Chief Information Officer for |
| | Cliff Luckey: The same methods and principles apply for < 1M or > 50M. |
| | Josh Jackman: I agree the same priniciple apply regardless, but we've used it for large scale and small scale <1M projects. |
| How do you capture user input / feedback for the creation of user stories, and to get feedback when new features are deployed? | Keir Buckhurst: Great question; having the right product owner is key is a key part of the process, since they represent those users and are critical to getting and sharing that feedback with the team. Usually it's good to bring in other SMEs as part of the story development and later reviews. You'll also see that the NASCIO report recommends that a user centered design can play a key role as well. |
| | Cliff Luckey: Our users are part of the User Discovery Process. UAT and user training activity occurs prior to deployment |
| | Josh Jackman: We use Discovery sessions and have a team of Business Analysts that capture |

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| | requirements alongside POs from Business SMEs prior to handing off the work to teams for backlog grooming - Called Dual Track Scrum, this has helped us better refine requirements and address complex business and technical unknowns in advance. Once development is underway, we take input from mid-sprint demos with SMEs, Sprint Reviews, UAT and trainers prior to release. The Business also maintains strong communication with the field to get input after release. |
| How do you ensure compliance to Agile processes at scale? | Cliff Luckey: Agile Certified Practitioners (ACP) monitors and manages 4 SCRUM teams each |
| | Josh Jackman: We've used Agile coaches that work closely with POs and Scrum Masters to mentor and guide best-practices. |
| | Keir Buckhurst: Having an agile coach was probably the most consistent recommendation we heard from States about what was needed to be successful. |
| What average cost savings have you experienced since full agile adoption | Keir Buckhurst: most cios I've spoken to say it's less about savings, more that you're spending the money on the right priorities; less risk of wasted funding on features that aren't important to the |
| How can you deliver a product at the end of a sprint (s) when many Health and Human Services business systems are large, | Cliff Luckey: There 30 days of full integration, regression and performance testing after code freeze for every Sprint. |
| complex and integrated with other systems? | Josh Jackman: We leverage non-prod environments the replicate the production environments, including actual and mock interfaces, batch cycles, etc. In addition to QA testing within the sprints, we complete end-to-end business testing in UAT. |
| | Keir Buckhurst: The product can also be delivered for users to test; it doesn't mean it needs to go into production at the same time. Some clients I've worked with will only deploy to production after multiple sprints are delivered. But the interim sprints allow their internal users to test and verify the direction, |

| | and make sure the end product will meet |
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| Is this primarily aimed at internal development or also contract management when suppliers are using Agile? | their needs. Cliff Luckey: Both, the Scrum teams are integrated Josh Jackman: Primarily development teams |
| | and vendors that are integrated into the internal development process. |
| What role, if any, do project managers play in your Agile environment? | Cliff Luckey: Most PMPs became PMI-ACPs. Many of the 47 Processes are still required in Agile, but not all. |
| | Josh Jackman: We use project managers to help build the roadmap across the across the entire project to help guide the project deliverables from inception to release, and to help keep stakeholders informed about status. |
| Do you mean to say that on your agile projects that you do not speak to any users and that the PO represents all types of users? | Keir Buckhurst: sorry, no, we do that as well, but having the right PO is a key part of it. Ideally (you'll see this in the nascio report) a user centered design is a part as well. |
| | Cliff Luckey: PO's are the conduit to business users, however, we also have product leads (business SMEs) that join the user story discovery sessions and DEMOS. |
| From a contracting perspective, the most difficult challenge I've seen is 1) getting an "indicative price" that satisfies financie and legislators and 2) keeping up during sprints with scope adjustments, pricing changes if necessary, and schedule. How do you keep up with the controls and finance expectations in contracting? | Cliff Luckey: Good question indeed: Agile Contracting and Finance considerations require as much planning, thought and effort as the Agile development and test methods/principles. It is a difficult question to answer in a couple of sentences. Contact me when you have 30 minutes and I will explain in detail. |
| | Josh Jackman: I agree that this is a complex question, but we closely monitor costs and use Agile to focus on the minimum viable product that meets project goals. |
| | Keir Buckhurst: In the <u>NASCIO report</u> you'll see some other recommendations around getting finance and approval authorities on board with an agile approach; some states have made sure their training approaches include |

| | an effort to educate those outside of IT as well. |
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| How did you solve the indicative price issue? | Attendee: haven't yet. I'm toying with a version of the federal fixed price determinable contract type, integrating the construction GMP model with an agreed statement of principles on considering complexity, inefficiencies, etc. It would at its core have to be negotiated with good issue elevation provisions. Still thinking about it, and the role of trust and the relationship Attendee: regarding contracting approaches - |
| | check out this article on the Scaled Agile Framework site - http://www.scaledagileframework.com/agile-contracts/ |
| How many team members do you have on each team? | Cliff Luckey: no more than 10. Most of our teams range in sizes of 7 to 10. the PO is a core team member also. Keir Buckhurst: Range I see across most clients is 5-10 |
| | Josh Jackman: 8-10: Each scrum team is PO, Scrum Master, 3-4 Devs, 2-3 Qas, and Business Tester. |
| Is that standard across the board? | Cliff Luckey: yes |
| What was the most difficult challenges you faced transitioning to Agile? | Cliff Luckey: Culture changes Keir Buckhurst: NASCIO survey of challenges |
| to Agite. | had training and legacy systems as top two challenges; procurement, integration, culture, and lack of dev opps were other big ones. |
| | Josh Jackman: Agile has been incorporated into the culture, but there are still issues with command and control mentalities in conflict with empowered development teams. |
| What Agile methodology tool are you using to manage SCRUM and Kanban? | Cliff Luckey: There are many - Rally, Jira, Jama, RTC Team Foundation, etc Jama, Jira and Qlik based analytics Agile Dashboard, |

a lot of people like Team Foundation and Rally Josh Jackman: We use JIRA. Keir Buckhurst: Jira is what I see most often. Is there a PPM tool being used in conjunction with for example JIRA Cliff Luckey: Jira is great for task to do SCRUM? management used by the Scrum team, all tools to include PPM should integrate- PPM, ALM, JAMA, JIRA (must integrate) look at Task-Top or Agile Craft Josh Jackman: We use JIRA to manage our projects Cliff Luckey: We estimate how many Sprints How are you estimating a SCRUM based project when you need to an Epic will require. We know the fixed cost work under fixed fee model? of each Sprint. Josh Jackman: We estimate based on the cost of the teams and supporting resources, which can be broken down into weekly increments if necessary. Keir Buckhurst: Some we spoke to recommended having a Sprint 0 to help assess and set a budget, based on the number of sprints expected. That first sprint can be T&M, with fixed pricing after that. There are some other recommendations in the NASCIO report. Josh Jackman: Moving from a 20+ year old @Josh you said your group was changing from a Mainframe to mainframe, we learned that a lot of the something Java like. Can you business and system knowledge was lost, with explain the challenges you had pain points regarding batch, interfaces, and going from Mainframe to java? being able to validate that we were getting the same outcomes in the converted system. We also had to change business expectations for functionality, since mainframe functions differently than web-based (both good and bad)

How do you manage requirements Attendee: regarding requirements traceability traceability in Agile with the - I am working with one project team that has ~9000 detailed requirements documented. changing priorities? They are mapped to the Feature. Think of the hierarchy -Epic/Feature/Story • For this project, mapping to the Feature worked best less tracking overhead Strong Product Owners who are able to make quick decisions regarding functionality are key. (Cliff Luckey agrees) Cliff Luckey: The tool we use individualizes all acceptance criteria (AC) - AC is the requirement, not the parent user story. All artifacts attach to the AC. AC and user stories will get backlogged if other priorities shift as a result of business needs of governance Josh Jackman: We use light-weight documentation to capture the delivered product, which is helpful in case we need to make future changes. Typically, the delivered product reflects the evolved requirement. Keir Buckhurst: I've seen test automation How mature is test automation or Test Driven Design in your State further ahead in my experiences, both at agile projects? Meant 'Test Driven state and local level Development' Cliff Luckey: Very mature, TDD is built into the DEV process. Also, a vast amount of automated scripts run after daily builds, new scripts are added during the Sprints to accommodate Sprint Code changes Josh Jackman: We also use automated test scripts to increase testing coverage and aid regression testing, with new scripts built within the sprints. We are also working to use TDD to drive development. Cliff Luckey: We have 30 training videos all We often hear about skill gaps and you've referenced initial training new employees watch before they join a for your staff in Agile. How do you Scrum team. We require extensive measure your team's proficiency in certifications and hands-on experience before

people are assigned to Agile roles. The good

| Agile or any other technology and then close those skill gaps? | news is: you can't fake this stuff. If you don't know what you are doing it will become apparent, quickly. |
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| | Josh Jackman: We use Pos and Scrum Masters that are certified practitioners and use mentoring to help acclimate to the Agile environment. We rely heavily on Scrum Masters to guide the Agile processes within the teams. |

Additional questions or comments:

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See Full Agile Report Here: <u>NASCIO.org/AgileGov</u>