

## CASE STUDY

# BUILDING PREDICTABILITY WITH ON-TIME DELIVERY FOR THE ARCHITECTURE LINE OF EFFORT



## CONTEXT

The Air Force Research Lab's Architecture Line of Effort (LOE) creates high-level architecture diagrams and packages to support AFRL's digital transformation.

## IMPROVEMENT OPPORTUNITIES

The Architecture LOE wanted to improve their customer and process owner support by delivering architecture diagrams with better first-time quality.

- The team members created diagrams requiring multiple touch points with customers with differing needs, perspectives, and changing priorities on what should be documented.
- They were often given disparate & incomplete data and utilized outdated project management approaches, causing heavy manual work and rework.
- The team lacked a codified best practices approach to their work resulting in a confusing array of differing processes, making it difficult to reliably deliver architecture diagrams with accurate data.
- The architecture team members struggled to visualize the workflow, creating confusion around work status.

The team wanted to improve speed and "first-time quality" and started an agile transformation to help chunk, prioritize, communicate, and to track their work, leading to more predictable deliveries

## SNAPSHOT



Architecture Modeling,  
Simulation & Analysis



Defense



Scrum, Scaled Agile,  
Digital.ai

## OPPORTUNITIES

Poor first-time quality, incomplete data, conflicting priorities, and need for workflow transparency.

## RESULTS

- 83% adoption of agility practices, leading to 69% increase in completion of planned work
- Clear, prioritized, and visualized work
- Regularly scheduled work product demos with rapid stakeholder feedback
- Senior leadership support for the agile transformation

**"Scaled Agile is the best program management approach I have ever used."**

**- Jeff Zweber, Product Manager**

## RESULTS & BENEFITS

- Teams established capacity and calculated load creating realistic work completion timelines.
- The Product Manager worked with the teams to prioritize the work based on deadlines, milestones, and customer needs to create a workable, high level 3-month roadmap with drafted stories ready for refinement at sprint planning events.
- The teams had successful PI Planning experiences, with team members playing key roles such as scrum master & product owner -- laying the foundation for scaling up to larger efforts.
- Teams stayed on cadence with agile ceremonies, such as sprint planning, team sync, backlog refinement, sprint review, demo, and retrospective resulting in predictable deliveries.
- The teams became accustomed to frequent demonstration of their work for rapid feedback. The teams had positive response from stakeholders, and got the feedback needed to adjust content and improve product quality.
- Stakeholders were able to see where their work items were in the development cycle and deliveries gained more realistic timelines.
- The Digital.ai tool was used to tie the team's work to the Air Force Research Lab's four strategic initiatives and to create a single source of truth.

The implementation of basic agile practices, cadences, and work management tools supported the Architecture Line of Effort to gain clarity, transparency, and to track their work -- leading to more predictable deliveries. The transformation simplified prioritization and added much needed feedback into their creation process, allowing teams to deliver faster, higher-quality Architecture MS&A outputs to help the Air Force Research Lab's overall mission.

## WORDS OF ADVICE

Transforming to an agile model has a stronger draw than ever. It creates happier and engaged employees, increases productivity, improves built-in quality, and promotes faster deliveries to stakeholders and customers. Agile transformation starts with a reason to change, with leaders driving the change, and implementing the small steps to start that change.

It takes an experimental approach, starting small and scaling up -- changing a few things at a time, learning, and trying again. Once people see what the pioneer teams are accomplishing, other teams will want to join in the culture shift to success.