

Empowering Excellence: The Agile Transformation Journey of Tech Ops Technology



Playing a pivotal role in ensuring aircraft readiness and safety, the Tech Ops Technology department manages a network of 55 critical applications in the complex and fast-paced world of aviation. This responsibility demands not just technical proficiency but also operational agility and organizational harmony. Coming off a lengthy multi-year project, it became clear that the department needed to tackle several latent challenges head-on to maintain progress and meet growing demands. Leadership recognized that fostering a culture of efficiency and work-life balance was essential, and saw the potential of Agile practices to drive transformative change, unlocking both immediate and long-term benefits for the organization and its employees.

OBJECTIVES AND OPPORTUNITIES

Tech Ops Technology had a series of strategic and operational opportunities to optimize their productivity and delivery timelines. Increasing transparency and visibility across Teams was a main objective, and this was identified as a way to create more effective prioritization and limit duplication through accurate progress monitoring. Furthermore, strengthened communication and delivery efficiencies would help lessen cognitive loads for Team members, ultimately bolstering productivity and morale. In doing this, we saw it would likely increase the department's responsiveness to market and Customer needs. The transformational journey was thus designed to fulfill these opportunities by focusing on key objectives: improving predictability, enhancing quality, increasing Customer satisfaction, and cultivating a more empowering environment for the workforce.

CASE STUDY SUMMARY:

Opportunities

- Increase visibility and transparency within Tech Ops
- Create clearer prioritization of work
- Increase delivery efficiencies
- Streamline communications and collaboration
- Lower the cognitive load and context-switching

Solutions

- Restructuring roles and responsibilities, including Epic Owners, Product Managers, Business Owners, and Scrum Leaders
- ART event optimization for improved PI Planning and enhanced visibility
- Centralized backlog and Kanban systems for managing Epics and Features
- Improved Flow Metrics and visualization through dashboards
- Enhanced prioritization framework using Weighted Shortest Job First
- Continuous learning and adaptation through feedback, retrospectives, and Communities of Practice
- Leadership and team empowerment through Agile Leadership Team (ALT) and servant-leadership mindset



THE AGILE TRANSFORMATION JOURNEY

To counter these challenges, Tech Ops embarked on an Agile Transformation in April of 2022, drawing on the expertise of Agile Velocity to lead the initiative. The journey began with intensive planning and strategic alignment, engaging leadership to understand Agile principles and their application towards set business outcomes such as better predictability and heightened customer satisfaction. The transformation initiative also prioritized the creation of an Agile Leadership Team (ALT) responsible for sustaining change momentum through continuous support and guidance.

Setting a clear, compelling purpose for transformation, Tech Ops adopted the Scaled Agile Framework (SAFe®) to facilitate a coordinated approach among the 300-plus member organization. The Agile Velocity coaches, and Southwest® leaders from Tech Ops Technology (IT) and Tech Ops Systems (Business), agreed to slow roll training to ensure proper knowledge retention, pragmatic application of processes, and avoid training fatigue.

With Scrum and Kanban frameworks implemented on a team level, the organization of teams into Agile Release Trains (ART) allowed for streamlined operations, aligning technical and business areas to significantly improve delivery cadence and quality. The transformation also necessitated cultural and structural shifts. Coaches like Bhavani Krishnan played a crucial role in shifting mindsets towards empowerment and collaboration, fostering an environment that valued decentralized decision-making, and cross-functional teamwork. These changes were not limited to internal practices but extended to embrace vendor partner integration, enhancing both the internal and external synergy of operations.

Key Outcomes

- Increased predictability and throughput
- Improved customer satisfaction
- Quantitative improvement in Flow Metrics, particularly Feature Cycle Time and Throughput
- Enhanced team engagement and ownership of work
- Greater visibility and transparency across teams

IMPLEMENTED SOLUTIONS

The transformation set in motion several targeted initiatives designed to address the core challenges identified:

- **Role Realignment:** Clarifying responsibilities by redefining roles for Epic Owners, Product Managers, Business Owners, and Scrum Leaders ensured accountability and contributed to efficient decision-making processes.
- **ART Event Optimization:** Enhanced planning and feedback mechanisms through Program Increment (PI) events, and Inspect and Adapt workshops encouraged continuous learning and adaptation, driving ongoing improvements.
- **Centralized Workflows:** By implementing centralized Backlogs and Kanban systems, Tech Ops enhanced visibility and managed workflows more effectively, aligning strategic priorities with operational execution.
- **Enhanced Flow Metrics:** Visualization dashboards allowed for real-time tracking of progress and impediments, leveraging Flow Metrics to continuously optimize performance, and transparency across the ART, and focus on improving predictability and productivity through use of metrics like Lead time, Cycle time, and Throughput.
- **Prioritization Framework:** The Weighted Shortest Job First (WSJF) method streamlined decision-making around task prioritization, ensuring resources were allocated to high-value tasks first. Regular review sessions allowed priorities to shift in response to evolving business needs.
- **Continuous Learning and Adaptation:** Communities of Practice and knowledge-sharing initiatives broke down silos, fostering a culture of continuous improvement, shared learning, and innovation across organizational boundaries.
- **Leadership & Team Empowerment:** The Agile Leadership Team (ALT) fostered an empowering work environment by adopting a servant-leadership mindset, focusing on removing roadblocks and enabling teams to make independent, local decisions.



ACHIEVED RESULTS

Increased Predictability and Throughput

Increased predictability and efficiency were realized through better planning and empowered teams, leading to a Program Predictability Metric improvement from 67.3% to 105% across four PIs.

Improved Customer Satisfaction

The creation of a Centralized Backlog and Kanban Systems to manage and prioritize Epics and Features across the ART, focusing on delivering value more frequently and quickly.

Quantitative Metrics

The ART noticed visible improvements in Flow Metrics, especially in Feature Cycle Time and Throughput.

Enhanced Team Improvement

Teams became more dynamic, with the reduction of work-in-progress and cognitive loads enhancing employee engagement and ownership. Teams were able to dedicate time for innovation and work improved significantly.

Greater Visibility and Transparency Across Teams

Greater transparency across ARTs facilitated better capacity planning, aligning departmental objectives with resources and capabilities available.

LESSONS LEARNED

Throughout the transformation journey, key lessons emerged.

- Effective communication proved integral in overcoming resistance, fostering alignment, and ensuring cohesive efforts towards shared goals.
- Continuous improvement remained a strong focus, with the regular collection of feedback through Inspect and Adapt Workshops and regular Retrospectives leading to iterative enhancements.
- The value of expert guidance was underscored by the pivotal role played by Agile Velocity's Agile Coaches in navigating the complexities of change. An experienced coach is able to connect with individuals on a deeper level.
- To ensure the enduring success of the transformation, ongoing commitment from leadership is crucial. Continued engagement is needed to keep teams motivated and value-focused, sustaining customer satisfaction, maintaining operational excellence, and creating a culture of persistent innovation and adaptation.

CONCLUSION

The Agile Transformation of Tech Ops Technology showcases tangible benefits of the strategic adoption of modern methodologies. Guided by dedicated leadership and expert coaching, the initiative successfully addressed key challenges and set a robust foundation for future growth, unlocking new levels of operational effectiveness and employee satisfaction in a competitive and demanding industry.