Scrum@Scale Implementation at Lufthansa Systems with TAL Consulting

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Árpád Földesi
Zoltán Csaba

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agileeducation.org

One Broadway, 14th Floor
Cambridge, MA 02142

Introduction

TAL Consulting specializes in integrated solutions for enterprise partners, including agile consulting, individual and team mentoring, training, and, most importantly, supporting our clients through the execution of their transformations. We have been supporting Lufthansa Systems (LSY) on their company-wide agile journey and its product lines in their agile transformation journey for 5 years. This case study focuses on the transformation journey of Lido Flight 4D product between 2022-2024.

Lufthansa Systems is a market leader in IT solutions for the aviation industry. One of their key products is Lido Flight 4D, which calculates around 45% of all flights in Europe. Lido Flight 4D product organization has over 40 teams (with over 350+ people) in 4 locations (Frankfurt, Gdansk, Bangalore, Budapest).

This case study is based on the presentation delivered at the Scrum@Scale Summit in Berlin, 2024.

About Lufthansa Systems

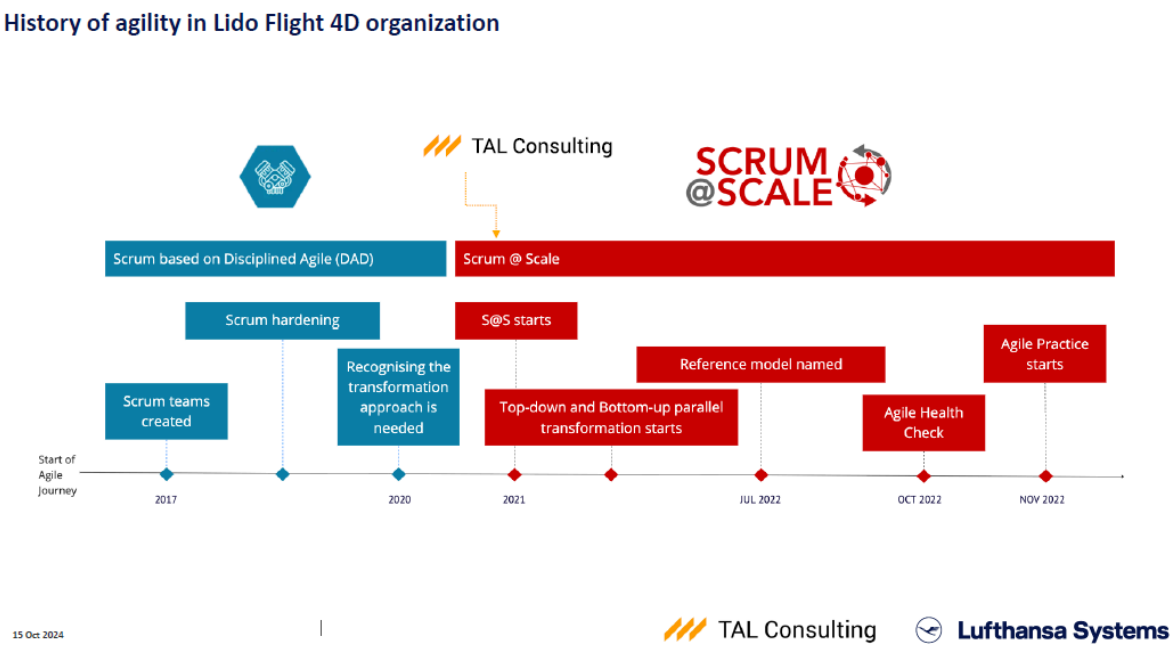
Case Study By: Árpád Földesi, Zoltán Csaba & TAL Consulting

History of Transformation and Organizational Challenges before Scrum@Scale

In 2017, Lufthansa Systems started the agile transformation, with siloed teams where some team members split their efforts across multiple product domains, and testing was handled by a separate team supporting the entire product. Initial agile adoption started with a wide but shallow implementation of Scrum through the Disciplined Agile Delivery (DAD) model, allowing teams to self-manage within their domain areas.

The DAD framework provided Lufthansa Systems with a foundation for agile practices, focusing on self-managed teams within specific domains. However, it lacked a lightweight, scalable mechanism to address cross-team dependencies and enterprise-level communication challenges. Scrum@Scale, by contrast, offered a streamlined framework designed to scale Scrum principles across multiple teams while maintaining alignment and reducing bottlenecks. This shift enabled the organization to go beyond isolated team-level improvements and achieve better coordination and faster delivery at scale.

Due to the monolithic, legacy architecture, teams had to coordinate closely for every feature, creating dependencies and bottlenecks. Deep domain expertise also made a pure feature-team structure less feasible.



Challenges with DAD

- **Siloed Teams:** Teams remained isolated within their domains, limiting cross-functional collaboration.
- **Dependency Bottlenecks:** Due to the monolithic legacy architecture, teams had to coordinate closely for every feature, causing delays.

- **Scalability Issues:** DAD did not provide an effective structure for aligning multiple teams across the product organization.

Recognizing these limitations, Lufthansa Systems sought **external expertise from TAL Consulting** to drive a more scalable and structured transformation. **Scrum@Scale** was selected to enable alignment across multiple teams, streamline communication, and reduce bottlenecks. With TAL's support, the organization transitioned from isolated team-level improvements to a **cohesive, enterprise-wide agile approach**, improving coordination and delivery speed at scale.

Customer Pain Points

Despite widespread Scrum adoption and strong leadership support, Lufthansa Systems continued to face challenges, particularly with its monolithic legacy architecture, which was gradually being transitioned to a service-oriented one. Common release cycles required cooperation among all teams, which complicated coordination.

- **Delivery Delays:** Before Scrum@Scale, product releases were often delayed by 20-40 days due to dependency resolution issues.
- **Time to Market:** There were 2 main releases per year with interim bug fix releases.
- **Dependency Bottlenecks:** Dependency resolution times typically spanned between 5-10 days.
- **Overcrowded meetings:** Meetings with non-contributing or minimally relevant attendees consumed excessive time, creating overhead and reducing focus on value delivery.

Team autonomy started to take priority over the common goal of the predictable and timely produced releases. This led to a loss of overall development focus, delayed deliveries, unreliable forecasts, and overburdened Product Owners managing disconnected communication channels and multi-domain product complexities. The impact of these challenges were unhappy customers, quality complaints, and delayed contracts. Addressing these pain points was critical for maintaining Lufthansa Systems' competitive edge in the aviation IT market, impacting over 100 airline customers globally.

Decision to Implement Scrum@Scale

By 2021, the leadership team (including Head of Flight & Navigation Solutions, Head of Product Development and Head of Transformation) of LSY Lido organization recognized the need to streamline communication between domains and, together with TAL Consulting, decided to implement Scrum@Scale as a lightweight framework for Flight 4D. Key advantages were that it is understandable for all who understand Scrum, enabled us to build on the organization's

existing strengths, addressed key pain points, provided minimum bureaucracy and complexity, and it did not rely on feature teams.

Our cooperation model included TAL Consulting as an end-to-end transformation partner. Not only did we provide hands-on implementation support and guidance to internal change champions, but our consultants also served as active members of the Executive Action Team (EAT) and the Agile Practice (AP). In the Lido Flight 4D case, a TAL consultant was a fully integrated member of the Agile Practice team, working closely with Lufthansa Systems to drive change from within.

We took a deep and narrow approach, starting with a reference project and gradually scaling across the organization.

Key Changes Implemented During Scrum@Scale Transformation

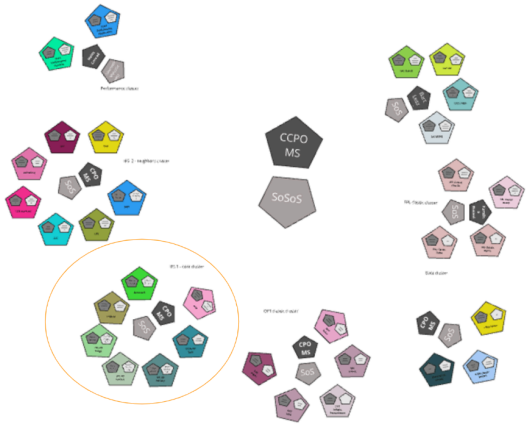
To address the complexity of changing technology, the product's key capabilities, and the organizational ways of working, we implemented seven key patterns at LSY:

1. **Change Management Model:** We treated the organization like a product, using an iterative and incremental approach to manage change. The S@S Transformation Roadmap model proved handy to align stakeholders and communicate the change initiatives.
2. **Agile Practice:** A cross-functional team led by senior management was set up to drive and execute organizational changes. Senior management in the Executive Action Team (EAT) needed the support of experts who have their focus on agile transformation. Agile Practice played a crucial role in the transformation, implementing 200+ organizational improvements per year:
    - Introducing a team- and team-of-teams level agile assessment program to track and enhance agile maturity.
    - Establishing scaled events within SoS to improve coordination and alignment.
    - Leading organizational refactoring efforts to optimize team structures and workflows.
    - Clarifying responsibilities between the EMS and EAT, ensuring effective governance.
    - Enhancing the SM hiring process, strengthening agile leadership capabilities.
3. **Agile Organizational Blueprint:** We created a structure (team configuration) based on the product and organizational visions, business priorities and architectural goals. It provided a transparent view and alignment of stakeholders about the future agile organizational structure and Way of Working.
4. **Reference Model:** We ran small experiments with seven teams to validate the approach before scaling. Our approach was "Think Big, Act Small, Fail Fast and Learn Rapidly."

Main goals were to improve predictability, reduce meeting overhead, reduce Product Owner overload, and deliver faster in the Scrum of Scrums (SoS).

5. **Scaling of Product Owner and Scrum Master Roles:** We introduced scaled roles to focus on present commitments and future planning. We managed to reorient the focus and mindset of the Scrum Master role to be on the delivery of Product Increments. While Scrum Master focuses on the PRESENT commitments and delivery, the Product Owner role can focus on the FUTURE and what teams should do next. During the Reference Model implementation, we introduced the missing middle layer of agile leaders: the Chief Product Owner and the Scrum of Scrum Master roles.
6. **MetaScrum Events:** We established scaled events for refinement, planning, daily scrums, reviews, and retrospectives. After several experiments, we combined the Refinements and Planning events on the SoS level. Within the MetaScrum, we kept the weekly events highly flexible, defining the agenda shortly before the event.
7. **Common Backlog:** An overall product backlog is used to ensure transparency of priorities, roadmap, dependencies and alignment across the SoS and teams.

Reference Model validates a way of working for the rest of the product organization



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Key Outcomes

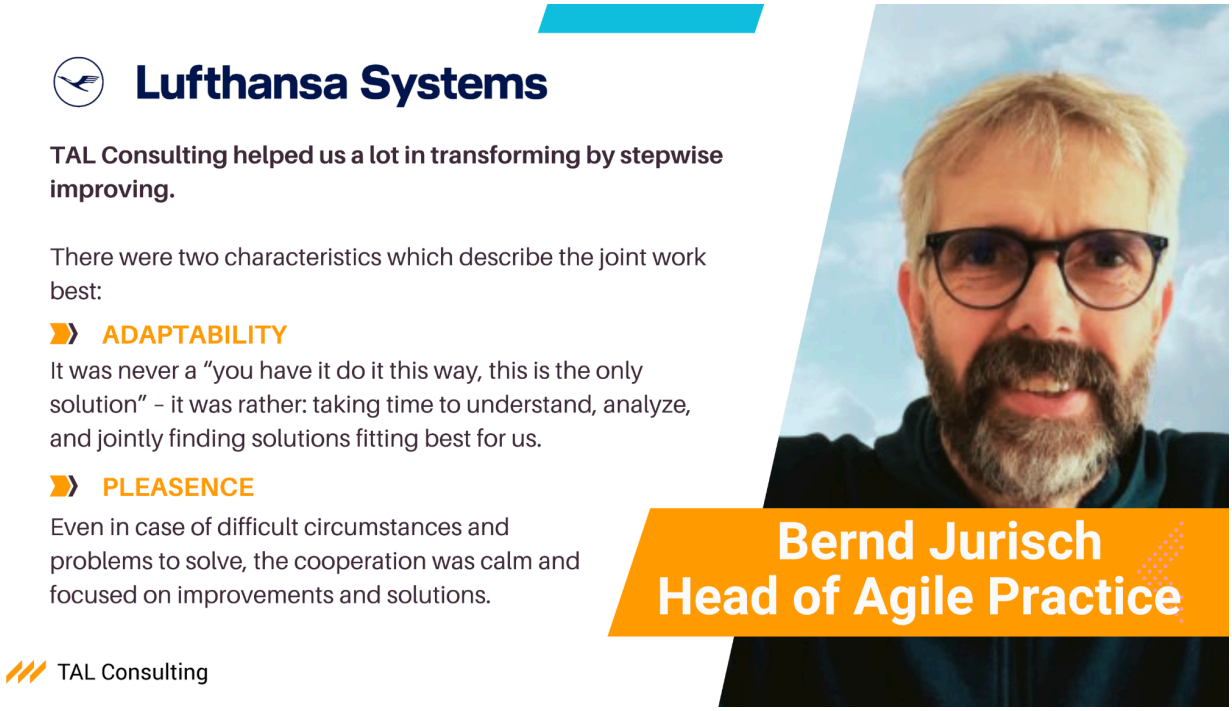
- **Increased Release Frequency:** Product releases accelerated from two major releases per year to six-week cycles, with bi-weekly interim releases for refactored product components.

- **Faster Dependency Resolution:** Dependency resolution times dropped from an average of 5–10 days to less than 1 day in most cases, reducing bottlenecks and enabling smoother workflows.
- **Streamlined Meetings:** Overcrowded meetings were replaced with a focused, efficient MetaScrum and scaled Sprint Review events, reducing time spent in meetings and allowing teams to concentrate on value delivery.
- **Improved Scaled Feedback Cycles:** Introducing six-weekly feedback and learning cycles improved delivery efficiency and ensured continuous adaptation to business needs.
- **Aligned Priorities and Release Plans:** Enhanced transparency and alignment across teams and domains ensured better coordination and predictable delivery schedules.
- **Clear Accountability:** Agile leadership roles, including scaled Product Owners and Scrum Masters, provided well-defined responsibilities and improved team support.
- **Planning Accuracy:** Teams aligned with the overall product-level goals, achieving above 80% planning accuracy.
- **Delivery Delays:** Product release delays reduced from 20-40 days to occasional 1-3 day delays.

Metric	**Before**	**After**
Increased Release Frequency	2 major releases / year	6-week cycles, with 2-weekly interim release
Faster Dependency Resolution	Average dependency resolution times 5–10 days	Less than 1 day in most cases
Streamlined Meetings	Avg. 50-100 participants	Avg. 10-15 participants
Improved Scaled Feedback Cycles	None	6 weekly
Aligned Priorities and Release Plans	None	6 weekly release planning
Planning accuracy	60%	80%+
Delivery Delays	20-40 days	1-3 day

Customer Testimony from Bernd Jurisch (Head of Agile Practice)

"TAL Consulting helped us a lot in transforming by focusing on adaptability. It was never a "you have it do it this way, this is the only solution." It was rather: taking time to understand, analyze, and jointly finding solutions that fit us best. Even amid difficult circumstances and many problems to solve, cooperation was calm and focused on improvements and solutions."



Conclusion

The transformation led to time-boxed, six-week product releases, higher transparency, aligned priorities and release plans, regular feedback and learning events that improved the delivery processes, efficient meetings, clear accountability of agile leadership roles, and balance between team autonomy and product-level business focus.

The Reference Model provides a working model for the whole organization where there is efficient collaboration among teams.

The Scrum@Scale framework provided Lufthansa Systems with a robust and flexible approach to agile transformation. By continuously experimenting and adapting, we were able to achieve significant improvements in operational efficiency and faster time-to-market for the releases.

Reflecting on our journey, we've identified three key principles that made the transformation successful and sustainable.

1. **Engage Stakeholders Early** – Bringing everyone on board from the start builds trust, fosters ownership, and creates a foundation for successful change.
2. **Embrace Continuous Adaptation** – Regularly using data and feedback from teams and leadership to validate and refine decisions ensures that transformation remains aligned with evolving business needs.
3. **Trust and Transparency Drive Speed** – Open communication, backed by data-driven insights, accelerates decision-making—cutting lead times from **4 months to just 2 weeks** in critical cases.

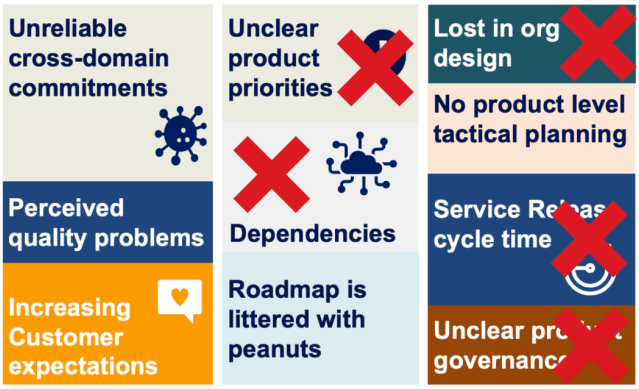
By integrating these principles, we created a transformation that is not only scalable but also deeply embedded in the organization's way of working.

Moving forward, the LSY Lido Flight organization is dedicated to continuous improvement driven by the Agile Practice and by the leadership of the EAT.

7 patterns applied by the SoS eliminated several pain points

Key Highlights:

- Org Design: Blueprint created and Reference Model implemented.
- Product Governance: Introduced scaled PO and SM roles, adding a new leadership layer.
- Scaled Meetings: MetaScrum events established to align priorities and goals.
- Dependency Management: Most dependencies resolved within SoS.
- Increment Delivery: SoS integrates and tests increments, enabling biweekly releases.
- Remaining Challenges: Some product-level issues persist



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About the Authors

Árpád Földesi is an Enterprise Agile Coach, organizational architect and consultant for agile transformations. He has broad experience in software product development in various industries and offers pragmatic solutions that help others achieve their business goals.

Zoltán Csaba is an Business Consultant and Enterprise Agile Coach with 15+ years' experience in enterprise agile environment as a Scrum Master, Product Coach and Agile Leader driving transformation in the IT industry.

Both are Registered Agile Leaders@Scale, POs@Scale, S@S Practitioners, and translators of the S@S Guide into Hungarian.