

AVIATION WEEK
**Program Excellence
Awards**

November 8, 2023
Washington, DC



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(This section must be signed)

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Thank you for participating.

Gregory Hamilton
President
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Acknowledged, agreed, and submitted by

Nominee's Signature

Date 6/2/2023

Nominee's Name (please print): Marlene Sharkey Marlene Sharkey

Title (please print): Senior Program Manager Senior Program Manager

Company (please print): Honeywell International Honeywell International

NOMINATION FORM

Name of Program: Novel Agile Deployment for Engines and Power Systems Programs (*Special Projects Category*)

Name of Program Leader: Marlene Sharkey, Sr Program Manager. Program Team: Rasa Fuller, Kumar Singarajan, Jurgen Schumacher, Rich Wunnenberg

Phone Number: 602-859-3947

Email: marlene.sharkey@honeywell.com

Postal Address: 111 S 34th Street, Phoenix, AZ 85034

Customer Approved

- Date: N/A
- Customer Contact (name/title/organization/phone): N/A

Supplier Approved (if named in this nomination form)

- Date: N/A
- Supplier Contact (name/title/organization/phone): N/A

**PLEASE REFER TO PROGRAM EXCELLENCE DIRECTIONS
AS YOU COMPLETE THIS FORM.**

EXECUTIVE SUMMARY: Make the Case for Excellence

Value: 10 points

Use 12 pt. Times Roman typeface.

What is the vision for this program/project? What unique characteristics and properties qualify this program for consideration?

Honeywell is committed to continuous improvement and evolving product development processes to become best in class. The Aerospace Engines and Power Systems Strategic Business Unit (SBU) leadership team formulated a vision to transform the way work is accomplished to be more effective, efficient, and sustainable so more products can be introduced to the market at faster cycle times. The goal was to embark on a new development process in a highly regulated, complex aerospace environment, simultaneously achieving measurable value to business metrics and improving employee engagement.

To achieve this vision, this team deployed an organizational change initiative using Agile processes in an agile way. The concept of Minimum Viable Offering (MVO) was used to introduce Agile principles and tools. The approach aimed to minimize disruption to on-going operations while providing maximum value to the working teams. Agile elements of increasing complexity and breadth were introduced sequentially to demonstrate and build value and to maximize organizational acceptance and culture change. Deployment consisted of three main phases: Acceptance, Managing the Work, and Planning the Work. In each phase, adoption of Agile increased, moving from basic standups to Kanban boards, and then to Big Room Planning, known as Scaled Agile Planning Interval (PI) Planning/Scrum.

The urgency to deliver on this vision has been amplified by increased market pressure to decrease costs and improve schedule while delivering to customer needs and navigating post-pandemic challenges. These challenges include turnover of experienced staff, managing through workplace flexibility (partial work-from-home), and responding to rapid changes in a distressed supply base worldwide.

Traditionally, the value of Agile has proven effective in the software industry. These positive results have included decreased cost, improved schedule, increased operational efficiency, and increased customer and employee satisfaction. Honeywell's vision was to expand application of Agile principles beyond the software domain and harvest these same business benefits in a long-cycle, highly regulated, mechanical aerospace product development environment for engines and power systems. The scope spanned mechanical, electromechanical, electronics and software domains.

With a mission to create value for both the business and for individual project teams, a new development process transformation was undertaken in January 2022. The focus shifted from "deploying Agile" to "affecting organizational change". The approach addressed the goal of the organization to become fully engaged with Agile achieving operational excellence which is scalable and sustainable across all projects.

First year adoption and benefits were substantial. The first organization-wide standup training launched the first week of January 2022, and by the end of 2022, 31 product development teams were leveraging the Kanban methodology with four of those teams transitioned to the Scaled Agile PI Planning/Scrum approach. The teams leveraging the Kanban methodology saw increased collaboration, quicker blocker resolution, and increased schedule adherence. The teams leveraging the Scaled Agile PI Planning/Scrum approach held a planning session for Q4 and within the first eight weeks of executing the twelve-week plan, they had pulled three weeks out of their schedule via visible work, strong collaboration, team engagement, and consistent leadership support. Today, Honeywell is strongly positioned to meet the vision of a fully engaged Agile organization designed to respond to the challenges ahead.

DIRECTIONS

- **Do not exceed 10 pages in responding to the following four descriptions.**
 - Allocate these 10 pages as you deem appropriate, but it is important that you respond to all four sections.
- DO NOT REMOVE THE GUIDANCE PROVIDED FOR EACH SECTION.
- Use 12 pt. Times Roman typeface throughout.
- Include graphics and photos if appropriate; do not change margins.

VALUE CREATION

Value: 15 points

Please respond to the following prompt:

➤ **Clearly define the value of this program/project for the corporation; quantify appropriately**

As Agile is successfully deployed with this program, Honeywell benefits from decreased product development cost, precise delivery to schedule, increased operational efficiency, and increased customer and employee satisfaction. The deployment leverages two key values of the Agile Manifesto: Individuals and Interactions over Processes and Tools and Responding to Change over Following a Plan. The implementation focuses on: Team Engagement, Visible Work, and Leadership Support. Early-adopter project results showed improved cost and schedule adherence. A major development sub-team improved their Schedule Performance Index (SPI) from 0.2 to 1.4 (500% increase in efficiency) during the first quarter of implementation. According to feedback from the teams, they were motivated, engaged and collaborating like never before due to the Agile values being deployed on this program.

Applying this novel Agile approach allowed us to quickly and broadly demonstrate the power of focusing on interactions and responding to change. With leadership engaged in blocker resolution and the teams talking to each other with visibility of work across all program teams, the organization began to experience and see the full power of Agile. In less than three months we began to see the benefits of Agile: decreased cost, improved schedule, increased operational efficiency, increased ability to meet customer milestones and employee satisfaction. For one program team a stretch target of 12 weeks was provided (versus their initial estimate of 26 weeks). Using the novel Agile approach the team delivered to the expectations in 9.5 weeks, exceeding their stretch target.

Prior to implementing this novel Agile approach, the organization applied all the Agile and Scrum tactics (which worked in a Software Development environment) at one time. Teams ultimately found little value in the approach, and they quickly returned to traditional project management tactics. In pursuit of value to drive organizational acceptance, this deployment team realigned to the Agile Manifesto and focused on the foundational values and principles that would support the complexities of Honeywell Aerospace's highly-regulated, hardware-focused environment and identified the tactics that would build project success and organizational buy-in: Standups for team engagement, Kanban for visible work, and JIRA boards for leadership support to drive blocker resolution. The success of focusing on these values of the Agile Manifesto to drive cultural change has become a best-practice that will help other Honeywell organizations approach Agile in a way that will more quickly drive value to those business units.

Furthermore, we have realized our novel approach has a much broader scope for implementation. While the initial focus of our approach was on New Product Introduction (NPI) program teams, once the success became visible across the organization, the deployment team began to experience organizational pull from other areas of the organization asking for help implementing the novel Agile approach. As such, we have benefited from efficiencies in design, testing, supply chain production environments, site transitions and leadership special projects throughout Aerospace.

We have continued to accelerate our Agile coverage in 2023 and are seeing impressive results. By the end of Q1 2023, 52 work teams have adopted the novel Agile approach to performing their work. And, more importantly, our people are embracing Agile and understanding that it brings value to their way of working. They understand that going forward, Agile is just how we do business.

➤ **Clearly define the value of this program/project to your customer**

With more than 72,000 engines and 100,000 Auxiliary Power Units (APUs) shipped since 1959, Honeywell products are used on virtually every commercial and defense aircraft platform worldwide. Our customers are not only demanding high performance and reliability of our products but have an increasingly high demand for speed of execution of our NPI product development program to expedite development of their high-investment aircraft programs. It is therefore imperative for Honeywell to not only deliver these capital-intensive programs to schedule and cost but have a detailed execution plan that can manage the complexity and interdependencies of technology and systems spanning Hardware, Electromechanical Systems, Electronics and Software. The Agile approach outlined provides the framework to efficiently deliver to customer commitments with precision in execution.

This team's novel approach to Agile deployment for NPI programs will result in tangible benefits to the end customer. Moving teams into a 12-week Scaled Agile PI Planning cycle requiring full team confidence votes for achieving the planned work ensures that Honeywell can adapt to changes while still driving overall schedule fidelity and customer milestone achievement. This ability to respond to change can also support improved joint change control management with efficient and rapid incorporation of customer change requests, driving improved customer satisfaction.

Product development teams within Honeywell can be viewed as the execution organization to the product business teams. In effect the product business teams become the internal customer to the product development teams. In this context, deployment of Agile techniques to improve overall product development efficiency allow the business team, and Honeywell as an extension, to use the productivity savings to invest in additional NPI programs, bringing more products to market with faster cycle times.

➤ **Clearly define the value of this program/project to members of your team; quantify if possible**

The members of the program development teams benefit from Team Engagement, Visible Work, and Leadership Support. Visible work allows teams to understand exactly what they are expected to deliver allowing the flexibility to adjust daily work to maximize efficiency. Leveraging standups, team members collaborate and work together to deliver outcomes, identify blockers and quickly respond to change. All members are engaged in the process. This empowers the team members, and they support each other to deliver their work. The other key aspect is leadership engagement. If a blocker hinders a team member from making progress or accomplishing their task, the team or leadership engage to help them resolve the blocker. In one of our first team's standups, a team member noted a key blocker was the approval of a funding request. The right leader was on the call and approved the request. This eliminated weeks of emails to drive this approval via traditional processes. The team members left motivated because they were able to continue with their work.

Our employees eagerly want to deliver results. The Agile approach makes it easy for everyone to know what they are expected to deliver, with the support of a team and leadership. Feedback from team members indicate they are more motivated than ever and that the cross-team collaboration and an ability to deliver results faster has increased their job performance and satisfaction.

➤ **Clearly define the contribution of this program/project to the greater good (society, security, etc.)**

People are our biggest asset at Honeywell. Increasing job satisfaction allows our teams to increase their joy and decrease their stress. It also allows them to perform with excellence and innovate. This fosters an improved work/life balance and allows them to contribute more to other important parts of their life, society, and the world. Job satisfaction can also be associated with positive mental health outcomes.

Decreasing inefficiencies also results in lower costs and less waste of precious resources including time and materials. Reduced waste of materials has a significant impact on the world around us due to the non-renewable resources that are required to extract and produce raw materials.

Honeywell Aerospace has a proud history of developing safety systems for all types of aircraft and spacecraft. With the novel Agile New Product Development approach, more advanced safety system products and services can be brought to market more efficiently and in shorter cycle times.

A societal benefit comes from knowledge transfer, face-to-face interactions, and flex-work optimization. Our novel Agile approach facilitates direct and efficient knowledge transfer from more experienced to less experienced professionals via many interactions during frequent standups and Scaled Agile PI Planning sessions. This creates a company and industry pipeline of trained aerospace experts. Face-to-face interactions promote increased collaboration, efficient communication and the creation of trust and empathy. During the Scaled Agile PI Planning sessions, large teams work together over the course of one or two days with very high engagement. This promotes team spirit resulting in a shared commitment to achieve the program deliverables. It also meshes very well with flex-work systems which many companies, including Honeywell, are adopting. Planning quarterly events maximize the efficiency of the flex work plan (everyone in one place at one time only during planning days) while maintaining the popular work/life balance benefits of working from home some days.

ORGANIZATIONAL BEST PRACTICES AND TEAM LEADERSHIP

Value: 35 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

➤ **15 points: Describe the innovative tools and systems used by your team, how they contributed to performance and why**

The deployment team took a novel Agile approach by leveraging two specific values of the Agile Manifesto: Individuals and Interactions over Processes and Tools and Responding to Change over Following a Plan. They were laser-focused on: Team Engagement, Visible Work, and Leadership Support. The first step was to ask all existing project teams and sub-teams, regardless of management method, to start engaging with each other in a daily standup structure. This allowed engineers and other functional team members across the entire organization to experience that first Agile value and it built awareness and acceptance of the positive impact that Team Engagement brought to their project execution. Next, coaches worked with targeted, critical-to-success project teams to identify their biggest

challenges and show them how the Agile mindset and methodologies would help to overcome their perceived barriers. In effect, coaches started with the problem rather than the solution. This allowed the teams to recognize the need for change. Coaches trained teams how to manage their existing work using a Kanban methodology to drive Visible Work. Over time, teams evolved to planning their work using the Scaled Agile PI Planning and Scrum methodologies. Once the teams saw the possibilities of the Agile organization, and experienced the benefits, they became invested in what was possible and began to drive the change themselves.

An organizational change initiative was deployed leveraging Agile in an agile way. The concept of Minimum Viable Offering (MVO) was used to introduce Agile principles and tools to the organization. The approach aimed to minimize disruption to on-going operations while providing maximum value to the working teams. Agile elements of increasing complexity and breadth were introduced sequentially to show value and maximize organizational acceptance. Deployment consisted of three main phases: Acceptance, Managing the Work, and Planning the Work. In each phase, adoption of Agile moved from basic standups to Kanban boards, and then to Scaled Agile PI Planning/Scrum.

In the acceptance phase, we deliberately started by deploying the concept of standups to the entire organization, regardless of what project management operating system their team leaders were using. The intent was to demonstrate the power of fast, daily collaboration and discussion across team members, raising issues and blockers immediately versus weekly status meetings which often added days to issue escalation and are structured such that the project lead asks for and receives progress reports, which are then summarized and reported up the leadership chain. We also deliberately called them “standups” instead of “standup meetings” to differentiate from status quo and to alleviate the concern of moving from one meeting per week to many meetings per week. The standups focused on each team member quickly answering three questions (What did I accomplish yesterday? What am I working on today? and Do I need any help?) and should take no more than 15 minutes. In a survey two months later, 70% of respondents said that the standups had improved communications on their teams.

The deployment approach was a modification of less successful past attempts to deploy Agile within this organization. Rather than use the traditional full Scrum Methodology, we took the time to truly understand the needs of the NPI teams. Through that assessment, we chose to start with standups to drive team engagement, and then the Kanban Methodology to drive visible work and blocker resolution via Leadership Engagement. We leveraged experiential learning rather than hours of classroom training. We also worked to minimize distractions (such as having dedicated resources separate from the NPI teams to create infrastructure and provide access to software tools) so that the teams could get the most value out of this change in methodology.

The Kanban Methodology was successful because it gave the team an efficient way to prioritize their work, leveraging the Agile Manifesto values without adding a lot of overhead. Due to the visible work and standups, team members were able to quickly and frequently communicate with each other and self-organize around the work. The increased collaboration and support from leadership allowed them to expose blockers early in the process and get the blockers resolved by leadership, increasing the team’s efficiency. This allowed for cost and schedule improvement vs traditional program management methods.

As teams became more experienced, they began using customizable features in tracking tools to set up their boards as it best suited their needs and to track real time progress. This gave the teams a visual representation of the work that had to be completed in the fixed duration and a yardstick of efforts needed to complete the sprint successfully.

Prior attempts at Agile deployment had the teams completing two to four hours of instructor-led training. We pivoted to an experiential model with less than one hour of education on Agile concepts followed by the initial standup for the team. The teams quickly understood the Agile mindset and were able to see immediate value in the first meeting.

Finally, we decreased the distraction-to-value ratio by providing deployment resources to quickly setup JIRA project boards, obtain access for team members, and bulk-load tasks for the team. This allowed the team to start gaining value immediately with limited investment or delay.

➤ **10 points: Define the unique practices and process you used to develop, lead and manage people?**

The organizational change initiative to embrace Agile practices to improve efficiencies was organized as a dedicated deployment program. A small team was formed within the Program Management Office responsible for the deployment, and a newly created Senior Program Manager of Organizational Transformation was tasked with leading the initiative. The remainder of the team consisted of program management professionals and other functional leaders. The deployment team met weekly to discuss deployment status, risks, and help needed. A Leadership Steering Committee (LSC), consisting of the SBU President, the Project Management Office (PMO) Leader, and Engineering Vice President had been formed well ahead of deployment to create the strategic vision for the organization's cultural shift to Agile. Throughout the deployment, this committee continued to meet with the deployment team bi-weekly to inform overall strategic goals and provide input on tactical approaches. The LSC also played a pivotal role in removing barriers to execution and providing an executive escalation path. The LSC allowed the deployment team and senior management to be in locked alignment on mission and messaging across the organization. With the SBU President acting as a strong Agile champion, this coordination strengthened leadership commitment and provided for a collaboration path whereby the deployment team could also guide leadership actions to maximize deployment success. The deployment team also partnered with a professional Communications Leader. A full communications plan was developed with this leader including announcements, newsletter stories, video testimonials of Agile success, and material in town-hall meetings to promote and communicate Agile team success stories. The communications helped facilitate organizational acceptance of Agile methods.

Another unique aspect of the Agile deployment team was that it was built with diversity in mind. A group of individuals were gathered from across multiple Honeywell disciplines and external hires were added to provide diversity of thought and experience. These external hires allowed the deployment team to assess existing processes and culture with "fresh eyes." The LSC encouraged the team to openly question why the current way of working existed and to challenge the status quo. External hires helped the team to exit the thinking that things should be done because "we have always done it this way."

Working through the lens of organizational change management, coaches took the time to truly understand what each team's challenges were. A key success factor was our intentional choice to meet the teams where they currently were, allowing them to start with standups and helping them bring their existing waterfall tasks into the Kanban approach to quickly improve collaboration and visible work management. At the start of deployment, the organization's culture still included a significant amount of top-down management. The LSC used their influence to reset expectations within the middle-management culture and then visibly demonstrated the shift to a servant leadership approach. The LSC and other functional leaders quickly began resolving blockers for the teams and driving the decision-making to the lowest possible level. With this Leadership Support, the teams quickly realized that they were now empowered to make decisions. In a short amount of time, the teams were able to resolve many

blockers on their own because leadership had broken down traditional barriers allowing the culture to shift.

The deployment team worked with organization and functional leaders to ensure they understood their role in changing the culture to an Agile environment. Our leaders quickly transitioned to a servant leadership model and were actively removing team blockers during the first Scaled Agile PI Planning event. The engagement of executives was unparalleled. During the event, the team gathered confidence when they saw the commitment and willingness of the leaders to get engaged in the intricacies of the challenges and genuinely help address issues on a real time basis. After a few iterations, the teams and mid-level managers became empowered and confident to address their new roadblocks with reduced need for higher escalation. This gave the teams confidence that their leaders understood their role in maintaining efficiencies and that this innovative approach was a sustainable way of working and an effective way of managing our business.

➤ **10 points: How did you leverage skills and technologies of your suppliers?**

In deploying the Kanban approach the deployment team leveraged JIRA software as the primary tool. This tool aligned naturally with the focus of the organizational change to Agile: Team Engagement, Visible Work, and Leadership Support.

One of the first program teams developing a generator product included a hardware supplier in their Kanban methodology. The supplier's work was visible and actively managed through Standups. Blockers were escalated, and the greater collaboration allowed the supplier to deliver on their commitments.

In another example, a development team was tasked with creating a development tester with the same specifications as a production tester. The team had to overcome two challenges; find a way to not compromise on production flow and at the same time develop a new product that is certified by a current production system. The team collaborated with the equipment supplier to bring an offline tester to the same level of current production configuration. This required the supplier to make both hardware and software updates to the offline tester. Once the offline tester was updated, it needed to be calibrated and certified to be at the same level of integrity as a production tester. Upon successful certification of the tester to current production levels (robustness correlation), the team was confident that modification of the tester can proceed to support the new product. The team collaborated with the supplier through daily standups sharing the details of hardware and software changes needed for the tester to be able to certify the new product. This methodology provided the special coordination of technical specialists to make the effort successful.

**DEALING WITH PROGRAM COMPLEXITY
(VOLATILITY, UNCERTAINTY, COMPLEXITY, AMBIGUITY, or VUCA)**

Value: 25 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

➤ **10 points: Describe UNIQUE areas of VUCA faced by your program and why. (Please avoid the issues surrounding Covid-19 pandemic, which was faced by all programs.)**

An area of complexity, volatility and uncertainty in the Agile organizational change deployment was the fact that it was targeted to an entire business unit with a large portfolio of NPI development programs,

some of which were very large. Changes in business priorities, customer needs and funding decisions affected many programs within the portfolio. An example of this occurred in late December 2022 in which a major program was discontinued due to a customer selection decision and 16 of 31 deployed agile teams were decommissioned. The novel Agile deployment strategy was developed to adapt to these changes. Most of the affected team members were the early adopters and thought leaders in the Agile transformation who had gained experience with an understanding of the value Agile brings to a team. Those re-deployed resources went on to lead and join other teams, and their presence facilitated rapid and efficient adoption of Agile in new NPI program environments.

An additional area of uncertainty and ambiguity is the aerospace workforce demographic shift. In recent years, many experienced engineers and professional employees have exited the workforce through retirement. This has necessitated increased recruitment of many early-stage career employees. Honeywell provides multiple tools and processes for knowledge capture which mitigates this experience gap. Nevertheless, the uncertainty of the timing and skillsets of resource changes creates a potentially disruptive environment for program teams and their performance. The novel Agile deployment created an opportunity to further mitigate this experience gap, by utilizing Scaled Agile PI Planning as one of its main elements. The PI Planning sessions consist of intense face-to-face collaboration with the entire team. This format provides a natural mentoring forum to transfer knowledge from the more experienced members to the early-career members. The knowledge transfer has been especially effective as it was situational and often in the context of solving practical problems immediately and in collaboration with other teams.

➤ **15 points: Explain how your team responded to these challenges. What changes did you make, what were the results?**

The deployment strategy for the Agile organization change was designed in an agile way. This allowed effective response in cases of volatility, uncertainty, complexity and ambiguity. Deployment of standups and Kanban were done in a modular way and organized around specific working teams. This often resulted in multiple teams for a given NPI program. This allowed the introduction of Agile techniques and methodologies to targeted portions of a larger program. The strategy was to employ this approach to maximize the benefit-to-disruption ratio and to socialize the approach to the larger program for select teams. In effect, a pilot program within a larger program was often used to accelerate effective adoption of Agile. This was in keeping with the overall strategy to foster acceptance first to maximize the success of more complete and complex subsequent applications of Agile. The modular approach also provided benefits as multiple teams were equipped with the knowledge required to continue the Agile transformation as they moved to different programs. The strategy proved effective in the case of one major program discontinuation as the resources from 16 teams re-deployed to other programs and were able to use the Agile techniques quickly and effectively in their new programs. This created a self-propagating model to allow more rapid deployment across the entire business unit.

Due to the foundational work with Agile deployment to NPI teams and the success that the organization had seen, we quickly rebounded from the reduction of 16 teams and accelerated up to 52 deployed teams by the end of Q1 2023. We leveraged the small percentage of Agile experienced resources that we were able to retain to help stand up the new teams. Twenty of those teams are now using the Scaled Agile/Scrum Methodology and their successes continue to strengthen, with one of the teams gaining 30% efficiency in the first quarter. More teams and other parts of the organization are coming forward and are requesting to start leveraging the Agile methodologies. Requests from new teams are a clear indicator of a cultural shift and the effectiveness of organizational change.

METRICS

Value: 15 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts, where predictive metrics indicate items that provide a view of how yesterday's actions and today's actions will affect the future timeline, cost or other requirement.

Provide charts/graphs that illustrate performance to these metrics:

➤ What are your predictive metrics?

The team developed two metrics to track extent of adoption and progress against deployment goals: number of teams deployed, and percentage of labor spend tied to deployed teams. The deployment space consisted of Honeywell Aerospace Engines and Power Systems SBU's portfolio of NPI development programs. Each development program would consist of multiple work teams, with larger programs consisting of more teams than smaller programs.

The roughly linear forecast line for number of teams deployed was created by a detailed schedule aligned to the work required to get a team fully working in a Kanban environment with standups. It also aligned to the deployment team's coaching resource availability and planned for only a small number of pilot teams per program. The 2022 deployment goal was set at 24 teams, targeted to be achieved by early November.

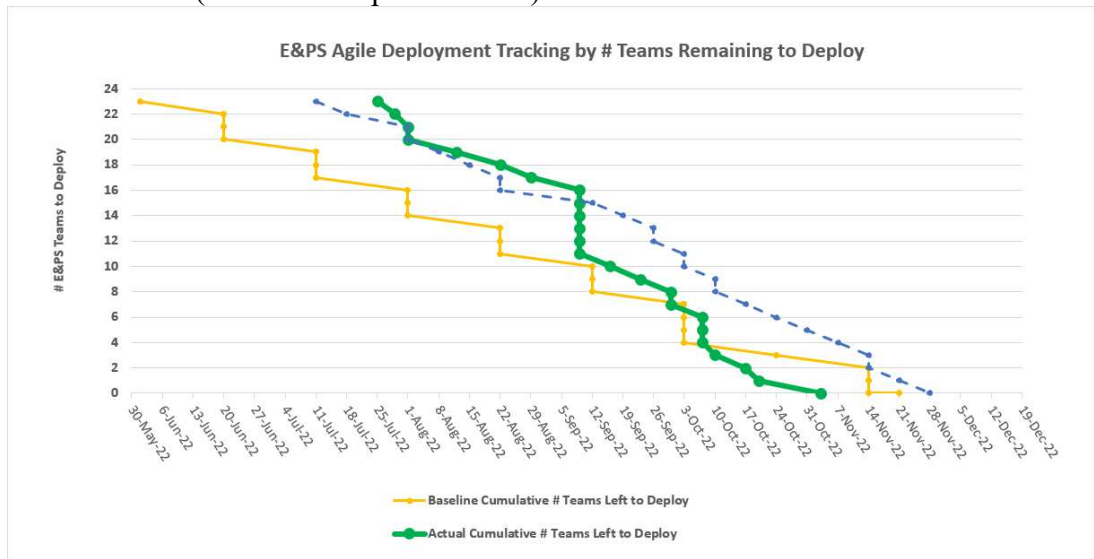
The metric tracking percentage of labor spend tied to deployed teams was intended to inform the SBU leaders of the extent to which Agile adoption was truly impacting their portfolio. Each team's work was tied to an assigned budget in the Work Breakdown Structure (WBS) within the larger NPI programs, and each team had a distributed elements of cost (EOC) detail aligned to their forecasted Estimate to Complete (ETC), which allowed us to document only the labor impact of their deployment. As each team moved into "deployed" mode, their labor cost was added to the numerator, and the overall SBU portfolio's labor spend was the constant denominator. The resulting number converted into a percentage of labor spend tied to deployed teams. Labor spend was chosen for this metric rather than gross spend, because the direct benefit of Agile is tied to people and their way of working. Other elements of cost, such as purchased materials and facility costs may only be indirectly affected by Agile methods, if at all.

As we moved through 2022 and began to see coaching efficiencies when more teams on a single program were deployed together, and when a team moved into a Scaled Agile PI Planning framework, we also saw non-linear (and increasingly positive) results against our two metrics, with acceleration especially visible later in the year. We used those results to predict what was possible in the future, and that informed our establishment of much more aggressive 2023 deployment goals.

➤ How did you perform against these metrics?

As the deployment progressed, early challenges tied to tool access were resolved. The use of experiential coaching brought efficiencies against our original schedule, and the number of deployed teams per program increased, creating significant deployment synergies. The resulting actual-deployments slope began accelerating in the right direction. By the end of 2022, 31 teams had adopted Agile methodologies in performing their work, against a target of 24 deployed teams. The graph below shows the acceleration in the adoption rate from the baseline plan. The team incorporated lessons learned from early deployment, added key team members with Agile and organizational change experience, and began to experience a pull for deployment from all corners of the portfolio as we gained critical mass of organizational acceptance by people on and adjacent-to deployed teams realizing the benefits. This acceleration in late

2022 continued into 2023 where, despite a loss of 16 teams with the discontinuation of a major NPI program, the organization deployed an additional 37 teams in Q1 2023 alone, bringing our deployment to 52 teams total (31 minus 16 plus 37 = 52).



Rapidly accelerating deployment will result in decreased cost, improved schedule, increased operational efficiency, and increased customer and employee satisfaction. According to direct feedback from the first team who moved into Scaled Agile PI Planning, they were more motivated, more engaged, and collaborating like never before. This team went from a troubled 0.2 SPI to a high-performing 1.4 SPI (500% increase in efficiency) during their first quarter of implementation.

➤ **How do your predictive metrics drive action toward program excellence? Please provide examples.**

Our metrics showed acceleration of deployment through 2022, predicting that aggressive 2023 deployment goals were possible. In 2023, the objective is to achieve 70% of the SBU’s labor spend managed within the Agile framework. Program cost and schedule will be positively impacted by operational efficiencies brought by focusing on Team Engagement, Visible Work, and Leadership Support. Transparency, decision speed, and barriers to execution all improve in this environment.

Instead of asking teams to simply do more with less, we are providing a structure and a tool kit that naturally creates an environment where teams can become more efficient. Once the SBU achieves 70% of the portfolio’s labor working in an Agile environment, the organization’s culture will be fully immersed in this highly efficient Agile way of working.

The 70% target is challenging, but we have already observed that the redistribution of now-experienced team members to new NPI development program teams has resulted in rapid new team organization into the Agile framework. This organic insertion of Agile/Kanban/PI Planning process experts helps build confidence in those around them, allowing them all to build proficiency more quickly. Some team members are also independently exploring the new Agile environment and finding ways to bring more transformation to their teams. For example, one team chose to leverage Visio to document the planning they had done during their Scaled Agile PI Planning event. Another team leveraged MIRO, an easy-to-use virtual sticky application, and shared its usefulness with other teams. Both teams recognized

capturing information digitally would allow for an improved work template for future NPI development programs, effecting future efficiency gains.

In the past, a small team of Subject Matter Experts (SMEs) would have created a full program execution plan, resulting in a lack of buy-in from the extended executing team. Scaled Agile PI Planning allows the team of doers to engage in and lead the detailed planning. It requires them to raise and articulate very specific blockers so that those can be resolved at the right level and quickly, and then the process asks them all to agree on the achievability of the next quarter's plan. When a team collectively understands the work in their plan and sees swift blocker resolution from their leaders, their commitment to achieve that plan becomes significantly stronger. In multiple cases, teams observed leaders at every level resolving blockers and quickly realized their own empowerment to drive issue resolution to the lowest possible level, increased decision speed and ownership.