

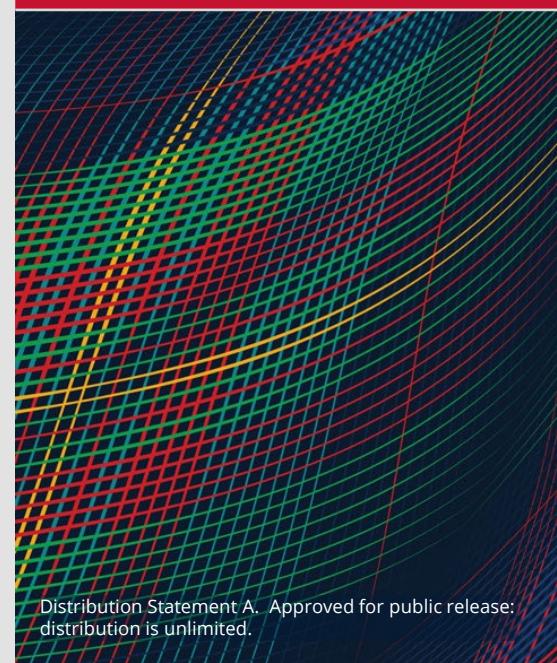


B-21 Waypoints: Streamlined Quarterly Planning

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Advancing Software for National Security

Agenda

- The Challenge at Hand
- The B-21 Waypoints Journey
- The Results are in...
- Call to Action

The Challenge at Hand

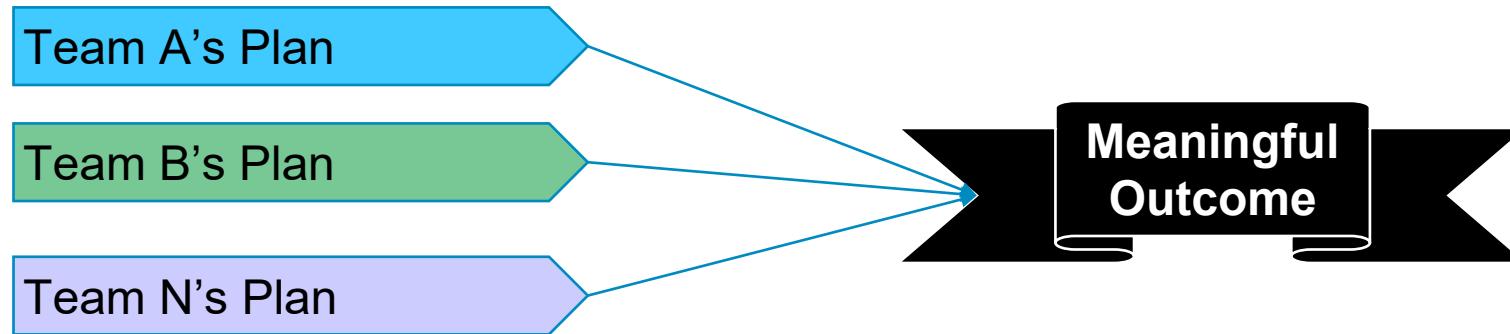
Three Key Questions Team Leaders Needed to Answer

1. Is there anything you were planning to complete last quarter, but did not?
What is the impact?
2. How confident are you that you will complete your commitments for this quarter?
3. Is there anyone else you are dependent on to complete your commitments, and are they aware?

What is the minimum viable process needed to rapidly answer these questions?

Our Problem Space

- We have **major programmatic goals** that require many teams to integrate and meet their objectives on time
- We're driven by delivering working outcomes, **not** by teams successfully following their own independent plans



Goal: Deliver what you said you would, when you said you would, at the cost it should be

Choosing a Planning Approach

Small
Programs
with
Decoupled
Teams

Large
Programs with
Complex
Dependencies

How do you right-size what gets tracked at the
org-level **without getting overwhelmed?**

Ad Hoc
Planning

Roadmaps

???

50,000+
Element IMS

Low Effort

High Effort

The Idea Behind Waypoints

- In Aviation, waypoints help pilots navigate, making it simpler to plan, track, and execute their flight plan
- Allows for flexibility between waypoints to make rapid adjustments as needed
- Example: Multi-leg commercial flight
 - Getting the passenger and luggage safely to the terminal destination on-time
 - Anticipating complex variables like weather, maintenance, and other disruptive factors and mitigating them as early as possible



Enter: The Waypoints Framework

- What is the Waypoints framework?

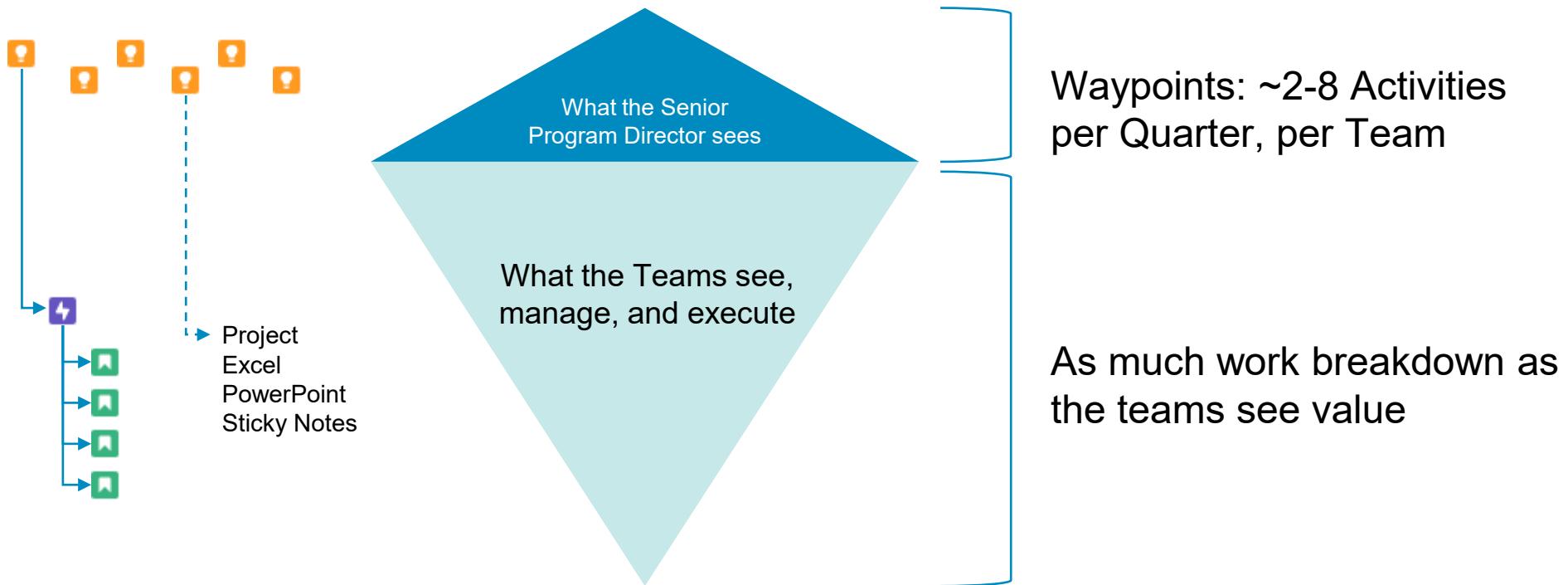
- The framework for visualizing major activities, synchronizing dependencies across teams, and managing risks using a **lightweight, digital approach**

- What is a Waypoint?

- Each Waypoint is a **promise** – a planned, demonstrable activity/accomplishment that will unlock another programmatic activity on the path towards the target
 - Target Waypoint Example: An Aircraft is Delivered
 - This is a big goal requiring coordinated efforts from all teams
 - Each team has its own set of Waypoints to lead towards this collective goal
 - Example: Family Cruise Plans



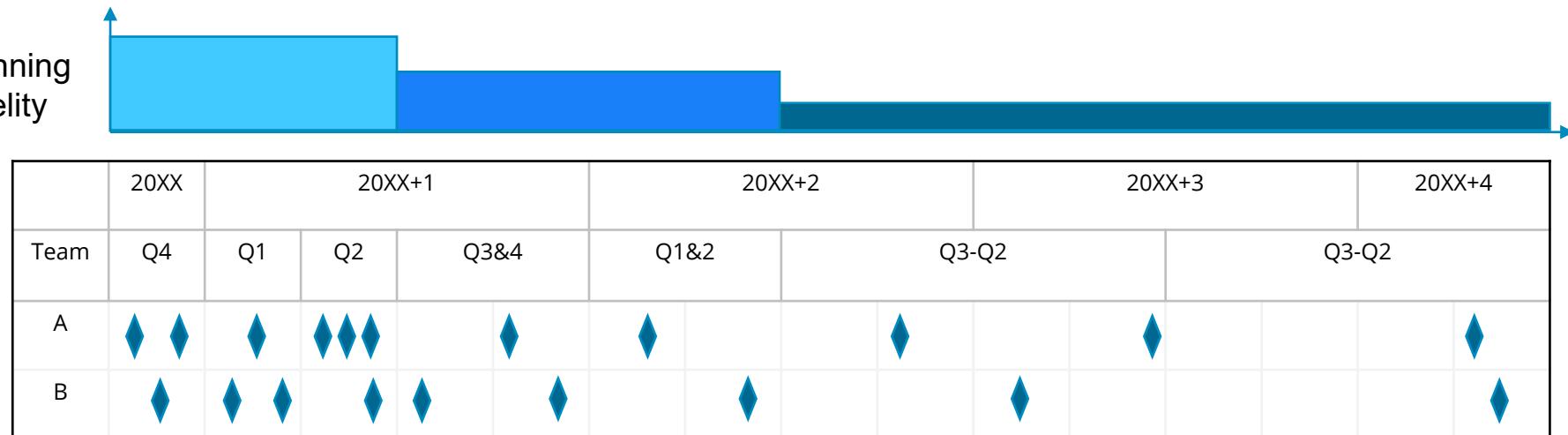
Requirement 1 – Right-Sizing the Waypoints



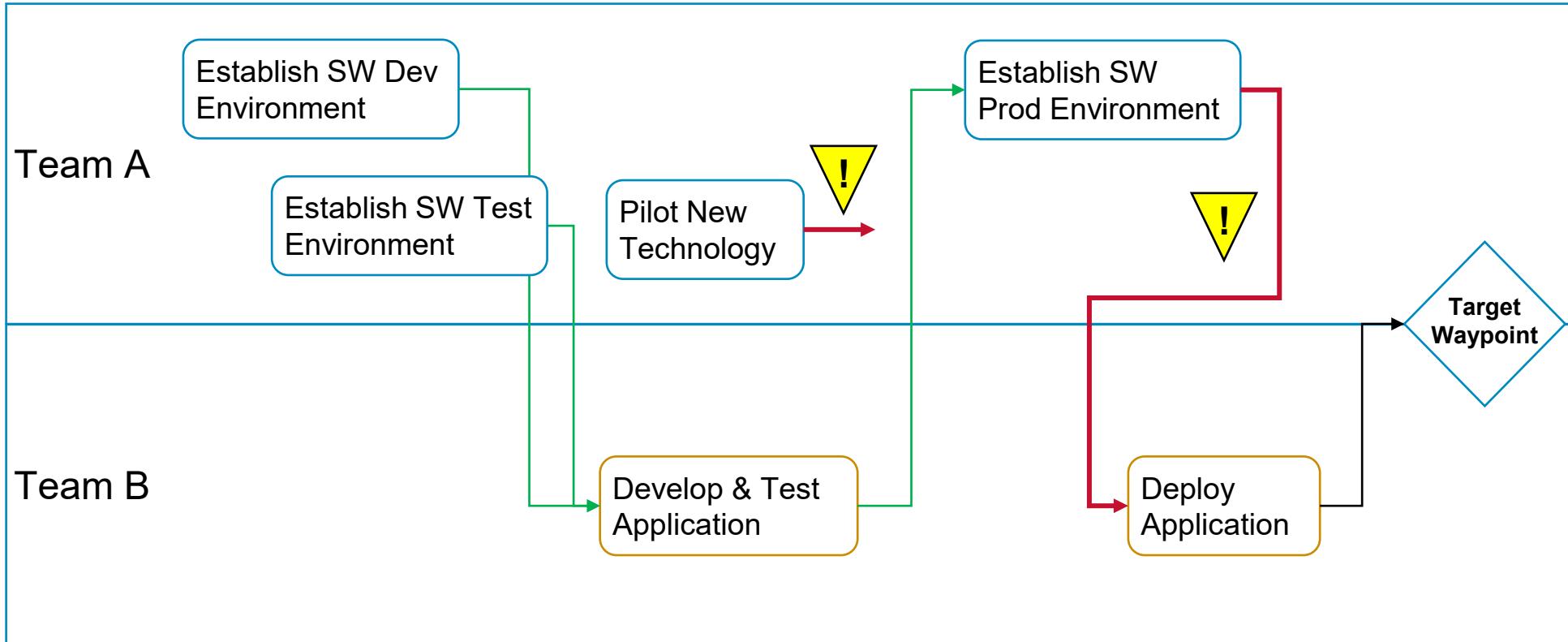
Waypoints does not replace all levels of planning...
...but it does distill the complexity of details plans to a comprehensible level

Requirement 2 – Time Phasing

- Highest focus in planning quarterly activities for the current and next 2 quarters
- Medium fidelity planning for next two slices of 6 month periods
- Lower fidelity planning for following two slices of 12 month periods



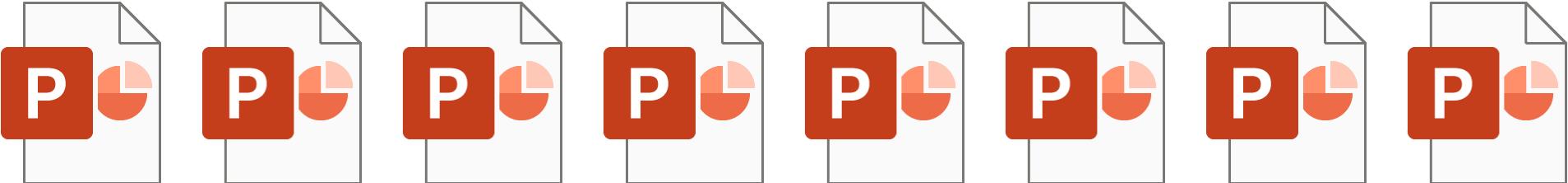
Requirement 3 – Uncover Problems Early



The B-21 Waypoints Journey

The Waypoints Journey - 1

- We started with teams creating their own PowerPoint files that outlined their quarterly activities for the next 3 years
 - **Challenge 1: low confidence that inter-team coordination will work**
 - **Challenge 2: the slides are only accurate four days a year – no way to update between quarters**



The Waypoints Journey - 2

Next quarter, we asked the teams to update their quarterly activities for the next N years in a consolidated Excel sheet

- Benefit 1: Dependencies started to become more visible
- Benefit 2: Single location where anyone in the organization can see the work
- Same Challenge: the Excel file is only accurate four days a year – no way to update between quarters



The Waypoints Journey - 3

We migrated the Excel data into Jira and Confluence tools

- Jira tracks individual taskings (“issues”)
- Confluence provides knowledge management and dynamically displays Jira issues

This allowed us to filter teams' issues (representing Waypoints) into quarterly buckets, sort them by Due Date, etc.

- Reduced cognitive overload of seeing everything all at once
- Able to trace Waypoints towards end goal

B-21 Lesson Learned: Encountered initial organizational adoption friction, but overcame it by demonstrating value and ease of use

Factor 1: Leadership Endorsement
Factor 2: Lean, motivated Launch Team
Factor 3: 5-Minute Guarantee
Factor 4: Replaced PowerPoint!

Waypoints Functions: General Contractor Analogy

Define “Done”



- What is the desired end state for each subcontractor?
- Do the subs' definitions jive into a completed job that will delight the homeowner?

Understand Subs' Workflow



- Know enough about of their major activities to understand progress
- Don't get in their chili! Let them cook

Coordinate Dependencies



- Have a plan for integrating multiple, concurrent subs' work
- Know what's impacted when things change

Manage Risks

- Tried and true project management staple



Key Functions
for Waypoints

Anatomy of a Waypoints Dashboard

Dashboards for each team are built in Confluence:

	POCs	Definition of Done
Time-Phased Waypoints	Late	
	Current Quarter	
	Next Quarter	Following Quarter
	Following Semester	Following Semester
	Following Year	Following Year
Dependencies	Waypoints I'm Dependent on Waypoints Dependent on My Team	
Risks	Matrix Mitigations	

Waypoints Dashboard - 1

Current Quarter's Waypoints

2025 Q3 Planned				
Key	Summary	Status	Due	Assignee
WPTS-242	Abstract for DoD SW Symposium is Complete and Submitted	DONE	Jun 20, 2025	Kevin Dooley
WPTS-341	First Draft of DoD SW Symposium Slides is Complete and Ready for Review	DONE	Jul 21, 2025	Adam Satterfield
WPTS-46	Stakeholders Have Reviewed Slides and Comments are Resolved	DONE	Jul 21, 2025	Adam Satterfield
WPTS-244	Slides are Approved by Security and Ready for CMU Document Markings	DONE	Sep 08, 2025	Kevin Dooley
WPTS-245	Slides are Successfully Submitted by Deadline	IN PROGRESS	Sep 11, 2025	Adam Satterfield
WPTS-243	Travel is booked for December	IN PROGRESS	Sep 15, 2025	Kevin Dooley

6 issues  Refresh

B-21 Lesson Learned: Waypoints Identification workshops helped teams visualize their plans, uncovered gaps, understand scope of work

Waypoints Dashboard - 2

Auto-generated, interactive dependency network



B-21 Lesson Learned: Dependency mapping workshops uncovered incomplete handoffs; gave us an early opportunity to correct our plans

The Results are in...

Lessons Learned

What worked

- Improved communication between teams
- Marketed the framework as a collaboration tool, not a work tracking tool
- Top leadership encouraged adoption, but not mandated – created “pull” effect
- Teams were open to trying new ways to improve planning – supported evolution
- Openness to hearing from teams on better ways to organize the information

What could've worked better

- Scoping the work in the simplest form to solve the programmatic goal (don’t capture everyone’s activities)
- Focus on getting all teams equally yoked in their journey (don’t fully build out one team when others haven’t started)

Scaling Challenges

- **Adoption was so successful that the Launch Team became a constraint in helping teams build their Waypoints and Dependencies**
 - Key Takeaway: Find at least one change agent on each team, empower them to learn the digital tools, help scale
- **Need to have a plan to transition to “Sustainment” (e.g., face of the Project)**
 - The Launch Team cannot be the Project Owner
 - Identify that POC earlier on to enable handoff
- **Configuration Control of the Framework is required as it grows**
 - Even in a high-trust environment, we found the need to establish a control board

Call to Action

- We'd love to see another team come back to a future SW Summit with the next evolutions of these ideas
- Open to collaborating – the Software Engineering Institute can help!
- We're happy to take Q&A about the process and framework

Team Contact



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