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Mpathway

Mission Agile Development for Government

Federal Agencies build software to impact mission and increase trust in government but conventional agile methods view productivity with a commercial mindset, focusing on profits and growth. Use Mpathway, the MetaPhase approach to agile software development, to build software using a tailored DevOps agile approach that works for government. Our unique practices – Motion to Mission, Backlog Reconciliation, and DevOps Insights – align development teams to the mission and produces software that prioritizes impact every step of the way.

Our approach to DevOps prioritizes agency goals by integrating an accountability model that holds the team to positive mission impact in every agile ceremony.



Mpathway Agile Development Practices



Motion to Mission



We make sure everyone on our scrum teams, including developers, testers, and architects, understand the mission by training them on day 1 and integrating the agency-mission into daily scrums.

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Backlog Reconciliation Our approach to Inspect and Adapt includes reflecting on mission goals. During team Retrospectives, we ask, "Did our work move the needle towards mission success? If not, what do we do about it?"

Continuous Improvement



Amass DevOps capabilities by continuously assessing team proficiency relative to mission needs. Identify opportunities to excel the mission through DevOps practices.

Our Agile Approach, Mpathway

Problem:

- Delivering exceptional agency mission is a very different object for agile than commercial businesses (growth and profit).
- Lack of strategy for a concerted motivational effort that would increase how agile teams understand their purpose and how they fit into the organizations they support.

Mpathway Motion to Mission:

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- A continuous learning process naturally woven into the Agile cadence.
- Motion to Mission sessions further teams' understanding of the Government agencies' purpose, mission goals, regulatory context, and unique culture and history.
- Rather than a "one and done" activity, Motion to Mission is an Agile ritual along with planning, backlog refinement, demos, and retrospectives.
- A ritual that gives teams of consultants a focused forum where they can critically think and absorb mission context and ask questions.
- After a Motion to Mission session, teams plan and execute with a shared and better understanding of their outcomes & contributions.
- Sessions are held regularly, are meaningful, and maintain relevance by bringing in stakeholders and guests when appropriate.

Problem:

• Tracking team performance is important for Agile hygiene. However, the churn of agility can cause teams to lose sight of overarching, big picture mission goals.

Mpathway Backlog Reconciliation:

- Does not incorporate solely traditional metrics.
- Follows an outcome-based focus by reflecting on how completed work affects the capabilities and mission of the agency.
- Performed at the end of an agile iteration providing the entire team a chance to "check the impact" or outcomes of work against the Motion to Mission objectives, evaluate where the agile process needs to adjust specific to the project, and discuss wins and failures openly and objectively.

Traditional Metrics	Mpathway Backlog Reconciliation		
X Velocity (Story Points)	End users are working more efficiently		
× # of tasks completed	100% compliance with executive orders		
X Cycle time	Automated show Section 508 compliance		
XDefects detected & fixed	Analytical reports aid decision making		





Problem:

- Government software development has real and serious constraints that make it different from commercial organizations. It is not enough to focus on DevOps capabilities for their own sake.
- Prioritizing the adoption of industry best practices and focusing on continuous improvement is difficult when attempting to serve multiple masters such as Federal regulations, Department policies, security compliance, and end-user requirements.

Mpathway DevOps Insights:

- MetaPhase's "DevOps Insights" is a tool that measures DevOps and automation proficiency against mission needs to prioritize investment in DevOps capabilities.
- The tool borrows from agile best practices and concepts such as Scrum's Fibonacci estimation and SAFe's Weighest Shortest Job First (WSJF).
- MetaPhase works with government to assign a Mission Score that represents how important each DevOps capability is to the mission. The team then rates its Proficiency Score for each capability. The two estimates result in an Investment Index to help prioritize investment in each capability.

DevOps Capability	Mission Score (M)	Proficiency Score (P)	Investment Index (M/P) The higher the number, the greater need for investment in the DevOps capability.
Cloud Readiness	2	2	1
Automated Scaling	1	1	1
Everything as Code	2	5	0.4
Shift-Left	8	13	0.62
Transparency & Observability	5	3	2.5
Security & Compliance	13	3	4.33
Code Quality	3	8	0.38

- 1. MetaPhase and the government work to identify the DevOps capability that is least important to the overall program mission (M) and assigns it a 1. All other capability mission scores are assigned relative to the least important.
- 2. The development team rates itself by identifying the DevOps capability where it is least proficient (P) and assigns it a 1. All other capabilities are assigned a proficiency score relative to the least proficient.
- 3. For each capability, determine the Investment Index by dividing the Mission Score by the Proficiency Score.
- 4. Based on the Investment Index, the team creates and prioritizes backlog items to improve those capabilities.
- 5. At regular intervals (such as once per quarter) the team repeats the exercise and adjusts accordingly.

Mpathway Solutions



Mpathway practices fuse DevOps with agile software development **that work for the government**. We teach our DevOps teams to enhance agency capabilities by focusing on the project's connection to the mission.



We have a dedicated Cloud Engineering practice because we understand how to deliver quality solutions successfully for government. Our software developers have technical expertise in Agile processes, DevOps practices, automation, and developing for the cloud.



We maintain a "No surprises mentality". We respect the agile process and the importance of testing early and often. We have honed our delivery of government tailored solutions at DOC, DOI, and USDA and work alongside you to deliver applications that are stable, secure, and have lasting impact.



When the contract first started last summer, we did not have time to learn the system or code. The team had no choice but to dive in headfirst. The challenges we faced were significant, but the team's determination and collaborative spirit turned them into opportunities for innovation, camaraderie, and growth. Their ability to come together, support each other, and push the boundaries of what's possible is what sets this team apart. After the deployment of our application, the **clients were over the moon**. Not only did we meet their expectations, but we exceeded them! Even the Associate Director gave us praise for such a great job! It's an honor to work with such a talented and dedicated team. I look forward to seeing what we will continue achieving next together" -Tandy Raungtriphop, MetaPhase PM



CONTACT

Interested in working with our team? For more information, contact our VP of Cloud Engineering: skirsch@metaphaseconsulting.com

