



“Pushing a Big Rock Up a Steep Hill”: Acquisition Lessons Learned From DoD Applications Storefront

Acquisition Research: Creating Synergy for Informed Change

Mr. Michael Morris
SPAWAR Systems Center Pacific
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Agenda

- ▼ Introduction
 - ▼ Problems with the Defense Acquisition System
 - The Current Process
 - Industry Approach
 - ▼ Overview of Recommended Solution
 - ▼ Ozone Widget Framework
 - ▼ Widgets in Action
 - ▼ DOD Storefront and PEO C4I Marketplace Overview
 - ▼ Widget Governance Process
 - ▼ Conclusion
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Introduction

- ▼ Industry has already fine-tuned its use of widgets and mobile applications
 - Rapidly evolving software development paradigm
 - A driving force in delivery of web-based dynamic content
- ▼ Using standard acquisition processes in DOD, by the time new solutions are deployed to the warfighter, the technology is obsolete
- ▼ Several programs within the DOD have started similar initiatives that hold the promise of reducing the “heavy lifting” required as part of the current acquisition process

What is a Widget?

- ▼ Lightweight
- ▼ Single-purpose
- ▼ User configured
- ▼ Web-enabled application
- ▼ Provides summary information or a limited view into a larger application
- ▼ Also used alongside related widgets to provide an integrated view

Defense Acquisition System Challenges

- ▼ Defense Acquisition System was designed to purchase “big ticket” items like aircraft carriers and fighter planes
- ▼ Excessive development and update cycles
 - Private sector cycles are 12 -18 months
 - Defense IT systems routinely require 48 - 60 months



Average Build Time: 7+ years

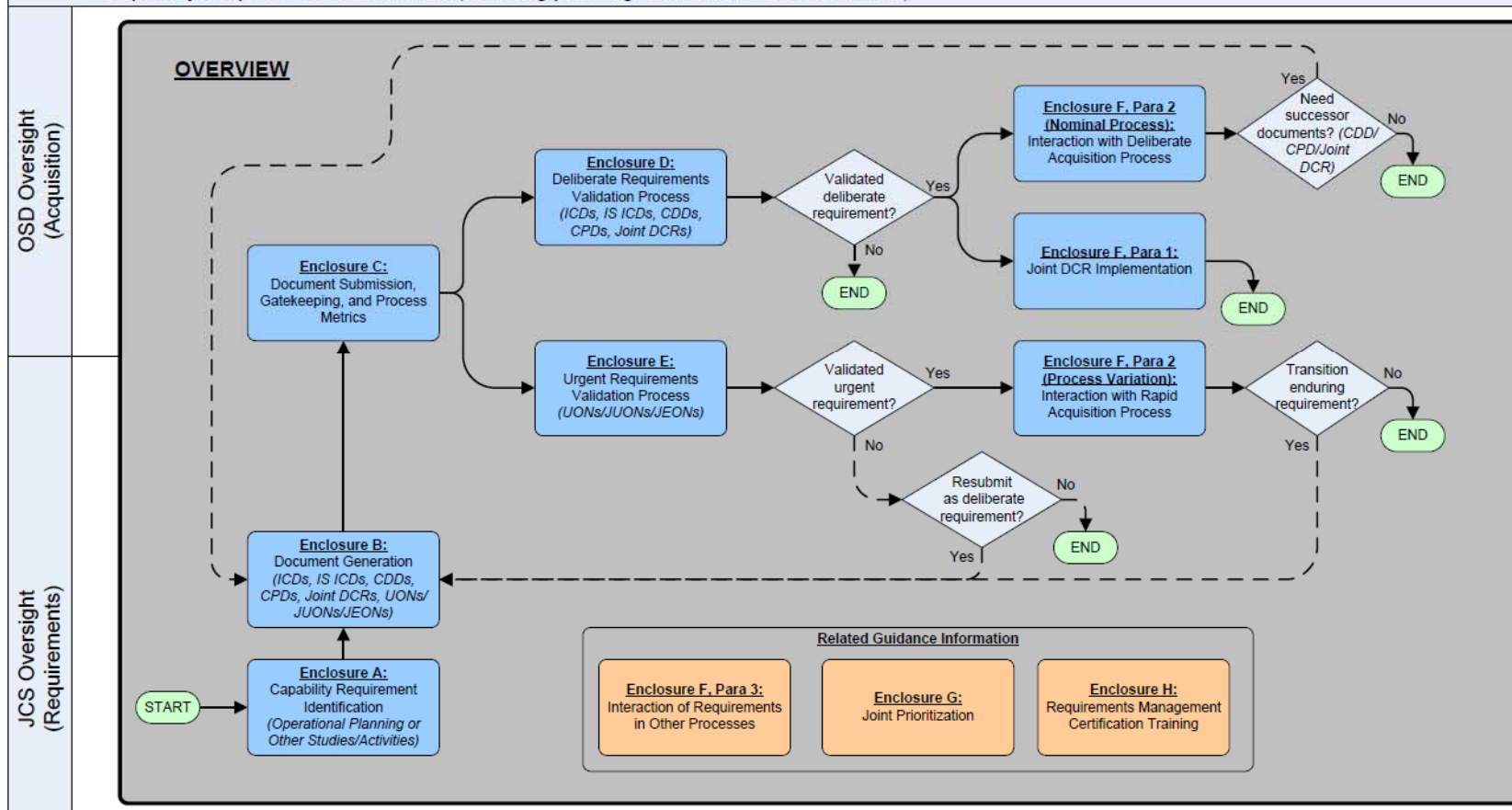


Average Build Time: 18 mos.

The Current Process

Joint Capabilities Integration and Development System (JCIDS) Process Flow Chart

Capability Requirement Identification (including planning, studies, and other activities)



Industry Approach

- ▼ Current acquisition rules required for POR systems have caused a major gap between the technology available to the warfighter and that which is available commercially
 - Exacerbated by capabilities of smartphones and tablet computers
 - Greater gap for younger service members raised on commercial technologies and then forced to use outdated systems

- ▼ Apple and Google are both known for their mobile operating systems and the applications (or “apps”) that run on them
 - Both companies have “app” stores that allow developers to rapidly deploy applications, but they do so in very different ways



Overview of Recommended Solution

- ▼ A lightweight web application test and integration (T&I) environment
 - Needed to model, test, exercise, and perform certification and accreditation of widget capabilities
- ▼ A Widget T&I environment is required for widget technology development throughout the DOD
- ▼ A widget T&I environment is needed that incorporates the unique and common aspects of Navy widget environments



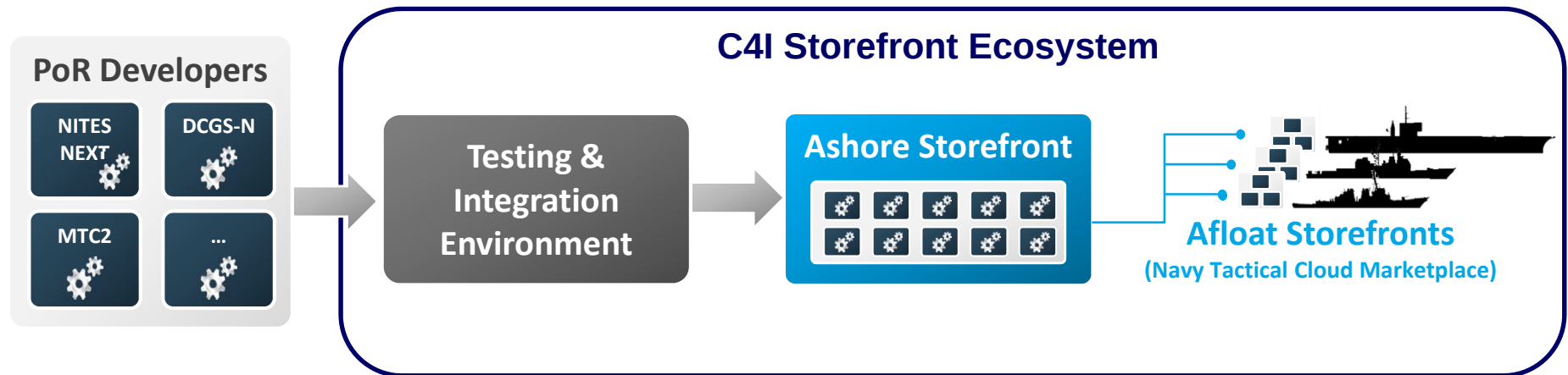
PEO C4I Storefront *Vision*



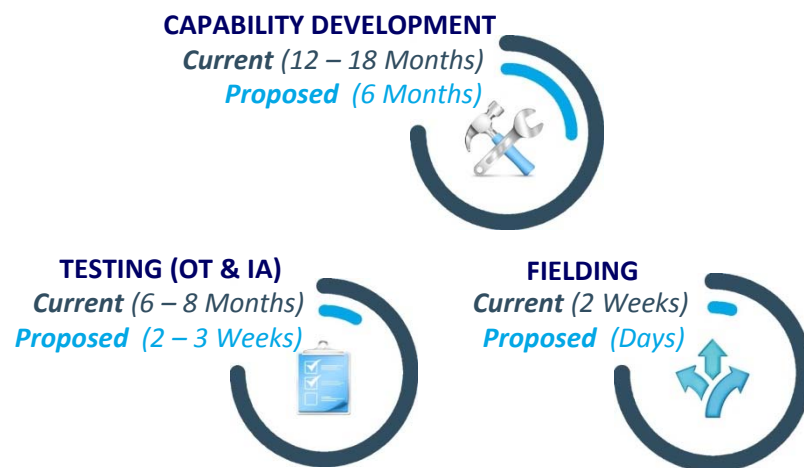
- Warfighters access *all* C4I capabilities via a *single*, browser-based C4I Storefront
 - Widgets
 - Applications
 - Updates / Patches
- Common PoR processes and a standard mechanism for deployment
- Positive control and visibility into the C4I systems and version available on the network



PEO C4I Storefront Overview and Benefits



Increased Speed to Capability



Reduced Total Ownership Costs

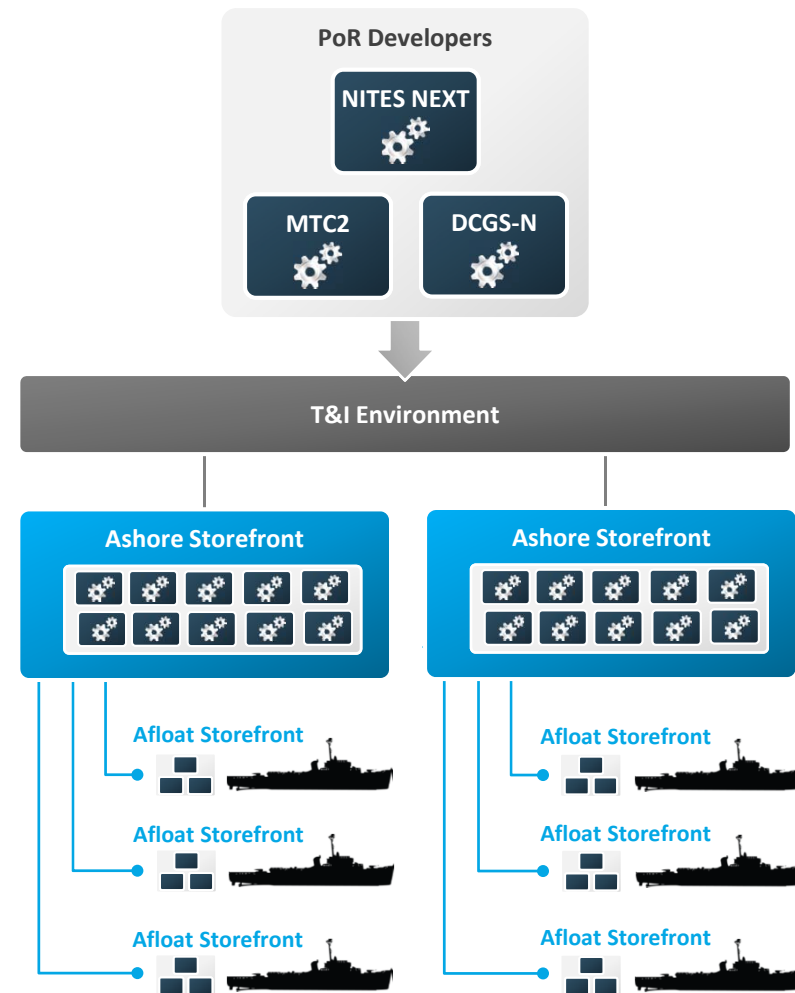
- Cost per app rather than per platform
- Fielding cost down
 - Upload once; available for all approved platforms
 - Automate delivery of widgets, applications, and services
 - No tech visit necessary for installation
- Sustainment cost down
 - Automate distribution of updates / patches



New OV-1

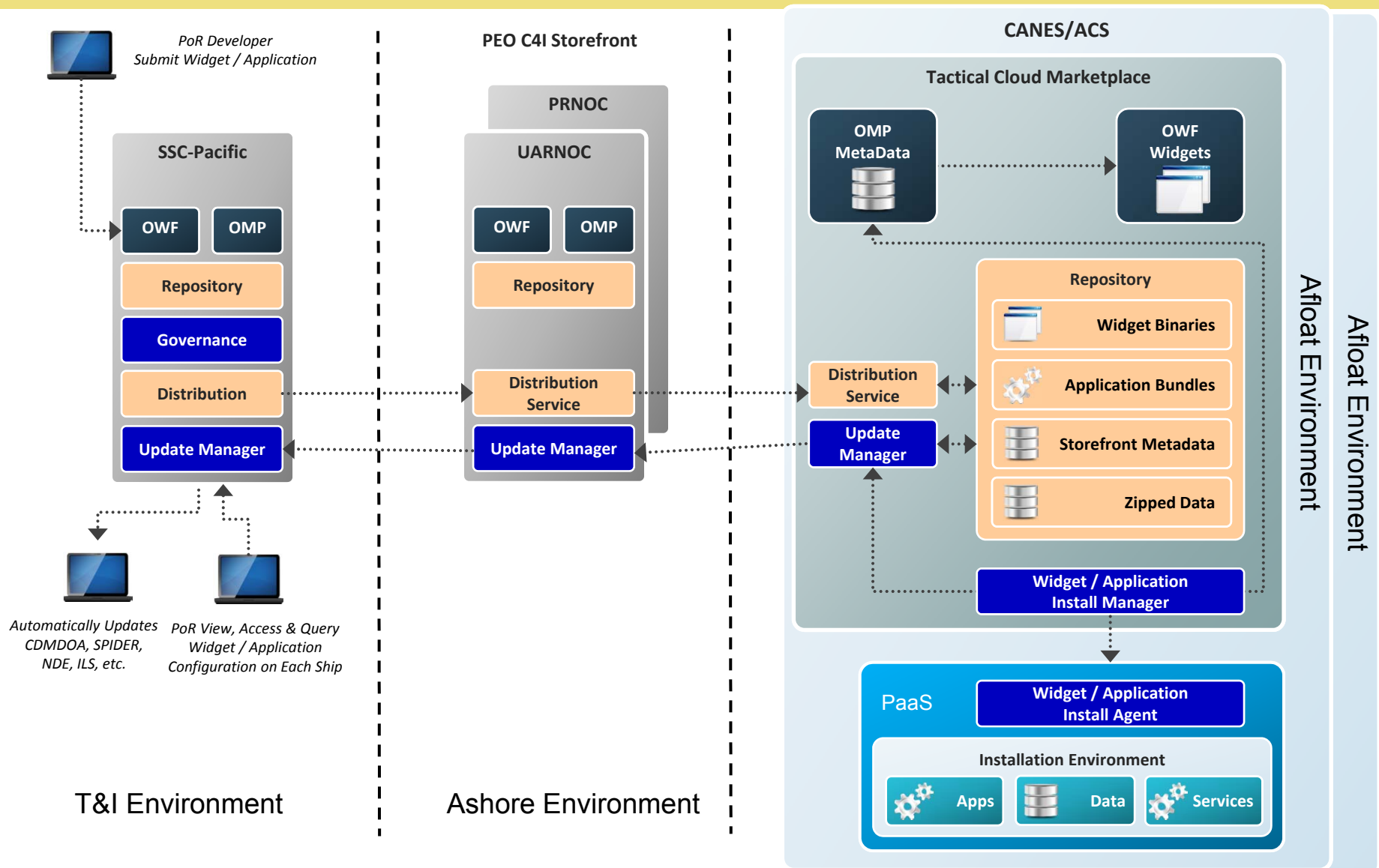


- The Storefront T&I environment provides:
 - Automated submission of new warfighter capabilities
 - Manual and automated integration, functional, and IA testing of widgets and applications
 - Rapid approval process to push new warfighter capabilities to the operational environment
- The PEO C4I Storefront provides:
 - PEO C4I capabilities to ashore users
 - Distribution of PEO C4I capabilities from ashore to the tactical environment
- The Navy Tactical Cloud Marketplace provides:
 - Afloat users the ability to discover, access, and use PEO C4I capabilities
 - Provides feedback on capabilities received, updated, and installed back to the PEO



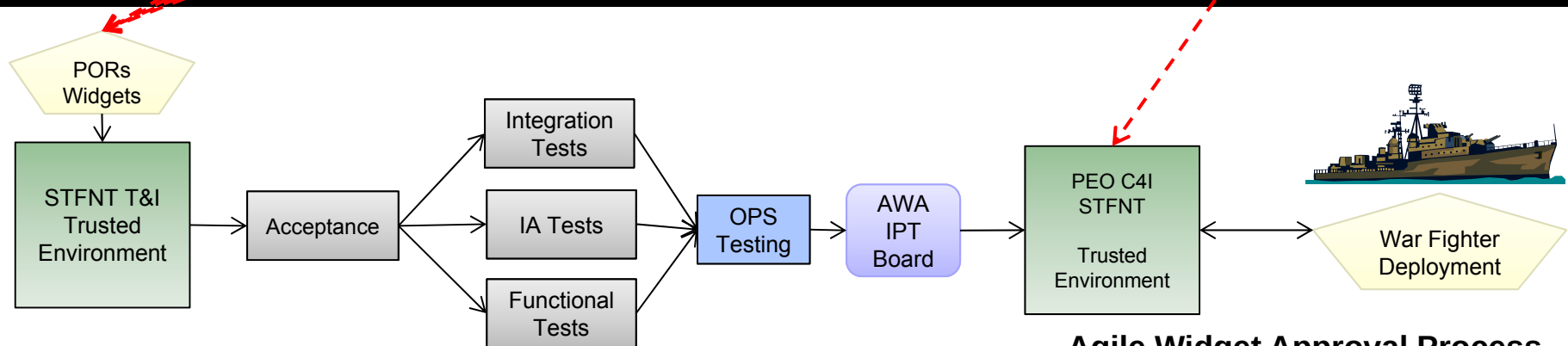
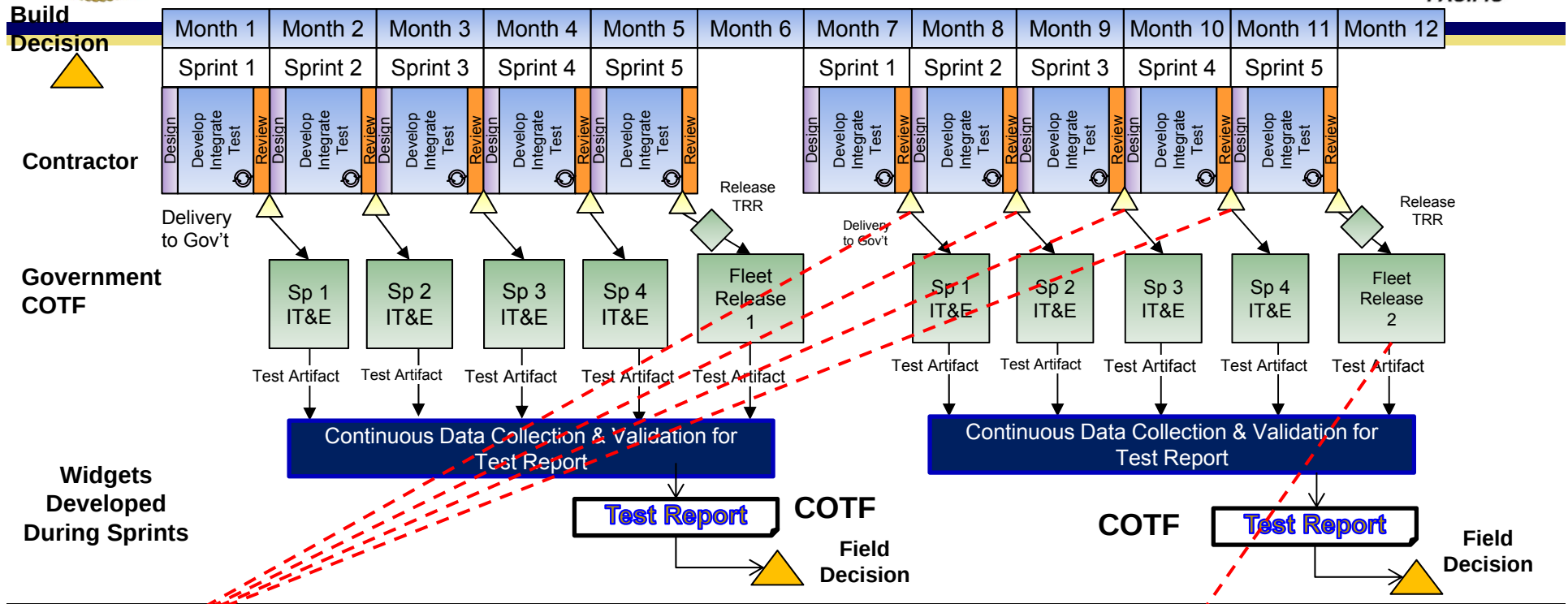


Navy App Store Enterprise

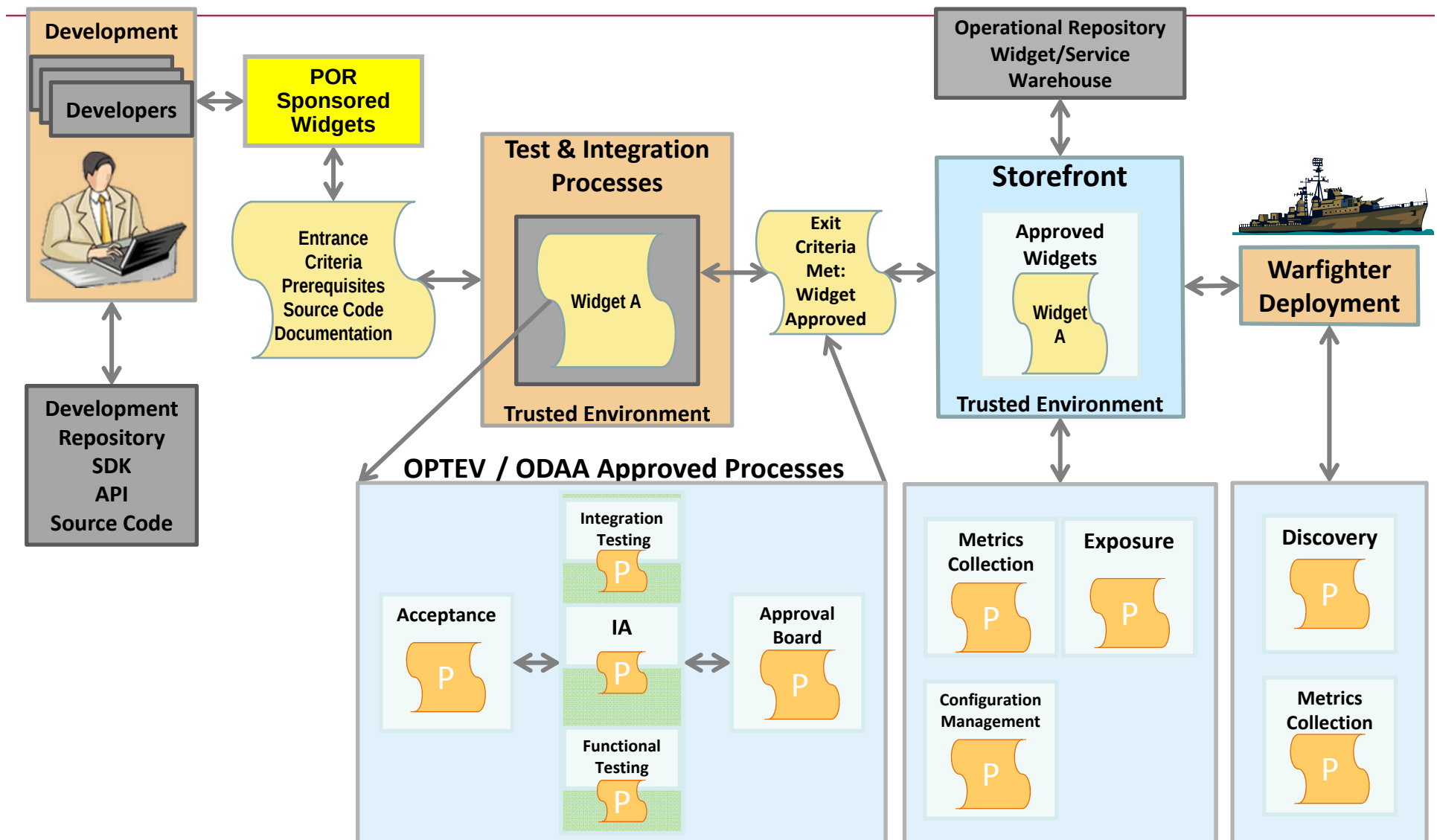




Rapid IT Process & Agile Widget Process



Proposed Widget Governance Process



Better Buying Power and Culture Change

▼ Better Buying Power 2.0

- Control Costs Throughout the Product Lifecycle
 - Supports the rapid IT widget governance process
- Eliminate Unproductive Processes and Bureaucracy
 - Supports the widget governance process with increased user input
- Promote Effective Competition
 - Encourages the creation of more widgets

Conclusion

▼ DOD must modify its acquisition philosophy to get new capabilities in the hands of the warfighter

- Light weight mobile applications
- Access to services and data sources
- Streamlined processes for accredited PORs
 - Allows rapid fielding of associated Widgets
- PEO C4I Marketplace and accompanying Widget Governance Process
 - Cost effective and expedient
 - Provides trusted and secure capabilities

▼ The future of warfare is information dominance and speed to capability can provide the tactical or strategic advantage our warfighters need





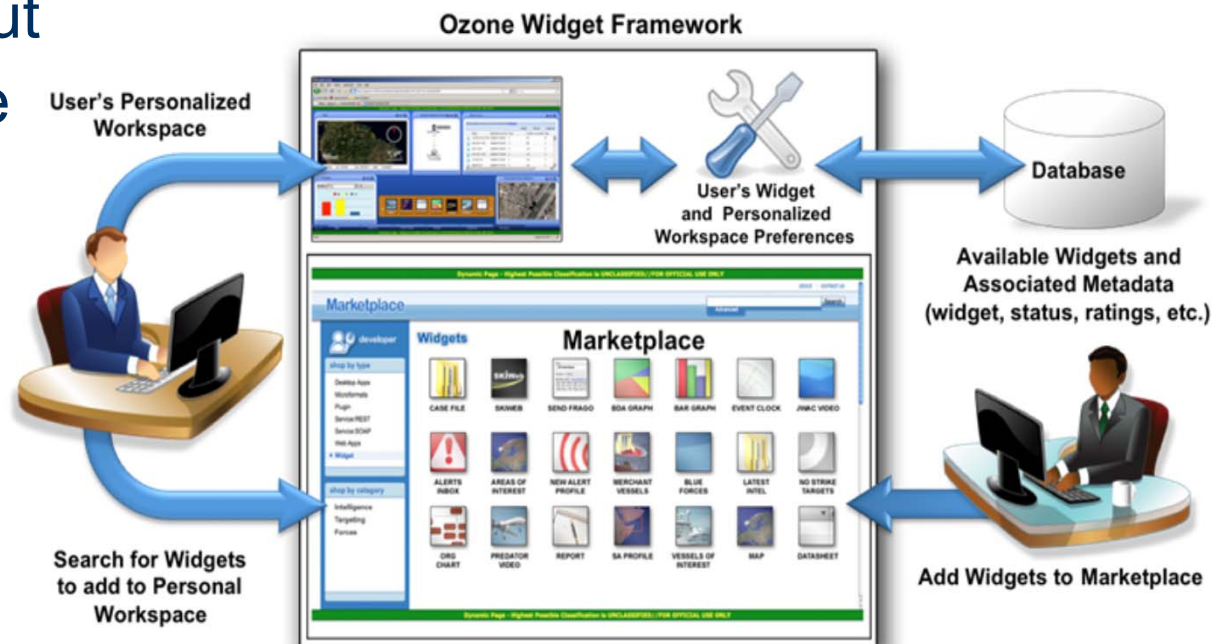
Presenter Contact Information

Mr. Michael Morris
michael.a.morris4@navy.mil
619-553-1260

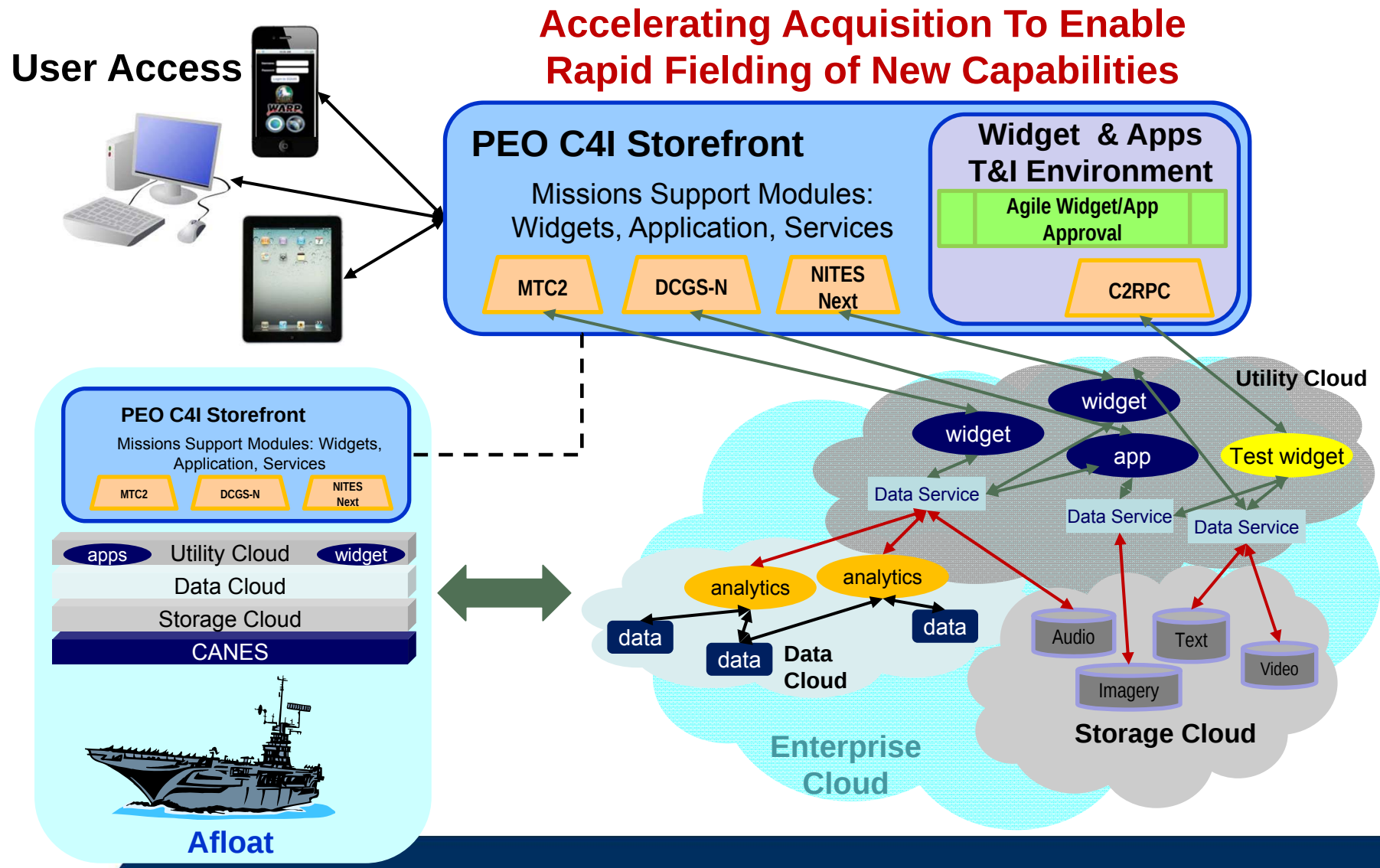
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Ozone Widget Framework

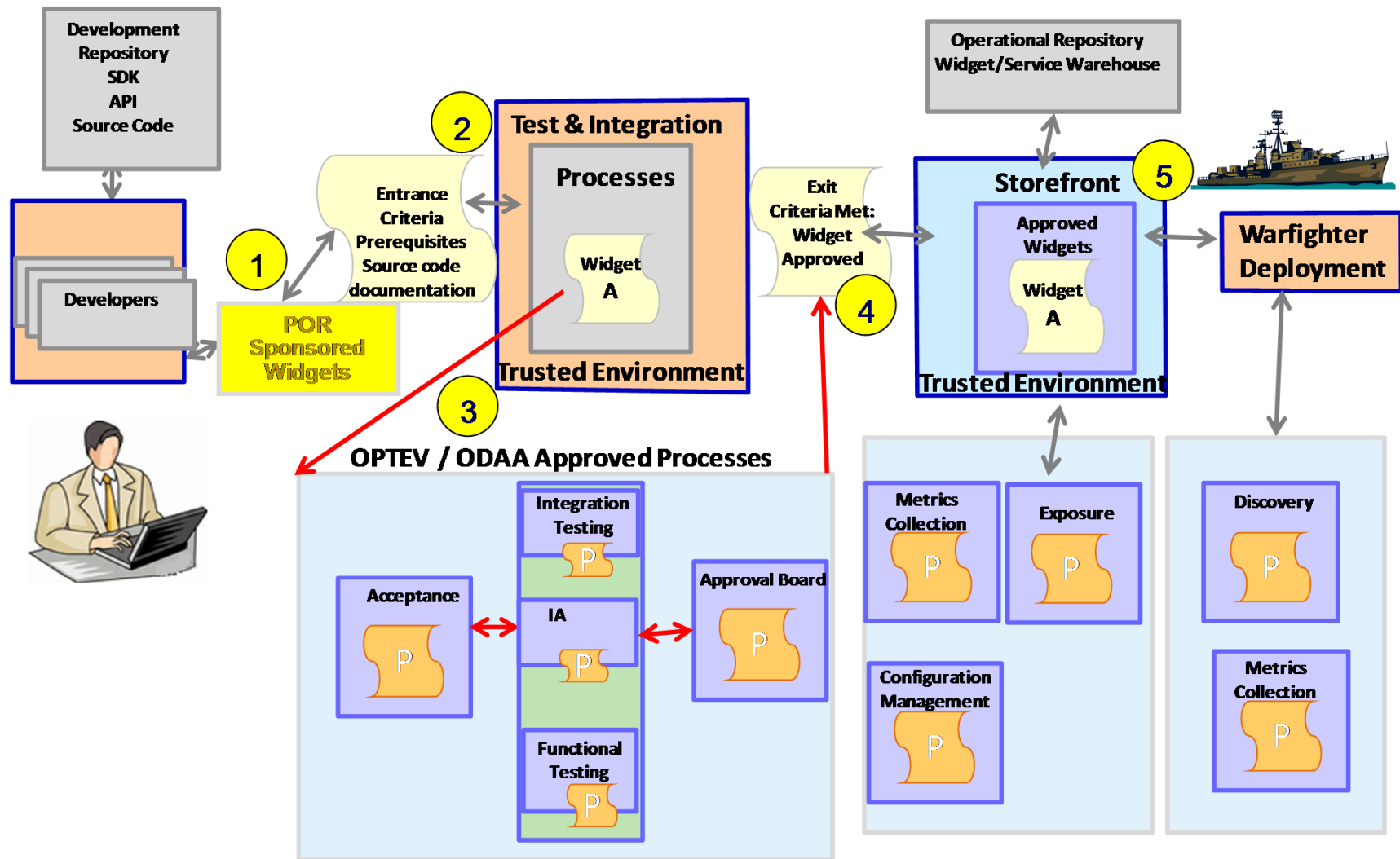
- ▼ A platform that offers infrastructure services to simplify the development of workflows and presentation-tier application integration
- ▼ It is also a layout manager for the operation of widgets on a single web page



PEO C4I Storefront & Navy Cloud



Widget Governance Process Overview



Storefront Operational Concept

