



JPO Digital Transformation

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F-35 Enables and Supports U.S. 2018 National Defense Strategy

- **Building a More Lethal Joint Force**
- **Strengthening Alliances and Attracting New Partnerships**
- **Reforming Business Practices for Greater Performance and Affordability**





F-35 Multi-Mission Capability

Destroy Targets Deep in Enemy Territory



Strategic Attack

Protect Ground Troops Engaged in Combat



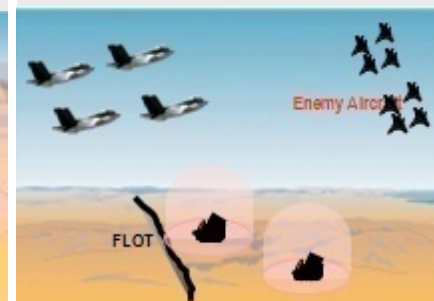
Close Air Support

"Knock Down the Door" for Other Platforms



Suppression/Destruction of Enemy Air Defenses

Clear the Skies of Enemy Aircraft



Air Superiority



What's Different From Legacy Aircraft

• Stealth

- Ability to go undetected

• Sensor Fusion

- Combine many sources of info

• Interoperability

- Pass vital information and data to legacy platforms

Maneuver at Will Throughout Battlespace

+

Provides Superb Battlespace Awareness

+

Makes Everyone in Battlespace Smarter

Survivable Against World's Most Sophisticated Threats Now and in the Future

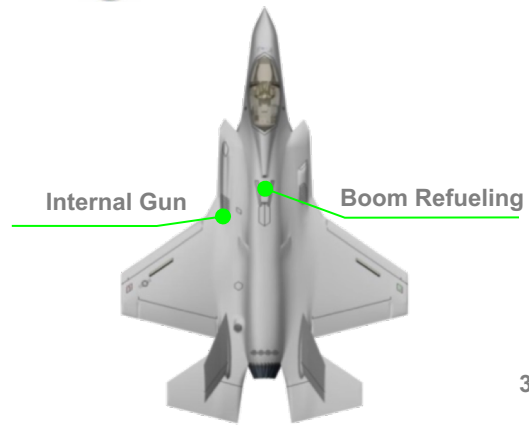
Critical to U.S. and Allied Air Dominance for the Next 50 Years



F-35 Weapon System Overview



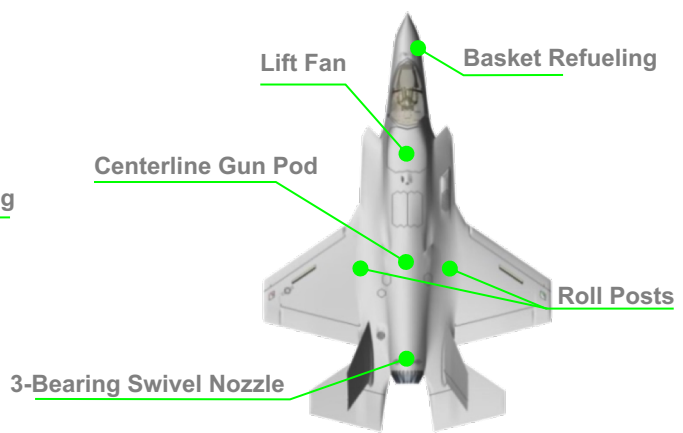
F-35A
Air Force - 1763



Conventional Take-off & Landing
Partners - 464
FMS – 166*



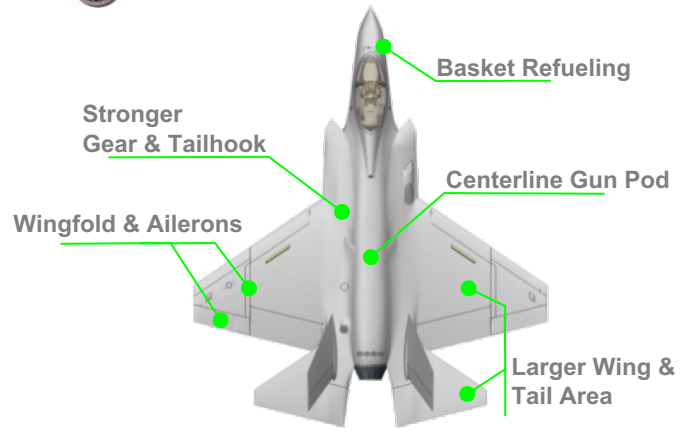
F-35B
Marine Corps - 353



Short Take-off Vertical Landing
Partners - 168



F-35C
Navy - 273 & Marine Corps - 67



Aircraft Carrier Variant

F-35 Program More than Just the Aircraft

* Japan's latest National Defense Program Guidelines states that Japan will procure an additional 105 F-35s over the next 10+ years. MOU signing Fall 2019; 63 F-35As and 42 F-35Bs, taking the overall total to 147

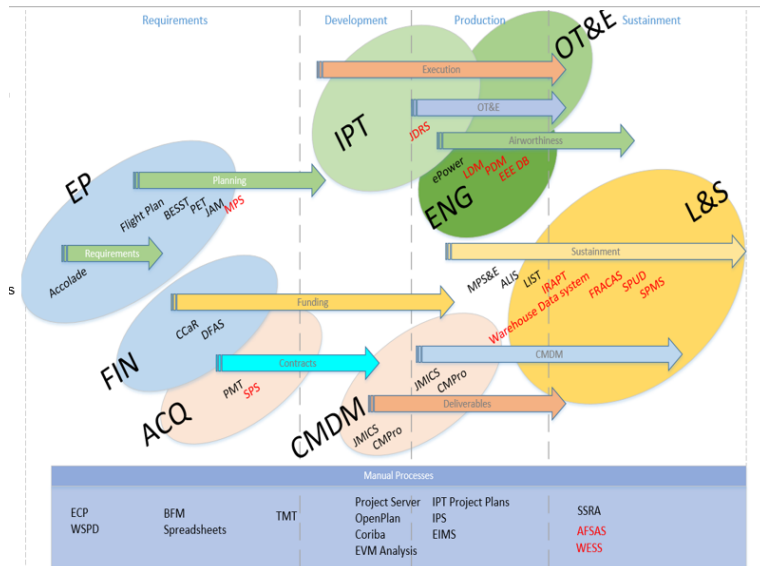


1 Program / 3 Variants / 15 Customers / 3,359 Aircraft
Big, Complicated Program with Significant Allied Participation

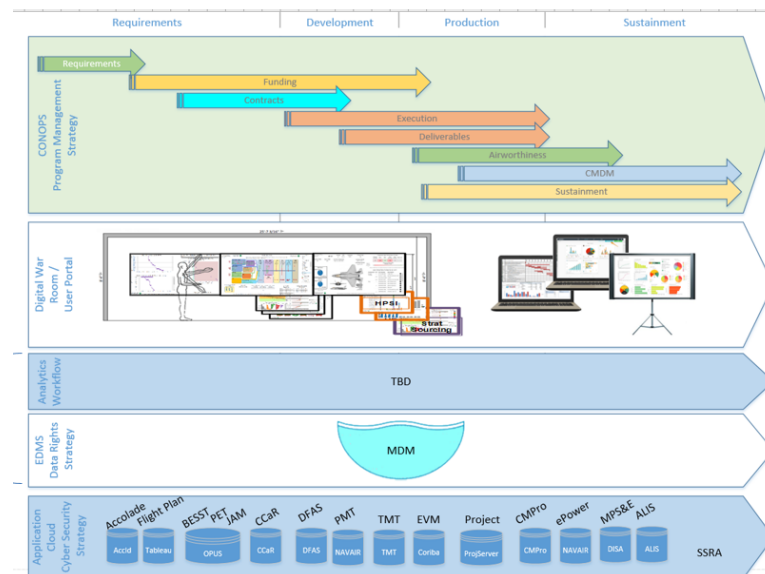


Goals of Digital Transformation

Current Processes



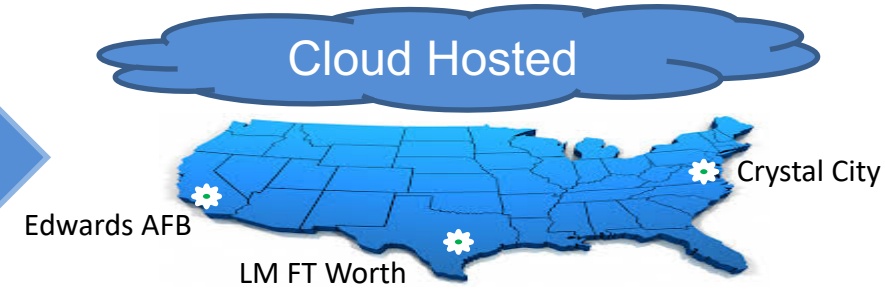
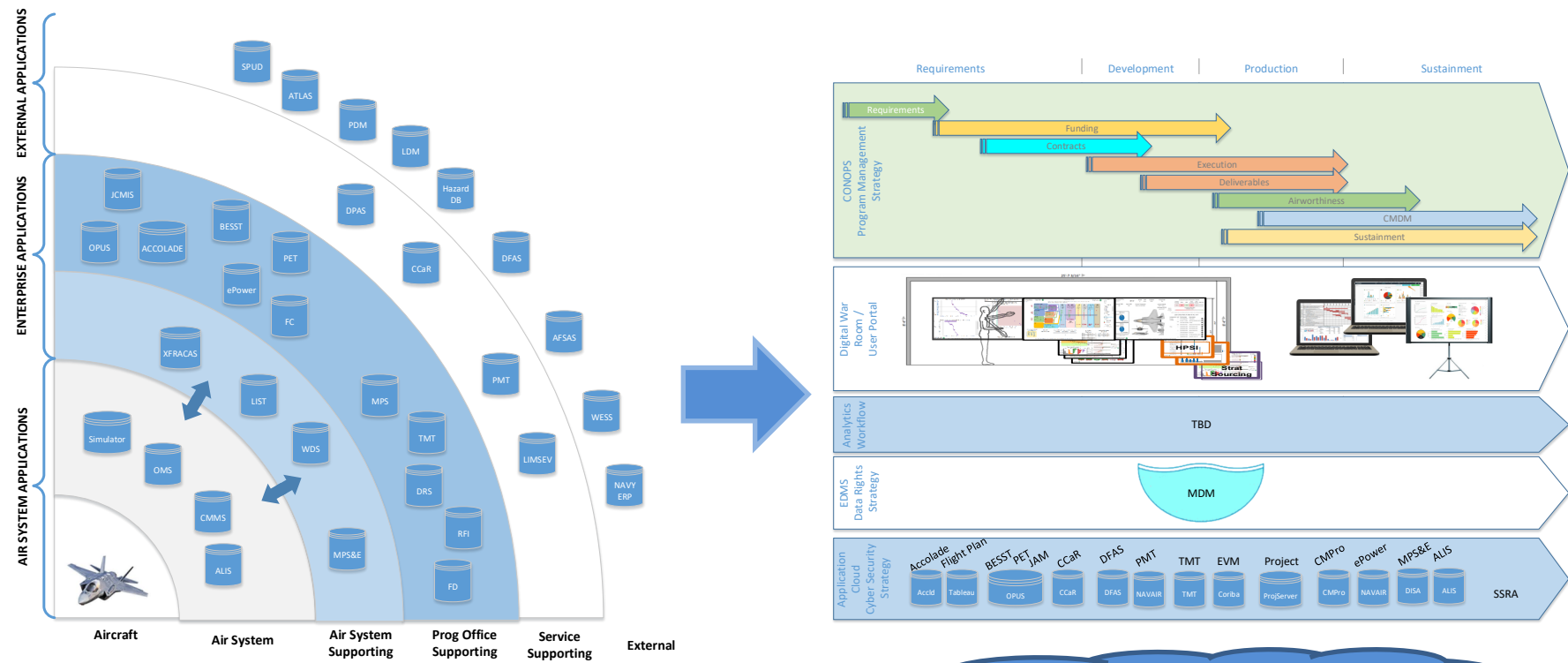
Phase I Ideal State



- Streamline data generation process to support data-first decision making
- Unify JPO processes to present a single view of end-to-end JPO Program execution
- Centralize data and provide governance to ensure confidence in the JPO data and decision making
- Capitalize on current and previous investments to achieve goals without inflating costs
- Automate manual processes and leverage legacy applications in the near term
- Develop ability to provide quick capability constantly through the software development lifecycle



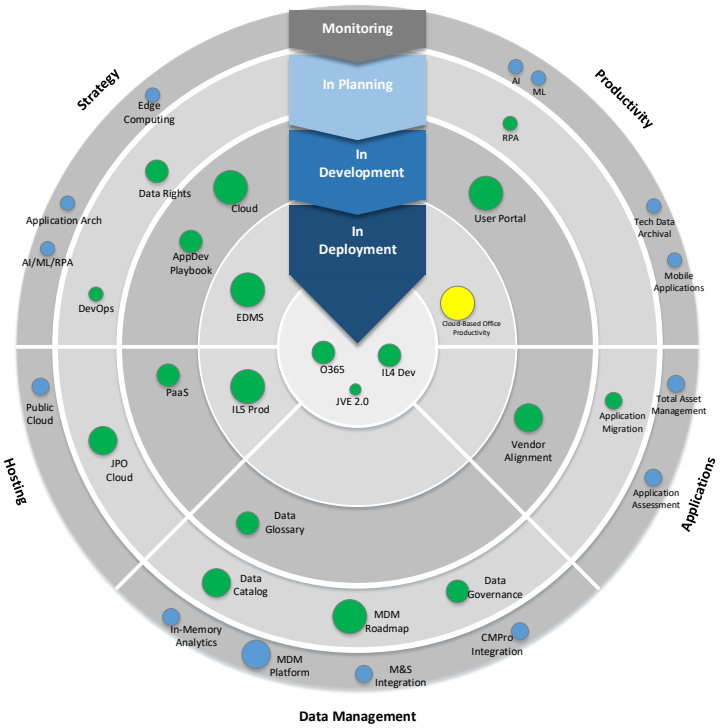
Digital Transformation Vision





Digital Planning Progress

January 2019



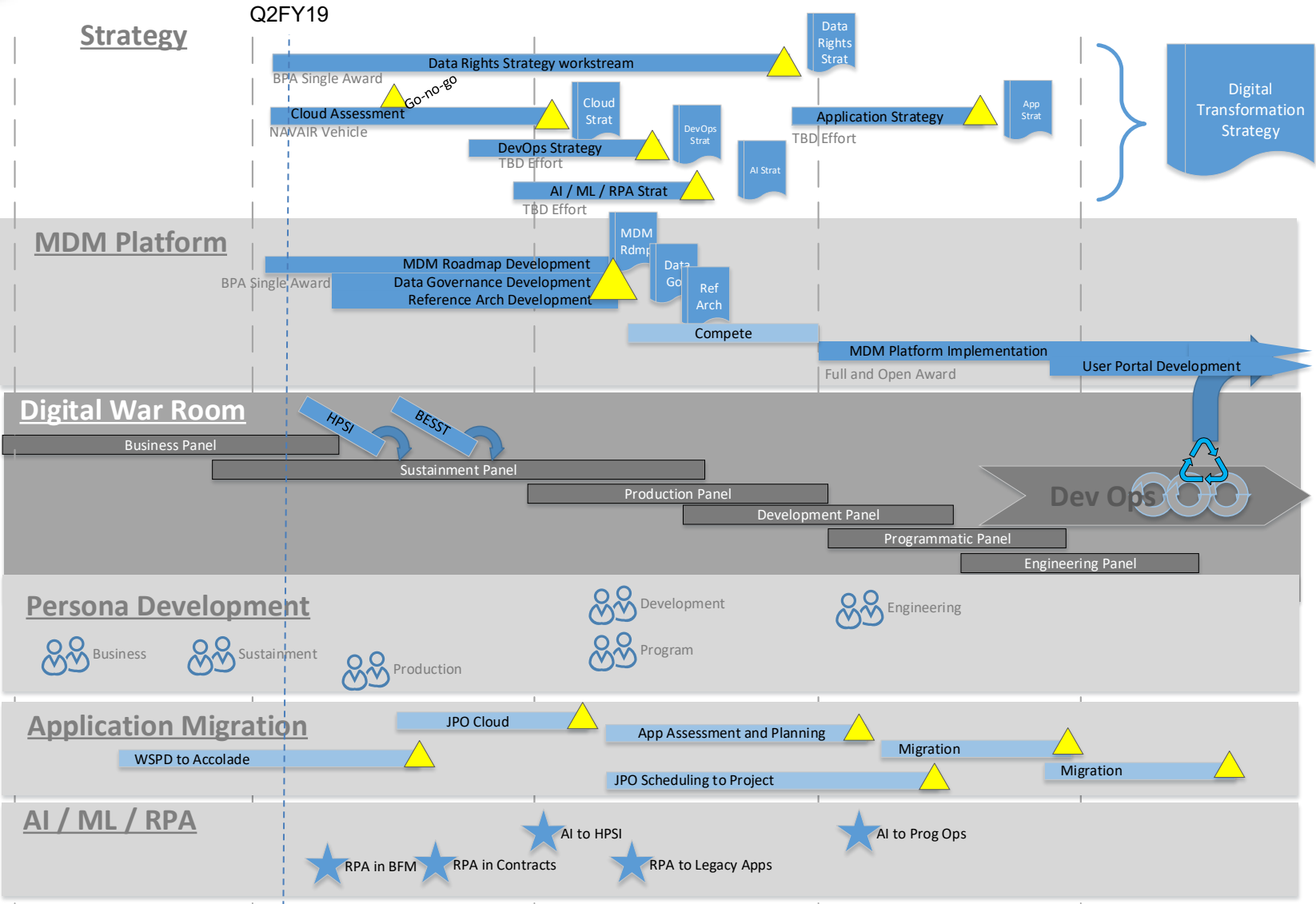
● Size= Impact to JPO
➔ Month-to-month progress

April 2019





Digital Transformation Roadmap





Automation and Insight

AI / ML / RPA



RPA in BFM



AI to HPSI



RPA to Legacy Apps



AI to Prog Ops

AI / ML / RPA (Result of AI / ML / RPA Strategy)

- Artificial Intelligence (AI), Machine Learning (ML), Robotic Process Automation (RPA)
- Current and future technology to streamline efforts saving time, and find insight / data to drive future decisions based on data

AI to HPSI

- Centralized Production, sustainment, logistic, supplier, and vendor data will allow implementation of AI resulting in up-/ down-stream insight increasing PSM effectiveness

RPA Pilots

- Largely manual processes requiring time intensive gathering of data from multiple sources, creating combined data sets, new files, running equations, and developing reports
- Today's RPA has the ability to automate those efforts with more consistency and speed which would reduce workloads
- Provide the data the JPO gets today in minutes instead of days / weeks
- Allow resources to analyze data vs taking time to aggregate it

AI to Prog Ops

- Centralized program data will allow the JPO to see trends in execution activities that will result in program hurdles
- AI already has the ability to streamline HR and onboarding as well as information finding

RPA to Legacy Apps

- As apps are integrated into the DWR and MDM, some of their operations will need to be automated in order to provide needed data
- RPA can automate those processes without requiring investment / update to the apps (which would happen later during migration efforts)