



FedEx DevSecOps Fastlane

Getting Business results faster

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FedEx Express – Worldwide

FedEx Express delivers fast, reliable service to more than 220 countries and territories around the globe.

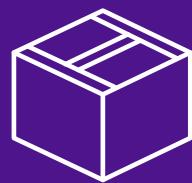
Choose FedEx Express when documents, packages and palletized freight need to get there by a certain time.



> 250 K
team members



679
aircraft at
>650 airports
worldwide



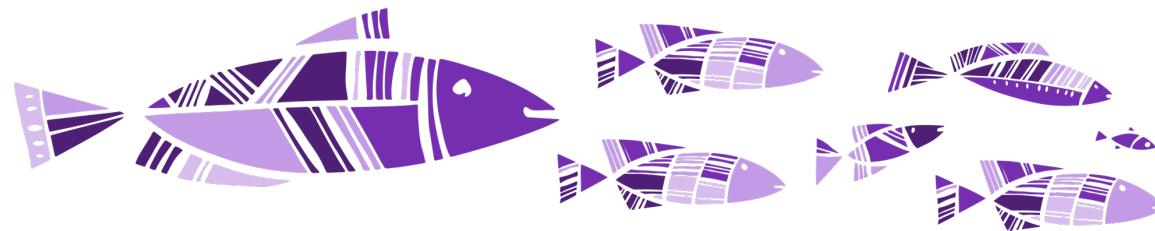
> 6 M
shipments
(average daily volume)



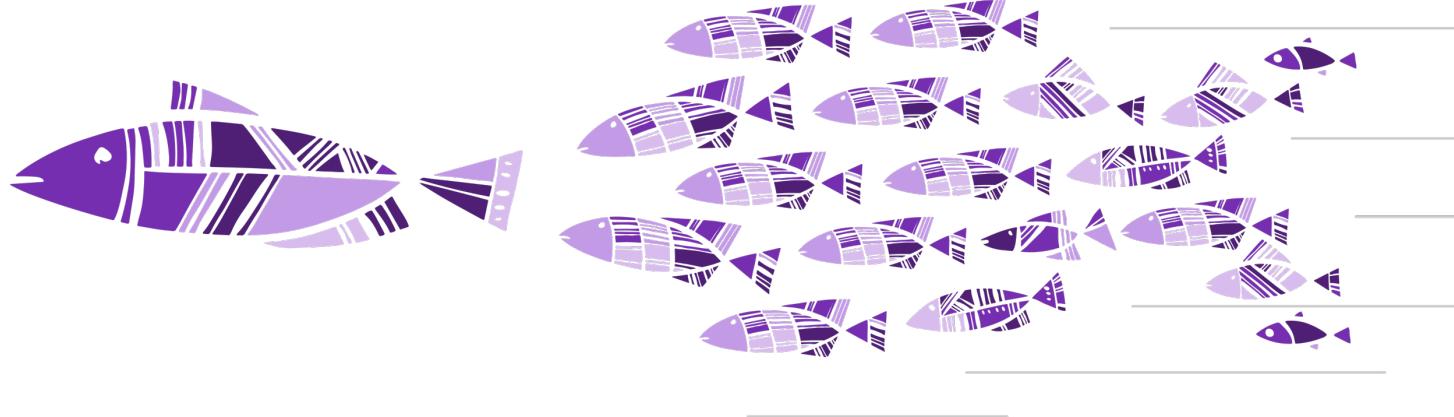
> 28 M
pounds of freight
(average daily volume)

Releasing the fast fish

“In the new world, it is not the big fish which eats the small fish, it's the fast fish which eats the slow fish.” – Klaus Schwab



FedEx has fast fish, the opportunity lies in them swimming in a school.



FedEx Business Agility framework

New strategic operating principles in building Enterprise and Common capabilities that enable FedEx to become the network for what's next



Key takeaway

It's crucial to enable collaborative and learning environment, invest time into improvement.

Don't just expect your teams to innovate and improve by only saying to do so, then get back in a while and ask for a status. Existing deadlines and commitments won't give a chance to evolve.



Today's story

Enterprise-wide cooperation, engineering practices and shared quality mindset that changed hearts and minds of people which resulted in supercharged delivery in a traditional program that supports route optimization services for FedEx packages delivery.



5 main points

Understand where you are and prioritize against bottlenecks

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Establish psychological safety and allocate time & capacity for improvement

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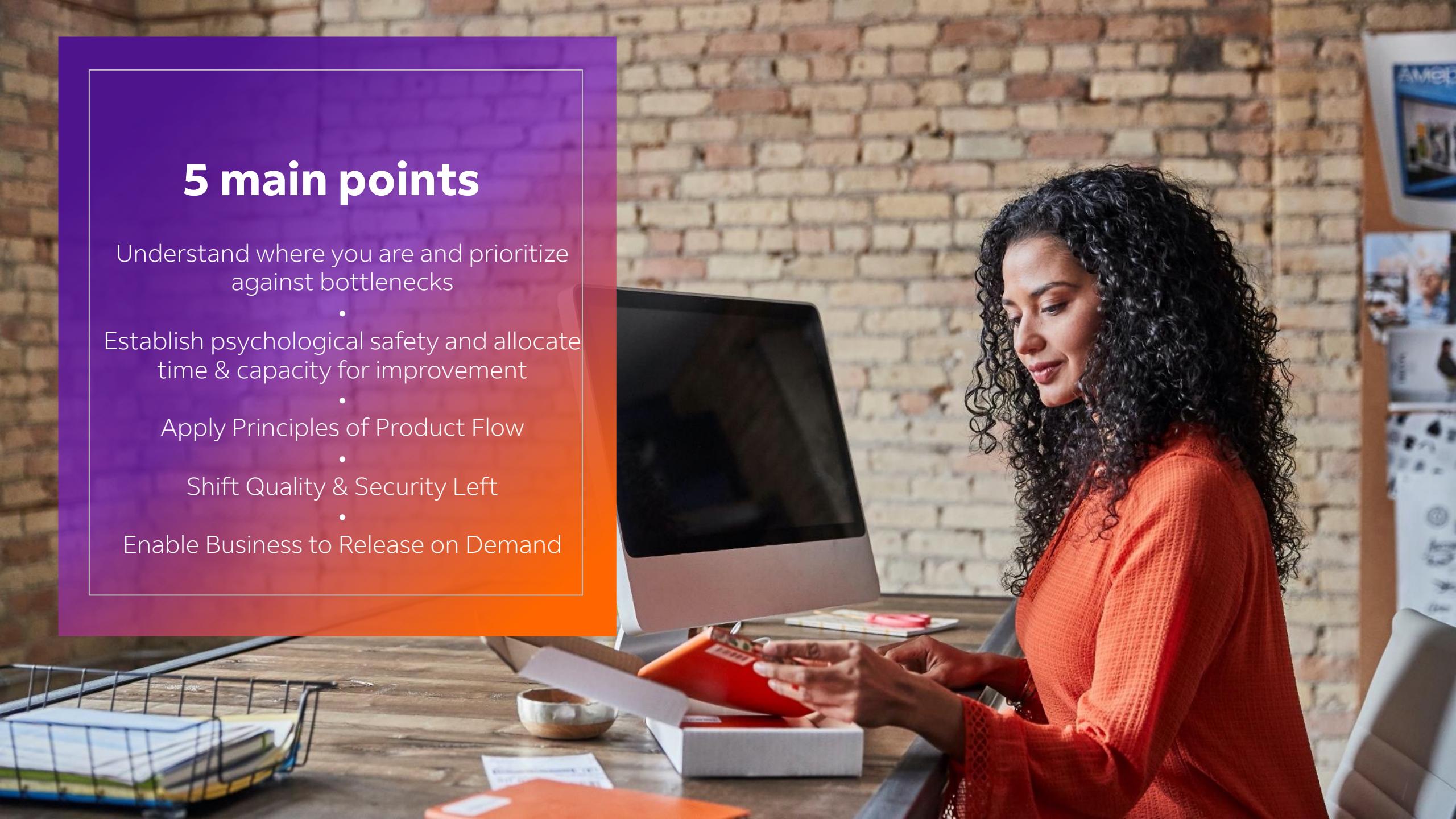
Apply Principles of Product Flow

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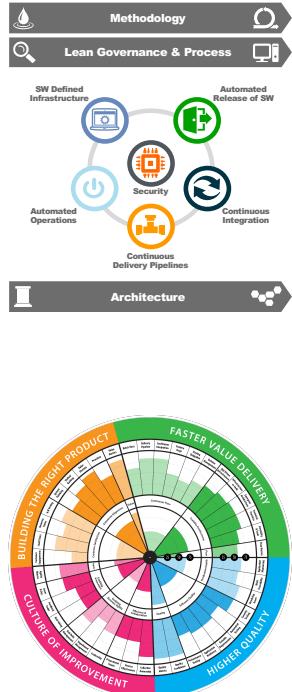
Shift Quality & Security Left

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Enable Business to Release on Demand



Understand where you are

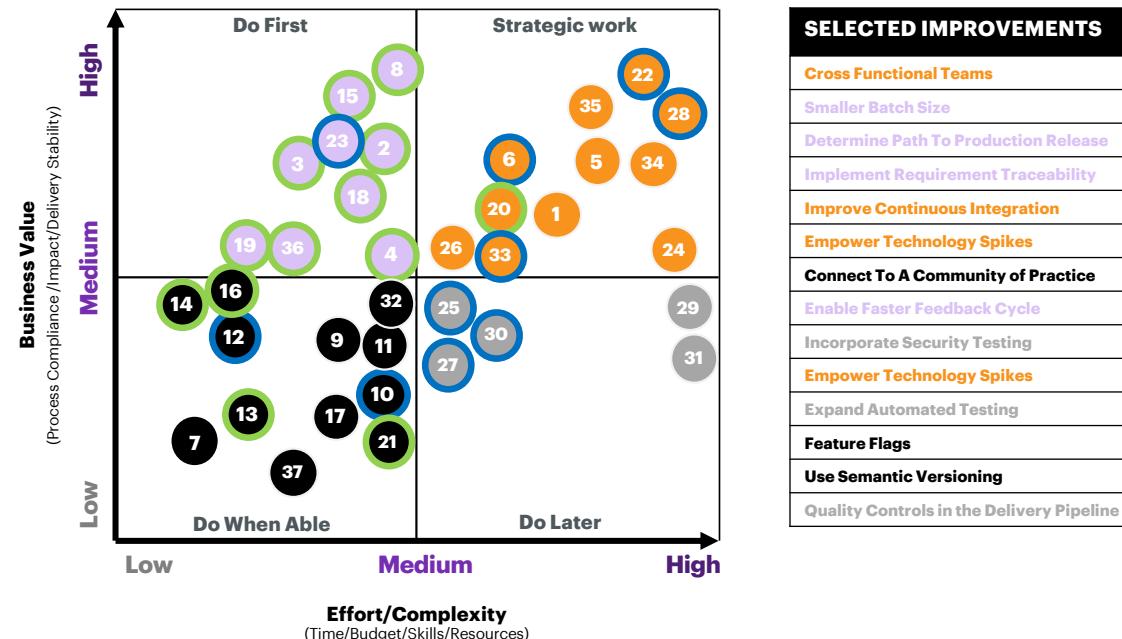
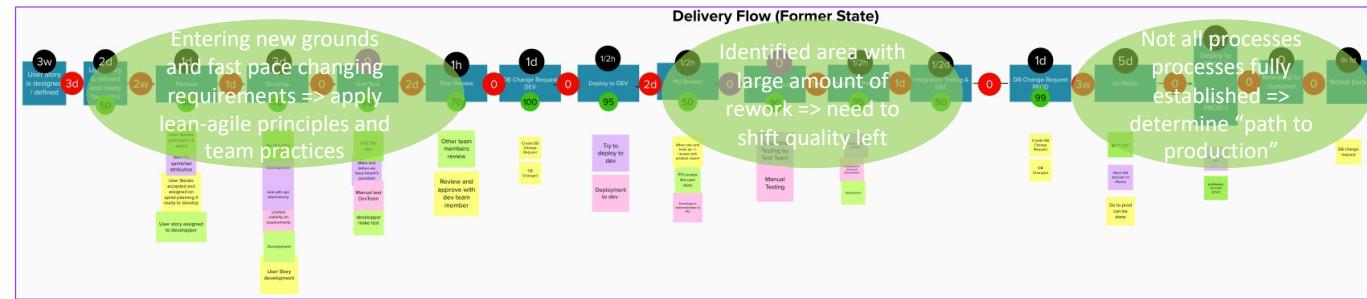


	1	MINIMAL	2	LIMITED	3	BASIC	4	ADVANCED	5	LEADING
DELIVERY ORGANIZATION & METHODOLOGY										
LEAN DELIVERY GOVERNANCE & PROCESSES			◇							
AUTOMATED RELEASE OF SOFTWARE				◇						
CONTINUOUS INTEGRATION			◇							
CONTINUOUS DELIVERY (INCL AUTOMATED QA)				◇						
AUTOMATED OPERATIONS			◇							
SW DEFINED INFRASTRUCTURE & CLOUD		◇								
PLATFORM/APPLICATION ARCHITECTURE	◇									
SECURITY	◇									

Legend:
◇ **Former State**
 based on information available at the time

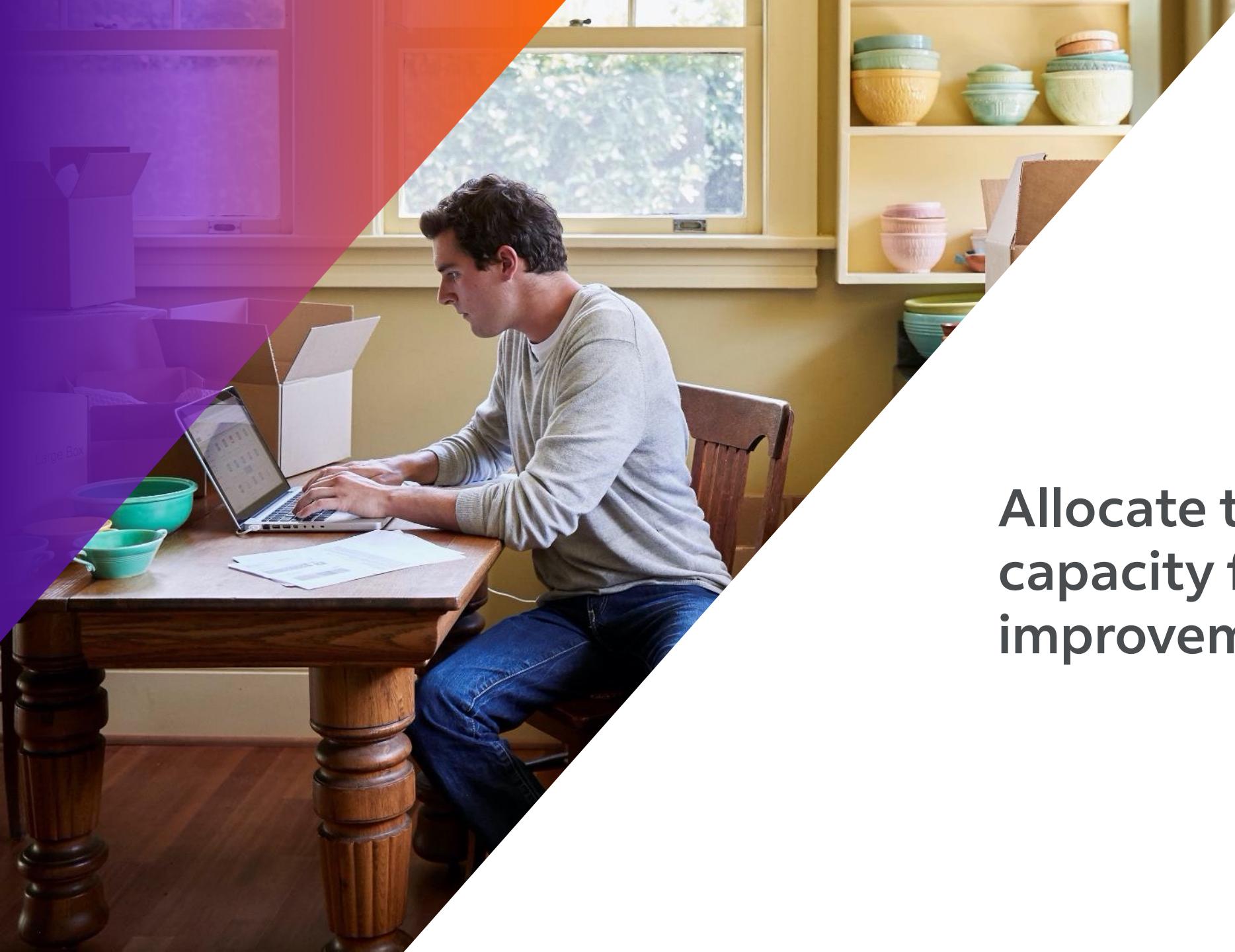
Prioritize against bottlenecks

“An hour saved at a non-bottleneck is worthless.” – Eliyahu M. Goldratt (The Goal)



A photograph of a woman with blonde hair, wearing a black FedEx delivery uniform with a purple collar and a name tag that reads "Stacy", packing a blue glass bottle into a large piece of clear bubble wrap. She is standing in front of a white pegboard wall with various circular items hanging from it. The background is a blurred view of a warehouse or shipping area.

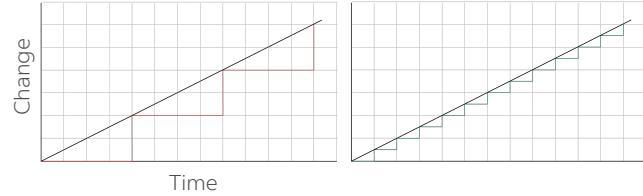
Establish psychological safety



**Allocate time &
capacity for
improvement**

Apply Principles of Product Development Flow

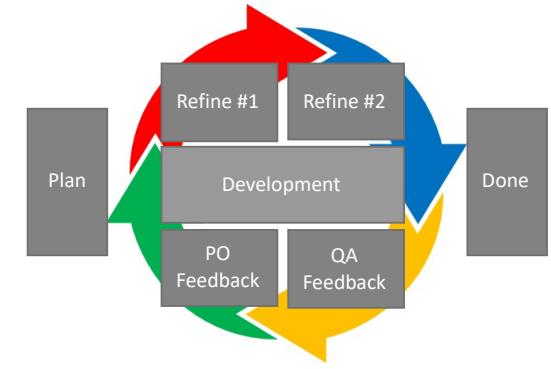
Achieve Flow by emphasizing smaller batch sizes, limited WIP and rapid feedback



Reduced batch sizes



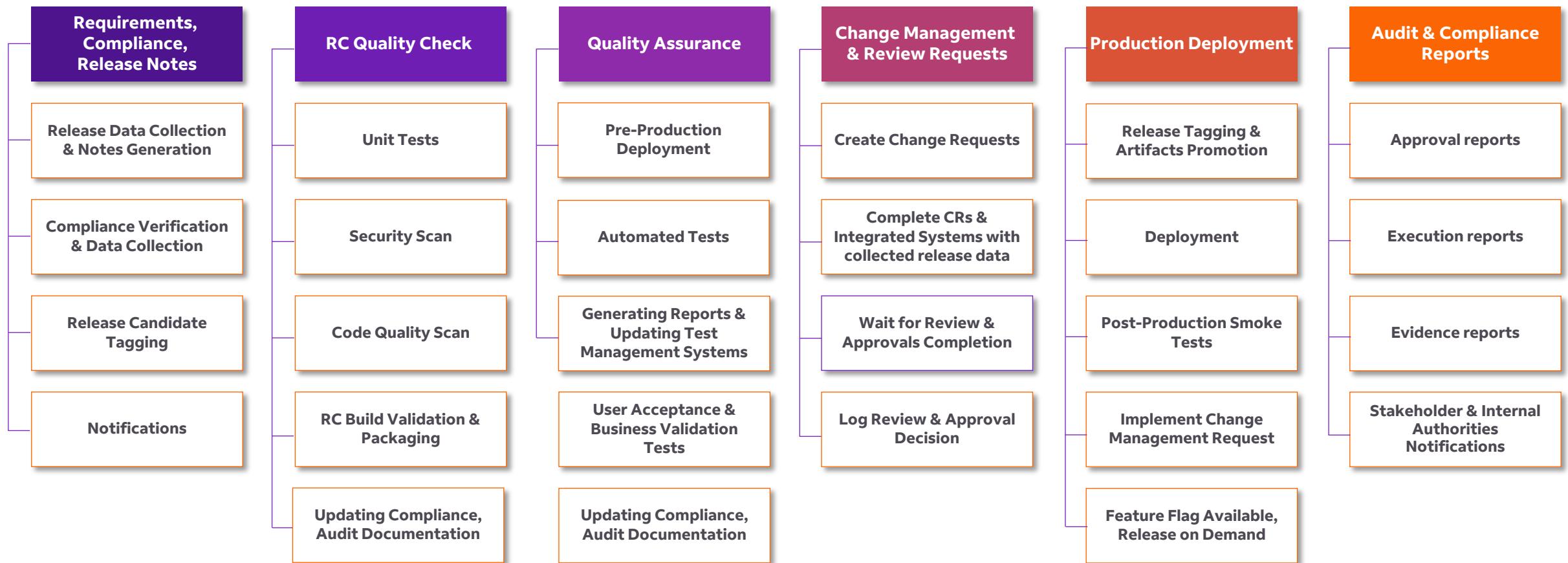
Applied WIP Limits



Continuous Refine & Review

Enterprise DevSecOps Platform adoption

FedEx extended traditional Continuous Delivery capabilities to support Enterprise functions that play critical role in the value delivery



Shift Quality Left

Applied team practices & techniques



Started 3 Amigos (PO, Dev, QA)

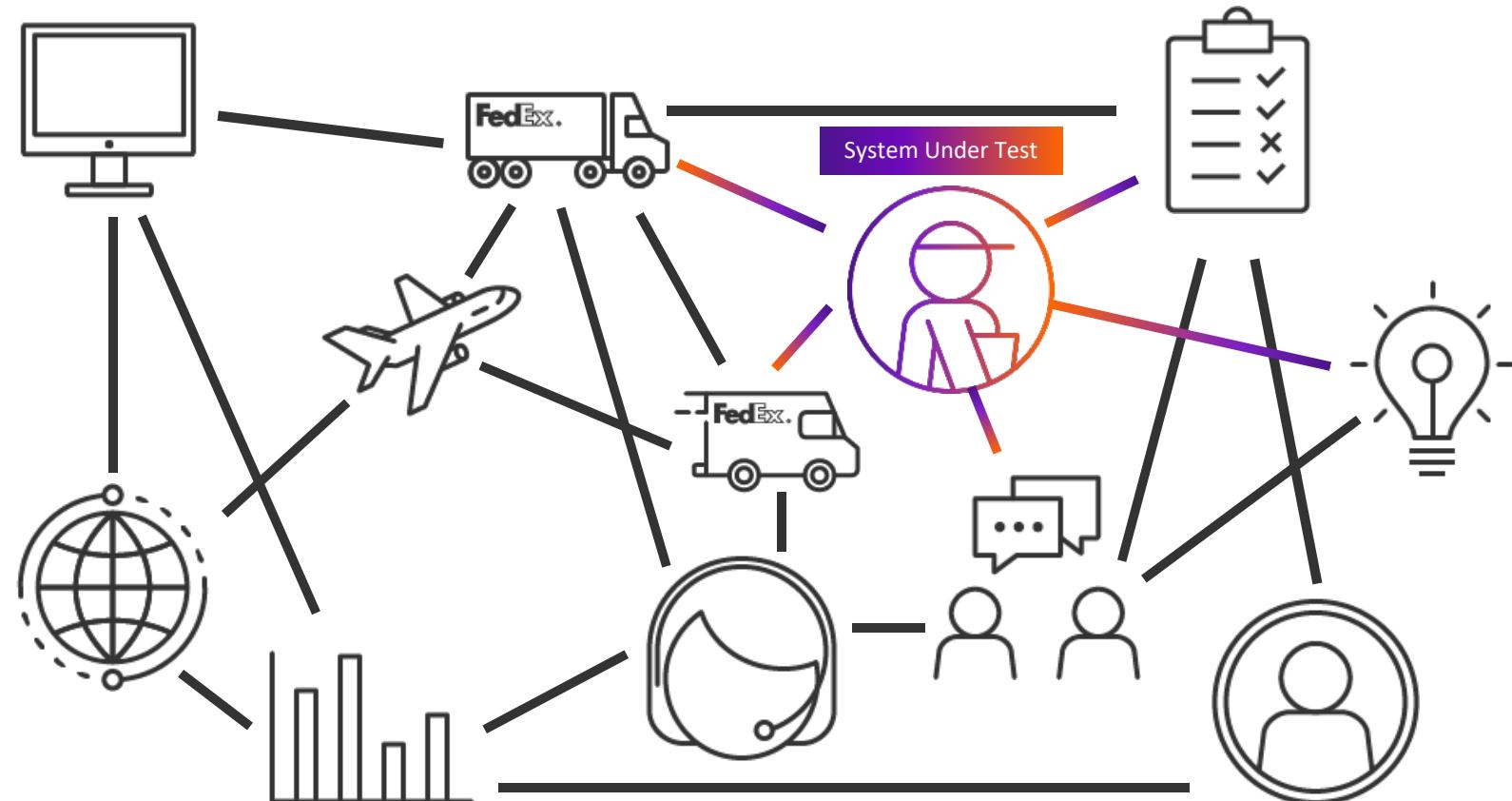
Defined of Ready & Done



Sliced User Stories vertically

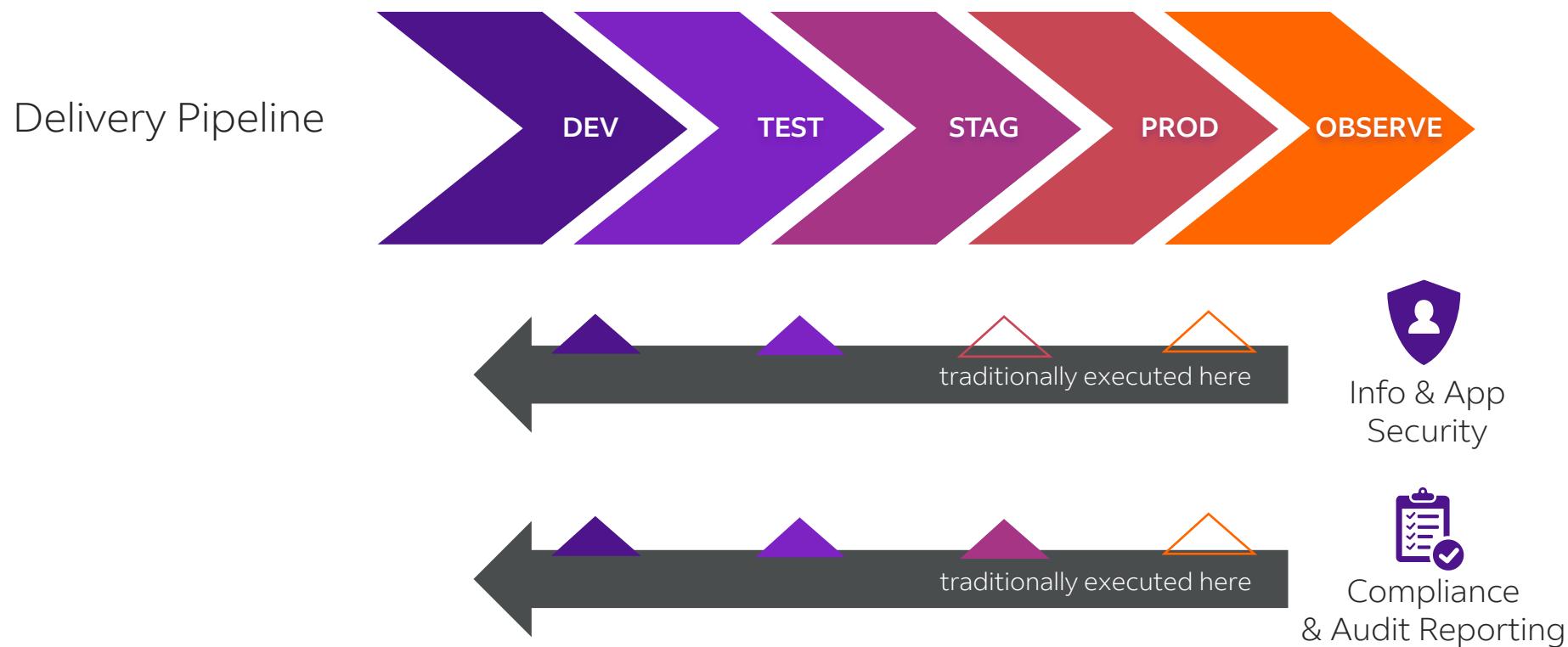
Give "Flight Simulator" to your product teams

If it was realistic, would it bring the same level of efficiency and predictability to software delivery that we see in other industries that employ the science of modelling and simulation? – Michelsen J., English J. (2012) What Is Service Virtualization?



Shift Security & Compliance Left

Incorporated Security and Compliance perspectives at the early stages



Business Release Flexibility

Deploy continuously, activate when & where you are ready

Benefits

- ✓ Product teams can deploy to production without impacting end customers
- ✓ Business gained ability to perform additional field testing in desired locations
- ✓ Scheduled, time-limited and infinite feature availability capability
- ✓ Powerful instrument to further improve product quality and provide best experience to our customers

Legend

	Feature A	
	Feature B	
	Feature C	
	Feature D	



What changed

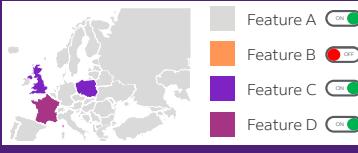
Faster Time to Market

Product features can be taken into development and be deployed to Production **7x faster** (within 1 day) by adopting Enterprise DevSecOps Platform



Release on Demand

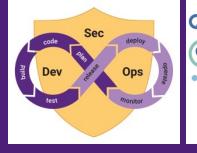
Developers can now deploy continuously to Production, while Business can release features on demand



- Feature A (green)
- Feature B (orange)
- Feature C (purple)
- Feature D (red)

Improved Security & Quality

By adopting incorporating InfoSec and QCoE scanning tools, builds and releases are stopped now, if there are **code quality or security violations**



Reduced Dependencies

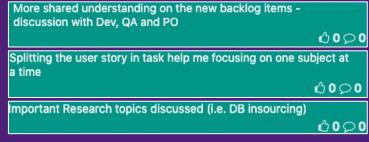
By virtualizing external services, team unlocked faster testing for critical Business Scenarios, without being dependent on service availability



Learning Organization

Teams are adopting Growth Mindset and demonstrating increased cross-functional knowledge, mastering new skills and improving work efficiency

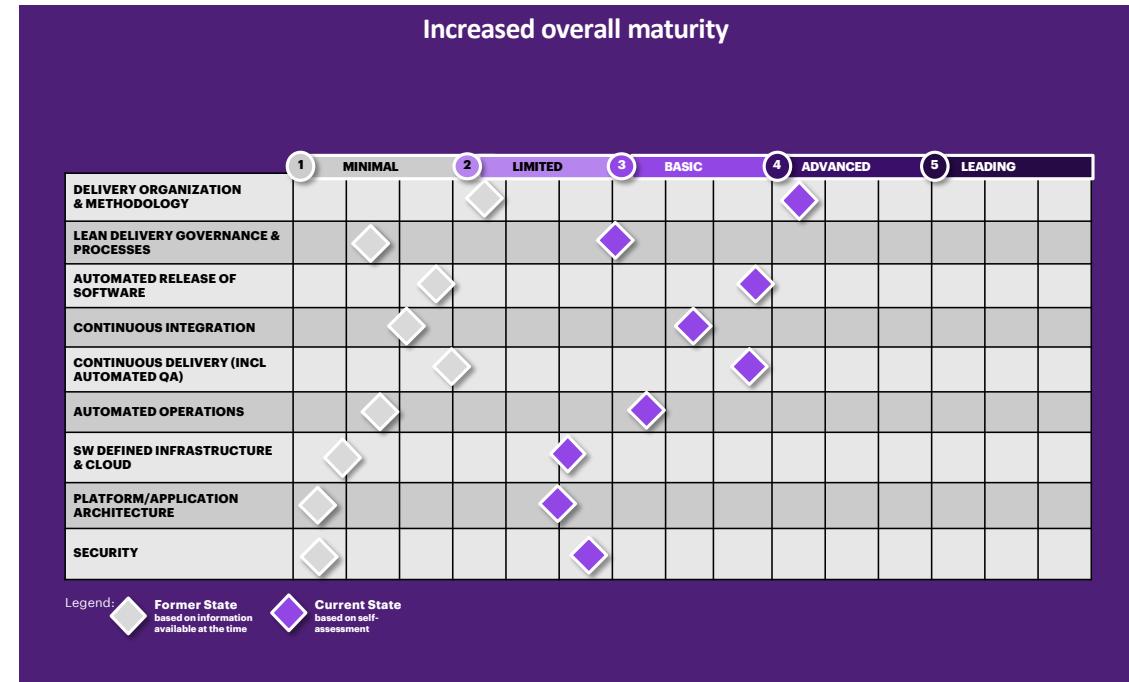
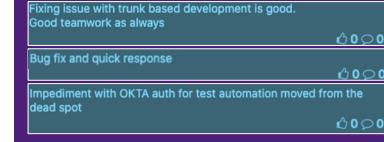
- More shared understanding on the new backlog items - discussion with Dev, QA and PO
- Splitting the user story in task help me focusing on one subject at a time
- Important Research topics discussed (i.e. DB insourcing)



Increased Engagement

Retrospectives indicate **2-3x increased amount of input, proactivity** in meetings and increased amount of recognitions for their teammates

- Fixing issue with trunk based development is good. Good teamwork as always
- Bug fix and quick response
- Impediment with OKTA auth for test automation moved from the dead spot



Moving forward



Bring Release & Change Management closer to the development



Inspire larger Leadership group with our takeaways & lessons learned to accelerate



Replicate success for more Value Streams



Closure

We are embedding continuous learning and collaboration culture in the FedEx DNA.
Join us – be example to others!



Practices &
Engineering Discipline



Local
Community of
Practice



Global Quality
& DevSecOps
Excellence



Reusable Assets
InnerSource



Guidance



Enablers in Program
& Product Backlog



Enterprise Platform
Team Support



Coaching



Lean-Agile
Principles



Change Driving
Leadership



Time for
Improvement



Psychological
Safety

Thank you