



# Humana DevOps Journey The Road Less Traveled

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## Rupesh Kumar

### Principal DevOps Engineer

Rupesh has more than 20 years of Information Technology (IT) experience in managing Enterprise level DevOps initiatives in the federal and commercial sectors.

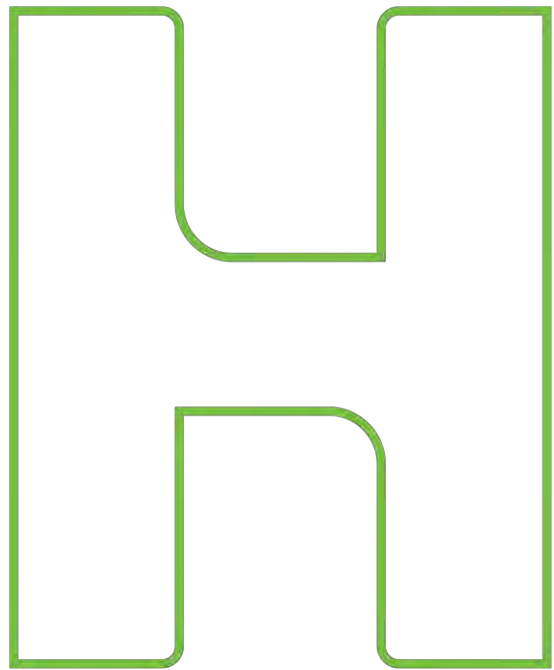


## Andrew Foster

### Director, DevOps Engineering

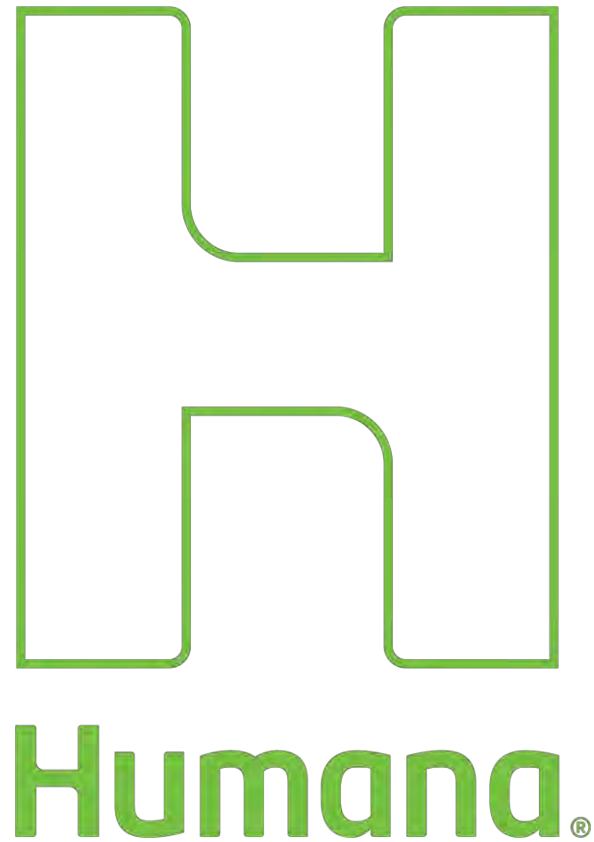
Andrew joined Humana in 2011 holding multiple technical and leadership roles.

Most recently he has lead DevOps adoption and transformation for the Enterprise.



**Humana®**

Human care means  
going beyond the  
expected, every day.



**DevOps Mission:** To give engineers the most compelling development experience possible.

# Humana Values Inspire DevOps Transformation



## Cultivate uniqueness

Appreciate individual uniqueness, creating an environment where everyone can fully be themselves, reflecting all of us and the communities we serve.



## Rethink routine

Work and learn together, transforming the norm to strengthen operational excellence and outcomes.



## Inspire health

Care for the whole person – emotionally, physically, and spiritually, building inspired communities where health and well-being prosper.



## Thrive together

Collaborate openly, building positive relationships to achieve strong, sustainable results for us and the people we serve.



## Pioneer simplicity

Take personal accountability, working together to create simple, personalized, quality experiences.

# Humana DevOps Model



## **Listen | Builds trust**

Enables healthy culture of active listening to the customer.



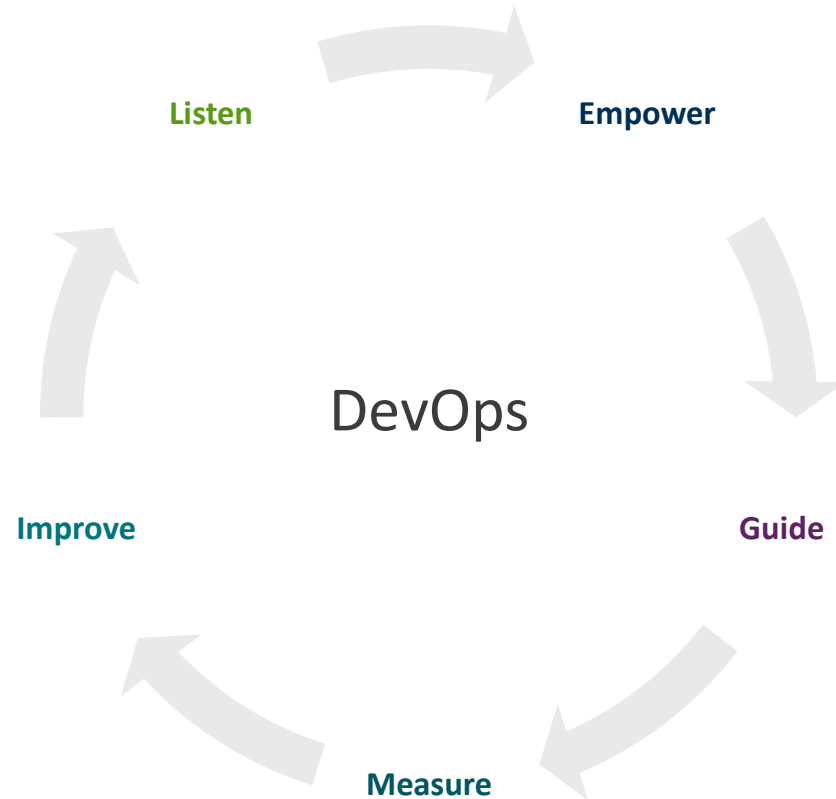
## **Improve | Builds quality**

Improve process and reduce cognitive load.



## **Measure | Builds decision making**

Capture data points to aid in story-telling, adoption, and improvement.



## **Empower | Builds sense of community**

Empower developers to contribute to solutioning by providing them with tools, capabilities, and platforms.

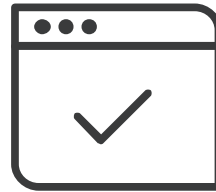
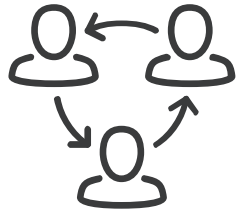


## **Guide | Builds confidence**

Foster guidance by creating standards and principles to enhance developer experience and level up software engineering practices.

# How to “Do DevOps” at Enterprise Scale

Organizational alignment, engineer first platforms, and pipeline automation equals DevOps success



## Alignment + Feedback

- Alignment across the IT Organization has accelerated adoption of key capabilities.
- Tight feedback loops with engineers & leaders keeps us focused on features that add the most value.

## Engineer Focused Platforms & Tools

- We can speed up software delivery by giving engineers modern & integrated platforms.
- Enabling engineers to stay inside those platforms as much as possible.

## Automated SDLC + Smaller Releases

- Codifying Humana’s SDLC, streamlining it w/ VSM, & baking process checks into DevOps pipelines.
- One Component → One Repo → One Pipeline drives us towards smaller more iterative releases.

# Greenlight API (GLAPI)

Enabling SDLC Process Automation and Controls via Pipelines

## Plan

- ✓ Traceability to Business Requirement
- ✓ Alignment to Funding Source, Value Stream

## Deploy

- ✓ Automated Change Ticket in System of Record (SNow)
  - ✓ Approval Validation
  - ✓ Risk Profile Assessment
  - ✓ Validate w/in Maint Window
- servicenow**

## Build

- ✓ Required Pipeline Task Validation
- ✓ Source Code Policy Enforcement
- ✓ Code Security & Quality
- ✓ Release from Main Branch
- ✓ App to Source Code Validation

## Accept

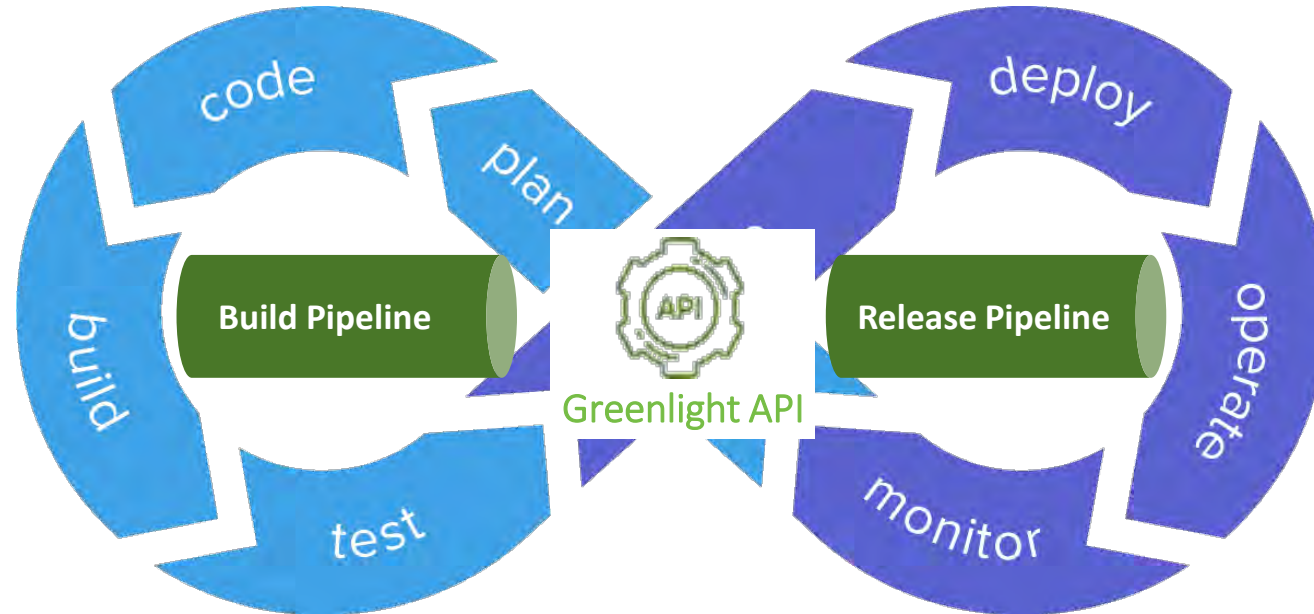
- ✓ Unit Test Code Coverage
- ✓ Test Case Validation
- ✓ No Open Bugs or Defects
- ✓ Security Quality Gate
- ✓ Performance Testing Gate
- ✓ Operational Excellence

## Feedback

- ✓ Unbreakable Pipeline

## Run

**CORE PRINCIPLE:**  
Operational Experience is a **Primary Feedback Loop** that Informs Controls Throughout SDLC



- ✓ Capability Available
- ☐ Capability In Progress



## Align + Plan

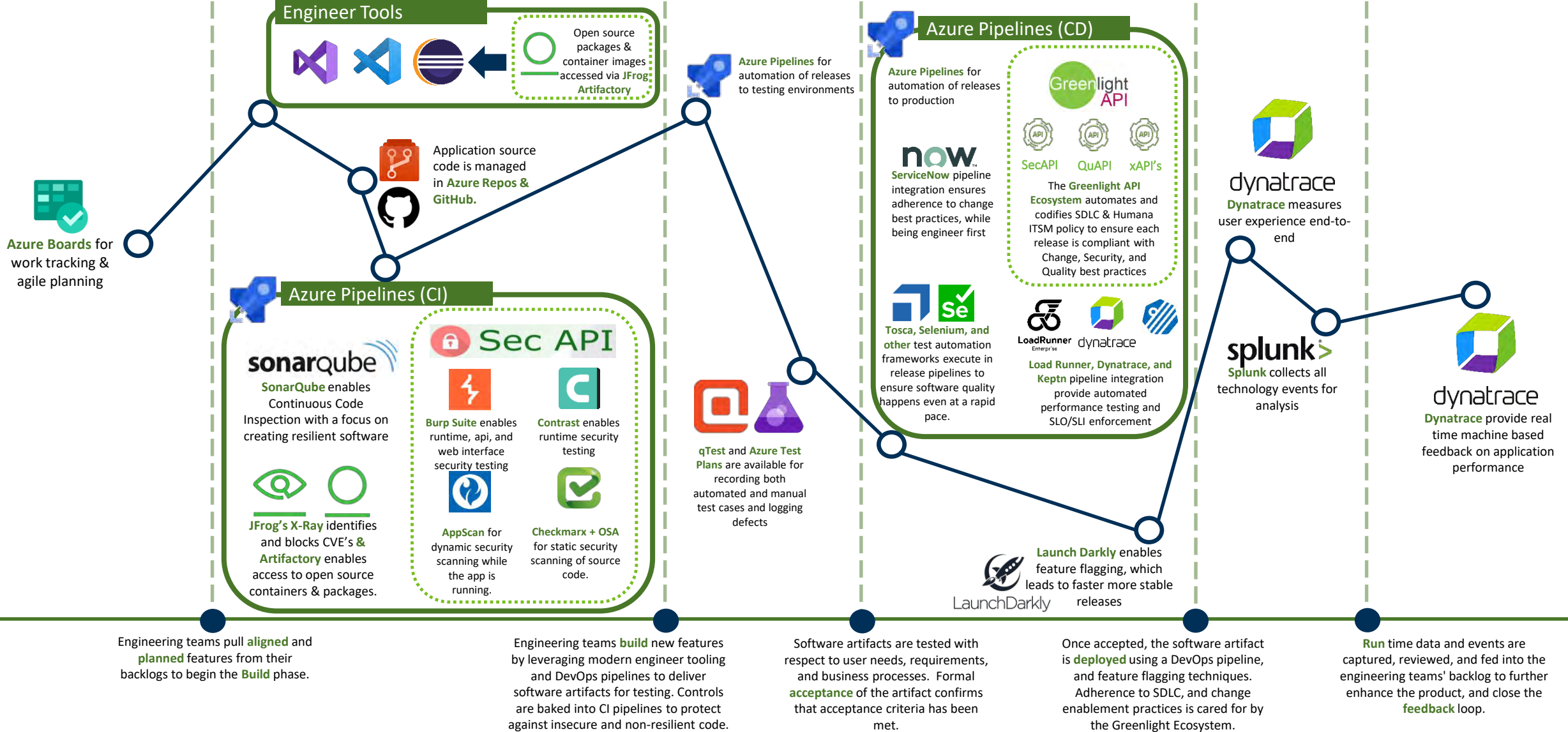
## Build

## Accept

## Deploy

## Run

## Feedback



# What results have we realized so far?

Helping Humana's developers become more productive leads to more value for our members

**56%**

**improvement in automation** over existing manual release processes\*

**>80%**

**improvement in overall process, wait, and lead time** over existing manual release processes\*

**>97%**

**of eligible releases using DevOps pipelines**, month over month, to release software to production

\*For engineering teams fully adopting DevOps capabilities

# Thank you

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