



Enhancing Pilot Competency and Performance Through AI-Driven Continuous Assessment and Resilience Training

EATS 2024 | Thursday 7th November

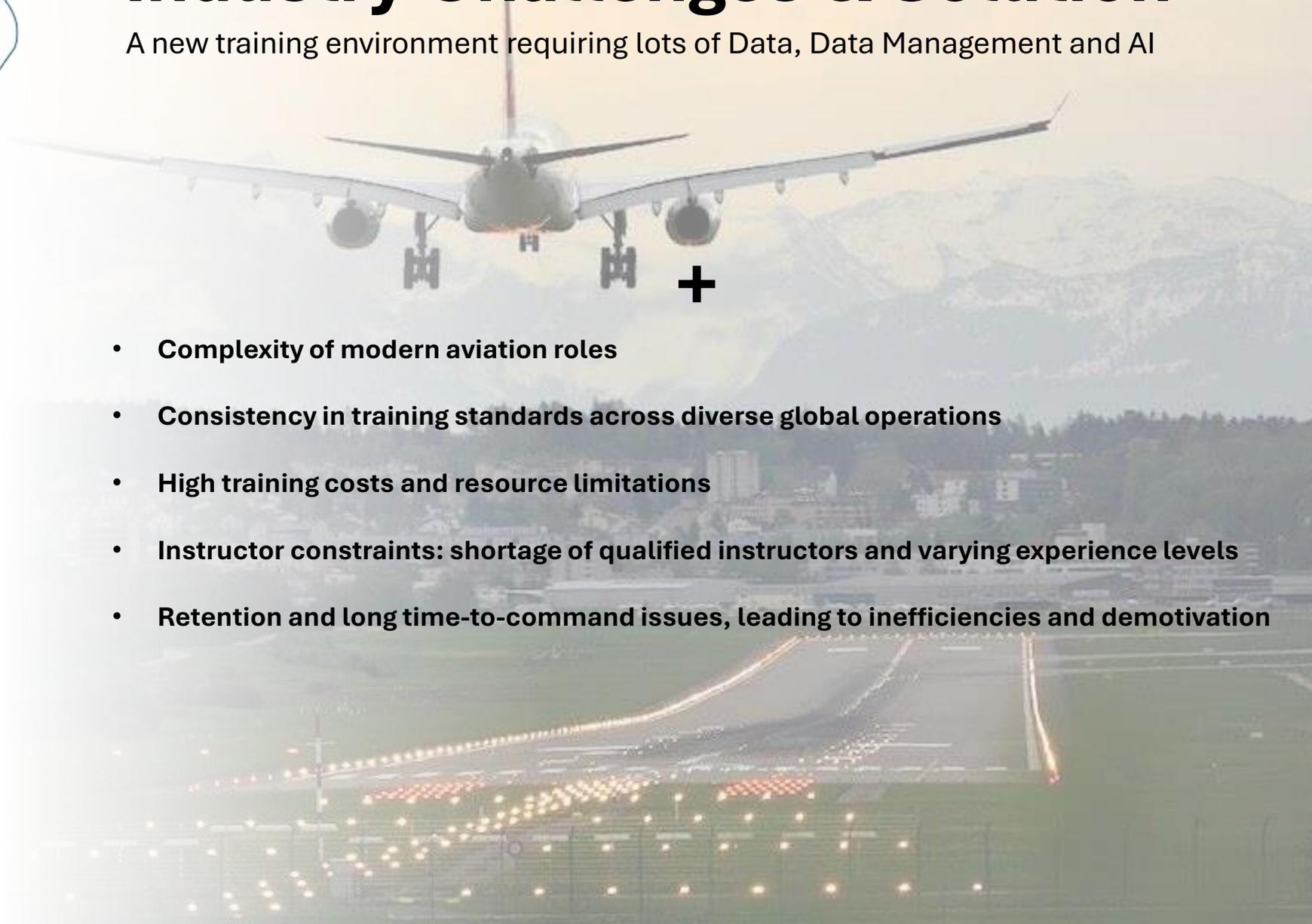
Industry Challenges & Solution

A new training environment requiring lots of Data, Data Management and AI



& their Observable Behaviors (OBs)

- Complexity of modern aviation roles
- Consistency in training standards across diverse global operations
- High training costs and resource limitations
- Instructor constraints: shortage of qualified instructors and varying experience levels
- Retention and long time-to-command issues, leading to inefficiencies and demotivation





Define, Architect, Deployed and Supported by APC using proven AI platform

Data Infrastructure

Support Multiple Large Language Modelling (LLMs)

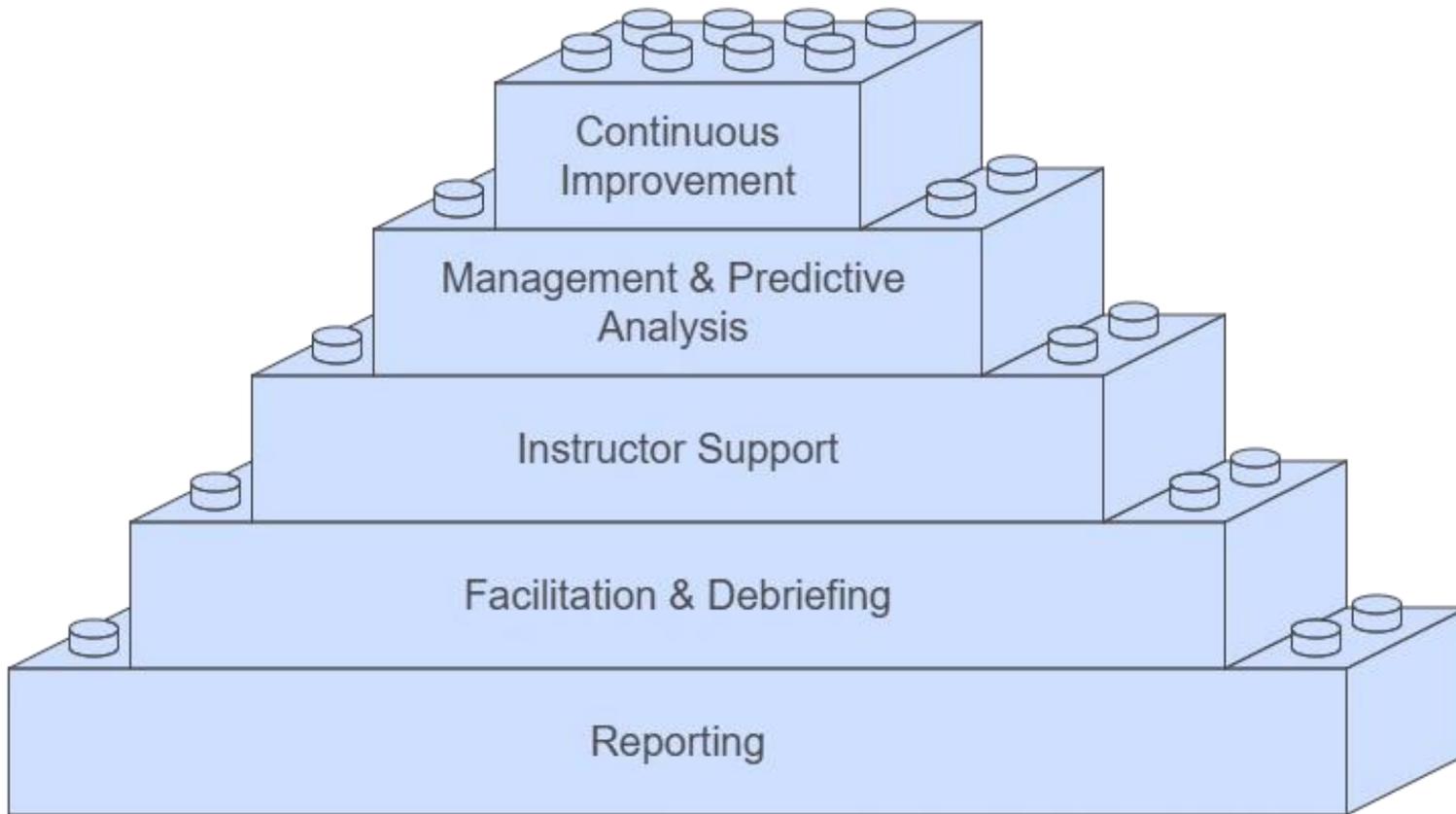
Support Multiple Machine Learning Techniques (MLs)

Seamless Integration Flexible User Interface & APIs



Data/AI-Driven Training Assistant System

AI-Driven Training Assistant System



Key features

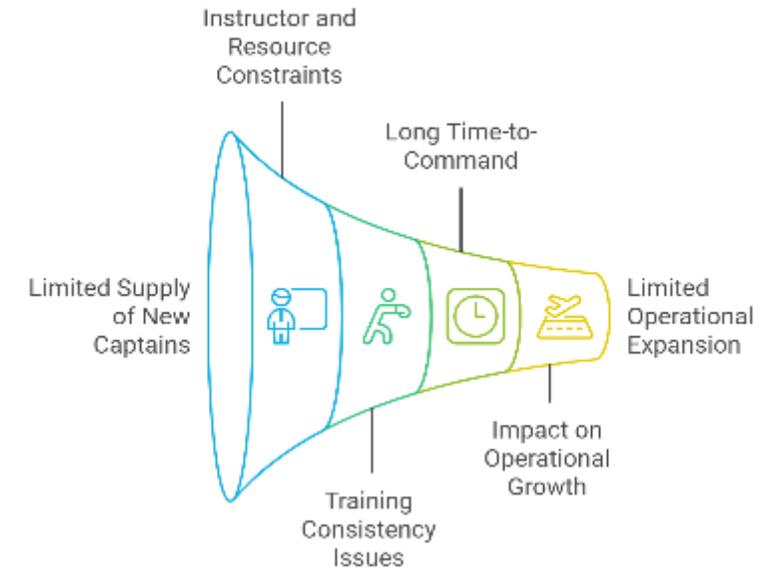
Personalized training paths
Real-time performance monitoring
Instructor calibration and support

Case Study: Command Upgrade

Typical impediments to FO progress:

- **Slow Progression**
- **Limited Feedback**
- **Brutal Selection & Training**
- **Discouragement**

Command Upgrade Process Challenges



Which of these challenges resonate with your operation?

Are there additional hurdles you're facing in your Command Upgrade process?



Early Initiation



Structured
Training Pathway



Continuous
Development



Regular
Assessments



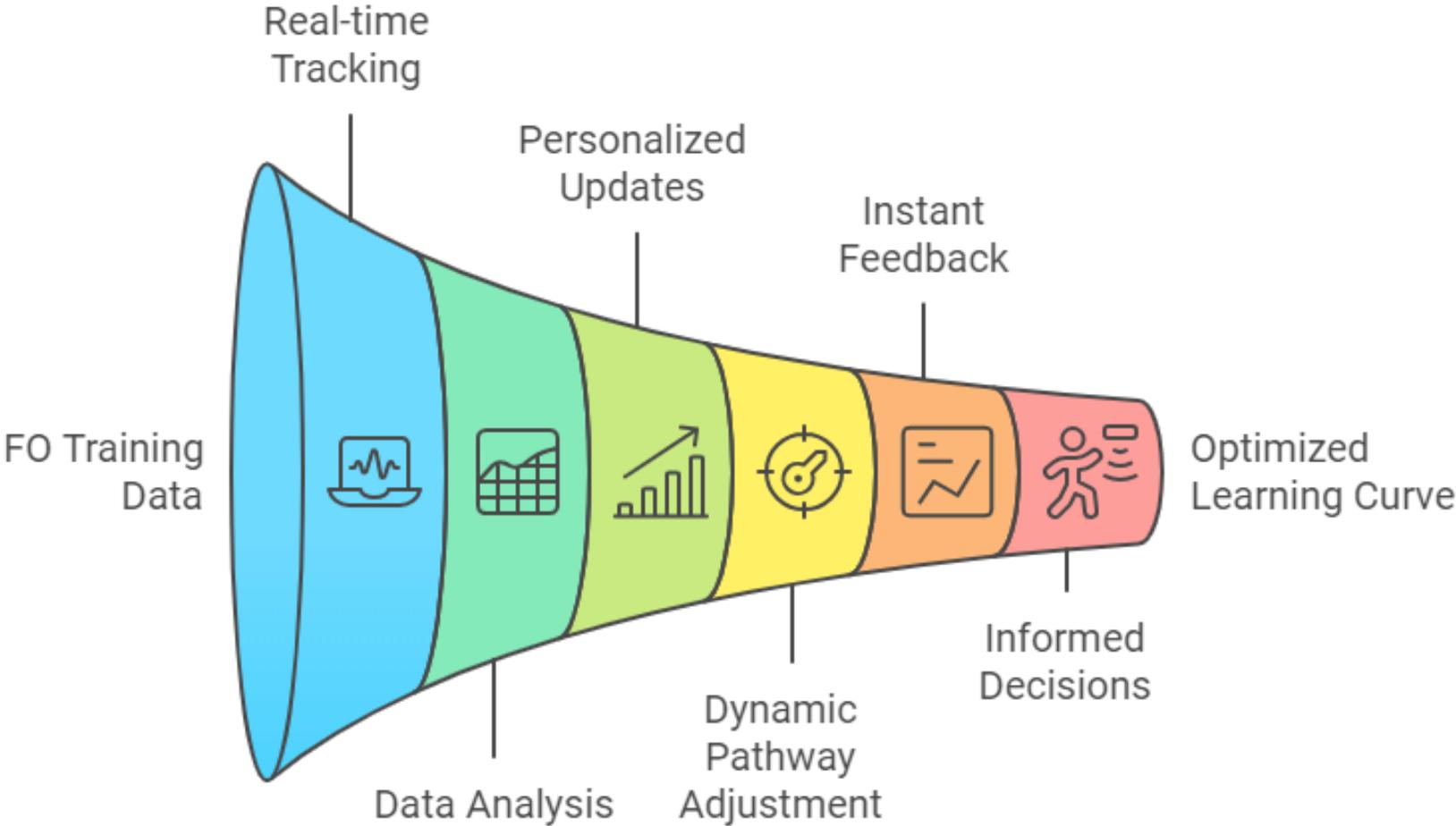
Command
Upgrade (CU)
Training Evaluation

Industry “Best Practice” = Route to Command

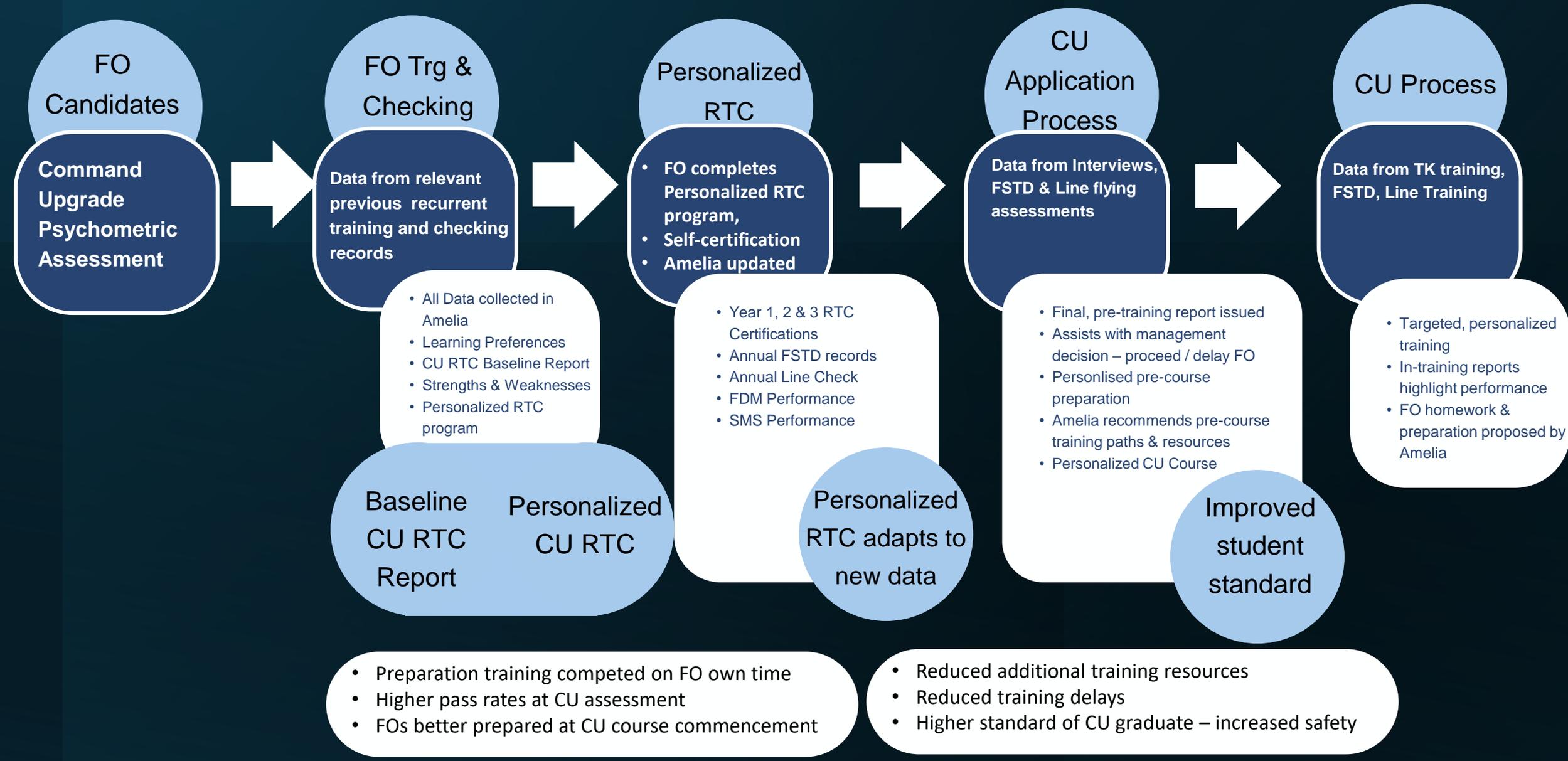
Smoother & Steady Progress over an extended growth period

Case Study: AI & Command Upgrade RTC

AI-Driven Insights and Real-Time Feedback for FO Progression



RTC Practical Implementation



RTC BASELINE ASSESSMENT REPORT FOR FIRST OFFICER 10186949

CONTENTS

1. First Officer's Information	1
2. Psychological Analysis and Impact on Training	1
3. Command Capability Analysis and Impact on Training	1
4. Strengths and Areas for Development	2
5. Potential Manifestations as a Captain	3
6. Recommendations for Improvement	4
7. Summary and Conclusion.....	4

The Benefits of using AI for Command Upgrade

A Personalized Route to Command process produces a higher quality candidate pool

99% pass rates in CU training.

Greater visibility for crew planning.

Less additional training resources required

RTC Graduate Commanders are the safest pilot cohort in SMS.



AMELIA



Enhancing Pilot Competency and Performance Through AI-Driven Continuous Assessment and Resilience Training

EATS 2024 | Thursday 7th November