The Next Generation of Global Aviation Training

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Shared Vision - A global aviation community that has sufficient competent human resources to support a safe, secure and sustainable air transportation system.

How do we achieve this from a training Perspective?
What is Big Data?

Everyday business and consumer life creates \(2.5\) quintillion bytes of data per day.

**VOLUME**
Large amounts of Data

**VELOCITY**
Needs to be analyzed quickly

**VARIETY**
Different types of structured and unstructured data

"90% of the data in the world today has been created in the last two years alone."

Worldwide IP Traffic will quadruple by 2015

By 2015, nearly \(3\) Billion People will be online, pushing the data created and shared to nearly \(8\) Zettabytes.
The New Role of Technology in Aviation Education

Big Data
FLIGHTSCOPE
SUCCESS STORY

BIG DATA
Data Driven Adaptive Training

1. Conduct Assessments
2. Obtain Relevant Data
3. Analyze Data
4. Determine Conclusions
5. Plan Instruction
6. Implement Instruction

Competency Focused
Adaptive Training Applications

• Bridge the gap between the classroom and simulation, Cockpit Systems Integration
• Teach or test new or existing procedures
• Recurrent training
• Practice or Assessment of knowledge and procedures
Example or use: The CRJ200 Super critical wing highlighted the importance of clean wing procedures. Send out timely safety critical information when an incident or accident occurs.
Intelligent Tutoring Systems

Use your data to define your training needs or gaps in your training. Write steps of procedures in regular language, using assigned labels.

User selects Practice or Quiz mode, testing allows performance to be tracked by training department.

Both modes offer all systems manuals, checklists and tutorials.
Step 1: STK 2 on (Turn battery Master On)

Step 2. STK 24 on Press APU PWR Fuel

Step 3. STK 25 Press APU start

Step 4. STK 4 APU Gen on
Intelligent Tutoring Systems

The APP allows the user to write their own scenario steps - **without any coding knowledge**, and the developed program translates the code into an interactive functional scenario.

Will work with all mobile technologies and computers.
Intelligent Tutoring Systems

• Provide experiential learning with 3D devices such as OCULUS RIFT
• Students can get the 3D experience
I would like to invite all of you to join us at the ICAO NGAP taskforce so help us ensure that we have the best and brightest aviation professionals to train in the future!

http://www.icao.int/safety/ngap