



# DIGITAL SOLUTIONS FOR AGING NORMS

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# INTRODUCTION

- Who am I?
- What is VARA?
- What do I do in my job at VARA?
- What I'm going to talk about.



# AIRCRAFT SAFETY & MAINTENANCE

- Aviation is the single most regulated transport medium (no one wants to change this);
- Safety is a commercial incentive as much as it is a moral one;
- Maintaining aircraft is a hugely complex process and requires high attention to detail, time, and resources.
- Airlines have limited resources



# MAINTENANCE: THE REALITY

- In 2014 airlines globally spent approx. \$62b on MRO – 9% of total operational costs\*
- These costs are increasing for smaller and regional carriers due to the reliance on maintaining continuously aging fleets and prohibitive costs of new aircraft acquisition
- These costs represent a major challenge for Australian Regional Carriers due to high labour costs, regulatory creep and reduced revenue margins



\* IATA AIRLINE MAINTENANCE COST EXECUTIVE COMMENTARY (<https://www.iata.org/whatwedo/workgroups/Documents/MCTF/AMC-Exec-Comment-FY14.pdf>)

# MAINTENANCE: THE VARA EXPERIENCE

- In total VARA has **17 Aircraft.**
  - 3 x A320
  - 14 x F100.
  - In the process of inducting another 2 A320's
- On Average VARA maintains over **3000** documents **per month** for the entire fleet.



# PROCESSES: PRE-ELO

- Dirty Fingerprint
- TSR's
- Scanning
- Physical storage
- Information availability
- Time delay / costly
- Location dependent



# THE SOLUTION: DIGITISATION GOALS

- A single source of truth for document and information archiving
- The ability to search and retrieve documents and information form a simplified system
- A structured file system with single point of entry and storage
- Web based form submission for technical services with workflow triggers
- Automated workflows
- A compliant system with reports and audit capabilities
- Information anywhere, anytime
- Address processing time



# DIGITISATION: OUTCOMES

- Reduced labour costs
- Compliance with required Australian standards
- Faster access to information
- Faster processing
- Increased mobility of users
- Reduced long term risks
- Increased collaboration & oversight
- Reduced overall costs



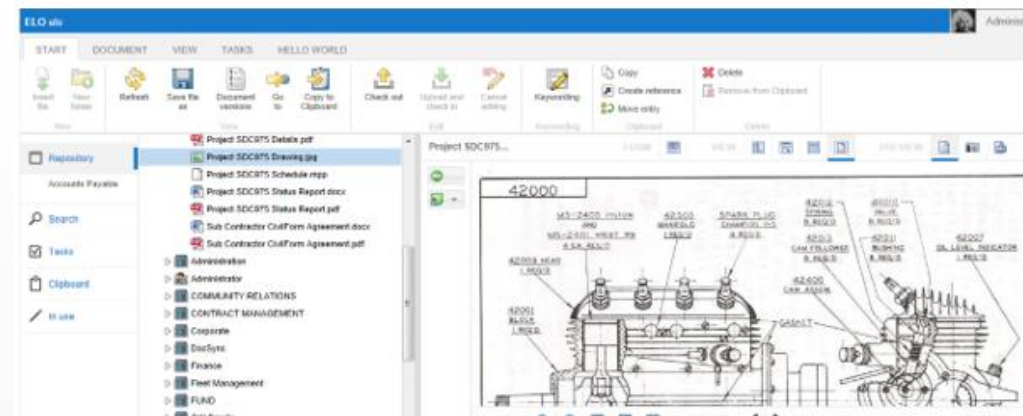


# THE SOLUTION: CHOOSING ELO

- Ease of use (intuitive interface)
- Quick deployment
- Fast return on investment
- Built on current standards
- Non-proprietary
- Low maintenance costs
- Compliant with Australian standards



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# PROCESSES: WHAT DID WE DO?



- **We reviewed our paper based processes**
  - Paper storage
  - Paper filing
  - Effort for submission, reviewing, filing and finding
  - Do we meet regulatory requirements
- **We discussed how to implement digital transformation without:**
  - Risking compliance
  - Increasing costs
- **We wanted to achieve:**
  - Faster processing: submitting / reviewing / filing / finding
  - Better auditing
  - Cost reduction
  - Information anywhere at any time

# PROCESSES: SUBMISSION AND MORE

## Scanning / Filing:

- Documents
  - Paper
  - Emails
  - Attachments
- Scan or Drag & Drop into ELO Inray
- Apply respective index information
- Automated filing
- Workflows can start

Basis		Extra text		Options		Permissions		Version history		Additional information	
Short name	TSR_0116005(1)										
Date	May 31, 2018 12:41 AM				Current version	1					
Filing date	May 31, 2018 12:54 AM				Editor	Administrator					
A/C TYPE	A320										
CLASSIFICATION	OPTIONAL										
EFFECTIVE DATE (IF MANDATORY)											
ORIGINATING DOCUMENT	none										
ISSUE DATE	04/05/2018			TRAXDOC #	none						
IS ELA AFFECTED	YES			IS AMP AFFECTED	YES						
FCOM / MEL IMPACT	NO			IS W&B AFFECTED	NO						
TRC APPROVAL REQUIRED	YES			HAS TIE BEEN AUTHORISED	YES						

  Expand keyword list automatically 

# CREATING PROCESS STANDARDS

- We created standard filing structures
- We created standard terminology
- We created “drop downs”
- We created automation where possible
- We created workflows
- We (will) create eForms
- We will go mobile

The screenshot displays the ELO (Enterprise Library) interface. The left pane shows a hierarchical folder structure under the 'VARA' root, including 'AIRBUS A320', 'FOKKER F100', and 'VH-FNC'. The 'VH-FNC' folder is expanded, showing sub-folders like 'AIRWORTHINESS DIRECTIVES', 'BORESCOPE', 'COA', 'ELECTRICAL LOAD ANALYSIS', 'ENGINEERING ORDER', 'EXCLUSIONS', 'FLIGHT LOG', 'MAINTENANCE DEFECT REPORT', 'MAINTENANCE LOG', 'REPAIR', 'SERVICE BULLETINS', and 'WORK ORDER'. The right pane shows a 'Preview' table with columns for Type, Short name, Date, Filed by, Version, Keywording, Filing date, Priority field, and Priority field. The table lists various folders and their details.

Type	Short name	Date	Filed by	Version	Keywording	Filing date	Priority field	Priority field	Priority field
Folder	AIRWORTH...		Administrator			May 31, 201...			
Folder	AIRWORTH...		Administrator			May 31, 201...			
Folder	BORESCO...		Administrator			May 31, 201...			
Folder	COA		Administrator			May 31, 201...			
Folder	ELECTRICA...		Administrator			May 31, 201...			
Folder	ENGINEERL...		Administrator			May 31, 201...			
Folder	EXCLUSIONS		Administrator			May 31, 201...			
Folder	FLIGHT LOG		Administrator			May 31, 201...			
Folder	MAINTENAN...		Administrator			May 31, 201...			
Folder	MAINTENAN...		Administrator			May 31, 201...			
Folder	REPAIR		Administrator			May 31, 201...			
Folder	SERVICE B...		Administrator			May 31, 201...			
Folder	WORK OR...		Administrator			May 31, 201...			

# WHAT'S NEXT

- VARA eForms
- Secure browser access
- Secure mobile application
- Submission anywhere / any time
- Analytics & Dashboards
- More departments