LexX Case Study | Australian Airline Digital Intelligence for Optimised Maintenance

Lex^X and a prominent Australian Airline (AA) entered into a Pilot aftering confirming the potential for Lex^X to assist with initiatives within AA Engineering operations. AA Engineering's key initiatives are to *significantly improve* the availability and on-time performance of its airline fleet.

Whilst overall use of Lex^X in this trial was restricted to several technicians due to Covid-19, the outcomes of it's use were extremely favorable.

Targets of the Pilot

AA Engineering's key initiatives were to:

- Significantly improve the availability and on-time performance of its airline fleet
- Reduce the requirement for redundancy and thereby lower capital commitments
- Lower support costs and costs associated with schedule disruptions
- Overall improved customer experience and brand perception

Estimated Time Savings

From the use of LexX during the Pilot were as follows:

Complex Problems 60-90 Minutes
Medium Complexity 20-30 Minutes
Less Complex 10-15 Minutes

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"The Lex^X platform is the **most succinct, intuitive and relevant**aircraft trouble shooting platform I have utilised in my 30+
year aviation engineering career. The fact it is linked to the OEM
documents is clearly critical and saves considerable time when
assessing faults as they 'roll in'. Most platforms are designed from an
office with little feedback garnered from those who need to utilise
them swiftly. Lex^X has been designed from the users perspective,
making it particularly relevant in our constant reactive environment."



Data Ingestion

The following data was ingested into Lex^X to facilitate the trial by Australian Airline technicians:



Ingestion of various data (e.g. tech logs, defect, task card data from TRAX and textual data from Tech Pubs, e.g. FIM, AMM and AIPC)



Integration of full history of data for Australian Airline's A320 fleet, but limited to around one million records



Due to restrictions brought about by Covid-19, it was not possible to upload TRAX data. Had this been possible it is likely the key outcomes would have been improved significantly

The Value | Key Findings



Made information available to the Technician at the point of failure (i.e. the aircraft on the tarmac) Q

Identified problems quicker than existing methods, guiding the Technician through fault resolution



Worked within the OEM TSM and, as such, worked within existing regulatory frameworks



Proved to be more succinct than the OEM documentation



Assisted with returning aircraft to service after outages associated with Covid-19

Overall, LexX enabled the availability and efficiency of critical assets

The Hidden Value of Data?

All modern industries, including Aviation, are **affected by knowledge loss**, especially as staff move on or retire. However, as Aviation has access to millions of records relating to previous maintenance, there is an inestimable amount of knowledge and wisdom available right now.

The trick is to extract that knowledge and wisdom in a way that is seamless to the end user, whilst remaining accurate, and compliant. That's where Lex^X steps in to the fold - Lex^X allows you to save and re-use those years of learning; every day for every one.



Our vision is to transform maintenance by empowering every technician everyday













