



Creating a workforce planning solution which enables its user to provide strategic advice to companies, industry and governments

Defence Industries – Workforce Planning Tool



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CASE STUDY

Creating a workforce planning solution which enables its user to provide strategic advice to companies, industry and governments.

PROBLEM

Our Defence Industries Client had previously forecast project resource requirements over the life of their projects. However, the process was manually intensive and did not integrate and utilise a number of relevant data sources.

Defence Industries often involve having large-scale projects with extended timeframes. The scale of these projects often have a noticeable impact on the labour market as they require large numbers of workers with specialist skills.

A problem exists in the industry where multiple projects of significant enough scale could cause the price for certain skills to balloon leading to unpredicted budget blow outs.

Exposé was engaged to create a tool which would enable them to forecast what the workforce requirements would look like into the future, analyse the current supply of skills and identify any likely shortfalls between the supply and demand of skills so that they could be planned for.

SOLUTION

Exposé was engaged to analyse, design and build the technical infrastructure, security parameters, user interface and data ingestion of publicly sourced information along with privately sourced project data.

Exposé was responsible for ensuring the secure transition of data, correlation of multiple data sources and creation of a multi-level report user interface. Exposé's solution included the following:

- Semi-automated ingestion of public data sets utilising Azure Data Factory, allowing for ongoing scalability of data ingestion methods.
- Azure SQL database utilisation to enable data ingestion, prevent data corruption and enable scaling of the Workforce Planning Tool.
- Reporting utilising Power BI integration, allowing for the analysis of multiple projects, skillset areas, industries and geographies.
- Alignment with Microsoft and industry best practices for data security, including recommendations for future data segregation to keep private data safe.

BUSINESS BENEFITS

In completion of this workforce planning tool, we enabled our client to:

- Predict likely future skill shortages for regions and/or in specific skill set areas more accurately. This enables the client to be able to provide strategic advice to industry partners to help them avoid future peaks in the costs of specific skills and to increase the confidence industry partners have in planning project pipelines further into the future.
- Work with governments to try to “smooth the curve” of workforce supply and demand by utilising the policy levers available to governments (e.g. training, public project delivery timeframes, immigration, etc) to reduce the “boom and bust” cycles within industries.
- Own a tool which is scalable and can be utilised across a wide-range of industries where workforce planning is critical, not just in Defence Industries.