



# University of Western Australia (UWA) Capstone Project

## Streamline Procurements Project Brief

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# Document control

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# Project Brief

## Introduction

The UWA Capstone Project will determine if machine learning can be applied to existing Tenders WA data to provide efficiencies in WA Government tendering processes and provide the tendering agencies with increased insights from our Tenders data.

Tenders WA makes the tendering process for Western Australian Government contracts transparent and efficient; and is the central source of information on Western Australian public sector requests and awarded contracts, including sole source purchases.

## Terminology

The following terms and acronyms are used in this document.

Term	Description	Comment
BI / PBI	Microsoft Power BI (Business Intelligence) application	
CUA	Common User Arrangements	
Finance	Department of Finance (WA)	
PQ	Parliamentary Question	
Tenders WA	Western Australian Government Tendering system	
UNSPSC	United Nations Standard Products and Services Code	
UWA	University of Western Australia	
WA	Western Australia	

# Project details section

## Objectives

- Identify procurement contracts across agencies that may be suitable for a single procurement process by identifying the best describable contract type in contract submissions.
- Harness the advances in natural language processing to analyse UNSPC descriptions and contract descriptions

## Background

The Department of Finance's Inform and Improve team has developed the Tenders WA Dashboard which is used by internal and external agency stakeholders. This dashboard contains various information on procurement contracts, for example: awarded contracts, supplier contracts, contract variations, expiring contracts and contracts without an expiry date.

Using different data exploration techniques, we would like to explore:

- Listing of contracts across agencies that could be open to a single procurement process.
  - Various agencies have multiple contracts published and they involve one or multiple suppliers. Identify if these contracts across multiple agencies may be combined into a common procurement process which meets their requirements.
  - Identifying future single contract opportunities across government agencies. Currently government entities have numerous similar contracts (outside of the CUA framework) that involve many differing processes. Identifying these opportunities for reducing the time and effort in the engagement process and contract management by all stakeholders.

## Data Description

Contract Details – Data Fields	Description/ Example/ Comments
Public Authority	State Agencies
Address	

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Client Agency	To be Derived from Description
Reference number	Tenders Reference Number
Type of Work	<ul style="list-style-type: none"> <li>○ Goods and Services</li> <li>○ Work</li> </ul>
Title	Contract Title
Description	Contract Description
Closing Date	
UNSPSC	United Nations Standard Products and Services Code
Procurement Method	
Period Contract	
Original Contract Value	
Revised Contract Value	
Actual Contract Expenditure	
Region/s	
Award Date	
Starting Date	
Initial Expiry Date	
Final Expiry Date	
Number of Submissions	
Panel Contract	
Contract Developer	
Phone	
E-Mail	

Contract Manager	
Phone	
E-Mail	
Contractor(s)	<ul style="list-style-type: none"> <li>○ Contractor A</li> <li>○ Contractor B</li> </ul>
Contractor information	<ul style="list-style-type: none"> <li>○ Aboriginal Business</li> <li>○ Australian Disability Enterprise</li> <li>○ DCSP</li> <li>○ Business Size</li> </ul>
<ul style="list-style-type: none"> <li>• Contractor Price (Panel – if provided)</li> </ul>	<ul style="list-style-type: none"> <li>○ Contractor A</li> <li>○ Contractor B</li> </ul>
<ul style="list-style-type: none"> <li>• Price Variations</li> </ul>	
<ul style="list-style-type: none"> <li>• Variation Period:</li> </ul>	01/10/2019 - 30/09/2020 No. of Variations:1 Total Variation: \$Amt  01/10/2020 - 30/09/2021 No. of Variations:2 Total Variation: \$Amt
<ul style="list-style-type: none"> <li>○ Variation Start Date</li> </ul>	
<ul style="list-style-type: none"> <li>○ Variation Start Date</li> </ul>	
<ul style="list-style-type: none"> <li>○ No. of Variations</li> </ul>	
<ul style="list-style-type: none"> <li>○ Total Variation Amount</li> </ul>	
<ul style="list-style-type: none"> <li>• Actual Expenditure</li> </ul>	
<ul style="list-style-type: none"> <li>• Expenditure Period:</li> </ul>	01/07/2018 - 30/06/2019 Expenditure \$Amt 01/07/2019 - 30/06/2020 Expenditure \$Amt
<ul style="list-style-type: none"> <li>○ Expenditure Start Date</li> </ul>	
<ul style="list-style-type: none"> <li>○ Expenditure End Date</li> </ul>	
<ul style="list-style-type: none"> <li>○ Expenditure Amount</li> </ul>	
<ul style="list-style-type: none"> <li>• Tender Details</li> </ul>	
<ul style="list-style-type: none"> <li>• Number</li> </ul>	

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• Date Advertised	
• Date Closed	
• Date Awarded	
• Region/s	
Specification Documents:	<ul style="list-style-type: none"><li>○ Tender Document(s):</li><li>○ Addendum(s):</li></ul>