

<b>TSC Category</b>	Technology Road Mapping					
<b>TSC</b>	Data and Statistical Analytics					
<b>TSC Description</b>	Identify data sets for the application of statistical techniques to analyse and interpret large complex data to uncover trends or patterns in order to locate and define new process improvement opportunities					
<b>TSC Proficiency Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
	<b>EGS-BIN-1055-1.1-1</b>	<b>EGS-BIN-2055-1.1-1</b>	<b>EGS-BIN-3055-1.1-1</b>	<b>EGS-BIN-4055-1.1</b>	<b>EGS-BIN-5055-1.1</b>	<b>EGS-BIN-6055-1.1</b>
	Carry out the collection of data for data analytics processing	Support the collection of data required for data analytics application	Implement the application of data analytics across the organisation	Facilitate the development of new analytics solutions to address existing gaps in analytics tools	Devise the next generation of data science with the use of big data analytics to aid in the discovery of new process improvement opportunities	Transform the organisation through the use of big data analytics to drive solutions and improve business processes
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>Business Statistics</li> <li>Microsoft Excel functionalities</li> </ul>	<ul style="list-style-type: none"> <li>Business Statistics</li> <li>Microsoft Excel functionalities</li> </ul>	<ul style="list-style-type: none"> <li>Operations of statistical techniques, e.g. Mean, Median, Regression Analysis</li> <li>Types of statistical software</li> </ul>	<ul style="list-style-type: none"> <li>Operations of statistical techniques, e.g. probability theory, probability distribution, hypothesis testing</li> <li>Test conditions required for each statistical technique</li> <li>Interpretation of the results from statistical modelling</li> <li>Types of statistical software</li> </ul>	<ul style="list-style-type: none"> <li>Strengths and limitations of each statistical technique in evaluating big and complex data sets</li> <li>Knowledge of how to manipulate statistical techniques for customised big data analytics</li> <li>Factors that determine applicability of statistical models for big data analytics</li> </ul>	<ul style="list-style-type: none"> <li>Relevance of big data analytics in improving business outcomes</li> <li>Knowledge of how big data analytics transform business decision making</li> <li>Knowledge of how big data analytics works in tandem with other forms of business analytics solutions</li> </ul>
<b>Abilities</b>	<ul style="list-style-type: none"> <li>Identify areas with meaningful data for collection</li> <li>Carry out the collection of data in a format for easy manipulation</li> </ul>	<ul style="list-style-type: none"> <li>Interpret data collected for categorisation into areas for process improvement</li> <li>Enhance the quality of data collected by scrubbing and removing duplicates</li> </ul>	<ul style="list-style-type: none"> <li>Analyse data set using basic statistical techniques to identify trends and patterns</li> <li>Collaborate with stakeholders to identify more specific data for further analysis</li> </ul>	<ul style="list-style-type: none"> <li>Review data sets uncover trends or patterns</li> <li>Develop new methods to conduct analysis of large complex data sets specific to each issue</li> <li>Facilitate the discussion on areas for application of big data analytics to examine issues</li> </ul>	<ul style="list-style-type: none"> <li>Formulate the approach used for big data analytics to a more bespoke solution addressing the shortfall of the current system</li> <li>Devise different analytical tool sets to provide an array of integrated solutions to improve business processes through big data analytics</li> <li>Guide junior employees in the refinement of big data and statistical analytics specific to the business</li> </ul>	<ul style="list-style-type: none"> <li>Inspire the usage of big data science as a tool for business process improvements</li> <li>Influence stakeholders on the importance of big data analytics to discover solutions to improve business processes</li> <li>Synergise the use of big data analytics with other forms of business analytics to improve business processes</li> </ul>