## SKILLS FRAMEWORK FOR RETAIL
### TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT

<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Retail Analytics</th>
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<tbody>
<tr>
<td>TSC</td>
<td>Data-Mining and Modelling</td>
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<tr>
<td>TSC Description</td>
<td>Establish and deploy data modelling techniques to support narrative and predictive analytics efforts and identify trends and patterns for simulation and forecasting purposes</td>
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<table>
<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tbody>
<tr>
<td>RET-RAN-1003-1.1</td>
<td>RET-RAN-2003-1.1</td>
<td>RET-RAN-3003-1.1</td>
<td>RET-RAN-4003-1.1</td>
<td>RET-RAN-5003-1.1</td>
<td>Drive, design and establish data-mining and modelling methodologies and data quality governance frameworks</td>
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### Knowledge
- Objectives of data-mining and modelling
- Data-mining and modelling processes and systems
- Methods of data-mining and modelling
- Various uses of data-mining and modelling processes and techniques
- Data collection methodologies and approaches
- Data confidentiality issues associated with presenting statistical results
- Business objectives
- Methods to validate data and information
- Types of statistical methodologies to make inferences
- Key metrics to drive desired outcomes
- Statistical software suitable for data-mining requirements
- Organisations business problems
- Guiding principles on data-mining and modelling frameworks
- Data-mining requirements based on organisational needs
- Application data modelling tools and techniques to synthesise patterns and trends

### Abilities
- Conduct activities to maintain data accuracy, cleanliness and integrity based on established guidelines
- Gather raw data for formation of data sets, analysis, simulation and forecasting
- Prepare and document data files in accordance with established procedures
- Assist in performing data exploration and correlation analysis
- Enforce procedures to safeguard data accuracy, cleanliness and integrity
- Develop data sets from raw data
- Prepare data sets for analysis, simulation and forecasting
- Perform data exploration and correlation analysis
- Identify first level patterns and trends in datasets
- Develop guidelines to safeguard data accuracy, cleanliness and integrity
- Identify data quality issues
- Perform narrative analytics based on data sets
- Conduct deep-dive analysis to identify patterns and trends in data sets
- Propose or construct appropriate analytics models based on train and test analysis
- Establish leading practices in safe guarding data accuracy, cleanliness and integrity
- Provide guidance on resolution of data quality issues
- Review appropriate analytics models based on relationships between variables
- Propose appropriate business scenarios for the conduct of preliminary simulation and forecasting analytics
- Design and establish data-mining and modelling methodology to be applied within the organisation
- Establish data quality governance framework
- Review findings on analytics correlations and causality
- Establish interactive analytics models based on dynamic scenarios
- Review business scenarios and outputs from simulation and forecasting analytics

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