TSC Category	Technology Management					
TSC	Internet of Things Application					
TSC Description	Implement Internet of Things (IoT) technologies to drive efficiency and effectiveness of operations					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
		ATP-TEM-2002-1.1	**ATP-TEM-3002-1.1**	**ATP-TEM-4002-1.1**	**ATP-TEM-5002-1.1**	
		Adopt Internet of Things (IoT) technologies and provide troubleshooting support	Execute Internet of Things (IoT) technology projects to enhance work processes and operations	Manage the implementation of Internet of Things (IoT) technologies for the organisation	Formulate strategies for the application of Internet of Things (IoT) technologies to drive operational efficiency and effectiveness	
Knowledge		• Concept of IoT • Types and functionalities of IoT devices • Types of wireless communication technologies • Concept of cybersecurity	• Concept of IoT • Types and functionalities of IoT devices • Types of circuits and sensors within devices • Types of wireless communication technologies • Data analytics techniques • Concept of cybersecurity	• Concept of IoT • Types and functionalities of IoT devices • Concept of ubiquitous computing and connectivity • Types of wireless communication technologies • Data collection, modelling and analysis techniques • Concept of cybersecurity • Data visualisation and business intelligence tools	• Concept of IoT • Types and functionalities of IoT devices • Concept of ubiquitous computing and connectivity • Automation technologies and applications • Data collection, modelling and analysis techniques • Concept of cybersecurity • Data visualisation and business intelligence tools • Principles of successful IoT strategies	
Abilities		• Conduct work activities using IoT technologies • Perform testing to verify the optimal functioning of IoT technologies • Provide troubleshooting support to end-users	• Conduct briefings on the uses and functions of IoT technologies adopted by the organisation • Review IoT testing results and identify areas for improvement • Integrate information from multiple data sources	• Develop novel ideas to enhance business operations by leveraging on IoT technologies • Collaborate with stakeholders for the development of IoT applications • Develop implementation approaches and schedules for IoT projects	• Initiate research on the application of IoT in business operations • Develop strategies for application of IoT to transform business operations • Conceptualise the technology infrastructure required for IoT implementation	

			• Review data to produce insights of business value	• Develop risk management approaches in relation to cybersecurity risks • Review and monitor success of IoT implementation using key performance metrics	• Create IoT solutions and develop business cases for investing in these technologies • Oversee integration projects which combine data from disparate devices, processes and applications • Advise others on cybersecurity risks related to IoT strategies and mitigation measures • Develop insights from strategic analysis of IoT data to enhance efficiency and service delivery	