SKILLS*future* SG

| TSC Category | Business Strategy | | | | | |
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| **TSC** | Emerging Technology Synthesis | | | | | |
| **TSC Description** | Monitor and integrate emerging technology trends and developments, structured data gathering for the identification of new and emerging technological products, services and techniques. In addition, the performance of cost-benefit analysis and evaluation of their relevance, viability, sustainability and potential value add to the business | | | | | |
| **TSC Proficiency** | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 |
| | | | DSN-SNA-3011-1.1 | DSN-SNA-4011-1.1-1 | DSN-SNA-5011-1.1 | DSN-SNA-6011-1.1-1 |
| | | | Conduct research and identify opportunities for new and emerging technology to support the business | Evaluate new and emerging technology and trends against the organisational needs and processes | Establish internal structures and processes to guide the exploration, integration and evaluation of new technologies | Establish an emerging technology strategy and spearhead organisational norms to synthesise and leverage new technologies and trends to propel business growth |
| **Knowledge** | | | • Market scanning and research techniques for emerging technology<br>• Similar or relevant industries<br>• New technologies and IT products and services in the market<br>• Typical business process flows | • Current industry and technology information sources<br>• Industry-accepted hardware and software products<br>• Emerging trends in technological products and services in the IT industry<br>• Cost-benefit analysis and evaluation methods for assessing new technologies<br>• Business process flows and interdependencies | • Key sources of information on new technologies in adjacent, competing or relevant industries<br>• Risk analysis of the new technologies, and implications on legal, ethical or security dimensions of the business<br>• Change management and implementation considerations relating to introduction of new technologies<br>• Business priorities, planning, value chain and key processes<br>• Current and future impact analysis | • Critical elements of an emerging technology blueprint<br>• Short and long term impact of new and emerging technologies<br>• Trends and developments in adjacent industries<br>• Potential impact and disruptions <of what?> to process norms<br>• Strategic partnership and alliance development |

| Abilities | | | | | | |
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| | | | • Explore relevance of technologies or IT processes in use and under development in other industry sectors<br>• Conduct research on new technologies<br>• Assess potential of emerging technologies to address challenges or enhance processes within the organisation<br>• Identify processes that will be improved by the application of new and emerging technologies and approaches<br>• Put forth recommendations or options of technology models that offer process improvement | • Determine the suitable sources and relevant sectors or industries to explore new technologies in detail<br>• Monitor the market to keep abreast of new technologies that will impact the sector<br>• Evaluate emerging technology against the existing business needs and infrastructure in a nimble and iterative manner<br>• Review market research and validate the new technologies against the organisational needs<br>• Provide recommendations with strong rationale for the outcome of the evaluation<br>• Communicate with external partners to obtain and explore emerging technologies | • Lead the identification and evaluation of new and emerging technologies, techniques and models<br>• Decipher impact of new and emerging technologies on business operations<br>• Experiment with the integration of new and emerging technology into the existing business context<br>• Establish internal processes and guidelines to facilitate the research on and evaluation of new technologies<br>• Establish organisational need and selection criteria for new technologies<br>• Articulate the business considerations and parameters relating to the adoption of new technologies<br>• Manage collaborations with external partners to gain access to and explore emerging technologies | • Develop an emerging technology strategy and blueprint<br>• Harness new technologies and trends in moulding business strategy<br>• Decipher the impact of emerging technology on the sector or field<br>• Establish organisational norms of evaluating emerging technologies in a rapid, nimble and iterative manner<br>• Synthesise different emerging technologies and trends into initiatives or products that propel business growth<br>• Establish alliances to facilitate emerging technology exploration across organisations<br>• Build strategic partnerships with organisations and suppliers to optimise access to new and emerging technology<br>• Create thought leadership around emerging technologies and their impact |