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| **TSC Category** | Business and Project Management | | | | | |
| **TSC Title** | 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 Description** | **Level 1** | **Level 2** | **Level 3** | **Level 4** | **Level 5** | **Level 6** |
|  |  | **ICT-SNA-3011-1.1** | **ICT-SNA-4011-1.1** | **ICT-SNA-5011-1.1** | **ICT-SNA-6011-1.1** |
|  |  | 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 * Similar or relevant industries * New technologies and IT products and services in the market * Typical business process flows | * Current industry and technology information sources * Industry-accepted hardware and software products * Emerging trends in technological products and services in the IT industry * Cost-benefit analysis and evaluation methods for assessing new technologies * Business process flows and interdependencies | * Key sources of information on new technologies in adjacent, competing or relevant industries * Risk analysis of the new technologies, and implications on legal, ethical or security dimensions of the business * Change management and implementation considerations relating to introduction of new technologies * Business priorities, planning, value chain and key processes * Current and future impact analysis | * Critical elements of an emerging technology blueprint * Short and long-term impact of new and emerging technologies * Trends and developments in adjacent industries * Potential impact and disruptions to process norms in the Infocomm Technology (ICT) industry or field * Strategic partnership and alliance development |
| **Abilities** |  |  | * Explore relevance of technologies or IT processes in use and under development in other industry sectors * Conduct research on new technologies * Assess potential of emerging technologies to address challenges or enhance processes within the organisation * Identify processes that will be improved by the application of new and emerging technologies and approaches * 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 * Monitor the market to keep abreast of new technologies that will impact the ICT market * Evaluate emerging technology against the existing business needs and infrastructure in a nimble and iterative manner * Review market research and validate the new technologies against the organisational needs * Provide recommendations with strong rationale for the outcome of the evaluation * Communicate with external partners to obtain and explore emerging technologies | * Lead the identification and evaluation of new and emerging technologies, techniques and models * Decipher impact of new and emerging technologies on business operations * Experiment with the integration of new and emerging technology into the existing business context * Establish internal processes and guidelines to facilitate the research on and evaluation of new technologies * Establish organisational need and selection criteria for new technologies * Articulate the business considerations and parameters relating to the adoption of new technologies * Manage collaborations with external partners to gain access to and explore emerging technologies | * Develop an emerging technology strategy and blueprint * Harness new technologies and trends in moulding business strategy * Decipher the impact of emerging technology on the ICT industry or field * Establish organisational norms of evaluating emerging technologies in a rapid, nimble and iterative manner * Synthesise different emerging technologies and trends into initiatives or products that propel business growth * Establish alliances to facilitate emerging technology exploration across organisations * Build strategic partnerships with organisations and suppliers to optimise access to new and emerging technology * Create thought leadership around emerging technologies and their impact |
| **Range of Application** |  |  | Contexts in which this skill may be applied includes, but is not limited to:   * Overall business operations * New IT products or services * IT operations * Marketing function * Sales function | | | |