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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – CHIEF TECHNOLOGY OFFICER** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Strategy and Governance/Infrastructure/Software and Applications/Product Development | | | | | |
| **Occupation** | Chief Information Officer/Chief Technology Officer | | | | | |
| **Job Role** | **Chief Technology Officer** | | | | | |
| **Job Role Description** | The Chief Technology Officer oversees all technical aspects of the organisation and partners with key stakeholders within the business to evaluate new IT opportunities. for growth. He approves the deployment of new technologies to enhance or develop new services and product offerings. He devises and implements long-term strategies focused on both current and new technologies that can help an organisation go to market more effectively, in turn increasing revenue through technological enhancements.  He is an inspiring leader with a futuristic mindset with an ability to drive innovative enhancements in the organisation. He foresees connections across diverse areas and influence key stakeholder decisions. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Establish technology strategy** | Develop enterprise-wide digital strategy | | | | |
| Develop a technology roadmap to align to the organisation’s overall strategy and growth plans | | | | |
| Influence strategic decisions on future business initiatives related to technology | | | | |
| Provide leadership in identifying, assessing and managing technology needs within an organisation | | | | |
| Advise senior leadership on business opportunities arising from technology developments | | | | |
| **Develop technology solutions** | Provide leadership in the design and development of major technical initiatives | | | | |
| Guide the final decisions on the feasibility of use of a technology solution for business implementation | | | | |
| **Manage portfolio of technology solutions** | Govern the integration of all solutions to ensure smooth and efficient flow of information within the organisation | | | | |
| Set objectives for IT investments, projects, services and activities to meet current and future business needs | | | | |
| **Enable innovation to improve organisation's goal** | Act as a Technology Evangelist to explore and adopt appropriate technology | | | | |
| Foster an environment conducive to innovation and technological change | | | | |
| Set the direction for research as well as a framework for measuring innovation research outcomes | | | | |
| Evaluate new approaches to redesign IT systems or optimise performance, quality and speed of services and/or products | | | | |
| **Manage stakeholders** | Build strategic relationships and alliances with stakeholders | | | | |
| Manage critical internal and external stakeholders’ changes in needs and priorities | | | | |
| Inspire stakeholders to pursue the organisation's technology vision | | | | |
| Drive technology alignment with the organisation's business needs | | | | |
| **Manage people and organisation** | Review operational strategies, policies and targets across teams and projects | | | | |
| Develop strategies for resource planning and utilisation | | | | |
| Review the utilisation of resources | | | | |
| Oversee the development of learning roadmaps for teams and functions | | | | |
| Establish performance indicators to benchmark effectiveness of learning and development programmes against best practices | | | | |
| Implement succession planning initiatives for key management positions | | | | |
| Advise stakeholders toward reaching compromises and agreeing on expectations | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Critical Core Skills** | | |
| Business Continuity\* | | Level 6 | Communication | | Advanced |
| Business Risk Management\* | | Level 6 | Decision Making | | Advanced |
| Continuous Integration and Continuous Deployment\* | | Level 5 | Developing People | | Advanced |
| Enterprise Architecture\* | | Level 6 | Influence | | Advanced |
| IT Strategy\* | | Level 6 | Transdisciplinary Thinking | | Advanced |
| Organisational Analysis\* | | Level 6 |  | | |
| Organisational Design\* | | Level 6 |
| Partnership Management\* | | Level 6 |
| Portfolio Management\* | | Level 6 |
| Solution Architecture\* | | Level 6 |
| Stakeholder Management\* | | Level 6 |
| Strategy Planning\* | | Level 6 |
| Agile Software Development | | Level 6 |
| Applications Development | | Level 5 |
| Artificial Intelligence Application | | Level 6 |
| Automation Management | | Level 6 |
| Budgeting | | Level 6 |
| Business Agility | | Level 6 |
| Business Negotiation | | Level 5 |
| Change Management | | Level 6 |
| Emerging Technology Synthesis | | Level 6 |
| Learning and Development | | Level 6 |
| Networking | | Level 5 |
| People and Performance Management | | Level 5 |
| Performance Management | | Level 6 |
| Product Management | | Level 6 |
| Quality Standards | | Level 6 |
| Service Level Management | | Level 6 |
| Software Design | | Level 6 |
| Software Testing | | Level 4 |
| Sustainability Management | | Level 6 |
| System Integration | | Level 6 |
| Test Planning | | Level 5 |
| **Programme Listing** | For a list of Training Programmes available for the ICT sector, please visit: www.skillsfuture.sg/skills-framework/ict | | | | | |
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| The information contained in this document serves as a guide. | | | | | | |

\*Note: Technical Skills and Competencies (TSCs) with an asterisk (\*) refer to Priority Skills (i.e., TSCs to be prioritised for this role).