|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – HEAD OF INFRASTRUCTURE** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Infrastructure | | | | | |
| **Occupation** | Infrastructure Engineer | | | | | |
| **Job Role** | **Head of Infrastructure** | | | | | |
| **Job Role Description** | The Head of Infrastructure establishes organisation's overall IT infrastructure strategy and roadmap to transition the organisation towards its future-state IT infrastructure. He/She advices on the development of IT infrastructure standards and governance policies and processes for operations, as well as capabilities and constraints of the IT infrastructure environment. He establishes governance policies, standards, procedures and guidelines to ensure that IT infrastructure architecture, solutions, and technologies are aligned with the organisation's vision and strategy. He builds strong partnership with key stakeholders from a strategic and operational perspective to ensure alignment with business requirements and expectations.  He is an proficient with with enterprise architecture methodologies and frameworks, architecture modelling tools, as well as product development methodologies. He is knowledgeable of various cloud, network, storage and security technologies, as well as cloud computing models and services.  The Head of Infrastructure is an influential leader with a broad sense of perspective to be able to drive decisions with key internal and external stakeholders. He is strategic in his approach to managing resources and developing capabilities within the team. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Establish infrastructure strategy and design** | Establish organisation's overall IT infrastructure strategy | | | | |
| Guide the formulation of a roadmap to transition the organisation towards its future-state IT infrastructure | | | | |
| Determine the short-term and long-term IT infrastructure needs for current and future business requirements | | | | |
| Advise on the design for an agile, scalable and secured IT infrastructure with built-in automation tools and workflows | | | | |
| Provide overall IT infrastructure architecture thought leadership | | | | |
| Define desired performance standards for IT infrastructure | | | | |
| **Manage infrastructure implementation and**  **optimisation** | Solicit buy-in from senior management on the implementation of IT infrastructure strategy and architecture | | | | |
| Advise stakeholders on capabilities and constraints of the IT infrastructure environment | | | | |
| Oversee the development of disaster recovery and contingency plans | | | | |
| Assess performance of IT infrastructure against defined standards and business requirements | | | | |
| Ensure IT infrastructure architecture, solutions, and technologies are aligned with the organisation's vision and strategy | | | | |
| Recommend new technologies for security, IT operations and service quality improvement, as well as for cost optimisation | | | | |
| **Establish and oversee standards and governance** | Establish metrics, key performance indicators (KPIs), Service Level Agreements (SLAs) and protocols | | | | |
| Establish governance policies, standards, procedures and guidelines based upon business strategy | | | | |
| Advise on the development of IT infrastructure standards and governance policies and processes for operations | | | | |
| Ensure regulatory and legal compliance of both physical and digital infrastructure design | | | | |
| **Manage partners and vendors** | Build strategic relationships with key infrastructure partners, vendors and technology providers | | | | |
| Lead negotiations with external partners and vendors | | | | |
| Oversee performance of key partners and vendors in the delivery of services | | | | |
| **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 | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Generic Skills and Competencies** | | |
| Audit and Compliance | | Level 4 | Leadership | | Advanced |
| Budgeting | | Level 5 | Communication | | Advanced |
| Business Environment Analysis | | Level 5 | Decision Making | | Intermediate |
| Business Innovation | | Level 6 | Resource Management | | Advanced |
| Business Needs Analysis | | Level 5 | Global Mindset | | Advanced |
| Business Negotiation | | Level 5 |  | | |
| Business Performance Management | | Level 5 |
| Business Risk Management | | Level 5 |
| Change Management | | Level 5 |
| Cloud Computing | | Level 6 |
| Contract Management | | Level 5 |
| Cyber and Data Breach Incident Management | | Level 6 |
| Disaster Recovery Management | | Level 5 |
| Emerging Technology Synthesis | | Level 6 |
| Enterprise Architecture | | Level 4 |
| Infrastructure Strategy | | Level 6 |
| IT Governance | | Level 5 |
| IT Standards | | Level 5 |
| IT Strategy | | Level 5 |
| Learning and Development | | Level 5 |
| Manpower Planning | | Level 4 |
| Networking | | Level 5 |
| Organisational Analysis | | Level 5 |
| Partnership Management | | Level 5 |
| Performance Management | | Level 6 |
| Project Feasibility Assessment | | Level 5 |
| Project Management | | Level 6 |
| Security Architecture | | Level 5 |
| Stakeholder Management | | Level 5 |
| Strategy Implementation | | Level 4 |
| Strategy Planning | | Level 5 |
| Sustainability Management | | Level 5 |
| 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 | | | | | |
|  |  |  | |  |  | |
| The information contained in this document serves as a guide. | | | | | | |