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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – Head of Quality & RISK** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Product Development | | | | | |
| **Sub-track** | Quality, Risk and Security | | | | | |
| **Occupation** | Quality and Risk Specialist | | | | | |
| **Job Role** | **Head of Quality & Risk** | | | | | |
| **Job Role Description** | The Head of Quality & Risk is responsible for development a quality and risk assessment strategy that addresses all phases of product development, as well as governance frameworks for managing quality and test automation. He/She reviews quality and risk management policies and standards to ensure compliance with regulatory requirements and international standards. He defines the approaches and procedures in the identification, selection and assessment of quality and risk standards for adoption, documentation for test reporting and risk assessments, and review of quality and risk standards. He provides technical inputs on approaches and conduct of quality testing and risk assessments and recommend solutions to resolve significant quality lapses and potential risks that may emerge. He also reviews quality test reports, risk assessments and outcomes to approve product.    He works in a team setting and is proficient in programming languages required by the organisation. He is familiar with international quality and risk management standards and processes, as well as applicable test automation tools.    The Head of Quality & Risk manages the quality of and risk in infocomm technology products from end to end and is able to readily integrate and apply knowledge from multiple disciplines. He develops innovative and effective solutions to issues encountered, communicate his plans and advice in a clear and compelling manner that inspires action. | | | | | |
| **Critical Work Functions and Key Tasks** | **Critical Work Functions** | **Key Tasks** | | | | |
| **Manage the organisation’s quality and risk strategy** | Formulate quality and risk strategies to address all phases of product development | | | | |
| Develop governance frameworks for managing quality, risk assessments and test automation | | | | |
| Review quality and risk management policies and standards to ensure compliance with regulatory requirements and international standards | | | | |
| Drive the application of new technologies, compliance, and security standards | | | | |
| Act as the organisation’s advocate for quality, risk management and excellence | | | | |
| Anticipate new quality tests required and potential risk areas based on organisational strategy and product development trends | | | | |
| Develop roadmaps for the implementation of Agile methodologies and practices in a quality testing and risk assessment functions respectively | | | | |
| **Develop quality standards and risk framework** | Define the approach and procedures in the identification, selection and assessment of quality standards and risks assessment framework for implementation | | | | |
| Advise on the selection of quality standards and risk guidelines to ensure quality of outputs and potential risks being mitigated at each stage of the process | | | | |
| Align quality and risk assessment standards with best practices, industry standards and organisational goals | | | | |
| Establish processes and mechanisms for inspecting and reporting quality and risk issues | | | | |
| Develop policies and procedures for documentation of end-user experience | | | | |
| Formulate the approach to enhance organisational quality standards and risk framework | | | | |
| **Perform quality testing and risk assessments** | Lead the implementation of quality and quality assurance testing and risk assessment frameworks, procedures, test infrastructure and tools | | | | |
| Oversee the execution of risk assessment and quality assurance testing including end-user experience tests | | | | |
| Provide technical inputs on approaches and conduct of quality testing and risk assessment | | | | |
| Advise on recommend solutions to resolve significant quality lapses and mitigate potential risks | | | | |
| Drive the achievement of higher quality and risk standards | | | | |
| Evaluate outcomes of quality test reports and risk assessments to determine product approval | | | | |
| Advise on the development of automated test cases and codes for applicable types of quality tests | | | | |
| Develop guidelines on the selection of quality tests and risk assessments to automate and the implementation of automated quality tests and risk assessments | | | | |
| **Optimise quality and risk assessment processes** | Drive continuous improvement in quality and quality assurance testing and risk assessment processes | | | | |
| Develop sustainable quality and quality assurance testing and risk assessment processes | | | | |
| Endorse improvements to optimise quality, quality assurance testing and risk assessment processes | | | | |
| Establish quality improvement programs and risk mitigation programs to detect, address and prevent quality issues and risks in processes | | | | |
| Secure buy-in for new investments in quality and quality assurance testing and risk assessment testing tools to enhance testing performance | | | | |
| **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 | | | | |
| Establish roles and responsibility of the quality testing and risk assessment functions in an Agile environment | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Critical Core Skills** | | |
| Business Risk Management\* | | Level 5 | Communication | | Advanced |
| Emerging Technology Synthesis\* | | Level 5 | Developing People | | Advanced |
| Internal Controls in Product Development\* | | Level 5 | Decision Making | | Advanced |
| Learning and Development\* | | Level 5 | Transdisciplinary Thinking | | Advanced |
| Partnership Management\* | | Level 5 | Problem Solving | | Advanced |
| People and Performance Management\* | | Level 5 |  | | |
| Performance Management\* | | Level 5 |
| Problem Management\* | | Level 5 |
| Process Improvement and Optimisation\* | | Level 5 |
| Quality Assurance\* | | Level 5 |
| Quality Engineering\* | | Level 5 |
| Quality Standards\* | | Level 6 |
| Product Risk Analytics\* | | Level 5 |
| Risk and Crisis Management\* | | Level 5 |
| Product Risk Assessment\* | | Level 6 |
| Risk Compliance and Governance\* | | Level 6 |
| Software Testing\* | | Level 4 |
| Stakeholder Management\* | | Level 5 |
| Strategy Planning\* | | Level 6 |
| Systems Thinking\* | | Level 5 |
| Agile Software Development | | Level 5 |
| AI Ethics and Governance | | Level 5 |
| Applications Development | | Level 5 |
| Budgeting | | Level 5 |
| Business Agility | | Level 5 |
| Business Continuity | | Level 6 |
| Business Needs Analysis | | Level 5 |
| Business Performance Management | | Level 5 |
| Business Requirements Mapping | | Level 5 |
| Data Analytics | | Level 5 |
| Data Ethics | | Level 5 |
| Data Governance | | Level 5 |
| Manpower Planning | | Level 5 |
| Networking | | Level 5 |
| Process Validation | | Level 5 |
| Product Management | | Level 5 |
| Project Management | | Level 5 |
| Software Design | | 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 | | | | | |
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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). | | | | | | |