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| **SKILLS FRAMEWORK FOR INFOCOMM TECHNOLOGY SKILLS MAP – Head of Quality** | | | | | | |
| **Sector** | Infocomm Technology | | | | | |
| **Track** | Strategy and Governance | | | | | |
| **Sub-track** | Quality Management | | | | | |
| **Occupation** | Quality Specialist | | | | | |
| **Job Role** | **Head of Quality** | | | | | |
| **Job Role Description** | The Head of Quality is responsible for development a quality strategy that addresses all phases of product development, as well as governance frameworks for managing quality and test automation. He/She reviews quality 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 standards for adoption, documentation for test reporting, and review of quality standards. He provides technical inputs on approaches and conduct of quality testing, and recommend solutions to resolve significant quality lapses. He also reviews quality test reports 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 standards and processes, as well as applicable test automation tools.  The Head of Quality manages the quality of infocomm technology products from end to end, he is able to readily integrate and apply knowledge from multiple disciplines. He is able to develop 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 strategy | Formulate quality strategies to address all phases of product development | | | | |
| Develop governance frameworks for managing quality and test automation | | | | |
| Review quality 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 and excellence | | | | |
| Anticipate new quality tests required based on organisational strategy and product development trends | | | | |
| Develop roadmaps for the implementation of Agile methodologies and practices in a quality testing function | | | | |
| Develop quality standards | Define the approach and procedures in the identification, selection and assessment of quality standards for implementation | | | | |
| Advise on the selection of quality standards to ensure quality of outputs at each stage of the process | | | | |
| Align quality standards with best practices, industry standards and organisational goals | | | | |
| Establish processes and mechanisms to inspect and report quality issues | | | | |
| Develop policies and procedures for documentation of end-user experience | | | | |
| Formulate the approach to review and enhance organisational quality standards | | | | |
| Approve new solutions, best practices, design approaches and technologies in quality management | | | | |
| Perform quality testing | Lead the design and implementation of quality and quality assurance testing frameworks, procedures, test infrastructure and tools | | | | |
| Oversee the execution of quality and quality assurance testing including end-user experience tests | | | | |
| Provide technical inputs on approaches and conduct of quality testing | | | | |
| Advise on recommend solutions to resolve significant quality lapses | | | | |
| Drive the achievement of higher quality standards | | | | |
| Evaluate outcomes of quality test reports 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 to automate and the implementation of automated quality tests | | | | |
| Optimise quality processes | Drive continuous improvement in quality and quality assurance testing processes | | | | |
| Develop sustainable quality and quality assurance testing processes | | | | |
| Endorse improvements to optimise quality and quality assurance testing processes | | | | |
| Establish quality improvement programs to detect, address and prevent quality issues in processes | | | | |
| Secure buy-in for new investments in quality and quality assurance 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 function in an Agile environment | | | | |
| **Skills and Competencies** | **Technical Skills and Competencies** | | | **Generic Skills and Competencies** | | |
| Agile Coaching | | Level 5 | Service Orientation | | Intermediate |
| Agile Software Development | | Level 5 | Creative Thinking | | Intermediate |
| Applications Development | | Level 5 | Computational Thinking | | Intermediate |
| Budgeting | | Level 5 | Leadership | | Advanced |
| Business Agility | | Level 5 | Decision Making | | Advanced |
| Business Needs Analysis | | Level 5 |  | | |
| Business Performance Management | | Level 5 |
| Failure Analysis | | Level 5 |
| Learning and Development | | Level 6 |
| Manpower Planning | | Level 5 |
| Networking | | Level 5 |
| Partnership Management | | Level 5 |
| People and Performance Management | | Level 5 |
| Performance Management | | Level 5 |
| Product Management | | Level 5 |
| Problem Management | | Level 5 |
| Process Improvement and Optimisation | | Level 5 |
| Process Validation | | Level 5 |
| Project Management | | Level 5 |
| Quality Assurance | | Level 5 |
| Quality Engineering | | Level 5 |
| Quality Standards | | Level 6 |
| Software Design | | Level 6 |
| Software Testing | | Level 4 |
| Stakeholder Management | | Level 5 |
| Strategy Planning | | 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. | | | | | | |