Quality Assurance Engineer/ Quality Engineer/ Quality Assurance Manager/ Quality Manager/ Head of Quality



AI & Analytics



IN 3-5 YEARS



These roles may not remain as a standalone function. Instead, the job tasks are being subsumed within developers' scope in each project delivery team. Al and RPA can be heavily leveraged to execute QA tests, enabling developers to better focus on coding/ script writing.

KEY TRENDS

Evolving IT Ecosystem

FUTURE TASK-LEVEL VIEW

- Al and Analytics can perform quality assurance tests by monitoring testing and identifying new bugs or defects which are introduced during the exploration phase.
 This helps job holders save time on results analysis as Al will be able to sort through the log files, scan the codes, and detect errors within seconds
- In some cases, job holders can expect their job tasks to be subsumed within the development functions of each project delivery team
- Al and Analytics can help uncover weak spots in quality testing processes such as identifying redundant test cases that are not linked to product requirements. This helps job holders to maximize accuracy and coverage of testing

POSSIBLE JOBS TO MOVE INTO

For Quality Assurance Engineer/Quality Engineer

- IT Auditor (Easy)
- Business Analyst (Moderate)
- Project Manager / Scrum Master (Moderate)

For Quality Assurance Manager/Quality Manager/Head of Quality

- IT Audit Manager/Head of IT Audit (Moderate)
- Program Manager/Program Director (Challenging)
- Software Engineering Manager/Head of Software Engineering (Challenging)



Possible job roles to move into for:

Quality Assurance Engineer/Quality Engineer



IT Auditor



POSSIBLE MOBILITY OPPORTUNITIES

Technical Support Operator



Project Manager / Scrum Master





RATIONALE

- Job holders can leverage their skills in process improvement and quality standards to transit into this role. They would be able to grasp the objectives and processes of auditing given their QA/ Quality experience.
- Job holders can leverage his/her experience in understanding business needs and identifying user requirements and expectations to transit into this role.
- Job holders can leverage their process improvement and project management skills to transit into this role. This is especially applicable for those who are strong in managing processes and projects.



TOP SKILLS MATCH

- Budgeting
- Partnership Management
- Process Improvement and Optimisation
- Quality Standards

- Business Needs Analysis
- Networking
- Partnership Management
- Test Planning

- Business Needs Analysis
- Process Improvement and Optimisation
- Project Management



TOP SKILLS GAP

- Audit and Compliance
- Business Risk Management
- Data Analysis
- IT Standards

- Business Innovation
- Design Thinking Practice
- Project Management
- Organisational Analysis

- Agile Coaching
- Business Requirements Mapping
- Change Management
- Contract Management
- Solution Architecture

Possible job roles to move into for:

Quality Assurance Manager/Quality Manager/Head of Quality



POSSIBLE MOBILITY OPPORTUNITIES

IT Audit Manager / Head of IT Audit



Program Manager / Program Director





RATIONALE

- Both IT audit and Quality Management share similar functions in checking for compliance with processes and standards. However, the transition becomes more challenging at a more senior level as they would require higher levels of technical competencies.
- Job holders can leverage **process improvement and project management** skills to transit into this role. However, the transition becomes more challenging at a more senior level as they would require higher levels of technical competencies.



TOP SKILLS MATCH

- Business Performance Management
- Partnership Management
- Process Improvement and Optimisation
- Quality Standards

- Agile Coaching^
- Business Needs Analysis*
- Partnership Management

- Process Improvement and Optimisation
- Project Management



TOP SKILLS GAP

- Audit and Compliance
- Data Analysis
- Data Governance
- IT Governance

- IT Standards
- IT Strategy
- Security Governance

- Agile Coaching*
- Business Innovation
- Business Process Re-engineering^
- Contract Management
- Data Visualisation

- Design Thinking Practice
- Organisational Analysis
- Portfolio Management

^{*}Skills match/gap for Program Manager Roles ^Skills match/gap for Program Director roles

Possible job roles to move into for:

Quality Assurance Manager/Quality Manager/Head of Quality



POSSIBLE MOBILITY OPPORTUNITIES

Software Engineering Manager /Head of Software Engineering





RATIONALE

 Job holders can leverage their programming (e.g. Java) skills to transit into this role. However, the transition becomes more challenging when it takes place at a more senior level as the more senior positions would require a higher level of technical competencies, with additional skills required in enterprise architecture and IT strategy



TOP SKILLS MATCH

Software Engineering Manager

- **Applications Development**
- **Quality Standards**
- Software Design
- Software Testing

Head Of Software Engineering

- Agile Software Development
- Product Management
- Quality Standards



TOP SKILLS GAP

Software Engineering Manager

- Applications Integration
- Applications Support and Enhancement

- Business Negotiation
- Product Management
- Project Feasibility Assessment
- Vendor Management

Head Of Software Engineering

- Applications Integration
- Business Innovation
- Emerging Technology Synthesis
- Enterprise Architecture

- IT Strategy
- Solution Architecture
- Strategy Implementation