

7.2.1 Job Dashboards

Assistant Quantity Surveyor/Assistant Cost Manager

Megatrends impacting the Job Role in Short to Medium-Term

COVID-19	Multi-Skilling	Sustainable Construction/ Buildings	Value Chain Aggregation & Integration	Workforce Challenges
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Impact Assessment



Technology Trends impacting the Job Role in Short to Medium-Term

BIM Technology	Data Analytics & AI	Digital Twin	Remote Monitoring
RPA	5G, IoT & Smart Buildings	Modular Construction	



Today

This job role assists with taking measurements and in overall contract administration, supporting the tender process until award, and gathering information for the preparation of cost estimates, reports, and payments.



In the Future

This job role is **at risk of displacement due to a high proportion of its tasks potentially being automated through technology**. Job holders may see a **need to upskill** and **grow familiarity in adopting and utilising technology** in preparation for the future (i.e., operating Digital Twin models and platforms, smart contracting), as well as look to **performing higher order tasks** (from data input to analysis). **Growing trends in sustainability** may also see job holders **acquiring knowledge in carbon costing and applying these in life cycle and project costing**.

Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Gather information for measurements and tender documentation	<ul style="list-style-type: none"> ▶ The use of digital tools (e.g., RPA) may automate the task of gathering measurements for various forms of contract bills, and updating rate schedules. ▶ Technologies (e.g., Robots & Automation and Remote Monitoring, enabled by 5G) may automate the conduct of measurements, admeasurements and re-measurements taking. 	Short-term
Assist with cost planning and control	<ul style="list-style-type: none"> ▶ Cost data compilation and entry, as well as the preparation of cost estimates and plans, cash flow projections and periodic cost reports may be automated by technologies (e.g., Data Analytics & AI, RPA). 	Short-term
Support preparation of tenders	<ul style="list-style-type: none"> ▶ Tender document preparation may be automated by the use of digital tools (e.g., RPA) to automate the data collection and information collation process. 	Short-term
	<ul style="list-style-type: none"> ▶ Job holders may need an understanding of smart contracting technology (e.g., Blockchain) to continue supporting preparation of tender documents on alternative platforms. 	Medium-term

7.2.2 Job Dashboards

Assistant Quantity Surveyor/Assistant Cost Manager

Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Support post-contract administration	H ▶ Digital tools (e.g., AI) may perform claims and payment documents verifications for final accounts. The use of RPA can support communication of payment regimes to relevant stakeholders.	Short-term
	M ▶ Job holders may be required to leverage digital tools (e.g., Data Analytics & AI) to support the preparation of data-driven valuations and payment recommendations.	Short-term
Assist with tendering and estimation*	M ▶ Job holders may continue to gather market research on prices for resources, and may be expected to interpret gathered data and derive insights.	Long-term
	H ▶ The compilation of tenders may be automated by the use of digital tools (e.g., RPA).	Short-term
Assist with construction cost*	M ▶ Compilation of information for management reports on profitability may be automated by digital tools (e.g., RPA). Job holders will need to shift focus towards assessing information for insights to draft management reports. ▶ Generation of cash flow forecasts may be augmented by digital tools (e.g., Data Analytics & AI). Job holders will need to develop capabilities in utilising digital tools to perform forecasting in consideration of complex variables (e.g., impact of trends).	Short-term

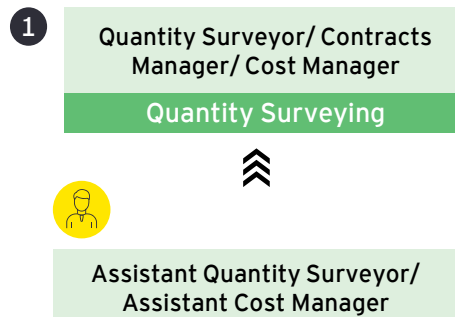
For this job role, it is expected that there is a significant proportion of tasks that are impacted. For more information on potential career pathways for the Assistant Quantity Surveyor/Assistant Cost Manager, please refer to Appendix : [Mobility Dashboards](#).

* Only applicable to Contracting Quantity Surveyor

7.2.2 Mobility Dashboards

Mobility Dashboard to Quantity Surveyor/ Contracts Manager/ Cost Manager

VERTICAL MOBILITY OPTIONS



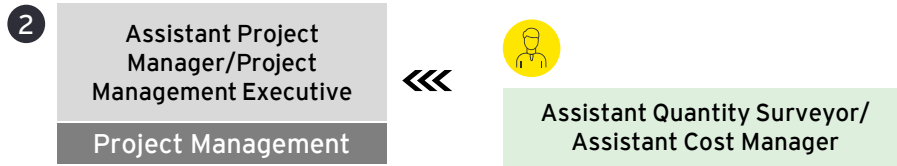
Mobility Option	Upskilling required	Additional Skills to Develop
Quantity Surveyor/ Contracts Manager/ Cost Manager	<ul style="list-style-type: none"> ▶ Construction Technology ▶ Contract Administration and Management ▶ Data Collection and Analysis ▶ Design for Manufacturing and Assembly ▶ Ethical Climate ▶ Integrated Digital Delivery Application ▶ Life Cycle Costing and Analysis ▶ Measurement of Building and Construction Works ▶ Procurement Coordination and Policy Development ▶ Project Cost ▶ Stakeholder Management ▶ Technical Writing ▶ Technology Application 	<ul style="list-style-type: none"> ▶ Artificial Intelligence Application ▶ Business Negotiation ▶ Continuous Improvement Management ▶ Dispute Resolution ▶ Green Building Strategy Implementation ▶ Programming and Coding ▶ Project Feasibility Assessment ▶ Project Risk Management ▶ Regulatory and Submission Clearance ▶ Technical Presentation ▶ Value Engineering
Quantity Surveying	<p>Potential Transferable Skills</p> <ul style="list-style-type: none"> ▶ Building Information Modelling Application ▶ Critical Thinking ▶ Research and Information Synthesis 	

To move into the following vertical mobility option, the Assistant Quantity Surveyor/Assistant Cost Manager would need to explore upskilling a portion of their existing technical skills that are required at a higher level in this new role (i.e., Contract Administration and Management, Data Collection and Analysis), and developing new skills (i.e., Project Feasibility Assessment, Value Engineering) that are required and in line with an accelerated progression into this role. For the function as a whole, new skills in the areas of digital (i.e., Programming and Coding) and sustainability (i.e., Green Building Strategy Implementation) are also potentially explored for development.

7.2.2 Mobility Dashboards

Mobility Dashboard to Assistant Project Manager/ Project Management Executive

LATERAL MOBILITY OPTIONS



Mobility Option	Upskilling required	Additional Skills to Develop
Assistant Project Manager/ Project Management Executive Project Management	<ul style="list-style-type: none"> ▶ Design for Manufacturing and Assembly 	<ul style="list-style-type: none"> ▶ Asset Management ▶ Condition-based Assets Monitoring Management ▶ Continuous Improvement Management ▶ Design for Maintainability ▶ Design for Safety ▶ Emergency Response Management ▶ Engineering Contract Management ▶ Green Building Strategy Implementation ▶ Incident and Accident Investigation ▶ Project Management ▶ Project Risk Management ▶ Quality System Management ▶ Regulatory Submission and Clearance ▶ Value Engineering ▶ Workplace Safety and Health Culture Development ▶ Workplace Safety and Health Framework Development and Implementation
	<p>Potential Transferable Skills</p> <ul style="list-style-type: none"> ▶ Building Information Modelling Application ▶ Construction Technology ▶ Critical Thinking ▶ Data Collection and Analysis ▶ Integrated Digital Delivery Application ▶ Procurement Coordination and Policy Development ▶ Stakeholder Management ▶ Technology Application 	

A potential job role the AQS/ACM could laterally move into is the **Assistant Project Manager/ Project Management Executive in the Project Management function**. However, there would be a need to invest the necessary resources, effort and time to develop additional skills required for the intended role. Although a substantial number of additional skills (i.e. Project Management, Project Risk Management) are required to move into the Assistant Project Manager/Project Management Executive’s role, job holders **will be able to leverage existing transferable skills and capabilities**, such as their **existing skills related to understanding and application of technology** (i.e. Building Information Modelling Application, Construction Technology) applied to the new function’s future technology-driven tasks of the intended role, e.g. conducting coordination for overall project plan integration using BIM Technology.

7.2.2 Mobility Dashboards

Mobility Dashboard to Building Officer/ Facilities Officer/ Property Officer

LATERAL MOBILITY OPTIONS



Assistant Quantity Surveyor/
Assistant Cost Manager



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Building Officer/
Facilities Officer/
Property Officer

Facilities Management

Mobility Option	Upskilling required	Additional Skills to Develop
<p>Building Officer/ Facilities Officer/ Property Officer</p> <p>Facilities Management</p>	<p>-</p> <p>Potential Transferable Skills</p> <ul style="list-style-type: none"> ▶ Integrated Digital Delivery Application ▶ Stakeholder Management ▶ Technology Application 	<ul style="list-style-type: none"> ▶ Building Management System Implementation and Control ▶ Condition-based Assets Monitoring Management ▶ Continuous Improvement Management ▶ Emergency Response Management ▶ Engineering Drawing Interpretation and Management ▶ Facilities Shut-down and Re-start ▶ Fire Protection System Maintenance ▶ Green Facilities Management ▶ Incident and Accident Investigation ▶ Inventory Management ▶ People Management ▶ Quality System Management ▶ Robotic and Automation Technology Application ▶ Smart Facilities Management ▶ Technical Inspection ▶ Value Engineering ▶ Workplace Safety and Health Framework Development and Implementation

A potential job role the AQS/ACM could laterally move into is the **Building Officer/ Facilities Officer/ Property Officer in the Facilities Management function**. However, there would be a need to invest a significant amount of resources, effort and time to develop additional skills required for the intended role. Although a substantial number of additional skills (i.e., Building Management System Implementation and Control, Facilities Shut-down and Re-start) are required to move into the Building Officer/ Facilities Officer/ Property Officer's role, job holders **will be able to leverage existing transferable skills and capabilities**, such as their **existing skills related to data gathering and interpretation, understanding and application of technology** (i.e., Critical Thinking, Data Collection and Analysis, Integrated Digital Delivery Application) **applied to the new function's future technology-driven tasks of the intended role**, e.g., navigating digital tools and platforms to coordinate movements of building assets and facility operations and retrofitting activities.

