

7.2.1 Job Dashboards

Quality Assurance Supervisor/Quality Control Supervisor

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

M

MEDIUM

degree of change in tasks

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

BIM Technology	Data Analytics & AI	Digital Twin	Remote Monitoring
RPA	Robots & Automation	VR/AR	5G, IoT & Smart Buildings
Innovative Building Materials	Modular Construction	3D Printing	

Today

This job role assists in conducting quality inspections and gathering data to identify non-conformances with relevant standards and requirements. Job holders are expected to be familiar with the organisation’s production processes and the relevant quality assurance requirements.

In the Future

This job role may see technology automate tasks related to documentation, data consolidation and collation. Job holders may also see a **shift in focus in leveraging technology to increase efficiency in conducting inspections and site surveillance**, preparation of quality plans. Job holders may see **continued focus on follow-through and compliance to quality control and safety requirements**, and growing emphasis on adherence to sustainability standards and guidelines.

Job Tasks Today	Impact at Task-level / Future view of Job Tasks		Time Horizon
Assist with the development of quality assurance and quality control plan	M	<ul style="list-style-type: none">Digital tools and platforms (e.g., RPA) may automate segments of QA/QC plans preparation, and perform documentation of systems and controls.Digital tools (e.g., Data Analytics & AI, IoT) can enable increased availability and access to production data. Job holders will need to be equipped with capabilities to apply data analysis skills to identify conditions impacting production quality in a more rapid manner.Job holders may also leverage digital tools and platforms to perform consolidate of project timeline data, and shift focus to carrying out inspections.	Short-term
Assist with quality assurance processes	M	<ul style="list-style-type: none">Job holders may need operational capabilities in implementing digitalized inspection checklists with the potential adoption of digital platforms as means of data storage and sharing.Job holders may also need to be aware of the impact of trends and technologies (e.g., Innovative Building Materials, Sustainable Construction) and its impact on production processes and use of materials, to ensure alignment and compliance with quality and regulatory requirements.	Short-term
	H	<ul style="list-style-type: none">Digital tools (e.g., RPA) can automate data collection for quality assurance purposes (i.e., qualification and employment data, suppliers and subcontractors engaged).	Short-term

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Job Tasks Today	Impact at Task-level / Future view of Job Tasks		Time Horizon
Assist with quality control procedures	H	<ul style="list-style-type: none"> Digital tools (e.g., RPA) may automate the collation and compilation of quality inspections data. 	Medium-term
	M	<ul style="list-style-type: none"> Job holders may need operational competency in digital tools for the conduct of virtual site surveillance (e.g., Remote Monitoring) to continue assisting in these tasks. Job holders may need an awareness of new production methods and materials (e.g., sustainable materials) that may impact production processes, so as to effectively follow up with production team on correction of defects. 	Short-term

The following TSCs/CCSs have been identified as in-demand/emerging for the job role going forward:

In-demand Technical Skills and Competencies		
Common Data Environment Management	Design for Manufacturing and Assembly	Process Optimisation
Emerging Technical Skills and Competencies		
Critical Thinking	Stakeholder Management	Technology Application
Emerging Critical Core Skills		
Digital Fluency	Transdisciplinary Thinking	