


7.2.1 Job Dashboards

Architectural Associate

Megatrends impacting the Job Role in Short to Medium-Term				
COVID-19	Multi-Skilling	Sustainable Construction/ Buildings	Value Chain Aggregation & Integration	Workforce Challenges

Impact Assessment
 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
VR/AR	5G, IoT & Smart Buildings	Modular Construction	



Today

This job role is responsible for supporting the pre-design and design work based on project requirements. Job holders assist in gathering necessary documents and information for contracting and procurement, and track construction work to ensure alignment with design objectives.



In the Future

This job role may leverage technology to enhance the support for current tasks and will need to be equipped with an **understanding of how to utilise technologies to deliver outcomes** in a more efficient and accurate manner. Job holders may shift focus to **perform value-added tasks**, such as **reviewing data consolidation and input accuracy**, with continued focus on compliance to regulations, and **adopting environmental sustainability and green building methods in delivery**.

Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Support the feasibility and design phase	<ul style="list-style-type: none"> Job holders will continue to support pre-design work and feasibility studies and support the design processes to meet project objectives. Preparation of site and zoning analyses outcome reports may be augmented by technology (e.g., BIM Technology and Data Analytics & AI). Job holders need to understand how to leverage digital tools and platforms to support report preparation. 	Short-term
Execute documentation and tendering	<ul style="list-style-type: none"> Building contracts may move towards smart contracts (enabled by technology e.g., Blockchain). Job holders will need to develop capabilities in administering standard smart contracts and conducting procurement exercises. 	Long-term



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Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Conduct checks for construction and completion	<ul style="list-style-type: none"> Job holders will continue to check that construction work satisfies the design intent. Job holders may need to leverage digital tools and platforms (e.g., VR/AR, BIM Technology) to conduct checks. Artificial Intelligence and RPA can augment the compliance process by identifying non-compliance of designs with authorities' requirements. Job holders will thus need to intervene and address non-compliance. 	Short-term
Gather information for continuous improvement initiatives	<ul style="list-style-type: none"> Job holders will need to be aware of evolving trends and technologies (e.g., designing for maintainability, sustainability, modular construction) and its implications on the delivery of architectural services, so as to support the use of them. 	Short-term

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

In-demand Technical Skills and Competencies		
Building Information Modelling Application	Critical Thinking	Data Collection and Analysis
Design for Maintainability	Design for Manufacturing and Assembly	Integrated Digital Delivery Application
Regulatory Submission and Clearance		
Emerging Technical Skills and Competencies		
Design Sustainability and Ethics Management	Programming and Coding	

