

7.2.1 Job Dashboards

# Architectural Assistant

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
<p><b>MEDIUM</b> degree of change in tasks</p>

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

In the Future

This job role is responsible for assisting with data analysis to support pre-design and design work execution. Job holders use digital tools and platforms, and computational model data to assist with pre-design and design phases. Job holders also assist with the documentation phases by gathering information.

This job role may be expected to be **increasingly proficient in the use of digital tools and platforms**, and well-versed in **analysing data from computational models to assist with pre-design and design phases**. Job holders may be expected to keep abreast of evolving trends and technologies so as to continue supporting the use and adoption of them in architectural services.

Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Analyse and maintain data for feasibility and design phase	<ul style="list-style-type: none"> <li>Job holders will continue to analyse data from site analyses and have <b>proficiency in data analysis capabilities to interpret and refine the findings</b>.</li> <li>Job holders may need to be equipped with the capabilities to <b>ensure maintenance of design databases and documentation in line with common data standards</b>.</li> <li>Job holders will continue to assist in <b>development of computational designs, leveraging BIM to automate designs</b> and developing capabilities to <b>assist in complex design development</b>.</li> </ul>	Short-term
Execute documentation and tendering	<ul style="list-style-type: none"> <li>Building contracts may move towards smart contracts (enabled by technology e.g., Blockchain), and job holders will need to develop capabilities in <b>administering standard smart contracts and conducting procurement exercises</b>.</li> </ul>	Long-term
	<ul style="list-style-type: none"> <li>Job holders may need to be equipped to <b>perform and adjust the analysis of performance of buildings against computational designs in response to trends</b> (e.g., environmental performance) through digital tools and platforms used in computational analysis.</li> </ul>	Short-term
Gather information for continuous improvement initiatives	<ul style="list-style-type: none"> <li>Job holders will need to be <b>aware of evolving trends and technologies</b> (e.g., designing for maintainability, sustainability, modular construction) and its <b>implications on the delivery of architectural services</b>, so as to support the use of them.</li> </ul>	Short-term

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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	Computational Design	Critical Thinking
Design for Maintainability	Design for Manufacturing and Assembly	Integrated Digital Delivery Application
Regulatory Submission and Clearance	Stakeholder Management	
Emerging Technical Skills and Competencies		
Design Sustainability and Ethics Management	Programming and Coding	

