DIGITAL CAREERS IN CLIENT AND CONSULTANT PROJECT MANAGEMENT

Developed by:

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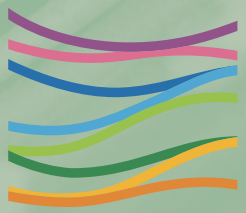

BUILT ENVIRONMENT CAREER STREAMS

Ngā ara rerekē o te ao hanga taiao

DIGITAL SKILLS IN CLIENT AND CONSULTANT PROJECT MANAGEMENT

This guide provides a helpful overview of digital skills required for client and consultant project management careers, focusing on how project managers enable and coordinate digital delivery across project teams. It's intended to help you understand:

- How project managers facilitate digital capabilities across project teams
- What digital awareness and skills project managers need
- How digital literacy can support effective project delivery

This supplementary document should be read alongside the main 'Consultant or Client Project Management Career Stream' guide. Together, these guides offer a picture of how digital awareness and coordination capabilities are essential for modern project management, while maintaining the profession's core focus on stakeholder management, delivery coordination and value optimisation for clients.

WHY DIGITAL SKILLS MATTER IN PROJECT MANAGEMENT

Project managers need the appropriate digital skills to be able to coordinate and facilitate the digital capabilities of others. Project managers are typically enablers, not creators, of digital resources. Their success depends on understanding what digital tools and processes can deliver, establishing clear expectations upfront, and ensuring project teams use digital capabilities effectively to meet project objectives.

Whether working in a general project management role or moving into digital specialisation, the project manager's digital role centres on establishing digital expectations at the project outset. It also encompasses coordinating information flows between disciplines, ensuring digital deliverables meet client needs, and resolving digital coordination issues that affect project progress, cost or quality.

THE DIGITAL SKILLS LANDSCAPE FOR PROJECT MANAGERS

Digital skills required for project management include:

Foundational technical capabilities – Project management platforms (e.g. Procore, Aconex, Autodesk Construction Cloud), common data environments, document management and version control systems, digital scheduling tools, and basic data literacy for dashboards and reporting.

Project information and governance – Understanding information management plans, BIM execution plans, employer's information requirements (EIR), asset information requirements (AIR), document status codes, and review and approval workflows within digital platforms.

Collaboration and communication – Using collaboration platforms for day-to-day project coordination, establishing digital communication protocols, facilitating virtual and hybrid meetings, managing stakeholder access to project platforms, and coordinating across organisations with varying digital capabilities.

Strategic project delivery competencies – Digital progress tracking and reporting, data-driven decision-making, establishing digitally capable project teams through procurement, digital project controls, and client reporting through digital platforms.

Integration of digital and project management expertise – Ensuring digital systems serve project objectives rather than becoming compliance exercises, balancing technological capability with practical project realities, coordinating across organisations with different digital maturity, and bridging capability gaps across the supply chain.

Project governance and oversight – Effective governance requires a combination of professional judgement, stakeholder management skills, and strategic thinking. Digital platforms support Project Managers by providing real-time visibility across project activities – dashboards and data analysis support decision-making and early risk identification.

Programme management – Digital scheduling tools can help identify risks by tracking progress and generating critical path analyses. Automated reporting reduces administrative burden and improves transparency.

Information management – Managing information effectively requires understanding what different project participants need, when they need it, and in what format. Digital platforms facilitate information exchange and collaboration, while common data environments ensure a 'single source of truth' for project information.

Supply chain management – The construction sector is predominantly composed of small to medium enterprises with varying levels of digital investment. Project managers frequently work across organisational boundaries where digital maturity differs significantly. Being able to bridge these capability gaps and adapt digital expectations to what supply chain participants can realistically deliver – while still maintaining project information standards – is a core competency.

INTEGRATING DIGITAL AND TRADITIONAL SKILLS

The shift to digital project management changes the emphasis of the project manager (PM) role. Instead of chasing information from multiple sources, project managers can access integrated data and use dashboards to provide early warning indicators. Coordination happens proactively through digital platforms, enabling project managers to focus more on strategic oversight, stakeholder management, and value delivery.

Digital adoption in project management varies widely across the New Zealand industry. Leading consultancies and sophisticated client organisations use integrated digital delivery approaches combining BIM coordination, digital project controls, and data-driven performance management.

Smaller, more traditional practices may still rely on email communication, spreadsheet tracking, and periodic reporting with limited platform integration. Many organisations operate between these extremes, using digital tools selectively without fully integrated workflows.

Digital skills needed for project management include:

Understanding digital delivery capabilities and limitations - Awareness of BIM capabilities for design coordination and clash detection, understanding digital cost management and quantity extraction, knowledge of engineering analysis and simulation workflows, familiarity with construction planning and 4D sequencing, awareness of digital collaboration platforms and information exchange, and understanding digital handover requirements for asset operations.

Establishing digital requirements upfront - Developing Exchange Information Requirements (EIR) for clients, defining Level of Detail requirements for different project stages, establishing BIM Execution Plan requirements for project teams, set expectations for model coordination and clash detection, defining digital deliverable formats and uses, and clarifying roles and responsibilities for digital information management.

Coordinating digital information flows - Managing Common Data Environments for project information sharing, coordinating model exchanges between disciplines, facilitating clash detection and coordination meetings, track information requests and responses through digital systems, ensuring timely consultant responses to contractor RFIs via digital platforms and managing digital document approval workflows.

Understanding client digital needs and capabilities - Assessing client digital maturity and readiness for BIM delivery, understanding client asset management systems and handover requirements, identifying client business drivers for digital information, managing client expectations about digital delivery benefits and costs, advising clients on appropriate digital requirements for their projects, and ensuring digital deliverables serve client operational needs.

Using project management digital tools – Proficiency with cloud-based project management platforms (e.g. Procore, Aconex), digital progress tracking and reporting tools, document management and approval systems, digital meeting coordination and communication platforms, dashboard and reporting tools for client updates, and understanding integration between PM platforms and design/construction systems.

Recognising and resolving digital coordination issues - Identifying when digital processes are creating delays or confusion, recognising scope gaps in digital delivery responsibilities, understanding when model coordination quality affects construction, identify when digital deliverables don't meet intended uses, facilitating resolution of digital information disputes, and ensuring digital requirements support rather than hinder project delivery.

DIGITAL SPECIALISTS IN PROJECT MANAGEMENT

As digital tools and processes become more embedded in construction project delivery, specialist roles are emerging alongside traditional project management practice. These roles are well-established internationally and are becoming more common in the New Zealand market, driven by client expectations around data, information management, and digital delivery.

Currently, dedicated digital specialist positions only exist on larger projects or within organisations with significant capital works programmes. On smaller projects, the same work is typically performed by project managers, document controllers, or BIM practitioners who have broadened their skill sets.

DIGITAL DELIVERY SPECIALIST

The digital delivery specialist ensures that digital tools, processes, and information requirements are effectively integrated into project delivery. This is a project management role, not a technical one. The digital delivery specialist doesn't author models, configure platforms, or produce data outputs. Instead, they hold expert-level understanding of what the project needs from its digital environment and facilitate the conditions for those needs to be met by the people doing the work.

Core responsibilities

- **Digital strategy and planning** – Establishing the digital delivery approach for the project, assessing the digital maturity of assembled project participants, calibrating digital requirements to what the team can realistically deliver, and embedding digital requirements into procurement documentation and contracts.
- **Cross-platform coordination** – Facilitating and coordinating across required digital workstreams (e.g. BIM, scheduling, cost management, field technology, reporting, collaboration platforms) ensuring they function as a coherent system rather than operating in silos.
- **Capability brokering** – Negotiating practical solutions when digital capability gaps emerge, such as when a subcontractor cannot deliver the specified level of model detail or when a consultant's BIM execution plan does not meet the client's information requirements.
- **Value assurance** – Providing assurance to the client and project governance that digital processes are delivering genuine project value, actively challenging requirements that are disproportionate to the project's scale, the team's capability, or the client's actual needs.

PROJECT INFORMATION MANAGER

The project information manager establishes and maintains the information management framework for a construction project. This role ensures that project data and documents are created, exchanged, reviewed, and stored in accordance with the project's information requirements and relevant standards. On larger projects, particularly for government clients, this role is increasingly specified in procurement documentation.

Core responsibilities

- **Information planning and governance** – Developing and maintaining the project information management plan, defining how information will be created, shared, reviewed, and archived across all project participants.
- **Common data environment management** – Establishing and governing the common data environment (CDE), including platform configuration, folder structures, naming conventions, access permissions, and workflows for document review and approval.
- **Stakeholder coordination and compliance management** – Working with project participants across varying levels of digital maturity to ensure information management requirements are understood, achievable, and consistently applied, adapting approaches where necessary while maintaining the integrity of the project's information framework.
- **Requirements assurance and handover** – Ensuring compliance with contractual information requirements, including employer's information requirements (EIR) and asset information requirements (AIR), managing information handover at key project stages, and ensuring that operational teams receive the information they need in the formats specified.

BUILDING DIGITAL CAPABILITY

Project managers need sufficient understanding of digital tools and processes to coordinate effectively without becoming technical experts. Building digital capability requires curiosity and willingness to learn, practical application and continuous skill development. The specific digital tools used by project managers vary by organisation and project, but the expectation of practical digital capability applies across the profession.

SELF-DIRECTED LEARNING

Most digital learning happens through curiosity or need-driven learning, rather than formal training programmes. If you enjoy exploring tools and solving problems independently, self-directed learning is generally the best approach to develop your capabilities more quickly. Options include:

- Learning to navigate BIM models using free viewers to understand what project teams see.
- Attending BIM coordination meetings to understand clash detection and coordination workflows.
- Asking architects, engineers and quantity surveyors to demonstrate their digital tools and workflows.
- Reviewing BIM Execution Plans from successful projects to understand good practice.
- Learning about Common Data Environments and information exchange protocols.
- Understanding client asset management systems and operational information needs.

FORMAL EDUCATION AND TRAINING

Tertiary education organisations, including vocational providers, wānanga, and universities increasingly include digital construction skills in their programmes.

Institutions offer courses, diploma and degree options that cover digital documentation, BIM model development, digital project delivery concepts, data management and emerging construction technologies.

PROFESSIONAL NETWORKS AND RESOURCES

Connecting with digital construction communities can help project managers stay current with industry developments, such as:

- **Building Institute Aotearoa's** DigiComm conference with digital streams and professional development events.
- **BIMinNZ** (http://biminnz.co.nz/) BIM practitioner community, resources, events and networking for project managers working with BIM.
- **Project Management Institute (PMI)** (https://pmi.org.nz/) local project management community and events.

> **"The technology has changed, but having to keep up with it is still the same - you've always had to keep up with whatever's new. Computers were definitely around when I started, but we did a lot more printing of reports – knowing how to bind a report was an important skill when I was 21. Now, knowing how to use AI is important. I don't think the pace has sped up or the diversity of things that you need to keep up with has changed."**
>
> – Sylvia Maclaren, Programme Director/Senior PM

GET THE GUIDE

Use the QR code to download the full Built Environment Digital Career Streams guide and explore the many rewarding pathways in the construction sector.

Or head to the website: **BECareerStreams.nz**

CAREER STORIES

Andrew Field – Business Director - Digital Transformation - Advisory Group at Beca

Andrew Field's career demonstrates how diverse influences can contribute to a digital specialist pathway in project management. He began in the architecture programme at the University of Auckland, where he found a strong affinity for the project and people side of construction – while also developing a fascination with Frank Gehry's work and the creation of highly complex buildings using contemporary construction techniques. This dual interest led him to completing a Master of Architectural Studies which combined architectural design, engineering project management, and digital design.

Early career experiences gave Andrew a wide skill set that built on his interests. While still studying, he worked as a quantity surveyor, developing practical skills in quantifying projects and seeing how they come together. This was followed by a graduate role at Worley Consultants, where he learned how to "navigate the world between the builder, the subcontractor, and the chairperson of the board client". A year in naval architecture further deepened his practical and technical understanding of complex design tools.

A move into project management led to an opportunity to work in Las Vegas, where he encountered "the genesis of all of the thinking around BIM". Returning to New Zealand, he began introducing digital tools and expectations into projects. Andrew also joined the BIM Acceleration Committee and was part of the team that developed the New Zealand BIM Handbook. Working at this strategy level, while also directing major projects, put him in a unique position to shape both industry policy and practical implementation.

Today, Andrew's key focus is on strategy and governance, which he balances with hands-on project work. By working as contract engineer on some significant projects, he is still able to get his hands dirty. "I visit the site, I wear the hard hat," he says. This reflects his approach when identifying new and emerging talent within the digital strand at Beca. "I think it's important to have people with specialist knowledge in the field, but I do worry that … a specialist without appreciation of what's happening in design or construction can mean they get a little divorced from the work."

His advice to others wanting to move into a similar field is to build a good base of industry knowledge and to "seek out a range of opportunities over time. There's nothing wrong with just trying a few different things, in order to find that ultimate drive."