

Digital Skills for Construction Project Managers

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Company Overview

Walls Construction is an Irish owned building contractor operating nationally with offices in Dublin and Cork. The business was established by PJ Walls in 1950 and is today recognised as one of Ireland's leading construction companies, with a reputation for quality and building excellence and customer service.

In 2015, the executive team, supported by private investors including members of the Walls family, acquired the company and this investor blend has enabled us to continue to expand the business.

Critical to this growth is the strength of our clients and the relationships we have forged over the years with key subcontractor partners and other professionals. With a projected turnover of €570m in 2023, Walls are placed firmly in the Top 5 General Contractors in Ireland.



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Meet Carolina



Education

- Diploma in Mathematics and Physics
- BA Hons Psychology
- MSc in Applied Behaviour Analysis
- Diploma in Learning and Development

Experience

- Training and Development Manager
- Employee Assistance Programme Counsellor
- Researcher
- Practitioner in Behavioural Psychology
- Assistant Psychologist

Traditional Project Manager Skills Set



Project Management Skills



Technical Knowledge



Leadership Skills



Time Management



Quality Management



Health and Safety Compliance



Problem-Solving Skills



Budgeting and Cost Management

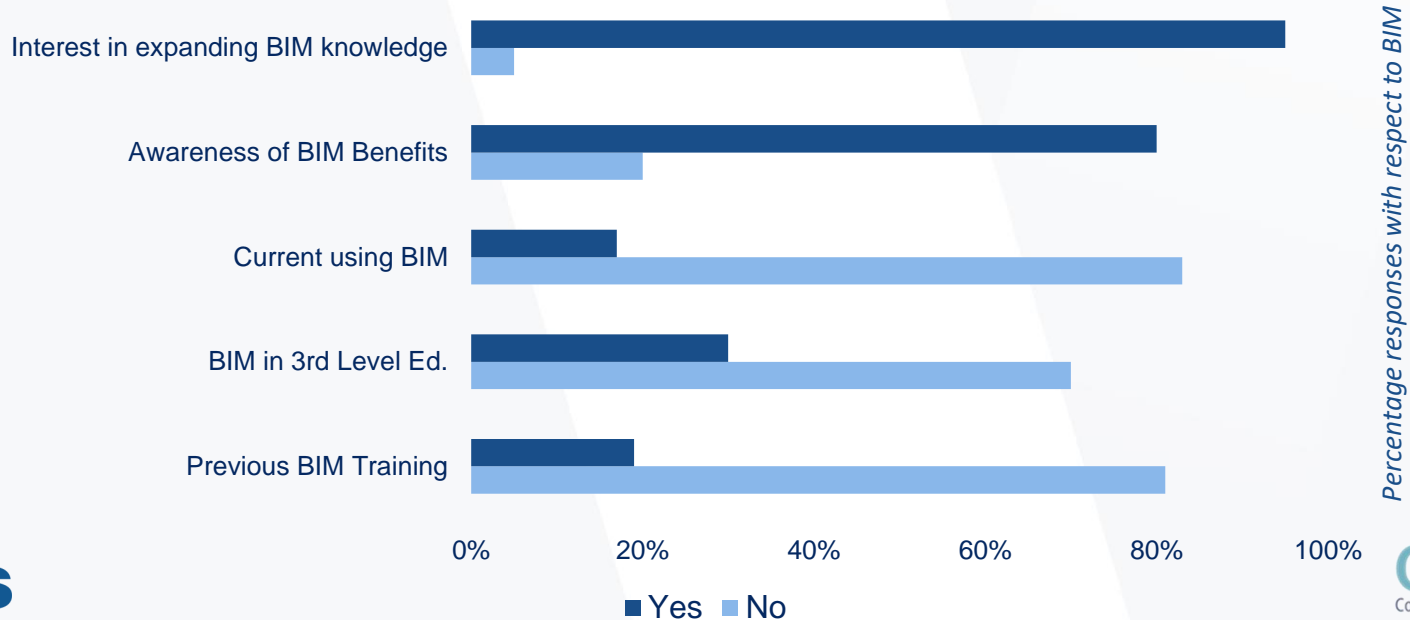
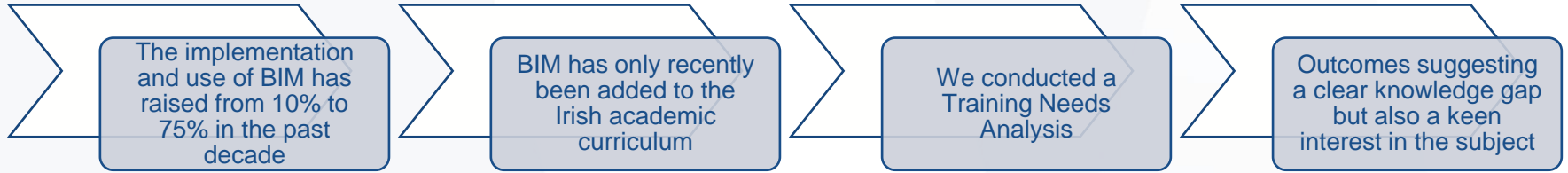


Client Relationship Management



Communication Skills

Our Digital Transformation

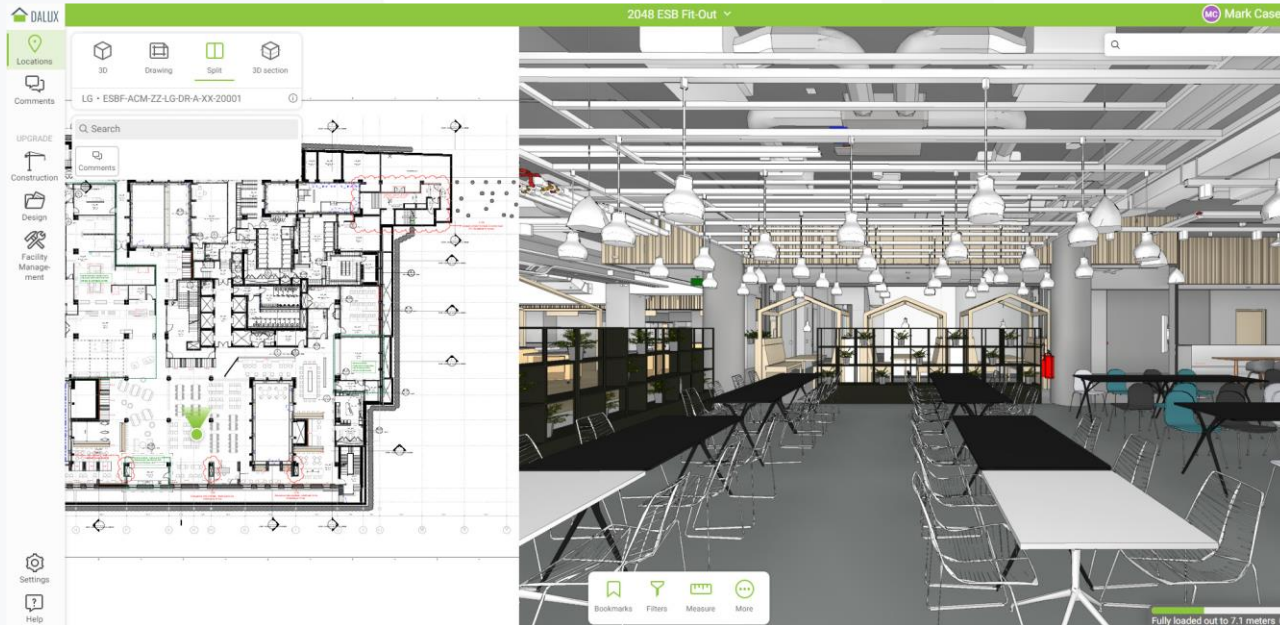


Our Digital Transformation – cont.

Digital technologies such as BIM can feel daunting to jump into





Introduce a tool that was user-friendly and could bring the familiar 2D drawings to life within the 3D environment

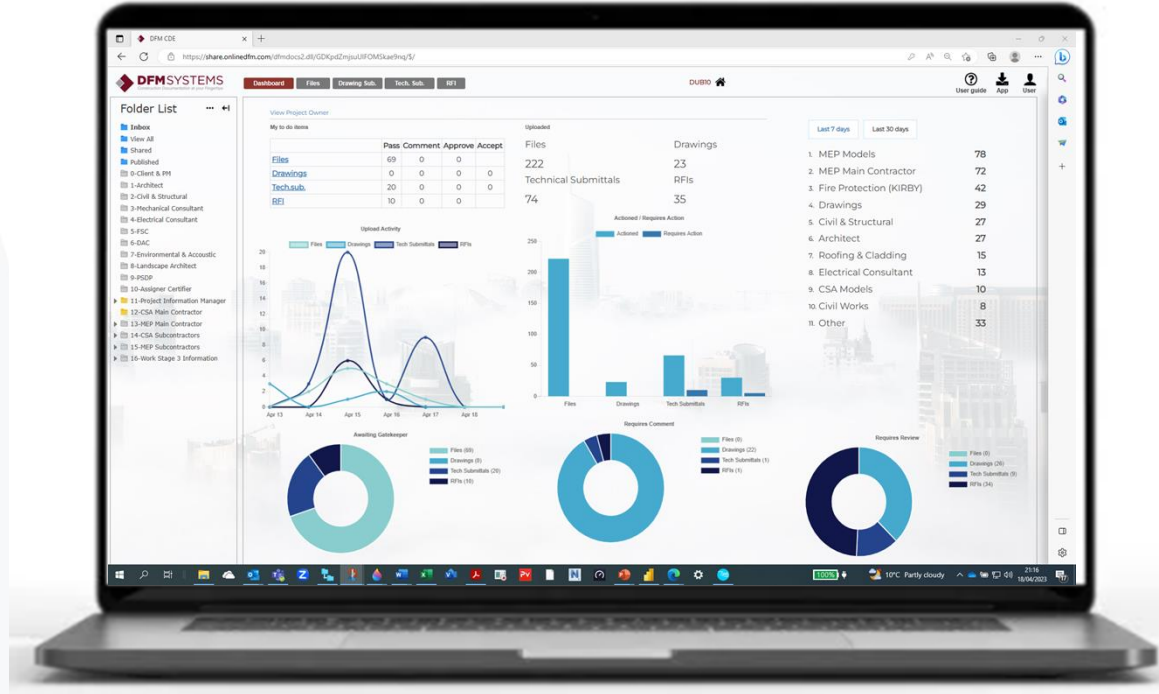
Introduce Dalux



Our Digital Transformation – cont.

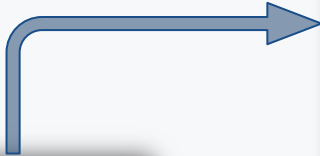
Common Data Environment (CDE)


-  = View & Download only
-  = Upload, View & Download
-  = Virtual Folders (predefined filters e.g.: Shared/Published suitability code)
-  = No access




Our Digital Transformation – cont.

Workflows – Submittals & RFIs

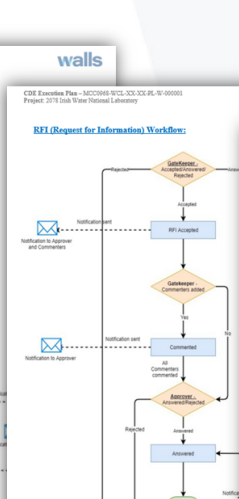
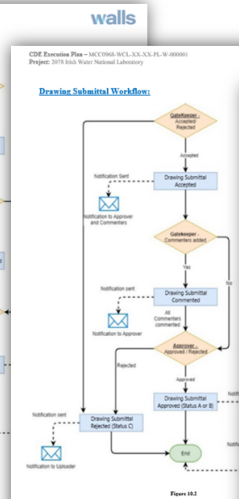
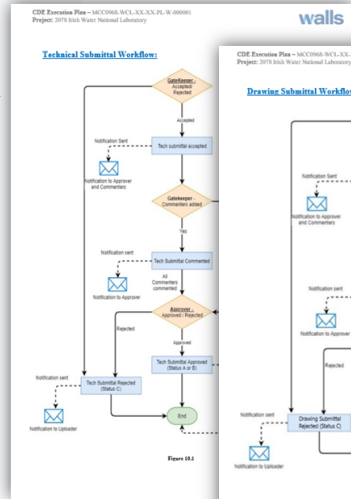






2076 LDA Shanganagh

CDE Execution Plan



CDE Execution Plan – MCC0966 (SCL, XCL, XFL, W, 000001)
Project: 2076 3rd Water National Laboratory

Workflows are used to submit information for acceptance (e.g. The Drawing Submittals) or to ask a question through an RFI (Request for Information).

All items submitted to a Workflow must pass through the 'Gate Keeper' which Commenter Group should answer an RFI or which Lead Commenter status to a Technical Submittal or Drawing Submittal.

The Gate Keeper may also request comments from additional Commenter Group(s) within **Table 18.3 (Table 18.3)** the Lead Commenter may request comments are received before assigning a status to an item.

Table 18.2

Item	Days	Clarification
Total Workflows Time Frame	10	This is the required Total Time Frame a submittal or RFI should be closed. The submittal or RFI will show as overdue if not closed within this time frame.
Commenter Time Frame	5	The Commenter has to provide comment or status for the RFI or to the Lead Commenter comment and a status for the RFI or submittal to the Commenter.
Lead Commenter Time Frame	10	The Lead Commenter has to provide comment or status for the RFI or submittal to the Commenter. If there is no response from a Commenter to the RFI or submittal then the RFI or submittal will be closed as 'Approved' or 'Rejected' by the Lead Commenter. The submittal or RFI will show as overdue if not closed within this time frame.

Table 18.3

Item	Yes	No
Does RFI or Drawing Request require engineering drawing or other files? (Table 18.2)		

CDE Execution Plan – MCC0966 (SCL, XCL, XFL, W, 000001)
Project: 2076 3rd Water National Laboratory

Commenter Groups:

The Gatekeeper will assign the appropriate Commenter Group for the individual Technical Submittal, Drawing Submittal and RFI workflows. Technical Submittals and Drawing Submittals need to be given a status by the Lead Commenter who may need to obtain comments from Commenters who are other members of the Design Team.

The Commenter Groups are defined within **Table 18.4** below:


Table 18.4


Element	Gate Keeper	Example(s):	
		Lead Commenter(s): (if applicable)	Commenter(s):
Circuits	Danielle January Seamus Russell WCL	RPS Group Graham Williams	EKD Architects Michael Dwan RPS Group Deer Fleming RPS Group Joseph Collins EKD Architects RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
Pipes & Trenching	Danielle January Seamus Russell WCL	EKD Architects Graham Williams	EKD Architects Michael Dwan RPS Group Deer Fleming Deborah Keane RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
Landscaping	Danielle January Seamus Russell WCL	RPS Group Graham Williams	EKD Architects Michael Dwan RPS Group Deer Fleming Deborah Keane RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
Structures	Danielle January Seamus Russell WCL	RPS Group Graham Williams	EKD Architects Michael Dwan RPS Group Deer Fleming Deborah Keane RPS Group Joseph Collins EKD Architects RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane
			RPS Group Michael Dwan RPS Group Deer Fleming Deborah Keane

Our Digital Transformation – cont.

File Naming Convention

1	2	3	4	5	6	7
Project	Originator	Volume/System	Level/Location	Type	Role	Number
Code = MCC0968	TW Irish Water MBP Michael Barrett Partnership RKD RKD Architects RPS RPS Group WCL Walls Construction Ltd	00 Whole Site 01 Site EW External Works ZZ Multiple Zones XX Not Applicable	E1 Basement -1 00 Ground Floor 01 Level 1 RF Roof ZZ Multiple Levels XX Not applicable	AF Animation file (of a model) CM Combined model (combined multidisciplinary model) CR Clash Rendition DR Drawing rendition (e.g.: .pdf) M2 2D model M3 3D model MR Model rendition for other renditions, e.g., thermal analysis, etc. VS Visualization File EQ Bill of Quantities BR Brief CA Calculations CN Contracts CO Correspondence CP Cost Plan CT Certificates CW Contract & Warranties DB Database DS Data Sheet ES Equipment Schedule FA Final Account FN File Note FT Forms and/or Templates HS Health and Safety IC Instruction IE Information Exchange File (i.e.: COBie) IP Image File IR Inspection Record MA Manuals MI Minutes/ Action Notes MS Method Statement PL Plan PP Presentation PR Programme RD Room Data Sheet RG Register RI Request for Information RP Report RL R-AID Log SA Schedule of Accommodation SC Schematic SH Schedule SK Sketch SN Snagging List SP Specification SU Survey SW Scope of Works TI Technical Information TS Technical Submittal TP Tenders and Proposals VO Variation Order	A Architect B Building Surveyor C Civil Engineer E Electrical Engineer F Facilities Manager K Client L Landscape Architect M Mechanical Engineer O Environmental Consultant P PSDP Q Quantity Surveyor R Project Manager S Structural Engineer W Contractor X Sub-Contractor Y Specialist Designer Z Assigned Certifier	000001 etc. <i>(max of 6 characters)</i>



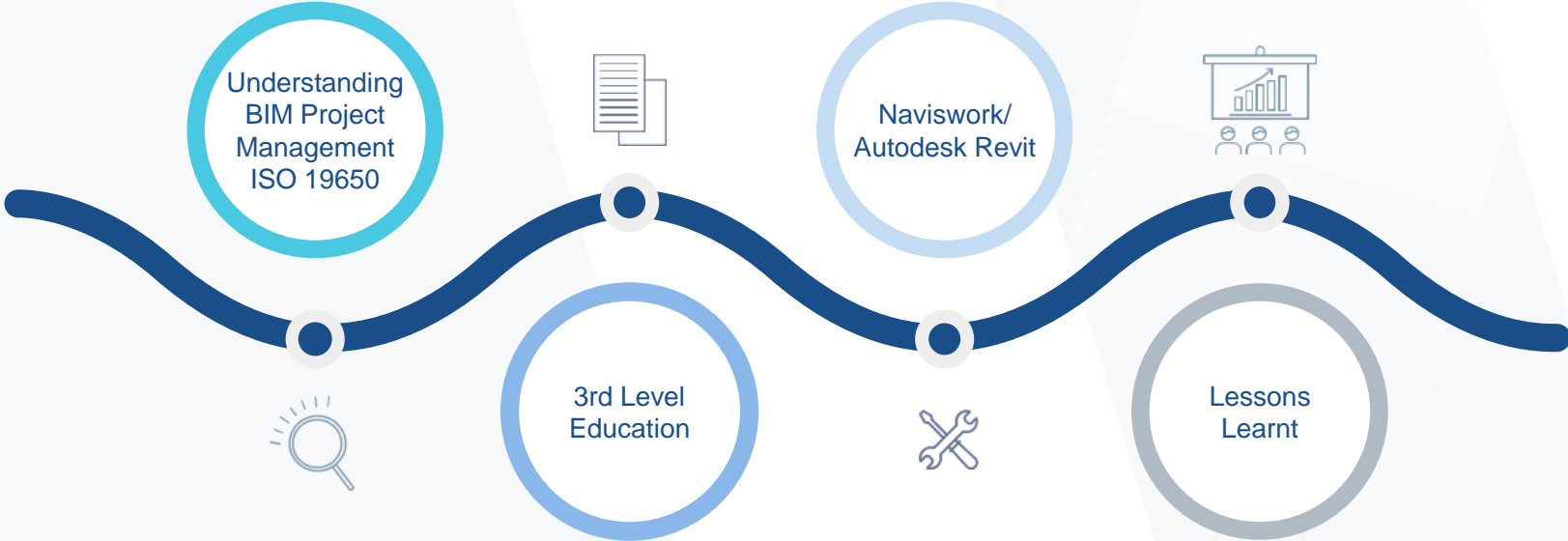


2076 LDA Shanganagh

CDE Execution Plan

Our Digital Transformation – cont.

Following the success of Dalux implantation and training, Walls invested in other courses that assisted out Projects Managers in navigating the world of BIM.





Conclusion

Walls Construction is determined to play its part in increasing residential construction output in Ireland.

We are focusing on all aspects of Digital technologies: Laser scanning, VR, AR, OpenSpace, Synchro Pro Drones, EHS and QA apps etc

Our Digital Transformation is a continuing journey and every year we assess the skills gaps, not only of our project managers, but of all our staff.

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By making BIM development and education a vital aspect of Walls, we gain invaluable possibilities including improving scheduling, improving snagging methods, preventing injuries, and aiding communication.

800+

CPD Hours to date

Digital technology can tackle long standing problems in the construction industry such as incompatibility among systems and manual processes that create waste, lead to cost overruns and reduced value for money.

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Construction IT Alliance

**Thank you for
listening**

Any questions?