

Unleashing the Power of Real-Time Data for Improved Project Performance

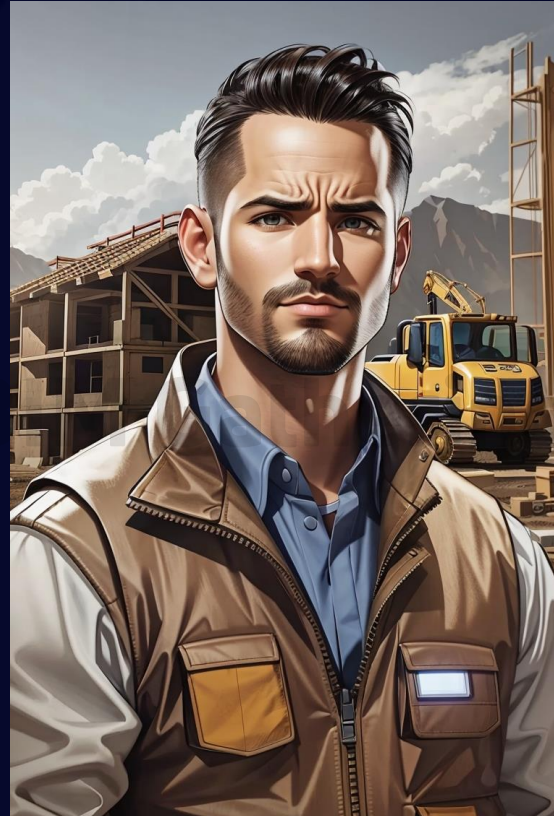
GagaMuller Group

20th September 2023

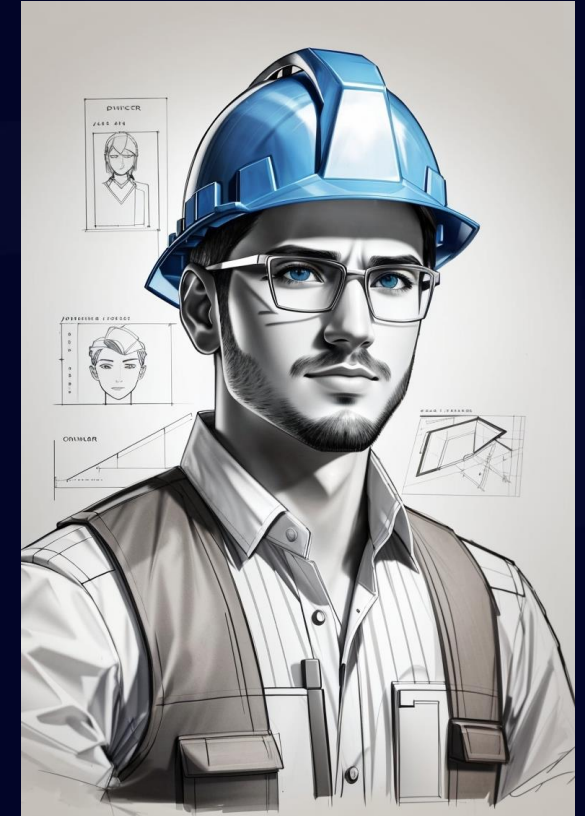
Setting the Scene



Paddy
Project Manager



Tom
Site Foreman



Jason
Engineer

Change in Circumstances:

Major incident on M4 motorway on morning of the event



Setting the Scene

- The right data delivered at the right time can dramatically alter the impact of a decision or course of action
- This could mean the difference between project success or failure





Jason Rymer

Data Engineering and Platforms Division Lead

GagaMuller Group

- Digital strategy and data specialist
- Bachelor of Engineering (Civil / Environmental), University of Technology,
- Over 20 Years experience in the Construction Industry
- 8 years in information systems and data analytics
- Specialist in digital integration and transformation

Project management and technology consultancy to the construction industry

 **Dublin and London**

 **5 Years**

 **90+ Staff Members**

 **14 Countries**

 **56 Clients**

 **157 Projects**

Sectors We Operate In

 **Residential**

 **Commercial**

 **Pharmaceutical**

 **Data Centres**

 **Housing**

Breaking from the status quo

People are so focused on doing the work...

They don't make time for process improvements





Data Capture

- Lack of digital processes to capture data at source
- Data Lag
- Data Quality
- Lack of standardised data
- Data silos



Skills and Processes

- Technology skill shortage
- Inefficient work processes
- Scalability
- Complex workflows



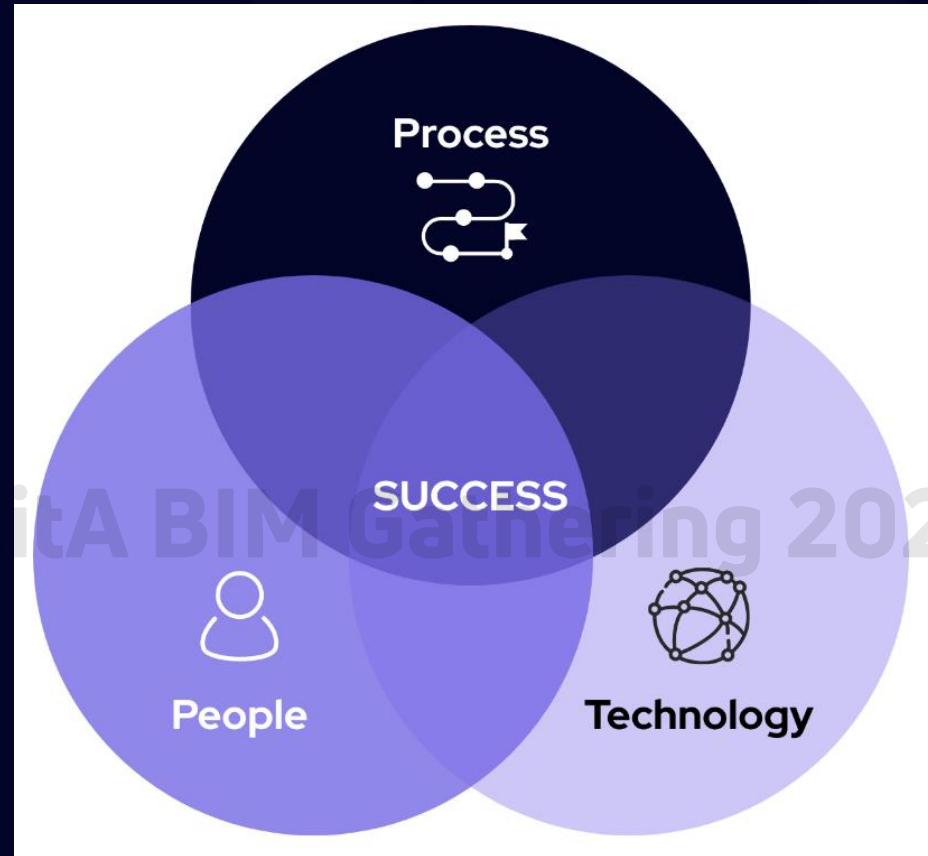
Technology Integrations

- Software interoperability
- Poor information management
- Security and privacy concerns
- Legacy systems



Data Interpretation

- Domain knowledge
- Data complexity
- Right data at the right time to right people



People: Understand the people that are involved and their needs

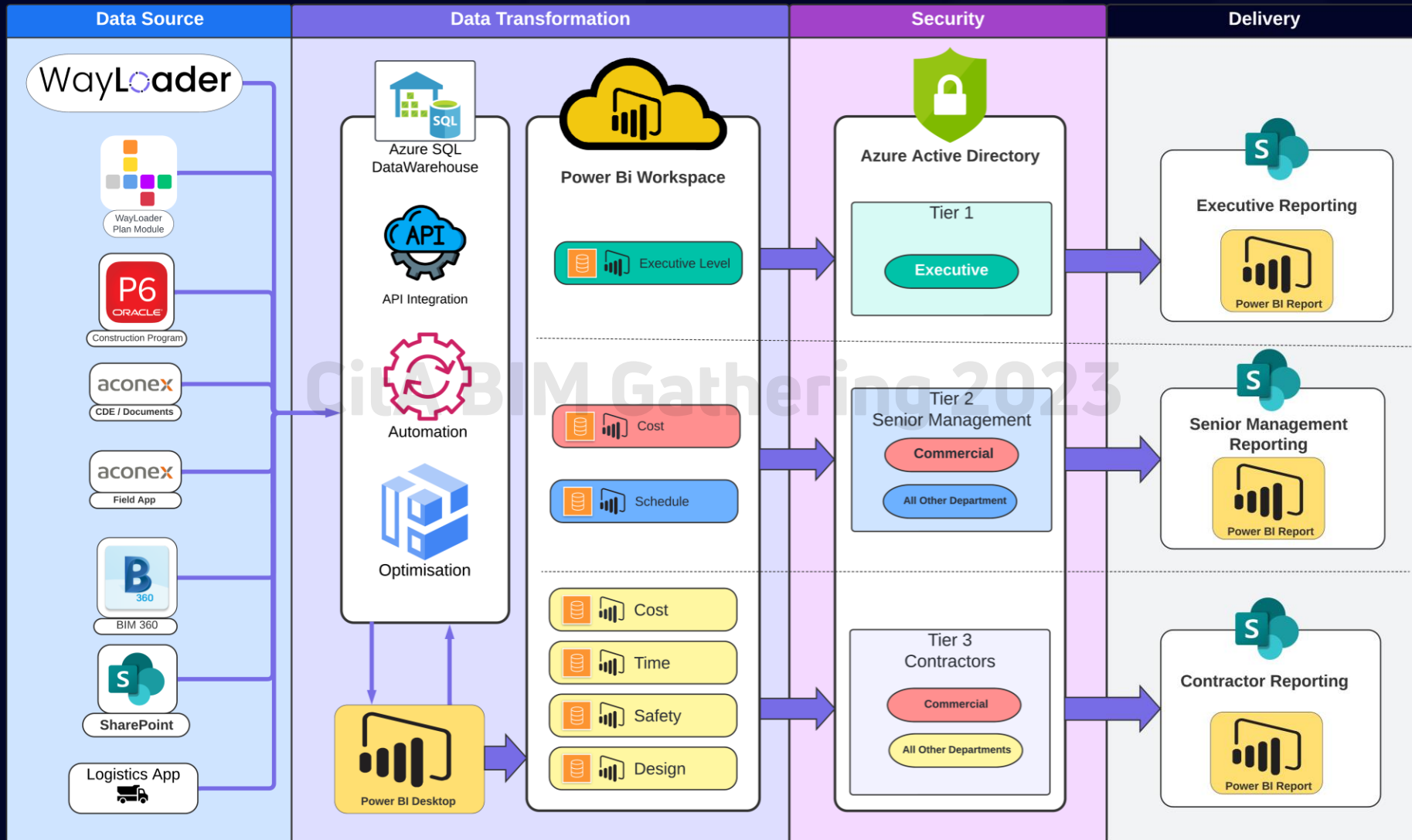
Process: Develop a process that is structured, collaborative and repeatable

Technology: Use technology to enhance the process, improve data capture and scale

Project Reporting Cycle

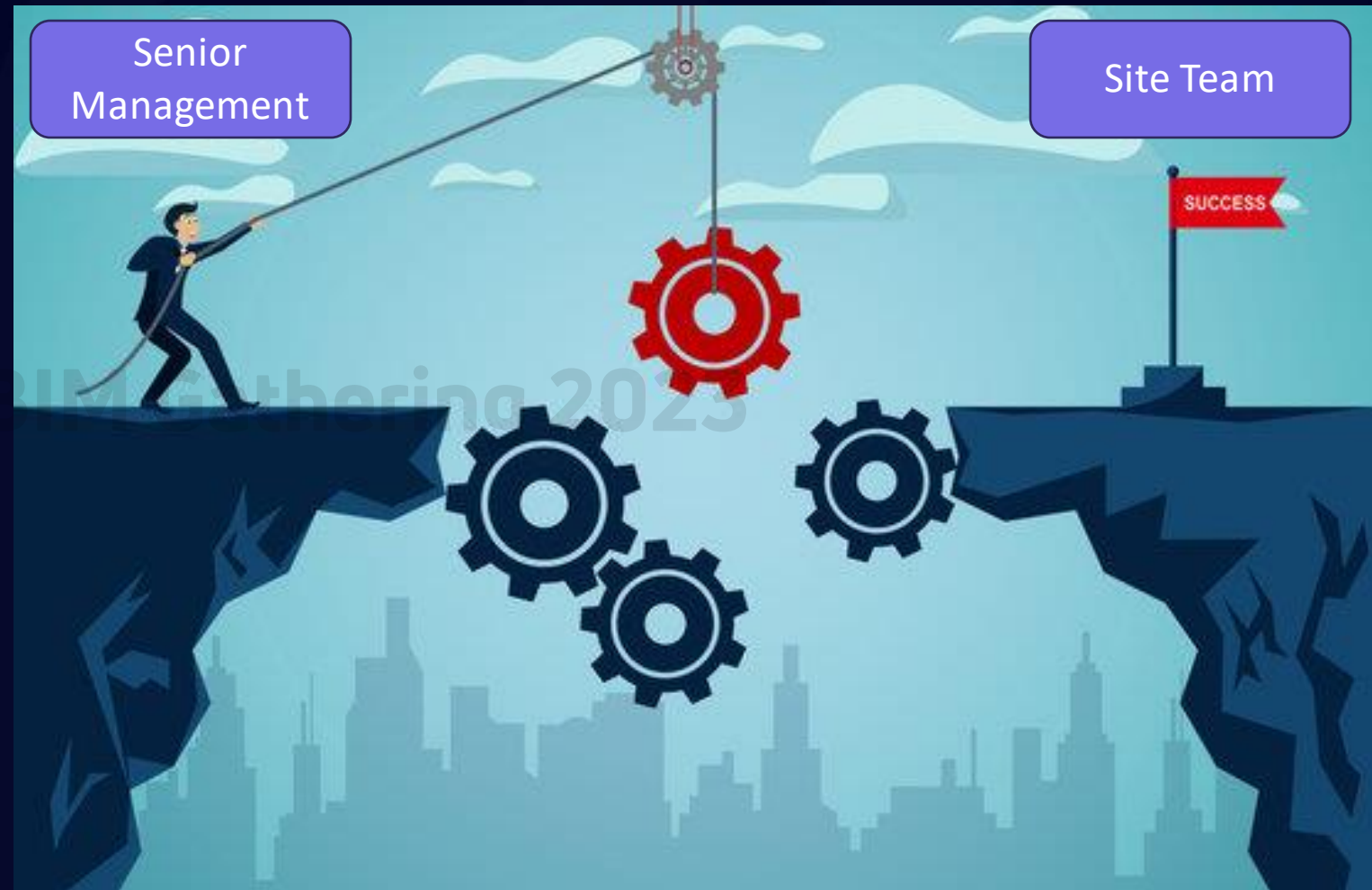


Enterprise Reporting Process



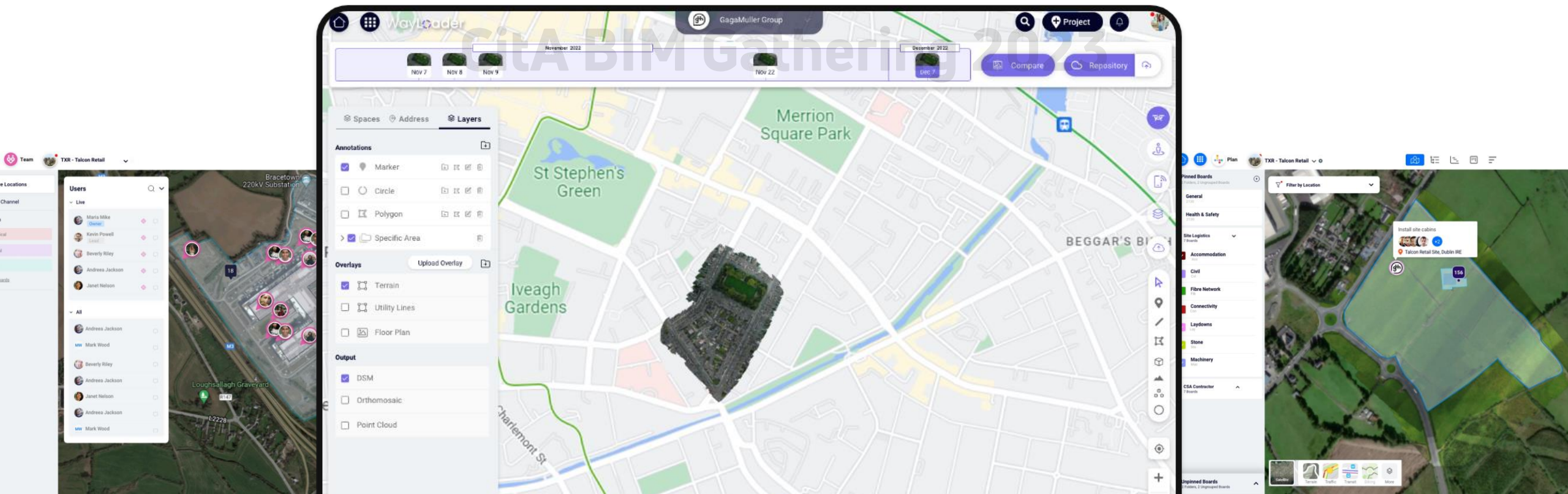
The Big Challenge

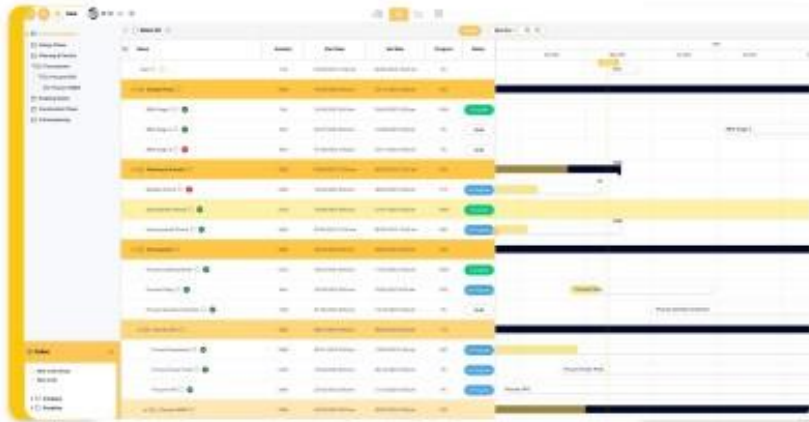
- Bridging the Communication Gap
- Improve Data Lag towards Real-Time Data



Introducing WayLoader

A location-based project management application developed to enable **real-time** visual **dashboards** for controlling work, enable collaborative communication between teams and empower decision makers to mitigate risks in a timely fashion.

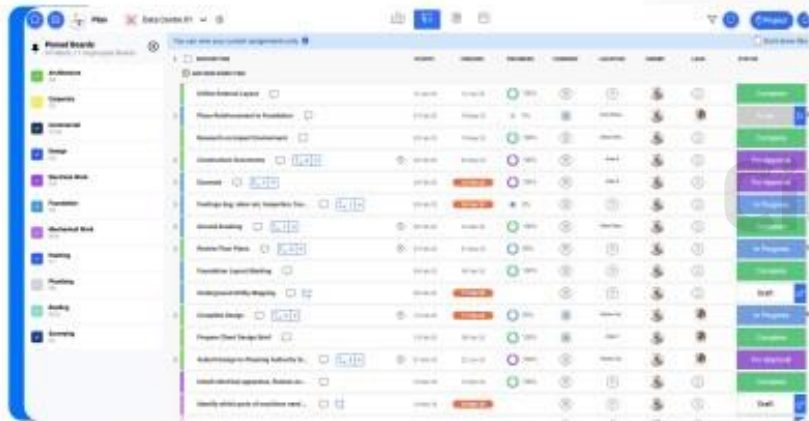




PLANNING

WayLoader Goal

- Macro level road map and scheduling
- Manage high level work breakdown
- Mitigate risks and minimise interruptions
- All while linking Goal's Gantt chart with Plan



MANAGING TASKS

WayLoader Plan

- Geospatial focused task management
- Lean Last Planner and constraint logs
- Real-time progress tracking
- Built in task approval process



FOR MESSAGING

WayLoader People

- Instant chat across your organisation
- Project focused channels and group chats
- Sharing of live onsite locations
- Reducing build up of email threads

THE STRUCTURE

Select the modules that benefit your organisation

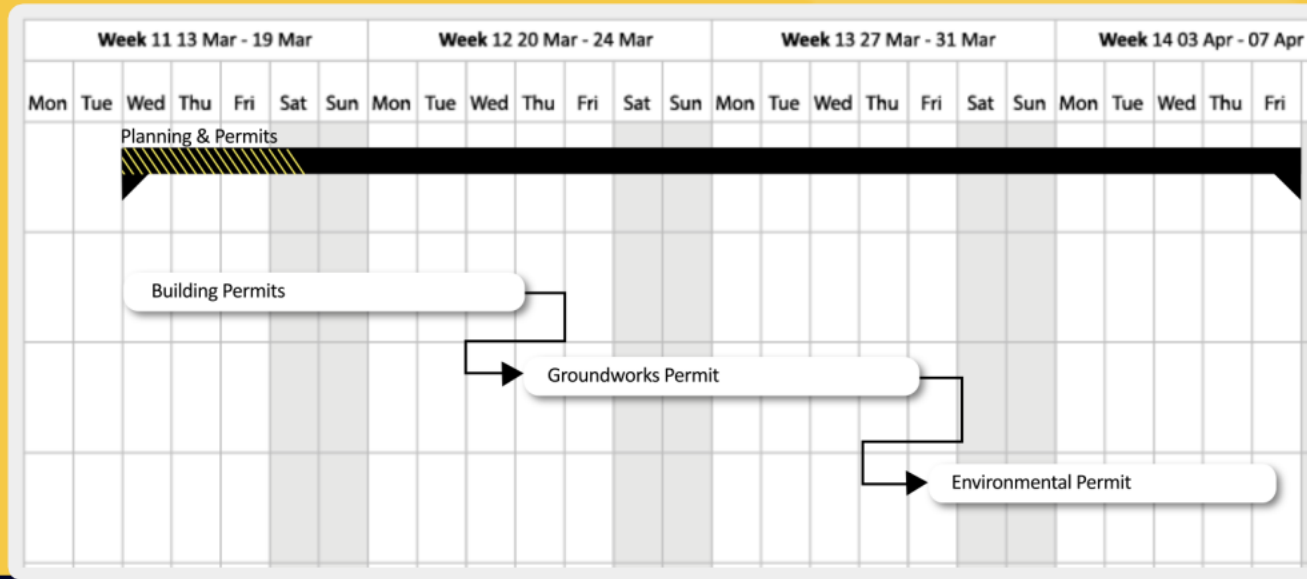




Goal

- Macro level project management
- Plan module integration
- Schedule variance visibility
- Work and code breakdown structures

Name	Duration	Start Date	EndDate
2023 - Roadmap	90d	15/03/2023	17/04/2023
Planning & Permits	40d	15/03/2023	24/03/2023
Building Permits	7d	15/03/2023	23/03/2023
Groundwork Permit	18d	24/03/2023	19/04/2023
Environmental Permit	99d	18/01/2023	17/04/2023
Design Phase	9d	15/03/2023	24/03/2023





Plan

- Real-time progress updates
- Location based task management
- Resource Management



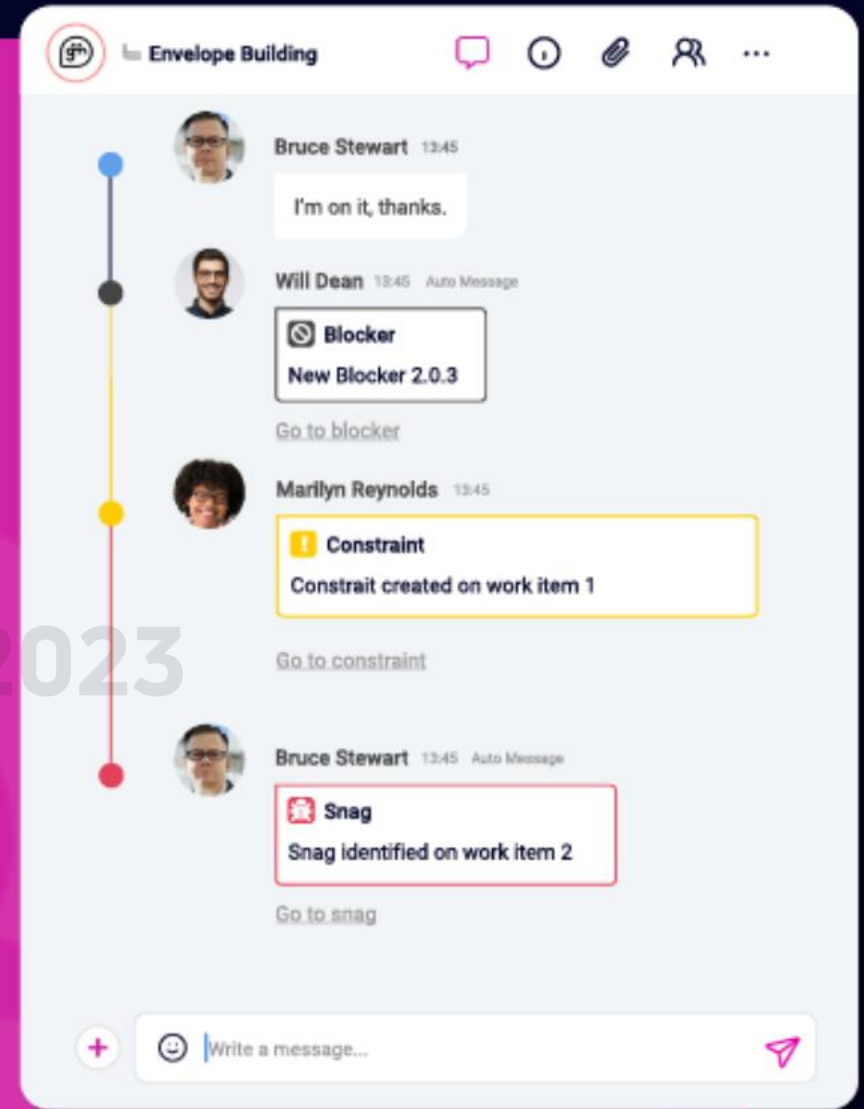
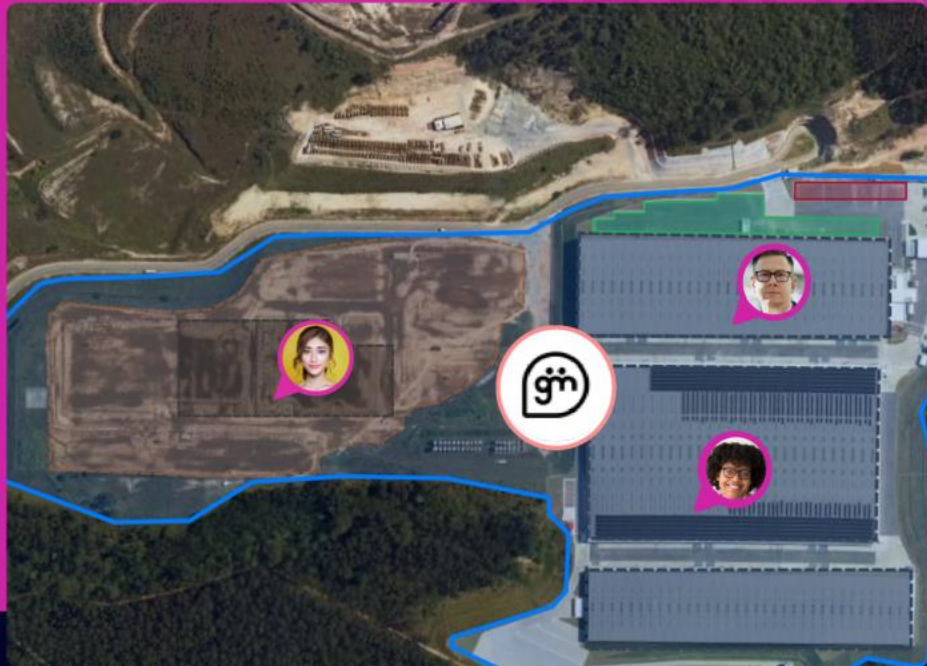
CitA BIM Gathering 2023

<input type="checkbox"/>	DESCRIPTION	STARTS	FINISHES	PROGRESS	COMPANY	LOCATION	OWNER	LEAD	STATUS
	Position Steel	05 Nov 2023	17 Nov 2023	100	Red Networks	DB 1			Complete
	Erection Of Steel	18 Nov 2023	13 Dec 2023	100	Red Networks	DB 4			For Approval
	Paint Steel	14 Dec 2023	22 Dec 2023	80	Red Networks	DB 2			In Progress



People

- Structured conversations
- Live location on resources
- Records of issue management



WayLader

Upgrade to WayLoader Plus

WayLoader Plus is a premium feature within the WayLoader application, which unlocks additional geospatial features that allows project owners to have a more immersive view of site from their desktop



Drone Overlays

Fly a drone regularly over your site for a birds-eye view of progress. Use drone analytics for accurate decision-making. Toggle drone overlays on our customisable map view for optimal space utilisation.



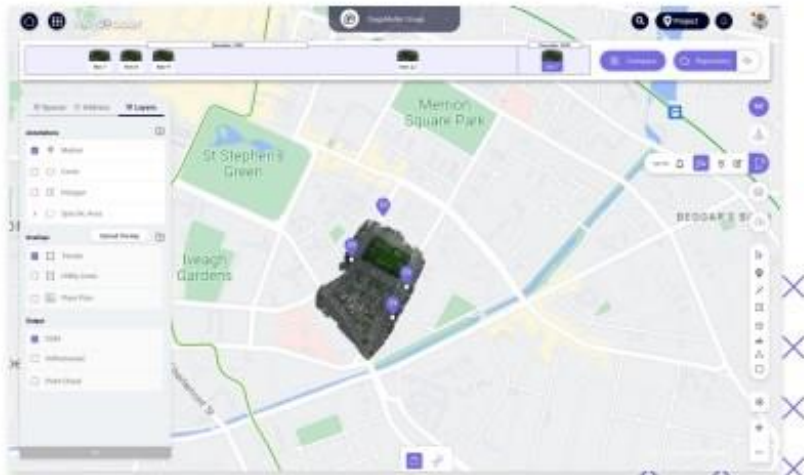
360° Walkthrough

With a 360° camera, upload content to WayLoader for you and your team. Explore your space with a customisable map view and 360° perspective.



GIS Layer Overlays

Wondering about utilities and services near your site? Our in-house library and support team can help. Toggle on layers or request additional ones to get the best tools for analysing your surroundings.



Sample Dashboards





CONSTRUCTION SCHEDULE

Summary (Tasks)

Construction Task KPI's

Reporting Date

29 April 2022

145

Planned

120

Actual

-25

Delta Tasks

83%

SPI

Clear Filters

Demonstration Project

FILTERS

29/10/2020 05/06/2023

Level

Level B02

Level B01

Level 00

Level 01

Level 02

Level 03

Status

Complete

In Progress

OverDue

To Do

Report Stage

1 - RC Slabs

2 - Pre-Cast Columns

3 - Cladding Panels

4 - Framing & Panels

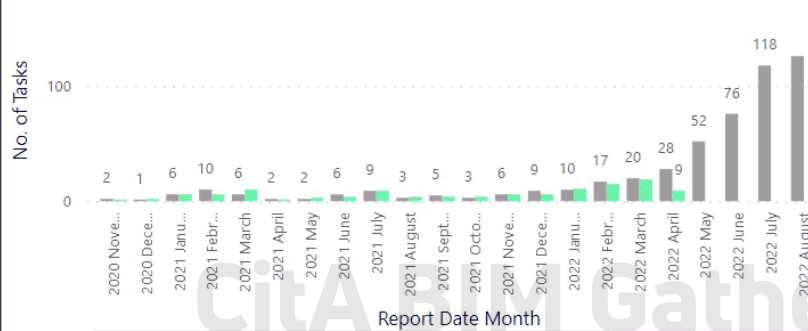
5 - Partitions Closed

6 - Final Paint / Decoration

7 - Testing / Commissioning

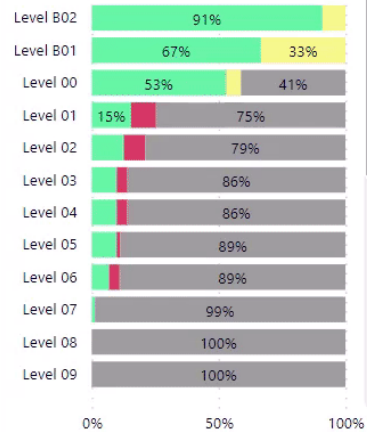
Plan Vs Actual - Histogram

Planned Actual



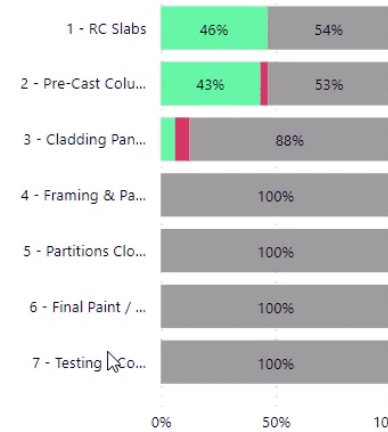
Level Activity Status

Complete In Progress OverDue To Do

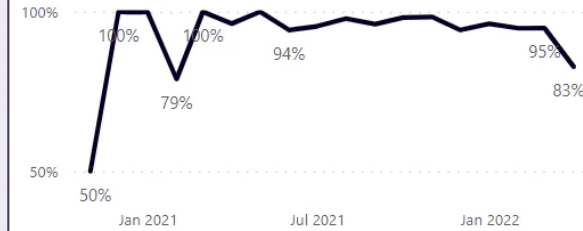


Milestone Status

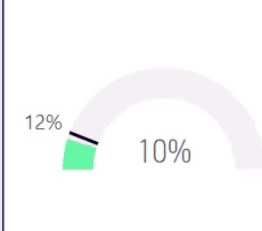
Complete OverDue To Do



Schedule Performance Index (SPI)



% Tasks Complete



Schedule List View

Task Name	Level	Package	Baseline Start	Baseline Finish	Status
Project Team Mobilisation	No Level		29 October 2020	12 November 2020	Complete
Prepare Pavement Closure Application to Local Authority	No Level		13 November 2020	01 December 2020	Complete
Local Authority Application Review Period	No Level		27 November 2020	09 February 2021	Complete
Temp Works Design Sign-Off	No Level		04 December 2020	17 December 2020	Complete
Temp Works Design Sign-Off	No Level		18 December 2020	14 January 2021	Complete
Mobilisation	No Level		15 January 2021	03 February 2021	Complete
Secure Site & Form Safe Access / Egress Routes	No Level	Site Set-up	19 January 2021	21 January 2021	Complete
Piling Design Development	No Level		22 January 2021	04 February 2021	Complete
Site Surveys / Reports	No Level		26 January 2021	01 February 2021	Complete
Erect Hoarding @ Shepherdess Walk	No Level	Site Set-up	26 January 2021	28 January 2021	Complete
Pavement Closure	No Level				Complete

Total

Sample Dashboard



Commercial Summary Report

Reporting Date: 15 November 2022

BUDGET		CONTRACT VALUES		% Complete
€ 83.68M	-€ 488.01K	€ 84.17M	€ 8.40M	10%
Budget	Variance	Total Value	Total Paid	Clear Filters

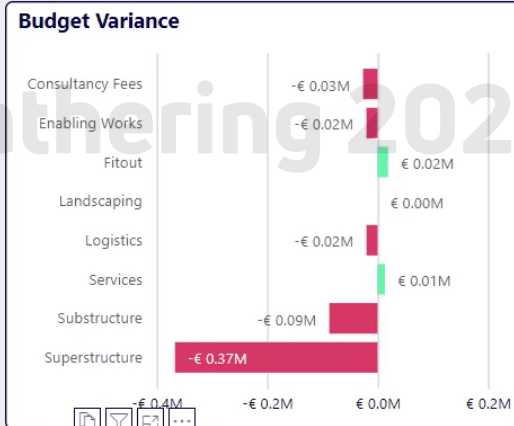
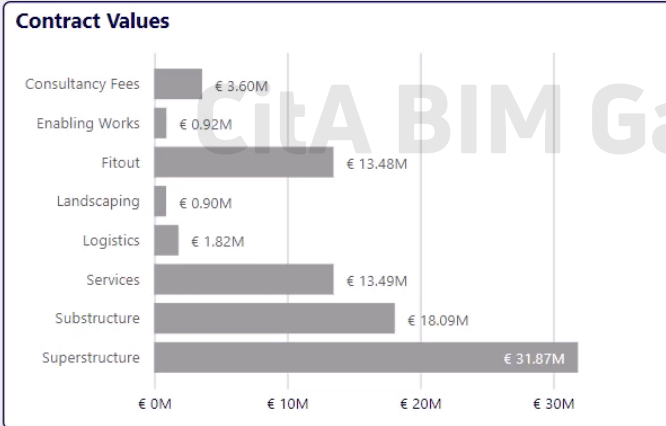
THR Project

FILTERS

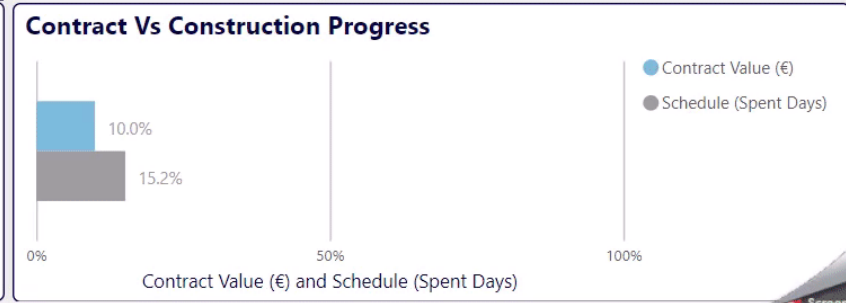
Category

- Consultancy Fees
- Enabling Works
- Fitout
- Landscaping
- Logistics
- Services
- Substructure
- Superstructure

CONTRACT PAYMENT PROGRESS



Category	Total Budget	Total Contract Value	Budget Variance	% Complete	Total Paid
Consultancy Fees	€ 3,578,400.00	€ 3,604,554.62	-€ 26,154.62	46%	€ 1,648,070.47
Enabling Works	€ 900,000.00	€ 920,000.00	-€ 20,000.00	6%	€ 55,815.00
Fitout	€ 13,500,000.00	€ 13,481,100.00	€ 18,900.00	0%	€ 0.00
Landscaping	€ 900,000.00	€ 900,000.00	€ 0.00	0%	€ 0.00
Logistics	€ 1,800,000.00	€ 1,819,980.00	-€ 19,980.00	42%	€ 766,490.40
Services	€ 13,500,000.00	€ 13,486,500.00	€ 13,500.00	3%	€ 401,895.00
Substructure	€ 18,000,000.00	€ 18,087,300.00	-€ 87,300.00	23%	€ 4,135,448.61
Superstructure	€ 31,500,000.00	€ 31,866,975.00	-€ 366,975.00	4%	€ 1,392,140.96
Total	€ 83,678,400.00	€ 84,166,409.62	-€ 488,000.00	10%	€ 8,399,860.45





Process

- Streamline processes
- Good information Management
- Standardisation
- Governance



People

- Training
- Collaboration
- Good Communication
- Engage the entire team
- Monitor behaviours



Technology

- Digitise process where possible
- Cloud based solutions
- Keep it Simple
- Develop Automated Data pipeline
- Real-time analytics

Cit A BIM Gathering 2023

Scott Taylor

**Good decisions
made on bad data,
are just bad decisions
you don't know about...
yet**



GagaMuller
Group

Innovate
Disrupt
Integrate



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