

Gathering23

Accelerating BIM adoption

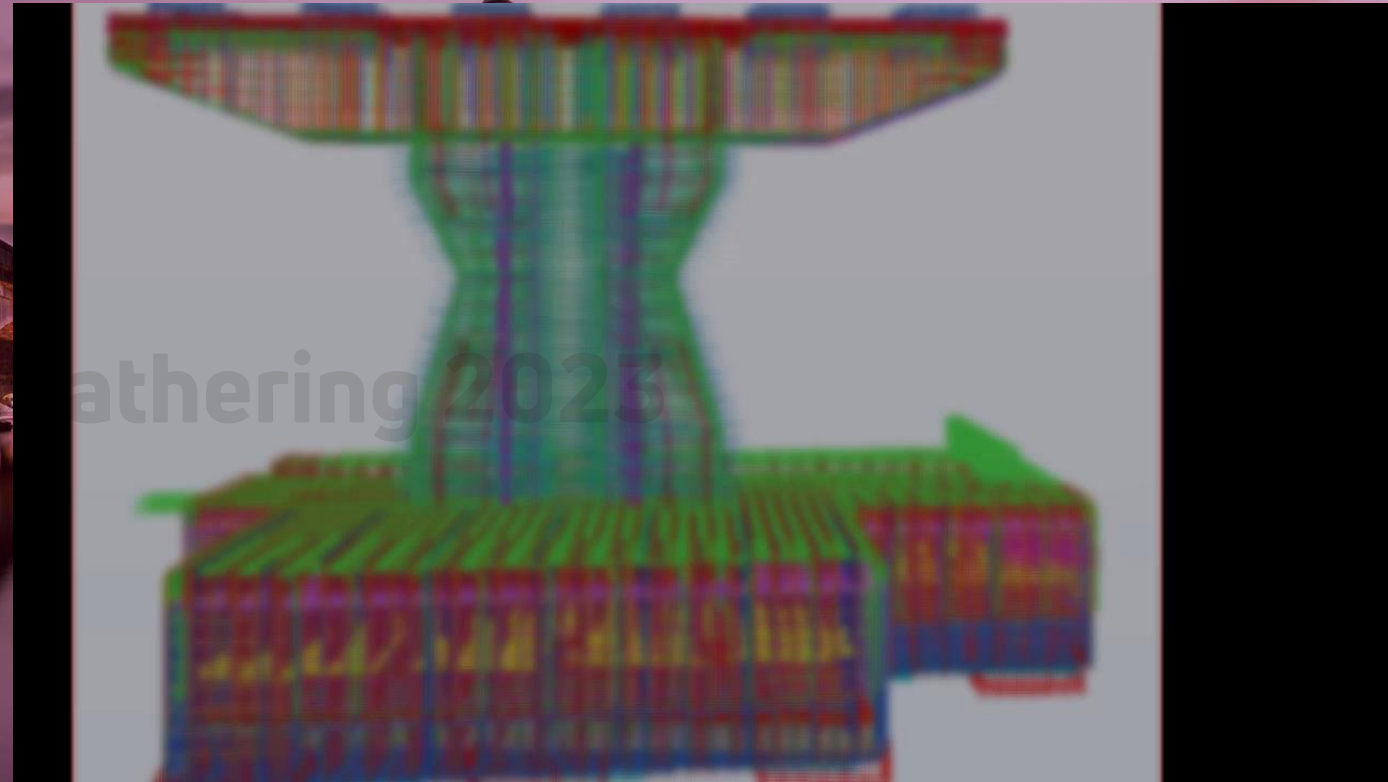
CitA

2012

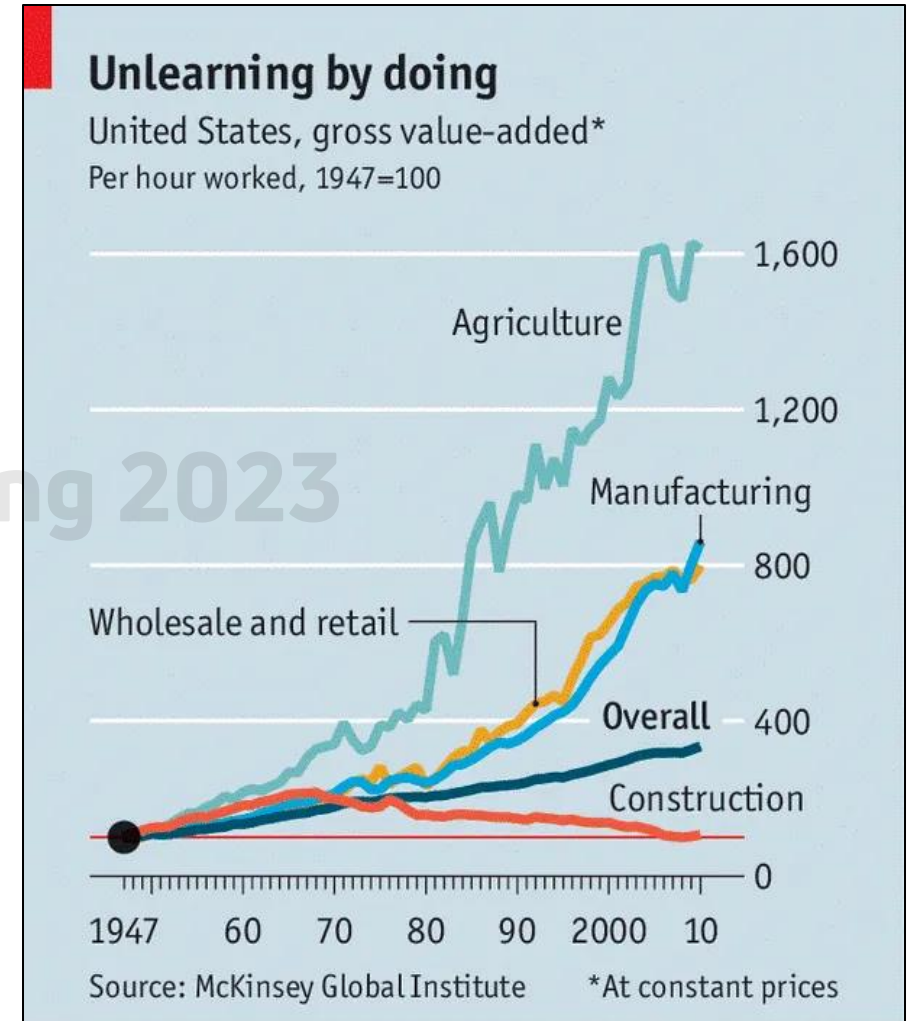


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STEEL**

BIM Journey begins



McKinsey Reports Construction is going backwards in productivity
Change is needed and through digital tools we can improve performance on and offsite



The Industry is changing and so has Bim as a process from servers to cloud based systems

The manufacturing industry is undergoing intense changes in response to many shaping forces.

This includes new and emerging technologies, such as artificial intelligence, machine learning, robotics, code manufacturing, and integrated workflows, processes, and data pipelines.

But the overarching factor affecting change in manufacturing is customer experience using BIM




Question 1: Consistent use of digitalisation

- 1  Enhancing progress monitoring and health, safety and wellbeing
 - 2  Cost estimation, prediction, planning and control
 - 3  Incorporating Environmental, Social and Governance (ESG) principles
- Lowest:** Carbon footprint calculation, benchmarking and reporting

Question 2: Improvement due to digitalisation

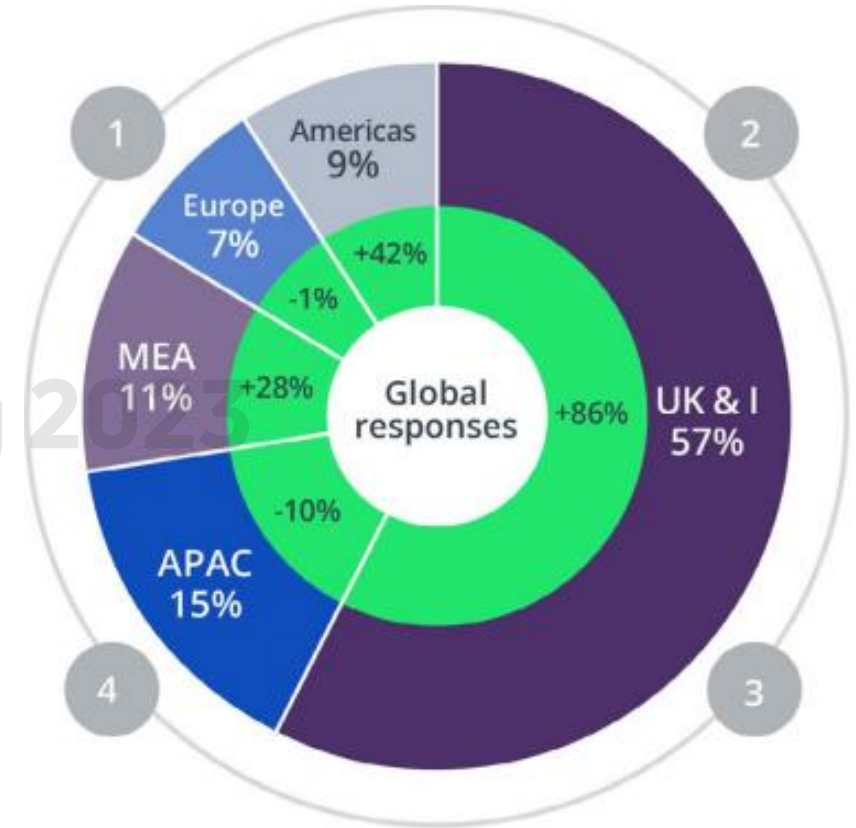
- 1  Cost estimation, prediction, planning and control
 - 2  Implementing whole-of-life and whole-of-asset thinking (ranked 3 in 2021)
 - 3  Enhancing progress monitoring and health, safety and wellbeing (ranked 2 in 2021)
- Lowest:** Designing and measuring social value

Question 3: Blockers to digitalisation

- 1  Cost, effort, and changes needed
 - 2  Shortage of skilled persons
 - 3  No clear demand from clients or stakeholders
- Lowest:** Recent graduates not equipped with the right digital capabilities

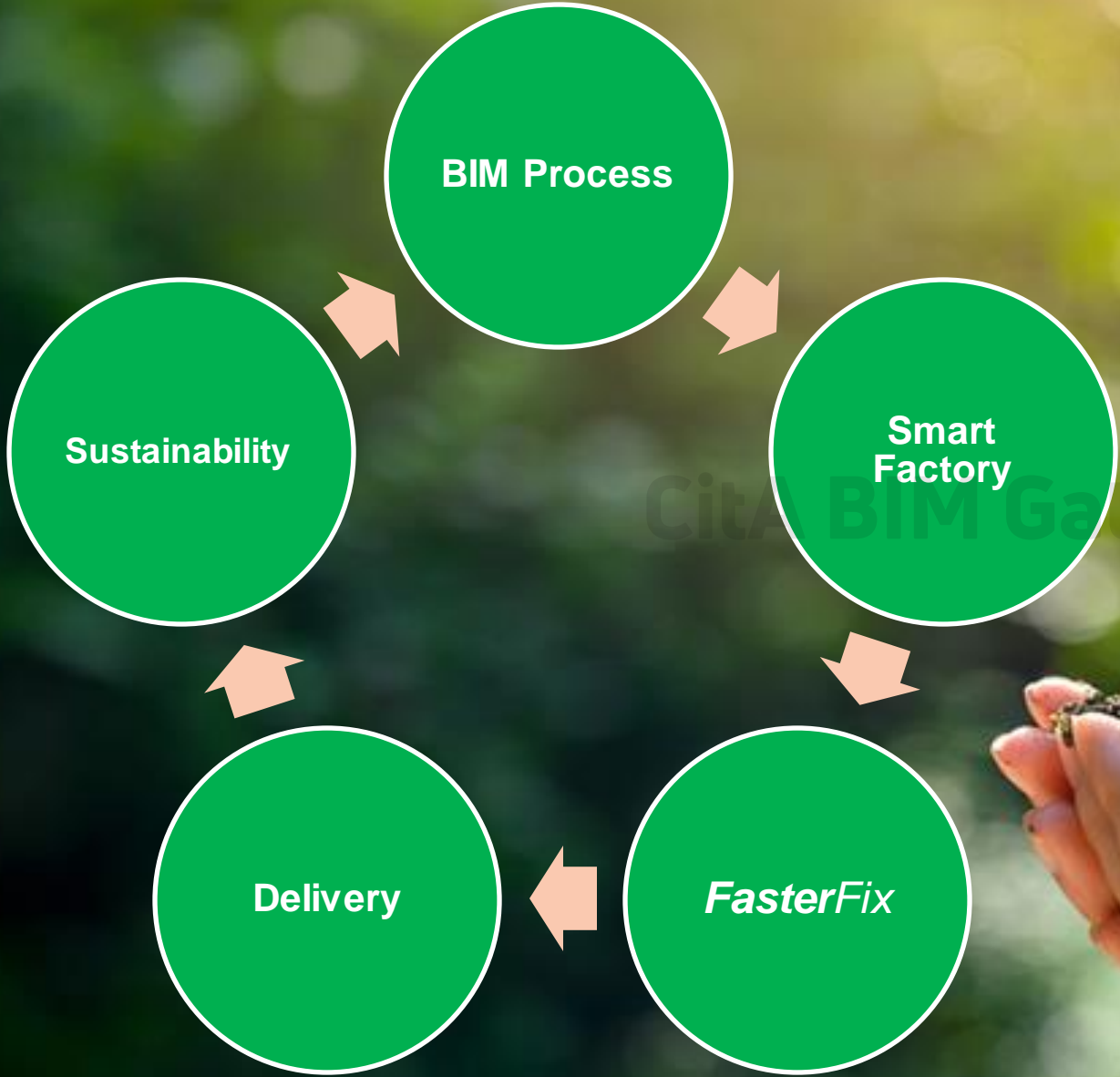
Question 4: Sharing data and information using digital models

- 1  Quantity take-off and cost estimating
 - 2  Health, safety and wellbeing
 - 3  Handover and commissioning, including provisioning of digital twins
- Lowest:** Life cycle carbon emissions



Source: [RICS](#) – Digitalization in Construction report 2023

Midland Steel in 2023



FASTERFIXTM

Better for the planet



DPORT-BERTH 35

☆ ✓ ↗ ☰




KILDARE STREET - JOHN PAUL

☆ ✓ ↗ ☰



IRL - MIDLAND_IRELAND - TE...

☆ ✓ ↗ ☰



CVBT - CVB TIDEWAY TUNNEL...

☆ ✓ ↗ ☰



ALIGN - SEGMENTS

☆ ✓ ↗ ☰



BOSTON SCIENTIFIC - MCDO...

☆ ✓ ↗ ☰




SOLVE TENDERS

☆ ✓ ↗ ☰



CURRENT PROJECTS

☆ ✓ ↗ ☰




BANDON ROAD, STUDENT AC...

☆ ✓ ↗ ☰



LIWT - HS2 - LONG ITCHINGT...

☆ ✓ ↗ ☰



NORW - MIDLAND_NORWAY...

☆ ✓ ↗ ☰



101309-PEF-BE-XX-M3-BLOCK...

☆ ✓ ↗ ☰



WPSB - WESTGATE PARK - UK

☆ ✓ ↗ ☰

TEMPLATE

D21.000 - TEMPLATE

☆ ✓ ↗ ☰



2AWN - INTEL BLUEJAY - AWN

☆ ✓ ↗ ☰



GTSB - HS2 GREEN TUNNEL FI...

☆ ✓ ↗ ☰



BLUEJAY INTEL

☆ ✓ ↗ ☰



BMST - BEAMS MARK SHEERA...

☆ ✓ ↗ ☰



TERMINAL 4 - PHASE 3 - DUBL...




HANSFIELD - ZONE 7



RINGASKIDDY



2PSS - INTEL BLUEJAY - PSSS



ST JAMES CARDIOLOGY - CLA...



GLENMALLAN - VOLKERSTEVIN



FASTERFIX

BIM Service



Collaborative 3D Models

Offsite Product



FASTERFIX *Delivery*

- Just-In-Time
- Increased Site Safety
- Complete Delivery Tracking
- 100% Traceability
- Onsite Steel Storage Eliminated
- 75% Faster Than Traditional Process



Utilizing BIM for Sustainability Goals

7 AFFORDABLE AND
CLEAN ENERGY



Improving the design criteria – get an analysis of building in situ concrete frames

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



To reduce carbon emission from manufacture of steel by using FasterFix

13 CLIMATE
ACTION



By utilizing efficient detailing practice our goal is to achieve a ZERO waste objective

To reduce carbon footprint by reducing number of staff needed on site

17 PARTNERSHIPS
FOR THE GOALS



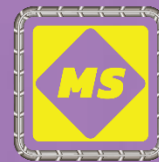
energy requirement



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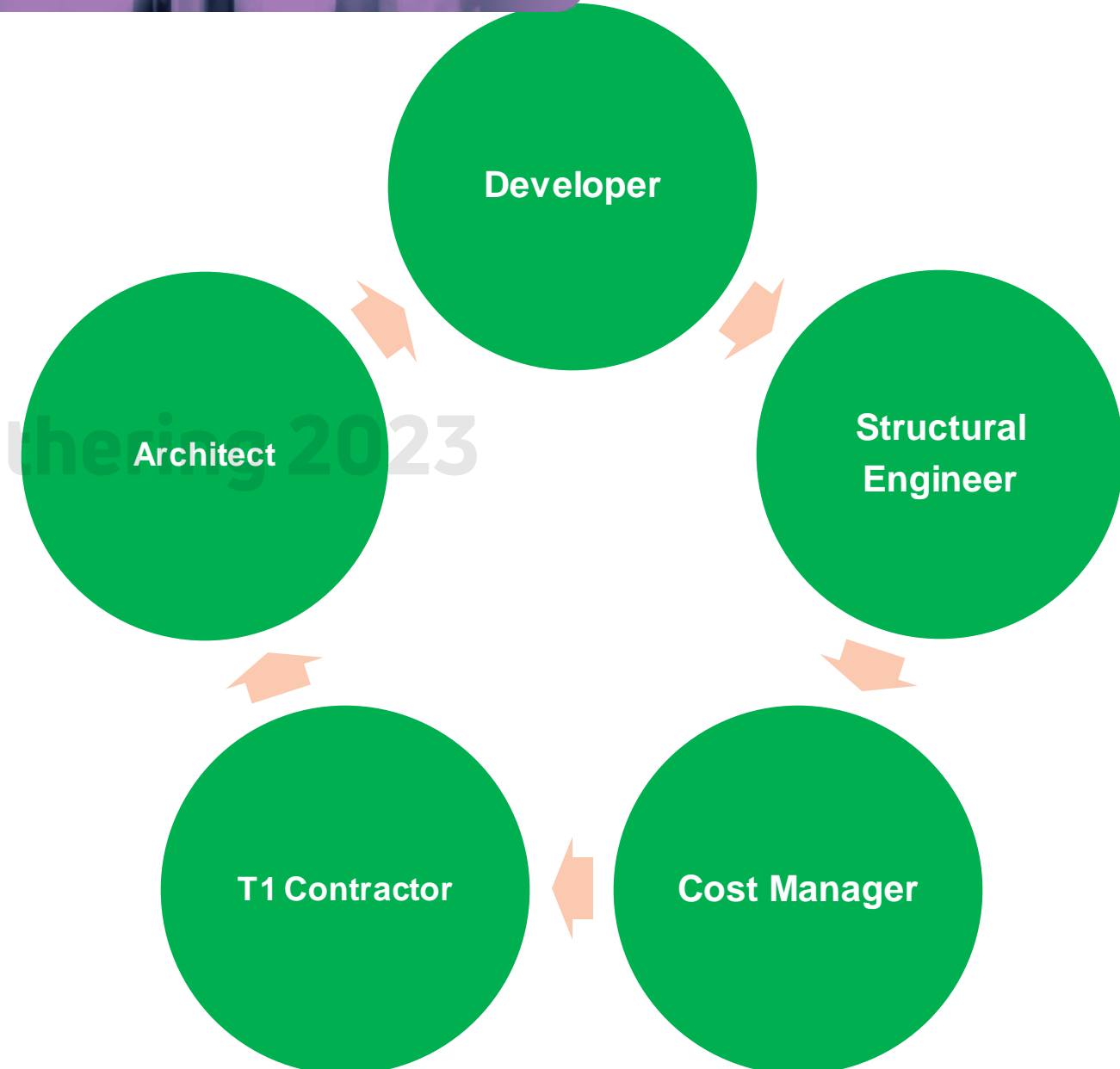


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ON THE CUSP OF NEW ERA

Educating the relevant people in BIM and what benefit it brings to cost Management is extremely important in showing practical delivery off projects and lean cost management



Cost Analysis
understanding the
benefits off practical
Constructable
delivery engaging
early supply chain
involvement in
assessment using
Bim is vital to
determine the best
value for the client

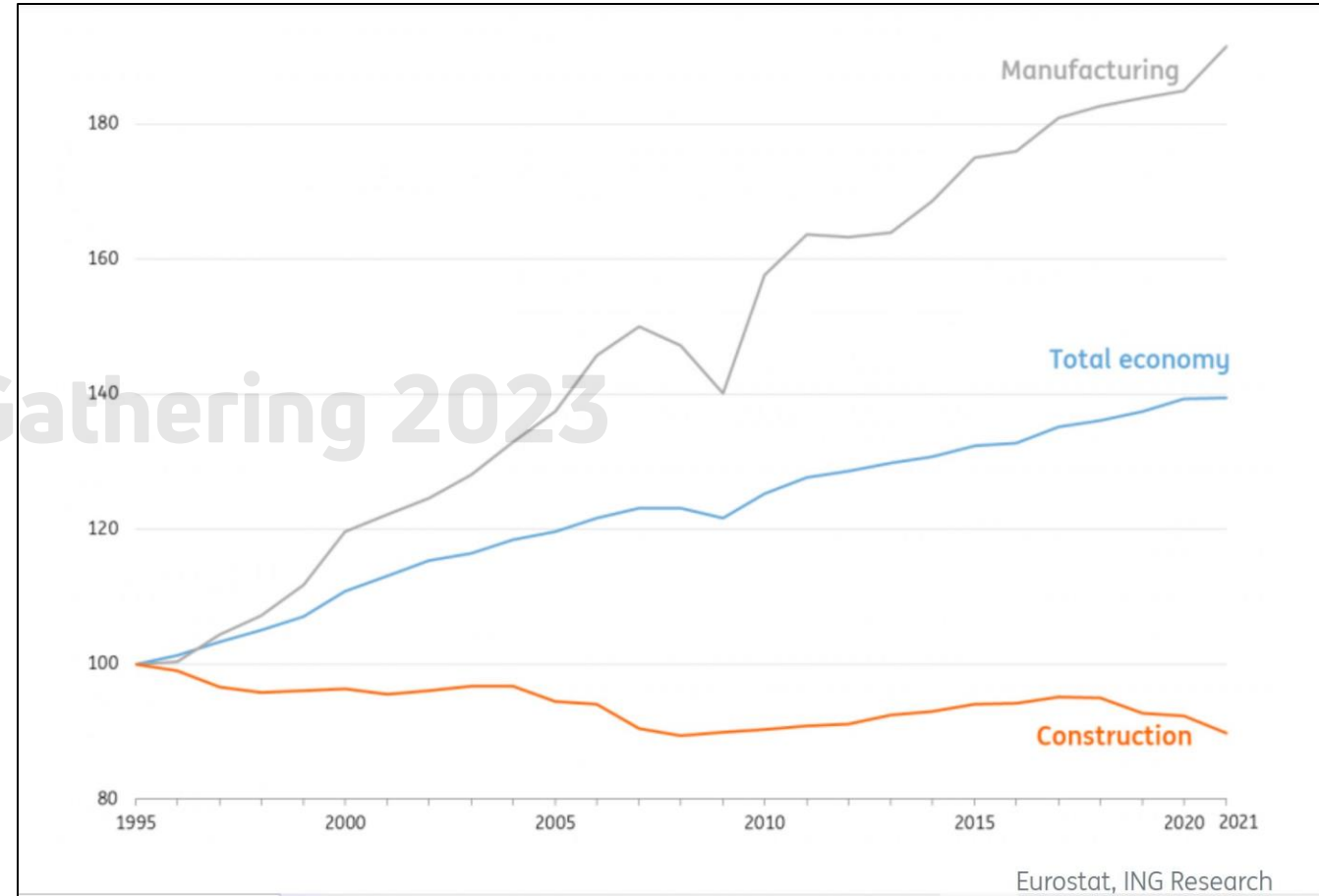


Early-stage involvement during cost analysis is critical for the client to get the value from Bim underpinning its not a cost it's a benefit





Digitalization is driving manufacturing forward and Driving Midland Steel





**BIM is
No longer just
Building Information Management**

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Data Collection

Clash Detection

Rebar Fabrication using Robots

4/5D Visualization

Data Collection



Importance of Bim/Digital

Digital solutions are critical to our delivery of the decarbonization of our built environment in a timeframe that avoids catastrophic climate change.

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We have a shortage of skilled workforce to deliver decarbonization projects, and digital tools can take some of the strain to enable more efficient and more affordable decarbonization solutions.

Sustainable Working using
digitalisation Midland Steel
are developing world first
sololutions in Robotics

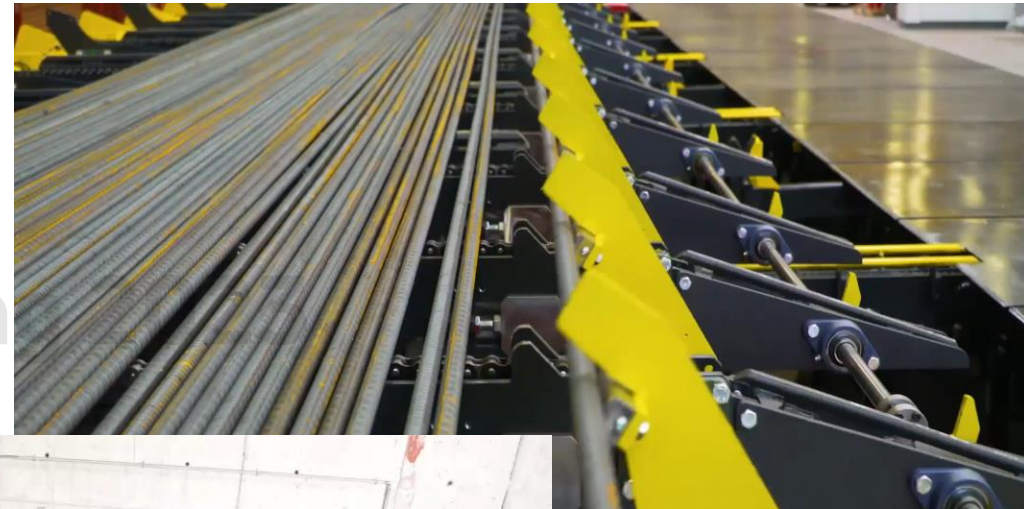
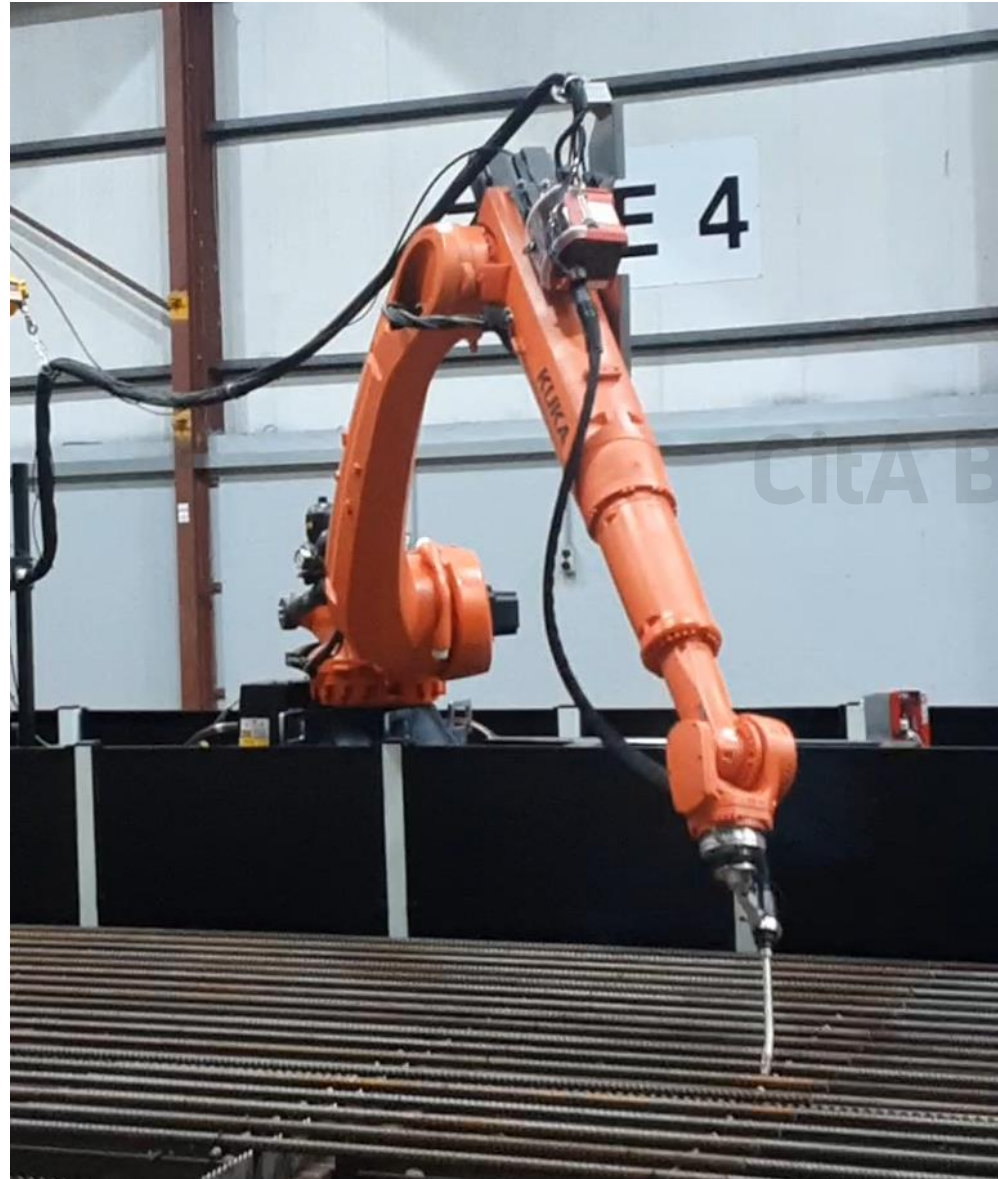


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Robotic Fabrication



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**Bim is changing the world off
construction as we know it driving
digital change & Futures**

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Accelerating BIM adoption

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Speaker – Tony Woods

Title – CEO

Email – tony@midlandsteel.co.uk



THANK YOU





