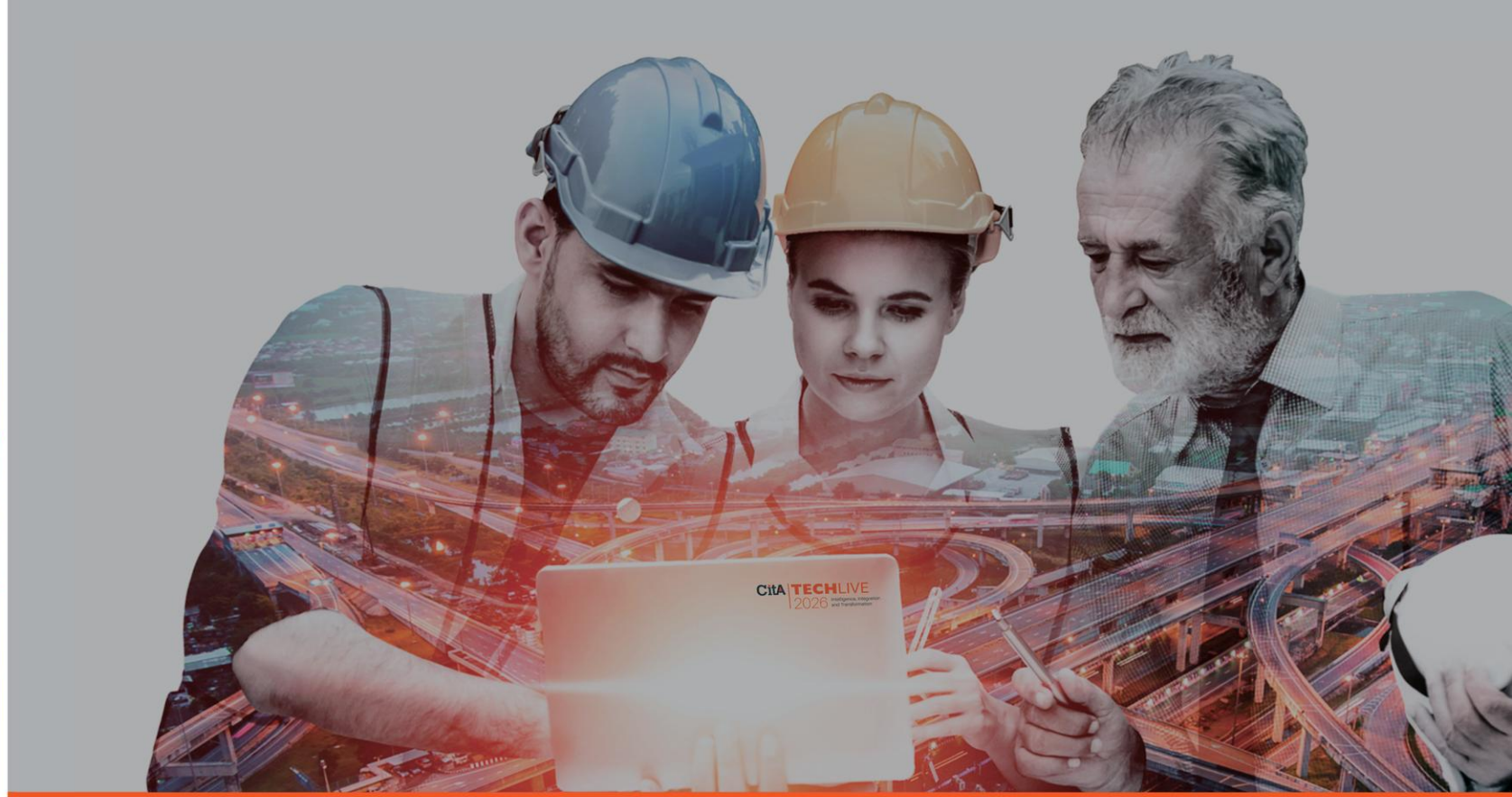
CitA | TECHLIVE 2026

Intelligence, Integration and Transformation



Dexcom Stadium, Galway,
12th November 2026



Shaping the Future of Construction

Richard Williams
Business Development Director, KOSMOS

Replacing fragmented collaboration with shared commercial clarity

About KOSMOS

Replacing fragmented collaboration with shared commercial clarity

Digital. Cost. Carbon.

Better decisions, faster.

Offices in Denmark and Ireland. Teams around the world.

Why we exist

Delivery of construction projects is broken.

8.5%

of big projects, across all sectors, finish on budget and on time. Only 0.5% also deliver the promised benefits.

Flyvbjerg, 16,000+ projects, How Big Things Get Done, 2023

Up to 80%

over budget. Large projects also typically finish 20% later than scheduled.

McKinsey, Imagining construction's digital future, 2016

9 of 77

major public projects are expected to meet both original time and cost. Combined cost is up 44%.

Northern Ireland Audit Office, February 2024

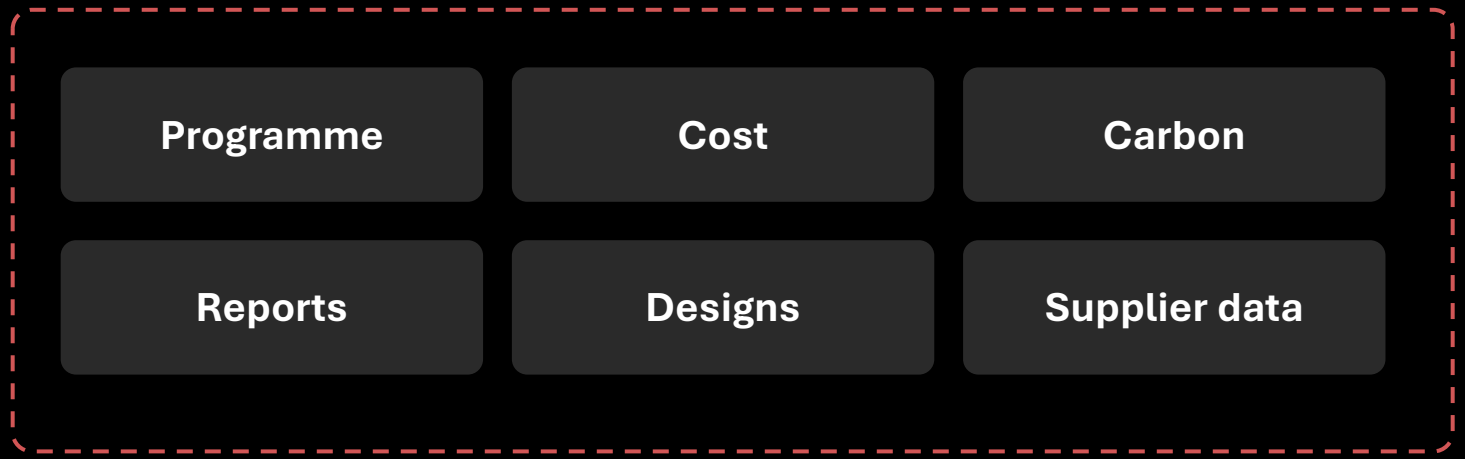
Our mission: Transforming the way construction projects are delivered.
We don't have all the answers. But we do have some of them.

A main root cause

The tools are developing.

Last Planner | Modular build | AI agents | ...and more

Project data is still fragmented.



“Transparent” is defined by suppliers.

Great intentions, built on a weak data foundation.

The answer

Project data needs to be three things

01

Transparent

Open to all stakeholders and understood by them, not just defined by suppliers.

02

Standardised

One common structure for cost and carbon, the International Cost Management Standard (ICMS), accessible by every party.

03

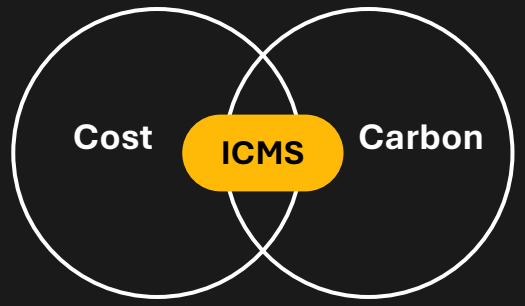
Digitally connected

Linked to the BIM model, analytic tools and communication dashboards.

How KOSMOS does it

One connected data set, from design through construction

One standard



Cost and carbon treated as one.
All data in ICMS format.

Connected at source

Cost and carbon data connected to the BIM model.

Consultants work inside the design team, not adding up data after the fact.

Live outputs

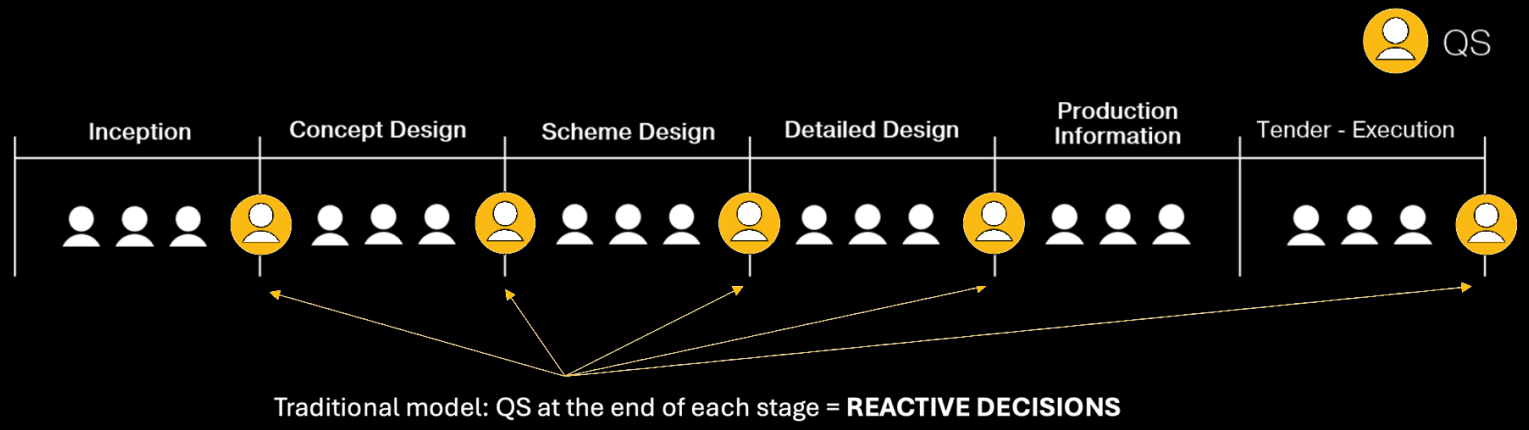
Automated, live updates.

Pulled straight from the BIM software, throughout design and construction.

Better decisions, faster.

A different rhythm

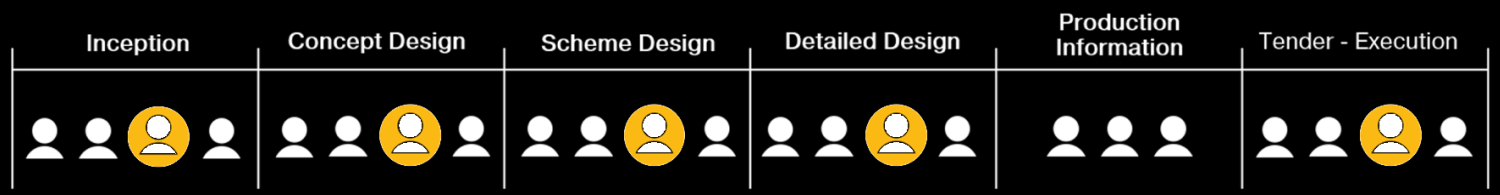
From reactive decisions to live decisions



Traditional model: QS at the end of each stage = **REACTIVE DECISIONS**

Typical

Cost is checked at the end of each design stage. Carbon often an afterthought. Decisions are reactive.



KOSMOS model: Cost & carbon estimated throughout design = **LIVE DECISIONS**

KOSMOS

Cost and carbon are calculated throughout design. Decisions are live.

The result

About half the time. About half the team.

Time to produce an estimate and bill of quantities (BOQ), concept to detailed design

Traditional approach: 18-20 weeks, with 8-12 cost managers or specialists

Concept 4 weeks	Schematic 6 weeks	Detailed design 8-10 weeks

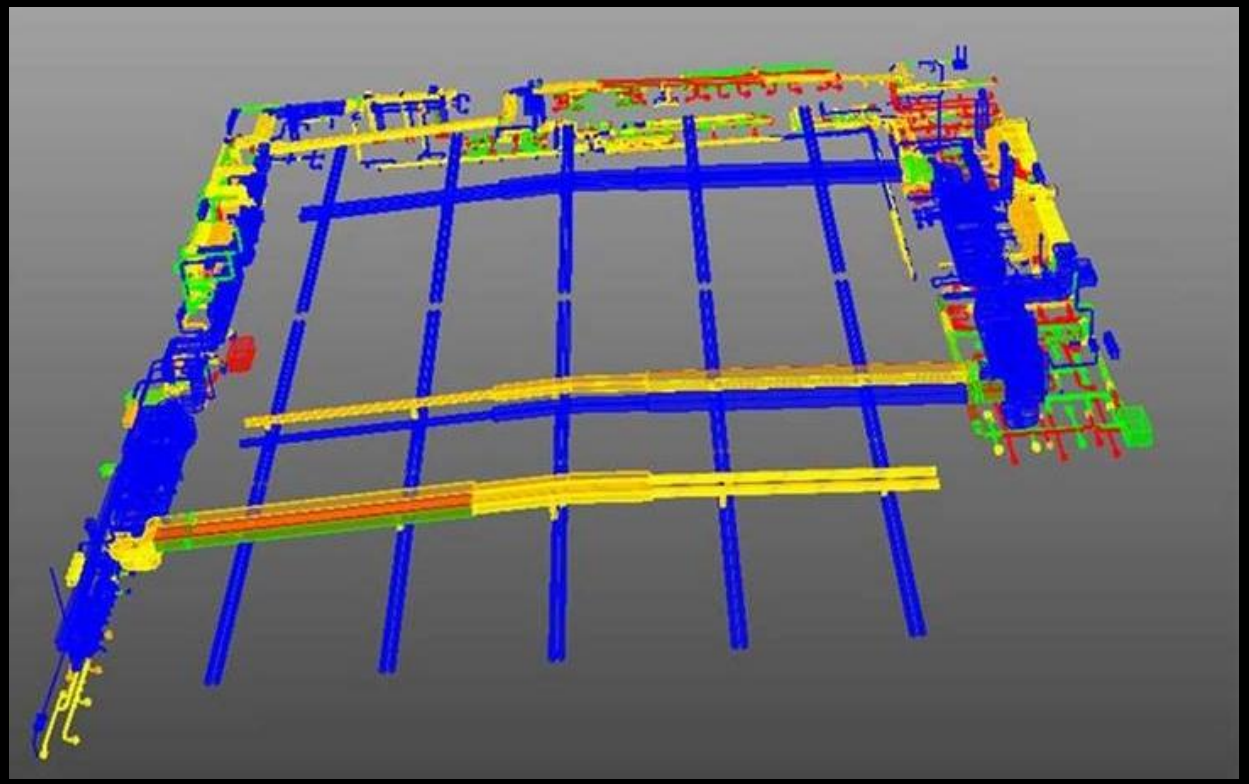
KOSMOS approach: 9 weeks, with 4-5 cost managers or specialists

Concept 2 weeks	Schematic 3 weeks	Detailed design 4 weeks

9 weeks

Seeing change as it happens

Live, visual updates show what really changed



The client declared there had been no changes to the design.

We showed them this extract from CostX.

- **Blue** = no change
- **Yellow** = as before, but moved
- **Red** = removed
- **Green** = newly added

Automated outputs

Dashboards and estimates that update themselves

Automated project dashboards



Commercial model linked to BIM data in the common data environment (CDE), Dalux.

Automated extract of data and creation of customised dashboards.

The Fifth Dimension

5D

Live, automated up-front cost estimation

Before design and construction begin, you need an accurate estimate.

We produce this automatically, in one conversation.

What comes next

Impressive today, but still only the beginning

In place today

1/10

All data in a commonly agreed, accessible format

2/10

BIM-connected cost and carbon data

3/10

Automated extracts and dashboards from the CDE

Still to come

7-8/10

Every meeting, email and message recorded.

AI spots changes and calculates cost and programme impact, ready for a decision.

10/10

Full automation from design to installation.

Only genuine exceptions go to a person.

High-level BIM models produced automatically from descriptive input.

In summary

Many people in construction say this will never work.

That’s fine. We’re not talking to them.

We’re talking to the ones who see the potential.



Thank you for your time

Richard Williams | KOSMOS