

Project Controls Expo – 14th November 2018

Emirates Arsenal Stadium, London

**Digitalisation and Project Controls – A Claims
and Disputes Perspective**

About the Speaker

Charlie Woodley

- Director in HKA's London office
- Construction informatics specialist
- Data expert in international arbitration
- Lead HKA Digital spanning advisory, claims and disputes
- Lead HKA's integrated research programme, CRUX

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HK>A

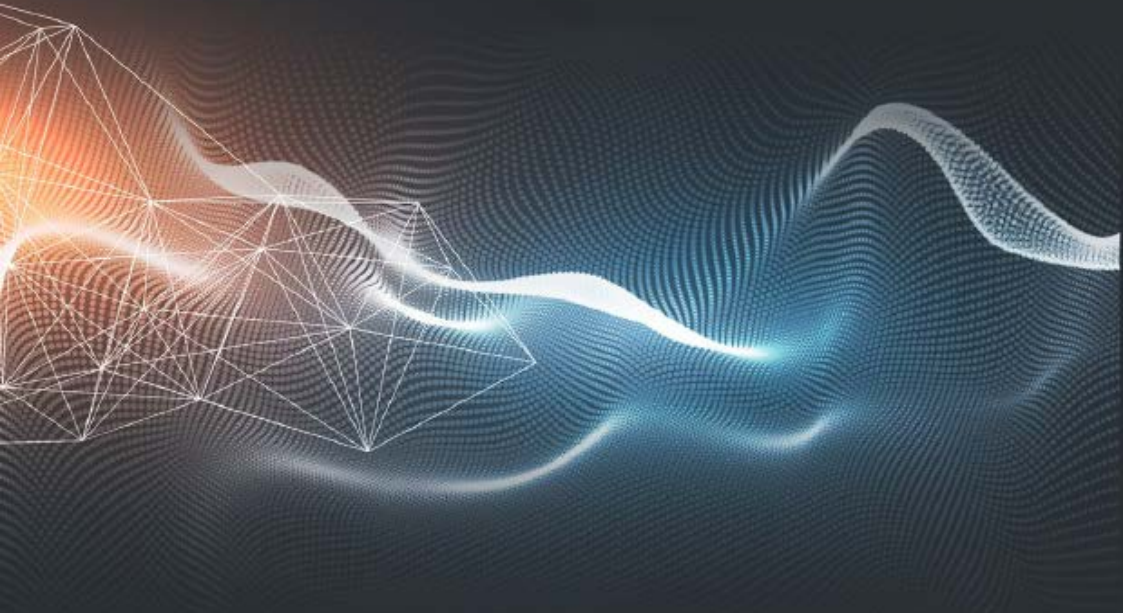
960

professionals operating in

42

OFFICES IN 20
COUNTRIES

**CLAIMS AND DISPUTE CAUSATION
A DIGITAL PERSPECTIVE**



**report
preview**

About the Topic

CRUX *INSIGHTS* Report Preview

- The true complexity of causation
- How is the 'illusion of control' a root cause
- Data not just documents - digitalisation and record keeping
- The link between controls and behaviour
- 3D models as a digital maturity indicator
- Digitalisation and dispute avoidance by proxy
- The positive impact of digitalisation on claims and dispute



257

CAUSATION DATA CLAIMS OR
DISPUTE COMMISSIONS

437

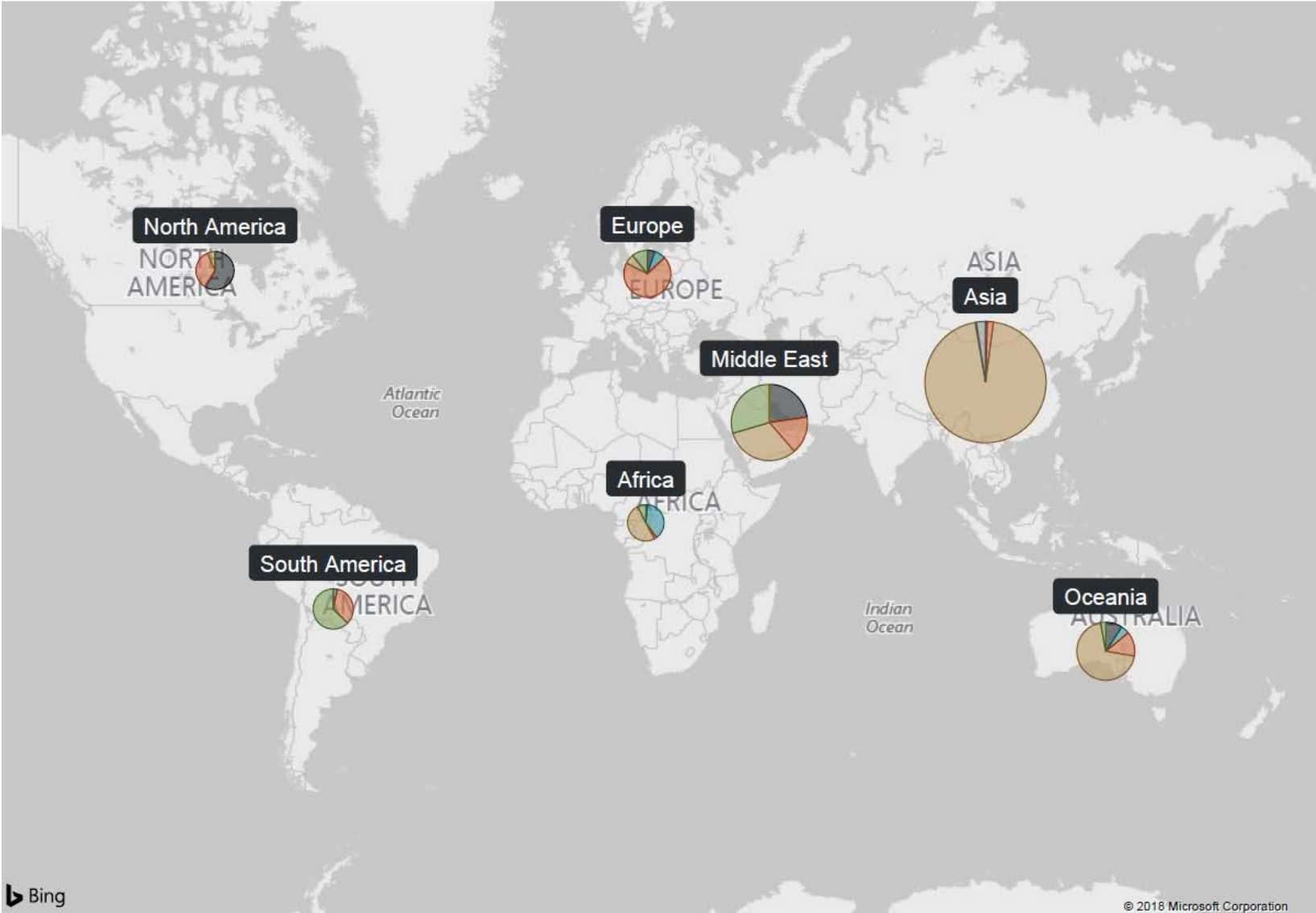
US\$ billion dollars of
capital projects



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To reduce the prevalence of disputes, our industry must better understand and manage complexity.

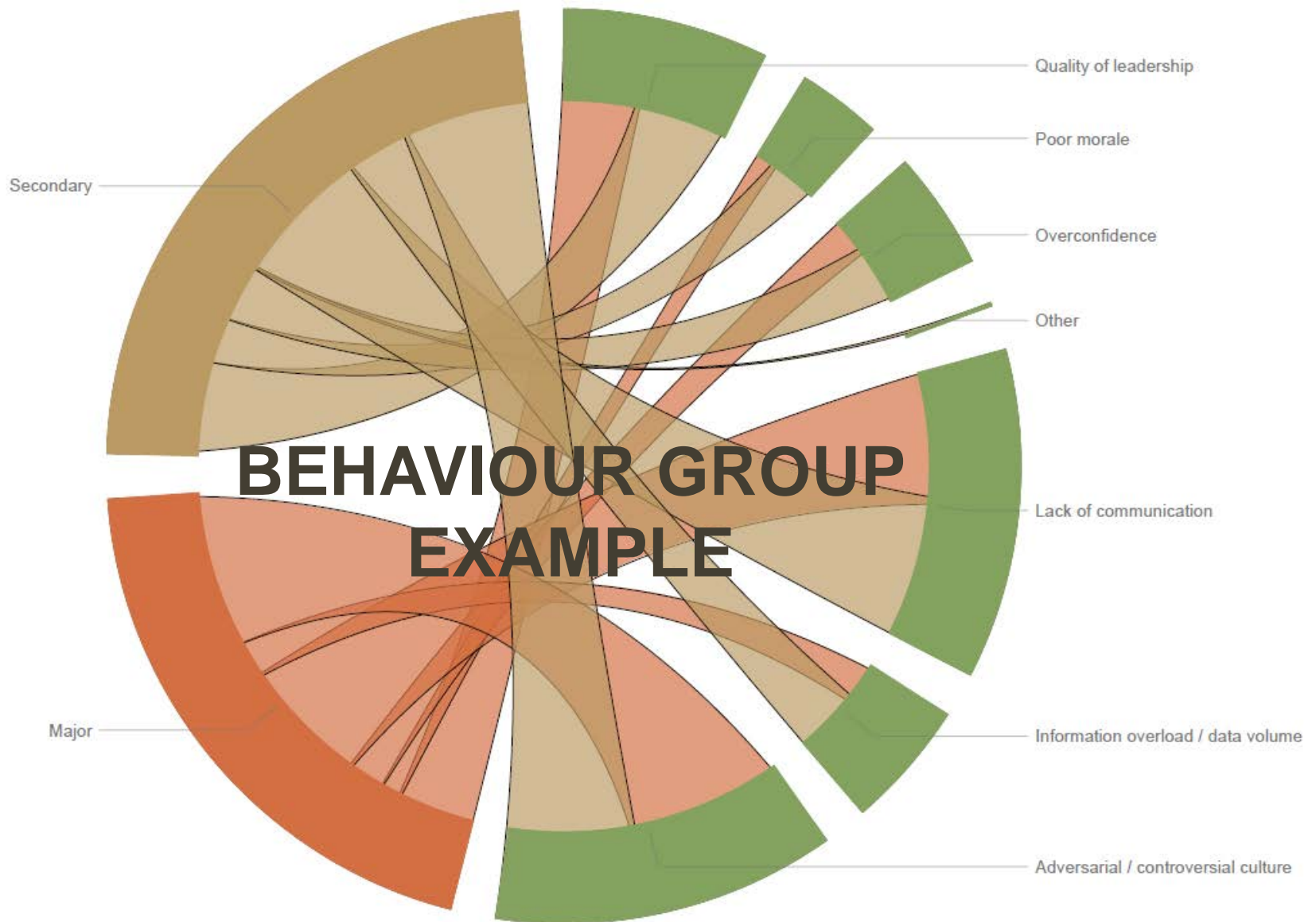
>HKA Sector ● Buildings ● Industrial ● Infrastructure ● Oil & Gas ● Power & Utilities ● Technology ● Various

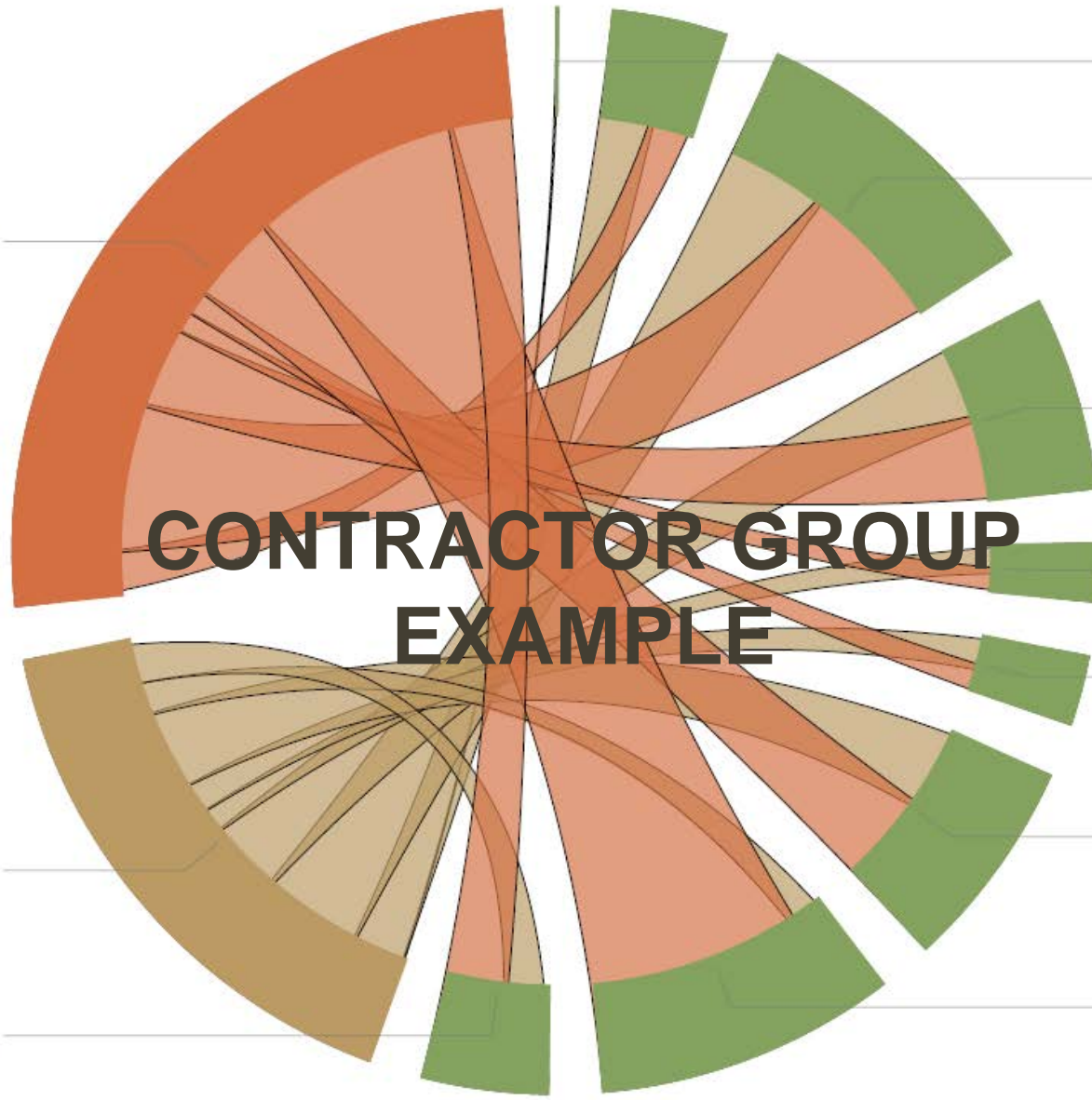


Causation Rankings by Type

Causation Type	Primary	Secondary	Total
Slow progress	81	55	136
Variations	107	29	136
Extensions of time	115	18	133
Late availability of information / design	89	37	126
Change of scope	95	30	125
Managing – time	79	42	121
Different interpretations of the contract provisions	62	42	104
Adversarial culture	56	46	102
Design errors / buildability	70	29	99
Lack of communication	47	51	98
Contract administration	45	50	95
Failure to comply with contract	50	44	94
Quality of design	53	40	93
Managing – cost	54	39	93
Inadequate / incomplete specifications	60	30	90
Ambiguities in contract documents	52	37	89
Poorly presented claims	45	41	86

**CRUX INSIGHT
RANKING EXTRACT**

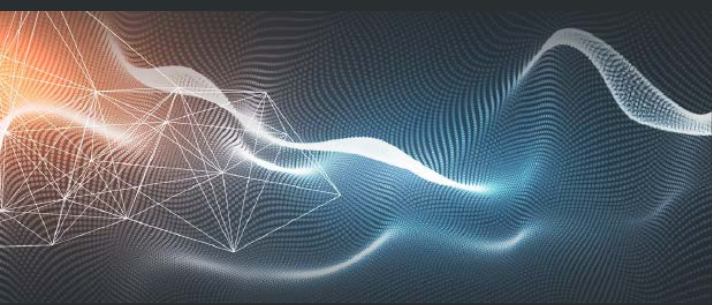




CONTRACTOR GROUP EXAMPLE

INDUSTRY CONTEXT

“ As information systems have increased, so too has the illusion of control. Disputes all too often expose flawed record-keeping and situational awareness compromised by poor information flow.”



“

The expectation to deliver more, quicker and for less is asked of an industry that has arguably failed to respond to calls for change for decades.”

Making sense of complexity

Topic Outline

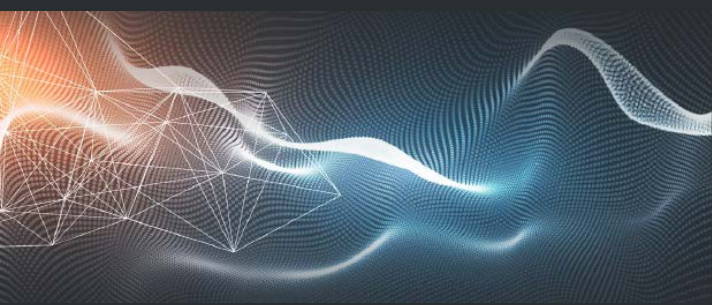
- ❑ Making sense of complexity
- ❑ How is the 'illusion of control' a root cause
- ❑ Data not just documents - digitalisation and record keeping
- ❑ The link between controls and behaviour
- ❑ 3D models as a digital maturity indicator
- ❑ Digitalisation and dispute avoidance by proxy
- ❑ The positive impact of digitalisation on claims and dispute

MAKING SENSE OF CAUSATION COMPLEXITY

“

When disputes crystallise, the issues in dispute can often be remote from the myriad of primary and secondary causes.”





“

Like executives, project delivery professionals must undergo a data epiphany and accept that, unassisted by technology, they will first be a constraint, and ultimately become redundant, replaced by technologically savvy peers.

How is the 'Illusion Of Control' a Root Cause

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How is the illusion of control a root cause?

Improved situational awareness and information liquidity

Knows which battles to fight and which to retreat from to fight another day

Information liquidity improves change control and shifts from gut to data driven decisions

Digitalisation facilitates collaboration and shifts away from adversarial relationships.



“It is easy for those focused on delivery to simply assume that the existence of controls directly translates into being in control.”





“

There is a high probability that differing interpretations of contract provisions are rooted in the ambiguities of contract documents. Together these factors are strong indicator of poor contract drafting.

Data not Just Documents - Digitalisation and Record Keeping

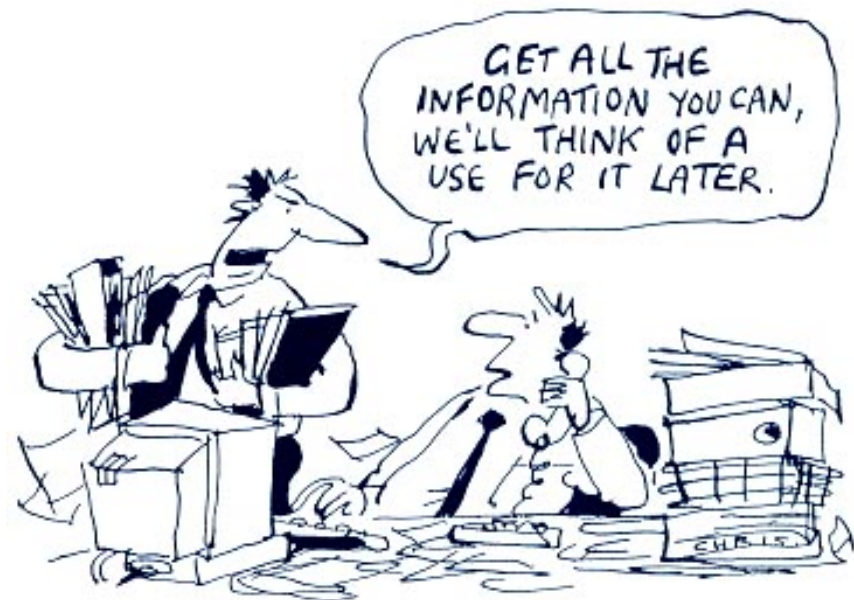
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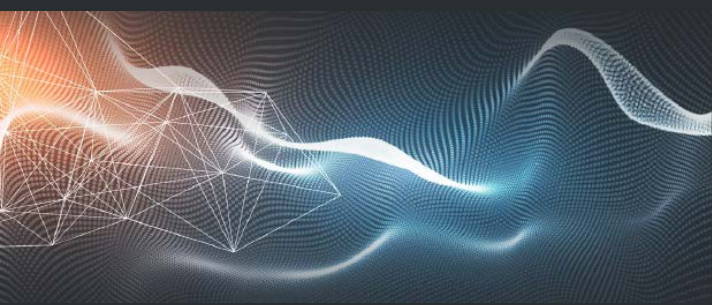
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What can be inferred about control on major projects?

“ Like executives, project delivery professionals must undergo a data epiphany and accept that, unassisted by technology, they will first be a constraint, and ultimately become redundant, replaced by technologically savvy peers.

Collecting ≠ Managing





“

The volume of project data will continue to grow exponentially. If the industry continues to fall behind the technology adoption curve, then the gap between the volume of project data and an organisation's ability to process it will increase.

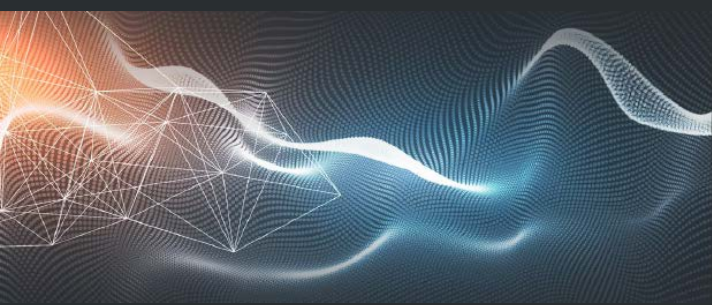
Why does the mantra 'records, records, records' need to be brought into the digital age?



Just what 'record' constitutes has changed significantly in past decades, and digitally adverse professionals can compromise supply chain relationships, legal prospects and profit margins.



It is only by understanding the flow of data through an organisation or project that advisors can make informed information requests.



“

It should concern executives that teams operate like mobile silos, moving as a team between projects and often failing to incorporate best practice.

The Link Between Controls and Behaviour

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Silos kill insight

Project data provides the foundations for greater insight



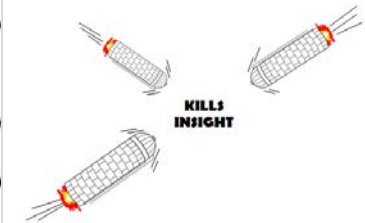
Limit the data and the picture is obscured

limited disclosure

lack of transparency



Use a 'silo' approach and...



How is behaviour pivotal to avoiding disputes?



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3D Models as a Digital Maturity Indicator

Topic Outline

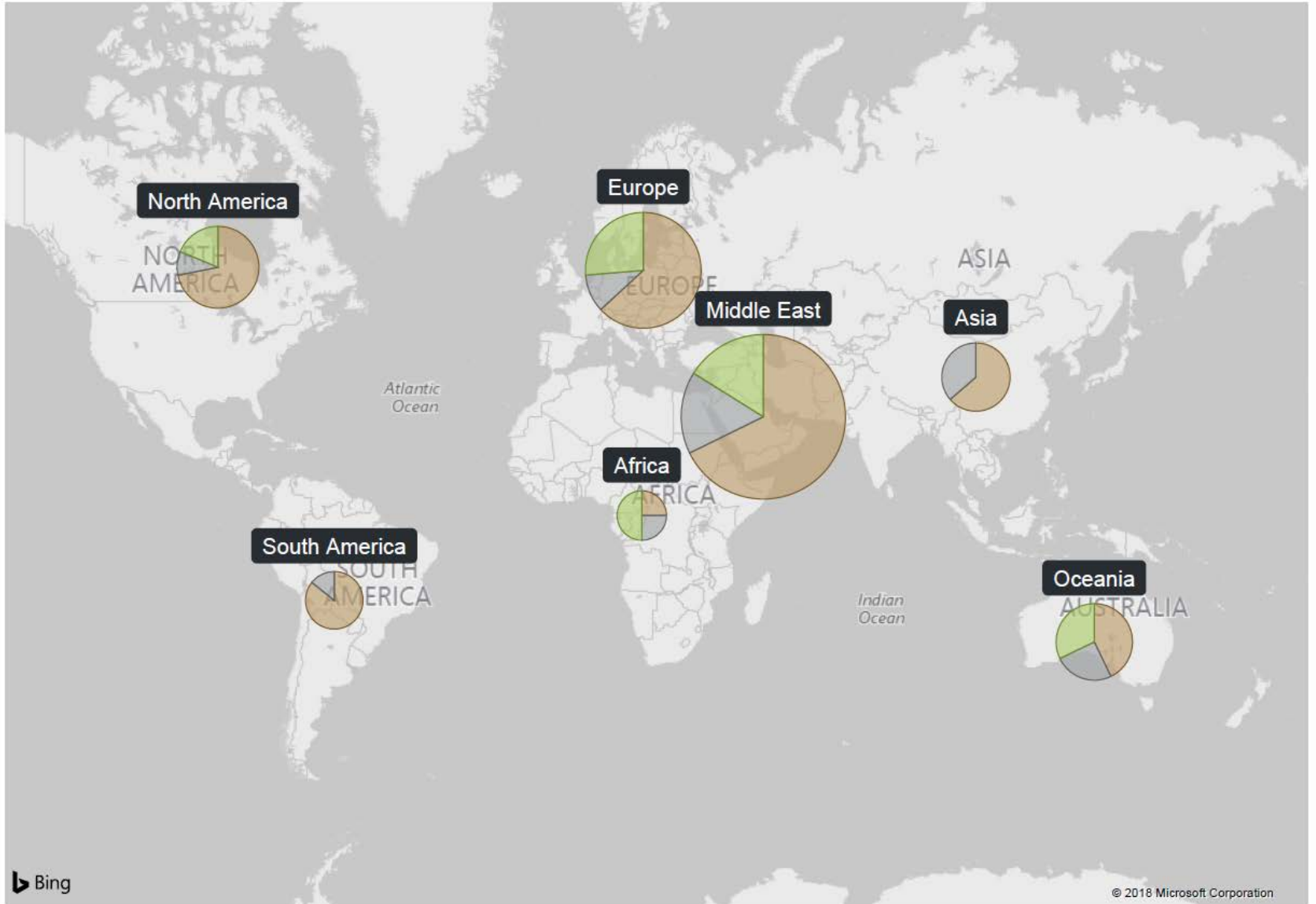
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Why are 3D models a digital maturity indicator?



The extent to which organisations incorporate non-graphical data is what makes 3D models an indicator of digital maturity.

3D Model Availability ● No ● Unknown ● Yes



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How can digitalisation result in dispute avoidance by proxy?

Improved situational awareness and information liquidity

Knows which battles to fight and which to retreat from to fight another day

Information liquidity improves change control and shifts from gut to data driven decisions

Digitalisation facilitates collaboration and shifts away from adversarial relationships.

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How will digitalisation impact claims and disputes?

Information liquidity and on-demand access to project data will reduce the likelihood or need for global claims.

The ability to better evidence or rebut claims with readily accessible data will increase the number of commercial settlements.

Data-driven decisions will reduce the likelihood of disagreement escalating through formal proceedings.

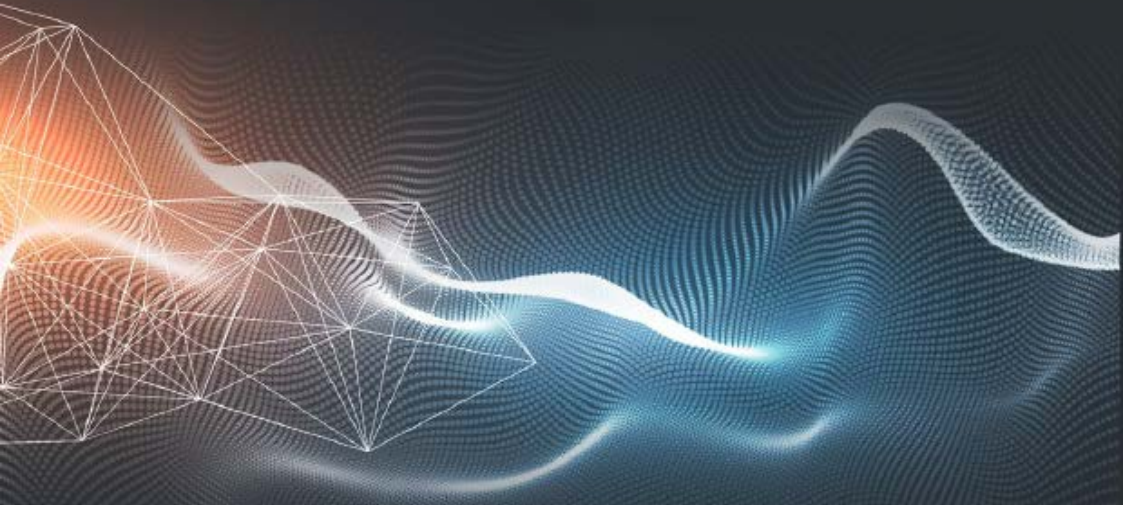
Machine readable formats improve and expedite discovery.

More structured data will reduce the time and cost of preparing records for analysis.

Digitalisation enables the coordination of numerous data sources into a single medium to improve understanding and presentation of complex issues.

Directly connecting dispute resolvers with data removes the burden of information requests.

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Questions