

# DIGEST



WELCOME TO KOREA



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# Welcome

to the

## Driver Trett Digest

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It is always a pleasure and a privilege to write the introduction to an edition of the Digest, especially when I can say I have contributed an article personally, giving me the moral high ground when I ask colleagues to draft articles in the future.

This edition comes from our people in Singapore, the UK and the Middle East, and covers a wide range of interesting topics. Les Harland takes us through the land of opportunity in Asia Pacific, George Dibble covers the transition from construction to consulting, and David Brown discusses measured mile analysis of productivity loss, and the use of AI chatbots.

Our guest contributor Toby Randle of Fenwick Elliott takes us back to school, whilst Abdullah Al Bash gives an insight into BIM as a game changer for dispute resolution. Mark Blackmore further deals with the Employer's sword: contra charges?

We have written much in the past couple of years about the rise of technology in our industry, and our experience on major projects has shown that when it fails, it creates major problems.

Our business has been working for some time with software experts to work out how to better and more intuitively link planning software with project documents, BIM, design information and site records, with the aim of eliminating the errors and contradictions, which can arise from a whole series of unconnected programmes, or worse, connections between programmes that are deficient. My experiences in this journey are set out in the article entitled, 'the giga cynic', which reflects some of the problems I have seen, and explores the need to develop more reliable integrated systems, if we are to try and avoid those issues in the future.

We have yet to decide what to call the integrated software service, but it may be inspired by the fact that Single Source of Truth (SSOT) architecture is at the core of this concept. Suggestions for the name are welcome; we may even make this a competition, so please keep an eye out on our website and social media channels.

I hope you enjoy this edition of the Digest and I look forward to meeting with some of you at our various offices around the world in 2023.



Mark Wheeler  
Driver Group CEO







# ASIA PACIFIC

## A LAND OF OPPORTUNITY

Leslie Harland  
Regional Director  
Singapore, Driver Trett APAC

Despite the setbacks resulting from the global pandemic, the phenomenal growth we are now seeing in APAC makes it an extremely exciting market opportunity going forward. Our foray into the region (Malaysia and Singapore) was more than three decades ago, when the region's share of GDP globally was around 22 percent.

Today, the region's share of global GDP has grown to just over 30%, and by 2030 is forecast to reach 40%<sup>1</sup>, as governments across the APAC region are looking to infrastructure to help stimulate growth as the region begins to return to some form of normality post-pandemic.



**Construction holds the key to economic recovery.**



Encouraged by this government focus, investors are turning to view Asia-Pacific as a land of opportunity. In the APAC region, construction holds the key to economic recovery due to its potential for job creation, with some market observers suggesting that on a regional level, the construction industry might reach US\$313 billion by 2024.

The growing potential of the region has, for example, resulted in significant investment by data centre operators, a construction market that was valued at US\$15 billion in 2022 and is expected to reach US\$24 billion by 2028<sup>2</sup>. This predicted increase has been driven by the development of multiple industrial zones, rapid growth in submarine cable connectivity, and digitalisation. Operators in the region are participating in the government's efforts for sustainable energy adoption by using renewable energy, signing power purchase agreements, or setting targets for carbon-free operations.

**However, rapid growth is not without challenges as construction projects around the world rely heavily on long supply chains: equipment, materials, and labour.**

A disruption to any link in that chain can result in delay and increased costs, and the way parties approach risk allocation

<sup>1</sup> Asia 2050 Realizing the Asian Century  
<sup>2</sup> Bloomberg

It is almost three years since the outbreak of Covid-19. At the moment, it is still impossible to quantify the precise long-term impact of the pandemic, save that insofar as international construction projects are concerned, it is likely to be material.

This is borne out by early analysis from the World Bank, which estimates that **256 developing country projects have been disrupted or cancelled due to the pandemic**, and we have seen (and will continue to see) project stakeholders battle over the resulting cost implications<sup>3</sup>.

Covid-19 is, and will continue to be, a catalyst for construction disputes, particularly as the true and longer-term impacts manifest themselves. In short, the scene is ripe for construction disputes<sup>4</sup>, for many years to come.

Driver Trett has expanded its APAC footprint with offices in Singapore, Malaysia, Hong Kong and Australia. Our offices work as one team, bringing together elite capabilities across various disciplines and industries, native language and cultural knowledge, and on-the-ground support.

Our presence in Singapore, an ever-growing popular seat for arbitration, is a place where our Asia-based clients increasingly require our assistance with their disputes, whether being appointed as delay, technical, or quantum experts through our Dialex expert services brand, or providing commercial and contractual support on underperforming projects.

**As we receive more enquiries from our Korean based clients, we have recently opened an office in Seoul, which is managed by Jung-Guk Lee.** This is a long-term investment opportunity which is crucial in maintaining and growing our Korean business and key for boosting integration across other offices in APAC.

This new office will also give our Korean clients more immediate access to high-calibre construction specialists within our organisation globally, which is part of our five-year strategic plan for APAC as we continue to invest in our people, which we see as key to our success. Our aim is to be the go-to global construction consultancy in the APAC region as we move forward.

<sup>3</sup> World Bank COVID-19's Impact on Infrastructure  
<sup>4</sup> Global arbitration review



# CONTRA CHARGES

## AN EMPLOYER'S SWORD?

Mark Blackmore  
Associate Director  
Coventry, Driver Trett UK

This article is written based on the construction industry of the United Kingdom.

**The use of contra charges, or counterclaims, will generally provoke a reaction from all parties involved, often negative.**

A contra charge, or counterclaim, is usually raised by the party paying for the works (the Payer) because of an error, omission, or breach of contract by the party carrying out the works (the Payee). A simple example could be that a contractor has failed to keep the site clean and tidy, or a defect has been identified that has not been rectified. If that failure continues, even after notice by the employer, the employer may undertake these works themselves, or instruct a third party to do so, contra charging the cost to the contractor.

However, there may not always be a direct contractual link between the parties involved where contra charges are advanced. For example, a sub-contractor may have caused damage, based on which the employer withholds money against the contractor. There is generally no contractual link between the employer and the sub-contractor, and by the time the sub-contractor receives the contra charge against them, it is likely that there will be the addition of the Contractor's costs on top of the employer's deductions.

Due to the close-knit nature of construction, the issue of contra charges generally causes friction between the parties, resulting in what some may consider trivial issues, to become personal. **No one likes to have well-earned money withheld from them.**

### SET-OFF, COUNTERCLAIMS AND ABATEMENT

There are several different types of contra charge commonly used in the construction industry: set-off, counterclaims and abatement.

A comparison is sometimes formed between set-off and counterclaims, although the two are different concepts.

Set-off is only used defensively, reducing, or completely removing a claim. It provides protection, in essence acting like a shield. A counterclaim is an offensive action, comparable to a sword and can be a claim that exists independently.

Likewise, there is often confusion between abatement and set-off. Abatement is generally used to reduce the contract price in instances where full payment may not be appropriate, such as when a contractor does not meet a performance specification, but where the employer is content to take possession of the building; the employer is accepting a reduced specification product and does not pay the full value. An abatement only applies where there is a reduction in the work carried out and does not apply as a counterclaim for a delay in executing the works; this would be a set-off.

Potentially, set-off has wider application than abatement and can (subject to the contractual provisions in question) be used to reduce any debts owed, or even nullify them. It is not used where the value claimed by the Payer is greater than that claimed by the Payee.





...when a claim is made for the price of goods sold and delivered, or work and labour done, the defendant is entitled to set-off or set up against the amount claimed...



A counterclaim can be for a greater sum and is commonly used for such things as recovering delay costs for the rectification of defective works. However, there must be a breach of contract and damages incurred as a consequence.

The right to set-off within the UK exists under common law. In *Gilbert Ash v Modern Engineering*<sup>1</sup> the House of Lords held that 'It has been a well-sealed principle of law since the middle of the last (19th) century that when a claim is made for the price of goods sold and delivered, or work and labour done, the defendant is entitled to set-off or set up against the amount claimed, any damages which he has suffered as a result of the plaintiff's breach of the contract, under which the goods were sold and delivered, or the work and labour were done.'

Section 111 of the Housing Grants, Construction and Regeneration Act<sup>2</sup> provides for the use of a pay less notice as the common approach taken for set-off in the construction industry.

There are four categories of set-off used commonly within the construction industry:

- Contractual set-off
- Legal set-off
- Equitable set-off
- Insolvency set-off

Contractual set-off is usually an agreed right within a contract, where the parties have an ongoing relationship. The right to set-off can also be excluded for similar reasons.

Legal set-off is a procedural remedy only applying in litigation / arbitration, where mutual debts exist and are due and payable at the commencement of proceedings. The debts must be substantiated, and therefore exclude unliquidated damages. This can also be referred to as the defence and counterclaim.

<sup>1</sup> *Gilbert Ash (Northern) Ltd v Modern Engineering (Bristol) Ltd* (1976) 1 BLR 73

<sup>2</sup> Housing, Grants Construction and Regeneration Act (HGCRA) 1996 as amended by Part 8 of the Local Democracy, Economic Development and Construction Act (LDEDCA) 2009, Section 109 'Entitlement to Payment'

Equitable set-off can be used not only as a defence for a claim but also as grounds for withholding payment. A typical example could be a claim for unliquidated damages for negligence being set off against a claim for payments due under a contract.

Insolvency set-off derives from the Insolvency Act 1986 and Insolvency (England and Wales) Rules 1986. This assists the creditor who may be required to pay debts owed to an insolvent party to avoid paying such debts.

## BURDEN OF PROOF

**The burden of proof remains with the party withholding the money under a contra charge or counterclaim, in the same way that a party making a claim for variations would have to fully substantiate such a claim.**

It is not uncommon, however, under the common forms of contract used within the UK to see a payment notice / pay less notice with a single line item for said contra charge, stating that further information is to be provided.

As with all claims, whoever asserts must prove. This may be unfamiliar ground for the paying party, who would usually be requesting more information from their contractor or subcontractor, and not often in a position where every penny claimed must be substantiated. If the employer wants to use that sword against the contractor, there is no short cut; the substantiation of all costs must be provided.

In conclusion, it is essential that the works carried out comply with the contract requirements and proper records are maintained. It is a far better position to be protected by the shield of the contract and records if a claim / counterclaim needs to be defended.





# FROM CONSTRUCTING TO CONSULTING

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George Dibble  
Consultant  
Bristol, Driver Trett UK

**2023 marks my three-year anniversary with Driver Trett and now feels like a fitting time to reflect upon my move from project surveying into consultancy.**

Rewind to 2019 and my working life was considerably different to today. Clipboard in hand and hardhat on head, I would happily wander the site as a Contractor's QS, taking progress photos, updating the current month's valuation, or measuring the latest fanciful subcontractor variation. It was an environment in which I felt comfortable, but, as time wore on, I grew disillusioned with project surveying and felt that my skills could be better utilised in an alternative role.

The last project I worked on had exposed me to the ins and outs of contractual provisions and, as a result, I became much more involved in how a contract was administered. It was an unfamiliar battleground, something I had studied but not experienced as a Contractor's QS - contracts, after all, are best left in the bottom drawer; *aren't they?! The project was challenging, and an interest in solid contract management and understanding was cemented by a particularly proficient Project Manager, who had a forensic understanding of the conditions of the NEC.*



“

...consultancy has been a steep learning curve, one which required a change of mindset from profit margins to client value.

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Much to my dismay, this Project Manager's aptitude in contract administration enabled him to run rings around our commercial team in a manner akin to a figure skater at a penguin march. Although initially resentful of his contractual choreography, an admission of defeat in this battle and a desire to win the war allowed me to step back for a moment and admire his artful mastery of the contract.

This project was meant to be my making as a surveyor, but the summer months on that project were among the most stressful I faced as a Contractor's QS. On reflection, this experience was a formative one, although not in the way I had initially hoped for or envisaged. The frustration of working opposite this Project Manager allowed me to reflect on and identify the gaps in my knowledge.

Into the final months of 2019, disenchantment grew within my day-to-day role, and I found myself seduced by a hidden urge to fold my hand and do something different. A clean break from the company could be all but guaranteed as I had already secured a three-month sabbatical following the Christmas break, and so I began to consider other options.

The world of dispute resolution was an area that had already captured my interest, having worked closely with claims consultants on a particularly problematic final account a year or so previously. The same consultancy had also been engaged to deliver various training seminars during my tenure in contracting, so it seemed a fitting place to begin. This company was, of course, Driver Trett.

Two interviews and some career planning later, an offer from Driver Trett was graciously received and eagerly accepted. This did mean, however, that I would be required to start from the beginning, returning to university to get a Master's degree. The next chapter would thankfully be eased by my new peers, learning from people who had been working in all different sectors of the industry for many years. I hadn't envisaged the mental toll that drafting a resignation letter takes, but, after submitting it with a heavy heart, I closed my old laptop lid down for the final time, sad to be saying goodbye but optimistic about the future.

One short but sunny sabbatical later, I was keen to get into the office and make a fresh start in an alien world, but little did any of us know, a monster loomed. Like most workplaces in March 2020, barely an hour would go by without someone uttering the phrase that we had all come to dread... COVID-19 was rampant, and a mere two weeks after receiving my induction we were informed that the offices would be closing and everyone would be required to work from home.

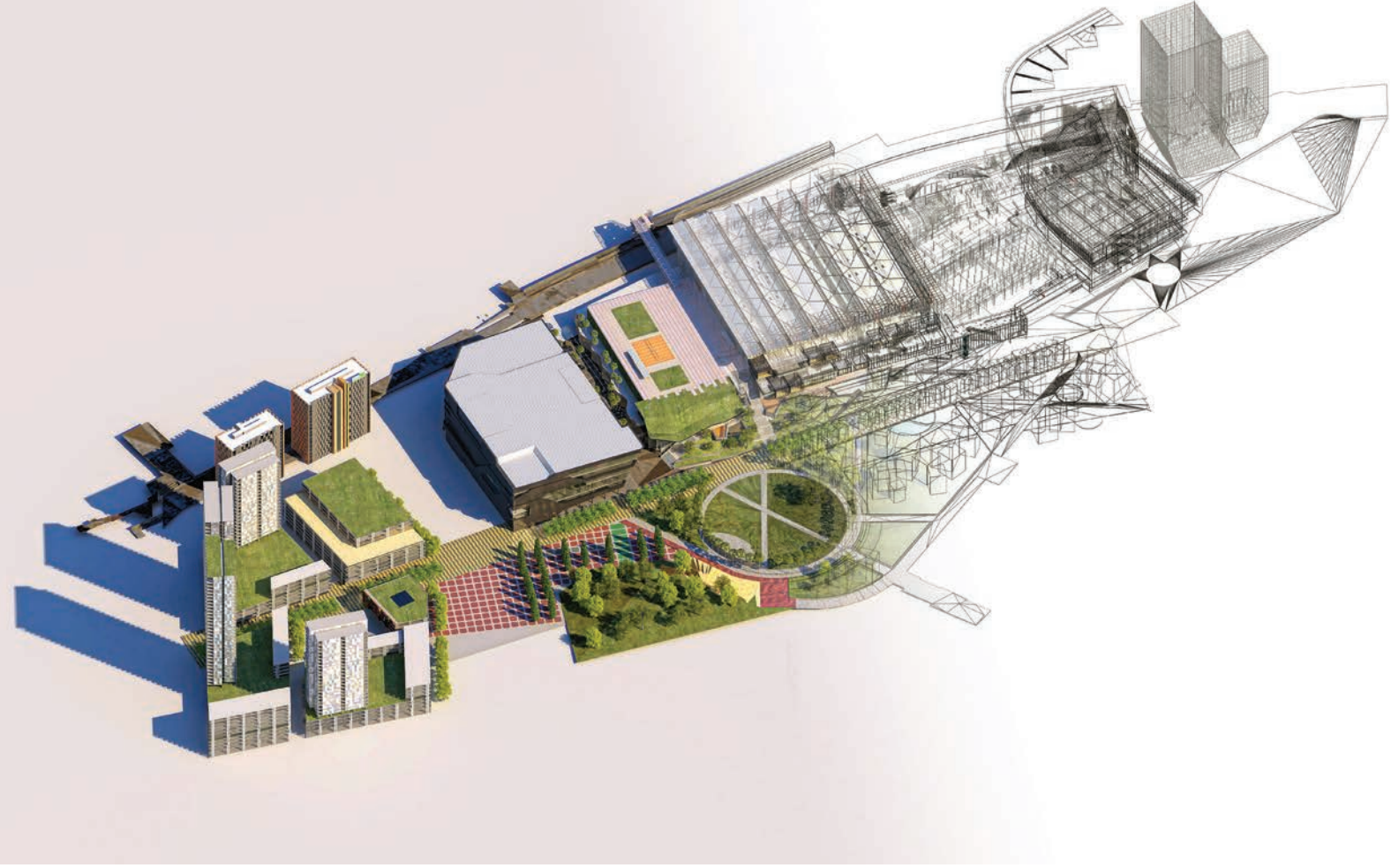
This period of stagnation did, however, enable me to focus on my studies towards my LLM, and while those long days and restless nights almost exhausted my capacity to type another sentence or draft another email, I dug deep and graduated with Distinction.

Professional life since starting in consultancy has been a steep learning curve, one which required a change of mindset from profit margins to client value. Builders sell buildings, consultancies sell people. Where the product was once paramount, acting in a heightened ideal of competence and professionalism has driven me to strive for a level of expertise which was formerly of secondary importance.

**Whilst my focus is now on integrity and expertise, the ability to close my eyes and think like a contractor is a valuable trait to possess.** My days are still filled with pivot tables, preliminaries, and prolongation costs, and my fond memories of site camaraderie will stay with me until I decide to hang up my scale rule, but for now, I feel that it is a (Yo Ho) Consultant's life for me.







# BIM IN THE CONSTRUCTION INDUSTRY

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## A GAME CHANGER FOR DISPUTE RESOLUTION

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Abdullah Al Bash  
Technical Director  
Kingdom of Saudi Arabia, Driver Trett Middle East

Today's construction industry demands innovation and transformation to achieve higher standards of efficiency and productivity across the entire project lifecycle.

Digitisation has revolutionised how projects are planned, designed, constructed, maintained, and progressed. Building Information Modelling (BIM) is the core of this revolution; BIM acts as a catalyst for more collaborative behaviours and better information sharing.

Disputes have been identified as a critical cause of the deficiency and low performance in construction projects.

**This article proposes that a BIM environment may minimise the issues that would cause conflicts before they develop into disputes and may help resolve disputes when they occur.**

BIM is a platform that promotes a high standard of collaboration, coordination, and information sharing, where its implementation ranges from project initialisation to the handover stage and beyond, into facilities management.

This article explores the possibilities of enhancing the process of dispute resolution in construction through the implementation of BIM.



## We will focus on the following key sections:

- BIM definitions from multiple perspectives in the construction industry.
- Current problems in the construction industry.
- BIM benefits in a dispute resolution context.
- Challenges of adopting BIM in dispute resolution.

## BIM DEFINITIONS

For the sake of clarity, and to give the reader a better understanding of BIM, the following are a couple of the most utilised BIM definitions.

On the UK Government's BIM Task Group website<sup>1</sup>, BIM is comprehensively defined with a focus on collaboration, intelligent 3D models, and information exchange:

*"...value creating collaboration through the entire lifecycle of an asset, underpinned by the creation, collation and exchange of shared 3D models and intelligent, structured data attached to them."*

Another well-structured definition is developed by the Government's report, 'Digital Built Britain: Level 3 BIM - Strategic Plan', which includes the following:

*"Building Information Modelling (BIM) is a collaborative way of working, underpinned by the digital technologies which unlock more efficient methods of designing, creating, and maintaining our assets. BIM embeds key product and asset data and a 3-dimensional computer model that can be used for effective management of information, throughout a project lifecycle – from earliest concept through to operation."*

## CURRENT MARKET SITUATION - UK AND MIDDLE EAST

In the dramatically titled report, 'Modernise or Die', published by Mark Farmer in 2016<sup>2</sup>, Farmer reviewed the UK construction labour model and stated:<sup>3</sup> *"It is time to decide the industry's future"*. Giving criticisms of the prevailing conditions of the UK construction market, the report recommended that a revolution needed to happen; otherwise, the construction industry would be "seriously debilitated".

Following on from Farmer's report, many problems were highlighted, including:

- Low productivity due to a failure to adopt the technology.
- The decreasing volume of the future workforce due to an ageing labour force.
- And most importantly, a lack of collaboration and improvement culture being a significant problem that prevents organisations from growing.

<sup>1</sup> The Government's BIM task group / Centre for Digital Built Britain (CDBB) - [www.bimtaskgroup.org](http://www.bimtaskgroup.org) / [www.cdbb.cam.ac.uk](http://www.cdbb.cam.ac.uk)  
<sup>2</sup> Farmer 2016, The Farmer Review of the UK Construction Labour Model

## The ultimate recommendation of Mark Farmer's report was to embrace BIM as a solution to the construction industry's problems. Farmer said:

*"now is the time to allow the opportunities from digitisation to offset the risks of continued reliance on labour intensive techniques".*

In the Middle East, Dubai has taken the lead in the use of BIM in major projects.

Dubai Municipality (DM) issued circular no. 196 on 18 November 2013 to all consultants and contractors in the construction industry in Dubai to mandate the use of BIM. In my opinion, more development in the Middle East is needed to establish standardisation and guidance of BIM applications.

Meanwhile, BIM has already been adopted in major developments in the Middle East, such as the Dubai Opera House, the Royal Atlantis Hotel in Dubai, the Midfield Terminal Airport in Abu Dhabi and the Louvre Museum in Abu Dhabi, Riyadh Metro and Doha Metro.

## BENEFITS OF BIM IN CONSTRUCTION DISPUTES

BIM can provide two key benefits, namely dispute avoidance and dispute resolution.

### BIM TO AVOID DISPUTES

BIM can play a proactive role in dispute avoidance in the following ways:

- Enables a better understanding of the scope of work between parties through the visualisation capability. This helps to minimise and better manage changes, and to reduce the probability of late issuance of change.
- In the case of any change, BIM provides an effective presentation of the change and its potential impact(s) on project time and cost.
- If the change has an impact on time and cost, then BIM enhances how the related claim is submitted and assessed through visualisation of the impact, and most importantly the enhancement of communication, transparency, and collaboration between the parties.

### BIM TO RESOLVE DISPUTES

#### **BIM may help to simplify disputes and minimise the time and effort required to resolve them<sup>4</sup>.**

The rationale of this is:

- The process of dispute resolution should be accelerated as a result of more accurate, easily accessible information

<sup>3</sup> The UK has been chosen as an analysis model due to its position as a global leader in BIM applications.

<sup>4</sup> David-John Gibbs; Wayne Lord ; Stephen Emmitt ; and Kirti Ruikar, interactive exhibit to assist with understanding project delays.



which provides greater clarity on the parties' positions.

- BIM (4D) includes simulation of different schedule scenarios (as-planned, impacted, updated, as-built) to demonstrate the cause and effect of events.
- BIM (5D) includes cost estimation options, meaning that the quantification of changed items in a project can be more easily retrieved.

There exists a need to raise awareness of BIM's capabilities, as there is still a lack of understanding of what it is and what it is capable of. Many people refer only to the first and last letters of BIM, and assume it merely involves working in the 3D building model while ignoring the power of the 'I' - Information, which is the core of BIM. The richness of BIM may provide a great way of sharing information and encourage the development of a high-level collaborative environment between parties.

## KEY CHALLENGES IN USING BIM IN DISPUTE RESOLUTION

The main challenges to using BIM in dispute resolution are<sup>5</sup>:

- Complexity: BIM can be difficult for experts and lawyers in arbitration and court procedures to understand, especially when they have not previously been exposed to this BIM or 3D modelling.
- Model manipulation: BIM models have powerful simulation capabilities which can tweak the actual causation and the impact of the delay if they are not used properly, which may become a reason for the dispute itself.

## CONCLUSION

### Information is really what BIM is all about.

The construction industry has recognised the potential benefits of adopting BIM in dispute resolution. If used properly, BIM's key benefits include proactive and collaborative dispute avoidance and dispute resolution, saving time and money and helping to maintain crucial business relationships.

BIM is undoubtedly an important and exciting development within the construction industry. However, like any new process or development in the way we work, BIM introduces new legal issues, challenges, and risks, which should all be addressed and overcome so that BIM can be utilised to its maximum potential.

5. Zohreh Soltani and Stuart Anderson, Ph.D. and Julian Kang, Ph.D., The Challenges of Using BIM in Construction Dispute Resolution Process









# MEASURED MILE ANALYSIS OF PRODUCTIVITY LOSS

## AN 'ARTIFICIAL' OPINION



David Brown  
Diales Quantum Expert

The measured mile analysis is a technique used to identify and quantify productivity loss on construction projects. It involves measuring the productivity of a particular task or activity over a set distance, referred to as the "measured mile." This technique allows construction professionals to identify factors that are causing productivity loss and implement strategies to improve efficiency.

One of the key benefits of the measured mile analysis is that it provides a clear and objective way to assess productivity. By measuring the same task or activity over a set distance, it is possible to eliminate variables that could affect the results. This allows construction professionals to focus on specific factors that are impacting productivity, such as equipment malfunctions, delays due to weather, or inefficient work processes.

To conduct a measured mile analysis, construction professionals typically select a task or activity that is representative of the work being performed on the project. This could be something as simple as excavating a certain amount of soil or installing a specific type of piping. The task is then performed over a set distance, with the productivity being measured at various points along the way.

Once the data has been collected, it is analyzed to identify areas where productivity is lagging. This may involve looking at factors such as the amount of time spent on the task, the amount of material used, or the number of workers involved.

**By identifying the root cause of the productivity loss, construction professionals can implement strategies to improve efficiency.**

There are a number of strategies that can be used to improve productivity on construction projects, including investing in new or more efficient equipment, improving work processes, and providing additional training to workers. By using the measured mile analysis, construction professionals can identify specific areas where these strategies are needed and implement them in a targeted and effective manner.

Overall, the measured mile analysis is an effective tool for identifying and addressing productivity loss on construction projects. By providing a clear and objective way to assess productivity, it allows construction professionals to identify the root causes of inefficiency and implement strategies to improve efficiency and reduce costs.



**The italicised narrative you have just read, was not written by me, but was produced by an AI chatbot created by San Francisco based OpenAI, in response to a request posed by me for it to “write me an article on the measured mile analysis of productivity loss in construction”.**

It took about 3 seconds get a response.

The ‘artificial’ opinion is not bad and offers a sensible sounding synopsis of the measured mile analysis, and certainly passes for media content, oven-ready for distribution on social media.

Impressed, I asked the bot “is a measured mile approach preferred over earned value in productivity loss analysis?”, certain that a thorny opinion query on a preferential analysis approach, that often may allude even the seasoned professional, would surely trip the bot up.

#### **The response, verbatim was:**

*A measured mile approach is a method used to determine the productivity of a construction project by comparing the actual output to the estimated output over a specific time period, usually a week or a month. This approach is used to identify the factors that are contributing to any productivity losses on a project and to develop a plan to improve productivity.*

*Earned value management (EVM) is a project management technique used to measure progress and performance on a project. It involves measuring the value of the work that has been completed and comparing it to the planned value of the work that was expected to be completed at that point in the project.*

*Both the measured mile approach and EVM can be useful tools for analysing productivity losses on a construction project. The choice of which method to use may depend on the specific needs and goals of the project and the preferences of the project team.*

Again, this bot took about 3 seconds to respond, and again, it was a pretty solid effort.

#### **My answer (unsurprisingly you might say!) is no.**

And it starts with looking behind the initial response. Whilst both bots provided pretty impressive summaries about productivity loss, **they were just that – summaries.** They didn’t look at the practicalities and difficulties inherent in demonstrating and measuring productivity loss, describing a process rather than understanding it.

Indeed, the second ‘article’ produced by the AI did not actually answer the question posed, namely, to indicate a preference for a given approach. In my experience, those of us who frequently provide such analysis will ordinarily have a preference, and that preference is often governed by things like the nature and quality of records available to conduct an analysis, as well as other external factors.

Further, in my experience, a claims consultant or expert witness will not require prompting to advocate the merits of a favoured approach in a given set of circumstances. **It may be that to readily express a preference is a uniquely human trait that would evade AI software, and by extension, bring into question the usefulness of AI in expert opinion.**

The responses generated by the bots indicate that the AI software cannot (yet) produce an article that indicates a practical comprehension of the subject; rather it provides an illusion of comprehension. The result is a narrative which might well be acceptable in less scientific publications, but which is insufficient to ‘pass muster’ under any greater scrutiny.

Conclusion, the bots may provide a reasonable introduction to any subject, but it is far from being able to actually produce an analysis. I think it’s safe to say that the bot is unlikely to put an expert witness out of work, now or ever.

So, what does AI mean for construction professionals and, in particular, those of us who grind out a living in the construction dispute space?

Are we about to be usurped by computers?!

# 'WANNABE' AN EXPERT?!

Mark Wheeler  
Head of Diales Expert Witness Services

Not a week goes by without a CV or two crossing my desk from someone who has been a project manager, an engineer, an architect, a quantity surveyor, or someone with some planning and delay analysis skills, who has decided that they are an expert.

A number of these applicants come with a great deal of enthusiasm, energy, and self-belief and they are ready to take the plunge into the heady world of providing expert reports. It will come as no surprise to readers of the Digest that not everyone who applies has those capabilities, and most, if not all, will require some focussed and detailed development in order to achieve the required levels of competency to provide expert testimony.

There are several stages to our filtration process. The first of these is ensuring that people interested in pursuing this particular career have the required levels of experience in their own discipline, and the highest possible levels of technical competence.

It is unusual to lose a high number of candidates at this point as most will understand as a given, that these are the most basic and essential requirements. It is, however, surprising how many people fail at the next stage, which is solidly understanding what an expert does, their responsibilities (which are significant), and the level of work that goes into producing a good quality expert report.

The next stage of the process for our team is to explain in clear terms what those responsibilities might be.

What will the level of work and effort be to produce a quality expert report?

***Ultimately, what might it be like to be cross-examined in a Court or a Tribunal by someone who is highly skilled in that process, and will in all likelihood, disagree vehemently with your views?***

We have arranged training days in the past, in which aspiring experts can, in a mock interview environment, experience what it is like to tread in an expert's shoes. A number will drop out at this point or simply say that they have decided it is not for them. For the remainder, the following step is to ensure that they are fully trained and ready for their first assignment. This process involves ensuring that they have the skills required including report writing.

Writing a technical report, coming up with a solution for a client, and preparing a proposal is a completely different science to writing an expert report. There are numerous guidelines available to assist in this process in various practice directions, and through a number of industry institutions or bodies. However, it is surprising how challenging some aspiring experts find moving away from purely technical reports, that are often solution based, to providing expert opinion against a clear set of criteria and instructions. Once the written work is up to scratch there is a training programme for aspiring, and even established experts, to hone their court room skills and ensure that they are giving evidence in the right way - competently and clearly with a focus on their duties to the Court and Tribunal. This is the stage at which it is really important to gain some confidence, and also a stage at which many struggle to progress to an adequate standard.

The final stage, when you have reached the right level of competence is of course to take your first commission. This process will often involve being an assistant to an established expert on several occasions, in order to build relationships with instructing lawyers and clients. Diales experts find they are well supported during this stage, with an existing expert looking over all of their work product, providing advice and help to ensure quality is being delivered.

***To be clear, the opinion is always that of the testifying expert, but when it is your first appointment, having a senior colleague to bounce things off can be invaluable, and help in building confidence.***

This process can take three or four years and is managed through the Diales Development Group, run by Keith Strutt, one of our most experienced experts. The criteria are clearly set out in detail, and an assessment on the 10 competencies is set out in an assessment form that maps progressively higher standards of experience and competence.

Experience shows that less than 1 in 10 of those applying to become an expert make it through the process to become an established testifying Diales expert. However, this should not put you off if you are considering this career step.



“

Writing a technical report, coming up with a solution for a client, and preparing a proposal is a completely different science to writing an expert report.

”

It is just as important to ensure that you are in the right environment and supported in training and development in a proactive way, so that you can achieve your aspirations and ensure that all the time invested ultimately comes to fruition for what can be, for those who succeed, a very rewarding pinnacle of their career. So, perhaps the final question is, are you ready to take that step?





# WHY CONSTRUCTION DISPUTES ARE LIKE EXAMS

Toby Randle  
Partner  
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At the moment, I have the dubious pleasure as a parent of trying to help two 'head strong' teenagers navigate A levels and GCSE's in the English schools system. In exams, (in fairness they haven't had much practice due to COVID) neither can resist the urge to write down everything they can remember about their subjects, regardless of whether it is really relevant to the question. It sometimes reads like a stream of consciousness.

They are long on facts and short on analysis. They struggle to ensure that each particular fact or argument being regurgitated is relevant to the issues in hand. In their mocks, despite working pretty hard, they didn't do quite as well as they had hoped.

We talked about 'exam technique' at the weekend (parental feedback never well received in my household!). We discussed resisting the urge to try show the reader how much work you have done and how clever you are. You simply don't get any marks for that. Rather, focus solely on the issues in hand, relate every point being made back to the question and be clear and concise in your answers. And most importantly do not repeat yourself!





*No matter how hard working your Tribunal or Judge, they are busy, and don't have weeks and weeks of reading time.*



We also talked about finding time to plan and structure the answer and write a short introduction and conclusion. Hopefully the statement “I think I did ok in that exam – I managed to write loads anyway” will never be used again!

I realised that in my work, which is predominantly large and complex construction disputes, it is common to see the same challenges arise, especially with experts.

Clients often applaud lawyers and experts for producing huge volumes – the thinking being that it will simply intimidate the other side into settling. Judges and Arbitrators on the other hand are rarely so appreciative, in my experience. I learned this early in my career, back in the 90s, when I was a junior lawyer involved in an international arbitration where there was a huge claim and even larger counterclaim. The Tribunal clearly lost patience with both sides, and particularly the experts because the evidence and submissions were too voluminous and complex to be properly understood in the time available. The pleadings were lengthy and chronological and there was no clearly defined list of issues for the Tribunal to refer the pleadings and evidence back to.

After two weeks of hearing and countless pages of submissions and evidence, the Tribunal decided that both the claim and the counterclaim should fail because they were “not proven” and each side should bear their own costs. Although this result actually suited my side rather well, I couldn't help feeling what a total waste of time it all was.

Tribunals often despair at the huge volume of documents and evidence they have to grapple with. Hundreds of thousands of pages are not uncommon. But unlike criminal fraud trials, or public enquiries where there might be a year-long hearing, big construction cases often have hearings no longer than three or four weeks, and sometimes much less than that – especially in civil law and middle eastern jurisdictions. No matter how hard-working your Tribunal or Judge, they are busy, and don't have weeks and weeks of reading time. With the best will in the world, they simply cannot read everything, especially if they are reading in a second language.

**So, my point is that everyone, and I include myself in this, should find time to distil down the written documents they are producing, so that they only deal with the issues in hand, and nothing else.**

When dealing with the issues, don't write ten pages on a subject when one will suffice. As Mark Twain once said, “sorry I've written a long letter, I didn't have time to write a short one”.

Just because an analysis has been done, that doesn't mean that it should be deployed. We all go down cul-de-sacs in our preparation, but the best lawyers and experts always seem to have the confidence to focus on the key issues and only the key issues. They seem to avoid the temptation to feel the need to justify their fee by also including analysis they have done that relates to matters that are no longer key issues in the case. They make sure that everything they ask the Tribunal or Judge to read is relevant to one of the key issues and they explain why it is relevant. This is no different to exam technique.

## THE DREADED CHRONOLOGY

Whilst very detailed day by day document chronologies are a useful tool in preparation for a case, in my experience they can also be dangerous if you are a slave to them. I say this because chronologies are not organised by issues and nearly always contain irrelevant information. The approach people sometimes take when preparing the chronology is typically “if in doubt put it in”.

What sometimes then happens is that this chronology is then used as a road map for the pleadings, expert reports and witness statements. They start at the beginning in terms of time and tell the story to the end.

In my view, the better approach is to try and tell the story of the case by reference to the key issues you have isolated and then use mini chronologies within each issue. As with the best Netflix box set, an engaged audience will be able to follow the story even though it jumps about in time provided they are engaged with the story line – or ‘issue’ in dispute parlance. The audience may not be as well engaged if you rigidly follow the chronology and then jump about between story lines.

## MY CONCLUSION

In my experience, the best practitioners adopt at least some of the following principles when dealing with construction disputes :-

1. They Identify the key issues at the earliest possible opportunity;
2. They focus only on those issues;
3. They keep it as short and simple as possible;
4. They include introductions, executive summaries and conclusions wherever possible;
5. They do not repeat themselves; and
6. They are not a slave to the Chronology – they tell the story by reference to the issues.

**So, my message is: if you adopt good exam technique when dealing with construction disputes, you won't go far wrong.**

“

*Some cynicism can be a healthy thing.*

”

# THE GIGA CYNIC

Mark Wheeler  
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An acquaintance of mine once told me of his frustrations with his former company's HR department, whose guidelines restricted his ability to phrase job adverts as he wished. A new law regarding ageism meant he could not give a minimum age for the role of commercial manager. Some editing and creative licence was required, and he managed to get away with "... it is unlikely that anyone below 35 will have reached the required level of cynicism for this role...".

Some cynicism can be a healthy thing. It comes with experience. It makes you want to test things, not take them at face value. Qualifications in cynicism are freely available from both the school of hard knocks and the University of Life. I have been fortunate enough to work on some of the world's largest projects in recent years, and I have seen all kinds of new technologies deployed and a wide range of management styles and techniques employed. **When I have seen these projects as an independent expert, in the context of a dispute, I almost always find very significant, often shocking, deficiencies in the records and documents.**

It is not uncommon to find a 3D or 4D model that contains missing data, BIM that has not been set up correctly and has gaps in its data, and progress records on file that contradict the Primavera programmes in significant ways. I have seen both drawings extracted from models that are undated and without a revision reference, and drawings dated later than earlier drawings, but with far less detail on them and no record of any change. Data often conflicts between systems and sometimes even within the same system. The projects that have these issues are not being run by small companies, or those without good reputations. These issues exist on major projects run by some of the world's leading contractors and consultancies.

**So what makes keeping construction data complete, accurate, and up to date such a challenge; and what can we do about it?**

**The first thing to do, is to accept that the data will come in many different formats, and that there will always be compatibility issues.**

This is where there is a need for experienced construction professionals to work with top IT experts, to ensure that the requirements are clear and the integration requirements are identified for the IT team to assess and derive a solution.

There also needs to be a robust end-to-end test of the systems that have been installed, to ensure that they work, and an ongoing audit to ensure they will continue to work as intended. This is where cynicism comes into play - as the quality check. Cynicism will assume that the systems don't work, and aren't complete, until proven otherwise. Then you should check again, and again once more. If you change the systems, you need to do the checking again.

## HOW?

I have advised on record keeping and software a few times and I usually suggest a four-stage approach:

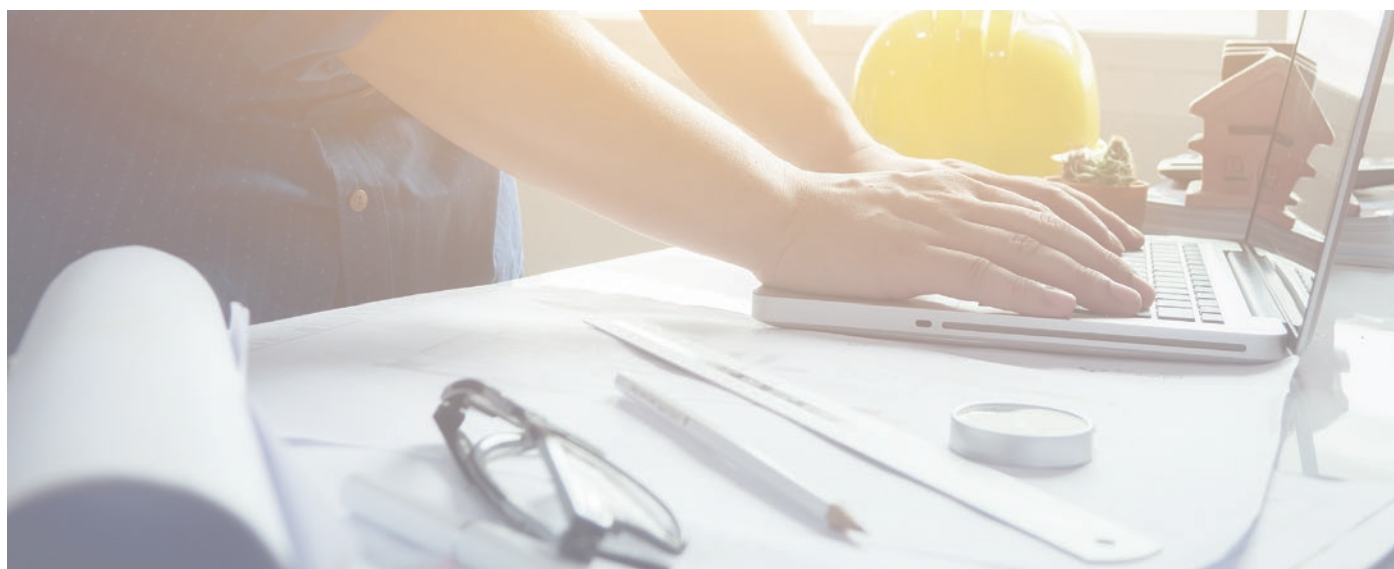


| STAGE ONE<br>Scope Definition   | STAGE TWO<br>Design and Build   | STAGE THREE<br>Test and verify  | STAGE FOUR<br>Operate and regularly re-verify  |
|---|---|---|--|
| <p>Setting out a briefing document which details what will be recorded and created, by whom, and in what format, what connectivity is required, and what will be the overall architecture for storage, retrieval, and reporting. This can be an involved process, but there is nothing more frustrating than a beautiful dashboard, that is obviously wrong.</p> <p>The types of software and file formats will need to be reviewed and analysed. One particularly useful strategy can be to create a data archive, which acts as a Single Source of Truth. This is then connected to all of the systems, rather than attempting to constantly translate formats directly between software.</p> | <p>This process should be straight forward from a well-defined brief, especially if you are using standard industry software packages. There really is no need to re-invent the wheel as all of this already exists, from record gathering apps to data storage and archiving, programme software to design suites.</p> <p>The real challenge is making it work together. Properly.</p> | <p>This is the place for the cynics. Check it all, check it twice, then check it again based on real time tests, with real data input. I have been told more than once how time entry works, only to insist on being shown it there and then, and watching it fail at every entry. Only when fully signed off by the stakeholders can you progress to the next phase.</p> | <p>Operation is going to depend on the training of the operatives. Many problems are rooted in a lack of training and are often termed as 'PICNIC' problems. This acronym is used by computer experts to describe user issues. 'Problem In Chair Not In Computer'.</p> |

Things change, software is upgraded, people leave or retire and are replaced, so make sure you get your cynics back once a month to ask some tough questions and verify that you are still working at the desired level of accuracy.

## CONCLUSIONS

**On any project, record keeping, document control, and the integration of software systems is important. Critically important. Cynical checking is therefore required, and on mega projects, mega-cynicism is needed and on giga projects, well you can guess, so give me a call...**



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