

UAE CONSTRUCTION AFTER COVID-19

How the pandemic can be a catalyst for
change for the construction industry

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MOVING BEYOND COVID

The UAE construction sector holds the opportunity to rework the way it operates in the post-Covid world

Few industries compare with the construction industry when it comes to solving challenging problems.

The industry is defined by its ability to deliver complex, bespoke structures, in unique locations, against impossibly tight time and cost deadlines.

That is perhaps why so many companies in the UAE's construction industry have responded strongly to immense challenges created by the Covid-19 pandemic.

Cutbacks in spending by government clients and private sector developers alike have led to a 20 per cent slump in contract awards in the GCC in the first six months of 2020, while at the same time, cash flow considerations have seen an increase in payment delays and disputes over design variations.

The squeeze on revenues and cash flow has been exacerbated by delays to project delivery caused by disrupted supply chains and quarantined workers, which have led to many companies seeking legal advice about invoking force majeure clauses or dealing with clients over contract price renegotiations.

The crisis is forcing companies out of the region, and some out of business. The loss of skills could leave permanent scars on the region's construction sector.

But the reality is that Covid-19 is not the cause of many of the challenges facing the construction industry in the middle of 2020. It has merely exposed the structural weaknesses in the industry that people have been turning a blind eye to for many years.

The industry's problems can no longer be ignored. Covid-19 has forced many of the problems to put on the table and confronted.

As a gradual response, the construction industry is trying to solve the problem. Companies are accelerating the adoption of new technologies, from BIM, to drones to virtual reality in order to remove waste from their processes and improve safety. Contractors are exploring new forms of contract. And the banks and governments are seeking to work with their clients to ensure that there is enough liquidity to the industry moving and to mitigate the default risk.

The biggest long-term threat to the industry remains that lack of new project opportunities, and it is to be hoped that governments continue with their infrastructure plans. From an industry perspective, it is imperative that construction companies keep pushing ahead with their problem solving drive.

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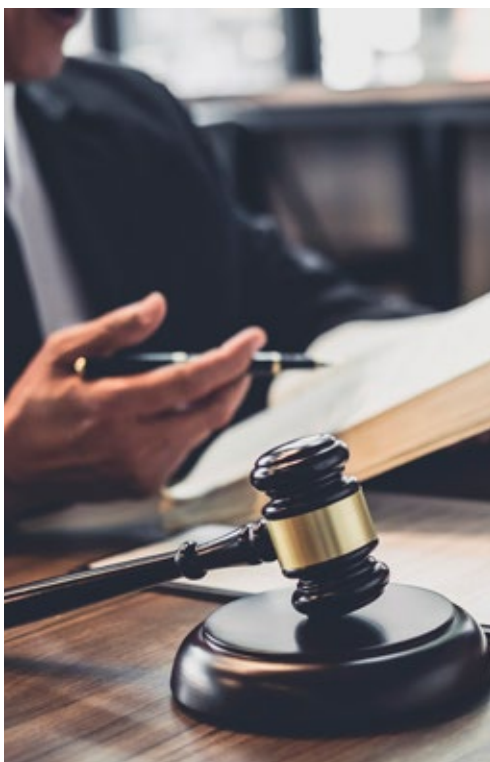
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FINDING A WAY FORWARD

After five challenging years, the construction industry in the UAE must change its ways if it is to survive low oil prices and Covid-19

For most of the past five years, the UAE's construction sector has been struggling with problems of a slowing market - a lack of new projects and weakening cashflow.

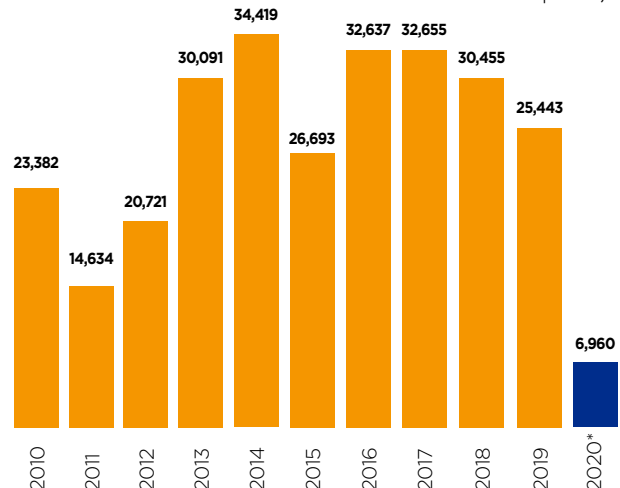
From project delays and cost overruns to unfair slow technology adoption, the consequences of these challenges were damaging the sustainability and reputation of this critical industry.

It is no surprise that therefore the construction sector is one of the worst-affected industries by the Covid-19 pandemic, which has accelerated the challenges that were already crippling the industry.

"Before the real impact of Covid-19 was felt, we already found ourselves in a construction industry that was under tremendous pressure due to a lack of cash in the system," says Sean McQue, director of construction at UAE contractor Alec. "Businesses were unable to perform and deliver as they were carrying extensive legacy issues

UAE CONSTRUCTION AND TRANSPORT CONTRACT AWARDS, 2010-20 (\$M)

*=Up to 12 July



Source: MEED Projects



caused by non-payment for works they had already executed. The effects of Covid-19 have exacerbated this problem.”

The novel coronavirus was first detected in China in late 2019 and has since appeared on every continent save Antarctica. By 12 July, more than 12.5 million people around the world had tested positive for the virus, and 560,000 deaths were confirmed.

The UAE announced its first confirmed case on 29 January and initiated a nationwide disinfection campaign on 26 March, with strict curfews in place. The economic impact of the Covid-19 pandemic far outweighs that of the financial crisis of 2008-09.

While the crisis of 2008 was a financial catastrophe caused by insufficiently capitalised banks, the Covid-19 pandemic is a physical contagion. Its impact on human health has rendered entire countries helpless.

Additional costs

The UAE’s construction industry was one of the few sectors exempted from the lockdown during the nationwide sterilisation campaign. Project sites remained active, although operations were not spared from the disruptions of the virus.

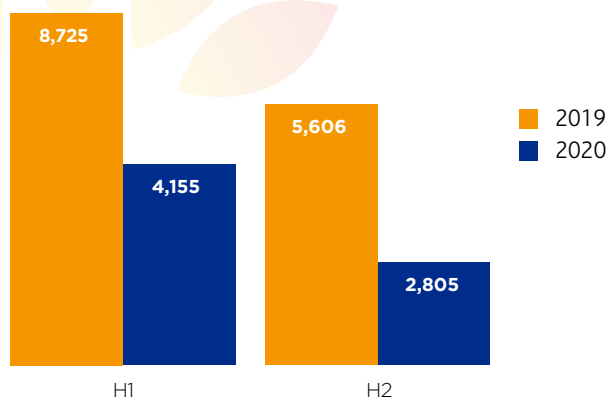
Social distancing had to be implemented on ground and inside vehicles ferrying workers to and from sites, adding time and costs for contractors. Meanwhile, supply chain disruptions meant procurement of materials was delayed.

“There is now news of businesses going under on a daily basis and our industry is fast losing whatever capacity and capability it had,” says McQue. “A good economy cannot function without a robust and healthy construction sector.”

The entrenched culture of bidding at unrealistically low prices to win work leaves little margin to accommodate unexpected challenges down the line. Contractors now find themselves struggling to absorb the costs and fulfillment burdens that Covid-19 has introduced for ongoing projects.

The economic slowdown has added strain on paymasters’ financial resources – including government spending for major infrastructure schemes. This has meant existing challenges around payments and cashflow have been exacerbated.

UAE CONSTRUCTION AND TRANSPORT CONTRACT AWARDS: H1 2019 VS H2 2020 (\$m)



Source: MEED Projects

“On the back of what was an already shrinking market, the current Covid-19 situation along with lower oil prices is resulting in a low level of new project opportunities for designers and contractors, which is likely to lead to reduced volumes of work over the coming 12-24 months,” says Jason Sams, construction divisional manager at UAE-based contractor Khansaheb.

“The low-price strategy being seen across the market is placing pressure on key parts of the supply chain, causing instability and unreliability, particularly financial, on resources and overseas procurement.”

For sites that have had to be shut down due to Covid-19 challenges, layoffs and salary cuts have become commonplace. McQue notes that everyone has adopted a “wait-and-see” attitude and are holding onto cash.

These issues ultimately leave room for disputes, as project parties find themselves unable to meet their contractual obligations.

“In these times, huge market challenges and volume reduction is anticipated,” says Sams. “Across the sector, supply chains and subcontractors have been exposed to significant pressure, which may lead to a number of them going out of business. There have been strategic changes, which have seen the focus move away from hospitality, retail, residential and commercial [projects] to infrastructure, industrial and agricultural [schemes].”

According to UK-based data analytics firm GlobalData’s Covid-19 Sector Impact review, the UAE construction sector posted growth of 3.3 per cent in real terms in 2019, and was expected to grow by 4.3 per cent in 2020, driven by government initiatives. However, following the Covid-19 outbreak and subsequent knockdown of oil

Overview

prices, GlobalData now expects construction output to contract by 1.9 per cent in 2020 and a recovery to 3.8 per cent in 2021.

This central forecast is based on a positive scenario that the outbreak will mostly be contained in the second quarter of 2020, such that restrictions on travel will be eased thereafter.

Research conducted by US-based McKinsey Global Institute highlights a similar forecast. "If things go well, construction activity could be back to pre-crisis levels by early 2021," says Ghassan Ziadat, vice-president of major projects at McKinsey & Company. "But longer-term lockdowns could mean it takes until 2024 or even later."

The Dubai government was already taking steps to regulate the real estate market, as oversupply marred property prices, even before the Covid-19 outbreak.

In August 2019, UAE Vice-President and Prime Minister and Ruler of Dubai Sheikh Mohammed bin Rashid al-Maktoum established the Real Estate Planning committee to balance supply and demand. It is expected that this will result in fewer projects being brought to the market in the coming years, which invariably mean fewer project opportunities for contractors.

Thus, a larger pool of players was left to compete for far fewer wins. Such an environment is likely to encourage low-price tender bidding to secure contracts, leaving little room for investments in areas such as technology, talent and research. It is time to rework the approach to construction, to create a more productive, streamlined and cost-effective industry. Covid-19 has emphasised the need for this change.

Government stimulus

"Growth in these times is the challenge and the current pipeline of tenders for the industry is presenting real concern," says Alec's McQue. "The normal reaction from governments that wish to stimulate economies in difficult times such as these is to invest in infrastructure. We anticipate this happening in the short-to-medium term, which will be great news for the construction industry."

"There has already been news coming out of Abu Dhabi in this respect, stating that infrastructure spending will be directed at local businesses, which makes a lot of sense."

As liquidity dries up, contractors find themselves left with little choice but to slash down prices even further. However, this could be damaging in the long term.

"Developers that are suspending projects with the intention to re-bid or negotiate lower prices with incumbent contractors are making a mistake," says McQue.

"Not only are they damaging the whole supply chain associated with the project, and the greater economy

"The normal reaction from governments that wish to stimulate economies in difficult times such as these is to invest in infrastructure. We anticipate this happening in the short-to-medium term, which will be great news for the construction industry"

along with it, they are just adding cost to their own development. They will ultimately end up paying the same price and will just delay the completion date, creating further loss of benefiting from the completed asset. Contractors will react by cutting costs where they shouldn't, and the quality and safety of the developments will be affected."

McQue believes the outbreak has brought greater attention to "the need to change". "The construction industry has for too long been reluctant to adopt new technologies and that has resulted in many inefficiencies and it is simply no longer sustainable for the sector to continue to operate in this manner," he says.

A key reason for this waste and inefficiency, McQue notes, is the lack of collaboration during projects.

"Collaboration – whether it happens in-person or in a digital space – is crucial in construction," he says. "This mindset had already begun to change, with recent events reinforcing the need to adopt cloud collaboration tools, which allow employees to continue to work from home or anywhere where they feel comfortable. Increasing complexity of projects means innovation is essential."

McQue says robotics will open new frontiers for the industry, while cloud collaboration and artificial intelligence tools are mature enough to enable firms to operate more effectively even in challenging circumstances. "If, for a long time, adoption of these tools was a matter of choice, today it has changed," he says. "Companies not embracing the digital revolution will be sidelined by those that do."

"Companies must become more agile and flexible in the way they operate, allowing employees to become more productive."

A STEEP CLIMB AHEAD

Contractors call for government backing and industry collaboration to tackle challenges posed by Covid-19



Yu Tao, president and CEO of China State Construction & Engineering Corporation Middle East (CSCEC ME)

What were the immediate challenges facing contractors after the Covid-19 outbreak?

The immediate challenges as a result of Covid-19 came from two fronts. The first was coping with the preventive measures put in place by our headquarters and the government. We spent a considerable amount of time establishing a system that would protect our staff across our office, sites and labour camps.

We started the exercise towards the end of January, when the alert was first issued in China, and so CSCEC Middle East was able to take much earlier action than some of our counterparts. We also applied directives from the government to our operations. All of this reduced our efficiency, no doubt, and was costly to implement. However, safety remains the utmost priority.

Secondly, payment cycles were affected. On one hand, we were incurring extra costs, but on the other hand, our cashflow became narrower and tougher to match with our expenditure.

How have construction contractors benefited from the stimulus packages issued by the UAE government?

As far as CSCEC is concerned, we did not get enough financial support. Maybe our industry is too big and fragmented to extend support to all players uniformly.

The government has made it clear for all government and semi-government bodies to release payments as soon as they can, to support contractors. However, I don't feel payments have been cleared quicker than before. In fact, if anything, they have become slower than before.

However, this affects our subcontractor suppliers as most of them do not have a strong financial capacity to hold out for so long. As contractors, it is our responsibility to keep the 'tap flowing' between the upstream and downstream value chain, which is not an easy job.

03 What conversations are you having with your clients and subcontractors?

We have received requests from some clients to reduce original contract prices. We have tried to analyse this from different aspects. Our operational costs have certainly risen due to the preventive measures we have instated. For instance, if we had 50-60 workers in one transport bus, we had to half this number, thus increasing the number of trips or vehicles to a single jobsite. At campsites, we had to reduce density of workers, requiring the addition of more camp space to accommodate the thousands of workers.

Based on this, we've tried to explain to our clients that while we're all frustrated and in shock due to Covid-19, nobody has been spared from the impact. As contractors, we have the greater responsibility given the human-dependent nature of the construction sector. We cannot afford to reduce the original contract price and will instead have to share incurred costs, while keeping the client informed of the force majeure situation with plenty of notice about future claims.

We have requested clients to allow us to send official requests to our subcontractor suppliers on their behalf, explaining that in order to survive, we all need to work together. However, the answer is the same. The subcontractor has a number of workers deployed on any site – how can he reduce the costs if work remains the same? Moreover, the contractors have a contractual obligation to their subcontractors. We can't just scrap an agreement – we have to be legally responsible, while also understanding the fact that everybody is suffering.

CSCEC has not reduced any prices. However, we have offered value-engineering propositions to our clients, subject to approvals.

04 Will the role of technology be stronger going ahead?

CSCEC is using technologies such as artificial intelligence (AI) to facilitate the inspection processes on our project. For example, our Etihad Railway project at the Saudi border is hundreds of kilometres away. During the lockdown, it was difficult to manage inspections and visits, and so, we were able to conduct remote inspections of our office, site and camps using a camera rather than in person. Perhaps slowly, we can adapt this approach even in regular operations.

It will take time. AI needs to produce higher efficiency and lower costs to justify its widespread use in an industry that often prioritises commercial considerations over all else. Certain countries have already started using robots on sites for plastering or other tasks, reducing the need for human resources; this could become commonplace.

05 What does the outlook for UAE construction look like?

The industry is slowing down, just like all other industries. We are seeing fewer tender invitations – a few government project tenders are being floated. There will certainly be a drop in the number of tenders and awards. However, when the industry will recover is a question mark. Contractors need to remain focused and complete the projects at hand. We may need to rearrange our resources if newer projects are scarce, and we should be prepared for this. It's still too early to make a judgement about the recovery path of our industry.

06 How can the government support the industry in the coming months?

Financial support is critical for any business. Open the tap and pay the contractor and subcontractor on time, as difficult as that might be. We all need to abide by our contractual obligations. Don't pass on the blame. Stick to the contract conditions, thus ensuring the project is delivered on time.

The developers also need to preserve calmness among industry players, as panicking will benefit no one.



OPERATIONAL DISRUPTION

Construction firms in the UAE have struggled to cope with the realities of Covid-19, as day-to-day productivity took the hardest hit

Our new normal is to “live in suspense every day”, says a UAE-based contractor.

The suspense – and correlating disruption to operations – spans from whether materials will arrive daily; how many workers will make it on site; which building has been put under quarantine; which districts are closed off for testing; and if a member of the team has tested positive for Covid-19 – and how many others have been infected but remain undetected.

“To say progress on our projects has been drastically affected by the Covid-19 pandemic is an understatement,” says the contractor.

The virus began upsetting the construction industry in the UAE since early March, but the sector has been hurting for more than a decade from the 2008 global financial crisis, followed by the crude price plunge in 2014 that brought contracting giants to the brink of insolvency.

Firms have been working to restructure debt even before the pandemic hit.

But in a latest knock to the industry, the outbreak has spread rapidly among migrant workers living in cramped dormitories in crowded labour camps.

“We are facing huge shortages of workers on site,” the contractor says. “Some have been infected, while others are in quarantine. Those who are living in areas undergoing sterilisation are not allowed to exit, and many fear they might contract the virus so they stay absent because theirs is not the sort of work where it is possible to distance.

“Subcontractor staff have not been able to come on site for days and consultants have also been avoiding site visits. But each day that our site doesn’t function is a loss and we are already looking at months of delays.”

Motivating mid-level employees to perform while enduring pay cuts has also been a challenge, he adds.

The UAE government has been locking down high-density areas, sterilising labour accommodations and running mass free testing to screen hundreds of thousands of workers. The contractor acknowledges that “overcrowding” will need to be stringently addressed across some camps.

Meanwhile, authorities have imposed strict measures such as physical distancing requirements in vehicles.

“We have had to change the bus capacity to 30 per cent to ensure social distancing, which meant an increase in



“... Every organisation will have a good look at itself in how it's set up and organised to deal with events such as pandemics”

the number of journeys,” says David Robinson, health and safety executive director at UAE contractor ASGC. “That had a knock-on effect on time, fuel and so on.”

Juggling costs

“From a business continuity perspective, I think every organisation will have a good look at itself in how it's set up and organised to deal with events such as pandemics,” says Robinson. “That will have a small knock-on impact on the overall cost of business, and then it will be dependent on each organisation on whether they want to swallow that cost within their profit margins, or add [it] on top of what they would bid. [In] the current market, people will probably just take that [cost] out of their projected profits to stay competitive.”

But another Dubai-based contractor says many industry players have yet to estimate the potential total increase in overall costs, which could run well into the “tens of thousands” each day.

“At the moment everyone has just been reacting [to guidelines] so we don't know the total impact [on cost],” he explains. “Sanitiser is being used like water and is costing us close to Dh20,000 [\$5,445] to Dh25,000 a week,

for example. Consider the cost of providing masks for thousands of workers every day and then there's gloves, cleaning products and so on, in addition to mandatory weekly sterilisations. Margins are already very, very low so any further squeeze is going to hit us all.”

Delays in the building materials supply chain as a result of the lockdown-induced slowdown in shipping, restricted cross-emirate transportation and longer customs clearance times, along with the decrease in factory activity, have also driven up prices of materials, the contractor adds.

“Most deliveries have not reached us on time because of the different lockdowns,” he says.

A factory owner and supplier adds that transporting materials has been “dramatically stressful” and “impossible” to deliver on schedule. “Whether by sea or road, we are seeing a new story at customs every day,” he says.

Meanwhile, the supplier says neither banks nor insurance providers have been cooperative so far despite the announcement of various relief measures.

“Our company health insurance is up for renewal and I've just received an email quoting a 55 per cent increase to the premium even though we have not had a single claim all year,” he says. “The reason they cite is Covid-19 of course. On the other side, banks are refusing to have conversations about renegotiating interest rates.

“They've got to stop this short-term thinking and look at the long-term value for everyone.”



FORCE MAJEURE IN CONSTRUCTION

Experts from Clyde & Co provide insight on force majeure clauses and laws for the construction sector in the wake of Covid-19

The initial outbreak of Covid-19, first in China and then as a global pandemic, severely disrupted construction supply chains. And while construction work continued in the UAE as an essential activity, government lockdown measures introduced to stop the spread of the disease affected many projects.

Some companies found as an immediate consequence that they were unable to fulfil their contractual commitments, exposing them to the risk of being liable for failing to deliver work that they are contracted to perform, but seemingly unable to do anything about it. This challenge continues even today, as social distancing measures remain in place, affecting productivity on construction sites.

How should contractors in this position respond? What legal options do they have available to them? And what might be the consequences of these options?

The comprehensive set of terms and conditions contained in the Fidic suite of books are designed to provide construction clients and their contractors with a series of readymade, off-the-shelf contracts. The menu of standard

terms and conditions included in the commonly used Fidic Red Book include many clauses that can apply to situations where it is not possible to fulfil contracted commitments.

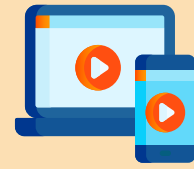
In the UAE, however, and across the GCC, it is common for construction clients to amend or remove many of these standard clauses from their contracts. The result is that no two construction contracts in the UAE are the same.

Therefore the most important piece of advice for contractors affected by the Covid-19 disruption is to conduct a detailed review of the terms and conditions of the contract with their lawyer. It is of upmost importance that construction companies, and any other contracted parties, analyse the relief provisions agreed in their contract at the outset.

Red Book

The Conditions of Contract for Construction based on the Fidic Red Book (1999) provide several clauses that contractors can refer to when advancing a claim to be relieved from their obligations to deliver work specified in the contract that has been affected by the Covid-19 lockdown.

- **Clause 20.1:** If a construction company considers



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itself to be entitled to any extension of the time for completion and/or any additional payment, it shall give notice to the engineer, describing the event or circumstance giving rise to the claim, not later than 28 days after the contractor became aware, or should have become aware, of the event or circumstance.

Clauses that a contractor might use in conjunction with clause 20.1:

- **Clause 8.4:** Provides an Extension of Time (EOT) for completion, with paragraph (d) stating that it applies to: "... unforeseeable shortages in the availability of personnel or goods caused by epidemic or governmental actions". In the region, it is common for this clause to be amended and paragraph (d) taken out of contracts. The World Health Organisation (WHO) declared Covid-19 a pandemic on 11 March and its definition included 'epidemic'. This may well be an area of contention, subject to expert evidence.
- **Clause 8.5:** Refers to a delay or disruption caused by a procedure implemented by a public authority, which appears to apply to the Covid-19 scenario. This clause uses a foreseeability test, which an employer or contending party might be able to argue that in the light of the recent history of viruses such as SARS, swine flu and MERS, the emergence of another virus was indeed foreseeable.

However, the outbreak of viruses are not everyday experiences and the effects of Covid-19 on the entire world were far from being foreseeable.

- **Clause 13.7:** Allows for additional time and money, if a contractor can identify changes in law or regulations arising as a result of Covid-19.
- **Clause 13.8:** Relates to price escalations for material and labour, but this clause is nearly always removed from contracts in the region.

Force majeure

Clause 19.1 of the 1999 Red Book sets out the definition of force majeure. It sets out tests and lists examples or events that constitute a force majeure, which is generally defined as an exceptional event or circumstance that is:

1. Beyond a party's control;
2. Which the party could not reasonably have provided against before entering into the contract;
3. Which, having arisen, such party could not reasonably have avoided or overcome;
4. Which is not substantially attributable to the other party

The standard form of contract does not specifically list epidemics. But the list is not exclusive and an argument can be raised that the Covid-19 outbreak is covered.

Despite the visible effects of Covid-19 on society, construction sites in the UAE largely remain operational, albeit less efficient, which is a point that will likely count against an argument in favour of a Covid-19 force majeure.

It can help to analyse situations similar to Covid-19, such as major natural disasters, the 2009 swine flu outbreak and terror attacks. In these instances, force majeure clauses did not always work. It often came down to specific wordings

of the clauses as well as the dispute resolution forum in which the interpretation of the clause was analysed.

Every contract is different. Amendment of clauses may lead to varying definitions and interpretations, making it important to check the wordings of contracts.

- **Clause 19.2:** States that the event or circumstance must have prevented the party from performing any of its obligations under the contract. The word 'prevented' is also used in clause 19.4. The definition of 'prevented' then links to another word – obligation.
- **Clause 19.2:** Refers to any of the contractual 'obligations' being 'prevented'. For example, this could refer to clause 8.2 (time for completion) or clause 8.3 (compliance with programme) being prevented.

Disputes could arise over whether the contractual obligation (i.e. clauses 8.3 or 8.4) is still capable of being performed, as opposed to it simply becoming more costly and time-consuming.

Assessing impact

Once force majeure is defined, a party must consider how the event or circumstance affects work.

- **EOT:** Clause 20.1 requires the contractor notify the engineer of its claims. Clause 19.4 then states that with proper notice, a party will be entitled to an EOT.

However, entitlement to cost is more of a challenge, as the contractor needs to demonstrate that the event is classified as force majeure as per the list of events in clause 19.1. The list includes natural catastrophes and so contractors will have to work with their legal teams to prove whether a pandemic can be classed as such.

- **Termination of contract:** Clause 19.6 provides that if the execution of the works in their entirety, or a substantial part is prevented for a continuous period of up to 84 days or multiple periods totalling 140 days, either party may serve a notice to terminate the contract. If the contract is terminated, the contractor will be paid for work done, materials produced and other costs reasonably incurred, usually excluding profits.
- **Impossibility:** Clause 19.7 is the impossibility clause, and broadens the force majeure specific clauses, covering all events and circumstances. For the UAE, this may include restriction of works between emirates and physical impossibility elements such as site access and getting labourers to site. However, the works must strictly be impossible, and not merely more difficult or costly, for this clause to apply.

“Amendment of clauses may lead to varying definitions and interpretations of force majeure, making it important to check the wordings”

Other relevant clauses to consider from the Fidic Red Book of 1999:

- **Clause 2.1:** Site access
- **Clause 6.7:** Health and safety
- **Clause 13:** Variations
- **Clause 13.2:** Value engineering
- **Clause 20:** Claims and notifications

Providing proof

Once it has been established that a contractor is entitled to submit a claim, it is necessary to prove that work is actually being delayed by the Covid-19 disruption.

There are signs that claims are being raised with little or no justification that Covid-19 is indeed the cause of delay, making project owners suspicious of contractor intentions.

Hence, it is important to be as specific and punctual as possible when communicating with the employer.

Proving the cause of delay on a project will be one of the major challenges for developments under way. Site issues should be assessed on a daily basis, separate from the problems caused by Covid-19.

Any mitigation measures such as value-engineering undertaken should also be recorded and clearly reported. But it should be ensured these measures do not breach contract provisions requiring engineer or employer approvals.

Lastly, in order to better help lawyers and consultants in the event of claims being raised, it is critical to keep detailed records of how things have changed as to how they were before Covid-19.



This article is based on insights from **Michael Grose** (top), partner at Clyde & Co, and **Matthew Heywood**, senior partner at Mantle Law



UAE LAW & COVID-19

Michael Grose of Clyde & Co explains UAE construction laws and how they could be interpreted by parties filing claims due to the Covid-19 disruption

It is common in the UAE to have construction contracts that have been amended from the standard forms defined by the Fidic suite of books, says Michael Grose, partner at law firm Clyde & Co.

But it is also possible, he says, to come across situations where standard Fidic clauses are unamended, but the applicable laws could introduce additional rights or amend those set out in the contract.

The UAE Civil Code or the onshore law has provisions that explicitly deal with force majeure and impossibility. The most relevant provisions are articles 273, 472 and 893.

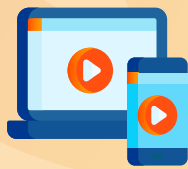
- **Article 273:** States that in contracts binding on both parties, if force majeure supervenes, which makes the performance of the contract impossible, the corresponding obligation shall cease, and the contract shall be automatically cancelled.

It goes on to say that in the case of partial impossibility, the part of the contract that is deemed impossible

shall be extinguished, and the same shall apply to temporary impossibility in continuing contracts, and in those two cases it shall be permissible for the creditor to cancel the contract provided that the debtor is so aware.

- **Article 472:** States that the right shall expire if the obligor proves that the performance of it has become impossible for him for an extraneous cause in which he played no part.
- **Article 893:** Deals specifically with the provision of labour and material, and hence is perceived to cover construction contracts. It states that if any cause arises preventing the performance of the contract or the completion of the performance thereof, either of the contracting parties may require that the contract be cancelled or terminated as the case may be.

The UAE Civil Code contains nearly 12 mandatory provisions that overrule anything that



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“It is also possible to come across situations where standard Fidic clauses are unamended, but the applicable laws could introduce additional rights or amend those set out in the contract”

parties agreed upon, such as the right to adjust liquidated damages (Article 390). The force majeure clauses are not listed as mandatory. However, the underlying principle of mandatory civil code provisions is that they operate in public interest. Additionally, any gaps left behind by deletion or amendment of clauses – such as the Fidic 1999 Clause 19 – will be filled by the civil code.

Freezones

The UAE Civil code is not the only source of law in the country. The legal framework of the Dubai International Financial Centre (DIFC) and the Abu Dhabi Global Market (ADGM) operates independently of the civil code.

DIFC law is applicable to most of the commercial activity within its geographical boundaries and for contracts that choose to apply it. In case the DIFC law does not deal with a particular situation, it resorts to English law as the back-up.

DIFC's contract law is codified in Law Number 6 of 2004, which defines force majeure under Article 82,

unlike English law, which does not have a specific concept for force majeure. The closest concept in English law is frustration, which is too narrowly defined for parties seeking release from certain obligations due to unforeseeable circumstances.

Article 82 states that “non-performance by a party is excused if that party proves that the non-performance was due to an impediment beyond its control and that it could not reasonably be expected to have taken the impediment into account at the time of the conclusion of the contract or to have avoided or overcome it or its consequences”.

Payment obligations are excluded from the force majeure provisions of Article 82 and a party cannot rely on this to delay or avoid payment obligations.

ADGM

ADGM has a different legal system, but broadly takes a similar position as the DIFC law. However, contract law is not codified in ADGM and the position defaults to English law. As with contractual provisions, the provisions stated above are also open to interpretations and application, with the outcome dependent on the forum in which a party finds itself disputing the impact of Covid-19.

The advantage of courts that are both onshore and in financial freezones is that they have experience in dealing with similar circumstances, such as periods of inflation or recession.

While situations requiring courts to rule on an epidemic or pandemic have been rare, they will rely on four key tests to determine whether force majeure or impossibility applies. The event should be:

- Unforeseeable
- Unavoidable
- External
- Impossible

The final test is difficult to ascertain. Impossibility can be applied either to the entirety of the contract or individual components.

Somewhere in between, it ceases to be impossible to perform a contract based on the current situation. Application of the impossibility test will determine what the courts are likely to do.

Parties filing a claim can expect a more sympathetic response from arbitrators, as long the claim demonstrates the link between the current pandemic and the relief being sought (time or costs).



This article is based on insights from **Michael Grose**, partner at Clyde & Co



PREPARING FOR ANOTHER COVID

The legal landscape of the construction industry will require futureproofing to safeguard the sector against upcoming risks, say experts from Baker McKenzie

Covid-19 was described early on as a 'novel coronavirus'. As novel as the virus itself was, so were the threats and consequences it posed.

However, it was thought that in the usual standard-form construction contracts, such as Fidic and NEC [New Engineering Contract], a pandemic could be contractually catered for in two generic style clauses, namely force majeure and a change in law.

The specific wording of these clauses is obviously highly important:

- *A force majeure clause relates to an exceptional event or circumstance beyond a party's control, which could not have been reasonably foreseen when entering into the agreement.*
- *A change in law clause could be relied upon when a governmental body makes a change to the law, which has the effect of preventing a party from performing its contractual obligations*

While on the face of it, these clauses seemingly provide for the effects of a pandemic, as the old adage goes, if

two lawyers agree on a point, one of them is not using their brain. That is to say there is scope to argue the applicability of these standard-form clauses with regard to their applicability to a pandemic. For instance:

- *Where performance (or even partial performance) of a contractual obligation is theoretically possible (although perhaps more costly or slower) arguably, a party is not entitled to relief under a force majeure provision; and*
- *To the extent that a government imposes certain counter measures to curtail the spread of a virus, it might be argued that such measures do not actually equate to a change in law and therefore a party is not entitled to any relief.*

This means that while it was believed construction contracts made provision for a pandemic, there is, as ever, room for argument on their applicability.

In the circumstances, and for certainty's sake, parties entering into new construction contracts or continuing to perform under their current contractual

arrangements, should consider building in clauses that specifically deal with the effects of Covid-19 and other pandemics, lest the world be faced with a second wave or indeed a new one.

Such clauses need not dramatically amend the current standard-form construction contracts, but merely add to them so that all parties are fully aware of their exact rights and obligations should we face a similar threat.

Of course, the nature and exact wording of such amendments or additions will have to be carefully considered in the context of the particular agreement. Parties should be alive to the need to do so however.

In addition, as the number of disputes arising out of the effects of Covid-19 will no doubt skyrocket, parties would be well-advised to adopt a pragmatic and commercial approach to such disputes in an attempt to avoid costly and time-consuming litigation, which will put further strain on already cash-strapped businesses. In this regard, alternative forms of dispute resolution, such as mediation could be highly effective.

UAE law

Also worth noting is, to the extent that the governing law is that of the UAE, parties may wish to rely more heavily on the UAE Civil Code. For example, Article 273 of the Civil Code caters to force majeure events and states that:

- *In contracts binding on both parties, if force majeure supervenes, which makes the performance of the contract impossible, the corresponding obligation shall cease, and the contract shall be automatically cancelled.*
- *In the case of partial impossibility, that part of the contract that is impossible shall be extinguished and the same shall apply to temporary impossibility in continuing contracts, and in those two cases it shall be permissible for the obligor to cancel the contract provided that the obligee is so aware.*

The wording of the above article, however, leaves one with the same potential arguments as under the standard-form contractual force majeure provisions.

Article 287 of the Civil Code also finds application in the times of Covid-19 in that it states: *"If a person proves that the loss arose out of an extraneous cause in which he played no part, such as a natural disaster, unavoidable accident, force majeure, act of a third party, or act of the person suffering loss, he shall not be bound to make it good in the absence of a legal provision or agreement to the contrary."* This article appears to be far-reaching but can curtail the provisions of an "agreement to the contrary". Parties are therefore cautioned

to carefully consider the effect of their contracts on this catch-all article.

Article 249 of the code arguably offers the most protection to a party whose contractual performance has been affected by Covid-19: *"If exceptional circumstances of a public nature, which could not have been foreseen, occur as a result of which the performance of the contractual obligation, even if not impossible, becomes oppressive for the obligor so as to threaten him with grave loss, it shall be permissible for the judge, in accordance with the circumstances and after weighing up the interests of each party, to reduce the oppressive obligation to a reasonable level if justice so requires, and any agreement to the contrary shall be void."*

However, this article fails to define or offer guidance as to precisely what an "exceptional circumstance of a public nature" is.

In addition, it appears the article only empowers a judge to make the above enquiry, leaving scope for the argument that an arbitrator is not enjoined to do so and therefore cannot offer the same relief to a party as a court, lest he exceed his powers.

In the circumstances, the legislature should give careful consideration to addressing any ambiguity or scope for argument arising out of the above articles.

Notwithstanding this, it appears clear that no amount of contractual wizardry or legal interpretation of the civil code will lead to a complete solution to address the current ills, and safeguard against future catastrophes posed by pandemics.

It is likely incumbent on governments to provide pragmatic and effective countermeasures in this regard. One of these may be the establishment of a disaster relief fund aimed at increasing liquidity for players in the construction industry in times of threat.

Whatever the solution, it must be accepted that this is a brave new world, and to continue the analogy of the construction industry being like a river, we must accept that we will need to develop new boats to survive the current, and future, tides.

ABOUT THE AUTHORS



Andrew Mackenzie (top) is partner and head of international arbitration (UAE) and **Terrick McCallum** is an associate, dispute resolution, at Baker McKenzie

REVISITING CONTRACTS

Some clients are now asking contractors to renegotiate contracts to lower prices, but there are legal considerations the contractor can explore

As the economic impact of the Covid-19 pandemic spreads, some project paymasters are seeking to reduce project costs by forcing their contractors and suppliers to renegotiate contracts with lower prices.

How should construction companies respond to the pressure? After five challenging years in which contractors have faced constant pressure to reduce costs, how much latitude is there to renegotiate contracts and push prices lower?

“The contracting party must first decide if it is obliged to renegotiate the contract,” says Suzannah Newbould, construction partner at UK-headquartered law firm DLA Piper. “This depends on whether a contract has been signed between both the parties.”

If a formal contract is in place, such as a Fidic-based contract, both parties are bound by the agreed price in the contract. It is common in the region, however, to start construction works with only a letter of intent in place, with the intention to sign a more formal contract at a later date.

“Such projects are more susceptible to renegotiations, with no legal restrictions if the employer does decide to change the pricing,” says Newbould.

Letter of intent

However, Newbould says a letter of intent can be upheld as a contract if it contains essential contractual elements such as a scope of works, price, and time for completion, and if both parties were legally entitled to sign a contract.

“It can be treated as a binding agreement, which nullifies the need for a contracted party to agree to renegotiation,” she says.

Once the legal grounds for a contract have been established, the contracting party must then consider the commercial importance of renegotiating the contract before deciding whether to engage or not. In the event that the contractor chooses not to renegotiate, it runs certain risks. “The client may believe it can make substantial savings by engaging someone else to finish the works if the contracting party is not lowering its prices,” says Newbould. “It

may then seek to terminate or descope the remainder of the party’s works.”

The Fidic Red Book does not allow for termination of a contract if the client is going to replace the originally contracted party with someone else to complete the works. But in the Middle East, this clause is often heavily amended to remove the limitation from contracts.

“Most contracts in the region have provisions for termination for convenience or ‘at will’ by the clients,” says Newbould.



The contract will typically dictate what happens in the event of termination. Fidic contracts, for example, say a contractor is entitled to its costs incurred to date and those reasonable expenses that it has incurred in anticipation of completing works.

If a contract does not specify that a client is able to terminate for convenience or does not elaborate on what the termination entails, then a client is likely to have to pay the contractor its loss of profits.

If either party has served a force majeure notice, then it is usual for a contract to specify that after a certain period (84 days as stipulated in Fidic contracts) either party will be able to serve notice to terminate, if the works have not substantially progressed during that period. The consequences of this are the same in Fidic, says Newbould. The contractor is paid for the work done to date.

Descoping a contract

The descoping of a contract is another risk the contractor will have to consider should it choose not to renegotiate with a client.

Standard Fidic forms of contract do not allow descoping if the works are assigned to another party. But again, says Newbould, this is a clause that is typically amended in the region.

Descoping is instructed by employers as a variation omitting large parts of the works as an “easier” alternative to termination.

“In the event that a party chooses to renegotiate the contract, the price should not be the only factor,” says Newbould. “There are other essentials the party must absolutely deal with in that renegotiation.” These ‘other essentials’ include:

- Revised time for completion and clarifying new deadlines;
- Settle existing claims, which will be difficult to recover once renegotiation is complete;
- Consider a health check of any plant and materials left on site, and consider the duration of manufacturer warranties, deal with any issues in the renegotiation;
- Ensure the value of bonds is reduced if the contract price is reduced;
- Delay damages are often expressed as a percentage of the contract price, with a 10 per cent cap on delay damages. Make sure the contract definitions provide for the percentage to apply to the renegotiated lower price;
- Deal with the second wave of the Covid-19 pandemic, which will not be an unforeseeable event.

If the renegotiated price includes the impact of Covid-19, the clients could say it also included the future effects of a second wave.

Other considerations

Some additional points to consider include advance payment repayments and bill of quantities (BOQ) rates, although these may provide cashflow benefits to a contractor.

“Advance payments are a percentage of monthly applications, but will have to be revised moving ahead or else the contractor will have a balance outstanding to the client,” says Newbould.

If left unaltered, BOQ rates will build up to the original contract price, which will mean the monthly applications will cumulatively amount to a total greater than the revised contract price.

“This essentially means the contract price will be used up faster,” says Newbould.

She adds that contract renegotiations can offer unexpected opportunities for contractors, such as changes to payment terms.

For example, in some cases, the two sides can agree to shorter payment terms such as fortnightly applications instead of monthly ones.

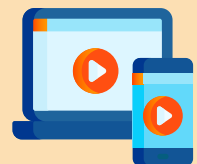
Cashflow issues can also be eased if all parties can agree upon a release of retentions, or that no further deduction of retention will take place going forward.

Additionally, while it may vary from contract-to-contract, the contractor could offer other solutions to reduce costs such as aggressive value engineering, descoping by agreement, or a cost-reimbursable mechanism with agreed profit (on an open-book basis).

“It will help to try and understand the reasons behind a client’s request for renegotiation,” says Newbould.



This article features insights from **Suzannah Newbould**, construction partner at DLA Piper



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COMMERCIAL DELIBERATIONS

A more nuanced and transparent approach to procurement can help clients and contractors negotiate better agreements in the long term

Legal considerations form an important part of the conversation that follows the decision to renegotiate contracts. It is, however, critical to consider the commercial aspects of such a decision.

There are four key factors to consider while renegotiating a contract, says Christopher Seymour, managing director at UK-based consultancy Mott MacDonald's Middle East unit, and chairman of the UK-based Royal Institution of Chartered Surveyors' (RICS) Market Advisory Panel in the Middle East and North Africa.

The first of these is to explore the commercial capacity of the market, and whether it has evolved from a position of premium pricing to one without such buffers.

Clients may stand to recover gains from their contract in such a situation. Seymour cites the example of the construction sector's pricing models in 2008, when premiums were noted across materials, plant and labour costs.

"In those circumstances, we were seeing some construction projects in the real estate sector costing about twice per square metre than what you would expect today," he says. "In a way, clients were correct in looking

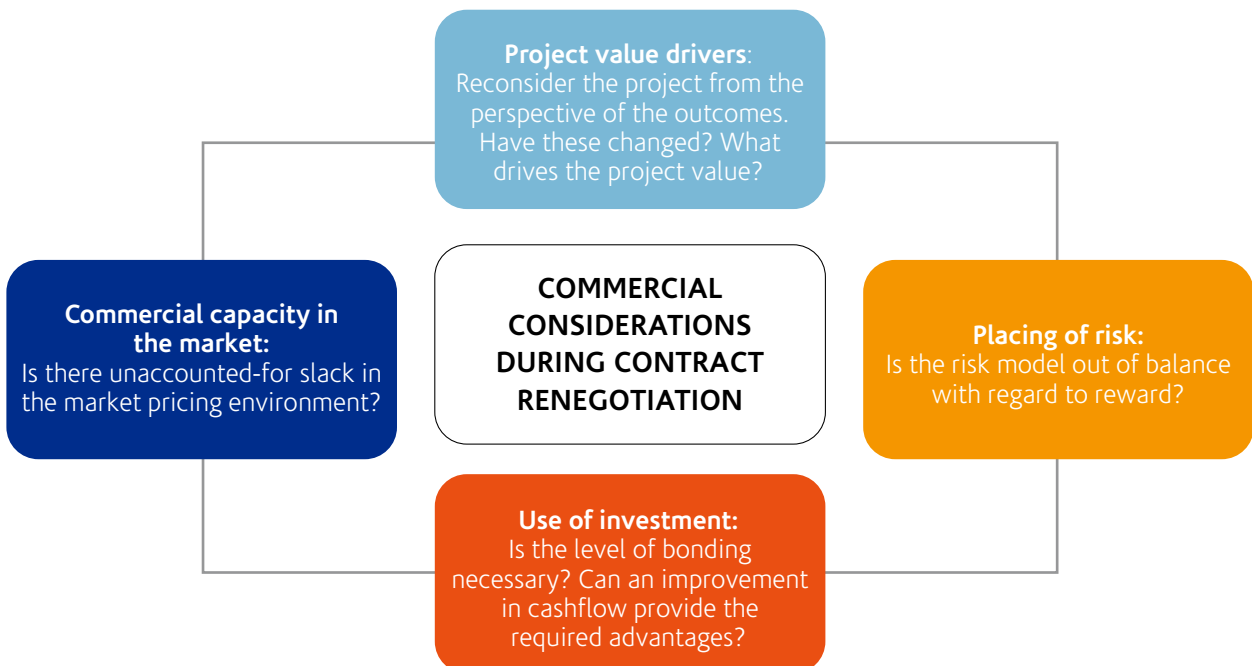
for that winning renegotiation on price, and most of them were successful because there was a big drop to something that was more realistic."

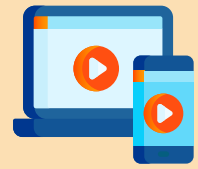
Changing mindset

However, the local construction and real estate sectors have noted downward pricing in the past 18-24 months. These declines have also led to project drivers being reviewed, with clients often reconsidering the function of planned buildings during construction.

Seymour explains that in such scenarios, clients must reassess projects in terms of their outcomes instead of just their expected costs. Additionally, stakeholders must consider the use of investment and whether bonding is necessary for the project.

Clients must explore if the security package around a performance bond is needed for the type of construction project they intend to build. Another straightforward consideration is whether an open-ended bond can be updated into a date-limited or closed-end one.





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Decisions like these can help to release costs from contracts and pass them back to clients, effectively adding working capital to projects and easing cashflow for contractors and consultants.

A significant consideration while renegotiating contracts is the fair distribution of risks and rewards among the parties involved, and this can have long-term ramifications for project stakeholders.

Seymour says the riskier aspects of contracts in the Middle East's construction sector are derived from fixed-price elements such as labour, materials, taxes and even soft costs.

While contractual agreements are typically designed for a client to pass down these risks, Seymour argues that in some cases, it might be in the client's interest to take on some of this burden directly or on an individual, case-by-case basis.

Efficient risk-sharing is possible through alternative procurement models that offer more agility. These options are important for contractors to consider in the current environment, as they seek a balanced pricing model that neither sets them up for additional risk nor prices them out of the market in the future.

Open-book or cost-plus-contract methods of procurement lend themselves to these market conditions "because you can get far more adaptability and agility" with them, Seymour explains, particularly as subcontractors and supply chain entities try to manage fixed-price risks in the near term.

It is expected a new normal will emerge for the UAE

construction sector in the post-pandemic era.

Seymour says open-book procurement must be one of the major elements that clients, contractors and consultants pursue during this period to streamline their costs and introduce greater agility to operating models.

He also recommends that all stakeholders, especially clients, approach project outcomes and risks in a more nuanced and intelligent manner.

This is particularly important as the industry tries to reduce its expenditure and ascertain the exact value of savings it must drive to be efficient in the future. Changing project outcomes where applicable and reviewing different risk models could help to derive the latter figure.

"I think that's a really good conversation to have between client and supply chain," says Seymour. "It [re-iterates the idea] that when clients open up about what their business is going through, it helps their supply chain become more synchronised and find ways to get the right result for both parties."

"It may not benefit us now, but looking to the future, if we can look at contracts in models that actually enable [transparency], we're going to be in a better place if something like the current situation occurs again."



This article features insights from **Christopher Seymour**, managing director at Mott MacDonald Middle East, and chairman, RICS Mena Market Advisory Panel

RESPONDING TO THE CRISIS

Construction industry experts weigh in on the challenges and opportunities introduced by the Covid-19 outbreak



Sean McQue
*Director, construction,
Alec*

The positive uptake

The construction industry has always been left behind with regards to real innovation and digitisation. For the first time we are seeing major effort to do things differently.

We are already seeing significant uptake in some of the digital tools we have been trying to launch for some time. When you get adoption by a critical mass, these will quickly become the norm on projects, which will present the opportunity for our supply chain to benefit from them too by becoming truly integrated.



**Senan Abdullah
Mohammed Juma
al-Naboodah**
*Managing director,
Al-Naboodah
Construction Group*

Moving ahead

I predict a slowdown in demand for residential and commercial projects in the medium-term as the economic effects of the pandemic run their course.

In terms of operations, we will have to maintain our social distancing and health protocols for the foreseeable future. There will also be added costs from restrictions to passenger numbers in our staff and worker transportation fleet, as well as from increased cleaning and disinfection programmes across our sites and facilities.

In the long-term, the news points towards a vaccine being developed later this year. Once this happens, governments across the world will be keen to jump-start economies with stimulus packages, so I'm cautiously optimistic that we'll start to see a gradual return to normal over the course of the next couple of years.



Cynthia Corby,
*construction industry
leader, Deloitte
Middle East*

Re-evaluate your position

Quantifying the impact of Covid-19 on project costs and cashflow is essential for all contractors to be able to manage their cash and continue to deliver on their projects. Cashflow visibility is one of the key areas contractors should focus on.

In addition, understanding dependencies on backlog and especially looking at any projects that are suspended or put on hold and understanding the impact that this has on the immediate cashflow is critical, as well as exploring any dependency on expected claims settlements that were due to be paid in the near term as contingency plans and scenario planning would need to be put in place. There is a real need for a collaborative approach between all stakeholders at this particular time in the market.



Louay Dahmash
*Director, EMEA emerging
region, Autodesk*

Embracing digital

Many construction companies were already on the path towards adopting greater digitisation, but the pandemic has accelerated this process. Companies that were already well established on their digitisation journeys have been affected less than those that were slower off the mark.

Firms that have been working diligently on digital delivery for a long time have accepted the 'new reality' much better due to their staff already having a collaborative mindset [as opposed to the traditional 'siloed' mindset] as well as cloud technology being present.



Michael Grose,
partner, Clyde & Co

Learning lessons

The greatest potential for change lies in the medium term as individuals apply the lesson that changes can be made to long-established working patterns with minimal disruption. It is this lesson that provides the greatest cause for optimism. Leaders can take the opportunity to drive innovation and change in a way that would not have been conceivable before the dramatic changes forced on businesses by Covid-19.



Johan Hesselsoe
*Managing director, UAE,
Atkins, a member of the
SNC-Lavalin Group*

Increasing project value

As project and construction management professionals, we should not only be focused on driving the most efficient construction cost structures, but also understand and evaluate the most efficient cost structure over the life of the built asset.

Construction costs represent only one portion of the overall development and lifecycle project costs. Decisions made in isolation to drive a lower construction cost can result in far bigger consequences for the whole life cost of a development.

Value engineering is often the precursor to lowering construction costs. However, this is often a label used for cost reduction; embracing true value engineering, where all parties look at how to truly increase the value of a project for a client, will not just look at ways of reducing costs. It will consider how to drive the best value out of the specific scenario.



Suzannah Newbould,
partner, DLA Piper

Resilient contracts

I am hopeful [Covid-19] will provide the impetus to change the approach to procurement and contracting. As we emerge from shortages of plant, materials and labour and establish methods of working to comply with government restrictions, pricing accurately will be challenging. Add to that the uncertainty of a second wave of Covid-19 and awarding contracts to the lowest price does not make sense. The way forward will be in applying two-stage tendering, alliance contracting, target cost and cost-reimbursable contracts.



Ghassan Ziadat,
*VP major projects,
McKinsey & Company*

An overdue transformation

In response to the Covid-19 disruption we expect nine shifts to change the construction industry, namely: a product-based approach; specialisation; value chain integration; consolidation; customer centricity; technology; investment in people; internationalisation; and sustainability.

This transformation is likely to occur within the next five to 10 years, and the pandemic will accelerate these shifts. Companies along the value chain need to review where they want to play and assess the impact of these shifts, decide how they want to act on them, and define new business and operating models in line with those decisions.

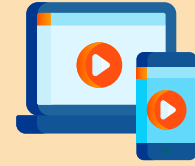


Mohamed Youssef,
*senior vice-president,
infrastructure, Middle East
& Africa, SNC-Lavalin*

A lean culture

The construction industry needs to embrace a transformation process and employ 'lean' design principles. This can be further driven by assigning 'change agents' and 'lean ambassadors' who are interested in learning or applying lean tools and spreading the lean culture within each firm as part of an ecosystem that promotes efficiency and productivity.

Working remotely and managing projects virtually during the Covid-19 pandemic have proven to be more effective and efficient than expected. This means that moving forward, companies will be able to adjust to similar 'lean' design and construction techniques and eventually reduce costs while maintaining quality.



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KEEPING CONSTRUCTION MOVING

Steps taken to get the construction sector through the crisis today will lay the foundations for a better industry tomorrow

Construction companies in the UAE and across the GCC are facing commercial challenges like never before. However, as Covid-19 restrictions across the UAE are eased significantly, construction firms need to analyse the steps they can take to keep going through the crisis, and what actions can be taken to help the industry recover and get ready for what comes next.

The suspension or cancellation of projects will have a significant near-term impact on the cashflow of construction companies.

For example, measures put in place to protect the welfare of workers on site has reduced productivity on day-to-day operations, meaning it takes longer to complete work and to unlock payments.

Corby says quantifying the impact of Covid-19 on project costs and cashflow is essential. "Cashflow visibility is one of the really key areas that contractors should focus on," she says. "Typically, this is done with long-term cashflows, but not necessarily with short-term cashflows. The need to change that is critical."

The construction industry's response to Covid-19 can be split into three distinct phases, says Corby, namely the 'respond' phase; the 'recover' phase; and the 'thrive' phase. During the respond phase, Corby says, contractors should seek to preserve cash by minimising

their overhead costs and settling any outstanding claims.

Contractors should also investigate measures introduced by governments in the region to provide financial support mechanisms and procedures for cash disbursements. It is important, says Corby, for companies during this initial response period to engage in scenario planning and forecasting to prepare for different post-crisis outcomes

Moving into recovery

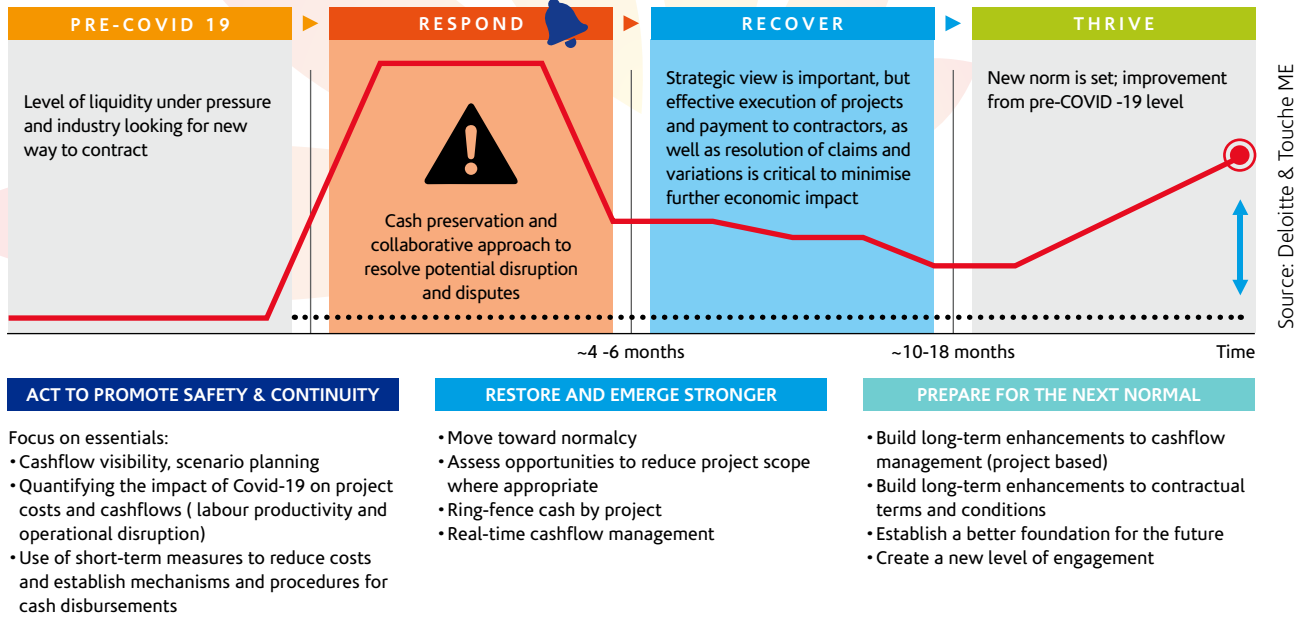
Preserving cash and building closer working partnerships with clients and suppliers will put companies, and the industry as a whole, in a stronger position once the economy moves into the recovery phase of the crisis, which will shape the market for the subsequent 10 to 18 months, says Corby.

While it will be important to maintain a strategic approach to cash preservation through the recovery, says Corby, it is equally necessary to execute projects effectively and pay contractors and suppliers on time, including the resolution of claims.

Even before Covid-19, payment delays were aggravating problems in the region's construction industry, says Corby, and these bad behaviours need to be stopped as construction moves into a post-Covid 'new normal'.

Corby says contractors and their clients should collab-

OVERVIEW OF CURRENT FOCUS AREAS IN THE COVID-19 CRISIS



orate to reduce project scope and costs where possible. She also calls for projects to be 'self-funded', with project finance and cash ring-fenced against the project, while maintaining strong real-time cashflow management.

The new normal for construction will benefit from long-term enhancements to cashflow management as well as to contractual terms and conditions.

Honesty and collaboration

Wail Farsakh says greater transparency and trust is required in regional construction.

"I cannot stress enough the importance of collaboration across the supply chain," he says.

"These are difficult times for everybody, not just in construction but across the world," says Farsakh. "Construction needs to share the pain and adopt a new recipe for [winning]. Minimising the loss for everybody. And the only way to do this is through transparency and cooperating with the supply chain, paymaster and banks."

Farsakh says contractors must apply this transparency internally as well. Business plans should be continuously updated, he says, and firms need to be honest on what can or cannot be achieved, and be prepared to take tough decisions and actions to consolidate operations and reduce costs.

"As contractors, the first thing we need is honesty," says Farsakh. "We need to look at ourselves, at the problem, and address it honestly in order to make difficult decisions during these times."

The UAE construction industry has been under considerable financial pressure for several years as a result of lower oil prices since 2014 as well as a slowdown in the projects market.

The Covid-19 pandemic has amplified this pressures to the extent where it is no longer possible to further defer difficult or unwelcome decisions.

However, the crisis presents an ideal opportunity for the regional construction industry to fix some of the bad practices that have led to so much pain in recent years, and to build a better model based on collaboration, transparency and a better balance of risk and rewards shared between contractors and their clients.

The steps that are taken to keep the construction industry moving through the Covid-19 crisis could provide a blueprint to help the industry thrive once the immediate crisis has passed.

"At the end, the king of it all is cash," says Farsakh. "Especially how we can reserve it and manage it [moving forward]."



This article is based on insights from **Cynthia Corby** (top), construction sector leader at Deloitte ME, and **Wail Farsakh**, CEO at Arabtec

EVALUATING AN INDUSTRY

What are the strengths, weaknesses, opportunities and threats facing the UAE construction sector as it faces a post-Covid reboot?

STRENGTHS



- Capable of delivering complex and bespoke structures
- Providing employment opportunities
- Economic value creation
- Building the country's reputation
- Supporting local talent and industries

MAXIMISING STRENGTHS

- Uniform regulations at national scale
- Update codes regularly
- Aligning local and in-country value targets for industry with national goals
- Forming pool of project parties to regularly collaborate with on similar projects

OPPORTUNITIES



- Digital transformation
- New materials and techniques
- Young graduates
- Sustainable construction processes
- Collaboration among industry stakeholders
- Industry 'voice'
- New business markets

MAXIMISING OPPORTUNITIES

- Regulations to drive digitalisation
- Collaboration tools such as BIM
- Combining expertise with incumbent firms in international markets to increase presence
- Contracting models that enable greater exchange of information
- Transparent procurement and supply chain procedures
 - Standardised components, prefabricated elements
 - Work with academia to identify talent and offer training expertise
 - Continuous project monitoring using digital tools to create actionable insights
 - Reskill workforce

WEAKNESSES



- Lack of innovation and delayed adoption of technology
- Siloed approach with lack of communication
- Lowest-price-wins culture and smaller profit margins
- Unsustainable building practices and high carbon emission level
- Insufficient knowledge transfer from project to project
- Lack of collaboration
- Using value engineering as a way to cut corners with quality
- Initiating construction without complete designs
- Delayed payments and pay-when-paid clauses

MINIMISING WEAKNESSES

- Incentivising sustainability benchmarks; penalising non-performers
- Investment in research and development
- Established long-term pool of suppliers
- Consider both the construction and operations phase in project planning
- Improved payment cycles through open, shared transaction platforms

MINIMISING THREATS

- Alternative project delivery mechanisms such as public-private partnerships
- Permanent and semi-permanent visas for professionals on the basis of experience
- Differentiated product offerings through consolidation and partnerships
- Laws to make digital landscape safer
- Strict health and safety and labour laws
- Building an attractive industry for young talent
- Energy-efficient electricity sources such as solar power
- Closed-loop circular economy principles
- Balanced risk allocation



THREATS

- Lower government revenues
- Growing talent gap
- Transient population
- Fragmented and cut-throat
- Adversarial relationships
- Safety issues
- Impact on environment
- Cybersecurity
- Unfair risk allocation on contracts

TEST OF RESILIENCE

Covid-19's impact on consumer spending demand and government finances may lead to greater challenges for the UAE construction sector in 2021

The Covid-19 pandemic looks set to spur long-lasting changes in the UAE construction sector. The pandemic is compounding challenges for the local contracting community, which was already pressured by low liquidity in 2019.

More than 35,000 homes were added in Dubai during 2019 in anticipation of Expo 2020 Dubai. It was also hoped the now-delayed expo would absorb much of the oversupply in the retail and hospitality sectors.

However, opportunities to win new work appear to be plateauing as property prices face downward pressure and demand wanes for real estate projects such as residences, offices and malls.

Some construction projects in Dubai were suspended earlier this year and, in several cases, contracts are also under review to achieve discounts.

Salary reductions and unemployment caused by Covid-19 could add stress to the oversupplied real estate market, and further dent capital expenditure plans by privately held developers.

The pandemic has expedited the downward trends that were expected as an eventuality in the post-Expo 2020 market, and US ratings agency S&P said in March that real estate developers could record lower margins and more payment defaults given the negative macroeconomic outlook.

Infrastructure spending

Covid-19 has forced a rethink of capital spending on infrastructure projects in the GCC, and the UAE is no exception.

While the majority of critical ongoing infrastructure schemes in the region will be unaffected by the pandemic in the long term, the financial uncertainty caused could affect non-essential project spending.

Dubai has reportedly asked state departments to delay new construction projects and value-engineer ongoing schemes to save costs. Similar cash conservation measures have been rolled out in Saudi Arabia, Bahrain and Oman.

These reductions do not mean government spending on infrastructure projects will stop in 2020 or beyond. Demand for roads, bridges, refineries and power plants will continue to generate project opportunities for regional contractors.

However, with private sector demand also expected to decline as governments seek savings and reprioritise their spending, contractors that do not specialise in the transport, oil and gas or utilities sectors may feel a notable drop-off in opportunities during 2021.

This trend is visible in Dubai, where projects worth a total of \$7.8bn were completed during the last quarter, and \$2bn of contracts awarded during the period, according to data from regional projects tracker MEED Projects.

The \$5.8bn net difference between completions and new awards was in line with the underlying trend of negative growth witnessed in the emirate since the fourth quarter of 2018.

The figure underscores the challenges that Dubai's contractors and consultants have faced as they seek to replace the pipeline of work they completed in Q1 2020.

Covid-19 is likely to be only a blip in the road to achieving the UAE's long-term goals as enshrined in its Vision 2021 and 2071 programmes. These mandates will continue to create work opportunities for private sector stakeholders in the country.

In April, the Abu Dhabi Executive Committee formed an infrastructure committee to accelerate projects and provide the private sector with more clarity about the procurement of major infrastructure schemes in the capital.

Dubai's Roads & Transport Authority (RTA) also announced plans to launch public-private partnership (PPP) projects in the city. Investors will be invited under build-operate-transfer agreements to fund the construction and operation of 1,550 bus shelters over the next three to four years, and share the proceeds of advertisements with the RTA under a 12-year contract.

Power plants and bus shelters are the type of infrastructure projects that currently make most sense to develop under PPP models in the UAE. However, it is likely that, as is the case in other parts of the GCC, hospitals, schools and road projects too will be developed through private sector collaboration in the future.

Moreover, while neither development has come in response to Covid-19, the timing of their launch will provide optimism for cash-strapped local contractors forecasting their order books for 2021 and beyond.

Covid-19 has inspired introspection in the typically traditional construction industry, compelling a review of health

and safety, technology and business continuity plans. Notably, the pandemic has also forced stakeholders, particularly contractors, to revisit existing supply chain models.

China will remain an important trading partner for economies in the GCC, and its price point will remain a competitive advantage in the declining post-pandemic economy.

However, in the medium term, contractors may well explore new international markets, especially in Asia, to ensure they have back-up import partners in case a second wave of Covid-19 gains traction globally.

Low-liquidity conditions are at the heart of the crisis faced by local construction firms amid the pandemic. Private sector investment may be stunted as Covid-19 threatens to dent consumer spending power – and, by extension, real estate demand – in the medium to long term.

While the prevailing market downturn is indeed a formidable business challenge to overcome in 2020, for many real estate clients, consultants and construction companies in the UAE, 2021 could pose the true test of survival.

UAE construction and transport projects in the pre-execution phase

Project	Client	Net project value (\$bn)	Project status	Completion year
Al-Maktoum International airport expansion: phase 2 – stage 2	Dubai Aviation Engineering Projects	17	Study	2045
Khalifa Industrial Zone Abu Dhabi: phase 2	Abu Dhabi Ports Company	7.8	Design	2030
Al-Maktoum International airport expansion: phase 2 – stage 1 (concourse building)	Dubai Aviation Engineering Projects	7	Design	2027
Firdous Sobha	Government of Umm al-Quwain/Sobha	6.7	Bid evaluation	2025
The Valley	Emaar Properties	6.6	Design	2022
Mina Rashid redevelopment	Emaar Properties/DP World	6.5	Design	2024
Abu Dhabi Al-Ain hyperloop	Department of Municipal Affairs & Transport	6	Study	2028
Lusailly	Emaar Properties	4.9	Design	2025
Dubai to Abu Dhabi hyperloop: phase 2	Roads & Transport Authority	4.2	Design	2030
Al-Maktoum International airport expansion: phase 2 – stage 1 (west terminal)	Dubai Aviation Engineering Projects	3.6	Design	2027

Source: MEED Projects



SUCCESSING WITH FINANCING

Restructuring credit in accordance with the current environment is key to the survival of contractors and their projects, says Mashreq's Mohammad al-Shouli

Project finance and cashflow remain the most critical challenge in this crisis, as construction firms, not just in the UAE but around the globe, question their survival over the coming months.

Lack of financing and accounting discipline by contractors in general compounds their struggle to secure bankrolling during periods of contraction in the economy. The infamous 'need to borrow', generally with no clear structure, has taken down many contractors during such difficult cycles.

Due to the Covid-19 pandemic, projects under way are experiencing delays in achieving completion due to interruptions across the supply chain. Productivity has taken a hit as contractors adhere to social distancing guidelines on site. Operational costs have

risen as money is diverted to mitigate the risks of the novel coronavirus.

Meanwhile, developments in early stages find themselves struggling to raise debt in the manner the project sponsors had originally anticipated, resulting in several projects either being halted or shelved entirely.

Effective communication

Communication channels between construction companies and their lenders are more crucial now than ever before. Such communication needs to be candid and focused on the desired end-results that safeguard the interest of both parties and allow for the completion of projects on hand with the best possible outcome.

“When the music stops, such projects suffer tremendously due to a shortage of new inflows to cover the earlier withdrawals outside the project cashflow”

Restructuring existing lines of credit, taking into consideration the changing tides, are necessary for the survival of contractors and their projects. Banks are very pragmatic today more than ever to reach this desired outcome.

Ring-fencing

One observation that lenders have made both during the financial crisis of 2008 and the current pandemic crisis is that contractors that ring-fence the cashflows of their projects are likely to fare better and raise finance for those projects faster.

This is where the contracting finance model, a term used by lending banks, comes into the picture. The model is dependent on the ‘what’:

- Initial project cashflow;
- Project execution plan;
- Legal contract defining scope, time, cost and responsibilities.

Once the above are analysed, the required financing instruments or the ‘how’, will be structured around:

- Contractual warranties that need to be provided by the contractor (performance, advance payment and retention bank guarantees);
- Procurement requirements, be it materials or equipment (documentary credit);
- Temporary cashflow deficits, which arise due to the timing of incurring cost and the receipt of payment from the project owner as per the terms of the contract (short-term loans or overdrafts).

For the ring-fencing to work, all payments made or received should be within a specific bank account that is used only for the purpose of completing this project. Upon completion of the project, the account will cease to operate.

Such an arrangement will require the contractor to assign the proceeds to the account held with the lender and for the project owner to recognise and accept the

same, ensuring the payments are only made to the project-specific account. However, the refusal of some project owners to accept project proceeds assignments makes it difficult for contractors to source the right cashflow financing from their banks.

Under the above model, banks will try to extend all possible support for project completion, which will result in the return of the guarantees and rundown of exposure. Banks will offer support if the source of repayment is clear and identified; they will offer more support if payment is assigned and made to the project account.

This arrangement also helps contractors and their finance teams maintain the discipline of ring-fencing projects and avoid the malaise of using a specific project’s funds to shore up other struggling projects, which ultimately leads to the failure of the first project.

When the music stops, such projects suffer tremendously due to a shortage of new inflows to cover the earlier withdrawals outside the project cashflow.

Therefore, it is an ecosystem that needs to exist if we are to protect and enhance the performance of this crucial industry. All parties need to realise that no one can operate in isolation, and a failure by any party is a failure of the project.

Time for change

Now is the time to set this practice in place and work with regulators to facilitate, maybe mandate, the assignment of project proceeds to the bank that is issuing the guarantees. It is also time for us bankers to reconsider what burdens we place on the contractor: lopsided contracts, delayed certifications and the size, text and tenure of project bank guarantees.

This is a conscientious decision we need to make, which will allow us to start addressing the real issues constraining the evolution of this industry: writing fairer contracts; promoting the use of technology; and building sustainably. Now is always the best time to change.

Going forward, any planning after securing projects under execution needs to factor in the possibility of a second wave of the Covid-19 pandemic. We all hope we do not face such a calamity again, but if it does happen, we need to be prepared for it. Learning from the existing crisis is the most important outcome of our situation today.

ABOUT THE AUTHOR



Mohammad al-Shouli is the executive vice-president and global head of contracting finance at Mashreq Bank

THE RISE OF DRONES

With the new norm of reduced human capacity on work sites, the time is ripe for construction players to embrace digitalisation



Rabih Bou Rashid, managing director of Falcon Eye Drones

What can UAE construction firms gain by adopting digital technologies in day-to-day operations?

The short answer is improved efficiency in every aspect of a construction project. Efficiency in time and money. Today, digitising has become cheap enough to be integrated in daily activities. Most project owners today are blind to mistakes happening every day on sites; this can be anything from inaccurate placement, cracks, holes and many more; there is no way for them to avoid these mistakes without extremely costly supervision and quality control.

Could Covid-19 be the turning point for UAE construction?

I very much believe so. With the new norm of social distancing and reduced human capacity on site, we are increasingly seeing a need for using tools to help with that. Instead of a team of four and five managing a site, a one-person team equipped with a drone can cover the same job. Drones can even assist in real live monitoring to make sure all employees are observing the new and old rules.

The current situation has highlighted to project owners and managers the need for drones when forced to work with a reduced capacity. If they had already had drone monitoring services in place, they wouldn't have been affected as much.

How can cash-strapped construction firms be convinced of the long-term benefits of digital solutions?

Honestly, with the situation being what it is today, they can't afford not to invest in drone technology. It is a money-saving technology that has proven its efficiency over and over again. The technology helped construction companies increase their reporting turnaround by 25 per cent and cut down site time wastage by 18.4 per cent, reduced rework massively and cut down the time it takes to survey a site by 98 per cent. All of this translates to money savings.

What do technology providers such as Falcon Eye Drones need to make their solutions widely adopted in the construction market?

Today, the biggest hurdle is probably awareness; the technology is fairly new, and as with many new technologies, there is always resistance at this stage. The second hurdle is government and regulations. While in the UAE, the rules are clear and efficient and very well-implemented for general drone use, they could be more lenient on construction sites as the drone is within a private property, not invading anyone's privacy and flying at a low altitude and not invading commercial airspace.

Today in the UAE, it is fairly complicated to operate drones on construction sites and it is creating a barrier for firms to implement drones on a daily basis. The way I see it, regulators should enforce drones on construction sites as an extra tool to provide safety and security on top of trackable building information management data.

SAFEGUARD YOUR WORKERS

The health crisis caused by Covid-19 has reinstated the value of the construction industry's most critical resource: people

How do you socially distance workers on a construction site? That is the question contractors have been struggling with ever since the Covid-19 virus began its deadly spread around the world and in the UAE.

Besix, the largest Belgian construction company operating in the Middle East, found their answer in high-technology hard hats.

Developed by UAE startup WakeCap, the patented-wearable is integrated into existing personal safety equipment including workers' hard hats – and ID cards for those who do not use hard hats – to visualise, track and record workforce activity in real time.

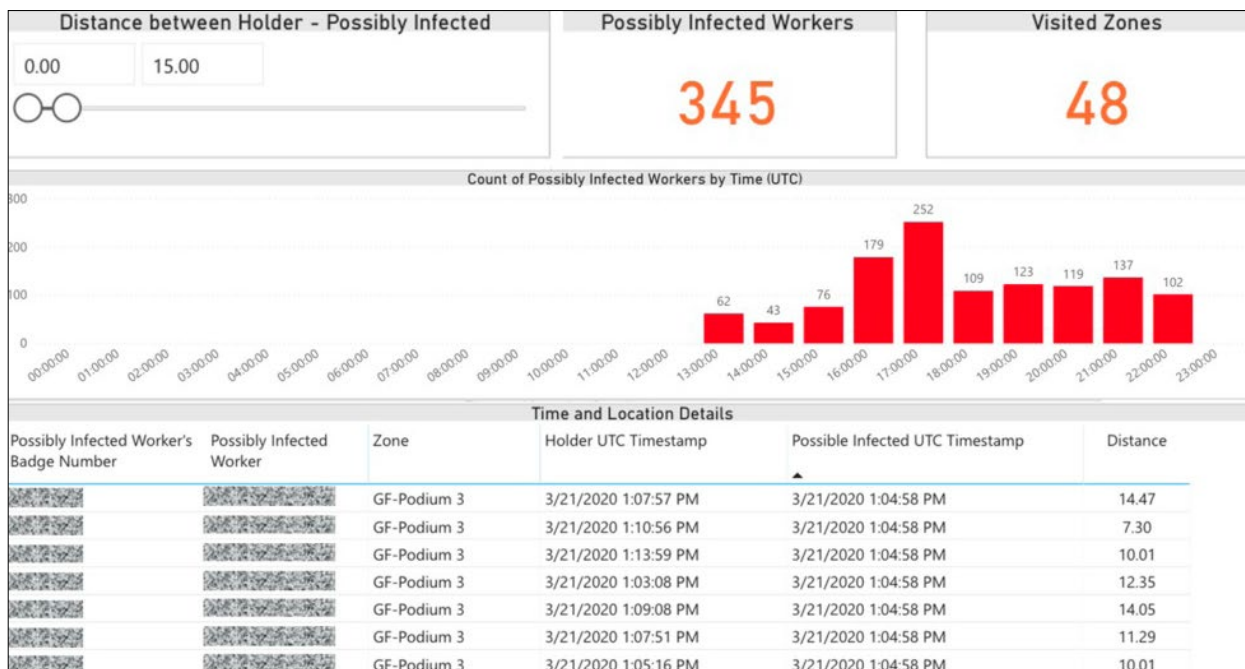
Besix was already using WakeCap's internet of things (IoT)-based enterprise solution to improve efficiency on work sites.

"The helmet sends out a signal every three minutes through which we record the location of the worker at that moment in time," says Ishita Sood, WakeCap's co-founder and chief operating officer.

"Before Covid-19, our use case was to record attendance and monitor workers to improve efficiency. But now the client can also access our dashboard to instantly generate a report to contact-trace all the people who have been in close contact with a worker diagnosed as Covid-positive. For example, you will immediately get a list of all the workers patient zero has come in contact with within a distance of two metres for more than 15 minutes."

Constructing such a list is "not easy", Sood says, and would otherwise involve a site manager having to manually go over records from prior weeks to identify team members and locations. Such a process would take longer and relies on "making the right guesses", she adds.

"You know the team was working on the first floor, but what if the worker went to the second floor to rest or meet a friend?" says Sood. "We connect the entire site so we know the location of the worker at any given time. This also helps when deciding on areas to sanitise. Right now, [contractors] sanitise the entire site, but when you have fewer cases you would want to sanitise specific areas."



WakeCap's contact tracing smart helmet and dashboard allows the site operator to track workers that may have come in contact with a Covid-positive patient, improving productivity and minimising downtime

Gulf states are heavily reliant on the constant supply of blue-collar migrant workers, primarily from nearby South Asian nations, to bring their trillions of dollars-worth of masterplans to life.

In the UAE, where construction has been classified as 'vital' to the economy, sites have been exempted from lockdown restrictions to remain operational upon obtaining government permits and implementing strict safety measures. However, positive Covid-19 cases among workers have forced many construction sites to temporarily close.

"Many sites are being shut down, or are [running] without 20 to 30 percent of their workforce," Sood says.

"I've spoken to 10 to 12 contractors so far and all of them have at least one site with cases, and some of them have multiple sites with cases. A lot of projects are now getting delayed [because] at any given point, there are 200 to 250 workers quarantined ... but if they have a tool that can give them a list of just the 50 workers in contact with patient zero, they wouldn't need to quarantine all 250."

Helpful technology

Luis Miguel Monteiro, project director at Besix, says WakeCap's tool has provided the contractor with a huge amount of data to help take the "best decisions in terms of logistics, crowd monitoring and transportation" during the highly contagious outbreak.

"Within the current framework of where we are, it's natural to have some cases considering we are dealing with so many workers," says Monteiro. "As soon as we started having the first infected cases, implementing all the quarantines and separating people, there [was] a big question mark in terms of how many people do we need to quarantine. There was no clarity on how to do things because this was new for all of us.

"[WakeCap] showed us that they had developed a dashboard that would allow us to understand how and where and with whom a certain worker was for a certain period of time ... to [precisely] identify and isolate a particular crew instead of isolating a whole section of the job."

WakeCap's technology has always worked as a contact-free attendance system that avoids the use of access cards or fingerprint sensors.

"It's not possible to enter a site without a hard hat," Sood explains. "If a worker comes on site he's automatically checked-in and checked-out, and there's no need for the workers to stand in line or wait anywhere in close contact with each other."

The system also makes it possible to monitor occupancy, she adds. For example, if it is preset that



only 50 people can enter a lunch area during break time, then the system can alert a site manager if that number has been exceeded.

The UAE government has been sterilising labour accommodations, locking down high-density areas and running mass free testing to screen hundreds of thousands of workers as part of efforts to battle the virus.

Monteiro says the success of the technology can be measured by the reduction in the number of cases and the number of quarantines.

"[As] a result of a series of actions that we have taken, which have been supported by the fact that we have data from WakeCap, we were able to segregate and to apply social distancing – and the cases have been dropping and are at a minimum," he says.

"It is extremely important for construction companies and for the market as a whole that we stay productive and efficient. We do understand that the Covid-19 crisis created a panic around the labour force, but slowly, I believe, with all the actions we have been taking, we have reduced the public health fear factor, and the psychological and safety fear factor."

Monteiro adds that having data available to demonstrate and highlight to the workers that they are on a safe project is important to their psychological safety as well as to the wider community.

THE WAY AHEAD

Fairer and more flexible transactional arrangements between parties will help projects survive local as well as global risk events



Christopher Seymour, managing director of Mott MacDonald Middle East and chairman of RICS Mena Advisory Panel

01 What lessons can the construction industry take away from Covid-19?

We have seen that projects in which fairer, more flexible transactional arrangements exist between project parties deal far more easily not only with global events on the scale of a pandemic but also with more local risk events that happen during the lifecycle of many projects.

A more even spread of risk, the use of collaborative contracts and fairer performance terms create value not just for the parties involved but also provide predictability of programme and cost, and hence more certain outcomes.

This can also prevent the tendency to delay the resolution of problems and claims until near completion of the scheme – this creates a large risk area that will only be determined at a future date. That future date, in some instances, has coincided with Covid-19 and both parties have had less resources to conclude the issues. This has been a learning point.

02 What are the challenges facing consultancies in the current environment?

Cashflow for the service industry is always top of the list since the majority of the costs are personnel-related and cannot be held up while invoice payment is not always so timely.

We understand it is not only the supply chain going through challenges during a global crisis, and the worst thing we can do is to stop engaging with our clients and talking through the difficulties – we believe there is a solution to everything.

Cash, however, only deals with the immediate challenge and in the medium to longer term, new project flow will become critical in both the consultancy and contracting industry. We see good news in the shape of successful bond issuances by most countries in the Gulf and we will wait to see if this translates to material awards for new assets and services in the next two quarters.

The other key aspect is developing and retaining talent, and in particular we need to work to make the industry more attractive to the younger generation.

What does the future of construction look like from the point that we are at now?

The world will emerge from the pandemic with an overall weaker consumer and higher government debt. We expect to see a reduction in construction work arising from those segments that rely on spend, such as lifestyle, tourism and leisure, in addition to non-critical public sector assets.

During this period, the construction industry will need to re-gear for the new reality of potentially fewer projects, faster turnarounds and more innovative funding solutions. Major infrastructure schemes will still go ahead, but there will be increased scrutiny on demand assessments, value for money and also consideration of risk.

Risk will be an emerging headline in all schemes at inception. The pandemic has highlighted the vulnerability of the world economies to global risks and this will feed into programmes and major projects. Clients will demand more certainty and are likely to be open to the consideration of fairer, more balanced transactions in return for more resilience and predictability of outcome.

What are some of the trends that will shape UAE construction moving ahead?

We can no longer discuss the impact of technology as a broad trend in the industry since all innovations and most trends have a leading technology component in their DNA. We will, however, see the creation of new assets plus maintenance and operation being completed faster with more accuracy and potentially at a lower cost due to the use of technology across the entire work flow.

The UAE has always been at the forefront of showcasing digital trends including 3D printing, use of robotics and so on, but it will take a market shift and also a client shift to fully embrace some of the developments that are available.

Sustainability is likely to be a key driver post the Covid-19 pandemic as evidence is showing the consumer is becoming more sensitive and aware of the fragility of the planet that we inhabit. This is likely to translate into more environmentally-focused designs and hence construction. Progress has been made pre-Covid 19 and we expect that this will now accelerate.

“... The construction industry will need to re-gear for the new reality of potentially fewer projects, faster turnarounds and more innovative funding solutions. Major infrastructure schemes will still go ahead but there will be increased scrutiny on demand assessments, value for money and also consideration of risk”

What will the role of bodies such as the Royal Institution of Chartered Surveyors (RICS) be in a post-Covid-19 world for construction?

The role of professional institutions has always been to provide support for members, market guidance, intelligence and thought leadership. We don't see this role change radically in the post-pandemic world. We do, however, expect the influence of such bodies to increase as governments seek guidance and support or data from independent organisations, which are connected to the market by an active and expert professional network.

The opportunity of the data capture from this network that can be turned into information and thus knowledge is considerable.

RICS will continue to develop and promote the use of standards in government to create a transparent, consistent and secure marketplace that will promote foreign investment and create a strong economy going forward.

LENDERS SEEK COLLABORATION

The rapid response of governments and banks has sustained the economy through the lockdowns, but Covid-19 is creating new challenges for banks

While hardly anyone has escaped the negative economic impact of Covid-19, the Middle East has been hit by a double impact.

The first was the health crisis driven economic downturn impacting sectors such as tourism, transportation and consumer activity as a result of the lockdowns and travel restrictions introduced to combat the health crisis.

The second impact was the result of the sharp fall in oil prices, which reduced government incomes, leading to widening fiscal deficits and the need to raise more money to manage these deficits.

This has left banks in the region grappling with two issues. One is the drying up of liquidity in the market as investors seek safer avenues such as treasury bills and sovereign bonds. The second is credit quality and the impact of credit risk on businesses in the region. The low

interest environment has added to the banks' woes as net interest margins are put under pressure, impacting their profitability apart from rising risk charges.

On the first issue, both governments and central banks across the region responded to the crisis very quickly and robustly, stepping in with enough stimulus to ease liquidity concerns. In doing this, they provided the opportunity for banks to lend to borrowers by injecting money at a lower rate of interest.

Banks now are working with customers and businesses to help them overcome this crisis and adapt to a rapidly changing economic environment.

Demand for credit is slowing because most businesses are scaling back their expansion plans and planned new projects because of the crisis. But despite this, companies still require credit to tide them over through the current cashflow issues because their revenues have typically dropped by about 30-40 per cent over the



“Demand for credit is slowing because most businesses are scaling back their expansion plans and planned new projects because of the crisis”

past few months. Companies need support from financial institutions in order to defer their payment liabilities over the next three to six months, or until the market recovers to pre-Covid-19 levels.

The steps collectively taken by UAE banks through the UAE Banks Federation have been commendable. At Mashreq, we have conducted a portfolio review and extended repayment terms where people genuinely need support.

We have done this across the retail portfolio as well as the corporate portfolio, where people's salaries are delayed, or are being reduced and their repayment capacity is affected. So we are fully embracing the individual borrowers and giving them time to work with us and pay as the market improves.

The construction sector in the region has been particularly affected by the impact of lower oil prices on government finances.

Construction and contracting in the GCC is driven largely by government investment. So the low oil prices directly affects the construction contracting sector as investment slows down and new projects or works are delayed. Similarly, payments can sometimes be delayed, leaving contractors facing liquidity issues.

Construction cashflow is also being hit by the slower execution of projects as a result of Covid-19. Construction is a labour-intensive industry, where a large number of workers are living in labour camps. The impact of Covid-19 in labour camps can affect the workforce and the ability to execute contracts on time.

Real estate downturn

Meanwhile, on the private real estate side of the construction market, there was already a slowdown happening before the pandemic because of growing oversupply. As a result, some real estate projects have slowed down, while others have been put on hold. This will have a profound impact on the real estate sector.

The hospitality segment, meanwhile, is one of the worst-affected sectors. Hotels are facing very low

occupancy, and restaurants, normally popular among tourists buying food and beverages, are suffering badly. Restaurants across the UAE are now working at a very low capacity.

The time to recovery is very important for the revival of some of these industries and, for construction and real estate, a lot will depend on the recovery of the oil price.

On the contracting side, Mashreq is working with customers to defer some of their commitments in cases where they do not get paid on time and there is a delay. The normal payment cycle of 90 days is being stretched by the project owner delaying payments. In that scenario, we can step in to help the construction company by extending its repayment terms. We are actively supporting these customers and working with them.

Contractors are also facing lower volumes of work so their business capability and turnover have declined. But as their revenues fall, they will have to work on more and more contracts in order to maintain their workforce. However, with lower volumes of projects, they will have to look at cost reductions.

Reassessing strategies

It is inevitable in this market that there will be an impact on credit quality because some of the small and medium-sized customers will be hit more severely than others. And some sectors will be affected more than others. So banks are gearing up for a fall in credit quality, and how to manage it. Based on stress testing, banks are planning the risk charge this year.

Mashreq is taking proactive, remedial measures and is conservatively looking at its business plan this year.

It has undertaken various reviews of its portfolio and has implemented International Financial Reporting Standard 9 (IFRS9) tools to assess the impact on the quality, credit quality and the risk charge.

Mashreq sees opportunities to strengthen relationships in this market by working closely with our customers. This is a time to show solidarity. We expect a good partnership to develop in these markets and we are proactively working with all of our customers across both retail and corporate segments.

ABOUT THE AUTHOR



Roy Philip

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PLAYING THE PART

Academic and research organisations can work together to help the construction industry recover in the aftermath of Covid-19



Ammar Kaka, provost and vice-principal of Heriot-Watt University Dubai

What will the role of higher education institutions be in the post-Covid-19 world?

Higher education institutes will continue to play an important role in the post-Covid-19 world. It is likely there may be changes in the way education is delivered, with several universities looking to adopt a blended learning approach, at least in the short term. Regardless, higher education institutions will continue to stay relevant, identify skills gaps and help people build the right skills to help countries improve economic prosperity – something perhaps more important than ever before.

Additionally, we will also see an increased trend of upskilling. With jobs under threat as a result of the pandemic, we will see candidates looking to learn new skills in order to stay relevant in a very competitive marketplace – an example is acquiring the skills now needed to harness the power of the latest digital technologies. Upskilling can also help future-proof jobs by increasing employee value to the employer. Equally for employers, upskilling employees is a far simpler way to retain employees in a changing environment than to hire new talent.

Finally, innovation and entrepreneurship will become more important than ever before as they will play a crucial role in economic recovery.

Is HWUD gearing up to train its engineering and architecture students to be cognisant of the impact of Covid-19?

Best practice post-Covid-19 is still an unknown. However, Heriot-Watt is conducting research into Covid-19 across a variety of domains, including building design and associated utilities.

Our programmes are constantly evolving and revised based on the needs of the market and requirements of future employers, and we will adapt and change programmes to ensure all engineering and architecture students are fully prepared and cognisant of a post-Covid-19 built environment.

Additionally, we also emphasise the need to develop soft skills such as creative thinking, problem solving, developing a positive mindset and resilience in times of uncertainty, all of which are as critical to success as job-related skills themselves.

Do academic and research organisations have a role to play in helping the construction industry cope with the risks of Covid-19?

They most definitely do. We believe it is more important than ever that academic and research organisations work together to help assist the construction industry recover in the aftermath of Covid-19.

Industry partners possess practical experience but are also the ones faced with challenges including those brought on by the pandemic. For example, they need to be far more efficient and competitive in order to secure work during a downturn. They should be able to demonstrate to clients that they possess resilient supply chains and can manage worker welfare to sustain work without delays. They should be globally connected to grab opportunities in wider markets and will have to be highly innovative to drive demand for their products and services.

Academic organisations on the other hand have the ability to study and come up with solutions to overcome these challenges as well as prepare the next generation of qualified construction professionals. Therefore, academic and research organisations are perfectly positioned to drive internationally recognised research and industry engagement as well as provide a creative environment for collaboration between multi-disciplinary research teams, industry and the UAE government to solve challenges facing the construction sector.

Tell us more about the Heriot-Watt Centre of Excellence in Smart Construction (CESC)

CESC was set up in September 2019 to provide a creative environment for collaboration between multidisciplinary research teams, industry and UAE government to react to and solve challenges facing the construction sector. Research and industry engagement is even more prevalent as we move towards the post Covid-19 world. Our industry-led research will focus on three themes:

- **Enabling technologies:** Post Covid-19, remote working and digital collaboration tools will become the norm. CESC will promote and share information relating to the latest trends and technological developments leading to improvements in productivity, quality, health & wellbeing and reductions in project variations, duration and cost.
- **Sustainability:** Prior to Covid-19, close to 40 per cent of global energy-related carbon emissions being released from buildings, (Source: World Green Building Council). However, this figure has dropped during the lockdowns imposed due to the pandemic. CESC will continue to work with the construction industry post Covid-19 to improve social, economic and environmental sustainability of the construction industry.
- **Health and safety:** The wellbeing of all employees post Covid-19 is even more essential through social distancing, providing the highest standards of hygiene and cleanliness along with safety equipment protocols. CESC will help drive forward the importance of these changes.

Could this crisis present an opportunity for the construction industry to redefine the way it delivers projects?

Yes, despite the unprecedented times Covid-19 has presented the construction industry with an opportunity to drive much-needed change. Traditionally, the construction industry has been slow to adopt digital transformation, but post-Covid-19, this transformation will no longer be an option but a necessity. Restrictions on movement put in place in order to counter the pandemic have also accelerated the digital transformation process itself, as people strive to achieve the same productivity and outcomes as they work remotely rather than from office.

Digital collaboration tools such as building information modelling (BIM), 4D and 5D simulation and integrated digital-twin solutions are more likely to be used from development of project concept to commissioning. Going digital also presents the industry with opportunities for a more innovative approach to building design considering requirements such as social distancing and building capacity, not just for new builds but also adapting current buildings to ensure guidelines are met.



INNOVATION AND EFFICIENCY

The unprecedented uptake of digital solutions during the pandemic lockdown could open the door to wider use of technology in construction

Covid-19 could be an event that “tips the industry over to increased productivity and better project outcomes driven by technology”, says Richard Humphrey, vice-president of construction product management at US-headquartered Bentley Systems.

Already under pressure to deliver projects at a low cost, the Covid-19 pandemic is forcing contractors and consultants to find efficiencies both at the construction phase of a development and in running costs for the end-user.

But despite the availability of technological solutions to many of the efficiency issues facing the sector, such as incomplete, badly specified designs, poor communication and a lack of collaboration, the construction industry in the region has shown resistance to innovation.

“There needs to be a catalyst for change,” says Humphrey, “for the industry to realise that the value of changing the way we work is done via technology adoption.”

With the unprecedented uptake of digital solutions for remote working and online education during the lockdown, the Covid-19 crisis could be the event that drives this change.

One common contributing factor to project overruns is starting construction with incomplete and poorly-specified designs. This practice, typically demanded by real

estate clients wanting to open their properties as early as possible, leads to errors and costly design changes during construction. Estimates for the cost of rework on projects range from 6 to 15 per cent of the total budget.

BIM technology

In recent years, the region’s construction industry has seen a rapid increase in the use of building information modelling (BIM) technology on projects, and many people say BIM is the key to eliminating some of the problems in the industry.

BIM provides a central design platform that can be accessed by stakeholders throughout the lifecycle of a project to improve communication and collaboration, minimise clashes, highlight errors at an early stage and streamline scheduling and procurement. But BIM technology does not just deliver better efficiency.

With ongoing social distancing measures to prevent the spread of Covid-19, contractors may have to reduce the number of workers on site. Using 3D modelling along with drones and sensors to enable virtual inspection, progress tracking and site monitoring along with collaboration platforms can allow more staff to work remotely.

“This practice will drive efficiencies,” says Humphrey,

The use of Design for Manufacture and Assembly (DfMA) has been accelerating over the past few years as improvements in manufacturing have finally created a commercial advantage to the use of offsite componentry. The advantage in health and safety has not been as well publicised. The facts, however, have always been there: the more that can be completed off site, the lower the health and safety risks in the project as a whole.

Covid-19 has brought this sharply into focus and so we are likely to see more momentum behind this trend. The overriding importance, however, is to create a market since without it the supply chain will either be weak or non-existent. Thus it is up to consultancies and clients to embrace the DfMA option early in the project.

We are now seeing a number of offsite options available in the Middle East market, which allow clients and design teams to make informed choices of which system, pod or pre-engineered component is appropriate for their project. The challenge will be one of volume and in a smaller or slower market this may delay the adoption of DfMA solutions in the short to medium term.

Christopher Seymour, Mott MacDonald

“as the cost of maintaining a large staff on the job site is reduced and activities are instead coordinated with the use of live feeds from the field linked to digital models, providing real-time data in the context of the project with site maps and 4D models.”

In conjunction with 3D building models, software can be used to simulate crowd movement, analyse foot traffic and optimise space utilisation to create an environment that minimises overcrowding and limits the spread of infection.

Manufactured solutions

Another major cause of inefficiency in construction is the use of overcomplicated, bespoke designs. This can lead to errors, over-ordering and additional man-hours on site.

The solution is to be found in modular construction. The concept of prefabricating repeat elements taps in to the efficient, streamlined processes of the manufacturing industry and can see the off-site production of key construction components such as structural columns, services pods or completely fitted-out building units, which can be then be transported to site and

assembled quickly, using less manpower and with less material waste.

Modular construction processes are increasingly being used across the region as a quick and efficient way to provide the housing, schools, medical facilities and infrastructure urgently required by the region's rapidly growing population. The Covid-19 crisis could accelerate the use of this cost and labour-saving building method.

As the region emerges from the Covid-19 crisis, health and welfare concerns for construction workers and for building occupants will become a competing priority. Social distancing measures, air quality concerns and remote working will test the construction industry's capacity to adapt and evolve.

“Climate change forced us to start adopting sustainable design. And now Covid-19 has highlighted the vital importance of health,” says Ghassan Nimry, director at local engineering advisory firm Eco-Structures International.

The disruptive influence of climate change and now Covid-19, is increasing demand for new technology, particularly in the heating, ventilation and air-conditioning (HVAC) sector, where manufacturers have been quick to innovate.

Sweden's TermoDeck, for example, has developed an HVAC design that uses the thermal mass of hollow-core concrete slabs that it says can reduce the AC chiller requirement of a building by 50 per cent.

Not only does this makes a building more efficient to run, says TermoDeck, but it increases the fresh air component in a building's air mix. The concrete core interior is alkaline, which inhibits microbe growth and a filtration unit can purify the entire air volume.

“We see this crisis as a perfect opportunity to rethink old practices and employ efficient and creative ways to improve how we build so that we can live better and healthier,” says Nimry. “We see this market absorbing the shock but emerging stronger and leaner. A few conservative developers and their architects and engineers will take a wait-and-see approach.

“But the innovative developers will take the first-mover advantage and build for this new paradigm combining sustainability and health.”



This article is based on insights from **Richard Humphrey** (top), vice president construction product management at Bentley Systems, and **Ghassan Nimry**, director at Eco-Structures International



LESSONS FROM COVID-19

What will the new normal look like for the UAE construction industry after the pandemic dies down and how can companies cope up with the change?

When Covid-19 first arrived, its impact was quickly felt across the UAE and its construction industry. The initial reaction was centred around project viability – should we keep going?

Most affected were speculative projects and those in the early stages of design, with many decisions made to postpone and reassess at a later date.

The government response was swift. The UAE is already well-known for adapting quickly to changing market conditions and the Covid-19 pandemic has been no different. Reflecting on the past four months, there are lessons here, both for the UAE construction industry as well as the wider economies that are looking to restart their construction sectors.

Whether Covid-19 has been the catalyst for wider industry change in the UAE has yet to be answered. There is certainly a great deal of talk taking place, but actions taken beyond the pandemic will be the true barometer.

Construction in the UAE has largely been considered a traditional industry. Yet, as a vital sector, construction sites were exempt from the restrictive measures put in place and the ability to continue site activities and deliver projects was the immediate focus of attention.

Tough questions

The pandemic has provided a spotlight on how we can maintain operations. It has also raised tough questions and challenged the status quo at all levels. Do we need everyone in the office or on site? Do we really need that report or indeed a face-to-face meeting?

Covid-19 has forced us to review and change processes and practices that are no longer feasible in the current environment. Levels of physical interaction have been reduced, with teams turning to digital platforms to communicate and collaborate.

To date, the biggest use of technology has been seen in how we maintain a collaborative approach to a project's

design stage. Teams are being far more interactive in a virtual environment and making better use of the tools that, for the most part, already existed.

The wider drive to embrace digital in project delivery began before Covid-19. Future industry change will be driven not just by technology, but by behaviours. Is there sufficient confidence in a digital response to construction delivery as opposed to physical presence on a site, or is it merely a stakeholder management tool? As measures begin to relax, it remains to be seen whether clients will push for a return to the pre-Covid-19 ways of working.

Working off site

Movement restrictions and social distancing have challenged how we deliver site-based activities. Elements of offsite manufacturing (OSM) exist, although uptake in the UAE has been slow. This could bring into play further adoption of pre-fabricated components. It is an approach to construction that does already feature in the UAE, albeit currently outweighed by more traditional methods.

The need to explore how we move materials and equipment to and around sites will undoubtedly inform the direction of travel, considering the number of people on a site, along with the extent of interface needed between trades. This will undoubtedly vary across differing asset typologies.

Improving safety

Overnight, the UAE construction industry had to figure out how to 'coexist' with Covid-19. Improving health and safety (H&S) has been a large focus for the industry in recent years, but now Covid-19 has widened the focus on H&S in the 'workplace' beyond the physical safety of the building site and into the wider wellbeing of site operatives.

Standards will need to be revisited, particularly in the absence of a vaccine. And while we have experienced examples of good progress already, an industry-wide change will be required to bring consistency in H&S and wellbeing standards.

Securing supply

As Covid-19 leaves its mark across the globe, the impact on the supply chain in the UAE has increased. With international materials becoming less readily accessible, attention has turned to local sourcing where possible, to allow projects to continue.

This has been aided by the greater trend in recent years towards locally manufactured products and materials, and has certainly helped minimise the impact on ongoing projects in the current environment.

"Whether the Covid-19 pandemic has been the catalyst for wider industry change in the UAE has yet to be answered. There is certainly a great deal of talk taking place, but actions taken beyond the pandemic will be the true barometer."

It has also prompted a wider industry debate on business continuity measures needed to minimise project reliance on overseas materials. There is undoubtedly a commercial implication to such an approach, and the challenge will be in striking the optimal balance between risk and budget – a conversation that is just beginning.

Contractual provisions

Many construction contracts contained no provisions for a pandemic or remote working. In the past few months, clients, contractors and the wider supply chain have had to develop solutions that work for all parties and the project. Measures to demonstrate productivity – tracking on-site resource or remote working – have all been developed and implemented. It has been encouraging to see parties work collaboratively to overcome these challenges.

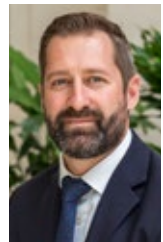
What is certain is that Covid-19 will change the industry's future contractual arrangements. It is expected that many of the exceptional provisions that have been made will become standard conditions in contracts moving forward.

Catalyst for change

The acid test still remains. When we can get back in the room, will we? Will the measures put in place over the past few months still apply or be rolled back?

At present, there is lots of speculation about the post-Covid-19 environment. The conversation thus far is encouraging; how that translates into action remains to be seen.

ABOUT THE AUTHOR



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