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Dato' Sr Hisyam Hj Jafrey

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ESSENTIAL SKILLS NEEDED TO ENROL IN QUANTITY SURVEYING PROGRAMME

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RISM Liaison QS Division Secretary **OSCOMM** December 2020 Issue No. 1 Session 2020/2021

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A Note from the QS Division Chairman Session 2020/2021

Dear Members,

Alhamdulillah, the editorial team has managed to publish the first issue of QSCOMM for the session of 2020/2021. The theme selected for this issue is "Adapt, Adopt and Improve" in view of the disruption experienced globally due to the pandemic. We hope this issue will provide some insight for our reader in facing the new normal.

We are experiencing an unprecedented situation with the global COVID 19 pandemics. Everyone, every sector has urgent needs to adapt to the new standard. The construction industry has undoubtedly just seen the tip of the iceberg of the many changes that this pandemic would create in terms of socio-economic disruptions, and so much more. COVID-19 has compounded the existing lags and the absolute vulnerability of our industry. In reality, construction is as vulnerable to these changes as other sectors, but the ways in which the ecosystem would be affected are different.

As we prepare to return to work to face an industry that has been drastically changed by the both public health and economic effects of the pandemic. The external market dynamics, along with the fragmented and complicated nature of the sector and the overall risk aversion, have made reform efforts both demanding and slow. Are we going to adopt the new changes in our industry and be the leader or just adapting to what are required from us?

In order to thrive and grow, the firms must adapt. The stakeholders in the construction value chain may need to improve their strategies to deal with or accommodate disruption. This refers in particular to consultants, production of components and logistics, general contracting and specialist subcontracting, all of which are likely to face commoditization and diminishing share of value of segments in their businesses.

We must turn COVID-19 into a unique opportunity for our industry to recalibrate our goals and development frameworks that can fast-track digital construction development in the next 10 years of programme of action. A blend of sustainable development, increased cost, skills mismatch, innovative materials, fabrication techniques, digitization, and a new generation of players looks likely to change the business model. The transitions ahead include procurement and expertise, increased profitability analysis, and increased customer engagement and branding. Restructuring and internationalization would build the scale required to encourage higher levels of investment in digitalisation, research and development and infrastructure, sustainability and human resources.

Finally, may 2021 brings much prosperity to Malaysia construction industry.

Dato' Sr Aziz bin Abdullah



RISM'S EVENT HIGHTLIGHTS

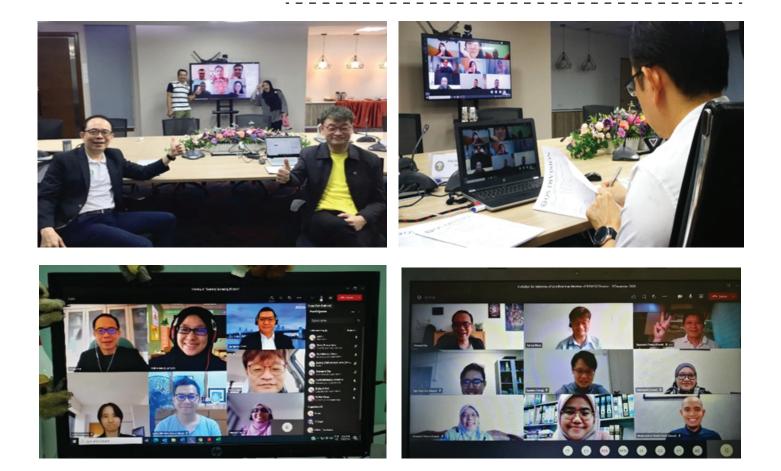


Annual General Meeting of the Quantity Surveying Division for Session 2019/2020



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Online Interviews of New Enrolment as RISM Member for QS Division - Session 2020/2021



MySMM Online Workshop Series



Online CPD Webinar on Current Legal Development in Malaysian Construction Law







Force Majeure dan lanjutan masa dalam kontrak binaan

Sr AMRAN BIN MOHD MAJID, cqs

B.Sc. (Hons) Quantity Surveying; B. Jurisprudence [External] (External Law Degree); Certificate in Legal Practice (CLP); M.Sc. Project Management; Certificate in Adjudication; Professional Diploma in Innovation Management; FRISM

Mukadimah

Force Majeure adalah sebuah perkataan Perancis yang bermaksud "kuasa yang lebih tinggi"¹. Merujuk kepada kes Lebeaupin v Richard Crispin & Co², Mahkamah Tinggi Inggeris ketika itu memutuskan terma berhubung dengan Force Majeure itu hendaklah ditafsirkan dengan mengambil kira sifat dan terma-terma am dalam sesebuah kontrak. Sečara lazimnya terma force majeure ini mempunyai maksud yang terhad memandangkan hal keadaan berhubung dengan peperangan, mogok, kebakaran dan cuaca luar biasa secara lazimnya diperuntukan secara berasingan dalam syarat-syarat kontrak binaan. Sehubungan dengan itu meskipun terdapat beberapa sebab yang berada diluar kawalan kontraktor yang mengganggu atau menghindarkan penyiapan kerja, namun hal keadaan ini tidak bermakna kontraktor boleh diberikan lanjutan masa disebabkan oleh force majeure. Sebaliknya rujukan perlulah dibuat kepada syarat-syarat kontrak untuk menentukan takrif force majeure itu sendiri sebelum Pegawai Penguasa (P.P.)/Pengarah Projek (P.D.) dapat memutuskan bahawa kontraktor telah terganggu atau terhindar semasa menjalankan kerja-kerja pembinaan disebabkan oleh hal keadaan force majeure.

Secara lazimnya, terma *force majeure* diperuntukan dalam mana-mana kontrak binaan sebagai asas untuk lanjutan masa diberikan agar tempoh penyiapan kerja sesebuah kontrak binaan itu dapat dilanjutkan. Namun demikian rujukan perlulah dibuat kepada syarat-syarat kontrak itu terlebih dahulu bagi menentukan samaada terma force majeure itu telah ditakrifkan berkaitan dengan pemakaiannya dalam syarat-syarat kontrak bagi menentukan had pemakaiannya dalam mana-mana syarat-syarat kontrak binaan.

Syarat-Syarat Kontrak Berhubung Dengan Pemakaian Peruntukan Force Majeure

Sebagaimana yang telah dibincangkan, pemakaian peruntukan berhubung dengan force majeure dalam kontrak binaan perlulah dibuat dengan merujuk kepada syarat-syarat kontrak secara keseluruhan. Kegagalan berbuat demikian boleh membawa padah nanti sekiranya timbul pertikaian di antara pihak majikan dengan kontraktor. Dalam hal ini adalah wajar rujukan dibuat kepada syarat-syarat kontrak itu bagi menentukan takrif, had dan prosedur yang terlibat sebelum klausa berhubung dengan force majeure ini digunakan. Rujukan boleh dibuat kepada kes Hoecheong Products Company Limited Iwn Cargill Hong Kong Limited. Perayu adalah penjual Cotton Seed Expellers (CSE) dan telah memasuki satu kontrak jual beli dengan responden (pembeli) di mana perayu berjanji untuk membekalkan 10,000 tan CSE kepada responden. Malangnya penjual tidak berjaya membekal kesemua kuantiti CSE tersebut. Sehubungan dengan itu pembeli telah menuntut pampasan gantirugi disebabkan kemungkiran kontrak oleh penjual. Penjual menafikan tuntutan gantirugi responden dengan alasan bahawa kegagalannya membekalkan sepenuhnya kuantiti CSE adalah disebabkan hal keadaan force majeure yang wujud dalam tempoh kontrak dan sebagaimana yang dibenarkan dalam syarat-syarat kontrak jual beli tersebut. Ini adalah kerana menurut penjual, keadaan kemarau yang teruk telah berlaku di daerah Henan, Negara China, yang menyebabkan bekalan CSE itu terjejas. Dalam hal ini bekalan CSE yang boleh diperolehi hanyalah daripada agensi "China National Native Produce and Animal By-Products Import and Export Corporation (CNNP)".

³Vincent Powell-Smith, 1990. The Malaysian Standard Form of Building Contract (PAM/ISM 69). Kuala Lumpur: Malayan Law Journal Sdn Bhd., hlm.92. ⁴(1995) 2 C⊔ 319

¹Merriam Webster, Defini on of *force majeure*:

h ps://www.merriam-webster.com/dic onary/force%20majeure.

Dilayari pada:25.10.2020.

² [1920] 2 K.B. 714 (18 June 1920)



Pembeli sebaliknya mempertikaikan alasan yang telah diberikan oleh perayu dan juga mempertikaikan pematuhan peruntukan syarat-syarat kontrak berhubung dengan klausa force majeure oleh penjual. Penjual tidak berpuas hati dengan keputusan Mahkamah Rayuan Hong Kong yang didapati berpihak kepada pembeli dan dengan itu penjual telah merayu kepada Majlis Privy (Privy Council - PC) di England untuk mendapat satu keputusan muktamad. Mahkamah PC telah meneliti klausa 12 dalam syarat-syarat kontrak penjualan dan mendapati antara lainnya force majeure boleh dijadikan alasan agar samaada satu lanjutan masa diberikan atau sebahagian atau keseluruhan kontrak jual beli dibatalkan. Namun demikian sebelum pertimbangan lanjut dibuat, penjual hendaklah mengemukakan satu perakuan daripada "China Council for the Promotion of International Trade (CCPIT)" yang menyatakan bahawa hal keadaan Force Majeure berlaku dalam tempoh kontrak.

Mahkamah Rayuan Hong Kong bersetuju bahawa wujudnya hal keadaan force majeure sebagaimana yang diperuntukan dalam syarat-syarat kontrak. Mahkamah Rayuan Hong Kong juga mendapati perakuan *force majeure* daripada CCPIT itu adalah sahih namun demikian memutuskan bahawa perakuan CCPIT yang dikeluarkan tersebut adalah tidak mencukupi sebagaimana kehendak klausa 12 syarat-syarat kontrak. Sehubungan dengan itu Mahkamah Rayuan Hong Kong membenarkan tuntutan gantirugi pembeli terhadap penjual.

Mahkamah PC telah meneliti rayuan penjual dan telah merumuskan bahawa sebelum rayuan berhubung dengan *force majeure* dapat dipertimbangkan, tiga syarat perlulah dipenuhi iaitu:

- a) Penjual perlulah membuktikan hal keadaan force majeure itu berlaku dalam tempoh kontrak.
- b) Hal keadaan *force majeure* itu didapati menjejaskan bekalan CSE tersebut.
- Penjual tidak dapat mendapat bekalan CSE daripada pembekal yang lain berdasarkan kepada spesifikasi CSE yang ditetapkan dalam kontrak.

Dalam hal ini Mahkamah PC memutuskan penjual telah memenuhi ketiga-tiga syarat di atas berdasarkan kepada bukti-bukti yang dikemukakan. Berhubung dengan format perakuan force majeure daripada CCPIT, Mahkamah PC mendapati klausa 12 dalam perjanjian jual beli itu hanya menyatakan bahawa hal keadaan force majeure dalam tempoh kontrak yang didapati berlaku hendaklah diperakukan oleh pihak CCPIT. Dalam hal ini tiada peruntukan dalam syarat-syarat yang menyatakan format perakuan daripada CCPIT yang perlu dikemukakan. Memandangkan perakuan CCPIT itu telah diperolehi, maka Mahkamah PC memutuskan bahawa penjual telah memenuhi kehendak kontrak. Akhirnya Mahkamah PC membenarkan rayuan penjual. Berdasarkan kepada nas-nas perundangan kes ini, adalah jelas pentadbiran kontrak berhubung dengan *force majeure* hendaklah ditadbir menurut peruntukan kontrak. Dalam hal ini rujukan perlulah dibuat kepada takrif serta had pemakaian hal keadaan *force majeure* tersebut sebelum P.P. bersetuju hendak memberi lanjutan masa berhubung dengan perkara ini. Dalam hal ini juga prosedur serta kaedah yang ditetapkan dalam syarat-syarat kontrak berhubung dengan pemakaian klausa *force majeure* perlulah dipatuhi.

Perakuan Kelambatan dan Lanjutan Masa P.P. Boleh Dipertikaikan Sekiranya Tidak Memenuhi Syarat-Syarat Kontrak Berhubung *Force Majeure.*

Klausa *force majeure* dalam syarat-syarat kontrak hanya boleh digunakan berdasarkan takrif serta had dinyatakan dalam syarat-syarat kontrak. Dalam hal ini klausa force majeure tidak semestinya boleh digunakan sebagai asas permohonan lanjutan masa disebabkan kelewatan yang berada di luar kawalan kontraktor berhubung dengan bekalan elektrik atau bekalan perkhidmatan utilti yang lain oleh syarikat-syarikat utiliti yang berkaitan. Sehubungan itu, P.P. atau P.D. hendaklah berhati-hati apabila hendak menimbang permohonan lanjutan masa oleh kontraktor. Sekiranya P.P. atau P.D. didapati khilaf memberi lanjutan masa di bawah alasan *force majeure,* adalah dikhuatiri lanjutan masa yang telah diberikan itu boleh dipertikaikan kelak.

Rujukan boleh dibuat kepada kes **Mission Richmark Sdn Bhd Iwn Capitol Avenue Development Sdn Bhd.** Plaintif adalah pembeli sebuah bangunan sepuluh tingkat pejabat/kedai manakala defendan adalah sebuah syarikat pemaju bagi sebuah projek perumahan di bawah nama "Sutera Avenue" di Kota Kinabalu, Sabah. Satu⁵perjanjian jual beli di antara pembeli dengan pemaju telah ditandatangani pada 28.3.2013 di mana nilai jualan bangunan tersebut adalah berjumlah sebanyak RM10,500,000.00.

Menurut klausa 14.1.1 dalam kontrak penjualan, pemaju hendaklah memberi milikan kosong kepada pembeli dalam tempoh 36 bulan daripada tarikh pelan bangunan diperolehi. Dalam kes ini tarikh pelan bangunan diperolehi adalah pada 24.9.2013. Maka dengan itu milikan kosong bangunan hendaklah diberikan oleh pemaju sebelum atau pada 25.9.2016. Namun demikian milikan kosong bangunan hanya dapat diserahkan pada 28.8.2017.



Sehubungan dengan itu pembeli berniat untuk mengenakan Gantirugi Tertentu dan Ditetapkan (*Liquidated and Ascertained Damages - LAD*) kepada pemaju menurut klausa 14.1.2 dalam syarat-syarat perjanjian. Dalam hal ini nilai LAD yang hendak dikenakan adalah sebanyak RM972,327.98 berdasarkan kelewatan selama 338 hari.

Sebaliknya pemaju menafikan tuntutan LAD tersebut dengan alasan bahawa Arkitek bagi projek ini telahpun memberi lanjutan masa kepada kontraktor yang dilantik sehingga ke 12.6.2017. Adalah didapati lanjutan masa yang diberikan adalah disebabkan kelewatan memberi bekalan elektrik tetap oleh pihak Sabah Electricity Sdn Bhd (SESB) yang kemudiannya menyebabkan kelewatan kerja-kerja pengujian dan pentauliahan (Testing and Commissioning - T&C) dilaksanakan oleh kontraktor. Sehubungan itu, pemaju mendakwa kelewatan yang terlibat adalah hanya selama 62 hari sahaja yang menjadikan jumlah LAD yang boleh dikenakan adalah sebanyak RM172,988.49 sahaja.Dalam hal ini adalah didapati Arkitek telah memberi lanjutan masa berdasarkan klausa 14.1.1 syarat-syarat perjanjian kontrak binaan di mana kelewatan yang berlaku adalah di luar kawalan kontraktor. Mahkamah Tinggi mendapati klausa 14.1.1 ini secara lazimnya dikenali sebagai klausa force majeure.

Mahkamah Tinggi berpendapat tafsiran klausa force majeure ini tidak boleh dibuat dengan begitu meluas atau secara liberal. Sehubungan dengan itu Mahkamah Tinggi tidak bersetuju dengan lanjutan masa yang telah diberikan oleh Arkitek berdasarkan alasan force majeure yang berpunca daripada kelewatan bekalan elektrik tetap oleh SESB.Mahkamah Tinggi berpendapat memandangkan tempoh kontrak adalah selama 36 bulan, maka adalah menjadi tanggungjawab pemaju untuk mengambil langkah-langkah sewajarnya demi memastikan bangunan 10 tingkat itu dapat diberi milikan kosong dalam tempoh 36 bulan selepas tarikh memperolehi pelan bangunan pada 24.9.2013. Sebaliknya Mahkamah Tinggi mendapati pemaju hanya membayar yuran sambungan bekalan elektrik kepada SESB dalam tahun 2015. Sehubungan dengan itu SESB hanya boleh menjalankan kerja-kerja pemasangan bekalan elektrik pada tahun 2015. Tambah lagi berdasarkan kepada afidavit pembeli, SESB telah berjaya mengadakan bekalan elektrik dalam tempoh 3 tahun daripada tarikh permohonan bekalan elektrik dikemukakan. Sehubungan dengan itu Mahkamah Tinggi memutuskan bahawa pihak pemaju yang sebenarnya lewat dalam melengkap permohonan bekalan elektrik daripada SESB. Sehubungan dengan itu Mahkamah Tinggi memutuskan bahawa pihak pemaju tidak boleh menggunakan

klausa 14.1.1 iaitu klausa force majeure untuk mendapat perlindungan di mana pemaju sendiri telah menetapkan tempoh yang singkat untuk memberi milikan kosong kepada pembeli. Mahkamah Tinggi mendapati lanjutan masa yang diberikan oleh Arkitek adalah bagi kontrak di antara pemaju dengan kontraktor binaan yang dilantik dan dengan itu tiada kaitan dengan kontrak jual beli di antara pembeli dengan pemaju. Sehubungan dengan itu Mahkamah Tinggi membenarkan tuntutan LAD pembeli terhadap pemaju selama RM972,327.98 berdasarkan kelewatan selama 338 hari. Berdasarkan kepada nas-nas perundangan kes tersebut di atas, pemakaian klausa force majeure mestilah tidak bertujuan untuk mengelak daripada membayar LAD oleh kontraktor kepada majikan sekiranya kontraktor didapati menyumbang kepada kelewatan penyiapan sesebuah projek. Kelewatan oleh pihak Berkuasa Tempatan ataupun oleh Syarikat Utiliti yang didapati menjejaskan kemajuan sesebuah projek tidak semestinya bermaksud bahawa pihak kontraktor tidak menyumbang kepada kelewatan kemajuan projek. Dalam hal ini adalah wajar kontraktor menunjukkan bukti bahawa pihaknya telah mengambil langkah-langkah sewajarnya untuk memohon bekalan elektrik dalam tempoh kontrak supaya kerja-kerja pembinaan termasuklah kerja-kerja T & C dapat dilaksanakan dalam penyiapan yang dibenarkan.

Rumusan

Berdasarkan kepada kertas ringkas ini, adalah didapati klausa force majeure ini secara amnya melibatkan hal keadaan di mana kelewatan penyiapan projek adalah di luar kawalan kontraktor sendiri. Namun demikian tafsiran serta had pemakaian klausa force majeure ini bergantung kepada peruntukan syarat-syarat kontrak itu sendiri. Dalam hal ini P.P. ataupun P.D. perlulah merujuk kepada syarat-syarat kontrak sebelum klausa force majeure ini boleh digunakan sebagai asas pemberian lanjutan masa. Kontraktor masih perlu membuktikan bahawa kelewatan penyiapan projek adalah sesungguhnya di luar kawalannya sebelum klausa force majeure dapat digunakan. Dalam hal ini Mahkamah tidak akan mentafsirkan pemakaian klausa force majeure ini secara luas ataupun secara liberal. Apabila kontraktor mendakwa kelewatan penyiapan projek adalah disebabkan sambungan bekalan tetap oleh syarikat utiliti, maka kontraktor perlulah membuktikan bahawa pihaknya telahpun mengambil langkah yang sewajarnya sejajar dengan Prosedur Operasi Piawai (Standard Operating Procedure - SOP) syarikat utiliti tersebut. Sekiranya gagal, maka berkemungkinan besar permohonan lanjutan masa kontraktor tidak dapat dipertimbangkan.



RISM'S EVENT HIGHTLIGHTS







Monthly Quantity Surveying Division Committee Meeting for Session 2020/2021

7



FEATURED ARTICLE

COVID-19: PROVIDING CERTAINTY IN UNCERTAINTY TIMES

Sr DR. SAIPOL BARI ABD KARIM

Center for Building, Construction and Tropical Architecture, Faculty of Built Environment, University of Malaya

COVID-19 outbreak has had a profound and tragic impact throughout the world which impacted millions of lives and unprecedented business with immense economic disruption. This pandemic proves that we live in an increasingly complex and interconnected world, of which it no longer only impacts the health of people, but also has a severe impact on society and the global economy [1]. Due to this ever-changing uncertainty, innumerable projects and business undertakings ground to a halt or wobbled along and had to be temporarily put on hold. Respective managers are now required to make decisions with incomplete or rapidly changing information. There is a need for good management to prevent the widespread transmission of COVID-19.

Projects, particularly construction, have been relentlessly hit, with worker absences, supply-chain disruptions, and deteriorating investor confidence taking a toll. As such, managing projects during this period will require adopting an agile attitude, continually assessing the risks, and adjusting operations in protecting the people, the project as well as its performance [2].

CHALLENGES DURING THE PANDEMIC

Project and business owners are now required to face the challenges to move around the varying restrictions and policies imposed by the Government to flatten the COVID-19 curve. Further waves of the virus and global severity and timing, will make it difficult for project and business owners to predict the impact as the Government is balancing between healthcare and reopening of the economy. This however have already disrupted the availability of manpower, materials, and equipment, as well as financial issues and project supply chain and delivery; and are likely to continue doing so even as they ease. In fact, project and business owners must be prepared to face an uphill battle; the possibility of insolvency or bankruptcy alongside cash flow shortages [2]. Resources will be increasingly scarce as the markets and economy weaken and then recover, and a challenge that may be compounded by low cash reserves. The current challenges faced by project and business owners can be divided into three domains:

• Manpower shortages and safety

Construction project workers working in close quarters and using common facilities will carry excessive risks that could affect an entire workforce [2]. Since the reopening of the economy, project and business owners are required to adopt a stringent yet systematic standard operating procedure by the Government that attempts to safeguard the transmission hence mitigating the emergence of a new cluster - particularly construction quarters. Project owners or construction firms also have to deal with shilly-shally situation; reducing the manpower due to social distancing practices on site but at the same time allocating additional manpower to conduct health screening as an act of balancing both COVID-19 precautions and safety measures to manage the extent of the risks. Ever since construction projects were allowed to resume their activities, several clusters of COVID-19 cases were reported from screening exercise conducted at construction project sites. This has subsequently impacted to the loss of workforce and labour wages at a rate of 30 per cent, which was worth RM3.3 billion, and the decline in the use of construction materials by 42 per cent worth RM4.6 billion [3].

• Financial impact of the project

Construction projects are now encircled with unforeseen market conditions, contracting challenges (including potential bankruptcies or invocations of force-majeure clauses), supply-chain bottlenecks, and cash-flow shortages [2]. Upon the reopening of the economy, the Construction Industry Development Board (CIDB) had inspected 7,590 construction sites nationwide from April to September 2020 and found that 149 sites still had not resumed operations, of which 45 were still closed as they were still facing financial issues [3]. Project owners would seek for full visibility into potential risks, and can help safeguard the project's overall business case. Contractors may not be financially positioned to complete the project, and owners could expect the increase of variation orders and claims for contractors. Claims were usually being given within one to two months, but since the pandemic, it will take up to three to six months. The pandemic has impacted the cash flow in the whole supply chain.



• Disruptions of supply chain

Project and business owners should map out their entire supply chain to take more proactive measures during COVID-19, including identifying alternatives, considering where to stockpile, and reviewing contingency budgets to source and expedite critical materials [2]. Furthermore, project and business owners must identify and manage these risks while navigating the interminably changing and inconsistent orders, which may result to a halt of construction projects [4]. This will also lead to the unanticipated project delays given that the industry is constantly facing temporary shutdowns, governmental orders, permit delays, or reduced manpower size to comply with social distancing requirements. Among potential risks that required attention are infrastructure risks (readiness and support system), cyber risks (security, remote access), employee risks (absence, stress and mobility), business and operational risks (points of failure, emergency measures, recovery) and communication risks throughout the supply chain.

RISK, UNCERTAINTY & THE 'BLACK SWAN' EVENT

A 'Black Swan' event is something that has immense impact but emerges outside of the realm of unvarying expectations. COVID-19 pandemic is very unusual in that it is both distressingly transmissible and catastrophic to some. Soon after its emergence, it became clear that it was a significant risk that was not planned for at all, and therefore this has rapidly become colossal. COVID-19 has transformed both personal lives and the economy overnight, wreaking a lot of agony and uncertainty for all. In the face of this and as we understand more about the virus, it is slowly becoming less distressing, and more manageable. However, we now know there are longer-term health risks and complications in COVID-19 survivors, and especially in those who have been on ventilators.

The Movement Control Order (MCO) imposed by the Government since 18 March 2020 as a preventive measure in response to the alarming situation of the pandemic. This was subsequently followed by the introduction of different versions of MCOs that were seen as means to ease the lockdown restrictions and to induce the national economy. Every cloud has a silver lining, and the COVID-19 pandemic has provided an opportunity for review, reflection and refocus [5]. As such, this state of affairs may have provided a once in a lifetime opportunity for projects and businesses to self-reflect on current practices and processes and to transform necessarily. It is a not-to-be-missed opportunity when resistance to change is at its lowest and building an imminent resilient

business is at its highest. Here are some suggestions in navigating the current and future post-MCO period.

- Smart businesses should be looking at exploiting the opportunities provided by the pandemic as well as transforming their operations to get to the 'new normal' and not just transition them poten tially back to status quo. As the MCO restrictions are loosen, projects and businesses will shift focus from a 'crisis response' phase to a 'busi ness recovery' phase [5].
- Projects and businesses should also claw their way out of the pandemic to the 'new 'normal'. To make sure that unnecessary risks are avoided and significant opportunities are taken, robust risk assessment will be required. This must be developed and implemented articulately across organisational levels. The mission and ability to transform to become more sustainable and resil ient may sound difficult for some businesses, but not impossible.

Organisations that fail to appraise the current global situation appropriately will heedlessly struggle to get back to the 'old normal' and will possibly struggle through a lack of planning or an inability to see the risks and opportunities in their plans. We should all navigate to the 'new normal' quicker and safer with time through the adoption of a robust operational or project plans that must be meticulously evaluated for risk and opportunity [5].

The current and undying impacts of the COVID-19 pandemic have created a whole new set of risks categories that would have been unimaginable in the year 2019, let alone the typical risks that we are familiar with in every construction project [4]. These state of affairs appear to be as a result of lack of knowledge and information and thus can be categorised as unidentified risk or 'unknown-unknowns'.

"There are known knowns. There are things we know we know. We also know there are known unknowns. That is to say, we know there are some things we do not know. But there are also unknown unknowns, the ones we don't know we don't know."

Secretary of Defense Donald Rumsfeld, February 12, 2002.



	Known	Unknown
Known	Known known	Known unknown
	A situa on that we	A situa on we are
	are aware and	aware but don't
	understand	understand
	(iden fied	(iden fied risk).
	knowledge).	
Unknown	Unknown known	Unknown
	A situa on that we	unknown
	understand but not	A situa on we are
	aware (untapped	neither aware nor
	knowledge).	understand
		(uniden fied risk).

RISK MANAGEMENT IN THE NEW NORMAL

Our world has become exceptionally VUCA – Volatile, Uncertain, Complex and Ambiguous. Often that we feel an amplified VUCA through such an immense change on how digitalization, big data, artificial intelligence, robotic, globalization, terrorism, financial crises, climate change and global shifts in power have made it more challenging to keep track [6]. The pandemic has made change harder to predict, more uncertain and more complex [7]. Nonetheless, whether or not the present situation is more VUCA than during the Black Death, World Wars I and II or when we discovered that the earth was neither flat nor the center of the universe, is still debatable. No one is expert enough to help predict the uncertain future in this unprecedented crisis and COVID-19 leads to an expected ambiguity [7].

Embark on Best Practices

As the complexity and uncertainty increases, so does the associated risk and the difficulties in identifying and managing the risks. During this pandemic period, project and business organisations will need to adopt dynamic risk management strategies with the aid of agile and intelligent technologies that will act as exhilarating tools and enable them to gain access to required insights for strategic and informed decision-making during any challenging scenario. These organisations are now looking at risk management to help them overcome the COVID-19 pandemic and avoid or reduce the impact of a next crisis. Although they may be adversely impacted by the pandemic, the complete nature and duration of risks associated with the pandemic cannot be fully known, understanding the risk exposure will help them minimise the downside effect of risks [1]. As the saying goes; any kind of crisis is good - it wakes you up;

the pandemic has turned the focus to revamping the existing risk management strategies. The following best practices can act as a guide for the risk management team when navigating this 'new normal' [8]:

- Proactive risk management: Projects and businesses will need to formulate a proactive approach to risk management and should be driven by strong leadership, one that is driven by strong board leadership, with dynamic response mechanisms and continuity plans.
- Financial and non-financial risks: Whilst financial risk is commonly within the purview of financial risk managers, a mixed bag of risks that contains both financial and non-financial risks requires projects and business to adopt a comprehensive perspective to handle such risks. Although risks were managed to a certain extent previously, the on going pandemic now necessitates a more integrated and focused response.
- Enterprise risk management (ERM): It has been argued that traditional risk management tends to not provide a holistic view toward managing risk and decision-making. Therefore, ERM implemen tation will help projects and businesses to create agile responses toward COVID-19 pandemic, and it will also enable organisations to formulate timely strategies and seize business opportunities that otherwise may be missed.
- Robust risk modelling: The current pandemic requires a makeover of existing risk models for better estimation of risk parameters. Existing models are currently tied-up under the strain of coronavirus, and thus are losing their predictive capabilities given the unique nature of the current pandemic and the added difficulty in quantifying the losses.
 - Effective management of risk: To be effective, projects and businesses must provide a compa ny-wide risk taxonomy that will comprehend the risk definitions and risk appetite as well as controls and reporting. A clear definition of risk appetite will translate risk-return trade-offs into explicit thresholds and limits for financial and strategic risks, such as economic capital, cash-flow at risk, or stressed metrics [9]. Effec tive risk control processes ensure that risk thresholds for the specified risk appetite are upheld at all levels of the organization.



Decision making should be informed with risk reporting, providing the boards and senior executives with insights on risk, identifying the most relevant strategic risks which then will be embed ded into the planning process.

Opt for Dynamic Risk Management

The COVID-19 pandemic is an unprecedented crisis which intensifies the importance and increasing relevance of robust risk management for project and business owners in responding to both routine and unforeseen impediments [1]. The question is "What should risk management be doing right now?"

As Malaysia starts to ease the lockdown and vigilantly reopen the economy thus move to 'new normal' through the introduction of several versions of MCO, risk management pledges that the organisation gazes towards the future. Such an effort pleads for dynamic engagement and collaboration from everyone in the project and business organisations to ensure the projects and businesses move smoothly through the anticipated phases, which is termed as 3R- Reaction, Resilience and Recovery [1], in helping them thrive in the unknown.

i. Reaction

Projects and businesses need to assess what the 'new normal' will lead to for the organisations and evaluate the possible impact of the recent MCO. COVID-19 proves that risks are interrelated and can impact the far-reaching value chain and therefore risk management needs to break into ' silos' and put together information from the entire organisation as well as from external stakeholders. Moreover, as time is epitome during this period, the use of scenario planning must be accentuated to assess this unknown future.

ii. Resilience

Projects and businesses must define the action to be taken to mitigate the downside of unknown future, and to always prioritise the risks, and subsequently pay attention to new emerging risks and potential 'black swans'. Disruptions caused by the external risks can be detrimental and demanding than the internal risks hencef orth require vigilant attention.

 Recovery
Projects and businesses linger upon relevant actions to ensure risk management activities are aligned to take rapid actions should a risk mate rialise. As COVID-19 pandemic led to long-lasting change to the world, risk management also needs to continuously assess the recovery strategy hence promoting an improved prepared ness.

SURVIVING THE UNKNOWN

The basic principles of risk management should be adopted by projects and business owners to chart out a route through the COVID-19 pandemic and minimize the negative impacts. Whether or not a robust risk management plan is in place, the following principles could help projects and business owners to navigate through this crisis and beyond:

ldentify the risks

Risk management is usually used to "predict the unpredictable" [13] and it is crucial to identify the risks in navigating them throughout this pandemic. This might bring the project and business owners to the risks that were not yet considered or might infuse the previously identified risks with a new sense of urgency. It is also emphasised that cataloguing or prioritising the risks must be conducted prior to moving in any direction effectively. This can be accomplished by considering all kinds of risks; operational, strategic, financial or reputational. This is followed by gathering information from manpower at all levels which could be in a position to identify risks that were not thought of previously. Next, the risks can also be identified by looking at other projects or businesses, of which their risks may be potentially create another risk down the line of supply chains.

Engage with stakeholders

The backbone of every organization lies in its people. People need to be heard, to be able to trust and need to have information. Projects and businesses must ensure that the manpower know that there is a risk management plan and this requires constant communication while also seeking their engagement and input [13]. While it has to be fully endorsed and supported by top management, it must involve the entire organization in order to succeed.

Seek for advice

During this crisis, everyone need to work together and to seek for advice and assistance in many ways. Experts in risk management can assist in identifying, analysing, evaluating and treating the project and business risks.



Besides that, legal experts, insurance brokers, financial advisers and counsellors or mental health professionals are among those who can provide assistance in navigating the crisis.

Humanising the risk management process

Manpower shortages and safety, financial impact, disruptive supply chain and other unknown delays caused by the COVID-19 pandemic pose a threat to projects being completed on time. The first step to deal with inevitable COVID-19-related delays is to be reasonable with team members and their needs. By being reasonable and accepting the reality of everyone's current situation, parties can effectively reduce associated risks. We are in unchartered waters, thus it is important that while we try our best to get to a more agile state of managing risk through systematically deploying the process effectively, we must not forget the psychological element, that is, to humanise it. Projects and businesses must look at each processes and interactions from the perspective of the clients and ensure that people is the epicentre while harmonising the need.

• Value the people

When projects and businesses resumed operation while at the same time trying to mitigate the physical risks, we must not forget to also consider the psychosocial risks. Stigma is a clear type of psychosocial risk; which is commonly associated with disease outbreaks. It emerged during the period of the rapid spread of the virus and strict measures and still persist or increase over time as businesses open their doors [14]. Psychosocial risk factors such as long working hours, reduced rest periods, increased workload and pressure, ergonomics, chemical and other hazards should all be mapped and assessed. All these factors can increase stress levels and lead to anxiety reactions. Hazard identification and risk assessment are essential steps to define appropriate control measures, adapted to the specificities of the workplace, the needs of workers and the particular context.

Treasure all limitations

There are clear limitations for the kinds of activity that projects and business can undertake. Many organisations will certainly be reflecting on what they could have done differently. Projects with limited budgets and scopes can only plan for so much. Projects and business usually struggled to mitigate risks when they have limited time and powers. The COVID-19 pandemic has brought to light the importance of good risk management; not just the need for robust pre-existing strategies and mechanisms, but for innovative approaches going forward [15]. Whilst a risk-free world is an impossibility, and arguably undesirable particularly within the VUCA environment, there are numerous steps businesses can take in order to adapt to challenges and reap the rewards of good risk management strategy. Projects and business that proactively analysing and reviewing their risk management strategies will be more resilient to endure the next crisis.

Finally, as we are now gazing through the new normal, we are also adapting from yesterday's lesson and putting a hope for tomorrow. The plans that we had few months ago seems no longer feasible and unrealistic for today. The path that we are walking could be uncomfortable and therefore we must navigate this period with creativity, flexibility and clear understanding. Moving forward, engage with the stakeholders and value all efforts in surviving the uncertain future.

Reference:

- Bart van Loon. Risk Management during the COVID-19 era (20-05-2020) https://home.kpmg/nl. (Accessed on 26/11/2020)
- [2] Jim Banaszak , Roberto Charron, Jack Guevara, and Kevin Stokvis. Preserving project continuity in the face of COVID-19. https://www.mckinsey.com. (Accessed on 25/11/2020)
- [3] The New Straits Times, 23/09/2020. Malaysia's construction industry suffers record decline. https://www.nst.com.my (Accessed on 30/11/2020)
- [4] Richard S. Reizen, Patrick J. Johnson and Matthew N. Spinner. Identifying and Managing Construction Risks During the Coronavirus Pandemic 20/04/2020 http://www.gouldrat ner.com (Accessed on 25/11/2020)
- [5] Maurice Dixon. Getting to the New Normal Faster: A Sustain able and Resilient Restart. http://ww w.de-risk.com/the-new-normal/ (Accessed on 26/11/2020)
- [6] Jeroen Kraaijenbrink 2019. Is The World Really More VUCA Than Ever? https://www.forbes.com (Accessed on 25/11/2020)
- [7] Carl E. Balita 2020. VUCA world 4.0 and the COVID-19 pandem ic. https://businessmirror.com.ph (Accessed on 22/11/2020)
- [8] Ajay Katara 2020. Revamping risk management to manage the 'new normal'. 18/09/2020. https://www.bai.org (Accessed on 25/11/2020)
- [9] Daniela Gius, Jean-Christophe Mieszala, Ernestos Panayiotou, and Thomas Poppensieker. 2018. Value and resilience through better risk management. https://www.mckinsey.com (Accessed on 30/11/2020).
- [10] Keeping your project on track during a crisis. Yellow Brick Consulting. https://www.emeraldgrouppublishing.com/top ics/coronavirus/blog/ (Accessed on 25/11/2020)
- [11] Duncan Haughey. MoSCoW Method. https://www.proj ectsmart.co.uk (Accessed on 30/11/2020)
- [12] Elena Belov, Tammi Ling and Allen Meyer, 2020. Compliance and COVID-19: Moving to a new normal. https://www.oliverwy man.com (Accessed on 30/11/2020)
- [13] Risk management during the COVID-19 pandemic: Checklist to recovery (23-4-2020) https://www.lexicology.com; (Accessed on 30 N/11/2020)
- [14] ILO 2020. Managing work-related psychosocial risks during the COVID-19 pandemic. Geneva: International Labour Organiza tion 2020
- [15] 6 Key Lessons Risk Management Coronavirus outbreak. https://www.bmt.org/insights (Accessed on 30/11/2020)



RISM'S EVENT HIGHTLIGHTS



December 2020 Issue No. 1 Session 2020/2021



Inaugural QS Sports & Social Sub-Committee Meeting for session 2020/2021



Inaugural QS Education Sub-Committee Meeting for session 2020/2021



The RISM-IRC2020 is an outreach pla orm for surveying postgraduates and researchers with the aim to serve as an open dialogue avenue in the region on contemporary surveying and built environmental issues. The conference presents the best of current systems research and prac ce, emphasizing innova on and quan fied experience. We aim to emerge this pla orm as the foremost world-wide gathering of academic researchers, Ph.D. and graduate students, top research think tanks and industry technology developers. It would also be the best opportuni es for linkages, networking and talent-scout for research ins tu ons and industry around the globe. The RISM-IRC2020 was jointly organised by QS Division, Royal Ins tu on of Surveyors Malaysia (RISM) and Department of Quan ty Surveying, Faculty of Built Environment, University of Malaya.

Facts about RISM-IRC 2020:

- Physical conference was cancelled due to COVID-19 pandemic and the enforcement of Movement Control Order by the Government of Malaysia
- Mode of the conference was changed to pre-recorded video
- 44 papers selected.
- Best paper award and best presenter award
- 18 partnering universi es involved
- 20 papers published in MCRJ 2020 (Special Issue)
- 20 papers under review for MCRJ 2021 (Special Issue)



DARE TO BE BOLD

DATO' Sr HISHAM HJ JAFREY



Dato Sr Hisham Hj Jafrey, graduated with a Bachelor's Degree in Quantity Surveying (Honours) from Leeds Metropolitan University. He started his career with Harlow and Milner of Wakefield. Returning to Malaysia in 1983, he later joined University Teknologi Malaysia, and played a prominent role in the development of Department of Quantity Surveying. He is a fellow of the Royal Institution of Surveyor Malaysia and a member of Royal Institute of Chartered Surveyors United Kingdom,

Dato' Sr Hisham Hj Jafrey is the Managing Director of ARH Jurukur Bahan Sdn. Bhd. Currently he also serves as a board member of Johor Corporation (JCORP), Kulim (Malaysia) Berhad, Cement Industries of Malaysia Berhad (CIMA) and ICG Global Ventures Sdn. Bhd.

Could you please start by telling us your experience during the early stage of establishing ARH? What is the main obstacle during the early days of ARH establishment?

ARH was initially known as Azhar Rouse & Hisham Sdn., and was started by the founder directors Encik Ahmad Azhar Rouse and I in the late 1980's whereby during that time I was attached to Universiti Teknologi Malaysia (UTM). An opportunity came for us to start the firm where Encik Ahmad Azhar Rouse was based in Kuala Lumpur (KL) and I was based in Johor Bahru (JB). Having started the Johor Bahru office where we did not have any client, basically presented a lot of challenges such as setting up the premises, managing operations and at the same time how to look into building your client list and so forth. *Alhamdulillah* we managed to establish ourselves and from there on it became what it is now.

The KL office was in operation earlier with a skeleton staff. When I was tasked to start the JB office, eventually I managed to get staff to assist in the administration and operations. Progressively as we started building up our clientele and work started to come in, we expanded by recruiting more technical staff and within about a year we had 5 staff in JB. In 1994 Azhar retired from the firm and I became the Managing Director, and since then 4 more directors and 2 associates were appointed to manage our staff strength of about 160. Basically, we started the firm without any financial assistance or facilities. It was facilitated with internally generated funds. We were fortunate because when we started we had some supportive clients. As far as financial resources were concerned, mainly it was derived from KL office. Since I was on my own in JB the overhead was very low. As we went on, we started getting some projects and at some point then we became self-reliant.

What motivated you to start-up your own business?

After graduating, I worked with a company called Harlow and Milner in the United Kingdom (UK) for a while, When I came back, I worked for UTM which later moved to Skudai JB. That is why I was tasked more or less to set up the JB office. During the 1980's I think especially in 1989 when the economy started to pick up, Azhar and I felt that JB was a good prospect as far as securing projects and there will be a lot of economic growth. So, we identified that as one of the opportunities that we could tap into.

Based on my own personal experience, I think I can understand when a person reaches a certain comfort zone, the difficulties for the person to take the next step when the person is at a crossroad, to decide which direction you want to embark on. I personally felt that ultimately I would like to start my own organization, and I was quite focused in the sense that I wanted to establish a consultancy practice and develop it as much as I can. So even when I was with UTM and was still quite involved with the development of the QS department of UTM, at the end of the day I had this desire that one day I will venture out to start my own private practice. So, I think I was very clear as far as where I would like to go at the end of the day.

I think as a Muslim, *Istikharah* prayer helps a lot. But I think not withstanding that, we have to find deep in our selves which path you want to take. As long as you are true to yourself and you truly believe that you are motivated and driven enough, you have to pursue your dream. I think *Insya-Allah*, as Muslims, we need to believe that *rizq* is everywhere. But you need the effort and desire to try and push yourself; whatever potential that you feel you can achieve and realize.





What is your definition of an ideal business Partners?

I think in some way, I'm quite lucky when it comes to my own experience. If you are a partnership or a corporate body (Sdn. Bhd.), you have partners. So that is a critical factor as well, I mean, on how to develop your business; because when you have a partner, there has to be a cohesive relationship within the partnership or amongst directors. And there must be a huge element of trust. Lack of trust among the partners or directors will lead to a major stumbling block.

Based on my experience, you have to find partners that can be complementary. I mean you look into relationships, being husband and wife, same character, strong headed, it might create issues later on. But if you are complementary, you give each other support, you give each other strength, one has certain deficiency, the other can try and make it up, to support. I think it can also be a situation where you have similar character, but I wouldn't say you have to be identical because if you are identical, everything is the same. From ARH's perspective, we have 5 directors and 2 associates and I think we have a cohesive leadership team, because we complement each other very well. Alhamdulillah. But of course, in any organization as an example in legal practice, they have a managing partner. Someone has to be their captain. But of course, you need the others to support. That is coming back to what I say you have to have trust. You trust the other partner is contributing, is carrying out his goal, responsibilities, and similarly he does that to you as well. He trusted you to carry out your own. Because each one cannot be doing the same thing anyway.

What is unique about ARH?

If you ask me, our asset; is our human capital, our people. Because the bottom line is, we are a service oriented industry. Like I said, our asset is our people. We like to give them the opportunity to grow, give them opportunity to feel that they belong and can contribute to the company, and we are here to help them grow and develop their skills. So that is why I think, as far as ARH leadership is concerned, we emphasize on developing their skill. We try and hold as many training sessions, mentoring programs, and we encourage them to develop. We give incentive for them to acquire knowledge, acquire qualification, for example we give some incentives which they can benefit from if they become a Registered Quantity Surveyor. I always emphasize to our human capital, to our people here on the importance of acquiring knowledge. Knowledge will put value in them and we are willing to invest in it.

They must be reciprocal and willing to gain that knowledge, to learn as much as they can. This initiative cannot be one way and it must be two ways from the employer and employee perspective. They must be very receptive; must be willing to gain that knowledge as well. Alhamdullilah, as far as our personnel is concern, 70% - 80% of our staff are with us for more than 10 years and some are almost 20 years. Alhamdulillah, we are happy that they are willing to stay with us, and still contribute and being part of us.

After 33 years in the industry, what do you think the most challenging problem currently faced by QS consultancy firms?

One is of course developing human capital and our skill set. Because in an ever-changing world that we see through digitalization and so forth, you do not see QS playing the traditional roles; it's different. The landscape has changed so much. Digitalization is part and parcel of our day-to-day life right now. Somehow, we have to make that work and maybe part of our profession. I think that is a big challenge. I think it comes together, the human capital aspect and how you develop the skill set so that it envelopes together with the digitalization. I mean because at the end of the day, digitalization is just providing the tools, which are all merely tools to assist you. It is the human capacity to think and decide, even though with Artificial Intelligent (AI) and all that, at the end of the day it is still the human input that is important to make good decisions. Digitalization is merely technology; how you harvest technology, how to work better, to work more efficiently. On the human aspect, I think at this point of time, it is still required.

You have successfully managed multi-billion ringgit in project value. For the benefit of our young and aspiring CQS/PQS, can you share some advice regarding how to be a prominent player in the industry and which mistakes to avoid?

We have been given the opportunity to be involved with a variety of projects. During the last 10 years or so, major infrastructure project that has given us a lot of exposure and experience. You have to somehow be able to have some perception or vision where you want to develop your companies. Where we started, we felt that infrastructure is one of the areas that can be looked into and looking at opportunities for the QS consultancies. From civil to major infrastructure, we started by making enquiries with clients, with the organizations that are involved in infrastructure and I think we managed to enlighten them with advantages, how a QS consultant can give them value added service.



Alhamdulillah, slowly these clients and organizations were willing to accept it. It started with minor roles that we played, and I think we managed to convince them and earn their trust. Ultimately to the extent that they appointed us to become full-fledged QS consultant. So far we have been involved with highways, airport, major water pipeline, LRT, double tracking, and others. In fact, some of our infrastructure project are quite unique as well, such as the huge sanitary landfill at Bukit Tagar which not many had the opportunity to be involved. We are now slowly getting ourselves involved in mini hydro. I think to us, we are all human, we will make mistake along the way, human error and so forth. But what is more important is our take away from this experience. Hopefully, we won't repeat the same mistake. That is why we need to have our own check and balance system. But you cannot run from it. The take away is that you must learn from the mistake and not to repeat it and then conduct the post mortem as why it happened as well. I mean sometimes it could be due to lack of focus or sometimes could be due to oversight, so we need to do forensic investigation of how it happened, and then to ensure that it doesn't happen again.

ARH Moving forward?

QS Consultancy is a service industry, and it's all about personal input that you are able to give to the client, that will differentiate your firm and other firms. We always try to develop, because we do not want ARH to be a one generation type of organization. So, we have to look into our own sustainability. We are already embarking on succession planning because we have to ensure that the organization is sustained, maintained, and grows. We must identify the future leaders of the company and mentor them, so that they can grow and become future leaders of ARH.

What is your advice for young entrepreneur that is interested to start their own business in QS consultancy?

First of all, you must have the desire. The ambition that you want to start your own consultancy. Then you have to study your market. What is the market that you want to try and penetrate? You have to focus and then decide whether what type of player you want to be. Whether you want to be a leader or the follower. But I think notwithstanding all that, we are ultimately in consultancy service. So, we must have at all time, be mindful, and bare that in your mind, that we must achieve best practices all the time. That is how you will be judged and measured at the end of the day. Sometimes when you focus only on the commercial part, on the growth and on how to sustain, you tend to forget on the best practice which should be paramount. That is why sometimes, if you want to grow a business you have to have complementary support. We do not necessarily want to be partners or leaders initially, but they are there to support as a check and balance, otherwise I don't think you will be able to be as objective as you can be.

In light of the current COVID-19 Pandemic, can you share with us your views of how it has impacted you as business owner? What is your advice to all QS in adapting the new normal?

Obviously in all businesses, when the pandemic hits us, I think it impacted everyone. At this moment the focus is to ensure sustainability. When it first hits us, we had meetings among the leadership team, and of course using online meeting, we started reviewing our situation, where we stand in term of our projects, our running projects, our future, our business plan. Where we are at this moment, and going forward how we are going to address this issue. And then we identify which projects we feel will definitely be affected. So we review everything, and then we come out with our plan moving forward, which are the ones that we feel are going to help us, are going to move on, and which are the ones we feel that will affect us. We look at our cost structure, we try and reduce our overhead, and we then inform our personnel of the steps that we are taking. At least they are on the same page with the leadership, that this is a journey. It is not a short term journey, but everyone whether we like it or not, has got to go through. This is the new normal. Then at the same time, looking at our standing, our situation, we review our financial status, we do some cash flow projection, making sure that we have operational cash flow and so forth. Those are the things that we did internally, and this is an ongoing process that we are doing. We have regular meetings, and we always review our standing and status. So, I think for us, of course we are affected, especially as far as our private sector projects are concerned, there are project being deferred, reviewed, and so forth. But Alhamdullilah, there are projects that still continue and that sustain us. And obviously the infrastructure projects, being government funded still continue, so that assisted us a lot in term of our operations.





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The Royal Institution of Surveyors Malaysia invites application from Malaysia Citizens for Educational Scholarships and Loans to pursue MQA accredited full-time courses at local Institutions of Higher Learning.

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DARE TO BE BOLD |

REPOSITIONING THE CONSTRUCTION COST DATABASE FOR GLOBAL NEW CULTURE



Introduction

Information is a vital element in making decisions. Thus, having timely and locally sourced costing data is a great boon to everyone related to the construction industry from contractors, consultants, quantity surveyors, suppliers, insurance and banks. Malaysia's construction industry faces a lack of access, accuracy, breadth and depth of industry data; most of which are due to data silos and a reluctance by most parties to share information as they are viewed as trade secrets. While cost information is available via various organisations in the Malaysian construction industry, most of it is only for the use of that particular organisation and is not easily accessible by third parties.

Highly accessible cost information could assist Malaysian construction industry players in the preparation of early cost estimates, cost planning, benchmarking, whole life costing, Building Information Modelling (BIM), Market Research, Economic Reports, Price Movement Assessments and cost forecasting. Small contractors with minimal costing data will greatly benefit from the extensive database.

The Importance of Accurate Cost Data

Accurate projections enable us to plan budgets ahead of time, preventing any unwanted surprises such as running over the budget. The total cost of construction comprises 65 per cent of building materials. In preparing estimates of construction project costs, the information from cost database can be served as a guide on building materials prices, workers' wages, machinery rent rates and equipment prices. The advent of accurate cost database will enable the QS to accomplish more analytical work resulting in more precise costing. It will cut down the amount of time a QS has to spend on chasing after data, increasing



Sr Nazir Muhamad Nor

General Manager Building Cost Information Services Malaysia (BCISM) Sdn. Bhd.

their efficiency, and making better use of their talents for analytical thinking so that they can contribute invaluable insights to the project.

Towards Better Resource Planning

Currently, construction professionals in Malaysia are still practising the traditional way of preparing the cost estimates, which is by referring to similar past projects. This is all well and good when one is only focused on one or two clients. But what happens when there is a need to diversify? One would have to scramble to get accurate information on these brand-new sectors. To remain relevant and be able to adapt to the frequent changes in the market, we need a cost information platform. There is a need for the central source of a full spectrum of information including capital costing, whole life cycle costing, and maintenance costing. We are moving towards that aim as we believe that projects should be ultimately designed to cost in order to achieve budget feasibility. Additionally, when purchasing a built asset, we must strive to achieve value for money. This means taking into consideration the whole life cycle cost of that project or life cycle costing, as some would call it. This would then achieve optimum balance in time, quality and cost. By knowing the maintenance costs earlier on, this will prevent situations where the repair costs are higher than anticipated, resulting in poorly maintained buildings. Data is undeniably the new oil in our industry. For timely, on budget projects, pre-planning with accurate cost data is crucial to mitigate unwelcome surprises. Savvy project managers and industry players will do well to utilise cost information services and be a part of the digital transformation trend overtaking the construction industry.

Big Data in Management of Construction Cost

For years, QS professionals have been somewhat restricted to work within narrow or limited information provided by designers and other stakeholders. Although the 'big data' trend has blossomed in different fields, its implementation in QS has been quite uninspiring. Surveyors, business managers, professional bodies and the like debates whether the QS profession should join the revolution and take advantage of the benefits of big data. The simple response to this is 'yes.' QS companies now have a vast volume of quality data that could, if properly channelled, ease fundamental QS issues. Big data can be seen as a series of data sets which is so vast and complex that it is difficult to handle using the existing database management software. Compared to separate smaller sets of the same total number of data, the big data enables these connections to be identified in order to track market patterns, avoid diseases and others. By improving the aggregation of big data and turning it into actionable insights, big data analytics will make it more effective. Unlike the perception that the industry as a whole is 'small' in the generation of data, including cost management, is generally data rich in nature. Cost management data, such as architecture and structural drawings, BQ, bidding documents, schedules of rate, labour rate, and maintenance and repair timelines, are created from various projects during their life cycle, spanning from beginning, design, construction through until operation. During this cycle, QS plays a crucial role. Once QS activity is over, big data, with velocity, volume and variety, is stored unintentionally in the organization.

The data is dense. A single BQ is as thick as a novel, let alone the several data listed above. The intensity of the QS data is well organized and can therefore provide more useful information. The data will come at a speed. Every set of data is collected from the people, the sites and the robust interaction between them. Some of the data missing, some of the data, however, is well recorded in QS's internal information systems. Big data is equivalent to the hidden resource that can be used to further improve QS activity and solve problems relevant to the profession, such as time-consuming and atrocity calculation, incorrect estimation, and time constraints to implement QS service.

Properly accumulated, BIM and big data will make it possible for a vicious cycle to improve each other in order to promote the control of construction costs. BIM flourishes on the importance of the knowledge it holds. BIM is not static, but constantly enriched with incoming real-time information as the systems run. Data comes into a BIM-centered system with a certain number, diversity and velocity. The growing affordability of sensor networks and computing powers makes it possible to collect vast quantities of data in real time. By integrating BIM and advanced ICTs, more rational decisions on cost estimation and control planning for project delivery can be taken.

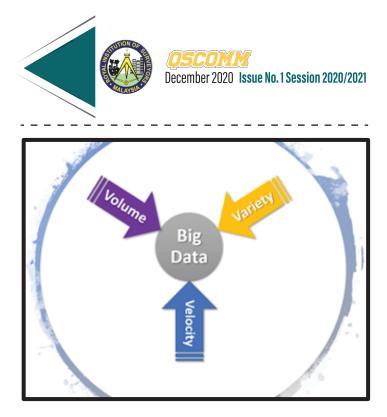


Figure 1: Big Data features

National Construction Cost Centre

Through the Construction Industry Transformation Programme (CITP) 2016 - 2020, one of the key initiatives under this programme is the development of the National Construction Industry Information Centre or NCIIC. In line with Act 520, Construction Industry Development Board (CIDB) Malaysia has established strategic partnerships with the Royal Institution of Surveyors Malaysia (RISM) to establish the Building Cost Information Services Malaysia (BCISM) Sdn. Bhd. in July 2019. BCISM is given the responsibility to regulate data and information on the National Construction Cost Centre (N3C) portal, in addition to acting as an operator to manage its operations. This is in line with RISM's role as a qualified professional body to advice on all aspects of the economy and construction costs as well as channelling information on construction on a cross-based manner.

In this context, we need to acknowledge how important it is to have information for extensive reference purposes. Reliable data and resource-based information is very helpful to make meticulous decisions especially in business planning. Through knowledge-based and evidence-based results, we can ensure that the construction industry becomes more dynamic, productive and efficient. We are now in the 'big data' era where knowledge driven by technology and automation enables us to lead and set industry benchmarks, not only in Malaysia but also in the ASEAN region as well as global markets.



Furthermore, myN3C web portal is an important milestone for the construction industry. This portal provides updates on construction costs to industry players. The establishment of this one-stop centre is important for industry players and the public, in order to obtain information on more transparent construction costs. This will further enhance the competitiveness and productivity of the industry. In addition, myN3C web portal also provides practical product that is suitable for its development, for example:

- a) Building materials price;
- b) Labour wage rate;
- c) Hire rate of construction machinery and purchase price for construction equipment;
- d) Four indices comprising Building Material Cost Index, Building Labour Cost Index, Machinery and Equipment Cost Index and Building Cost Index.

Through the existence of this myN3C portal which equipped with accessible quality data, it is hoped that industry players have a positive and optimal impact in terms of time, quality and cost in making business decisions and initial expenses. These information are crucial as a guide in making estimates on project costs, analysing the construction market, evaluating price movement and so on. It is confident that the myN3C portal is able to provide quality, up-to-date and indirect data contributing to the improvement of the construction industry which is more competitive and efficient amongst construction industry players. In addition, myN3C also promotes a culture of transparency and competitive prices to the construction industry. It is hoped that industry players can utilize the services or products that available on this portal. Moreover, it is positive that this portal is able to be a major reference to all contractors, consultants, private and public clients, investors, financial institutions, suppliers, academicians and others.



Figure 2: Several products of National Construction Cost Centre

Source: http://www.bcism.org.my/ http://myn3c.cidb.gov.my/

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Sr Dr. Kho Mei Ye, Sr Dr. Othman Mohamed, and Dr. Mahanim Hanid

Introduction of QS Job Scope in Malaysia

Also known as a Cost Consultant, a Quantity Surveyor (QS) is tasked to ensure the construction projects are within budget. They provide cost estimation, project budget, and work in a team with other professionals and identify design changes and its cost implication to a project. A QS will manage the cost of construction project, prepare tender documents, contractual draft, budgets, bills of quantities and other related documentation. They help to ensure the construction projects are completed within project budget while meeting all contractual obligations. In a nutshell, a QS is an asset for any construction project that requires timely delivery of the project with minimal disruption to costing. During challenging times such as COVID-19 pandemic, the effectiveness of a project lies in the proper use of resources with minimal expenses. This is done by always negotiating with suppliers for the best possible value for money purchases and keeping expenses as low as possible while striving to achieve the most optimum result and meeting all contractual obligation. A QS will also need to apply their negotiation and mediation skills to keep project on track even when there are unexpected incidents such as COVID-19 pandemic to avoid delays and penalty. A QS needs to progressively monitor the project viability and financial status to keep the client abreast on the project progress. This will help to achieve maximum operational efficiency during the project implementation.

Essential Skills needed for Quantity Surveying Programme

In completing a Quantity Surveying Programme in any Institution of Higher Learning, a few essential skills are needed. Students must learn to be independent and must have interest in measurement and calculation works. A good working knowledge of Microsoft Excel and the ability to learn special software are also important. It will be an added advantage if one is able to adapt quickly on such soft skill as every construction project is unique as there is no universal solution to any construction problems.



ESSENTIAL SKILLS NEEDED TO ENROL IN QUANTITY SURVEYING PROGRAMME

An ability to learn sophisticated design and to do costing or estimation by using different software are critical to the construction industry as we are moving towards the digitalization era. Sometimes a QS is also required to do estimating or costing for special projects. Hence, it is important to have high flexibility and agility to accomplish and deliver any given task.

Excellent relationship-building and interpersonal skills are crucial because a QS will be working and dealing with many people from different disciplines. Sometimes, a QS will be required to relate or present complex information and propose cost estimation in a simplified manner to people from diverse background. The ability to work in a team and the ability to negotiate are crucial to achieve the best result for clients. Apart from all these, attention to details, methodical and systematic approach to work, and good mathematical grasp are also critical for a QS. There is no standardize formula or guidelines on how to become a successful QS, but accountability, responsibility, and professionalism will lead towards a successful future career. Besides that, a QS must perform self-checking to ensure error-free or minimal human errors in each calculation. This is vital to ensure the quality of work meet the highest standard before submission to the client. Critical thinking and logical thinking are imperative for a OS because there is no building design, construction methods or construction materials in the construction industry which are completely identical. With the above mentioned skills, you are all ready to enrol in any Quantity Surveying related programme. Do not worry as you will learn all these necessary skills and knowledge by enrolling to a Quantity Surveying programme in any Institutions of Higher Learning. Good luck to your future career development as a QS!



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