MARCH 2020 | ISSUE 1



lt's Collaboration O'clock

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FROM THE EDITOR

his issue is about collaborations. Evidently, we have taken a new approach of producing topical and thematic issues, an approach we hope is going to be enriching, enchanting and exciting.

In this issue we have taken collaboration as possibility for growing our practices.

This is the first issue in 2020, and we invite all of you to share any articles for possible publishing to admin@ aaqs.org.

Happy reading.

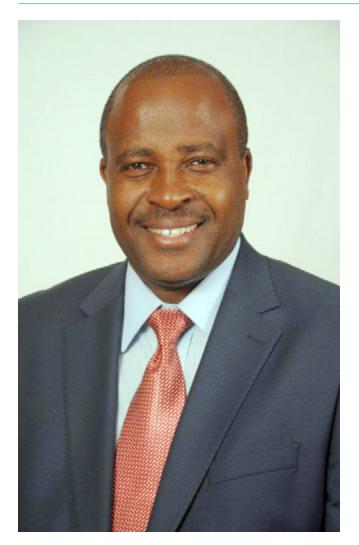
Regards,

RICA QS VOICE

AFRICA ASSOCIATION OF QUANTITY SURVEYORS NEWSLETTER

QS Jennifer *Editor.*

FROM THE PRESIDENT'S DESK



readership. African QS Voice has continued to grow in size, content and quality. Bigger readership demands relevant, diverse and interesting content which rhymes with the inspiration of quantity surveyors across Africa.

This issue dwells on collaborations – this is at the heart of AAQS objectives and relates directly to four of our objectives: foster and maintain professional contacts among members, free movement of quantity surveying across Africa, research and technical advancement of the built environment and use of model documentation.

I would like to applaud the contributors who have shared their wisdom in this maiden edition of 2020 edition, please read in detail and connect with AAQS objectives.

The activities of AAQS have greatly been effected by Corona virus pandemic as Quantity Surveyors do

not live in isolation. Individual associations have cancelled their events and so has AAQS. Planned meetings in Namibia and Rwanda will not happen. We care about the wellbeing of our delegates. Traveling across continents has been restricted and where allowed, it is quite inconveniencing. There is also the health guidelines on social distance which have directly affected meetings and conferences.

This is a wake up call for us to revamp our ICT platforms so that business can continue, albeit at a slower rate. We need to bench mark with those who have successfully held large meetings via ZOOM or other platforms – One Kenyan professional association plans to hold its AGM via ZOOM.

Going by the successes being achieved in combating the Corona virus menace across the globe, we are hopeful that we shall be able to hold our general assemble in October 2020. Our host, Ghana Institution of Surveyors (GhIS) is ready for us.

Let me end by mentioning the devastating effect of Coronavirus to economies across the globe. The situation of the built environment has been bad in many of our countries and this has been exacerbated by this pandemic. Massive job losses, business collapse, collapse of stork markets and many more. Reviews by World Bank, Deloitte, Bowmans, PricewaterhouseCoopers and other reputable institutions paint a grim picture, please read to appreciate how a calamity like corona virus can devastate the world in such a short period.

I look forward to better time ahead, I miss the firm African handshake, high-fives andhugs!

Please stay safe and hopeful.

Qs David M. Gaitho AAOS President

PRINCIPLES OF EFFECTIVE COLLABORATIVE PARTNERSHIPS

A presentation delivered at the IQSK Summit 2019, by Zachary Munene



DEFINING COLLABORATION

"The situation of two or more people working together to create or achieve the same thing" - Cambridge Dictionary

Before parties consider collaboration, few blocks need to fall in place:

Cost and Benefit – Collaborating parties need to assess the likely benefits to them and the impact on their service delivery; the attributes and suitability of potential partners (due diligence); and attendant potential risks.

Alignment of goals and values – There is need for a basic mutual agreement about the purpose of the collaboration; what the organizations will try to achieve together; mutual expectations; and, the principles or values by which the partners will operate.

Negotiation of details – The parties need to agree on each partners' specific roles and responsibilities; practical issues such as time frame and financial arrangements; brand (s) management; confidentiality of proprietary and other information shared e.t.c

Documentation – The agreement between the partners need to be documented either in a Memorandum of Understanding or, where there are resource or legal implications, in a formal agreement or contract.

THE PRINCIPLES OF EFFECTIVE COLLABORATIVE PARTNERSHIPS

Recognize and Accept the Need for Partnership Collaboration can be born out of various needs:

Need to grow your network – Being successful in business requires that you consistently make connections and form alliances.

Opportunity for learning – Some of the most successful collaborations involve two parties who bring two very different skills set, perspectives and strengths to the table.

Achieving efficiencies – this will lead to cost savings – getting more done with less.

Need for quicker solutions – Power in numbers.

Need for inspiration – getting out of one's comfort zone and thinking in a new way. It is easy to get into a routine in your business and not realize that there may be a better way to do something, different techniques to try, and new tools that can help you to save money.

Develop Clarity

Where there is no clarity, even with the best of intentions, things may go wrong.

Without clear goals and careful planning, collaborating parties risk misunderstandings, disagreements or other problems may arise.

To have an effective collaborative partnership, the parties need to develop clarity around various aspects including but not limited to:

- Clarity of Purpose;
- Clarity of Priorities;
- Clarity of Process;
- Clarity of Performance;
- Clarity of Problem-Solving approaches;

Commitment and Ownership

Each party must be committed to the cause.

The collective results need to be greater than the sum of its part.

To achieve that, every member needs to take personal ownership and demonstrate commitment to the overall objectives.

Trust

A foundation of trust makes both internal and external partnerships stronger and increases the chances of success.

Trust has been defined as, "The level of positive expectation we have of another person, when in a situation of risk."

Risk is the key element that drives almost everything related to trust.

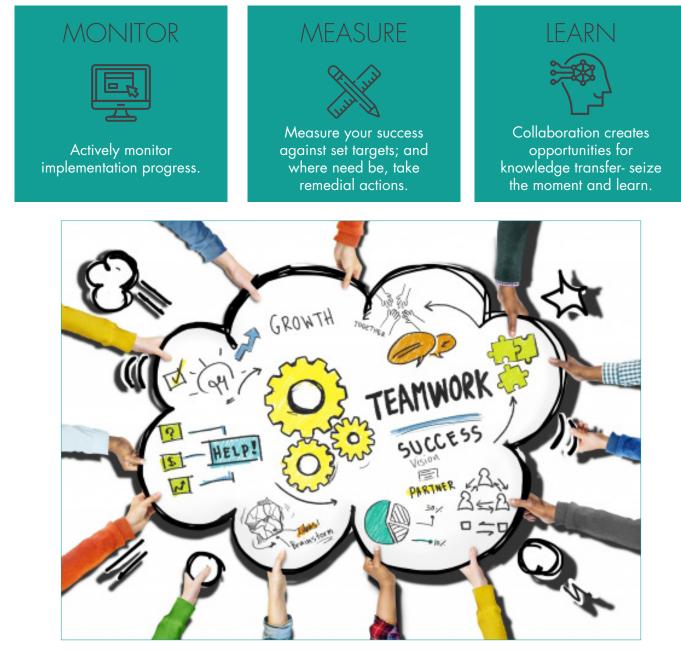
In business partnerships, trust needs to exist between individuals, as well as between entire departments or organizations. Trust takes time to build, but since it is a key ingredient upfront before a decision to collaborate or not is made; we apply what is referred to as procedural trust.

This is where both parties initially place their trust in an agreed structure or a clear procedure that they execute together. It is the ability to create transparent, consistent, and verifiable steps - with clear checks and balances - that allow parties to create the long-term, sustainable foundation upon which organizational trust and, eventually, personal trust can be built.

Clear Partnership Arrangements

The agreement between the partners need to be documented either in a Memorandum of Understanding or, where there are resource or legal implications, in a formal agreement or contract.

Monitor, Measure & Learn



INTERNATIONAL TOOLS TO FACILITATE COLLABORATIONS

What the FIDIC-AfDB contract agreement means for members



here is a growing need for countries to invest in both social and economic infrastructure at a sustainable level. A recent study has revealed that global infrastructure investment needs to be \$94 trillion between 2016 and 2040, which is 19% higher than the current trend.

FIDIC has undertaken and succeeded with its proactive advocacy initiative programme that engaged with multilateral development banks, financiers, investors, insurers and private and public clients to ensure that FIDIC standard procurement contracts to secure delivery of infrastructure efficient and effective.

This standard contract document forms part of a suite of documents and a wider campaign to improve conditions for members firm and clients in the delivery of infrastructure projects.

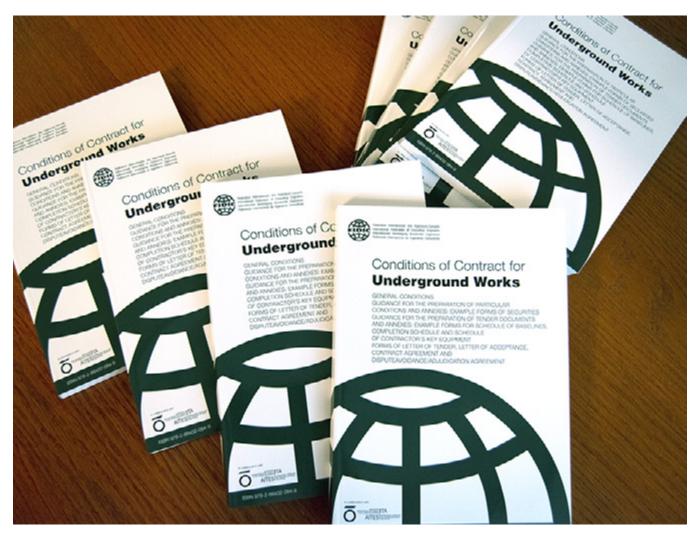
The FIDIC community FIDIC has secured a major agreement with The World Bank (WB), Inter-American Development Bank (IDB), Caribbean Development Bank (CDB), European Bank for Reconstruction and Development (EBRD), Asian Infrastructure Investment Bank (AIIB) and now the African Development Bank (AfDB) that will see the regional funding organisation adopt the use of FIDIC standard contracts for the



next five years. The licencing agreement signed with multilateral banks is a major win, a landmark achievements and good evidence of the value proposition for FIDIC member association, member firms and stakeholders associated with FIDIC. Under the terms of this agreement, FIDIC has granted these banks the leading source for development financing in the World, Latin America, the Caribbean, Europe and Asia a non-exclusive license to refer to FIDIC contracts for projects they finance, and the documents will be used as part of these multilateral bank's standard procurement bidding documents.

Member associations The endorsement and adoption of the FIDIC standard contracts with multilateral development banks hails a significant step forward in FIDIC's policy and advocacy activities for its worldwide member associations. Such agreements not only promote the use of FIDIC contracts, which are globally recognised and make procurement processes more efficient, but they also aid in the promotion and development best practice in risk allocation, effective contract management, dispute avoidance and resolution within the global consultancy, engineering and construction sector.

As a result, FIDIC and its member associations enable



the consultancy and engineering sector and continue to engage at a strategic level, while also ensuring the use of practical and efficient practices to ensure the efficient delivery of infrastructure.

FIDIC and the consultancy and engineering sector have worked for decades to establish the integrity and reputation of the sector, and it is vital that this work continues going forward. The establishment and signing of such agreements with multilateral development banks continues this important process. It continues to add value to the sector for every player and person within it. Our member associations have access to FIDIC's network and expertise, which allows engagement in strategic conversations to shape and influence the sector going forward.

Member association firms When licencing the use of its contracts, FIDIC considers a number of factors, one of which is the benefit to its member associations member firms. It is these firms that design, plan and deliver the infrastructure that will last for generations. It is crucial to the consultancy and engineering sector that, national associations and FIDIC work together and engage to ensure the efficient delivery of infrastructure with the integrity that leaves a legacy we can all be proud of. The use of FIDIC contracts helps to manage risk, reduces costs for clients and companies, and provides a common base for procurement processes. The benefits of FIDIC contracts and the signing of licensing agreements with these multilateral development banks are felt across the entire supply chain. FIDIC, its member associations and their member consultancy and engineering firms are proud to engage in such agreements as they form a vital part of meeting the scope of infrastructure delivery required to meet global challenges such as access to effective transportation system, clean and sustainable energy provision, safe drinking water, access to the internet, and mitigating the effects of climate change.

Over the months and years ahead, FIDIC will progress with the implementation of its advocacy programme to secure similar undertaken and endorsement from other multilateral banks, strategic sovereign government, financiers and private equity investors. Further endorsement and conversion with these strategic stakeholders will be incorporated into the future issued version of this report.

Finally, FIDIC will welcome feedback from member association, member firms and stakeholders on how best to improve future edition of this report to meet the needs of the consultancy and engineering business sector

DIGITIZATION AS A TOOL FOR COLLABORATING

Digital Adoption in Capital project. An excerpt from the Africa Construction Trends Report 2019

lobally, digital transformation has risen to the top of organisational agendas. Businesses are devoting an increasing amount of time, effort and capital into digital transformation. According to research, 80% of companies globally have invested in digitalisation, with an estimated US\$2trn to be spent on digital transformation by 2022..

The business case for digital transformation and its benefits are clear: it provides safety gains, financial benefits, productivity gains, enhanced decision making and improved efficiency. Research done by Deloitte globally shows that 50% of business leaders identify productivity and operational goals as drivers of digital transformation.

These benefits are also true for capital projects. Yet, the capital projects industry has traditionally prioritised investment in conventional tools, techniques and process changes, as familiar ways to improve delivery on time and budget. Technological change can seem uncertain and has impacted digital initiatives negatively.

As is the case with regards to new technology investments in other industries – which are often a reactive response to business risks rather than proactive innovation causing the industry to be change resistant. Furthermore, digital initiatives, where they have occurred, have seldom delivered and sustained the anticipated value or achieved their full potential for various reasons. While digital maturity varies from sector to sector, the capital projects industry lags behind other sectors, such as media, retail and finance. Construction and mining lag the furthest behind. For many capital



projects industries this is because digital investment has typically been ad hoc. Initiatives have simply emulated what has been done elsewhere, or used what seemed most convenient or readily-available. Project teams have tended to work in silos, adopting piecemeal and unconnected technologies that fail to serve the full project lifecycle. Such thinking and practices have led to inconsistent data and information mismanagement within and between projects, leaving capital projects owners and organisations unable to develop and mature their digital capabilities in the long term. Project teams owner organisations, and the supply chain are coming to the overwhelming realisation that their traditional approach to technology investments are not yielding the benefits they had hoped for. Projects are still not delivering a fully digital operation, but rather delivering a traditional asset with some digital functionality. This fails to realis the full potential of the technology.

In other cases, digital 'quick fixes' may be too limited in scope to deliver meaningful improvements. Central teams still focus on impressive-sounding 'headline' initiatives, but advanced technology is often not mature enough, and as a result, fails to solve key business problems and delivers no immediate value to projects.





This can discredit further initiatives, limit budgets and stall new digital ideas. The scale and complexity of the digital landscape makes it hard to determine the most appropriate solution, with multiple providers, manufacturers and consultants each pushing different solutions. The right approach requires a fit-for-purpose, organisation specific digital vision and strategy that allows cohesive piloting and appraisal, investment, planning and implementation. A digital capital project is more than just the use of technology in delivering a project.Adigitalcapitalprojectrepresents a fundamental shift in how a project is designed, constructed, operated and decommissioned. Only when projects begin with a strong digital foundation built around data can subsequent investment in technology become more effective. Deloitte research has shown that when digital is integrated and used effectively, it has the potential to add value throughout a project's lifecycle. For example, digital integration can reduce engineering hours by 10-30% in the design, financing and procurement stage of a capital project. Similarly, in the operations and asset management phase, operating costs can be lowered by 10-20%. Other benefits include:

- Reduced project start-up costs and reduced construction defects
- Impact of design-stage decisions over lifecycle
 performance and cost

- Significant safety benefits by reducing hazards to human workers
- Reduced management process costs arising from incomplete data (5-10% saving on design fees)
- A single source of data, with visibility of assets at portfolio and national level.
- Organisations that have invested wisely are seeing significant benefits. For example, in the mining sector, a major mining company in Australia uses a fleet of autonomous trucks to haul ore, which improves safety, productivity and cost, as one remote operator can supervise multiple trucks running 24 hours a day.

Other case studies, based on Deloitte's experience, have been in the Oil and Gas sector for example. One case required the objective of a step change in productivity and capital efficiency across the ecosystem as investments had been ad hoc and were not delivering value. The value estimation of digital transformation included the following:

- 5-10% reduction in build cost
- estimated value capture of up to US\$1.7bn annually based on
- productivity improvements
- 3-5% reduction in maintenance hours
- 30% reduction in engineering hours.

BE WARY RAISING PROFESSIONALS - ICEC

Power of Early Preparation: Application and Implication in Quantity Surveying Profession and Construction Industry, Lesson learnt- RQSSA 2010-2020

Key terms: Quantity Surveyor, RQSSA, ICEC RP

"The time to repair the roof is when the sun is shining", John F. Kennedy



uantity Surveying, an established profession from United Kingdom which is relatively new compared to Law, Accounting, Medicine and Architecture. Despite this, the main aim of Quantity Surveying is to add value to money used in construction industry and similar sectors. Moreover, Quantity Surveyors are trained to advise on all financial aspects in the sector in concern. (Ivor H. Seeley,1997)

This gives Quantity Surveying and allied professions an important position in economy. However, for QS to satisfy what the world and other professions expect from it, Young or Raising Professionals should be prepared enough to tackle challenges faced by current Professionals inter alia QS awareness and understanding. For instance, how many Quantity Surveyors are engaged in our economies or its sectors? Are they well prepared and positioned to meet their main aim satisfactorily –adding value to money used in construction industry?

It is my pleasure as 8th chairman to Rwanda Quantity Surveying Students 's Association to contribute to first issues of ICEC RP News articles. We preferred to prepare a 'mouth piece 'for Our activities as well as lessons learnt article as learnt from downs and up since



2010 up to this year 2020, year of 10th Anniversary. We believe in power of early preparation. No matter how good or bad the situation might be, if there is early preparation, future is bright. If Junior teams can help thousands of teams in sport to be strong, why cannot this help Construction and Quantity Surveying?

Moreover, remember that "It is not the strongest or the most intelligent who will survive, but those who can best manage change" (Charles Darwin, 1859, The Origin of Species).

I look forward to seeing QS coming out their shells to serve our economy to the maximum.

About Young QS Rwanda - RQSSA (Rwanda Quantity Surveying Students Association)

RQSSA is a nonprofit organization run by students, for students and other communities. It was established in 2009/10 by pioneers of Quantity Surveying-Construction Management Students at University of Rwanda, School of Architecture and Built Environment. Currently, RQSSA is also affiliated to Rwanda Polytechnics-IPRC Kigali and University of Rwanda, offering Quantity Surveying Courses in Rwanda as well as an affiliate of Council of Quantity Surveyors-QS-Rwanda Institute of Architects with mission and mandate to contribute to the development of the Construction Industry in Rwanda through different settings.

Vision

Play a Critical role towards development and sustainability in/through Quantity Surveying Profession and sustainable economies in General.

Mission

Facilitate quantity surveying students and other communities to play important roles in sustainable development through development of Quantity Surveying Services, Construction Industry and Other areas of Economy hence strengthening the association through connecting it to the community, other organizations and sectors.

Activities and objectives

- Launch Annual Journal-QS/CMT/CI since 2013 and by March 2020, RQSSA will publish a sixth Edition.
- **Organizing events** to raise QS Awareness since 2010 including but not limited to 10TH ANNIVERSARY (2010-2020); School and industrial visits; Outreaches; Public Lectures; Conferences; Public lectures; Trainings; Researches and Projects (Like SDG based) inter alia.
- Initiatives and innovations (Domestic, regional and international)
- Others

Values

Vision, Innovation, Excellence, Diligence, Dexterity and Integrity

Motto

Self-definition, Accountability & Sustainability.

"When we shift from a logic of competition to one of cooperation, we all gain. Success is about partnership and leveraging our strength", Paul KAGAME



RQSSA Journal launch



RQSSA Committee weekly meeting-UR Chapter



Commmitte meeting at RQSSA-RP Chapter



QS Public lecture organized by RQSSA on 24th of May 2019 at University of Rwanda



School visits and Class tours

TECHNOLOGY, GLOBALISATION AND THE FUTURE OF WORK: PREPARING QUANTITY SURVEYORS FOR DISRUPTION

Rotimi Bola Ojelade, CWP Consultants, FCT-Abuja Key Focus Debunking the myth of robot-induced unemployment and emphasizing the primacy of human capital CONTRACTOR DE LA CONTRACT Understanding the concept of globalisation, the future of work and the role of technology Â How can we best prepare How is globalization, increased automation and digitization impacting the practice of quantity surveying profession? people who are currently in work and the people who are preparing for the world of work? 4 How can our profession harness the energies of this diverse workforce to achieve the common good of the profession? Globalisation The Future of Work The impact of artificial intelligence, automation on work and jobs, Globalisation is a process of interaction and integration among the people, companies, and government of different nations, a process driven by international trade and investment and aided by information and communication technology. The changing structure and models of engagement of workers which dwells on freelancing, independent work, the gig economy and the decline of lifetime employment. The workforce is becoming multi-generational in an increasingly globalized world. Four generations, consisting of traditionalists, baby boomers, Generation X and Generation Y, are rubbing shoulders at the workplace, as Political globalisation Economic globalisation Social globalisation professionals work beyond their retirement age. Vowork The rise of Machine : How vulnerable are we ? The Gig Economy Flexible work arrangement Mckinsey Global Institute predicted in 2017 that by 2030, as many as 800 million jobs could be lost worldwide to automation, Artificial Intelligence and Freelancing Alternative Career Path Advance Robotics. Co-working Spaces & Virtual Offices Frey and Osborne (2013), adopting an occupation-based approached established vulnerability index for different professions or their component tasks • Up to 375 million workers may need to change their occupational category by 2030, and digital work could contribute \$2.7 trillion to global GDP by 2025. Multigenerational Workforce The Basics of Disruptive Technology

 Each generation has its attitudes, mindsets, preconceived notions and experience. While each one is increasingly unique, there is one characteristic that each of these five generations share – they are all participants in today's workforce.



Production

Aspect

Information Aspect Institutional

Aspect

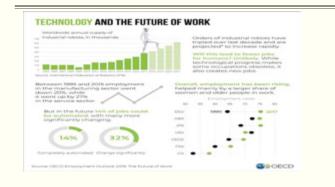
Disruptive Technology in Construction Industry

3D printing Building information modelling Automation Drones Artificial/virtual reality Cloud Artificial intelligence Modular building Wearables Self-healing concrete

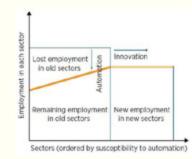


- The Fear of Robots : Let's Look at History & Data
- Andrew Puzder, the chief executive of Hardee's Food Systems Inc., a restaurant chain headquartered in Tennessee was quoted talking about swapping employees for machines. He said, "They're always polite, they always upsell, they never take a vacation, they never show up late, there's never a slip-and-fall, or an age, sex, or race discrimination case," (World Bank, 2019).
- the Industrial Revolution during the 18th and 19th centuries did not lead to widespread suffering, rather it brought prosperity and economic growth in Europe. As automobiles replaced horses, industries based on old order shut down but new industry emerged

- with the invention of the automated teller machine (ATM) in 1972, many predicted that will be the end of human teller in the banking industry in United States. Contrariwise, the number of human bank tellers employed in United States has roughly doubled. From about a quarter of a million in 1972 to half a million in 2019 (WORLD BANK 2019)
- Creative destruction redistributes not simply income and wealth but also political power (Acemoglu & Robinson, 2012, p.84).



Innovation and Automation : The Two Competing Forces



HOW DO WE RESPOND ?

- Developing existing and building new technical skills: Industry, academia, and government must collaborate to develop responsive and adaptable curriculum, teach skills that are relevant in this era of the 4th industrial revolution, 9 Ò Encourage the development of soft skills
 - Collaboration between the generations: Create opportunities for cross-generational mentoring. This can work both ways—don't automatically assume that younger generations will be mentored by older generations. All age groups have opportunities to learn from each other.

Rate of automation

- Source Tubors of Arts, Report 2018, March 11
- Artificial Intelligence To Create 58 Million New Jobs By 2022 (WEF 2018)
- Machines and human will continue to work together with the percentage of work to be done by machine consistently increasing.
- 50% of all companies are expecting their full-time workforce to shrink by 2022 due to automation, but 40% are expecting to extend their workforce and more than 25% are expecting automation to create new roles in the enterprise.

The Need for Re-skilling Revolution

Top 10 skills

in 2020

- plex Problem Solving all Thinking
- Cel
- Creativity People Management Coordinating with Others 4.5.6.7.
 - Emotional Inte ligence
- Judgment and Decision Making Service Orientation
- 9. Negotiation Cognitive Flexibility

1.	Complex Problem Solving
2.	Coordinating with Others
3.	Peccle Management
4.	Critical Thinking
5.	Negotiation

- Service Orientation
- Judgment and Decision Making Active Listening Greativity 8. 9. 10.

in 2015

PRACTICE MEMBERS 2019

Are you looking for continental partnerships? Become a practice Member AAQs and join the growing list



PAN AFRICAN EVENTS IN THE CONSTRUCTION INDUSTRY



ICEC - AAQS CONFERENCE 2020

ICECAAQS 2020 Conference is a global conference of the of the International Cost Engineering Council (ICEC) to be held in conjunction with the Africa Association of Quantity Surveyors and hosted by the Ghana Institution of Surveyors (an ICEC member association).

DATE 19 - 21 OCTOBER 2020

THEME

RISING PROFESSIONALS:

Connecting the Past to the Future

VENUE



FEES

ICEC OR AAQS MEMBERS	USD 500.00
RISING PROFESSIONALS	USD 250.00
UNDERGRADUATES	USD 150.00

CONFERENCE PARTNERS



INTERNATIONAL COST ENGINEERING COUNCIL (ICEC)



AFRICA ASSOCIATION OF QUANTITY SURVEYORS (AAQS)



GHANA INSTITUTION OF SURVEYORS (GHIS) – QUANTITY SURVEYING DIVISION (QSD)







Meeting of Secretariat Steering committee at ASAQS in February 2020, Johannesburg





YQS Nigeria

EDITORIAL TEAM



Qs Jennifer Musyimi Chair of Newsletter & Website Committee



Clarissa Walters AAQs Secretariat