Value Engineering

The changing face of Value Engineering

On 30th March, the virtual Value Engineering Summit showed how advances in AI are creating a broader mix of capabilities for Value Engineering, ensuring there's scope for a new generation of priorities

lue Engineering neans creating value and finding an optimum balance between quality and expense. In today's highly competitive Construction environment, there's never been a better time to explore its benefits and see how it can enhance a business's competitive advantage, literally from the first conception and 'get-go' of a project.

International

These were the crucial factors addressed by the Value Engineering Summit on 30th March - a livestreamed webinar featuring presenters and panelists committed to enhancing project value and who work on every aspect of the development chain.

SMART SOLUTIONS AGAINST A CHALLENGING BACKGROUND In his keynote presentation, David

Clifton, vice president - Business

Development, Hill International (Middle East), looked at the larger economic picture. With the world arguably heading for a median international inflation rate of around 10%, and the cost of re-bar rocketing upwards by 23% in the last two months, Value Engineering isn't about making 'ad hoc', project-by-project contingencies: rather, it must reflect the overall performance of the organisation and its ability to weather a climate

of rapidly rising inventory costs. Given these factors, can a business, for example, build bridges between client expectations and its own performance requirements?

inevitably reflect not only the basics such as the conversion competitive advantage it will gain from more sophisticated (and better inflation-protected)

The key elements of any Value Engineering programme will also costs of imported goods, but the

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supply chain options. With the latter in mind, the rising cost of oil can quite easily, for example, jeopardise calculations that would have seemed rock-solid until quite recently: back in 2018, it was debated whether oil would ever again break the US\$50 per barrel mark again. Now in 2022, prices regularly exceed US\$110 per barrel...

THE STORY OF THE NUMBERS

Given these factors, it's critical for a business to know where it stands commercially on a daily basis and be able to 'crunch the numbers' in the ways that will provide correct and relevant data for any given Value Engineering initiative.

These were the factors addressed in the day's next VIP presentation, by Carolina Fong Guzzy, Co-Founder/ Digital Engineering Manager, Accienta. She explained the role of effective data capture and analysis and how to transition out of antiquated processes to create a properly informative digital dashboard. She explained how the retrieval of relevant data also directly impacts the quest for more elaborate aspects of added value, such as sustainability.

Yet, the data and mechanisms



driving these elements generally won't be achievable with the IT capabilities that most businesses have, and this may require the organisation embracing a full-on process of Digital Transformation. Carolina explained how Digital Transformation can be put into effect in the most practical ways and once operational, how it can influence the most basic perspectives from which organisations understand and see project delivery and - ultimately - value.

ISN'T SUSTAINABILITY THE OPPOSITE OF VALUE **ENGINEERING?**

There is an abiding view that Value Engineering can't afford to entertain higher aspirations, whether they involve, for example, sourcing exotic materials or sharpening visual appeal by bringing on board international design specialists. The quest for Sustainability is all too often a classic case in point.

While sustainability need not

necessarily add to a project's bottom line, there is still a perpetuating 'urban myth' that believes qualities such as sustainability are expensive luxuries that are best engineered out (not in). So, the Value Engineering Summit brought together an expert panel, combining perspectives from four very different disciplines. The title of the panel was 'Why Sustainability and Value Engineering aren't Enemies', and the session featured:

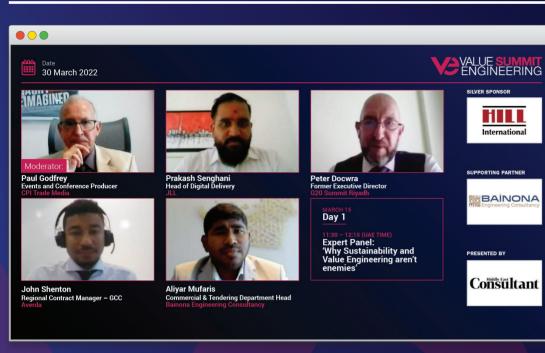
- · Prakash Senghani, Head of Digital Delivery, JLL
- Peter Docwra, Former Executive Director, G20 Summit Riyadh
- John Shenton, Regional Contract Manager GCC. for Averda
- Aliyar Mufaris, Commercial & Tendering Department Head, Bainona Engineering Consultancy

Comprehensively, the panel argued that in today's world, sustainability has to be incorporated from Day One and - far from breaking the template - the cost optimisations it necessitates can quite harmoniously be part and parcel of the Value Engineering model. Peter Docwra, for example,

argued that sustainability can



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indeed be a core component in an integrated project management platform, and is something that clients (especially from government and public sectors) will now increasingly expect to see as a 'given'. Therefore, even mentioning sustainability in a summarised client presentation is something that requires considerable forethought and precise planning - and there is simply no option other than finding sophisticated ways of budgeting for its practical requirements, even across a protracted life cycle.

Meanwhile, Prakash Senghani urged everyone to remember that sustainability is a process, not a 'fait accomplit', and any Value Engineering model has to therefore be ambient and flexible, future proofed as necessary for evolving scenarios, liabilities and costs. He recalled Carolina Fong Guzzy's remarks that availability of the right data is the only way to ensure that the company dashboard is capable of making the assumptions and predictions that formal and effective Value Engineering will necessitate.

This point was amplified further by John Shenton, speaking about sustainability and public sector planning. What about, for

example, the 'hidden' aspects such as waste disposal and the lifetime value of the development itself? Or how well will a building's external panelling weather and endure? Will transport systems have sufficient capacity, and do public areas allow for any interpretation of a post-pandemic 'new normal'? Is the right data available for these assessments and how effectively have they been costed-in? These are all vital steps in making coherent Value Engineering judgements.

Alivar Mufaris then added the powerful comment that when it comes to competitive client pitches, the bar has never been higher: his company, Bainona, had built an outstanding record with government and the private sector by always expressly looking at the sustainability life cycle; being able to answer telling questions about the commercial returns on a property long after its 'honeymoon' season is over and is part-and-parcel of effective Value Engineering.

In the day's anchor slot, Ash Toma, Regional Strategic Asset Management Director, Middle East, Atkins, focused on the role of smart management and data from an altogether fresh angle - explaining that advances in Artificial Intelligence (AI) are empowering completely new dimensions of input into Value Engineering equations. They are in effect lifting the bar in terms of the rigour and scope of analysis and thereby opening the door to fully costing-in and understanding more complex factors such as sustainability.

He argued that opportunities of this kind are only available if business leaders are 'data cognisant', and moreover, without this attribute they can no longer hope to be competitive in client pitches.

Companies need to re-create themselves around the ability to source and manifest the numbers; but more importantly still, they need to have a rigorous understanding of what they need the numbers to tell them.

Once they have these answers, a company can build a properly integrated data platform: with this in place, it's no longer the case that Value Engineering is an isolated exercise, but rather, the norm.

