

EXECUTIVE SUMMARY

The global population is expected to increase to 9.2 billion by 2050, which would lead to an estimated requirement of US\$40 trillion in infrastructure to sustain the global infrastructure growth. While the AEC industry is known to be a laggard in the adoption of technology, it is still one of the most information dependent sectors. As we see massive investment in infrastructure – public and private – there exists tremendous potential in the industry to use of innovative technologies to further efficiency, productivity and efficacy.

The past decade has witnessed a need for utilizing integrated solutions, i.e. Building Information Modelling (BIM) and geospatial technologies – duly augmented by digital technologies (IoT, Cloud, AR/VR, etc.) to intelligently model construction projects. The AEC industry on the whole is undergoing throes of major change with the onset of these integrated solutions to create operational efficiencies and additional business avenues, eliminate data redundancy and costs across planning, designing and engineering, construction and operations and maintenance continuum. As the industry begins to embrace these technologies, investments in construction technology (ConTech) also has started to rise. From 2011 to 2017, start-ups in ConTech attracted an investment of around \$10 billion for BIM, data-gathering analytics, design and planning software, among others.

The increase in adoption of technology in the AEC industry coupled with the thrust provided by national governments to infrastructure and construction technology via budget, policies and initiatives, is going to result in the growth of the AEC market and the geospatial market in the AEC industry. In a way, the transformation in the AEC industry has also arrived in developed countries such as the UK, USA, Germany, the Netherlands, Norway and Sweden; but it still lags in developing countries, thus having a direct impact on the AEC industry market.

The AEC industry is ripe for disruption. From BIM to geospatial technologies to 3D printing and Digital Twins, the construction workflow is undergoing a massive transformation. Undoubtedly, geospatial technologies are fundamental to facilitate an incremental construction strategy for project efficiency and outcomes. In the near future, as more geospatial technology companies enter the AEC foray, the technology shall become crucial for the overall growth of the AEC market, thus leading to socio-economic development.

KEY FINDINGS:

- Cumulative global AEC industry is estimated to be US\$ 11.30 trillion in 2018 and is projected to reach US\$ xx.xx trillion by 2022
- Asia-Pacific, North America and Europe to have the maximum market share with xx.x%, xx.xx% and x.x%, respectively by 2022
- Investments in ConTech are expected to boost productivity gains by approx. US\$ x.x trillion
- Current geospatial market size in the AEC industry is estimated to be US\$ xx.xx billion and is projected to reach US\$ xx.xx billion by 2022
- Major acquisitions by geospatial companies to strengthen their engineering (hardware/software) portfolio to serve the AEC industry
- Adoption of integrated geospatial and BIM solutions to increase substantially in construction and operations, and maintenance phase in the next 3 years