Executive Summury

The GeoBuiz-19 report presents an evaluation and assessment of the Geospatial Industry fabric, the Location Analytics and Business Intelligence Market, the Geospatial Market in AEC Industry and a comparative appraisal of 75 countries on their geospatial preparedness, i.e. the Countries Geospatial Readiness Index-19.

The Geospatial Industry Fabric: The section I of the GeoBuiz-19 report brings forth a qualitative assessment of the geospatial industry in the digital ecosystem, the numerous ways in which geospatial industry and government stakeholders can capture data and precise positioning and the geospatial industry dynamics, i.e. the commercial geospatial industry landscape. On the basis of the inputs received from 100+ CEO's and business, the major technology drivers, market opportunity, challenges and the way forward for the industry is defined. The report also provides an integrated view of the major trends in mergers and acquisitions and partnership that have happened in 2017-2018 and the new business models that have emerged owing to the technology disruptions.

Location Analytics and Business Intelligence Market: Section-II of the GeoBuiz-19 report, discusses the tremendous potential of location context for driving business intelligence. Adding location-based data visualization and analysis enables an organization to identify trends, discover relationships between disparate and unconnected datasets, and make better-informed decisions.

The section covers the role of new-age technologies, like Artificial Intelligence, autonomous systems, and IoT in helping LI develop innovative solutions, while at the same time making it reach to more users, in more ways than ever. Further, new application areas such as autonomous mobility and shared economy-based businesses are going to make LI even more pervasive than today.

Collaborations continue to drive tne LI's penetration into new user segments as adoption of LI is relatively less capital-intensive, it's easier to use and integrate, there are several plug-and-play options available. In addition, the new entrants in the LI market are focus on developing solutions and working in deeper collaboration with user industry, whereas the established players continue to improve their software and platform-based capabilities.

Along with rapid growth, the LI industry also faces some challenges such as stringent data privacy laws around the world, availability of timely and accurate location data, lack of skilled manpower and limited awareness about LI among its prospective users. The industry can deal will most of these challenges be becoming more inherent with its user industries, bringing in transparent mechanisms to assure the consumers of their data protection, reaching out to the academia and research institutes, among many other things.

KEY FINDINGS:

→ The LI industry market size has grown from nearly US$ 9 billion in 2014 to around US$ 22 billion in 2018. By 2022, this number is likely to almost double its 2018 numbers.

→ Among the defined industry categories, location data and map content, and solutions and services account for nearly two-thirds of the market, which is expected to further solidify in the future since these sections are growing at a relatively faster pace.

→ Among the user industries that are expected to be expected to emerge as the biggest market of future for LI, retail, logistics, mobility, smart cities, real estate, etc. are the most popular ones.

→ Overall, the Asia Pacific, followed by North America, is the biggest market for LI. These two regions are expected to maintain their leadership in the foreseeable future as well.

Geospatial Market in AEC Industry: The third section of the GeoBuiz-19 report, duly highlights the importance of geospatial information and technology and its application in the AEC industry. 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. This section presents a brief overview of the global construction industry and the critical role of geospatial information and technology in enhancing the efficiency and productivity of the sector. Additionally, the section also explores the scope, trends, opportunities and market size of geospatial industry solutions in the AEC industry to define the existing and the potential market benefits for all stakeholders of the industry and the benefit of the geospatial solution and service providers, construction industry players and decision makers.

The AEC industry, on the whole, is undergoing throes of major change with the onset of integrated (geospatial + engineering) solutions to create operational efficiencies, create additional business avenues, eliminate data redundancy and costs across the planning, designing and engineering, construction and operations and maintenance continuum. From BIM to geospatial technologies to 3D printing and Digital Twins, the construction workflow is undergoing a massive transformation, and as the industry begins to

embrace these technologies, investments in ConTech has also started to rise. Today, we see a massive investment in infrastructure highlight that there exists a tremendous potential in the industry to use innovative technologies to enhance efficiency, productivity and efficacy.

KEY FINDINGS:

→ The cumulative global AEC industry is estimated to be US$ 11.30 trillion in 2018 and Asia-Pacific, North America, and Europe to have the maximum market share with 66.1%, 12.4% and 8.2% respectively in 2022.

→ The investments in digitalization and its enabling technologies are expected to boost productivity gains by approx. US$1.6 trillion annually

→ Since 2011 up until 2017, start-ups in ConTech have attracted an investment of approx. $10 billion for BIM, data-gathering analytics, design and planning software, among many other things.

→ The current geospatial market size in the AEC industry is estimated to be US$ 58.49 billion.

In the near future, geospatial technology shall become crucial for the overall growth of the AEC market, thus leading to socio-economic development in which case 'geospatial readiness' is the need of the hour.

Countries Geospatial Readiness Index 2019: The Final section of the report is the Countries Geospatial Readiness Index (CGRI)-19, an annual appraisal of geospatial readiness of 75 countries. (+25 from CGRI-18). This index evaluates the geospatial preparedness of the select 75 countries on five pillars namely, data infrastructure, policy framework (geospatial and enabling), institutional capacity (education), user adoption and the geospatial industry fabric (innovation, incubation and accelerators, and capacity).

The CGRI-19 with the addition of regional overview section this year aims to provide a comprehensive region-specific outlook to the industry and government stakeholders of the multitude of opportunities available in the region. Post the regional overview, a holistic view of the critical aspects of the pillars is presented to enable the decision makers to develop an integrated approach to understand and maintain pillar-wise competitive advantage and enabling the visualization of internal differences for the pillar across regions and countries.

The index is utilized as a tool for decision-makers to assist countries in making informed decisions; and for this reason, the scoring of the countries is done in a percentile format to help readers understand the relative preparedness of the 74 countries in comparison to the USA –the topmost geospatially ready country. The USA, UK and Germany retain their position as top three respectively from CGRI-18.

KEY FINDINGS:

→ A critical component of the data infrastructure of a country is the technology architecture that makes available spatial data for use and application to government departments and the citizens.

→ 2018-2019, has witnessed a number of data privacy legislations across all countries with specific laws governing data privacy, sharing and localization, thus, affecting a huge subsect of the geospatial industry (especially location).

→ Many of the universities of the 'Leader' countries provide their students with Geo-research lab facilities which enable students to experiment and innovate.

→ 'Leader' economies like the Netherlands, USA, UK, Singapore and Canada, have managed to successfully integrate geospatial solutions at multiple levels of industrial, governmental and public adoption.

→ The Industry fabric of a country is enhanced in each country with the inclusion of associations and incubation centers and clusters. USA and EU lead the industry fabric pillar

Geospatial Readiness is becoming an increasingly important aspect for all, developed, and developing economies. From foundational governance to implementation at industry and institutional levels including user-level espousal, the effectiveness rests on the proactive approach followed to convert this potential at national level, and regional levels.