

Partner Showcase

Geospatial technologies are critical for economic growth. Advanced geospatial technologies are constantly empowering governments and private organizations to build a geospatial infrastructure that helps them plan policies and programs, automate operations, improve collaboration with stakeholders, monitor progress and analyse impact.

As per the Geospatial “Artha” Report, India’s geospatial economy is growing at a CAGR of 12.8 per cent and is likely to grow to Rs 63,100 crore (\$8.5 billion) by 2025. The Indian Government has been depending heavily on the use of GIS in various initiatives and programs and 2021, many new policies and guidelines were introduced, ushering in the much-needed reforms, which have now created a clear path for the growth of India’s geospatial industry.

India’s Growth Story with Geospatial Technologies



The geospatial industry can create a huge economic impact via employment generation, increased operational efficiencies, improved transparency and resource efficiency, better decision-making and cost savings.

As **Dr. Abhay Kimmatkar, MD, Ceinsys**, rightly points out, “The economy of a country grows with the optimum utilization of its resources. Geospatial technology, with the location advantage it provides, is key to ensuring and measuring the way the resources of a country viz. land, power, water, minerals, etc. are utilized. It helps identify areas of wasteful expenditure, optimised revenue recognition and maximum value realization per unit. For example, geospatial technology is the most important decision support mechanism in understanding the amount of land available, the availability of water in proximity, the type of soil and its characteristics, the weather conditions, etc. Integrating all these varied parameters can help understand the best crop suitable. This, when applied to a large number of land parcels, causes a huge improvement in the agricultural yield. We all are aware how reductions in losses in electricity, water, etc. can make a tremendous impact on the exchequer.”

Economic Impact of Geospatial

How Our Partners View It

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Dr. Abhay Kimmatkar, MD, Ceinsys



Reiterating the thoughts,

Santanu Chakraborty, VP – Sales, NeoGeoInfo shares, “Geospatial or GIS solutions accelerate the value creation of the mission-critical projects. This is possible through rapid technological innovations

in the fields of data acquisition and processing/modeling techniques that are extremely efficient and independent of human errors.

A simple example is how the ease of data capture using drones or the ability of satellites to produce incredible resolution images has made the land resurvey projects (pending for a long time in India) a reality now. Several state governments and the Survey of India are actively pursuing these projects. Land resurvey projects give accurate land parcel maps which in turn will be used to give property cards (conclusive rights on the land) to the respective owners. These conclusive rights on land will not only improve our ease of doing business index but also enable the people to participate in a thriving economy. Of course, this is easily relatable and simple, but there are engineering and navigational applications (it is estimated that effective and efficient navigational/PoI data improves the GDP by 10 to 13%), whose impact can’t be directly relatable, but it’s much more significant than my land resurvey example.”

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Santanu Chakraborty, VP – Sales, NeoGeoInfo



Jake Jacob, Head-GIS, ULTS, adds, “Geospatial analysis is being adopted as a great decision support system in every walk of life. From enabling us to travel faster through shorter routes to saving precious

resources like water and power and even saving lives in a pandemic or natural disaster, geospatial is an integral part of every informed decision. In each of these aspects, there is an obvious economic impact since money is after all a translation or an extrapolation of time and material resources. If we can shorten the time spent and reduce the utilisation of resources whether human or material, it will manifest in saving money. Hence, it’s time that the government departments adopted this great tool to save precious money which can save the national economy and help it prosper. From tracking traffic to saving people from looming catastrophes, geospatial is enabling the world to move in a faster, more convenient, and safer way. As an industry, Geospatial services generate US\$400 billion in revenue per year. However, their total economic contribution is several times higher.”

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According to **Irfan Choudhry, CEO, Genesis Ray Energy,** “India has long been a leader in using modern geospatial technologies, whether we speak of its remote sensing satellites program that started way back in the 1980s or 2000s

when it took steps toward designing a National Spatial Data Infrastructure. Most recently in 2021, India came up with a draft geospatial policy that aims to boost geospatial entrepreneurship for the socio-economic development of India. Already we have been seeing widespread adoption of GIS at the government level for policy formulation in various domains such as land management, utilities, urban development, agriculture, energy, and telecom. In particular, the use of GIS is revolutionizing sustainable development in urban planning, utilities, transport, and land administration for better compliance, and operational transparency.”

He further adds, “As India moves towards the target of 450 GW renewable energy by 2030, the quest of finding suitable wind and solar sites using GIS and other geospatial technologies will

only grow from here onwards. Similarly, driven by key national mission mode programs, such as Smart Cities Mission, AMRUT, and the Housing for All by 2022 mission, GIS is making a significant impact in the urban development sector. In transport, the recently launched Gati Shakti – the National Master Plan for Multi-modal connectivity - is leading the GIS adoption in the sector, whereas, with schemes such as SVAMITVA, the Ministry of Panchayati Raj is utilizing GIS for land administration to provide rural citizens the right to property documentation.”

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Irfan Choudhry, CEO, Genesis Ray Energy



Vinay Simha, Founder, SkyServe adds value to the thought by sharing, “India is a land of many cultures, many states with diversity and uniqueness going hand in hand. Due to the expansive population and its

needs, geospatial information is one of the best inferencing data sets to address commercial, tactical and strategic needs. For example, we are a price-sensitive nation feeding a billion lives, inflation is a key aspect here, if the government and agencies had a live onion produce dashboard, they can trigger actions before it becomes a big issue. In such case, geospatial data plays a key role.”

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Vinay Simha, Founder, SkyServe



Shitanshu Jain, Strategy Consultant - Digital Construction, Capricot Technologies echoes the thoughts by sharing, “India is a diverse country with multitudes of levels - Country, State, District, etc. For a steady

and healthy national development, there is a need for a scientific and quantitative analysis of the economic, social, demographic and environmental characteristics among all levels of government across the regions. The application of

GIS technology in economic development plan can ensure the supply of accurate and quantitative information required for decision making.”

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Shitanshu Jain, Strategy Consultant - Digital Construction, Capricot Technologies



Parkshit Das, Director- Geospatial Sales, Emitech Infosystems, presents an interesting view on the subject by saying, “Government and industries rely on GIS for planning, development, analysis and decision making. GIS has

evolved to become a technology that can, not only meet industry-specific business needs but can also potentially change the way business decisions are made. Enterprises have integrated other systems like ERP, CRM, and BI with GIS for greater insights into their data and business Decision-making. Today, a lot of organizations are sharing their work and creating billions of maps every day to tell stories and reveal patterns, trends, and relationships about everything. As GIS continues to evolve and integrate technologies such as Big Data, IoT, and Artificial Intelligence, its role is becoming more instrumental than ever in the digital transformation of the country.”

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Parkshit Das, Director- Geospatial Sales, Emitech Infosystems



Reiterating the importance of geospatial technologies, **Thiyagarajan Deivasigamani, MD & CEO, Redleaf Technologies** shares, “ Geospatial technologies are playing a very vital role in the complete operations of government sector. By using GIS for

planning, government departments are able to achieve better efficiency and reduced costs along with many other benefits. GIS brings in acceleration, e.g., planning tasks that used to

take a few days to complete earlier, can get completed within a couple of hours using GIS. That’s the difference GIS is making. Many operational tasks which were not possible traditionally are also becoming possible with GIS. We are seeing innovative solutions using GIS, for instance, GIS-based solutions that are strengthening the defense capabilities of the country.”

GIS is a cutting-edge technology providing much more intelligent insights than before. So, we are leaping forward not only economically but in several other areas using GIS.

Thiyagarajan Deivasigamani, MD & CEO, Redleaf Technologies

Conclusion

The viewpoints shared by some of our esteemed partners indicate that geospatial technologies like GIS are vital enablers of India’s economic growth. However, a lot remains to be achieved. The adoption rate of geospatial technologies needs to increase to make a credible impact. While sharing success stories is a wonderful way of spreading the word, it is necessary to raise awareness, work towards building a skilled workforce, strengthen the policies and solidify public-private partnerships for more concrete outcomes.

