

ISSUE 1 | MARCH 2022

Not for Sale | Only for Subscriber

ISSN: 2581- 4613

GIS RESOURCES

GEOSPATIAL TECHNOLOGIES FOR CROP DAMAGE AND COMPENSATION ESTIMATION

**EXCLUSIVE
INTERVIEW!**

Rajiv Kapoor
Chairman and
Managing
Director,
RMSI



Scan to visit website

How GIS and Geospatial
Tech Can Enhance the
Agriculture Sector

Farmoanut®: Making Crop
Damage and Compensation
Estimation Easier

Potential Use Cases of
Geospatial Analysis for
Crop Insurance

RMSI - A Global Leader in Geospatial and Engineering Solutions

A Talk with Rajiv Kapoor, Chairman and Managing Director, RMSI

RMSI is one of the world's leading global GIS companies across the globe. RMSI's core competency lies in providing solutions across the entire geospatial value chain - from data enhancement including every manner of geospatial data conversions to software development to modeling, analytics, and consulting. The ability to offer complete GIS solutions, comprising data, software, and engineering under one roof, is a key differentiator for the company.

We had a great opportunity to have a questionnaire with Rajiv Kapoor, Chairman and Managing Director, RMSI. He has shared interesting insights on the journey of RMSI in the last 3 decades. He also talked about company expansion plans, untapped opportunities in the Indian geospatial market, and advice to budding entrepreneurs and college students.

The questionnaire follows as...

GIS Resources - Let's start from the beginning, back in 1992 what made you interested in geospatial technology, and the idea of starting RMSI. And how has been the journey so far?

Rajiv Kapoor- We are a three-decade-old company focused on geospatial and engineering solutions. Way back in 1992, when GIS was considered a niche technology, we identified that geospatial technology could be a real business enabler and play a crucial role in business transformation in the future.

What interested us was the location context and how it can play an important role in each sector from infra development, transportation, to utility, telecom, etc. For example, a utility company has millions of assets, and in case of a fault, location data provides context to identify the correct failure location of an asset with respect to the power breakup and managing a quick redressal.

Since its inception, RMSI started with one of our first customers (GE Capital) for whom we did digitization of paper maps to working with some of the largest and most recognizable Fortune 500 companies today, creating maps and powering intelligence platforms. We work with most blue-chip companies (Top 15-20) in each of our core sectors, including government and private sector clients.

RMSI has grown from an initial team of five people to a company of more



Rajiv Kapoor

Rajiv represents the executive management on the Board of Directors of RMSI. He has been with the company since 1997 and has played a significant role in the company's growth and business expansion. Rajiv has the overall responsibility for developing the company's vision and strategic direction.

Rajiv previously worked as a Financial Controller with KB&T Limited, managing its finance and accounting functions, including treasury and banking operations, foreign exchange management, project finance and resource mobilization, budgeting, public issue formalities, and all legal and commercial aspects of the business.

Rajiv is a Chartered Accountant and has a degree in B.Com (Hons.) from the University of Delhi.

than 5000 people. During this journey, one thing that has stood out is our commitment to our human capital as we have consistently been ranked as one of the best companies to work for in prestigious surveys.

GIS Resources - Could you tell us about expansion & investment plans contributing to the growth dynamics in India?

Rajiv Kapoor - Despite COVID, we have been fortunate to manage a good growth path for the company. We successfully transitioned to the WFH model and continue to support our clients uninterrupted across global geographies.

In the coming year, we are forecasting a much higher growth. We already have subsidiaries in key geographies and looking to consolidate our presence in international markets.

- We have plans to grow our onsite teams - Have to increase our presence in different markets locally to manage the sensitivity of data.
- We are also looking at investing in new business development models, having sales resources who are persuasive and innovative to understand client's problems, and partnering with them to offer solutions.
- From the Indian context, we are excited about the new geospatial policy and the liberalization of the drone policy. We are developing innovative IP solutions with a special focus on location intelligence and opportunities within the infrastructure and logistics sectors. These revolve around last-mile mapping challenges and effective visualization and analytics for large infra projects. Our solutions are driven by industry needs and current gaps.
- We are fortunate to be working with all the sunshine sectors. For e.g. Automotive sector is looking at bringing in autonomous cars, utilities bringing in green and sustainable utilities, and the mapping sector is looking at location intelligence for all industries. Our focus is on how to develop solutions and products around our client's challenges.
- We are also looking for similar or complementary companies, acquiring stakes in these companies to accelerate our agenda.

GIS Resources - How does RMSI envisage the use of Geospatial technologies in substantial development?

Rajiv Kapoor - We want to transform through the use of emerging technologies and do more of what we can in lesser time/effort induced and with more precision.

For eg. Building capabilities around developing smart applications on top of data we own, data we can leverage, or open-source data.

Drones hold an important place in the construction industry. Many firms are adopting it for surveillance and mapping activities. During the project design phase, a high-quality drone survey can help in 10-20% design savings due to multiple benefits such as choosing the optimum route, value engineering, identification of obstacles before construction, better land-acquisition planning, and undertaking better visual planning for projects.

AI/ML will also have a visible synchronization with geospatial in the future. We have already been using AI/ML for at least the last 5 years in many areas dealing with the usage of digital maps. Anything that is spatial information has a pattern and uses AI/ML. One can train algorithms to sense these patterns. For example, Supervised learning can be effectively applied in geospatial. We have done a fair amount of work using this tool, especially in cadastral applications, and now we are increasingly looking at the telecom engineering space and figuring out how it can be applied to some of the problems in this industry.

Also, the announcement of a new geospatial policy and relaxation of drone policy in India will bring in far more data being generated in the market, opening opportunities for Indian companies like us to develop innovative applications to leverage data.

GIS Resources - In your opinion, what are untapped opportunities in the geospatial market (in India)?

Rajiv Kapoor - There is a lot of untapped potential with significant usability of GIS in healthcare wider use in infrastructure, e-commerce and logistics sectors that can drive real transformation. As per the latest Union Budget announcements, there is a significant government push in increasing infrastructural investments with programs such as Gati Shakti, Svamita, etc. These programs will have a technology backbone spanning geospatial mapping to GIS analytics as a core technology. GIS can play a critical role in substantially reducing the cost of these projects by reducing duplication of work across departments and smarter monitoring.

Further, base data was available earlier, but we can develop high-resolution contextual data to amplify last mile connectivity in the country with the new policy.

GIS Resources - There is a lot of talk going around about The Draft National Geospatial Policy 2021 and liberalization of Geospatial policy, what does this entail to RMSI?

Rajiv Kapoor - The Government of India took excellent initiatives in the Geospatial sector last year by liberalizing the Geospatial policy and creating an enabling infrastructure for Drone Industry through Drone Rules 2021.

To fully realize the benefits of these major policy initiatives, there is a need to increase budgetary outlays for these sectors to undo the damage caused by the earlier restrictive policies. There is a shortage of quality survey infrastructure in the country in terms of manpower, know-how, and equipment. Most of the Indian cities have not been surveyed properly, and this results in large leakages & damages, and illegal construction problems besides aggravating issues like urban flooding.

RMSI is an established mapping expert and can help the drone ecosystem develop towards mapping. With the help of drones, one can conduct illegal construction and encroachment monitoring and effectively manage urban floods, forests, pollution, assets, and many more areas.

Furthermore, the liberalization of geospatial policy will level the playing field for private entities. A ready supply of geospatial data will be available to create high-quality maps. Moreover, having access to accurate geospatial data will benefit multiple sectors that were suffering before.

GIS Resources - What are major trends that you think could influence to drive the Geospatial market most in the coming years?

Rajiv Kapoor - With the recent IPCC 2021 report findings, India is on a red alert with respect to the impact of climate change by 2030, including a high threat to some of the key coastal cities in the country. The trends in climate change are increasing at such a fast pace that this is a real threat now. RMSI specializes in assessing the impact of climate change on hydro-met hazards. We are working extensively on this segment from a flood, climate change, and disaster perspective to enable mitigation strategies at the country and State level. Preventive steps can be certainly taken today to manage the climate change scenario. We are also working towards publishing a Climate Risk Index for India.

In the area of disaster risk reduction, there is a growing trend globally to make extensive use of technologies

such as Decision Support Systems and Drones. As part of government engagements in India and emerging economies, RMSI is developing Decision Support Systems (DSS) to help governments combat disasters.

Another big trend is about the infusion of new technologies like AI/ML with GIS for faster and quicker development of specific data at a high resolution. These infusions will pave the way to find smarter ways to generate data driving usability for very specific use cases.

The recent union budget announcements around drone usage, land records digitization, and programs like the Svamita & Gati Shakti will certainly see larger geospatial technologies engagement, hence driving the market. GIS will be driving the country's growth ambitions, aiding the new-age ecosystem by providing location intelligence at the fingertip.

GIS Resources - You have 3 decades of experience in the geospatial industry, give some advice to GIS Resources readers and budding entrepreneurs who would like to turn their ideas into a profitable business.

Rajiv Kapoor - When we were formed, one obvious assumption was around the growth of this technology. We always knew that geospatial will have a significant play but we never realized that it will move from being a niche to a mainstay technology in this short span. From a technology enabler, it has become a technology that solves customers' business problems. The acceptance and adaptability of the technology have increased multi-fold.

For budding entrepreneurs who would like to turn their ideas into a profitable business, I would say that instead of being solution providers, they should partner with their clients to solve complex problems. They should enable their clients by solving their core business challenges rather than offering piecemeal solutions. This will help them get on the path of their digital transformation journey.

GIS Resources - Last question for students, what talent sets do you look forward to hiring fresh college graduates?

Rajiv Kapoor - While hiring freshers, our focus is on identifying candidates with the right work attitude and culture fit. Additionally, we look at base qualifications in telecom and engineering and put them through rigorous induction programs to upskill them to be market-ready.