THE CHANGE ISSUE

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MIT
INCLUSIVE INNOVATION CHALLENGE

2019 REGIONAL FINALIST

SatSure

ASIA

Massachusetts Institute of Technology has announced the 2019 MIT Inclusive Innovation Challenge Regional Finalists! Sixty global organizations representing the most innovative future of work solutions on the planet will now proceed to five regional events in Toronto, Canada; Mexico City, Mexico; Darmstadt, Germany; Addis Ababa, Ethiopia; and Kaohsiung, Taiwan.

SatSure is excited to be among the **12 Finalists** from Asia, and we shall be pitching to a live audience and Selection Panel of regional innovation leaders. We have been selected in the Financial Inclusion category.

SatSure

CHANGE IS THE ONLY CONSTANT

Leadership , Strategy , Brand

A primer to changes in our organisation
by Dr Roger Moser, Chairman, SatSure

Organisations constantly evolve and SatSure is not immune to change. Since its establishment three years ago, SatSure has continuously been evolving and now is considered a trailblazer in the financial inclusion sector in India.
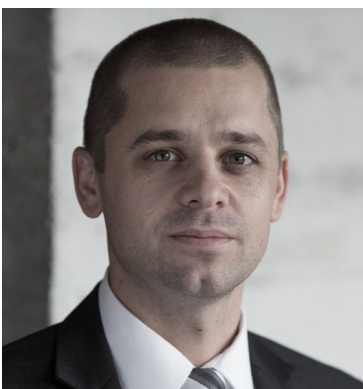
Our journey, which we began in 2015 is now an inflection point. Having validated our proposition in the market we are now providing our services to four insurance companies, three state governments, six agro commodity firms and two banks in India. Further afield we have gained traction in Australia, Zimbabwe and the Philippines alongside customers in our immediate neighbourhood of Nepal and Myanmar.

We have also cemented our reputation as a thought leader and ecosystem builder with our initiatives in Kerala, Andhra Pradesh and Maharastra where we were successful in forging partnerships that will see downstream space applications take centre stage in policy decision making in these states.

All this entails an organisation that strikes the mark on the following – Process Management, Project Management, Change Management, Knowledge Management and Resource Management. We have been busy putting these pillars together.

Changes that are afoot

Process Management – SatSure has taken its first steps in the direction of Business Process Management by aligning itself to the ISO 9001:2015 as well as the ISO 27001: 2013 standards. Our team has been working with external consultants to put the required policies and procedures in place to achieve alignment to the standards and the board mandate is to get certified in these standards

Amardeep Sibia, Outgoing CEO, SatSure.

Prateep Basu, Incoming CEO, SatSure.

by the second quarter of 2020.

Project Management – Our growth entailed us to put a robust project management structure to be put in place. Our organisation has been internally aligned with guidance notes provided in the ISO 21500:2012 standards. We have implemented a lean management approach with teams constituted to deliver on our projects.

Change Management – Growth also entails realigning of roles within the organisation. As part of organisational change the following changes have taken place.

Amardeep Sibia, our CEO, is transitioning into a mentoring role at SatSure while one of the founders, Prateep Basu, the current CSO has been nominated by the Board of Directors to lead the company as its CEO.

Samuel John, our COO is leaving his role to build out our newly opened aviation vertical. He will be working with our team in the Trivandrum office exclusively focussed on the aviation industry.

We are also actively promote leadership building within the organisation and core team members showing great promise are encouraged to take on new roles and responsibilities. In lieu of this Karthik Ravindra and Sarvesh Kurane have been inducted into leadership roles as AVP – Operations and AVP – Value engineering, as they have shown great promise during the short period that they have been with SatSure.

Website, Brand and Newsletter – SatSure has

About the author

Dr. Roger Moser is the Chairman of the Board of Directors at SatSure. Dr Roger is an academician and currently is an Assistant Professor for International Management at the University of St.Gallen (HSG). He is also Adjunct Professor of Strategic Management at the IIM, Udaipur. Dr. Moser serves as Director of the Asia Connect Center– HSG at the University of St.Gallen.

Decision Intelligence from Space

SatSure leverages advances in satellite remote sensing, machine learning and big data analytics to provide answers to large area questions across multiple domains.

Revamped SatSure Website

changed its brand identity with a new website and logo which is currently live. The new logo reflects SatSure's vertical agnosticism and our transition from a pure agriculture play to that of a financial technology platform in the various sectors we are focussing. SatSure now has a presence in Agriculture, Banking and Finance, Infrastructure and Climate Change.

New SatSure Logo

Newsletter – Our successful newsletter 'Fasal' has been fully revamped and renamed as "The SatSure Newsletter (TSNL)." From the occasional publishing, TSNL will now be published monthly. Fasal had been warmly received by our customers and partners and also received mention in the "Society of Actuary" publication. This is a testament to the quality content which we strive to bring on a regular basis. The newsletter content will be driven by industry knowledge with guest columns from our partner and client network.

Knowledge Management – Innovation is at the core of SatSure and Knowledge Management is the driving factor of being ahead in its forward curve. At SatSure we have instituted a program where our employees take lead on new technology implementation by training, and buddying up with others. In keeping with the philosophy of **acquire, train, manage and retain** about which you will read in this news letter, SatSure employees conduct weekly knowledge transfer sessions with their peers in the company and additionally an internal training program has been rolled out.


Sweta Maitra, HR Manager, SatSure

Resource Management – As part of acquiring and managing an exceptional workforce, SatSure has brought into the organisation a new HR manager. Sweta Maitra holds a Masters Degree in counselling and psychology has worked previously in an HR consultancy. In her guest column in this newsletter, Sweta writes about her vision for SatSure's Human Capital Management practice which will see our internal organisation strength doubling over the next six months. Managing the growth in manpower will bring its challenges which we are poised to address.

NATURAL DISASTERS IN THE AGE OF BIG DATA

Analysing the impact of Cyclone Fani
by Devleena Bhattacharjee
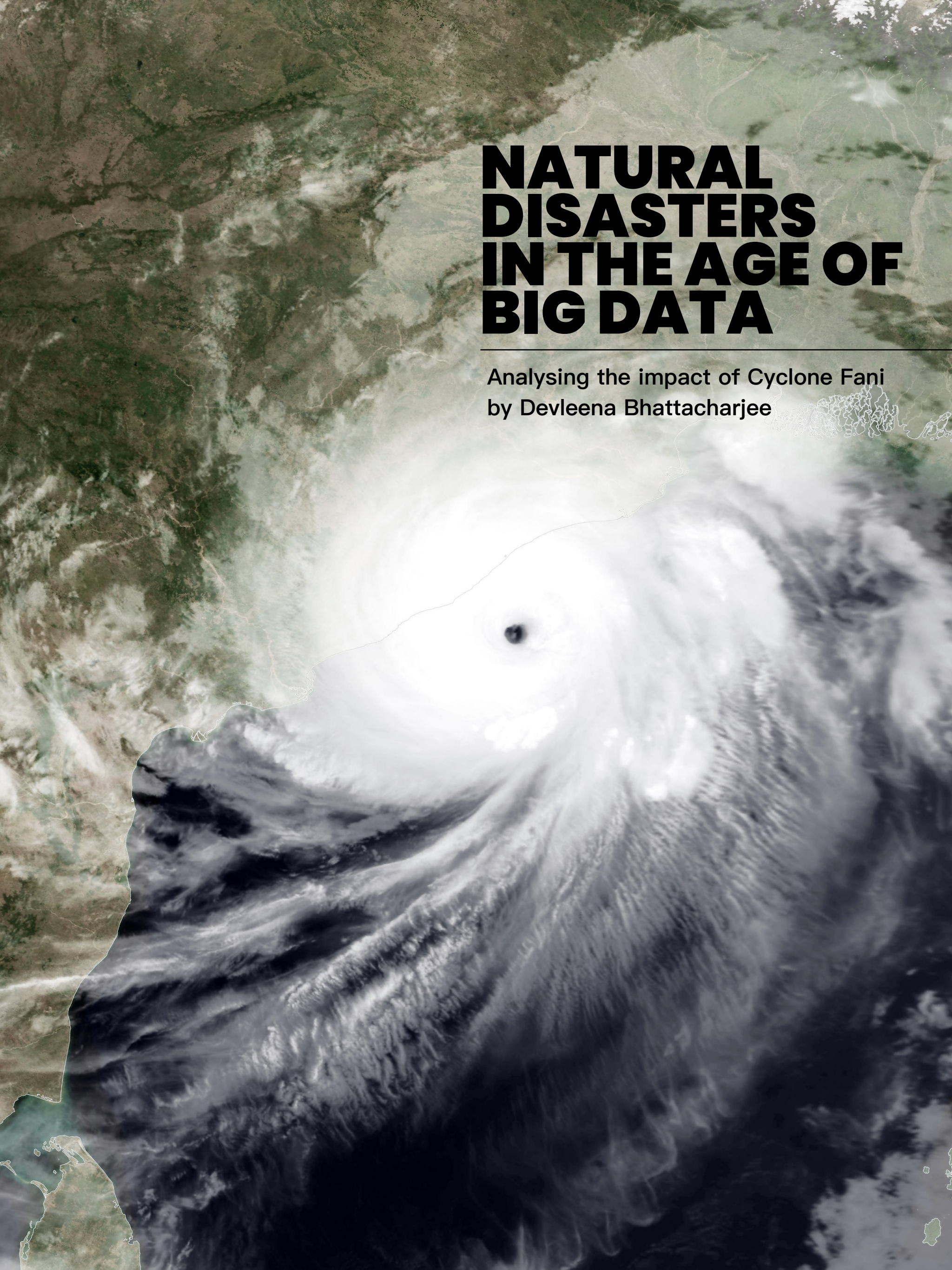
The eastern coast of Odisha, Andhra Pradesh and West Bengal were recently battered for ten long days, starting April 25th, by a deadly cyclone named Fani. Spelt as 'Foni',this cyclone registered wind speed over 250 km/hour and claimed over 90 lives while causing a financial loss of over 9,000 Crores. If it was not for the effective and diligent effort of the Odisha government and NDRF, many more lives and livelihoods would have been lost.

Climate change has made natural disasters to occur more frequently and with increased intensity, across the globe. In the last 20 years, there has been more than 6,000 incidents of climate–related disasters, which killed 1.3 million people and left 4.4 billion injured and homeless. When a natural disaster such as a cyclone or typhoon strikes, traditional maps fail since the earth undergoes a lot of geophysical changes during cyclone, tsunami, floods or storms. However, five types of data becomes very vital under such circumstances:
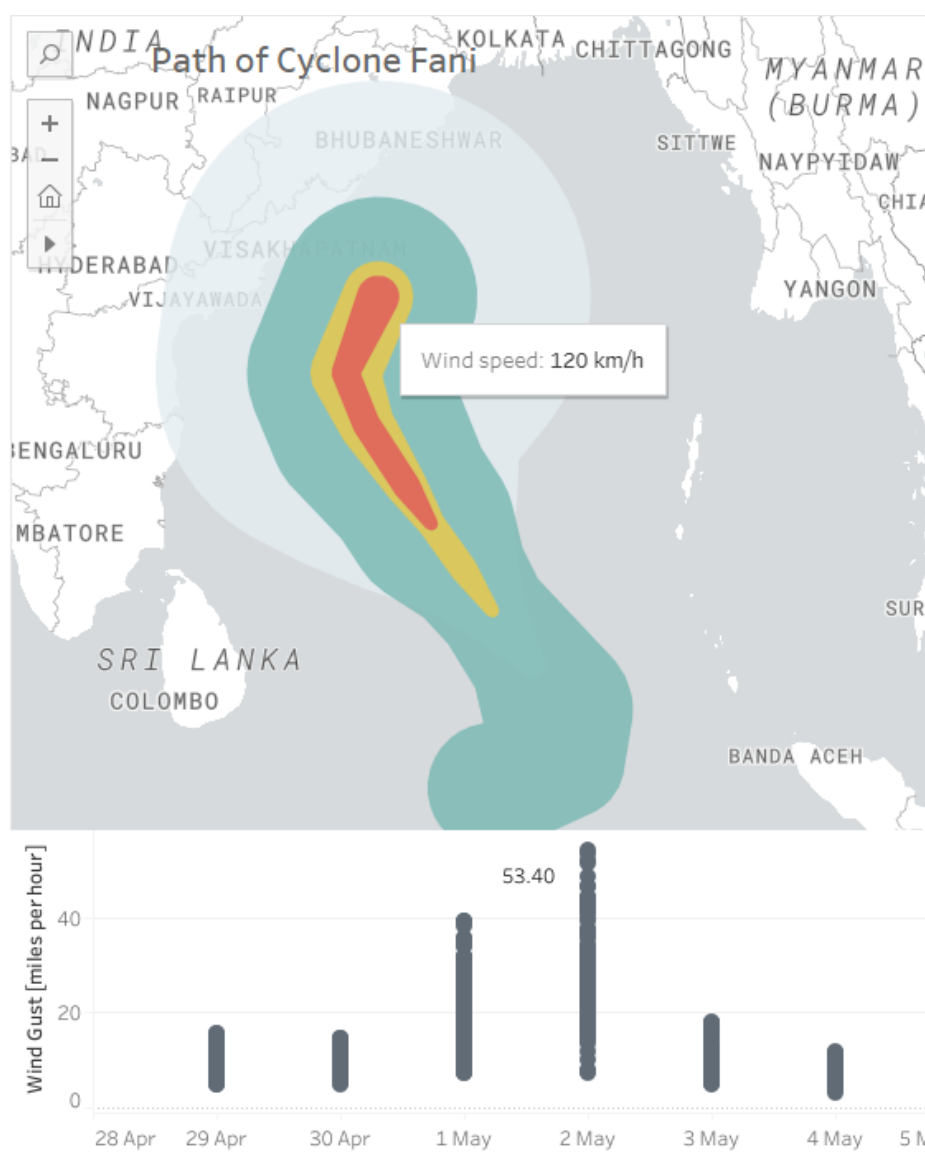
Remote sensing – Latest updated satellite imagery and atmospheric data for tracking the event and analyzing its impact after its landfall. These help authorities to plan and execute relief actions better. Predictive models further help in analyzing forecasted impacted areas, extent of damage and loss implications. These not only help in disaster preparedness and real–time monitoring but also in post disaster analysis and rehabilitation.

Ground reports – Updates from trapped civilians, survivors, volunteers and rescue teams are some examples of crowd–sourcing hyperlocal data to enriching the value of the information extracted using Earth imaging and weather satellites.
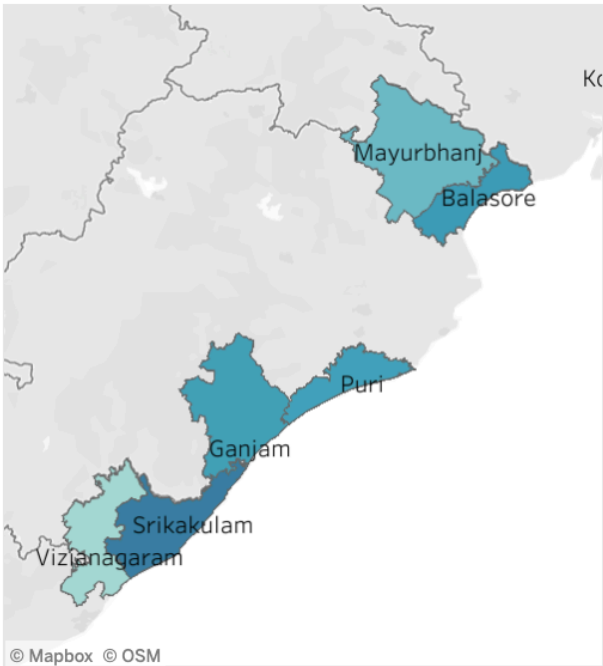

Cyclone Fani Track

Updated Weather data — High resolution and high frequency weather datasets are very useful for monitoring the event and predicting the affected areas with high accuracy.

Land–use data — Terrain information, spatial population distribution, mapping of roads, hospitals, and area under agriculture are some of the features that increases the decision making power for managing the pre– and post–event logistics

Digital Media reports — In the age of 24*7 news and social media, a lot of information is extracted faster through such medium using simple textual and sentiment analysis, which helps in understanding the nature of help being asked and help being offered by victims and volunteers respectively.

About the author
Devleena Bhattacharjee is the founder and CEO of Numer8. Numer8 helps businesses and governments understand their data better. They work with businesses, governments and international agencies like the United Nations and the European Space Agency helping in proactive decisions on planning, development, cost and revenue. Numer8 is partner of SatSure.

In our study of Fani, done by the teams at Numer8 and SatSure, we analyzed five layers of data to study the disaster top down and ground up. We analyzed tweets that were shared on Fani across location and time, trend over days was correlated with disaster intensity for critical zone analysis.
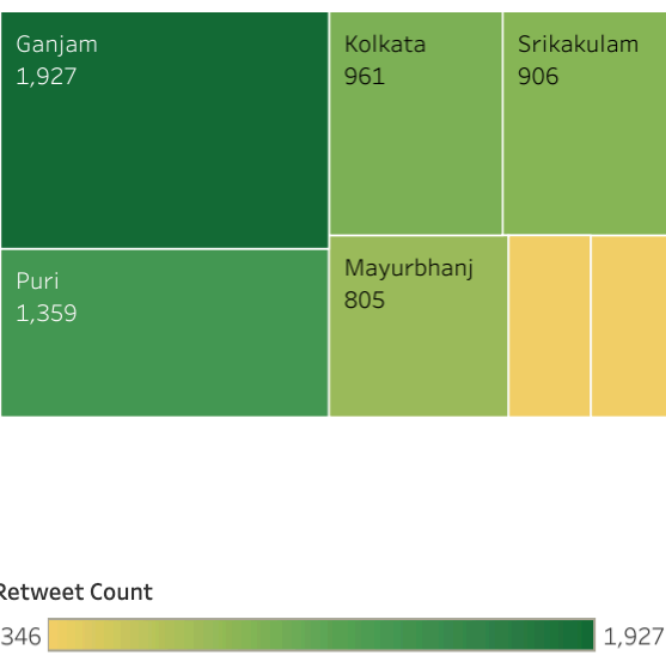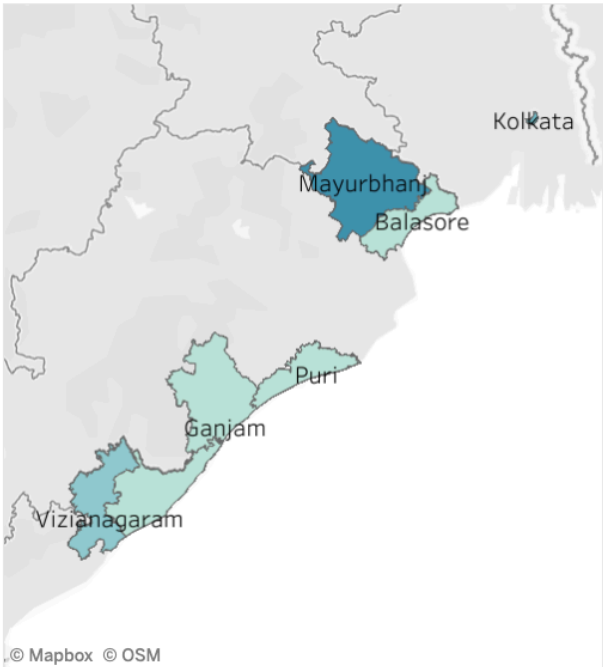
Negative Overall Sentiment
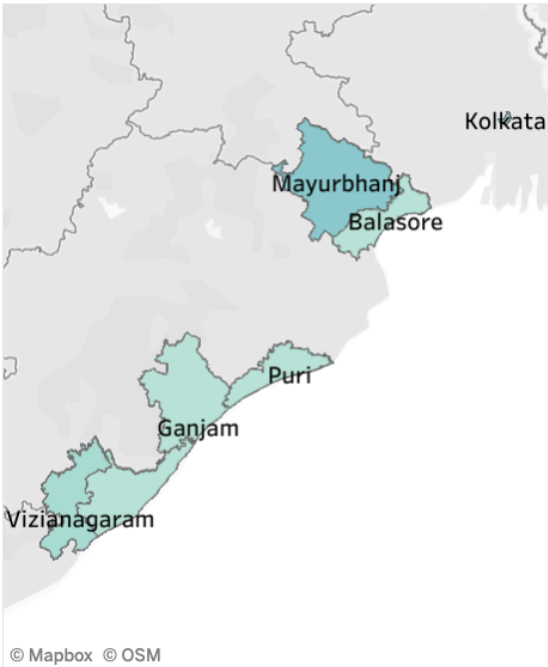
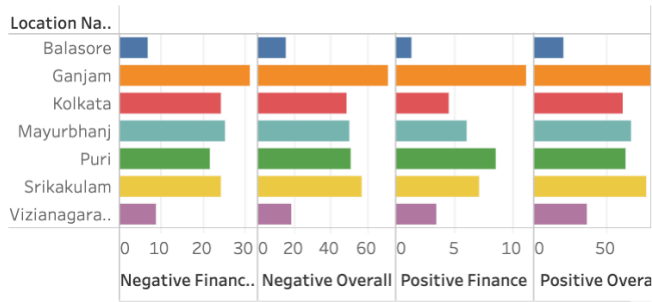Negative Financial Sentiment

Retweets by region

| Ganjam 1,927 | Kolkata 961 | Srikakulam 906 |
| Puri 1,359 | Mayurbhanj 805 | |

Retweet Count

346 ────────────── 1,927

Sentiment Meter

0.000 ────────────── 1.000

Positive Overall Sentiment

Positive Financial Sentiment

Sentiment by region
(Financial Impact and Overall)

Sentiment Analysis Dashboard

Sentiment analysis on human capital and financial market impact helps us in studying the loss of lives and livelihoods.

Satellite data helped us in our study of wind and flood impact, where density–based thresholding techniques were used on Sentinel–1 Synthetic Aperture Radar (SAR) imagery for estimating actual inundation on the ground. Digital terrain model was used as an additional layer for providing a predictive depth estimate due to the inundation caused by flooding. The climate data, correlated with demography estimates extracted and proxied by using satellite imagery–based land–use land cover classification, provided a spatial risk analysis for human lives in near real time.

The Fani data visualization model will be further used for both pre– and post–event analysis of upcoming natural disasters by the respective teams at Numer8 and SatSure. We are building a dynamic spatial visualization tool for tracking disasters and predicting their impact — both on human lives as well as financial. Such powerful visualizations analyzing variety of data can be used for taking preventive measures, as well as decision intelligence tool for responding to rehabilitation and recovery efforts.

Visit our interactive dashboard on Cyclone Fani to know more about how you can get near real time data during a natural disaster.

CLICK HERE TO VIST THE DASHBOARD

LEADING THE WAY FOR STARTUPS IN SPACE DOMAIN

SatSure and Kerala's Space Startup Ecosystem
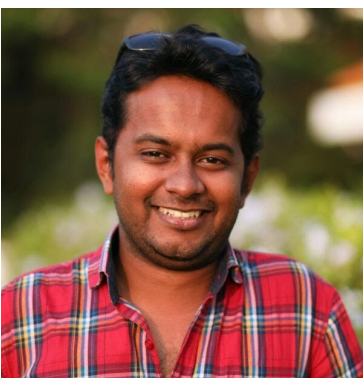by Deepu Aby Varghese

SatSure's Abhishek Raju receiving the occupancy agreement in the presence of the Chief Minister of Kerala.

Undoubtedly, Kerala is emerging as a key region in the startup ecosystem of the country with Thiruvananthapuram, and Kochi being the hubs introducing radical changes in the IT, hardware and manufacturing industries.

Thiruvananthapuram has the added advantage of housing some of the most important space research and development centres of India. The vibrancy of the startup ecosystem and highly supportive government policies facilitating startup promotion in Kerala have reinvigorated startup aspirations in the space domain,

encouraging players to shift focus to Thiruvananthapuram. Plans of companies like Agnikul, Exseed Space, Spacestrut, Bellatrix Aerospace and SatSure to move or expand operations to the city are marking the arrival of a new breed of enterprises. "The new breed of space companies comprises a set of people who are solving very specific upstream and downstream problems. The upstream work is primarily concerned with launch vehicles, satellites, rovers and other space assets.

Downstream space companies deal with the data which is obtained from the assets that are already in orbit for the general good of society," said Samuel John, Chief Operating Officer (COO) of SatSure which has recently expanded its IT operations to the Space Technology Applications Development Ecosystem (STADE) introduced by Kerala Startup Mission (KSUM) at Technopark.

About the author

Deepu Aby Varghese is the Correspondent for Technopolis – The official campus magazine of IT Parks Kerala. The article reproduced here was originally published in Technopolis June – July 2019 Edition and is reproduced here with the permission of the publisher and edited for brevity. You can access original article here.

Technopark, Thiruvananthapuram

With the launch of its operations at STADE, Samuel says it is a 'long–awaited homecoming' for the company.

SatSure focuses on leveraging satellite data for meeting downstream requirements. SatSure uses technological advances in remote sensing, machine learning and big data analytics to provide answers to large number of questions across multiple domains. The company uses geospatial big data platform to combine satellite imagery and proprietary algorithms with weather, IoT, drone imagery, social and economic data sets, and cadastral, among others, to generate near real–time location–specific insights. Besides agriculture, SatSure offers solutions to verticals like social infrastructure, telecom and sustainable development. "We have about 15 team members working in hardcore IT to support our remote sensing experts working out of Bengaluru. I would call our facility here a Geospatial and Big Data Centre of Excellence," said John.

"The reason why IT companies grew in Kerala and elsewhere in the country was because of the positive policies which assisted them scale greater heights. What we hope as space enthusiasts is that the government will lay down a very robust startup policy within the space industry," he observed. SatSure is one among the few startups associated with Indian Space Research Organisation's (ISRO) commercial arm — Antrix Corporation Limited. The company signed a strategic MoU with Antrix in March 2018 with the intention to develop geospatial big data analytics.

While SatSure's solutions for agriculture sector remains its single largest business, John says that the company also works for the telecom sector — mainly to help develop telecom networks based on analysis of land use and land classification using satellite images. Also, in the sustainable development sector, the company has built an elaborate portfolio by analysing data sets pertaining to land use, classification and deforestation.

HUMAN CAPITAL MANAGEMENT AT SATSURE

Building a High Performance
Team at SatSure
by Sweta Maitra

Effective Human Capital Management involves acquiring, training, managing and retaining employees for them to contribute effectively

The largest intangible asset or capital of an organisation is its employees and the unique value they bring is what we know as "Human Capital."

Coined by A.W. Lewis, this term denotes the collective stock of skills, attributes, knowledge and expertise of employees which plays a key role in increasing the productivity and thus profitability of the organisation. Managing an organisation's employees for them to contribute significantly in the overall productivity of the organisation is called "Human Capital Management."

Effective Human Capital Management involves acquiring, training, managing and retaining employees for them to contribute effectively to the overall growth of the organisation. Basically, it involves upgrading the existing skills of an employee and extracting the best out of him/her. The benefits of this include hiring the right candidate for the right role, getting the best out of one's employees, enabling free flow of information between superiors and subordinates and also helping the employees improve in an area where they are lacking.

About the author

Sweta Maitra is the newly appointed HR Manager for SatSure. She is tasked with developing the company's evolving HR Strategy and ensuring our team is world class. Sweta comes to SatSure from Human Dynamic, an HR Consultancy. She holds an M.Sc. in Counselling Psychology and a BA in Psychology from Christ University in Bangalore.
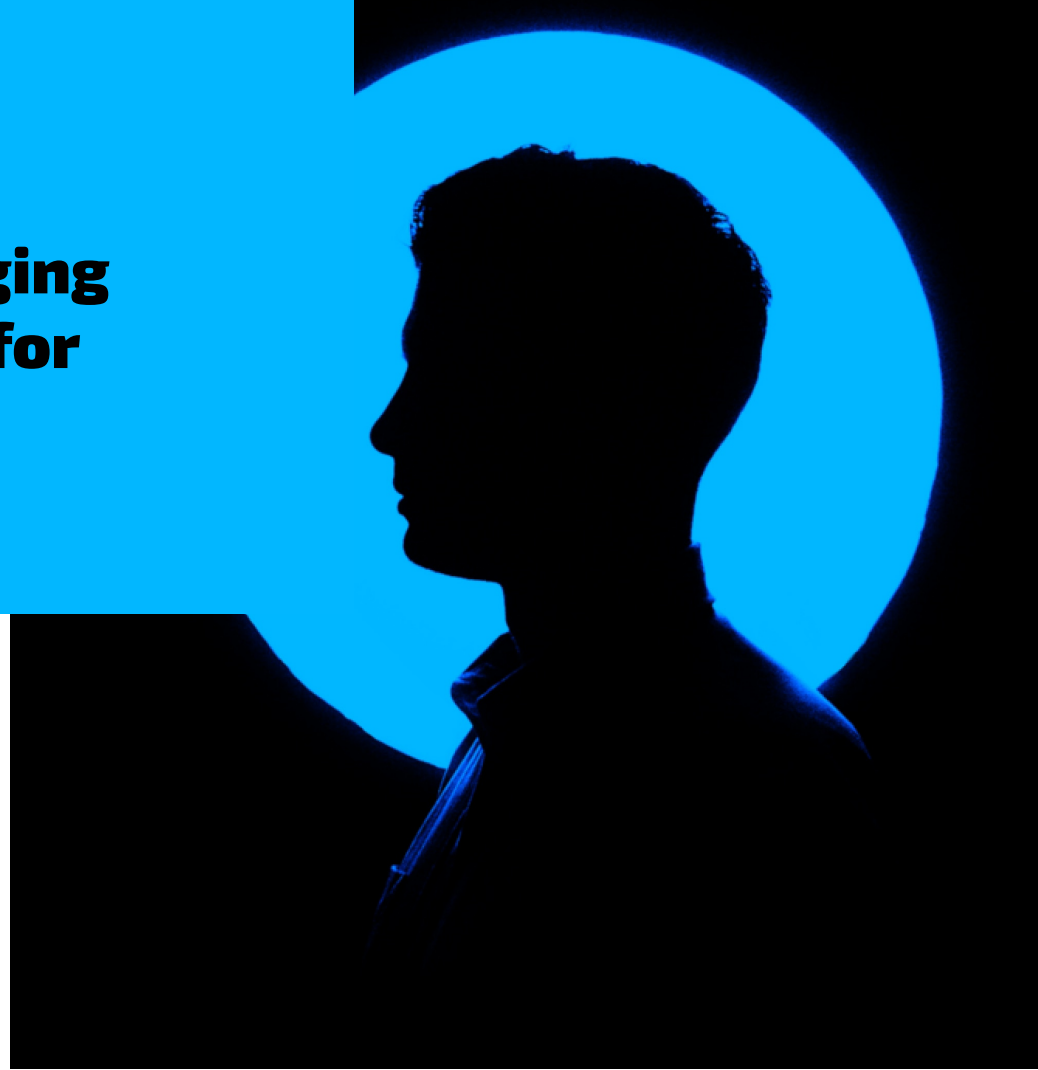
In today's start–up world with their unique nature of work, organisational structures and highly specialised employee capabilities — the importance of effectively managing their human capital is the need of the hour or they stand the risk of their organisation not succeeding. SatSure is a key player in the field of Geospatial Analytics with their employees working with highly specialised knowledge of remote sensing technologies, machine learning and big data analytics to meet their client needs.

To keep ahead in their highly competitive field, SatSure ensures that they hire the right individual for their specialised work, keep an open line of communication between employees and management and provide opportunities to them to improve in any area where they feel they might be lacking. They also strive to maximise their human capital by motivating their employees to diversify in their work and also learn from other experts in the field so that they have the skillset to contribute to every aspect of the organisation's growth and profitability. Thus, SatSure would be an example to other start–ups of the unique advantage of putting their human capital first.

Do you have a Monty Hall Problem?

Sparta from SatSure is your answer

sparta.satsure.co

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