

Now, a Big Data Boost for Infrastructure Sector

The Integrated Database on Infrastructure Projects can be accessed to study & analyse trends in the sector almost on real-time basis

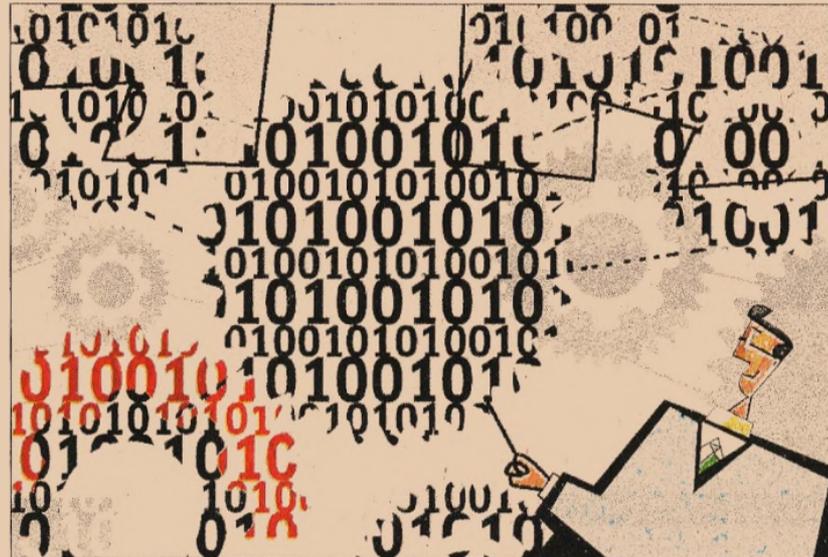
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New Delhi: Researchers from Indian Institutes of Technology (IIT)-Madras and Bombay along with Harvard University are using big data to build India's first comprehensive database on infrastructure projects called Integrated Database on Infrastructure Projects (IDIP).

The mapping of infrastructure projects will include the entire infrastructure sector and all types of central, state projects and public private partnership (PPP) ventures. It will also cover all phases of the project—project design and formulation, development, construction as well as operation.

"This is being envisaged in Integrated Database on Infrastructure Projects in India which is likely to be launched in a month's time," said Thillai Rajan A, a faculty of the department of management studies at IIT Madras.

The researchers are also collaborating with the National Highways



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Authority of India (NHAI), state governments and private sector infrastructure developers. "We are in the process of collaborating with government bodies to continuously update the data on operations of various projects, thus making it al-

most real-time," he said.

India's infrastructure sector is one of the largest in the world, with the recent Economic Survey pegging the country's infrastructure development needs at \$4.5 trillion by 2040.

Researchers, policymakers, corporations, investment agencies and others associated with the core sector would be able to access this database to study and analyse the trends in the sector almost on real-time basis, said Rajan.

The rollout of IDIP would help in ensuring better returns to taxpayers with increased transparency and accountability among all the stakeholders in the infrastructure projects.

The database would also stimulate cutting edge first-hand research in this sector

"Since the public sector will continue to play a significant role in infrastructure development, the database would help to achieve better social and economic returns on taxpayers' investment," said Rajan.

This development is being led by Rajan, IIT Madras, in collaboration with faculty members and research students of other institutes including IIT Bombay, CEPT Uni-

versity-Ahmedabad, Harvard Kennedy School and Harvard University, said Rajan.

The faculty members are the technical experts on this project who decide on data requirement and closely monitor the data acquisition process. IIT Madras has also signed a memorandum of understanding with a startup—Akara Research and Technologies—for developing solutions for IDIP, he said.

The database would also stimulate cutting edge first-hand research in this sector. This is how the IDIP will work—the database would use advanced data analytics tools and a map-based interface to present various dashboard views. "Query-based tools would enable the users to drill down to specific features, say, for example, the projects developed by a specific developer, or road projects exceeding a certain length, and so on," Rajan explained.

Researchers and others would also be able to download the relevant datasets, in addition to the analytics feature of the database.