



CASE STUDY

Assessing the IoT Market in India





Client

A Consulting Firm



Industry

Technology



Solution

Thought Leadership
Support



Region

India





OBJECTIVE AND SCOPE

The client, a global consulting and professional services company, wanted Benori's support in writing a report on Digital Transformation scenario in India covering the growth potential of Internet of Things (IoT) and NarrowBand-Internet of Things (NB-IoT) market. The report also included:

- IoT market size and structure, growth, opportunities, and use-cases
- NB-IoT ecosystem and players in India
- Road ahead and global perspective on NB-IoT growth





APPROACH

We conducted extensive secondary research to understand the digital transformation scenario in India highlighting spending priorities, adoption of IoT, company initiatives, and growth opportunities. We also mapped the digital enterprise market capturing the IoT stack, use cases, and connectivity technologies. NB-IoT market was also analyzed in detail to comprehend its scalability and adoption in the Indian market through actions of key market players.



METHODOLOGY



**Secondary
Research**



**Primary
Research**



**Data
Modelling**





Impact

The report helped the client with the following:

- Understanding the market and dynamics of NB-IoT in India, its demand and trends, and adoption by various industry sectors
- Identifying key players, their strategies and plans of incorporating the technology in various applications



Sample Output

Global Use Cases of NB-IoT

Global Use cases

NB-IoT is one of the most effective connectivity models for a large variety of IoT projects that operators can monetize. NB-IoT is unlocking a new wave of applications that have not previously benefited from connectivity due to barriers such as power, cost and propagation. The technology has strong market potential and is used across industries ranging from agriculture, automotive and logistics, energy and utilities, healthcare and e-health, manufacturing to smart city and smart homes. Low power consumption is a prerequisite for almost 80% of all LPWAN use cases ranging from applications like smart meter, smart parking, and wearables to smart grid. China is considered to have the largest NB-IoT footprint according to an expert panel session hosted by Ericsson as smart city features such as air quality monitoring and building management have been an uptake area.



India Market Perspective

NB-IoT Ecosystem

NB-IoT in India and things have never looked this great for the IoT industry because IoT is all about connectivity and wireless is the only way to connect billions of Things. While there are many wireless communication technologies around that are great for specific use cases. A cellular IoT (CIoT) technology that can actually deliver on the promise of LPWAN was needed. To meet this need, telecom operators in India are working on NB-IoT projects that will take India to a next level in wireless connectivity.

CIoT technologies (NB-IoT and LTE Cat M1) are globally crucial for the next exponential leap in the IoT industry. However, NB-IoT in India is more crucial than in any other country or market of comparable size. Primarily because of the bandwidth limitations in the license-free bands in India. While other countries have non-cellular LPWAN IoT technologies (eg: LoRaWAN), the very same technologies are bandwidth constrained in India. In a way, NB-IoT is the first LPWAN technology in India that can scale to the magnitude of the Indian IoT demands.

Status of NB-IoT in India:

- Network deployments started in select cities in India
- Several NB-IoT modules available from every major cellular module manufacturer
- Low operational/connection cost
- High need for network coverage for fast scale-up of NB-IoT

Skylos IoT solutions along with Inmarsat's satellite connectivity are available through BSNL. In 2021, they planned to expand partnerships. As per a statement by Inmarsat Enterprise President, "Inmarsat is providing Skylo with capacity from its ultra-reliable L-band network to deliver the world's first NB-IoT ecosystem for satellite. Provision of the ecosystem will initially be focused on the Indian market."

About us:

Benori is a trusted partner for knowledge solutions across the globe, serving clients from a wide range of industries including Professional Services, Financial Services, Consumer & Retail, Technology & Internet, Industrials & Manufacturing, and more. Our customized solutions strengthen the insights value chain of our clients, empowering them with key insights needed to drive intelligent decision-making and accelerate growth.

Headquartered in India, Benori is uniquely positioned to deliver multilingual research needs of global clients, powered by its digital agility, deep research capabilities and a highly experienced leadership team. Adopting a 360-degree approach, our team employs a combination of diverse methodologies including primary research, secondary research and data modeling, and offers detailed foresight on market trends, competitive shifts, regulatory changes and technological advancements.

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 info@benoriknowledge.com

 www.benoriknowledge.com



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