

# Universal IoT: Service Assurance, Deployment, & Fulfilment 2018-2025

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# **Abstracts**

There are numerous companies involved in IoT business and each of them is trying to offer some kind of solution. However, there is hardly any company that is seriously trying to solve the issues that are limiting the growth of IoT extensively. All companies are offering solutions that are good in silos only. And, anyone who has business interest in IoT would definitely agree that it's not an ideal situation.

Researchica (Earlier TeleResearch Labs) has followed the technology market for more than 15 years now, unfolding its ups and downs. We have observed many highly potential technologies failing badly due to poor planning and overlooking the concerns of end-users. One of such failure was of 3G network.

Being an active stakeholder of the industry, Researchica has always been taking industry challenges that needed serious consideration. And, over the years we have positively contributed to the technology market achieve its true potential. The idea of this research came after we observed that there is a highly serious issue with IoT project deployments that no one is taking into consideration.

It all started with our survey on IoT projects. The objective of the survey was to find out what it takes to create a healthy IoT market where the IoT service provider as well as the end-user both gets benefited? We tried to investigate from all the angles, including network deployment, service development, business models, and customer demand. And we were looking to find out - What is of utmost importance and why does IoT projects fail?

We interacted with more than 400 IoT companies, and organisations those deployed IoT as well as those not willing to deploy IoT or have cancelled their decision to deploy.



There are many instances where IoT projects could not materialise just because IoT devices were not compatible with other devices of the organisation.

During our survey, we had a chance to interact with CTO of a large Middle East company. He told us that after analysing the cost-benefit of IoT devices, the company decided to deploy around 10,000 IoT devices in their manufacturing plant. However, during the PoC, the technical team from IoT vendor identified that the required IoT devices are not compatible with the existing system of the company. As a result, they had to cancel their plans. This is just one example; there are many issues Researchica has identified that will keep on hampering the IoT growth in the future. For example, there are multiple instances where companies are facing many issues post deployment. They are not able to operate the devices properly or not able to take full advantage of the system.

Security is another big challenge for companies leveraging IoT networks or devices and it's also a big deterrent for new companies considering IoT solutions. Apart from that interoperability of IoT systems, speed, real-time communications, optimal connectivity, and battery-life are most prevalent challenges in IoT systems.

So, there's definitely a big need for service assurance in IoT. But the big question is how can service assurance for IoT be achieved? What are the available solutions? What should be ideal strategy to ensure service assurance by IoT service providers?

This Research attempts to answer all these questions and every other challenge that is coming in the way of achieving flawless IoT deployment. After minutely analysing all the pressing issues of IoT, Researchers have gone deep into decoding possibilities, analysing solutions, gathering right advice and recommendations for key stakeholders of IoT market. Researchica has also proposed models for achieving IoT service assurance within the limitations of available IoT technologies. There will be tons of new IoT solutions that can add value to end-users; however, their flawless implementation and fulfilment is even more important than the IoT solutions.

#### Unique Attributes

- 1. What are the most critical issues faced by companies that develop new IoT based services and by companies adopting IoT into their processes?
- 2. Proposed models for service assurance
- 3. How to price IoT offerings for mass adoption
- 4. Future IoT collaboration and innovation models



5. Unique strategies that IoT players can employ to create fresh demand and propel revenues

# Questions Answered by the Report

- 1. What is holding back IoT to become mainstream?
- 2. What are the major challenges in IoT deployments across consumer, business/industrial and civil markets?
- 3. What are various breakthrough innovations in IoT technology? What is their scope and importance?
- 4. How can service providers maximise their offerings in an increasingly competitive environment?
- 5. What factors will drive deployment scale up, and what market challenges remain?
- 6. What emerging technologies and services are driving the market forward?
- 7. What is the projected market potential of IoT during the next 5 years?

# Companies Mentioned in the Report

Adeunis RF, Advantech, Altair Semiconductors, ARM Holdings, Atmel, Bluegiga, Broadcom, Cypress, Cypress Semiconductor, Dialog Semiconductor, Digi International, Espressif Systems, Fibocom, GainSpan, Gemalto, GreenPeak Technologies, Huawei, Ingenu, Intel, Laird Technologies, Lantronix, Linear Technology, Marvell Technology Group, Mediatek, Microchip, Murata, Neoway Technology, Nordic Semiconductor, Novatel Wireless, NWave Technologies, NXP Semiconductors, Qualcomm, Quectel, Radiocrafts, Redpine Signals, Renesas, Samsung Electronics, SemTech, Sequans Communications, Sierra Wireless, Sigma Designs, Silex Technology, Silicon Labs, SIMcom Wireless Solutions, STMicroelectronics, Telit Communications, Texas Instruments, Toshiba Semiconductors, U-blox, ZTE.

#### Target Audience:

IoT Players, Chip Manufacturers, Sensor Manufacturers, Battery Manufacturers, Semiconductor Companies, IoT Platform Providers, IoT Device Manufacturers, Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODMs) and OEM Technology Solution Providers, Research Organisations, Technology Standard Organisations, Forums, Alliances and Associations, Technology Investors, Governments, Financial Institutions, and Investment Communities, Analysts and Strategic Business Planners.



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