

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

https://marketpublishers.com/r/U4F08DF0B6DEN.html

Date: June 2018

Pages: 200

Price: US\$ 4,995.00 (Single User License)

ID: U4F08DF0B6DEN

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.



Contents

1 INTRODUCTION

- 1.1 Objectives of the Study
- 1.2 Scope of the Study
 - 1.2.1 M2M
 - 1.2.2 IoT
- 1.3 Research Methodology

2 EXECUTIVE SUMMARY

- 2.1 Top 10 IoT Market Developments of 2017
 - 2.1.1 75% of IoT projects fail Cisco Study
 - 2.1.2 Google launches IoT core
 - 2.1.3 'Trusted IoT Alliance' developing blockchain based trusted IoT
 - 2.1.4 The US Senate introduces IoT Cybersecurity Improvement Act 2017
 - 2.1.5 Itron acquires Silver Spring Networks for US\$830 million
 - 2.1.6 Dell announces US\$1 billion R&D investment into IoT edge analytics
- 2.1.7 Google Waymo puts the first fully self driving car on US roads without a safety driver
 - 2.1.8 Consumer IoT devices sales grew almost 4 times during Christmas 2017
- 2.1.9 Uptake ('Cool Vendor') receives US\$264 million funding in 2017
- 2.1.10 Deutsche Telekom deploys NB-IoT across eight European markets and the United States
- 2.2 IoT Resolve
 - 2.2.1 Technical Pain Points
 - 2.2.1.1 Security
 - 2.2.1.2 Interoperability of IoT Systems
 - 2.2.1.3 Speed
 - 2.2.1.4 Real-Time Communications
 - 2.2.1.5 Connectivity Solutions
 - 2.2.1.6 Battery Life
 - 2.2.2 Data Protection and Privacy
 - 2.2.3 Market Readiness
 - 2.2.4 IoT Service Assurance is the biggest challenge
 - 2.2.5 Standardisation
- 2.3 Future of IoT
- 2.4 Analyst Viewpoint



2.4.1 Chipset manufacturers would not be able to meet the demand from IoT Companies

- 2.4.2 IoT across Industrial, Consumer, and Civil Markets
- 2.4.3 Opportunities and Challenges in Industrial Adoption of IoT
- 2.4.4 Opportunities and Challenges in Consumer Adoption of IoT
- 2.4.5 Opportunities and Challenges in Civil Adoption of IoT
- 2.4.6 Importance of IoT (Revenues) for Telcos
- 2.4.7 Pricing strategies for IoT services
- 2.4.8 Why is service assurance important for IoT?

3 IOT MARKET STRUCTURE, ECOSYSTEM, AND VALUE CHAIN ANALYSIS

- 3.1 IoT Ecosystem
- 3.2 Elements of IoT System
 - 3.2.1 Sensors
 - 3.2.2 Network/Connectivity Technologies
 - 3.2.3 Analytics Aggregation and Insight
- 3.3 IoT Market Segmentation
 - 3.3.1 Market Segmentation by Application/Industry
 - 3.3.1.1 Consumer IoT
 - 3.3.1.1.1 Home
 - 3.3.1.1.2 Lifestyle
 - 3.3.1.1.3 Health
 - 3.3.1.1.4 Mobility
 - 3.3.1.2 Business/Industrial IoT
 - 3.3.1.2.1 Manufacturing
 - 3.3.1.2.2 Healthcare
 - 3.3.1.2.3 Retail
 - 3.3.1.2.4 Energy
 - 3.3.1.2.5 Mobility
 - 3.3.1.3 Civil IoT
 - 3.3.1.3.1 Cities
 - 3.3.1.3.2 Public Services
 - 3.3.1.3.3 Government
 - 3.3.2 Market Segmentation by Technology
 - 3.3.2.1 IoT Software
 - 3.3.2.1.1 Top 10 IoT Software Companies
 - 3.3.2.2 IoT Hardware
 - 3.3.2.2.1 Top 10 IoT Hardware Companies



- 3.3.2.3 IoT Connectivity
 - 3.3.2.3.1 Top 10 IoT Connectivity Solution Providers
- 3.3.2.4 IoT Service
- 3.4 IoT Market Structure and Ecosystem
 - 3.4.1 Industry Competitors
 - 3.4.2 Buyers
 - 3.4.3 Suppliers
 - 3.4.4 Substitutes
 - 3.4.5 Potential Entrants
- 3.5 IoT Opportunity Galore
 - 3.5.1 Industrial and Vertical Markets
 - 3.5.1.1 Industrial Automation
 - 3.5.1.2 Factory and warehouse
 - 3.5.1.3 Healthcare
 - 3.5.1.4 Automotive
 - 3.5.1.4.1 Case Study: mbrace
 - 3.5.1.5 Supply chain/fleet management
 - 3.5.1.5.1 Case Study: Chorus
 - 3.5.1.6 Oil and gas
 - 3.5.1.7 Agriculture
 - 3.5.1.8 Media Companies
 - 3.5.1.9 Opportunities and Challenges in Industrial Adoption of IoT
 - 3.5.2 Consumer Markets IoT
 - 3.5.2.1 IoT Use Cases across Consumer Markets
 - 3.5.2.2 Smart homes and building automation
 - 3.5.2.3 Consumer electronics, small appliances and toys
 - 3.5.2.4 Opportunities and Challenges in Consumer Adoption of IoT
 - 3.5.3 Civil Markets IoT
 - 3.5.3.1 IoT Use Cases across Civil Markets
 - 3.5.3.2 Smart Grids
 - 3.5.3.3 Smart Cities
 - 3.5.3.3.1 Case Study: Nedaa
 - 3.5.3.4 Intelligent Traffic Systems
 - 3.5.3.5 Energy and Utilities
 - 3.5.3.6 IoT for Disaster management
 - 3.5.3.7 Opportunities and Challenges in Civil Adoption of IoT
 - 3.5.4 Promising New/Untouched Segments
 - 3.5.4.1 Ultra-low-cost IoT Solutions
 - 3.5.4.2 IoT Innovation in Agriculture



- 3.5.4.3 Forecasts on Promising Areas
- 3.5.4.4 Investment Forecasts across Untouched Markets
- 3.5.4.5 IoT Users and Devices Forecast across Untouched Markets
- 3.5.4.6 IoT Revenue Forecast across Untouched Markets
- 3.6 Market Attractiveness Analysis
- 3.7 IoT Market Drivers & Inhibitors
- 3.8 IoT Resolve
 - 3.8.1 Technical Pain points
 - 3.8.1.1 Security
 - 3.8.1.2 Interoperability of IoT Systems
 - 3.8.1.3 Speed
 - 3.8.1.4 Real time communications
 - 3.8.1.5 Connectivity Solutions
 - 3.8.1.6 Battery life
 - 3.8.2 Data Protection and Privacy
 - 3.8.3 Market Readiness
 - 3.8.4 Reliability
 - 3.8.5 Standardisation

4 IOT DEPLOYMENT, PRICING STRATEGIES, AND SERVICE ASSURANCE

- 4.1 IoT Deployment Models
 - 4.1.1 Major building blocks for a successful IoT deployment
 - 4.1.2 What are the best practices for a scalable IoT deployment?
 - 4.1.3 Case Study of a highly successful IoT deployment: Rolls-Royce
 - 4.1.4 Top 10 highly successful IoT deployments
- 4.2 Pricing Strategies for IoT deployment
 - 4.2.1 Major Factors affecting cost of IoT deployment
 - 4.2.1.1 Initial Cost
 - 4.2.1.2 Lease Period
 - 4.2.1.3 QoS
 - 4.2.1.4 Age of Resources
 - 4.2.1.5 Cost of Maintenance
 - 4.2.2 Critical analysis of current IoT deployment charging models
 - 4.2.3 Proposed Pricing Models for IoT Service Providers
 - 4.2.3.1 Simple Purchase
 - 4.2.3.2 Pay-as-you-go Model
 - 4.2.3.3 Subscription (Time-bound) Model
 - 4.2.3.4 Pay-for-resources Model



- 4.2.3.5 QoS-based Model
- 4.2.3.6 Hybrid Model
- 4.3 Researchica Remarks: Unorthodox charging models can boost the uptake of IoT across verticals
- 4.4 IoT Service Assurance
 - 4.4.1 What is IoT service assurance?
 - 4.4.2 Why is service assurance important for IoT?
 - 4.4.3 Major Trends in IoT Service Assurance
 - 4.4.4 How can service assurance for IoT be achieved?
 - 4.4.5 Proposed Models of IoT Service Assurance
 - 4.4.6 IoT Service Assurance Checklist
 - 4.4.6.1 Security of IoT Network
 - 4.4.6.2 Interface
 - 4.4.6.3 Long Durability
 - 4.4.6.4 Network/Connectivity
 - 4.4.6.5 Ruggedness of Devices

5 MAJOR BREAKTHROUGH INNOVATIONS IN IOT TECHNOLOGY

- 5.1 IoT Chipset Innovations
 - 5.1.1 MIT Chip offers energy efficiency for secure IoT
 - 5.1.2 ARM announces integrated SIM chips to lower IoT deployment costs
- 5.1.3 Qualcomm Technologies QCA4020 tri-mode connectivity system-on-chip (SoC) helps overcome IoT fragmentation and interoperability challenges
- 5.2 IoT Security Innovations
- 5.2.1 MIT researchers have developed a novel transmitter that protects wireless data from hackers
 - 5.2.2 Ruckus announces IoT suite to enable secure access networks
 - 5.2.3 Dell, Microsoft collaborate for joint IoT solutions
 - 5.2.4 Comodo CA launches IoT security platform
- 5.3 IoT Sensor Innovations
 - 5.3.1 Sensors for bio-compatible devices
 - 5.3.2 Miniature and low power consuming sensors
- 5.4 IoT Battery Innovations
 - 5.4.1 Battery-less and Self-powered Devices
 - 5.4.1.1 FORCE Technology Innovation
 - 5.4.1.2 Retail Application: Shelf labels based on indoor solar cell technology
- 5.5 Innovation in IoT Connectivity Solutions
 - 5.5.1 Short Range IoT Connectivity Technologies



5.5.2 Longer Range IoT Connectivity Technologies

6 IOT MARKET FORECAST 2018-2025

- 6.1 Global IoT Market 2018-2025
- 6.2 Global IoT Market by Region 2018-2025
 - 6.2.1 North America
 - 6.2.1.1 U.S.
 - 6.2.1.2 Canada
- 6.3 Europe
 - 6.3.1 Germany
 - 6.3.2 United Kingdom
 - 6.3.3 France
 - 6.3.4 Italy
 - 6.3.5 Spain
 - 6.3.6 Rest of Europe
- 6.4 Asia Pacific
 - 6.4.1 China
 - 6.4.2 Japan
 - 6.4.3 South Korea
 - 6.4.4 India
 - 6.4.5 Australia
 - 6.4.6 Rest of APAC
- 6.5 Latin America
- 6.6 Middle East & Africa
- 6.7 IoT Market by Vertical
 - 6.7.1 Industrial Automation
 - 6.7.2 Factory and warehouse
 - 6.7.3 Healthcare
 - 6.7.4 Automotive
 - 6.7.5 Supply Chain/Fleet Management
 - 6.7.6 Oil and Gas
 - 6.7.7 Agriculture
 - 6.7.8 Entertainment & Media
 - 6.7.9 Military & Aerospace
- 6.8 IoT Sensor Market 2018-2025
- 6.9 IoT Chipset Market 2018-2025
- 6.1 IoT Battery Market 2018-2025
- 6.11 IoT Platform Market 2018-2025



6.12 Global IoT Security Market 2018-2025

7 CONCLUSIONS, RECOMMENDATIONS, AND STRATEGIC ANALYSIS

- 7.1 Recommendations for Chipset Manufacturers
- 7.2 Recommendations for Sensor Manufacturers
- 7.3 Recommendations for Battery Manufacturers
- 7.4 Recommendations for Platform providers
- 7.5 Recommendations for End-to-End Service Providers
- 7.6 Recommendations for Governments
- 7.7 Recommendations for Businesses and Industries



List Of Figures

LIST OF FIGURES

Figure 1 IoT Market Structure and Ecosystem

Figure 2 Global IoT Market Revenue (In US\$ Million), 2018-2025

Figure 3 IoT Market Revenue by Region (In US\$ Million), 2018-2025

Figure 4 North America IoT Market Revenue (In US\$ Million), 2018-2025

Figure 5 USA IoT Market Revenue (In US\$ Million), 2018-2025

Figure 6 Canada IoT Market Revenue (In US\$ Million), 2018-2025

Figure 7 Europe IoT Market Revenue (In US\$ Million), 2018-2025

Figure 8 Germany IoT Market Revenue (In US\$ Million), 2018-2025

Figure 9 UK IoT Market Revenue (In US\$ Million), 2018-2025

Figure 10 France IoT Market Revenue (In US\$ Million), 2018-2025

Figure 11 Italy IoT Market Revenue (In US\$ Million), 2018-2025

Figure 12 Spain IoT Market Revenue (In US\$ Million), 2018-2025

Figure 13 Asia Pacific IoT Market Revenue (In US\$ Million), 2018-2025

Figure 14 China IoT Market Revenue (In US\$ Million), 2018-2025

Figure 15 Japan IoT Market Revenue (In US\$ Million), 2018-2025

Figure 16 South Korea IoT Market Revenue (In US\$ Million), 2018-2025

Figure 17 India IoT Market Revenue (In US\$ Million), 2018-2025

Figure 18 Australia IoT Market Revenue (In US\$ Million), 2018-2025

Figure 19 Latin America IoT Market Revenue (In US\$ Million), 2018-2025

Figure 20 Middle East & Africa IoT Market Revenue (In US\$ Million), 2018-2025

Figure 21 Global IoT Market Revenue by Vertical (In US\$ Million), 2018-2025

Figure 22 Global IoT Market Revenue for Industrial Automation (In US\$ Million), 2018-2025

Figure 23 Global IoT Market Revenue for Industrial Automation (In US\$ Million), 2018-2025

Figure 24 Global IoT Market Revenue for Healthcare (In US\$ Million), 2018-2025

Figure 25 Global IoT Market Revenue for Automotive (In US\$ Million), 2018-2025

Figure 26 Global IoT Market Revenue for Supply Chain/Fleet Management (In US\$ Million), 2018-2025

Figure 27 Global IoT Market Revenue for Oil and Gas (In US\$ Million), 2018-2025

Figure 28 Global IoT Market Revenue for Agriculture (In US\$ Million), 2018-2025

Figure 29 Global IoT Market Revenue for Entertainment & Media (In US\$ Million), 2018-2025

Figure 30 Global IoT Market Revenue for Military & Aerospace (In US\$ Million), 2018-2025



Figure 31 Global IoT Sensors Shipment (In Million Units), 2018-2025

Figure 32 Global IoT Sensors Market Revenue (In US\$ Million), 2018-2025

Figure 33 Global IoT Smart Sensors Shipment (In Million Units), 2018-2025

Figure 34 Global IoT Smart Sensors Market Revenue (In US\$ Million), 2018-2025

Figure 35 Global IoT Chipset Shipment (In Million Units), 2018-2025

Figure 36 Global IoT Chipset Market Revenue (In US\$ Million), 2018-2025

Figure 37 Global IoT Battery Shipment (In Million Units), 2018-2025

Figure 38 Global IoT Battery Market Revenue (In US\$ Million), 2018-2025

Figure 39 Global IoT Platform Market Revenue (In US\$ Million), 2018-2025

Figure 40 Global IoT Security Market Revenue (In US\$ Million), 2018-2025



List Of Tables

LIST OF TABLES

Table 1	IoT Market	Revenue by	Region ((In US\$	Million).	2018-2025
I UDIC I	IO I IVIGINO	I VOVOLIGO D	y i togioii i		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. 2010 2020

Table 2 Global IoT Sensors Shipment (In Million Units), 2018-2025

Table 3 Global IoT Sensors Market Revenue (In US\$ Million), 2018-2025

Table 4 Global IoT Smart Sensors Shipment (In Million Units), 2018-2025

Table 5 Global IoT Smart Sensors Market Revenue (In US\$ Million), 2018-2025

Table 6 Global IoT Chipset Shipment (In Million Units), 2018-2025

Table 7 Global IoT Chipset Market Revenue (In US\$ Million), 2018-2025

Table 8 Global IoT Battery Shipment (In Million Units), 2018-2025

Table 9 Global IoT Battery Market Revenue (In US\$ Million), 2018-2025

Table 10 Global IoT Platform Market Revenue (In US\$ Million), 2018-2025

Table 11 Global IoT Security Market Revenue (In US\$ Million), 2018-2025



I would like to order

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

Product link: https://marketpublishers.com/r/U4F08DF0B6DEN.html

Price: US\$ 4,995.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/U4F08DF0B6DEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970