

Industrial Internet of Things (IIoT): Key Trends, Opportunities and Market Forecasts 2015 – 2020

Product ID R-1501MZ | Research Report: 98 pages, published March 2015



- Single user license \$1,995
- Team license \$2,995
- Companywide license \$4,995

Related Courses and Curricula

- [Courses: Telecom for non-engineers](#)
- [Courses: IPv6, BGP, MPLS](#)

Report in a Nutshell

The Internet of Things (IoT) will overtake human communications rapidly as there are vastly more objects in the world than humans, they can communicate much faster, much more frequently, and for many more reasons than humans. Industrial IoT (IIoT) represents a very important segment, which includes manufacturing, automation, and virtually any process or operation that does not directly involve direct consumer interaction.

Initially focusing on improving existing processes and augmented current infrastructure, IIoT will evolve to encompass next generation methods and procedures such as "teleoperation" (operation of a machine at a distance), tele-robotics, and other areas that rely upon interface and control of real objects by virtual objects. We see IIoT as one of the leading areas for overall IoT adoption due to many factors including the incidence of many high value use case scenarios, which is an issue for many consumer oriented applications and services.

IoT will not only facilitate connections between the physical to Internet but will involve various other components such as software platforms, software applications, sensors, actuators, routers, cloud services, Big Data, Cloud analytics, etc. The cumulative market for IIoT will rapidly grow in an exponential manner with the addition of various synergistic technologies, services and products.

This research evaluates the technologies, companies, solutions, and market outlook for IIoT. The report evaluates key trends, analyzes market drivers, and provides forecasting for IIoT for the 2015 - 2020 period. All purchases of our reports includes time with an expert analyst who will help you link key findings in the report to the business issues you're addressing. This needs to be used within three months of purchasing the report.

Report Benefits

- Industrial IIoT forecasts to 2020
- Identify growth factors for IIoT market
- Identify leading applications and services
- Understand market challenges and opportunities
- Identify leading companies involved in IIoT realization
- Understand the differences between IIoT and consumer IoT

Target Audience

- Telecom service providers
- Manufacturing companies
- Semiconductor manufacturers
- Embedded systems companies
- Systems integration companies
- Wireless device manufacturers
- Systems integration companies
- Sensors and actuators suppliers
- Telecom and IT infrastructure suppliers
- IoT and connected industrial service providers

Table of Contents

1	Introduction	6	
1.1	Scope of the Study	6	
1.2	Intended Audience	7	
1.3	Companies Covered in Report	7	
2	Executive Summary	10	
3	Industrial Internet of Things (IIoT)		12

3.1	IloT: The Fourth Industry Revolution	12	
3.1.1	IloT is a Change Agent in Transforming Ordinary Factory to Smart Factory		13
3.1.2	Connected Factory	14	
3.1.3	Industry (Industrie) 4.0 - Smart Factory	15	
3.2	Main Objective of IloT is an Integration of Connected Things	16	
3.3	Opportunity to Develop Agile and Flexible Production Processes		16
3.4	IloT Market Overview 2014 - 2015	17	
3.4.1	GE, Cisco, Intel, AT&T and IBM Founded Industrial Internet Consortium (IIC)		17
3.4.2	Cisco hosted The Second Annual Internet of Things World Forum (IoTWF)		19
3.4.3	IIC launched Test-beds	20	
3.4.4	IIC to on Broad Reference Architecture for IoT soon in 2015	22	
3.5	IloT will Enhance, Integrate and Scale existing Corporate IT Systems	23	
3.6	IloT will Leverage Potential of Existing Infrastructure based on Extracted Data	24	
4	Key IloT Solutions	25	
4.1	AT&T Inc.	25	
4.1.1	AT&T Machine to Machine Solutions	26	
4.1.2	AT&T M2X	29	
4.2	Bosch	30	
4.2.1	Bosch Connected Devices and Solutions GmbH (BCDS)	31	
4.2.2	Bosch Software innovations: Bosch IoT Suite	31	
4.3	Cisco System Inc.	36	
4.3.1	Cisco Industrial Networks	37	
4.3.2	Cisco Embedded Networks	38	
4.3.3	Management and Application Enablement	40	
4.3.4	Physical and Cyber Security	41	
4.3.5	Cisco IloT Solutions	41	
4.4	Echelon Corporation	43	
4.4.1	Echelon's IzoT platform	44	
4.5	GE Software	48	
4.5.1	GE Predicitvity Solution	49	
4.5.2	GE Predix Platform	51	
4.6	Object Management Group (OMG)	51	
4.6.1	Data Distribution Service (DDS)	52	
4.6.2	Dependability Assurance Framework for Safety-Sensitive Consumer Devices	53	
4.6.3	Threat Modelling	53	
4.6.4	Structured Assurance Case Meta-model (SACM)	54	
4.6.5	Unified Component Model for Distributed, Real-Time and Embedded Systems (UCM)	55	
4.6.6	Automated Source Code CWE-SANS Top 25-Based Security Measure	55	
4.6.7	Oil and Gas Risk Management	56	
4.7	Real Time Innovation (RTI)	56	
4.7.1	RTI Connex DDS	57	
4.7.2	RTI Industrial IoT FastTrax Program	59	
5	IloT: Global Market Analysis and Forecasts 2015 - 2020	61	
5.1	IloT is different from Consumer IoT	61	

5.1.1	Brownfield vs. Greenfield Deployment	62	
5.2	IIoT has to work in Consortium to achieve Success	62	
5.3	Global IIoT Markets 2015 - 2020	63	
5.4	IIoT Global Markets by Industry Segment 2015 - 2020	65	
5.5	IIoT Markets by Region 2015 - 2020	70	
5.6	Global Markets by Deployment Vertical 2015 - 2020	73	
6	Company Profiles	77	
6.1	ABB Ltd.	77	
6.2	Adaptiv.io	78	
6.3	AT&T	78	
6.4	Bayshore Networks	79	
6.5	Bedrock Automation	81	
6.6	Blackberry	81	
6.6.1	BlackBerry Corporation - U.S.	82	
6.6.2	BlackBerry - Europe	82	
6.7	Bosch Connected Devices and Solutions GmbH (BCDS)	83	
6.7.1	Head Office- Germany	83	
6.7.2	Robert Bosch Engineering and Business Solutions Limited- India	83	
6.7.3	Bosch Automotive Products (Suzhou) Co. Ltd. - China	83	
6.8	Bosch Software Innovations Corp. - U.S.	84	
6.8.1	Bosch Software Innovations GmbH- Europe	84	
6.8.2	Bosch Software Innovations- Asia pacific	85	
6.9	Cisco Systems Inc.	86	
6.10	Ei3 Corporation	87	
6.11	Elecsys Corporation	87	
6.12	GE Software	88	
6.12.1	GE Global Research	89	
6.12.2	GE India Technology Centre Pvt. Ltd.	89	
6.13	Jasper Technologies Inc.	89	
6.14	NEC Corporation	90	
6.15	Object Management Group (OMG)	91	
6.16	OneM2M Partners	92	
6.17	Real-Time Innovations (RTI)	93	
6.17.1	Real-Time Innovations EU Office	94	
6.18	Tech Mahindra Ltd.	95	
6.19	Telstra	95	
6.19.1	China Office	96	
6.19.2	U.S. Office	96	
6.20	Unisys Corporation	97	

Figures

Figure 1: Seven Layer IoT (IoTWF) Framework 20

Figure 2: Bosch IoT Suite 33

Figure 3: Anatomy of the IzoT Platform	44
Figure 4: Global IloT Market 2015 - 2020	64
Figure 5: IloT Global Markets by Industry Segment	67
Figure 6: IloT Regional Markets 2015 - 2020	72
Figure 7: IloT Global Markets by Deployment Vertical 2015 - 2020	75

Tables

Table 1: Global IloT Market 2015 - 2020	64
Table 2: IloT Global Markets for Industry Segment 2015 - 2020	66
Table 3: IloT Regional Markets 2015 - 2020	70
Table 4: IloT Global Markets by Deployment Vertical 2015 - 2020	75

REV PLV