



INDIA

MARKET PULSE REPORT IoT

Discover Key Trends & Insights on Disruptive Technology Sectors and Innovations





About GrowthEnabler

GrowthEnabler delivers data & intelligence on disruptive technologies & digital innovations from the startup economy, to global brands, business leaders, startups and entrepreneurs, to gain insights, get connected and grow faster through the GrowthEnabler Personalised Intelligence Interface (Pii) platform.

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The Talk

The talk is a new media & thought leadership platform. BIG IDEAS is one of the vertical and a knowledge platform for Startups & SME entrepreneurs. the talk BIG IDEAS enagages with Startups & SMEs on a regular basis to find the challenges of entrepreneurs and it is committed & focused in creating platforms for small medium businesses to connect, engage and get new insights to grow their business. We bring Startup & SME entrepreneurs, Investors, Corporates, Governments, Industry practitioners, and professionals together on a common platform. BIG IDEAS is in a mission to enrich the platform with knowledge & creating opportunities for Startup entrepreneurs and has joined hands with GrowthEnabler to bring out well researched reports & insights and spread among audience across the ecosystem, which will create a lot of visibility, opportunities & partnerships.

Disclaimer

This document is the result of research performed by GrowthEnabler. GrowthEnabler's methodologies provide for objective fact-based research, secondary cited research and represent the best analysis available at the time of publication. Unless otherwise noted, the entire contents of this publication are copyrighted by GrowthEnabler and may not be reproduced, distributed, archived, or transmitted in any form or by any means without prior written consent by GrowthEnabler.This report intends to inform key decision makers, investors and industry influencers on how disruptive technologies and digital innovations will impact the future of their business, industry and sector of interest.

CONTENTS

- 02 Executive Summary
- 04 Introduction
- 06 Market Map
- 08 Top IoT Startups in India
- 10 Research Methodology

INTRODUCTION

IoT IN INDIA

Steady developments in Sensor Technologies, Open sourced micro controllers and micro processor platforms, Internet infrastructure and communication standards are spurring the importance of IoT as a technology platform for enabling the concept of a connected world. An Increase in internet penetration, an ever-increasing focus on operational efficiency and productivity, increase in market/ consumer familiarity and reduction in cost of devices makes IoT one of the top use cases for IT budget spends across most industries in 2018.

Manufacturing, pharmaceuticals, healthcare and automobiles will see a steady increase in implementations over the next couple of years. Use cases across automobile industry and connected cars have already been explored and implemented and this is only set to increase. Pharma industry can use this technology to monitor drug results online. Medical practitioners could monitor the vital signs of their patients anytime, anywhere. RFID technologies to track and monitor goods and assets, sensor technologies to monitor process parameters, operational technologies (such as programmable logic controller [PLC] and supervisory control and data acquisition [SCADA]), and manufacturing execution systems to manage plant operations have already been in use in many Indian end-user organisations for years now.

IoT is also gaining immense popularity among governments and consumers, but security concerns and the lack of trust is limiting its adoption in the short run. India has witnessed a major digital push in the last couple of years under transformational projects like Digital India, Smart Cities, Startup India, etc. While the past years have seen the adoption of disruptive technologies like Cloud, Big data, Mobility; the year 2018 will largely emphasise on integrating all of these technologies and providing seamless connectivity across all platforms.

Currently, the Indian IoT ecosystem has a diverse set of about ~120 players including Hardware Vendors, Application Vendors, Network Operators and System Integrators; 60-65% of these players being startups. IoT presents opportunities for players across the value chain both for application and hardware vendors. An IoT-ready infrastructure has unique requirements with on-boarding, configuring, managing and securing connected devices. As a tidal wave of IoT use cases hit your organisation, your IT and OT departments may struggle to cope.

OTHER KEY TRENDS TO NOTE ARE :

- IoT skill sets in India are set to grow, and many companies are creating training programs that will help transform the existing IT workforce.
- Hardware vendors are increasing investments in R&D to develop and expand their product portfolio in IoT and enhancing market share through acquisitions.
- Application vendors are focusing on both vertical and horizontal solutions including consumer and industrial IoT.
 In addition to catering to a large segment of consumers, they are looking to offer customised solutions for niche consumer groups.

Enterprises focusing on transportation and logistics could make initial gains by focusing on fleet management IoT solutions. For many other enterprises, IoT could be an important component in their overall digital transformation journey particularly those focusing on manufacturing, engineering, automotive, transportation & logistics, and energy.

IOT STARTUP LANDSCAPE : INDIA

- Over 430 IoT startups were set up in India in the last decade with more than 80 per cent of them established after 2010. Cumulatively, these start-ups have received more than \$169 million USD in funding since 2006.
- Bengaluru has emerged as the prime destination for IoT startups, as it accounts for 29% of the total IoT startups in India. Bengaluru is followed by Mumbai 11%, Delhi-NCR with 7%, Hyderabad 6%, Chennai 6%, and others together accounting for 41%.
- A wide availability of talent, thriving ecosystem of investors, access to industry experts and the presence of startup accelerators are contributing to Bangalore's dominance.
- 67% of the IoT startups in India are in the Infrastructure layer, which includes hardware components such as infrastructure sensors, embedded chips, MEMS, actuators, modules, SIM card and system design. The Applications layer accounts for 52% of the IoT startups in India.

MARKET MAP





TOP IOT STARTUPS IN INDIA

STARTUP			SYNOPSIS
SCALING	SATURAM Bangalore IloT	Founded Year : 2014 www.saturam.com	Saturam is a data-driven digital transformation company and has built Piperr [™] (A suite of Bigdata apps for Al and IoT). Saturam also offers services on streaming Data Pipelines & Data Lakes (Integrate, Cleanse, Dedupe, Enrich, Geo-Spatialize etc) and embedded Analytics & Al apps (Customer 720°, 6W, Pricing etc) On-premise, On-Cloud or On-Edge.
SCALING	NEEWEE Bangalore IIoT	Founded Year : 2014 www.neewee.ai	Neewee is a Bengaluru based Analytics services Company that specializes in Predictive Maintenance/Condition based Monitoring Solutions for Internet of Things (IoT). Their IoT enabled platform, ATHENA, deployed on premise or on the cloud, simplifies the implementation of Analytics. Their IoT Enabled Integrated Analytics Platform uses its built-in, domain specific Advanced Analytical models. The platform is built with open source components to reduce CAPEX.
G falkonry SCALING	FALKONRY Mumbai IloT	Founded Year : 2013 falkonry.com	Falkonry is the leading provider of operational analytics for Global 2000 industrial companies. Falkonry's ready-to-use machine learning system accelerates the digital transformation of industrial operations by delivering new analytical insights from patterns hidden inside operational data.
ecolibrium O	ECOLIBRIUM ENERGY Noida IIoT	Founded Year : 2009 ecolibriumenergy.com	Ecolibrium Energy focuses on Energy Management Solutions, Demand Response Programs for Distribution companies and renewable energy integration in the grid. Their technology enabled solutions helps meet the needs of utilities/grid operators that deliver energy and are responsible for maintaining the real-time balance between supply and demand.
Peta SCALING	PETASENSE Bangalore IloT	Founded Year : 2014 petasense.com	Petasense : offers an end-to-end solution – comprised of a patent- pending wireless vibration sensor, cloud software and machine learning analytics – that helps with asset reliability and predictive maintenance. Customers are able to monitor, assess and predict the health of their critical machines in real-time which helps reduce unplanned downtime and lower repair costs.
MATURE	MOBSTAC Bangalore IloT	Founded Year : 2009 mobstac.com	MobStac's focuses in the field of proximity-based marketing and uses analytics as a new way to bridge online and offline experiences. They help businesses and brands leverage BLE beacon technology to deliver context-rich experiences to a multitude of industries and verticals. Their product Beaconstac offers hardware, software and a cloud-based platform to intuitively manage the entire solution.
SCALING	ZENATIX Gurgaon IIoT	Founded Year : 2013 zenatix.com	Zenatix is an energy data analytics company that provides energy management and analytics solutions. Zenatix offers WattMan uses a combination of IoT and AI and helps large retail chains and Banks in improving their energy efficiency and automate other manual operations. WattMan IoT involves installing sensor, controllers and actuators. Collected data is also analysed to provide predictive and preventive maintenance alerts in real time for all business critical assets.
SCALING	LOUDCELL Noida IIoT	Founded Year : 2012 loudcell.com	LoudCell is a USA and India based startup developing innovative and highly sophisticated technology to address the problems of fuel and energy wastage. LoudCell offerings are based on the IoT and Cloud technology platform to enable quick scalability. Designed to be tamperproof, the LoudCell product line enables its customers to address the dual issue of reducing carbon print and reducing their energy costs.

STARTUP		SYNOPSIS	
SCALING	BEACONSTREAM Bangalore IloT - Retail	Founded Year : 2014 beaconstream.com	BeaconStream : The BeaconStream consumer app is useful if your business doesn't have a branded mobile app. In this case, their App can be offered for free to your customers to view your deals. A Great help for small to medium businesses to become tech savvy in no time.
COVICSIS Infrare distantian MATURE	CONVASCIS Mumbai IloT	Founded Year : 2009 covacsis.com	COVACSIS Technologies Pvt Ltd : Knowing and controlling the micro- economics of the production floor is increasingly becoming vital for manufacturing organizations. COVACSIS Technologies Pvt Ltd has designed an Intelligent plant framework that captures all micro events across all locations on the plant floor and models them into key and extremely relevant business KPI's.
SCALING	LOGIC LADDER Gurgaon IIoT - Energy & Utilities	Founded Year : 2011 logicladder.com	Logicladder is a leader in delivering energy and asset performance savings. They provide energy and asset intelligence as a service and create software that makes energy and environment data simple to acquire, understand and act upon thereby providing substantial savings to their customers.
ALTIZON SCALING	ALTIZON Pune IloT	Founded Year : 2013 altizon.com	Altizon has a family of sensor data appliances and SDKs that drive data from sensors in Industrial Equipment to their flagship Datonis [™] platform. The Datonis [™] platform provides a device cloud and performs large-scale data ingestion and aggregation utilizing Big Data technologies on time series data. Their OEM and SI partners build applications that leverage Datonis [™] for on-premise and cloud solutions for Operational Efficiency, Predictive Maintenance, Remote Monitoring and Consumer Insight in Manufacturing, Smart Grid and Connected Health industries.
CITIUX SCALING	ALTIUX Bangalore IloT	Founded Year : 2013 altiux.com	ALTIUX innovations is a product engineering, design and technology services company that helps clients to design, develop and deploy products and solutions for the connected world. With expertise in M2M, IoT, Mobility, Big data, Cloud and Analytics they help build products and solutions for companies in the Consumer Electronics, Homes, Intelligent Buildings, Smart Cities and Manufacturing verticals.
IUTRek EMERGING <	IOTREK Mumbai IloT	Founded Year : 2016 iotrek.in	IOTREK : Current IOT network solutions typically rely on GSM, WiFi, Zigbee etc. which are limited by high power demand, price, range (few 100 ft max) & security. Also, there is a lack of standardised IoT infrastructure to support millions of sensors. To solve all these challenges IoTREK are building solutions based on proprietary LORA Technology which is approximately 1/10th of the cost of prevailing solutions (GSM, Wifi), long-range (10km), 5+ years of battery life & highly scalable.

RESEARCH METHODOLOGY

GrowthEnabler's proprietary research methodology analyses the business impact of disruptive technologies and digital innovations. We capture and assess the impact these technologies have as part of the larger business ecosystem in order to enable executives to take informed business decisions, based on facts. The GrowthEnabler Personalised Intelligence Interface (Pii) platform delivers data and intelligence from the startup economy, enabling business leaders and tech entrepreneurs to interact, innovate and grow faster.

The research methodology is divided into two sections; the first section covers Global and UK Market trends and analysis, while the second part talks about top IoT startups in India – using the GrowthEnabler startup scoring system.

1 MARKET ANALYSIS

GrowthEnabler conducts extensive primary and secondary data analysis, using proprietary pattern analysis techniques, web algorithms and scoring methodologies to provide relevant market data, trends, industry analysis on sub-sectors, technology areas, applications, industry landscapes and competitors across startup technology segments. GrowthEnabler curates large volumes of data collected from various channels, including, databases, reports, journals, associations, interviews and other sources. Primary insights are gathered using surveys from key business and technology leaders in corporate organisations, investor groups, public sector entities and technology startups. Following this, several market drivers, constraints, opportunities and challenges for specific markets are identified and used as input using regression modelling.

2 STARTUP TECHNOLOGY LANDSCAPE & ANALYSIS

STEP 1 : STARTUPS DATABASE BUILDING

The IoT startup database is built using primary and secondary research analysis, led by a team of analysts and subject matter experts (SMEs), coupled with Machine Learning and Natural Language Processing (NLP) technologies to facilitate data mining across the web.

Primary Research – The Primary research data is derived directly from GrowthEnabler Surveys, Interviews and company profile information provided by Startups Registered on the GrowthEnabler Pii platform. Secondary Research – A team of Machine Learning and NLP experts scan wide range of data sources including startup websites, news, industry reports & investor portfolios to extract secondary data, which is then validated by founder/s, CXOs, product heads or other senior decision makers. Analyst Validation – A team of Analysts and SMEs validate both primary and secondary data while pro-actively interacting with senior decision makers and crossreferencing against business databases, to finally derive the relevant analysis included in this report.

STEP 2: STARTUP EVALUATION WITH GROWTHENABLER PERSONAL INTELLIGENCE INTERFACE

The research identifies the top disruptive startups in IoT and categorises them into three stages of growth* - Emerging, Scaling , and Maturing. Out of the 57 parameters, 30 sub-parameters are classified under 5 core categories that are then used to calculate the GrowthEnabler Startup Score. The categories include:

- Leadership Team For education, experience & profile relevancy
- Business Traction For market potential and business model
- Product & Innovation For the stage of product readiness and end-user value of the innovation
- Financial Strength For the financial fidelity with revenue & funding
- Social Media & Branding For the media mentions, awards & social media traction

