



THE INTERNET OF THINGS: SIMPLIFYING OR MYSTIFYING THE USER'S EXPERIENCE?



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It's been quite a while since the Internet of Things (IoT) made its debut in the technology space. Since then, of course, it has gained enormously in terms of technology, availability of connected devices and customer uptake. This, simply put, can be attributed to the very real advantage it offers, in terms of transforming the way customers live and work. Now to dive in deeper. Today, the developer has a plethora of technologies and protocols to choose from. The list includes (but isn't limited to) Zigbee, RFID, Thread, NFC, 6LowPAN, Bluetooth, Z-Wave etc. of course, the choice depends on

the application itself, in terms of power utilization, battery life, security, data usage efficiency etc. In short, IoT is here to stay. Let's take a look how...

The Rise and Rise of IoT

Gartner has predicted that the connected things numbers will reach 20.4 billion by 2020 and Internet of things endpoint spending to reach \$2925B by 2020. Similarly, IDC has predicted the revenue opportunity of \$1.7T for the ecosystem by 2020.



Constant innovation in wireless technology, reduced costs of manufacturing, changing business models and advancements in security models are leading to a surge in the uptake. Consequently, the world is becoming more and more connected. IoT devices are making in-roads into the lives of people at a speed never seen before. Here's more data to support the argument.

Imagine that if the predictions are correct, you may expect at least 3-4 devices every individual by year 2020. Considering IoT penetration of 40-50%, the devices per actual user may be to the tune of 6-7

But, it doesn't end here. The question that arises naturally, what are these devices used for? Does one really need these? The answer (in my opinion) is yes to both questions. Here's the explanation. Today, from the leaders of the technology industry to the startups (yes, even start-ups) are feverishly working on IoT-based applications. The bottom-line, of course, is to net customers by offering never-seen-before innovations. The basic idea is to change the method of how to access devices that have been around forever. At the top of the list (in my opinion) include smart homes, smart cities, connected cars, connected health and wearables.

Of these, smart homes top the pecking order. This is a reality today, no matter which domain one considers. Here's why it offers multiple benefits. The user can control their home appliances (or "things" in the Internet of Things) by a mere click on their handheld devices. This entails switching the devices on or off, monitoring ongoing activities, using smart assistants to control devices, et al.

Sounds familiar? If so, then you're probably an IoT fan already.

But, challenges remain

However, there exists fine print-like all technologies, really. While there is no argument that IoT devices are steadily making their presence felt in the everyday lines of customers, things are getting increasingly complicated. Permit me to delve deeper into this.

Is one usually aware of the number of applications on one's mobile device? Now to stretch the argument a bit-can one usually define a timeframe of how long the applications have been on the device? Or, for that matter, how long they are likely to stay? Interestingly, keeping and discarding applications on one's mobile device is based on several factors. For instance, it may be difficult for the user to juggle between the multiple applications on their device. Or, simply put, to conserve the device's memory and battery life, to limit the number of notifications received, the list is endless. Currently, the model for IoT devices entails every device manufacturer providing their own application for controlling appliances. So, assuming one purchased a smart bulb from vendor A, then one would need this vendor's application to control it. The result? An unwanted overhead on the customer, as they would not only have to juggle multiple applications but remember which application controls what. So, dear reader, is one's life simplified or further complicated? So is there a solution....

The solution is to opt for a model that aggregates the devices for the consumer. The device manufacturers should congregate on a common platform, so that multiple devices can be controlled from a single common user interface, or a common application for the devices. This would entail providing customers with the option of adding, configuring and controlling the devices in question. From a single place, of course!!! Manufacturers can, needless to say, continue with their business. The difference would result in providing the devices at the same time and on a common platform. Now, put this in context of the issue posed in the challenges section. Isn't this, by all means, a doable solution? Creating a win-win for customers?

To Conclude

In my opinion, the model ought to do wonders for the uptake of IoT, in the future. Not that the future was in any doubt, it's just that this would definitely streamline the entire process, do good to all parties involved and provide a fillip to IoT start-ups.

About the Author

Manish Jain, AVP & Head of Engineering, Digital Lifestyle Solutions at Comviva.

Manish brings to the table over 17 years of work experience in the telecom value added services industry, spanning research and development projects and product conceptualization and development. A core techie at heart, he has filed for over 20 patents that include inventions around network nodes and handset-based solutions and finance. He holds a bachelor's degree in Electronics and Communication from Delhi College of Engineering, as well as an MBA in Operations.