

Why & How Service Companies Should Get Started on their IoT Journey

By Matt Crego

Many service companies have incorrectly assumed that the Internet of Things (IoT) does not apply to them because they don't make "things" and therefore cannot benefit. The truth is that there is immense potential for service companies to leverage IoT to accomplish goals that fall into five main categories: **increased revenue, lower operational costs, differentiated products, customized service offerings and better customer experiences.**

Early IoT adopters in the services sector are realizing a clear advantage over their competitors, such as with the use of beacons and telematics devices, where new devices have been created to link service companies and their customers to the world of things. Your opportunities may resemble some of these real world examples:

- **Amazon Dash is a fantastic example of a new device used to enhance the purchasing process and ensure that when the consumer needs replenishment of a product (e.g. laundry detergent), Amazon is the default choice due to the simplicity of ordering. This hand-held, single click device is connected to the internet via Wi-Fi through a one-time mobile phone enabled configuration. By clicking a single button on the device, it immediately orders the product, charges to a default payment option and sends the product to a default shipping address, much like One-Click shopping on the Amazon website. The Amazon Dash creates an opportunity to increase revenue and improve the customer experience.**
- **RadBeacon (Radius Networks) and iBeacon (Apple) are notable examples of Beacons, which are passive radio devices that can communicate, typically over Bluetooth Low-Energy (BLE), with mobile phones, special radio receivers or other electronics to communicate motion or proximity. The beacon is small enough to be placed on an individual or badge, such as during a conference or sporting event, and the organizer can detect the presence of an attendee in order to turn on digital showroom displays, count attendee participation and activity, or to advise attendees of attractions or areas of interest. Beacons also can be placed on the displays themselves to push notifications to mobile users nearby, providing coupons or other incentives. The applications for beacons are limited only by the imagination, and the data collected from them can also be transformed into a valuable asset for marketing, measuring trends and other analytics applications. Beacons and similar technology can create an engaging customer experience while also showcasing products in a unique way.**
- **Magellan is a good example of Telematics devices that can measure and transmit over cellular connections. In Magellan's case, the device plugs into a universal port in vehicles called an OBD2 port and transmits data about a vehicle's use, such as hard-braking, speeding and other**

driving attributes that can signal erratic or irresponsible driving behavior. Auto insurance companies are working with their customers to install these devices in insured vehicles to determine how risky the driver is, and build discounted rates for safer drivers. Usage-based Insurance, or UBI, is another established practice that is allowing insurers to better measure risk and underwrite policies with lower premiums, making these insurance companies very attractive options for the safer drivers that are their most valuable customers, due to fewer claims that result in higher profits. In the use case above, telematics can reduce insurance risk and related operational expenditures (e.g., claims).

- **Coin Card and Plastic are reinventing the physical credit card with Smart Credit Cards with simple LCD screens, the ability to store multiple credit and loyalty cards, and buttons that allow the user to cycle between them. Once the desired card is selected, the card can be swiped by most card readers, and the smart card will emit both the correct magnetic reader signal and the right NFC transmission to enable a real financial transaction to occur, all without requiring new point-of-sale hardware. With the enablement of the smart card as a bona fide electronics device, additional security features can be enabled through Bluetooth communication with a mobile phone, such as notifying a user that the card has been left behind at a restaurant, and allow the card to be remotely disabled. Also through this linkage to the rich mobile platform, analytics can be performed to better understand consumer habits, likes and frequent shopping locations. This invaluable data can be used to drive promotions for buyers and marketing efforts for retailers. Coin Cards and similar technology provide the opportunity to create differentiated and unique service offerings (e.g. remote management of security features) as well as identify additional revenue opportunities for retailers.**

With these great examples to inspire the possibilities in other industries, how might a CIO, CMO or other service company leader find and exploit latent opportunities? While the creative process is fluid, a framework for exploring opportunities can be used.

Where to Begin

Like the examples mentioned above, the opportunity for IoT in your service business is likely to be in non-obvious scenarios. So, you will need a strong framework to identify how and where these opportunities might exist. Start with the outcome in mind and work backwards through the value chain. Understand the “levers” in the value chain that deliver the desired outcomes. As an example, the path to increased revenue requires higher sales conversion rates. Higher sales conversion rates are driven by improving the customer ordering process. The customer ordering process can be automated with an IoT device like Amazon Dash. So how do you get there from here?

It is critical to map out your value chain and look for these leverage points at each step in your service delivery process, such as ordering, billing and collection (see the figure below). Your goal is to identify information derived throughout the value chain that can be moved upstream or further downstream in the process to add value. The process of moving information from one step in your chain to another is an important form of innovation. This is often where companies are connecting existing devices or creating new ones to facilitate this information move. These are usually not natural flows of information as they’re not adjacent steps and are therefore, not obvious.

Framework to Identify IoT Opportunities in Your Value Chain



After mapping your value chain, it will be necessary to conduct innovation sessions to explore new thinking around existing service offerings, develop the profitability of the new ideas you have conceived and then develop a business case. Be sure that you are also looking into what your competition is doing in order to determine where your best opportunities lie.

The Internet of Things is not only for product manufacturers, there is also a tremendous opportunity for service companies to benefit from the Internet of Things, as our examples have demonstrated. Creative thinking and reimagining your business, with the right execution capabilities, can really transform service delivery. By providing compelling new features and conveniences to customers, you can create new approaches to your existing services and harvest the troves of data that result from them, resulting in a deeper understanding of what your customers want. These insights can then be used to achieve additional innovation.

Don't assume that because the opportunities aren't obvious, that they're not there. They are - and they're transformative.

About Cimphoni

Cimphoni is built on the premise that technology, when properly applied and led, can deliver innovative solutions that transform businesses, enrich the products we use daily and improve the quality of our lives. The Cimphoni team is comprised of technology and business leaders, physicians and medical researchers with a thirst for innovation and a passion for solving problems. Cimphoni Consulting is focused on business transformation using information technology to enable new product and service offerings and improve business performance.

Cimphoni Solutions develops Internet of Things strategy, devices and data analytics, as well as custom enterprise software. Cimphoni Life Sciences creates new medical devices and solutions that address acute and chronic illnesses and improve the health of individuals.

Founded in 2012, Cimphoni is headquartered in suburban Milwaukee and has an office in Phoenix to serve customers throughout the United States. More information can be found at www.cimphoni.com.

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