

COLUMNS

How machine-to-machine technology works for retailers

July 11, 2016



Aziz Memon is principal marketing and brand consultant at Salt Strategy

By [Aziz Memon](#)

Subscribe to **Luxury Daily**
Plus: Just released
State of Luxury 2019 **Save \$246 ▶**

M2M is a simpler explanation of another industry buzz term, "The Internet of Things," also known as IoT.

I am not a techie and I will not pretend to be one, so simply put, M2M is machines connecting with other machines wired or wirelessly and exchanging information in real-time without human intervention.

How does it work?

Imagine this scenario. Your alarm clock wakes you up at 6:30 a.m. and signals your coffee maker to start brewing your coffee or your office printer automatically re-orders more ink before running out.

Another good example is Google's NEST thermostat that learns your schedule, programs itself and can be controlled with your phone.

A commercial truck exchanges vehicle data such as miles driven, fuel consumed and route information automatically with the head-office computers, and also automatically schedules maintenance with the fleet's garage.

Collecting and analyzing data in real-time using M2M helps companies increase productivity, lower operating costs, develop revenue streams and gain competitive advantage.

But when the information being exchanged is about you, it gets personal.

Personalization

One of M2M technology's many benefits is personalization of services.

When combined with Big Data, M2M gets more sophisticated in supporting personalization.

Take, for instance, Progressive Insurance's Snapshot device which plugs into your car's diagnostics to track your driving habits so that your insurance premium can be personalized.

Or a beacon that tracks your current location in the mall or within a grocery aisle and beams you a message for a product which is on offer in your immediate vicinity. The message could be accompanied by a customized coupon or a personalized price offer based on your previous shopping habits.

Beacons

Beacons are little devices that send signals to Bluetooth-enabled technology such as a smartphone when a shopper

is within its range.

Beacons use Bluetooth Low Energy (BLE) technology to create a wireless personal area network for transmitting data over short distances while consuming so little energy that a coin-sized battery could last three years.

This technology has the potential to significantly change the way that brands and retailers will connect with consumers.

Beacon technology provides shoppers an almost concierge-like shopping experience with contextual messages and promotions, loyalty-driven offers and shopping list reminders.

A June 2014 research study by inMarket, one of the world's largest in-store beacon platform service providers, found that shoppers who received location-based beacon messages were 19 times more likely to interact with the advertised product than those who did not receive a beacon message.

A similar study conducted by inMarket in September 2014 indicated that beacon engagement achieved five times higher interaction rates than traditional push messages that occur without location context.

Also, shoppers who receive branded messages at the right time in the store are 7.5 times more likely to seek out the product off the shelf than those that do not.

On the flip side, over-saturation and irrelevant beacon pushes can cause app usage to decline and the app to be deleted from the phone.

In fact, just adding one more push per beacon location reduces app usage by more than three times.

Beacons at retail

As the technology improves, here is what your grocery shopping will look like in a couple of years.

Your refrigerator takes inventory and automatically adds milk, orange juice and eggs to your shopping app.

As you walk into the store's produce section, you are reminded that the very short mango season has just started and lists the varieties that will be the ripest this week, how much they weigh and how much they will cost.

As you pick up milk and orange juice, a store beacon pings your device with a personalized offer for Philly Cheese for the cheesecake recipe you had favorited last week while browsing the Web.

You walk past the freezer section and your Fitbit app informs you that because you have walked 5 miles in the day and you can add your favorite reduced-fat frozen yogurt into your daily calorie budget for a personalized price.

Finally, you exit the store and pay using your phone.

Beacon applications are going beyond the retail arena to places such as airports and train stations so that notifications on departures, delays and gate and platform assignments can be delivered instantly to passenger smartphones.

I know firsthand that Toronto's Billy Bishop Airport on Toronto Island was planning to invest heavily in beacon technology as part of its refurbishment plan.

According to Business Insider, more than half of the top 100 retailers in the United States had tested beacon technology in 2014 and that the installed base of active beacons would be 4.5 million by 2018.

If beacons have not caught your interest yet, this should help.

According to BI Intelligence, beacon messages this year will trigger retail sales worth \$44.4 billion in the U.S.

"We anticipate that in a couple of years, more than half of new mobile apps will talk to IoT devices," said Kundan Joshi, CEO of TheAppLabb.

"IoT enables mobile apps to provide great insights by connecting with a wide range of data points, as every temperature sensor, every light bulb, every printer, fridge, clothing could potentially act as a data source," he said.

There are privacy concerns from consumer groups but I expect legislation and technology to catch up and alleviate concerns of privacy and security.

One way or another, we will see more personalized pricing and customized offers beamed to us.

Players

Apple was the first major device maker to integrate a beacon protocol standard, called iBeacon, into an operating system, followed by Google's own standard called Eddystone. Both work with each other's smartphone operating systems.

On the hardware and firmware side, there are numerous vendors.

Some of the notable ones, in no particular order, are Gimball, BlueCats, BlueSence, Estimote, Gelo, Bikon, Accent Systems, Lightcurb, Glimworm, Kontakt, Sensorberg, Sonic Notify, GP Motorola, Sensorberg and Swirl.

Is it expensive?

At about \$5 a beacon, the hardware itself is inexpensive, but the number of units required will depend on the size of your marketing effort.

There will be other costs related to message planning, app development if you do not already have an app, programming, permissions from retailers, installation, monitoring and redemptions.

SO, IF YOU are a marketer, you should consider using this technology to digitally extend your brand into the physical world in your next marketing plan.

Or, at the very least, consider a localized test to see if proximity marketing in-store with beacons will help boost sales.

Aziz Memon is principal marketing and brand consultant at [Salt Strategy](#), Toronto. Reach him at aziz@saltstrategy.com.

© 2020 Napean LLC. All rights reserved.

Luxury Daily is published each business day. Thank you for reading us. Your **feedback** is welcome.