

MARCH 3, 2017

## How Can Your Bank Tap Into the Internet of Things?



The Internet of Things (IoT) has officially moved beyond hype. IoT is now well known and defined—basically putting data-gathering sensors on machines, products and people, and making the data available on the Internet—and companies are already using IoT to drive improvements in operational performance, customer experience and product pricing. Gartner (<http://www.gartner.com/technology/home.jsp>) predicts we'll see 25 billion IoT data-gathering endpoints installed worldwide by 2020.

While IoT is delivering on its promise in a wide range of industries, many bankers are still struggling to find the value in finance, an industry largely built on intangibles. We see two primary IoT opportunities for banks:

- Direct use of sensor data (location, activities, habits) to better engage customers and assess creditworthiness.

- Partnering with companies that manufacture or integrate sensors into products to provide payment services for device-initiated transactions.

### **Engaging customers and assessing creditworthiness**

Like most businesses, your bank can simply use IoT to understand—and serve—customers better. Banks are already implementing smart phone beacon technology that identifies customers as they walk in the door. Customers who opt in can be greeted by name, served more quickly and generally treated with more personalized care. You can also take advantage of sensor data outside of the bank to market more relevant services to customers. For example, data from sensors could alert your bank when a customer's car goes into a repair shop; after the third service call, you might offer the customer an auto loan for a new car. This type of tailored service and marketing can change a customer's relationship with your bank dramatically: Pleasant experiences and valued information are a time-tested path to loyalty.

IoT sensor data can also supplement traditional methods for predicting creditworthiness and protecting against fraud, especially for customers with little or no credit history. For example, if a small business HVAC contractor applies for a commercial loan, you can request access to data from shipping and manufacturing control sensors to track the flow of actual product into buildings. This can help the bank confirm how the business is doing. For product manufacturers, you can track and monitor goods, including return rates, and if the return rate is high the bank can adjust the loan pricing and decisions accordingly. Leveraging alerts on credit cards and processed payments can provide information about where and how often an individual or business is making purchases, providing clues about creditworthiness without requiring access to detailed credit card records. In short, with billions of sensors all over the world, IoT will offer you more data that can help you assess creditworthiness and prevent fraud.

### **Providing payment services for device-initiated transactions**

To illustrate the potential of IoT, proponents often cite the “smart” refrigerator, which senses when a household is low on milk and automatically orders more. Similarly, in the

commercial space, sensors can automatically trigger a call for maintenance when a piece of equipment is due for service. In these device-initiated transactions, your bank could partner with the providers to offer payment services as an integrated component of the IoT package.

On a more local level, as small businesses begin to take advantage of IoT sensors to automatically reorder supplies—paper, toner, medical supplies, salon products—your bank can tie payments into the IoT-triggered reordering system. In addition to broadening your market for payments, being part of this solution can strengthen attachment to your bank among small businesses in your community.

### **Start with the end in mind**

This is undeniably an exciting time in banking. Between fintech offerings and IoT applications, it's tempting to move quickly for advantage, but we all know that investments are far more likely to pay off when you treat the process with rigor and resist the urge to grab bright shiny objects. IoT is no different: Before you start buying systems and aggregating data, know what problems you're trying to solve and what data you'll need for the outcomes you want to achieve. In banking, the most promising returns on IoT investment are likely to be found in improved customer experiences and marketing effectiveness, reduction in loan default and fraud, and growth in your payments business. But with all the dramatic changes unfolding, who knows what innovations might be ahead—your bank might find opportunities for IoT no one else predicted.

*Contributed by:* **John Matley**, Principal, Deloitte Consulting LLP; **Akash Tayal**, Principal, Deloitte Consulting LLP; **William Mullaney**, Managing Director, Consulting LLP

---