



# Driving Value Through Internet of Things Technology

technology branch strategies digital banking

**Summary:** The Internet of Things (IoT) is driving innovation in the financial services industry. There is potential for CFIs to use IoT technology to enhance the customer journey and grow their business. We look at these opportunities and give three tips to consider for successful deployment.

The human brain, with its 100 quadrillion connections, contains about 100B neurons — similar to the number of stars in the Milky Way. In 1926, a Serbian-American inventor named Nikola Tesla imagined a wirelessly connected world where the "*earth would be converted into a huge brain,*" with devices simpler than a telephone and small enough to carry in a pocket. Though the Internet of Things (IoT) has not yet reached the level of the human brain, Tesla proved to be quite a visionary.

According to Cisco's Annual Internet Report, more than 29.3B devices will be connected to the internet by 2023 — 5B in North America alone. A large percentage of these will be IoT devices used in our homes or on transport. The explosion in the number of objects that can communicate with each other — including wearables, voice-activated assistants, appliances, sensors, and more — creates a significant opportunity for financial institutions (FIs) to capture a sizable portion of this booming market. McKinsey estimates that the IoT could enable \$5.5T to \$12.6T in value globally, not to mention the intangible value to both clients and their customers, who will save time and effort by using these technologies.

We look at some opportunities that community financial institutions (CFIs) may want to investigate, as well as three key considerations for successful deployment of IoT technologies.

#### IoT opportunities for CFIs:

**Personalize the customer experience.** In a world where personalization is a must, a holistic view of a customer's financial behaviors is extremely valuable. Connecting a customer's devices to a single digital identity offers a unique digital footprint which might provide further insights into usage patterns and financial behavior. This would allow CFIs to tailor their offerings to each user's specific needs, including personalized money management suggestions and budget plans.

**Embed finance to drive customer engagement.** IoT technologies allow FIs to connect with customers in specific life scenarios, such as at home and in the car. For example, by partnering with whole goods manufacturers, a lender could proactively offer a new line of credit to replace a failing washing machine in the exact moment of need. Similarly, connected cars could carry an embedded wallet and make autonomous payments for gas, parking fees, and even drive-through restaurants. They can also provide data for CFIs to offer more tailored insurance, based on driving habits and vehicle health.

**Transform branches.** Branches can benefit from IoT technologies in many ways. Biometric sensors can alert employees as a customer enters a branch, and channel customized offers right to the customer's connected device. Some ATMs now have live video support for additional assistance. Regional hubs can acquire the data that allows them to optimize branch distribution and resource allocation.

Some observers believe that in the future there will be even greater IoT opportunities in the B2B space, with "smart labels — a series of components that allow an object to be identified and send information about itself. Smart labels, if embedded throughout the value chain, could eventually trigger events like invoicing and payments, allowing objects to do business with each other directly.

#### Key IoT deployment tips:

- 1. **Develop an IoT strategy.** Investment in IoT technologies can be significant, so CFIs should carefully assess what gaps they are trying to fill, keeping their customers' needs at the core. An IoT strategy should form part of an institution's broader digital transformation. "*Smaller banks are likely to serve one or a few niches and have a more specific buyer persona,*" says one IT provider. "*It can help them select primary investment areas for IoT, be it the diversification of payment methods or offering first-class assistance at the physical bank's office.*"
- 2. Prioritize privacy and security. Given the massive increase in the amount of data an institution could potentially collect through multiple devices, the security and privacy of customer data is of primary importance. As such, CFIs need to continue to prioritize cybersecurity. Moreover, they should be transparent about how they intend to use customer data, offer opt-out options, and create clear privacy policies to ensure customers remain willing to share information.
- 3. **Build trust.** Before machines can be left to transact on their own, CFIs will need to develop secure and reliable processes for digital identity verification, essentially the equivalent of KYC protocols, or Know Your Machine protocols. However, as one industry expert points out: "*The integration of biometrics with loT devices provides a stronger KYC verification than consumers or businesses have with legacy transactions.*"
- 4. Partner with experienced vendors and fintechs. As most CFIs don't have the bandwidth or expertise at their disposal to build proprietary systems to accomplish these goals, finding the right business partner to implement established systems is crucial. Not only will this ensure that the technology works properly, but partnering with a known fintech or tech company will help customers feel more comfortable adopting the new technology.

The IoT offers many opportunities for CFIs to continue to enhance the customer experience, while also increasing their own efficiencies. Maintaining a customer-centric approach and being aware of the technological and privacy challenges will ensure CFIs make the most of this growing market.

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## ECONOMY & RATES

Rates As Of: 08/22/2022 08:14AM (GMT-0700)					
Treasury	Yields	MTD Chg	YTD Chg		
3M	2.74	0.33	2.68		
6M	3.16	0.25	2.97		
1Y	3.28	0.35	2.89		
2Y	3.31	0.42	2.57		
5Y	3.15	0.48	1.89		

Datas As Of 00/22/2022 00.14AM (CMT 0700)

10Y	3.02	0.36	1.50
30Y	3.26	0.25	1.35
FF Market	FF Disc		IORB
2.33	2.50		2.40
SOFR	Prime		OBFR
2.28	5.50		2.32

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