



5G and the Next Generation Point of Interaction in Payments

Innovation leaders Lov Kher, Ph.D., Managing Principal and Fellow, Verizon, and Ken Moore, Chief Innovation Officer, Mastercard, share how the low latency and high computing power that 5G and edge computing can enable will transform financial services.

January 3, 2023

presented by **verizon**^v

partnered with **AMERICAN BANKER**



Lov Kher, Ph.D.,
Managing Principal
and Fellow,
Verizon

Empowering SMBs with Next Gen Point of Interaction

A major challenge for the 31.7 million small businesses in the U.S. is managing cash flow. 5G connectivity can power tools that financial institutions can provide for SMBs such as:

- Using Buy Now, Pay Later (BNPL) installment plans to access capital instead of securing financing at higher rates.
- Moving into the digital economy with procure-to-pay systems.
- Accepting a wide variety of payment types cost-effectively using a mobile device.
- Using mixed reality experiences to drive brand loyalty and engage with consumers.

It's a great day for a football showdown between division leaders. As you enter the stadium, the app on your mobile device offers you a choice of seven simultaneous camera angles to view the game. You move seamlessly through the views and check out different vantage points.

An official throws a flag for pass interference, so you re-watch the play on your phone, changing angles to see different perspectives. Throughout the game, the app displays pass completion rate, number of tackles a player has made, how fast a player is running, and real-time win probabilities.

You're thirsty but you don't want to miss a play. With the app you see that the closest concession stand isn't busy. You order and pay for your drink on your phone and walk to the concession stand to grab it.

Technology that blends the physical and the digital worlds could engage fans in innovative ways, and those technologies have the potential to transform how financial institutions empower their consumers and businesses. The result can be new business models and opportunities for banks and credit unions to offer immersive experiences that deepen customer and member loyalty to their brands, increase security and reduce fraud, and become more agile in a hyper-connected world.

Powering the Next Generation of Interaction

What does the fan experience at a professional football game have to do with banking? A great deal, actually, explains Lov Kher, Managing Principal and Fellow, Verizon. Mixed reality platforms can change the ways in which we work, shop and play. And they can change how we bank.

An interactive experience like the one described above relies on digital innovation to build smarter, more efficient, and more agile enterprises. "By leveraging Verizon private 5G wireless networks and private mobile edge computing to bring disconnected systems together allows us to create powerful, and intelligent solutions that can help enable new functionality, smarter insights, and faster decision making," explains Kher. "The result is Enterprise Intelligence. And that's what Verizon delivers."

The high speed and low latency that 5G and edge computing can enable power technologies that are expected to reshape how banks, consumers, and businesses interact with each other, including artificial intelligence (AI), data analytics, Internet of Things (IoT), a Zero-Trust security model, virtual reality, and eventually the metaverse.

Here are just a few potential use cases in financial services and payments that 5G could support:

- Empowering businesses to accept new credit scoring solutions.
- Creating intelligent consumer journeys that weave in and out of digital and physical worlds for a more immersive experience.
- Personalizing product offerings by applying AI to a deeper set of transactional data.
- Working with colleagues remotely in 3D to enhance collaboration.
- Offering more complex financial services solutions on mobile devices.
- Powering cashier-less stores. Consumers enter a store, choose an item, and walk out. The phone engages with the payments infrastructure for an experience with much less friction.



Ken Moore,
Chief Innovation Officer,
Mastercard

Next Gen Point of Interaction: Green Banking

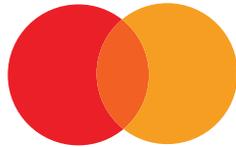
5G connectivity could enable financial institutions to add value to consumers that extends beyond payments.

Almost three-quarters of consumers say that sustainability is a very or somewhat important purchase consideration.² What if consumers could visit a physical store, scan a QR code on their phone, and view details about the product such as where it was made?

Mastercard takes the concept one step further: based on transaction details, banks and credit unions can offer consumers the [Carbon Calculator](#), a white-labeled app that calculates the carbon footprint of purchases and offers points for choosing sustainable products that consumers can use to purchase carbon offsets such as planting a tree.

These use cases rely on high-speed, high-capacity, and low-latency connectivity that networks have traditionally struggled to support. 4G cloud-based point-of-sale (POS) systems, for example, generally lack the speed and bandwidth needed for mobile devices. 5G offers the potential for merchants to move the acceptance infrastructure to the phone. “Additional connected IoT devices and networks create new opportunities for personalization – and also unique security needs,” says Ken Moore, Chief Innovation Officer, Mastercard. “With these increasing levels of connectivity and interactivity, we’re focused on leveraging emerging technologies to establish trust and provide banking consumers with a seamless, safe experience.”

“With the speed that 5G can offer, we can interact with an increasing number of sensors with minimal latency and high speeds,” Moore explains. “This allows us to build intelligent experiences based on our surroundings and engage with channels in a completely different way.”



Partnership Drives Innovation

Verizon and Mastercard – with platforms that connect financial institutions, consumers, businesses, and more – have partnered to create the foundation for many of these innovations. Harnessing Verizon’s 5G connectivity and the power of the Mastercard network, these firms are working together to innovate the future of payments and commerce, delivering solutions such as immersive retail technology, contactless shopping, compelling point-of-sale experiences, and digital capabilities. These collaborations are aimed at delivering scalable innovations to drive the financial services industry forward and create new experiences for consumers and businesses alike.



As these technologies become more widely adopted, the role of financial institutions should shift from being product-centric to becoming aggregators that work with fintechs and others to deliver apps to consumers and businesses.

“The days of doing everything yourself are long gone,” says Kher. Instead, he recommends that banks and credit unions build synergies with companies that have deep pockets and the right relationships – like Verizon and Mastercard – that spur innovation. Both Kher and Moore encourage bankers to reach out to their respective organizations to explore the wealth of opportunities in next generation connected and intelligent interactions.

For more information:

To experience first-hand how Verizon 5G and Edge solutions can transform how banks and credit unions engage with and provide personalized experiences to consumers and businesses, visit the Verizon Innovation Center in Boston or the Mastercard Experience Center in New York City. To schedule a visit to view demonstrations of financial services use cases or to learn more, contact:

Mark.Bubar@verizon.com, Managing Principal, Global Financial Services

Nima.Sepasy@mastercard.com, Senior Vice President, Innovation Strategy and Customer Engagement

Who we are:

We deliver the promise of the digital world by enhancing the ability of humans, businesses and society to do more new and do more good. We transform how people, businesses and things connect with each other through innovative communications and technology solutions.

Verizon Enterprise Solutions - Transform Your Business