

5G Edge Partner Program

Contactless & autonomous shopping experience with AiFi.

The pandemic continues to dramatically impact consumers' shopping preferences and journeys which may become long-term habits. As the lines between the physical and digital blur even further, retailers want to offer consumers more convenient, personalized and secure shopping experiences.

Retailers however, understand more than other industries that in order to deliver these new experiences, a reliable, advanced and secure infrastructure is foundational to the desired outcome.

Read how AiFi & Verizon are transforming retail spaces and delivering the "phygital" experiences consumers want and expect.

Overview

AiFi enables reliable, cost-effective, and entirely contactless autonomous shopping with AI-powered computer vision technology that provides an unrivaled shopper experience for retailers and consumers around the world.

AiFi works with top global retailers to create customized autonomous shopping experiences with flexible integration and entry options, which grant customers the option to check out with a cashier or autonomously through the AiFi platform.

Verizon enables this solution to be easily deployed in any location with Verizon 5G connectivity, while Verizon's MEC eliminates the need for traditional servers which in turn, reduce upfront hardware and maintenance costs by 60% compared to other autonomous shopping solutions.

Multi-access edge computing (MEC) brings technology resources closer to the end user. Data is processed and stored at the network's edge, not at some distant data center, significantly reducing latency. MEC provides both an IT service environment and cloud computing capabilities to help enable the real time enterprise.



The customer experience with AiFi has three steps:

Easy enter: Customer checks-in with app or credit card and AiFi starts tracking shopping activity immediately without any disruption to their regular shopping habits.

Seamless shopping: AiFi's machine learning is trained to recognize tens of thousands of SKUs with pinpoint accuracy as well as when customers put products back on shelves.

Frictionless checkout: Shoppers can head home completely checkout-free and receipts are sent directly to their email or mobile app.

Flexible shopper journeys

AiFi offers hybrid shopping and several entry options to help you create a unique shopping experience for your store. The hybrid solution allows shoppers to checkout with a cashier or enjoy a contactless, checkout free experience with our computer vision technology.

Turnstiles: Located at the store entrance requiring customers to check-in before entering the store for secure 24/7 shopping

Kiosk: Placed inside the store for customers to check-in for the autonomous shopping experience upon entry or when exiting the store

Door Locks: Placed outside the store to allow for easy and secure entry when staff isn't present, in addition to regular shopping hours

Benefits

Customer convenience: Save customers time and make shopping enjoyable with uncrowded, grab-and-go stores that can stay open 24/7.

Operational efficiency: Use backend store analytics to find the optimal inventory mix for each location, end stockouts, prevent shrinkage and lower overall costs.

Optimized productivity: Automatically generate a to-do list for staff and allow them to focus on providing exceptional service that drives revenue instead of scanning.

Featured deployments



Industry insight

"This drive towards contactless payments saw increases in contactless card use, notably amongst those demographics who were more 'wedded' to cash (such as the baby boomer demographic) and increases in wallet use for contactless payments from those previously concerned about the security and usability of this payment method."

"Despite initial consumer concerns around the security of contactless card payments, the pandemic saw awareness of contactless payment technology overall with an associated increase in the use of contactless cards and major US retailers beginning to enable EMV contactless card payments."

Contactless payments: Trends • Opportunities • Market Forecasts • 2021-2026 [Juniper Research]



Case study - Verizon & AiFi at The Indy 500

AiFi and Verizon delivered an autonomous shopping experience to the 105th Running of the Indianapolis 500. Ticket-holders, volunteers, staff, and drivers will be able to purchase an assortment of snacks, beverages, and Indy 500 merchandise using AiFi's portable computer vision enabled NanoStore, which will run on Verizon's 5G Ultra Wideband network. AiFi's NanoStore is fully autonomous, customizable, and can now be placed in any location with Verizon 5G coverage.

"As in-person gatherings start back up, venues and consumers alike will prioritize personal safety in every way possible," said Steve Gu, founder and CEO at AiFi. "Our NanoStore allows attendees to avoid crowded lines and experience contactless shopping while purchasing their favorite snacks and drinks.

"The NanoStore provides a completely new and futuristic shopping experience for attendees," said Rebecca Russelink, Chief Information Officer at Penske Entertainment. "We're excited to work with AiFi and Verizon to ensure the best possible customer service with this unique store."

"Our long-standing partnership with Penske is filled with industry-driving innovation. AiFi shares that same passion and have been amazing partners in making this autonomous shopping experience come to life" said Andy Brady, Vice President, Enterprise Sales, Verizon Business

Customers may enter the NanoStore by scanning the Indy Express Shop app. Once scanned, the computer vision-technology around the store will observe and track the items that a customer chooses. When customers are done shopping, customers can walk out and will receive a receipt to their app or email within minutes. AiFi's computer vision-technology has achieved an accuracy rate of 99% for a seamless customer experience, without using facial recognition or storing biometric data. (2)

The AiFi application can run on Verizon 5G mobile phones by:

Apple, Samsung, Google, Motorola, OnePlus, Nokia, TCL & Kyocera

The AiFi nanostore could be connected via:

Verizon 5G Business Internet

Verizon Private 5G [storage & compute optional]

The AiFi application could be hosted on premise or on Verizon' 5G Edge ⁽³⁾ ⁽⁴⁾

Public MEC with AWS

Private MEC with Azure

About The 5G Edge Partner Program

Verizon was the first in the world to launch 5G mobility service for customers in 2019 and continues to work with key partners to lead the development of the 5G ecosystem.

The 5G Edge Partner Program is part of this work and it aims to accelerate 5G Edge adoption and development by partnering with best-in-class, cross-industry, application providers and developers who will change how we live, work, shop and play.

Why AiFi and Verizon

The power of Verizon's 5G network, combined with our Edge infrastructure and AiFi's application & nanostore delivers a bundled solution that's proven, secure, scalable and easy to deploy.

Together, we deliver new and exciting retail experiences that will help drive digital transformation forward. Whether you deploy over public or private 5G,, it's all seamlessly available on a single Verizon bill and contract.

Why Verizon

Superior coverage: Our 4G LTE network covers 327 million people. That's over 99% of the U.S. population.

5G innovation: Verizon 5G Ultra Wideband is the fastest 5G in the world, with ultra-low lag and massive capacity.⁽⁵⁾

Trusted security: Managing over 500,000 security networks and hosting devices gives us valuable insights into the digital landscape.

Massive capacity: We obsess over the details, analyzing millions of gigabytes of data every day.

Easy integration: We've certified 900+ machine-to-machine (M2M) chipsets, modules and devices.



Tools

[Verizon 5G Edge Developer Portal](#)

[Verizon Open Source](#)

Learn more

To find out more about how Taqtile's Manifest and the Verizon 5G Edge Network can accelerate digital transformation and improve safety, efficiency and lower downtime across your shop floor, contact us directly at:

vz.5g.edge.partnership@verizon.com

hello@aifi.com

Links and references

1. CONTACTLESS PAYMENTS Trends • Opportunities • Market Forecasts • 2021-2026 [Juniper Research]
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3. <https://www.verizon.com/5g/#ready>
4. <https://www.verizon.com/about/investors/runs-on-verizon/aws>
5. 5G Ultra Wideband (UWB) available only in parts of select cities. 5G UWB access requires a 5G capable device with select voice/data & 5G UWB plans. 5G Nationwide available in 2,700+ cities.