

Whitepaper

Realizing digital advantages in the storefront



The power of in-store connectivity

Retail has entered a new era informed by the lessons of the last several years and leveraged by the wider adoption of increasingly complex IT solutions. Storefronts that integrate experiential, omnichannel marketing that merges the personalization of digital retail with the in-person experience of brick-and-mortar will be flagship earners in the future.

Calls for innovation like this are nothing new. In response to mounting cost pressures, retailers are again called to do more with less, to reach for greater and greater efficiencies to enact incremental gains and further stabilize earnings.



While the core business principles of retail have not truly changed, technology has and is developing at a seemingly exponential pace. An analysis by McKinsey argues, “*Organizations face an urgent need to overhaul their tech architecture and operating model to keep pace with the changing landscape.*”

Retailers continue to face a myriad of challenges

Indeed, retailers are facing significant pressure from nearly every sector of their business in a manner that is, in some ways, greater than the 2008 economic crisis; it has created an atmosphere of collective uncertainty.

Present socioeconomic conditions are the result of the struggles of the last several years interacting with long-standing systemic vulnerabilities, whether difficulty in talent acquisition, rushing, historic inflation (near 10% YoY), the threat of an official recession, investments in new data systems, or the

robust cybersecurity tech increasingly demands.

These pressures increasingly include climate disasters, disruptive events that have increased in frequency (according to the World Meteorological Organization) and continue to have significant real-and-potential impacts on business logistics.

Even independent of climatological chaos, supply chains have seen a myriad of issues in the last several years, from the shutdown of major ports and the stranding of thousands of shipping containers to the Suez Canal obstruction of mid-2021.

Amidst these issues, customer expectations have made a major shift toward frictionless retail and a level of personalization that calls for omnichannel engagement strategies.

Lockdowns resulted in changes in customer behavior that are generally unique among other recession-like events, with a large contingent of customers eager to get back out into in-person, traditional shopping centers,

while others ‘dug in’ to BOPIS and other remote and/or primarily digital modes and everything in-between.

Combined with the ongoing challenges in obtaining skilled workers to meet these complex customer demands has placed a continuous strain on customer relations with increased call volumes and turnovers that are increasingly difficult to prevent or replace.

Needless to say, no one organization can address all these issues in a way that fully resolves the cost pressures they apply. Their causes are systemic and run deep into policy realms. For example, there are generally no near-term solutions for (e.g.) the energy crisis as it is the result of a multitude of factors including a foreign war, and businesses simply have to expect that expense.

The answer for storefront operations today must come from investment into and development of efficient system-level integrations. Modern networking technologies—and the new ways in which they can achieve those integrations—present a salve for the woes of the modern retailer.

How investing in network technology creates smarter storefronts

Modern network technology powered by new, faster mobile networks can orchestrate a wide range of functionality. When paired with fixed wireless solutions that integrate with mobile systems, storefronts are equipped to meet diversified customers needs and achieve omnichannel goals.

These solutions help to assuage those cost pressures while playing a major role in meeting the demand for hybridized store environments that will be able to meet the next generation of customer needs.

“...the line between digital and physical retail has blurred,” writes Karen Bomber for Forbes. *“The result is a mélange of consumer expectations wherein shoppers demand both the convenience and transparency of eCommerce and the service and immediacy of physical retail.”*

The ‘how’ is, in essence, the way in which high-speed mobile systems enable a variety of information-gathering and service-rendering systems to interact with one another in a seamless manner. This culminates in both a ‘frictionless,’ deeply personalized shopping experience for customers and a smoother, better-informed back-end experience for management, customer agents, and floor staff.

We can begin with an examination of how mobile systems allow for that greater personalization, getting retailers closer



to the grail of truly omnichannel engagement.

In brief, integrated 5G networking systems with low latency and reliably high bandwidth allow for greater customer personalization. They do this by bringing the same speed and convenience customers expect at home with a fixed wireless solution to the functionality of kiosks, customized digital signage (and other types of smart displays), various immersive in-store experiences, and even VR/AR

technologies, all of it interacting with their own ‘IoT’ devices.

These come together to help create the same effects shoppers have come to experience in digital shopping via Google and major distributors such as Amazon, collecting data and feeding it back to customers in the form of ‘smart’ recommendations. These are *actually* personalized, genuinely useful, and can even assist in significantly boosted acquisitions via targeted content such as personalized marketing videos.

From those personalized recommendations, smart mobile and AI-powered systems could even instantly check inventory and provide increased visibility on an out-of-stock item. This enables connecting the customer with that item at a nearby distribution center and expediting purchase for either home delivery or later pickup while still in the store environment.

Similarly, those personalized recommendations and inventory checks could pair up in real-time with modern VR/AR-powered fitting rooms that allow customers to 'try on' merchandise that may not be present in-store at the time of their visit.

“AR and VR are becoming increasingly popular ways for customers to preview products, especially in the cosmetics, jewelry, and furniture industries,” notes a report by T-Mobile. “An estimated 100 million consumers shopped with AR online and in-store in 2020, and 46% of retailers planned to introduce AR or VR solutions that year to meet customer service expectations.”

“This trend produces greater customer satisfaction with purchases and fewer headaches for retailers. Customers who used AR to preview products before purchasing were 40% less likely to make a return,” the report continues, emphasizing how much of an earnings impact these technologies can have.

Getting set up for this kind of individualized, curated, mobile-powered shopping experience also allows for pop-up store and kiosk enablement. Allowing them to be set up in record time while maximizing their potential via hyper-localized recommendations and near-store targeted advertisements.

Furthermore, 5G integrated consumer insights, tracking, and geospatially informed data collection and analysis provide those critical opportunities for omnichannel engagement wherever and whenever it is needed. This helps to



identify the specific needs and preferences of a given demographic to a level of detail that goes far beyond the capabilities of traditional salesmen (while empowering those same agents).

Let's examine, for example, mobile-powered heat mapping. Heat mapping simply refers to a better, data-driven way to visualize the 'hot zones' in your store environment, the places where customers are most often walking, stopping, looking, and talking. In the retail environment, this is most often used to boost sales conversions via better strategic information, eventually resulting in more effective marketing across the store environment.

Another report by McKinsey notes, *“Strategic plans should reflect ‘heat maps’”* to better identify given value segments and opportunities with quick-response potential.

It's a form of behavioral analytics that can be accomplished via mobile-powered and fixed wireless connected monitoring systems which convert all of that data into color-coded 'maps' that any manager can quickly grasp and understand. Via interaction with other integrated systems, it can even help business leaders to understand (e.g.) the performance of loyalty cards or when and where repeat purchases are most commonly achieved.

Toward a frictionless future

All of this helps to facilitate the 'frictionless' shopping experience that retailers today should prioritize. The idea that retail shopping should minimize potential pain points as well as points of contact with staff as much as possible (if they wish) while allowing consumers to get connected with the products and services they want in a way that is more immediately accessible.

Notes Ryan Taylor, Head of Retail Product Marketing for T-Mobile, "One of the biggest opportunities I see in retail today is delivering a frictionless-type experience, a self-checkout or a scan-and-go option where a consumer does not have to actually interact with an associate or employee in a store to fulfill their shopping experience or needs."

Indeed, a frictionless approach helps to soothe a traditionally major source of customer dissatisfaction in retail: the checkout experience. According to [Kantar's Analytics Practice](#), a more satisfying checkout experience was generally one with a shorter processing time overall.

Executed properly, the consumer ends up with a more consistent, convenient, and expedited purchasing experience. An experience that increases consumer satisfaction and thereby revenue, capturing distinctly post-pandemic demographics in a way that will round out your brand's reach and increase sales overall.

All sounds well and good, but the question for potential adopters is often

one of start-up costs and investment margin. High-speed mobile networks thereby stand out in another major way: they're relatively easy to set up and integrate. And yet they facilitate such a wide range of technologies that bring the storefront up to the standards of a world that has smart devices in every pocket.

That adaptability is essential; if the last several years have demonstrated anything, it's that even major players can struggle tremendously in the face of sudden challenges.

By getting the storefront connected in a way that simulates increasingly popular digital shopping experiences, retailers can not only secure future foot traffic but create shopping experiences that were simply impossible a decade earlier.



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