

Transforming the In-Store Retail Experience with Smart Retail Analytics

Tech Mahindra and Intel supports the deployment of a comprehensive digital in-store media network that delivers real-time advertising based on customer analytics

Authors Executive Summary

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The Internet of Things (IoT) promises to fuel innovation in nearly every aspect of people’s lives, including how they shop. Connecting “things” that were never connected before is leading to new data insights that have the potential to materially and meaningfully impact how retailers meet the evolving needs of the modern consumer. The IoT connects mobile devices, screens, cameras, and sensors with customers and employees, so retailers can gather more data about each shopper and use it to increase efficiency, empower sales staff, create a more personalized shopping experience, and drive accelerated growth.

Currently few retailers have deployed full IoT solutions, and many remain overwhelmed with data that is divided among isolated systems and fails to provide the real-time insights necessary to truly transform the retail experience. What retailers need is a proven, holistic solution that brings all the innovative individual technologies—from RFID tags to digital signage to interactive kiosks—together. Beginning with visual retail solutions, retailers need options that enable them to derive value from the IoT by collecting, interpreting, and rapidly acting on meaningful data.

Tech Mahindra is driving a comprehensive digital in-store media network that will enable the integration of store traffic and customer anonymous demographics, coupled with daily sales, critical operations-related data and real time security, powered by Intel® NUC, artificial intelligence and Intel vPro® Platform for remote management.

Reimagining the Retail Experience

It is no secret that most consumers today shop in entirely different ways than they did just a decade ago. Some customers visit brick-and-mortar stores not simply to engage in a transaction but also for inspiration and exploration, which may lead to an immediate purchase or further online research. Others spend time researching products online before they ever enter a store, at which point they already know, or think they know, what they want to purchase.

Regardless of their research methods and path to purchase, when customers walk into stores, their expectations are higher than ever. Just as every item is readily available to them online, they also expect items that interest them to be readily available in brick-and-mortar stores. In addition, customers expect stores to deliver positive, exciting, and emotional shopping experiences that represent the brand and its values. While it is true that customers enter stores with diverse needs, they share a desire for shopping that is both highly customised and personally relevant.

To better serve these customers, retailers have invested in a variety of digital technologies that improve and expand customer experiences to keep them in stores longer. These point products—including digital cameras, product sensors, digital

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displays—provide a bounty of data, as well as the ability for real-time reaction. But in most cases they were implemented at different times, using different technologies, and are not connected in meaningful ways. Lacking adequate analytics, it is not clear if the digital technologies are delivering real value, and the individual customer’s preferences remain largely a mystery.

The emergence of big data and IoT provides an opportunity to “connect the dots” from every in-store digital product, map the entire customer journey, and ultimately create a more inviting, target-orientated, and dynamic shopping experience. With a fully realized IoT solution, retailers can identify which products a shopper has picked up in the store, shift digital display content based on identified interests, and follow up by offering cross-sell or up-sell opportunities. By using real-time data from multiple sources, retailers can not only understand but also shape and improve the customer’s in-store experience—providing the type of fast, personalized service that builds lifetime loyalty.

Harnessing the Future with In-Store Media Network

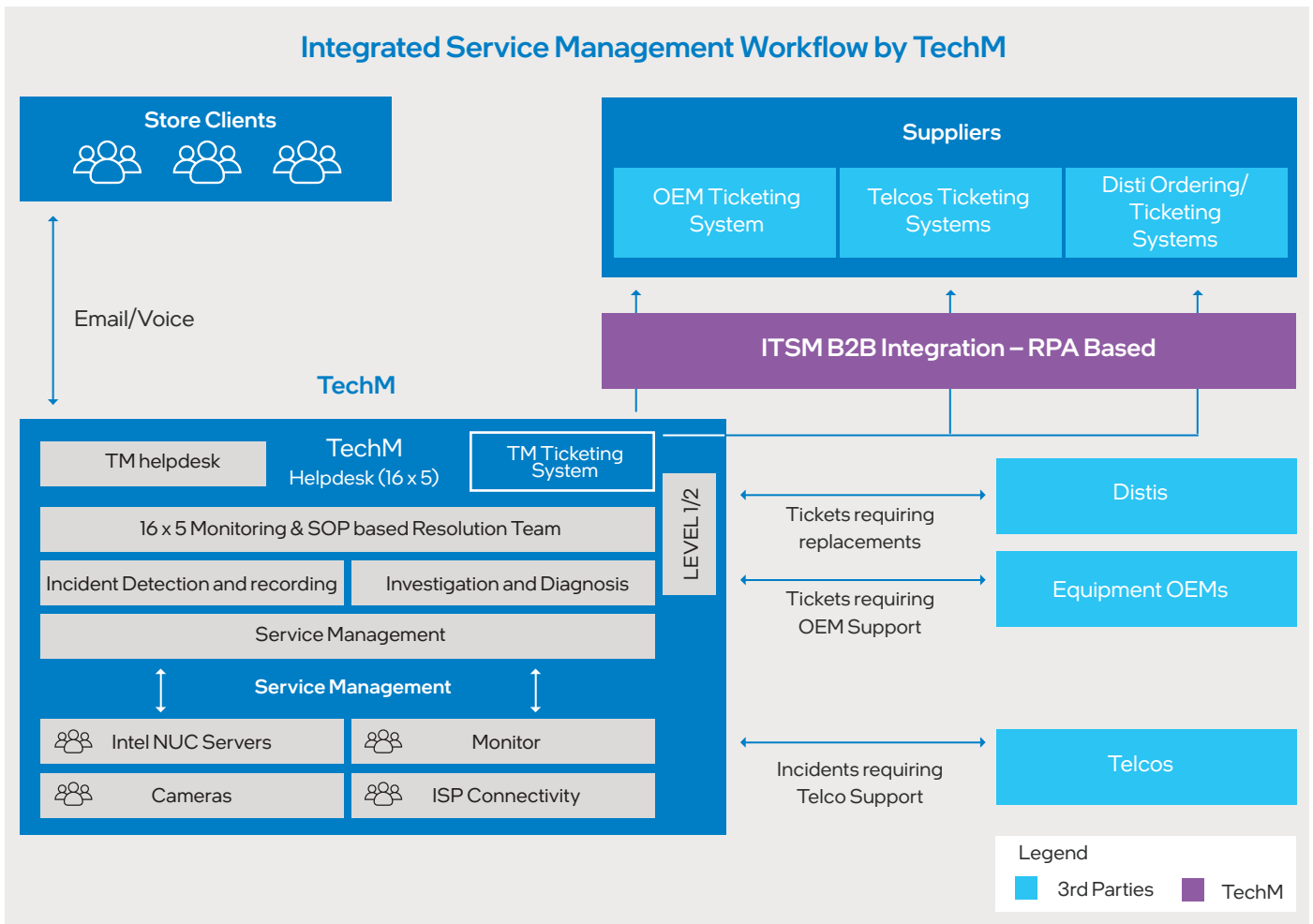
The in-store media network is an innovative platform that integrates data from all the IoT sensors and other digital devices in each retail environment and enables actionable analytics. Each hub is unique: configured based on the specific objectives

of each retailer and customized over time using a cost-effective, modular approach.

The platform consists of a unique suite of solutions – video cameras, screens and hardware – that are installed as part of a digital display and provide real-time operations data, enhanced customer engagement and audience measurement including store traffic and customer demographics, with the ultimate goal of supplying superior analytics and measurement data to help advertisers and marketers create the most effective campaigns. The advantage of this platform is that retailers can advertise to shoppers right at point-of-sale where buying decisions are made. The platform provides enhanced customer engagement and audience measurement including store traffic and customer demographics. The software has been designed from the bottom up to collect anonymous video analytics that are designed to protect consumer privacy but provide advertisers with macro measurement data to gauge advertising effectiveness.

Integrated Service Management from Tech Mahindra

Tech Mahindra provides infrastructure procurement and logistical support as well as analytics-based managed services, and is responsible for network monitoring and management, remote support and on-site troubleshooting.



Intel Technologies Drive Retail Analytics

Ultimately, software is the brain behind retail analytics. However, before retailers can put software to use, they must be able to capture, store, and process their data, which often comes from many different sources. With compute, storage, and networking technologies that span edge to cloud, Intel enables a data-centric world—one that lets retailers collect and manage data from any touchpoint, be it in the store or online. Intel technologies make it possible for retailers to analyze data on the spot, right where it's created, or bring it all together in one place. The results? Highly curated experiences, inventory and supply chain efficiencies, and the ability for customers to get what they want, where they want it, with less friction.

As an Intel®-based solution, the in-store media network delivers powerful performance, hardware-enhanced security, and modern manageability to ensure a seamless customer experience, secure processing of customer data and seamless remote management. The platform consists of a large display screen integrated with Intel® NUC powered by an Intel® Core™ vPro® Processor.

The combined expertise of Tech Mahindra, supported by Intel®-based technologies, can help retailers create truly connected in-store experiences. Intel is delivering the processors and Wi-Fi components needed for the solution. The platform uses Intel® processors with on-chip graphics that drive a variety of 2D/3D graphics and high-definition video of up to 4K x 2K resolution, as well as multi-zone screens. The Intel Core processor-based NUCs have the computing performance and I/O throughput needed to reliably run the media network applications.

Why Tech Mahindra for Digital Transformation?

Tech Mahindra along with esteemed partners like Intel, helps enterprises accelerate their digital transformation with a comprehensive suite of offerings that covers the entire IT infrastructure stack. With platform-enabled solutions powered by AI and Automation, Tech Mahindra helps enterprises accelerate their journey to a digital future focusing on helping organizations develop a future ready infrastructure aligned to their core business needs.

Tech Mahindra fosters customer success through a 3-pillar strategy:

Imagine	with enterprises to define how their industries will change in the future and how they will proactively transform to be ready for that eventuality.
Build	systems and processes for enterprises so that they can handle revolutionary change.
Run	the business value of clients by helping them differentiate themselves in an increasingly crowded market.



Leadership across verticals

 <p>Communications</p>	<p>5G Slice to Price - Communications Value Chain</p> <p>Produce to Play - Media & Entertainment Value Chain</p>	 <p>Retail</p>	<p>Design to Delight - Retail & Consumer Goods Value Chain</p>
 <p>BFSI</p>	<p>Cradle to Grave - Banking, Financial Services Value Chain</p>	 <p>Energy & Utilities</p>	<p>Wells to Wheels - Oil & Gas Value Chain</p> <p>Generation to Consumption utilities Value Chain</p>
 <p>Manufacturing</p>	<p>Concept to Customer Delight - Manufacturing Value Chain</p>	 <p>Healthcare</p>	<p>Delivering Future of Care Health & Lifesciences Value Chain</p>

Learn more at <https://www.techmahindra.com/en-in/>

Conclusion

Tech Mahindra and Intel are driving integrated, end-to-end digital in-store media network, backed by powerful Intel technology, that are helping retailers capture and analyze more data about the customer journey, and use that data to drive better and more personalised customer experiences, as well as deeper brand engagement and more sales. The in-store media network help educate customers while elevating brand awareness, a combination that offers great value to brands.



Disclaimers

Performance varies by use, configuration and other factors. Learn more at <https://intel.com/benchmarks>

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details.

No product or component can be absolutely secure.

Your costs and results may vary.

Intel does not control or audit third-party data. You should consult other sources to evaluate accuracy.

Intel technologies may require enabled hardware, software or service activation.