



THE SMART STORE OF THE FUTURE – POWERED BY FASTER, CHEAPER AND EFFICIENT IT

Abstract

We know that technology is a key ingredient in building the smart store of the future. But what are the challenges that technology helps address?

What are the opportunities that it presents?

And how are retailers leveraging technology today?

We attempt to answer these in this paper.

This holiday season, retailers witnessed record shoppers, sales and increased use of non-traditional methods to attract and retain customers. IT effectiveness is proving to be the 'must-have' focus area for retailers to enable seamless cross-channel customer experience. Realizing the potential ahead, businesses are pushing IT to operate in a faster, cheaper and more efficient manner and help improve bottomline while providing the much-needed competitive differentiation.

Challenges and opportunities

Retailers are on a continuous path to improve their agility, responsiveness and alignment to consumer needs. The fast evolving consumerization has introduced complexity and service delivery challenges and also opened up opportunity areas for IT organizations to support their business needs including:

- **Cross-channel enablement** – With a 50% increase in the number of customers using the online channel, brick vs. click is now turning to combinations of brick and click. This surge is driven by multiple smart mobile devices and associated applications, growing use of presence technologies, and enhancements in the online experience. In short, it means more complexities to handle when providing consumers and retail store associates newer ways to

leverage technology to grow business.

- **Smarter IT infrastructure** – The backbone for seamless execution of complex business transactions is faster, smarter and robust IT infrastructure that supports critical business applications. Organizations are investing in modernizing their infrastructure landscape to build a best-in-class, seamless shopping experience for customers across physical stores and the online medium and IT is playing a larger role by enabling retailers to study consumer behavior and apply the insights gained to design stores, sections, shelf's, checkouts, online layouts, and more.
- **Secure IT** – With the increased use of wireless and handheld devices across stores and online channels to drive sales, security and sensitivity of

customer's information is of utmost importance to retailers. Ensuring availability of adequate security and compliance standards across technologies remains one of the key priorities of CIOs.

- **Faster and streamlined service delivery** – With the increasing significance of business functions such as supply chain, distribution, warehouse management, and online commerce, organizations are addressing concerns related to multisupplier relationships, lack of transparent SLAs, fragmented technology support, and lack of proactive monitoring for stores support with technology. Organizations are increasingly setting up agile, flexible and integrated service delivery operating models to support the business.

Key trends and 'must have' initiatives

While there are several interesting IT programs aligned to the goal of building the "store of the future", here are a few that are making it to the CIO's 'must have' list of transformation initiatives:

- **Business events assurance** – While organizations have invested heavily in monitoring tools, the ability to track the business flow, determine the financial impact of downtime, foresee and resolve potential issues still remain unsolved mysteries. Several organizations today are embarking on a journey to establish 'business events assurance' by defining their

business services, mapping it to lower level applications and infrastructure components, and thus enabling capabilities for providing a proactive, less disruptive experience to the business.

- **Technology modernization** – Customers today are looking for seamless experience irrespective of the channel they have chosen to buy. Ensuing similar UI and shopping experience across mobile, eCommerce, via stores, and more is leading to technology refresh programs initiated by several organizations. This isn't

limited to consumer interfacing but also extends to planning staffing by using analytics and shopper tracking devices and application and feeding that data into work force management (WFM) tools.

- **Leveraging mobility** – The use of consumer devices that appeal to the new breed of digitally aware consumers as mobile point of sale (mPOS) devices provides opportunities for more revenue generation. It does this by creating a cost-effective on-the-spot checkout register and line buster, especially during rush hours. This

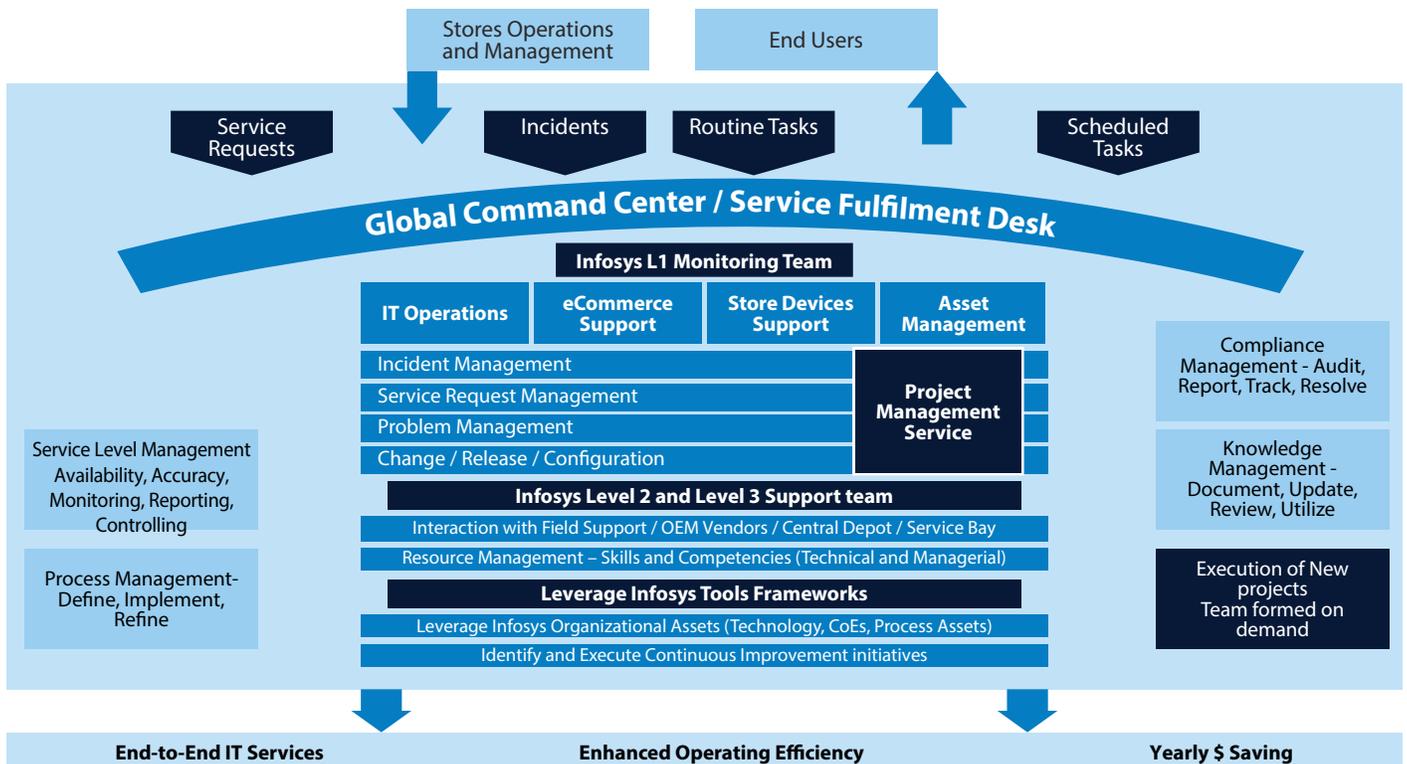
helps in providing a better experience to consumer and reduces “second thoughts” that consumers have in cases of long checkout lines.

- **Faster networks** – In a retail environment with modern technology tools and lately wireless network, it is necessary for mobility devices to connect back to a central hub for a range of activities, from authentication to sending / pulling data. Apart from this, the stores are not just a place for business; they act as a “office” for the retailers’ staff that checks their emails, schedules etc. on store infrastructure. This entire load puts a big demand on WAN infrastructure which is always under stress. Opportunities for WAN optimization exist to contain the cost of ever expanding WAN links.
- **Workforce efficiency** – Organizations are investing in tools, processes, and

automation to make their workforce more efficient. Systems and tools are deployed to manage store operations. Cloud applications are deployed to track and manage issues related to store devices. Speed is the key and organizations are doing every bit possible to give those extra hours which can make a difference in their day-to-day efficiency.

- **Service intelligence (Business metrics measurement)** – With business intelligence a growing initiative within many organizations, service intelligence takes that capability one level further. Ability to map business services to IT services, applications and IT Infrastructure and measuring IT performance in business terms provide valuable insights for decision making and determining key focus areas of concerns and growth.

- **Security and PCI compliance** – Organizations are investing in streamlining processes, building IT Governance Risk and Compliance (ITGRC) systems to manage end-to-end lifecycle of IT vulnerabilities and risks. With the advent and adoption of wireless in brick-n-mortar stores, PCI compliance doesn’t remain confined to traditional payment terminals but transcends to handheld devices. Networks too need most advanced authentication mechanism.
- **Integrated operating model** – With all these and other initiatives going on, what is needed is a scalable and tightly integrated operating model to deliver services in a seamless manner. Below is an illustration of an IT operating model combining different areas of the organization to build a single cohesive unit.



Clearly, technology can help address several, if not all, challenges that retailers face in their effort to connect and offer seamless and truly delightful experience to their customers. What is needed is the ability to choose the right technology solution that aligns with business goals and helps capitalize the opportunities that today’s digital world presents.

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