

Unifying and Streamlining Retail Operations with Centralized Management

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Retalix
Retail Future Ready™

Executive Summary

An increasingly competitive market landscape has been presenting retailers with conflicting challenges.

Globalization and fierce competition have caused retail chains to expand quickly and introduce multiple lines of business. Consequently, many retailers today operate hundreds of stores and thousands of touch points – all of which need to be configured, managed and synchronized – a costly and time-consuming on-going effort.

At the same time, customers having evolved into connected-social shoppers now constantly have vast amounts of information at their fingertips, and their feedback and opinions on retailers spread like wildfire via social networks. These trends, among others, have been placing great pressure on retail chains to react to market changes and customer concerns in real time, and to accelerate time-to-market.

This document describes how the effort of integrating, synchronizing and managing all systems throughout the retail chain hierarchy has been making it difficult for large retailers to achieve agility and act fast. It discusses the disadvantages of having to individually manage and configure each store system and every touch point, presents the concept of centralized management as the means to achieving unified and streamlined retail operations, and offers recommendations on the building blocks required to make this concept a reality.

Finally, the state-of-the-art software retail platform Retalix 10 is presented, as is the way in which its powerful centralized management capabilities and Data Movement Services enable streamlined operations, and allow retailers to seamlessly configure and control any retail system from any location.

Legacy Systems Impede Fast Action in Large-scale Retail

In recent years retail organizations have constantly been expanding their geographic reach and entering new lines of business. As a result, store systems and various types of touch points across multiple regions now need to be configured and managed. To manage retail operations in a unified manner, meet business objectives across the entire retail chain and assure consistent shopper experience throughout all stores and sales channels, retailers must assure full synchronization among all these systems.

And where legacy systems are involved, such synchronization demands complex and costly integration. Additionally, it makes real-time reaction nearly impossible, as any change or update that needs be performed across the entire retail chain requires further, extensive integration – between center systems, regional systems, multiple stores and all customer touch points. It also results in cross-channel and even cross-store business operations being difficult to implement.

Retailers attempting to centrally manage retail operations using dated legacy systems will typically have to rely on complex scripts and additional auxiliary systems. Even then, centralized management will likely be limited to product catalogs, and will not cover such functionality as inventory, promotions, sales transactions and store configuration, among others. To deploy changes across the entire retail chain will require that IT personnel invest efforts at each and every store, or alternatively develop complex scripts so as to distribute changes and updates throughout multiple stores and customer touch points.

The need to integrate and synchronize legacy systems bears the following disadvantages, among others:

- Slow time-to-market and limited ability to react quickly to customer demand and to market and competition dynamics
- High IT expenditures and diversion of management attention from core-retail activities
- Exposure to such risks as loss of files during synchronization processes
- Discrepancies in the configuration of different systems, can take hours to discover and correct
- Adding touch points is cumbersome, and deploying new types of touch points, such as mobile POS, across the entire chain is unacceptably time consuming

To make things even more challenging for retailers, customers have become increasingly demanding. They have evolved into connected social shoppers, with vast amounts of information readily available to them, and customer opinion now spreads like wildfire across social networks. Retailers must demonstrate great speed and agility to keep pace and assure real-time response to customer demands.

Conversely, as a retail business grows, it becomes more and more difficult for it to act quickly. To assure that all systems be in full sync, retailers must engage in time consuming integration projects and maintain complex synchronization systems. Is there no other way? Fortunately, there is.

Unified Retail Operations with Centralized Management

The ideal solution to consolidating and synchronizing retail systems for real-time shopper service lies in unified retail operations with centralized management capabilities.

The following four key building blocks are essential to state-of-the-art, unified retail systems with centralized management. These are:

1. SOA (Service-oriented Architecture)

SOA provides retailers with the agility they need to easily create extensions and quickly react to market changes. It allows their IT organizations to employ and reuse common services for different applications. With SOA, previously separate mission-critical system processes, such as invoice generation and tax calculation, can effectively become centralized services that may be reused at any customer touch point, enabling payment at POS and self-checkout stations, for example.

Retail organizations employing SOA can dramatically reduce time-to-market when introducing new touch points throughout all stores.

2. A consolidated platform with a common code base

A consolidated platform that serves all sales channels, customer touch points, and store and chain systems – all built using a common code base – ensures streamlined deployment and ongoing management of all store, mobile and online shopping channels.

A platform of this type first and foremost features a unified data layer that maintains and shares the common information resources used by all applications, including item, customer, sales transaction

and inventory data. Secondly, it includes a common code base business layer that accommodates the unified retail objects, services and business process rules and logic required to maintain retail activity.

Retailers utilizing a consolidated platform can effectively eliminate the traditional need to integrate disparate retail data and functionality “silos”.

3. Data synchronization

Retail management systems are generally arranged in a well-defined hierarchy: headquarter systems, store systems and touch point applications deployed within individual stores. In very large retail chains, regional systems are also implemented between headquarters and stores. All levels need constantly be synchronized.

To effectively unify retail operations without cumbersome integration, data synchronization is called for. A retail platform with inherent data synchronization can enable retailers to keep headquarters, stores and all touch points completely in sync. Effective data synchronization involves continuous trickle feed downloading of item, price and promotion data, and even touch point configurations, from headquarters to stores, then on to customer touch points. It also requires on-going trickle feed uploading of transaction data, as well as of item and configuration overrides from touch points to stores, then up to headquarters.

4. Centralized management and configuration

Centralized management and configuration of retail systems enable retailers to centrally control and supervise chain-wide operations. Configuring a printer for a specific POS terminal, setting cashier user names and passwords, configuring POS graphical user interface look and feel across the entire retail chain, implementing new promotions and coupons for a specific region – virtually *anything* can be configured and controlled from headquarters or store office. The full visibility achieved by information being continuously pushed from stores to retail chain centers allows, for example, regional managers at headquarters to monitor store sales, traffic, fraud detection, review the status of marketing campaigns, and more in real time.

Moreover, applying rules-driven configuration can automate and simplify the work of administrators, by providing versatile configuration options based on predefined rules, including the ability to schedule changes in advance, to be deployed by retailer systems when needed.

Rules-based centralized management ultimately enables retailers to easily configure their systems to meet their specific requirements, while requiring relatively few coding changes and saving both time and money.

With centralized management and configuration, headquarter employees can define, configure and manage users, touch points and peripherals in specific touch points, stores, groups of stores, or across the entire retail chain.

Examples include changing the tax rate for all stores in a specific state, editing cashier policy for all super stores and modifying a POS menu in all pharmacy lanes.

Rules-based examples may include having all items priced below \$5 voided by cashiers, though only in transactions worth less than \$30 or including up to 12 items, and only on Saturdays between noon and 4pm.

The Benefits of Unified, Streamlined Operations

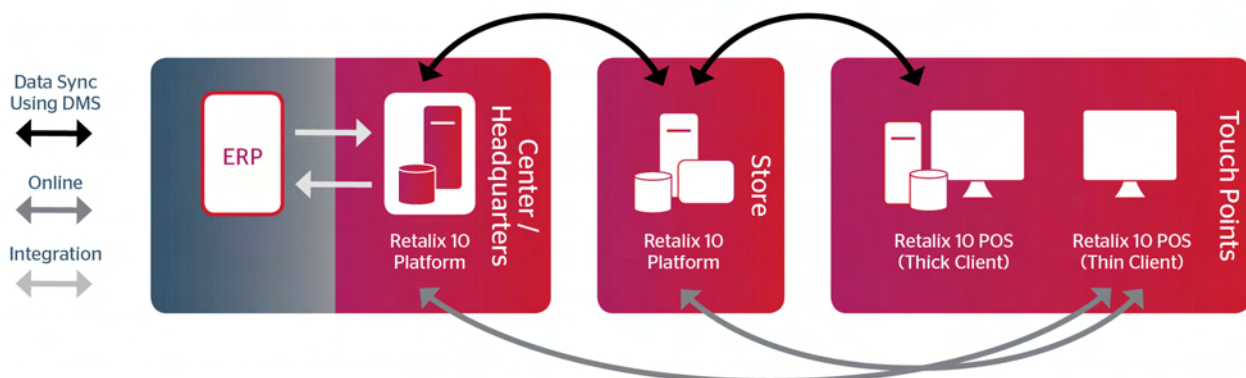
Retailers implementing retail systems based on the key building blocks described in the previous section are likely to benefit from the following:

- Significant reduction in IT costs and faster reaction to customers' demands, thanks to quick and easy central configuration
- Real-time central monitoring and control, assisted by transaction data flowing upwards to headquarters, potentially from each and every store. Combined with an advanced, configurable alerts system, real-time central monitoring and control will:
 - Increase store and cashier efficiency
 - Enable fraud detection in real time
 - Enhance the effectiveness of marketing campaigns
- Location transparency, with configuration and centralized management actions supported at any location, even at home via browser interface
- Native central inventory and returns management
- Administrator visibility of the configuration of all touch points across the entire retail chain

Centralized Management with the Retailix 10 Platform

The Retailix 10 retail platform and Store & Sales Channel Suite ideally address the requirements of unified retail operations, as its centralized management is one of the core characteristics of all Retailix 10 products. Retailix 10 leverages open, component-based and extensible SOA (Service Oriented Architecture) that integrates all retail data and business logic within a single repository serving all Retailix 10 applications. Headquarters, store back office systems, and each and every touch point all draw from the same data and business logic, eliminating the need for costly on-going integration.

Retailix 10's architecture is built to reflect the way in which its business components are utilized in enterprise- and store-level processes. The platform dramatically reduces the amount of integration effort required throughout retail organization by consolidating the use of general, common services across the entire store and retail network.



One of the key benefits of using the Retalix 10 platform lies in its ability to support unified and streamlined retail operations. It therefore enables retailers to centrally configure the entire chain's retail services and business processes from any location, contributing to complete location transparency.

With Retalix 10's centralized management capabilities, retailers can gain full, real-time consolidated visibility of all store transactions, and powerful support for centralized business functionality, such as cross-store returns and chain-wide inventory management.

Synchronization between different headquarter, store and touch point levels is achieved via Retalix's DMS (Data Movement Services), the synchronization module responsible for movement of all data throughout all retail software systems and applications. The Retalix 10 platform needs only to be integrated with retailers' existing ERP systems, and continuously assures that all data is in full sync across the entire retail chain hierarchy. Batching and bulk load facilities provide the means to enable repeat synchronization and perform mass price updates with ease. DMS effectively eliminates the need for integration between all organizational and functional levels, and makes real-time data feeds, both upwards and downwards in the chain hierarchy, easier than ever before, while avoiding unnecessary data and business logic duplication.

The Retalix 10 platform unifies and streamlines retail operations, making large-scale store configurations, as well as on-going changes and updates quick and simple. Retalix 10 ultimately allows users to quickly react to events as they occur, and to gain enhanced, centralized control of the entire retail chain's operations.

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