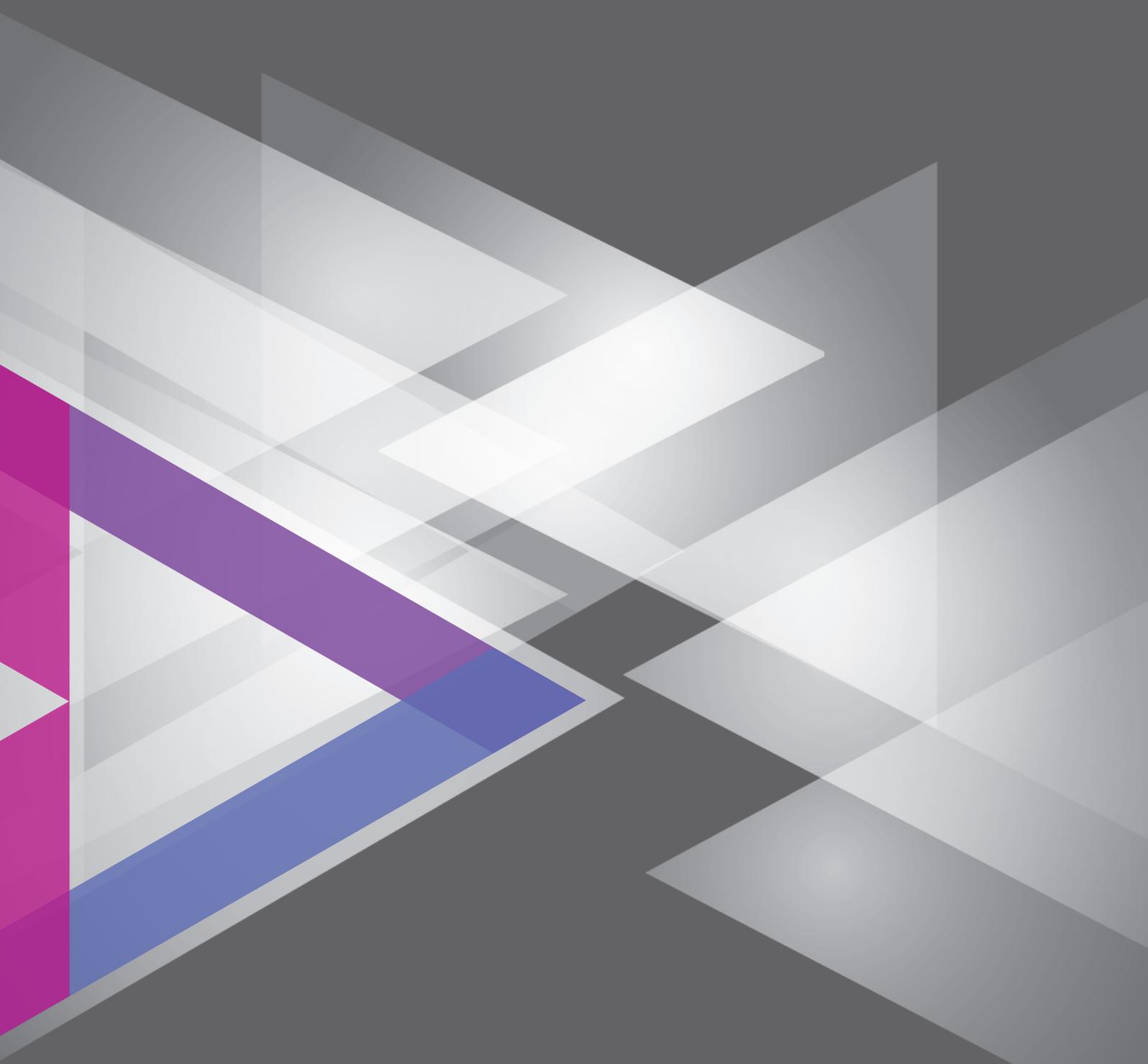


White Paper

**GETTING THE RIGHT PRODUCT AT THE RIGHT TIME
TO THE RIGHT PLACE IN THE RIGHT QUANTITIES**



Executive Summary

A decade ago, all that retailers were concerned about was 'location, location, location'. The emphasis was on opening stores at central locations that drew maximum walk-ins. With strategic planning, an optimum ambience was created and a pro-active sales team was put in place to drive in sales.

Retail operations were confined to the distribution of products to various stores. Print media and television were the only channels for advertising. Opening new stores in identified locations meant merchandising them with products that are available in similar stores.

As organizations had multiple facilities in multiple locations, the challenge was to distribute manufactured products and procured products from the right facility to the right locations at the right time and in the right quantity. This meant having multiple layers of distribution including warehouses in different towns and distributors across the country.

Information technology was required at several levels of the distribution. At the store, the point of sale application took care of stocks, receipts and sales as well as returns, local taxation, accounting etc. All the Management Information System (MIS) required at the store level were generated by the POS (point of sale) software. The stores depended on the central system for information about best sellers and other updates across stores located in various cities, regions or states. Loyalty meant managing points the customers collected when they shopped. Sales officers were responsible for ensuring adequate stock and they generally resorted to forecasting based on current and past data to determine replenishment. At the central location, it was necessary to plan extensively and work out logistics of distribution. It was also necessary to take into account other aspects like movable and immovable inventory across the country, track sales performance, effectiveness of marketing campaigns and also to an extent, customer experience. Financial data from across the supply chain and retail chain needed to be consolidated to determine the profitability of the business. Warehouse and distribution management systems addressed the requirements of storage and stock movements. The linkage between the retail chain and the backend was essentially through data transfer (using leased line or the Internet). Most of the IT applications at the store and the central location were deployed on standalone basis. It was too premature to talk about interface and exchange of data.

Technology for determining "the right product at the right time to the right place" was in its infancy.

Over a period of time consumer expectations increased many folds and there was a paradigm shift in retail. Besides that, consumer shopping underwent a sea of change.

Today's consumers shop through multiple channels such as in-store, the company's online portal, marketplace, multi-brand outlets, kiosks and more. They access these channels through their computing devices like smartphones, tablets, laptops and computers. Consumers expect seamless, omni-channel experience cutting across online, brick and mortar, social media, mobile and other touch points.

As part of their purchase activity, consumers normally:

- Browse through the catalogue over the Internet or expect the same on his smartphone.
- Make an initial survey of the product along with its price, and compare it with competitors before making the purchase at the store or the web.
- Expect cross-channel pickup and return facility i.e. Purchase items through the online portal and collect them at the store or expect delivery at a designated address. Purchase return/after sales service facility at the store or at home, irrespective of the purchase channel.
- Expect visibility of inventory and price across channel.
- Expect personalized communication through mail /phone.

Merchandising and in-store display made their way to the centre stage. Retailers started offering their products across multiple channels like large format stores, exclusive stores, multi-brand stores, malls, kiosks and websites - own and third party. New domestic and international players expanded their footprint across countries by way of collaboration, and tie up with industry majors. This also enabled them to launch their existing and new products globally.

On the other hand, the supply chain complexities like proliferation of products, explosion of channels, facilities spreading across multiple cities / countries grew multifold. Sourcing moved from local and national to global, as organizations looked at optimizing the cost and improving quality. Expectations on product lead times shrunk from months to weeks and weeks to days that invariably led to pressure on reducing lead time drastically across the supply chain. In addition, the supply chain needed to be resilient to maintain across channel optimum inventory, product dispatches at the right time to right place, seasonal variations in demand and sudden changes in requirements. Even logistics companies grew tremendously to deliver products to their customers as per the defined schedule, using IT to track and deliver.

Simultaneously, information and communication technologies made tremendous progress. Desktops were replaced by elegant terminals, servers became sleek and powerful and software became user friendly. Touch based software became prevalent. Introduction of hand held devices improved billing, stocking and sales efficiencies. Communication links grew rapidly with increased availability of networking bandwidths. Stores and warehouses could be seamlessly connected to the central server and data transmission moved from asynchronous to synchronous mode. In addition to this, mobile apps put things in a fresh perspective. It enabled customers to get information about various offerings and also complete their purchasing activity using smart phones.

As consumer expectations rose, multiple retail channels sprung up to meet the emerging need. Retail shopping had undergone a complete makeover.

These rapid changes brought along an equal share of complexities that posed several challenges like:

- Consumers expecting a seamless experience across channels (examples: product information, content, inventory and price. Order on web, collect in store; order on web return in store; home delivery).
- Expansion of retail into multiple channels like web portal (own, 3rd party), different format stores, kiosks, multiple warehouses, etc. This resulted in an imbalance in inventory in some parts of the supply and retail chain. There were pile ups in some stores/warehouses, while shortage in other locations.
- There was no single view of customer switching across multiple channels. Consequently, positioning the right product and making the right customized offer through the right channel became difficult.
- Supply chain related issues on account of frequently changing demand, need to quickly align production, last minute changes in shipping requirements put enormous stress on the supply chain network.
- There was pressure on reducing the lead time for sourcing product and at times on delivery, the requirement was in terms of a single day or even in hours of placing the order.
- Ever increasing competitive pressure on margins needed continuous relook at the costing and pricing.

These challenges required organizations to start many new business initiatives supported by technology.



Omni-channel Retail

In order to enhance customer experience and get across channels, the right product at the right time to the right place and in the right quantities, retailers need to reorganize their business and IT systems. This facilitates the process of customers embracing multiple sales channels (eg: purchase on web, collect/return in store) to complete their transactions, which is omni-channel retailing.

There are several changes and improvements that ought to be carried out in the system to support omni-channel retailing. To name a few:

Product and Inventory

Retailers need to centralize product information such as catalogue details, characteristics (like colors, styles, sizes), product specifications, product prices, product images and more. These digital assets are then stored at the enterprise level with proper controls to ensure a single version of the truth. The same is rendered to all stake holders. Inventory is stored at different places like warehouses, e-commerce distribution centers, stores, etc. This inventory is made visible to customers across sales channels i.e. customers have the choice of ordering his goods from multiple sales channels.

Customer Data

In order to support omni-channel, retailers have processes for consolidating customers' information across sales channels i.e. across channels, there will be a single view of customers, irrespective of their touch points (like stores, mobile, websites, social media).

Right Product

Products should be segregated into various categories like high, normal and occasional demand for determining the appropriate sourcing and replenishment process of the right products across various sales channels. In addition to this, advanced statistical forecasting and planning tools and techniques enable planning for products across different sales channels. Some retailers also adopt various sourcing techniques like pull system, milk runs, etc. for certain categories of their products to closely align the suppliers manufacturing capabilities with the demand. Techniques like theory of constraints, optimization of machines, and manpower availability in production ensure speedier manufacturing processes.

For new products, data obtained from the sales force, customers' inputs, trade fairs, conferences, etc. is collated to define the requirement. New products are launched as per the company's new product launch calendar. Social media is also used to quickly carryout pilot projects and get feedback before major launches, thus ensuring that the right products are released to the sales channels.

Sales analytics are deployed to assess the sales of products across channels, categories, geographies and so on. This sales information across channels facilitates in taking decisions like launching schemes, initiating further marketing plans and re-launching products.

Right Time

The entire supply chain system needs to work in tandem with the retail chain to ensure that the product reaches the sales channel at the right time. This means monitoring the flow of materials to manufacture the products, delivery of products to warehouses and shipment of the products to different sales channels with the help of IT systems. The system needs to take into account seasonal variations and changes in demand and supply due to new product launches and sales schemes. Exceptions happen due to sudden changes caused either by the environment or competition or due to other internal issues. The system should be capable of quickly adapting to changes.

Customer orders are tracked across the supply/sales chain to ensure that the product is delivered to the customer at the right time. Status of customer orders are updated from time to time and communication is also forwarded to customer about the status of their order. Additionally, customers can also track the status of their orders. IT systems enable the tracking of customer orders right from ordering to sourcing/production to delivery, thus ensuring that customers' orders are delivered at the right time to the right place.

Right Place

Ultimately, the success of retailing means availability of the right product with the right chain. Each sales channel will have its own requirement in terms of delivery/storage location, quantity, etc. IT systems will take into account these complexities and ensure that the right product is delivered at the right place including customer orders which are to be delivered at right place, irrespective of the channel through which the order was captured.

Right Quantity

It is always a challenge to know the right quantity to be supplied to each part of the retail network especially when the complexity involves multiple product segments and multiple products within each segment. Today's IT systems derive the right quantity of stock required for the entire omni-channel operations taking into consideration many parameters like:

- Omni-channel inventory (including in transit) with lead time for delivering the same
- Lead time for sourcing or producing the item, pending orders
- Velocity of sales across the sales channels
- Capacity of stocks that individual channel or the retail chain can hold
- Analytics for assessing the demand based on sales along with external inputs

Analytics

Understanding customer requirements and purchasing patterns is essential for retail operations. Retailers critically analyse large volumes of customer data. Apart from this, retailers also look at allied processes like in-store operations including merchandising, supply chain and logistics operation, etc. to get insights into the preferences and performance of various operations. Some of the basic analytics which normally retailers look into are:

- Customer loyalty, segmentation based on various parameters like gross purchase, category of items, age groups, preferences, etc.
- Store analysis: Sales at category level, merchandising, cluster performance
- Supply chain: Lead time analysis, inventory demand and replenishment, and store merchandising, out of stock inventory



Conclusion

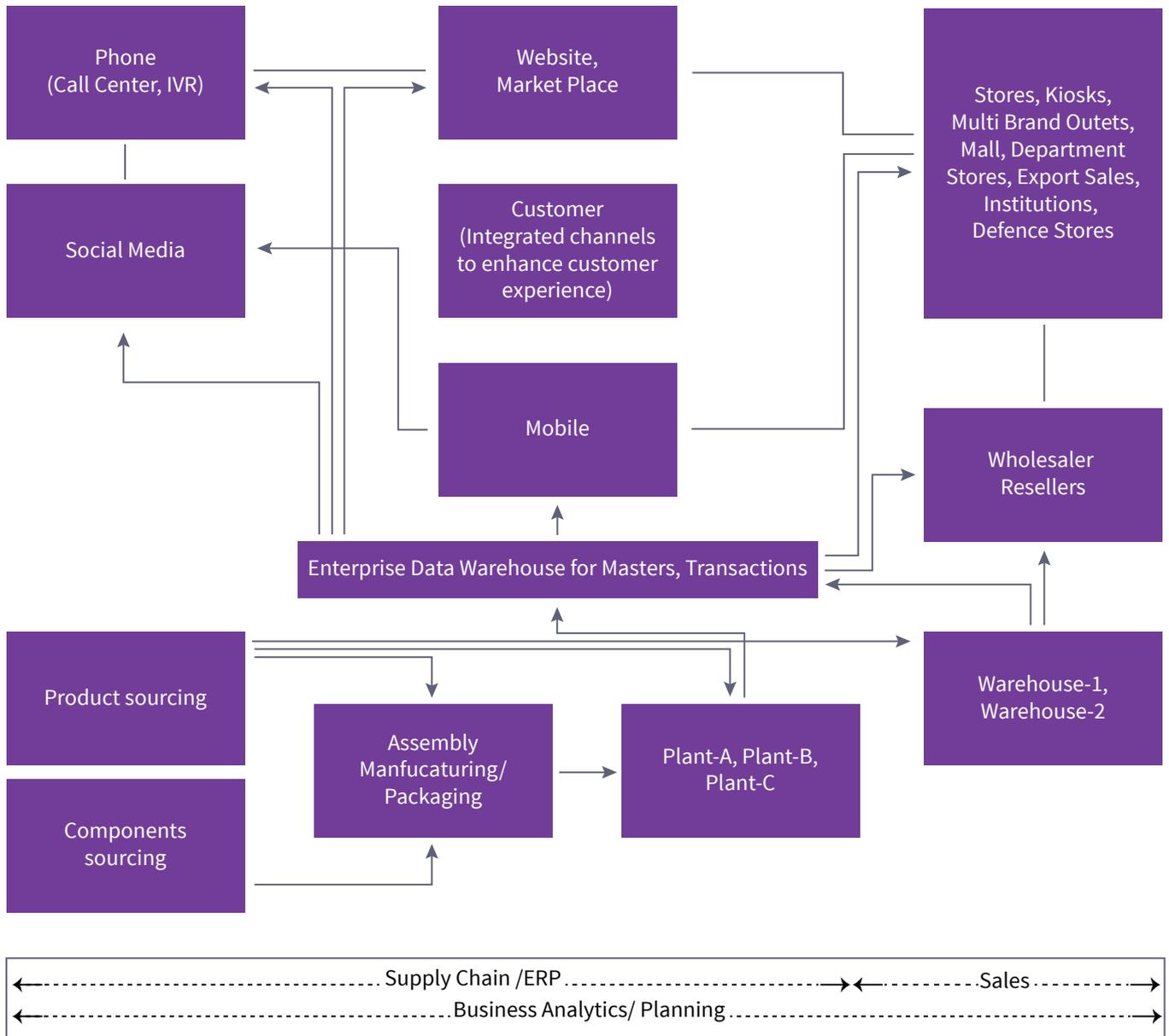
IT systems across business models are taking into consideration the omni-channel requirements and features like seamless integration of IT applications across supply chain and retail. That is systems at stores, online, mobile, kiosks, social media, etc. are integrated with each other as well as with the supply chain/ERP applications. As a result it is possible to have visibility of inventory levels, sales revenue, etc. across channels.

Retailers who leverage integrated supply chain, planning and CRM tools stand to gain in a competitive market. (Refer sample flow diagram for supply chain, sales and distribution on the next page) Some of the business benefits are:

- Efficient business plan for channel/store: Based on historical sales and the economic scenario, sourcing or production plans are derived for each product/ item. These plans can be implemented at the micro levels such as stores, items, weeks, etc. In addition to this, it is also possible to plan for different horizons, for example 'sales during seasons (festivals)'.
- Cross/Upselling of products: Availability of customer information along with real time sales/inventory for a sales person facilitates cross/ upselling the product. This also includes offering the right product to the customer.
- Optimizing Inventory: Real time sales and availability of stocks across retail channels helps in moving stocks across the retail chain as required and also in taking corrective measures in sourcing, as appropriate.

Change is the essence of customer expectations and demands. By smart usage of various IT systems and communication technologies, one can ensure that across sales channels, right product is delivered to the right customer at the right time and at the right place. For this purpose, the choice of a reliable partner like ETP will help retailers in achieving the objective of enhancing the customer experience.

Flow diagram for Supply Chain, Sales and Distribution





Every year, 50,000 retail associates use ETP to serve 150,000,000 consumers, selling USD 5,000,000,000 of merchandise. More than 300 brands in over 22 countries, across 10 time-zones, in 200 cities, at 25,000+ stores, in 5 languages run on ETP.



We are also present in the following countries: Australia, Bahrain, China, Egypt, Hong Kong & Macau, Indonesia, Iraq, Jordan, Kuwait, Malaysia, Oman, Qatar, Saudi Arabia, Thailand, The Philippines, Tunisia, Uzbekistan, Vietnam and Yemen.

Founded in 1988, ETP is an Omni-channel Retail Solutions company headquartered in Singapore, serving market leaders in more than 22 countries across Asia Pacific, India and the Middle East. ETP's omni-channel solutions include omni-channel POS, Mobility, CRM, Marketing and Promotion Campaigns, Order Management & Supply Chain Management, and Merchandise & Assortment Planning. ETP has successfully executed over 500 enterprise software projects across 25,000+ stores for 300+ brands. ETP's unique value proposition is its ability to create and deliver innovative products and implement them successfully with domain expertise delivered by hundreds of consultants embodying ETP's best practices. ETP helps its customers get it right in omni-channel retail.

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