

# Survival of the Fastest

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# Winning wallets...lower costs!

Using integrated business information to grow revenue and contain costs by driving more agile retail operations.

**Agility**

- Leveraging actionable information to become a more agile retailer means giving back time and focus to your people to understand and serve customers better than competitors

**Differentiation**

- By applying as much effort to innovation and differentiation as to routine execution, the agile retailer builds customer relationships by fully understanding consumer interactions and transactions

**Measurability**

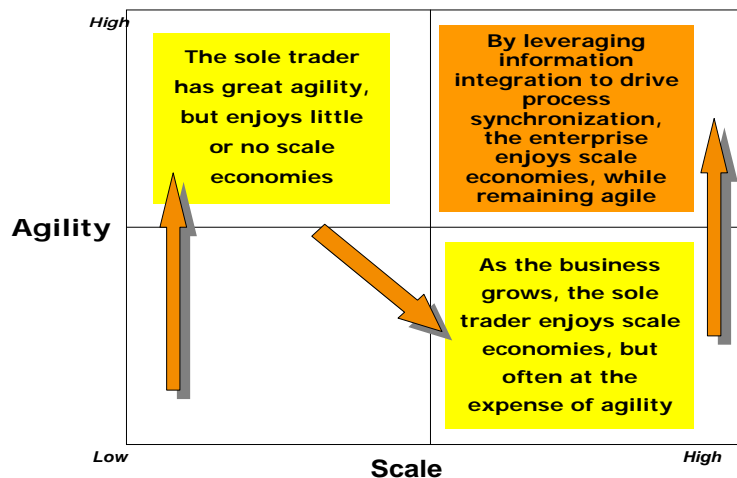
- The ability for all levels of the business to be driven by the right incentives, associated with the right Key Performance Indicators (KPI's), and linked to more efficient business processes.

Retailers compete not only with each other, but with the many ways in which limited dollars can be coaxed from the consumer's wallet. Every customer interaction is an opportunity to sell and must be both a success and a learning experience for the retailer. Successful retailers orchestrate complex businesses in hundreds of locations, with thousands of products and by nurturing and protecting their customer base across multiple channels.

The "Right product, Right place, Right price, Right time" model is no longer sufficient to ensure survival in today's retail marketplace. In contrast to this 'reactive' model, successful retailers are increasingly those who, relative to their competitors, are able to deploy **predictive** forecasting, enabling them to out-think, out-market, out-sell, and, ultimately, outsmart their competitors. Today, speed is of the essence!

A simulation exercise conducted by consulting firm Marakon Associates demonstrated that a company that accelerates its decision-making pace by 50% would double the company's value in just five years.

***Retailers need to compete with greater agility. Those who win will do so at the expense of competitors.***



## Agile Retailers win

The ‘natural’ cycle of managing retail inventories has typically been daily or even weekly. Retailers planned to be in stock on those items they expected to sell, and replenished based on what they sold. ‘Scale’ meant that large multi-outlet retailers leveraged economies of scale to buy at relatively lower prices, while amortizing costly infrastructure investments efficiently across a network of stores.

Smaller, but more agile retailers have successfully competed when they targeted niche areas with the aim of addressing the unserved needs of consumers based on ‘customer intimacy’ rather than ‘scale efficiency’. However, smarter retailers...notably the very biggest are increasingly learning how to enjoy the **best of both worlds**, by progressively adjusting their technology investments to understand and respond to customer needs with ever-increasing agility.

Dimensions	Traditional Alerting	Actionable Alerting
Timeliness	On time	Ahead of time
Depth of Data	Typically related just to the current problem, without contextual comparison	Current data integrated with past-comparables to provide the right content <b>and</b> the right context
Breadth of Data	Typically driven by a <u>specific</u> operational alert	‘Holistic’ alerting – looks at combinations of data across the enterprise
Thresholding	Typically pre-defined alert ‘thresholds’ embedded as preset business rules	Role-based, dynamic business rules fully integrated with business processes and workflow.
Actionability	Alerts are not tailored to the specific role	Alerts are orchestrated around one or more roles to support collective action
Scope of decisions	Tactical	Strategic <u>and</u> tactical

### A Christmas story...

It’s the 22nd December, at 1pm, in the Dallas Office of Tim Burton, replenishment expeditor for Foodways stores. Tim is carefully monitoring the sale of 14lb Turkeys today. Sales, which are visible to Tim by item, by store, by customer basket, within 5 minutes of each sale, are performing as expected on frozen Turkeys, but sales of fresh Turkeys are higher than expected in the Chicago area.

An alert appears on Tim’s desktop to tell him that not only are Turkey sales in North Chicago significantly above plan, but that a higher proportion of basket sales with fresh turkeys are also highly linked to the sales of Christmas trees in two stores where a coupon has been offered with Turkeys to promote tree sales. Tim is very aware that, while fresh Turkeys are a high margin item before Christmas, they are almost worthless post-Christmas...who wants a Turkey the day after Christmas?

Tim decides to take action.....He first runs a query to determine whether there are nearby stores where fresh Turkeys are selling below plan, whether a nearby Distribution Center has turkeys on hand and whether upcoming deliveries to the affected stores can be intercepted and adjusted....right now. Tim also runs a query to determine whether to switch the promo for Trees from Fresh to Frozen turkeys for North Chicago stores only, and what the expected volume increase would be on both frozen Turkeys and Christmas Trees.

The availability of Christmas trees in the affected stores is taken into account as an additional constraint in determining the optimal promo price, and an additional discount for targeted customers through e-mail and cell phone text messaging is factored in.

The promotion is generated, the new price and offer is transmitted to the selected stores, and targeted offers are e-mailed to selected customers, price labels and/or Electronic Price Changes are transmitted to the stores within 30 minutes of the decision.....

Speed and agility are not just about reacting to issues as they occur. More importantly, it’s about predicting issues before they occur and preempting action wherever possible. The best approach is to prevent problems in the first place, by anticipating and avoiding them.

Imagine gaining back the time your organization invests on responding to problems and focusing that time on the customer. Imagine preempting those problems. What’s that worth in terms of customer retention, sales and margin? Winning with time is about never failing to satisfy each and every customer on the dimensions of product, value and service. It’s about creating an environment where their loyalty is strengthened every time they shop with you.

## The Intelligent Retail Enterprise

Retailers have made huge investments in technology over the past two decades. These investments usually fall in to two categories, operational systems and business intelligence. Operational systems have improved the accuracy, speed and expense structure of routine operations while providing the ability to scale. Business intelligence has provided associates with the means to analyze performance, recognize trends and has enhanced their ability to make decisions as they plan and execute.

Today, we see the emergence of **Operational Intelligence**. The goal here is to empower existing business processes and then, from that, determine the information infrastructures that would enable more effective Business Process changes to follow. This is a more pragmatic approach that interjects greater intelligence into the existing processes, allowing these to evolve in response to greater empowerment of front-line associates. It's institutionalizing the collective intelligence within your enterprise and pervasively integrating it into your daily operations. There are four key attributes of operational intelligence that we can discuss:

- **Information Recency:** Leveraging information from recent operational feeds ensures that front-line decisions are based on relatively fresh information, and thus provide the greatest relevance to both the customer, and to the company. .
- **Information Integration:** Information from both the Data Warehouse, and from other sources, such as operational systems, may need to be brought together at any given moment to make the best possible decision.
- **Information Availability:** Ensuring the necessary information required supporting a transaction, or a decision, is available, whenever needed at the point of decision. This information content may not necessarily be the most recent, but the key is that it should be available 'on demand', anytime, anyplace, to support business operations.
- **Operational Alerting:** This uses the power of technology to proactively drive business processes, by actively alerting associates or customers about issues that need early or immediate attention, based on reaching specified threshold conditions.

In reality, these capabilities play out in Retail in two major areas:

- **Anticipating customer needs and/or generating sales opportunities while the customer is still engaged in a shopping expedition**, where you have the opportunity to infer that mission from the first such purchase, and actively influence subsequent purchases before the shopping expedition ends. (This could be at a series of sales points in a Department Store, or at concessions in a Superstore or Hypermarket. It could be suggestions, coupons, discounts...whatever adds value for the customer, and increases sales for the retailer! )
- **Anticipating variations in supply or demand**, where the opportunity exists to cost-effectively correct the problem before the next natural cycle of replenishment takes place. (For example, an out-of-stock condition is detected in a store and the manager is alerted to check if merchandise is in the store...but not on-shelf, or has been placed on the wrong shelf, or is hidden behind other merchandise.

Imagine continually focusing your best merchandising, marketing, distribution and store associate on every SKU in every store for every customer visit. Imagine treating every store, every SKU and every customer as if they were your only one. As the intelligent retail enterprise is realized, this will be the new paradigm.

By monitoring business events, analyzing them in the context of historical performance and responding with automated decisions you'll be exploiting the perpetually presented, fleeting opportunities to satisfy customers; often without human intervention or error. By embedding intelligence in your operations, you'll be competing with agility, differentiating yourself from the competition and winning with time throughout the retail value chain.

## **Customer Management**

Nothing drives customer retention and comparative store sales like the quality of individualized attention which your customers receive when they visit your stores. Service provided to customers by your sales associates varies greatly based on an associate's respective experience and competencies.

Equally, with customers, the service received often varies dramatically based on their familiarity with your stores, their shopping frequency and the extent to which they've developed individual relationships with your sales associates.

Applying the intelligent near-time retail enterprise to Customer Management is all about using detailed sales history in the context of near-time customer interactions to consistently provide extraordinary service. It's about optimizing customer dialogue.

Properly executed, the intelligent retail enterprise will make every sales associate a star performer and every customer a VIP, as they progress through every facet of a relationship strengthening shopping experience. Providing customer-facing sales and service associates with tools that support tailored marketing to each customer based on understanding their historical preferences and interest in current items.

The best sales associate for their needs is notified that they are ready to be served once they swipe their customer loyalty card, and your sales associates are prompted with selling suggestions based on previous purchases and current stock.

Armed with this approach, retailers can:

- Increase average transaction size for repeat customers by 10-15%.
- Execute individually tailored promotions to specific customers while they're still shopping based on buying patterns, affinity purchases and overall purpose of the store visit.
- In unassisted shopping environments your customer walks through your store and is notified, via wireless device, of individually customized promotions.
- Customer specific promotions are instantly made available for that customer at the cashier to ensure a speedy checkout.

## **Demand Chain Management**

With the intelligent, real time retail enterprise, there is no need to lose sales anymore because you lack the agility to respond to trend merchandise sales or effective promotions.

- Dramatically improve on-shelf availability by predicting stock outs and shelf gap conditions before they occur.
- React to stock outs and shelf gaps as soon as they are projected or realized with replenishment alerts to the store or warehouse.

### ***Key facts...***

40% of the time that customers visit the grocery store, one or more of the items on their shopping list is not available on the shelf. Even more frustrating to retailers, 33% of the time that merchandise is not available on the shelf, it is sitting in the stock room where it cannot be sold.

A study of consumer behavior indicates that when faced with out of stock conditions, 16% of customer will buy a different size/type; 37% will buy a different brand; 9% will not buy any; 21% will buy their preferred brand elsewhere; 17% will return later....

By accelerating the frequency of sales/inventory/forecasting analysis to hourly and intelligently alerting store personnel and operational systems, applying near-time intelligence to Demand Chain management provides the agility required to dramatically reduce the incidence or impact of stock-outs.

### ***Tomorrow's Book-Buyer...???***

Mrs. Smith is in the mood for a good "mystery" - but doesn't have anything specific in mind. She comes into Books' For You to "browse". As she enters the store, she inserts her loyalty card into a kiosk, which accesses her details and recent purchases. If she is a high-value customer, the store manager may be alerted at that point to come to the sales floor to welcome Mrs. Smith to the store personally.

Mrs. Smith looks around the store, and then inquires as to whether there are any new books in the mystery book section. The associate may trigger an inquiry on the Data Warehouse and inform Mrs. Smith that there is a new book by one of her favorite authors (in fact, at a kiosk, Mrs. Smith could initiate this herself, triggered by reading her store card)....the system may also know that she has previously purchased mystery novels which are based in England, and the associate may thus be prompted to draw Mrs. Smith's attention to a author she has not selected before, but who has written a new novel whose plot is centered in London....

At the checkout, Mrs. Smith may receive a special offer based on her purchases, with an offer for another book by the new author she selected....

- Ensure that the right substitute merchandise is placed on the shelf if a stock out cannot be avoided.
- Reduce lost sales due to stock outs by 20-25%.
- Respond to critical assortment replenishment.
- Set Requirements and update forecasted demand based on intraday sales.

Increased visibility to sales and dynamically re-forecasted demand for new item introductions or fast moving products can give your supply chain a full day's advantage in responding to unexpected demand and improve your in-stock position for these items by 30-40%.

### **Supply Chain Management**

As retailers have implemented niche supply chain applications and adopted Just in Time (JIT) inventory management practices, the industry has come a long way in improving supply chain flexibility and reducing inventory levels.

The intelligent retail enterprise will take these advances to another level by:

- Maintaining a centralized repository of every supply chain transaction as it occurs in near near-time.
- Viewing all supply chain transactions in the context of dynamically updated demand signals and plans.
- Immediately and intelligently reacting to conditions which sub-optimize inventory position, logistics efficiency or demand response by automatically initiating or revising supply chain transactions (such as PO's, Store transfers or transportation methods/timing).
- Alerting associates to address opportunities which cannot be resolved automatically (such as calling vendors or logistics providers).
- Never miss a cross-docking opportunity. Your distribution network is actively updated with incoming shipment status and optimizes the outbound schedule based on transportation availability, critical store replenishment requirements and pending allocations.
- Leverage RFID tagging data in your enterprise data warehouse to provide near-time visibility to the location of key items as they travel from receiving dock to checkout counter.
- Provide customers and merchants with near-time status on special order items. Don't ever "lose" merchandise in the stock room again.
- Provide SKU/Store level POS data to your suppliers every few minutes. For Vendor Managed Inventory (VMI) products, suppliers can respond to variable demand as it unfolds throughout the enterprise.
- Enable your VMI partners to better respond to demand variations and keep shelves properly stocked.

#### ***Just in time...?***

*...It's Midday in The Yonkers, NYC, and The Store Manager has just finished producing Sandwiches for the busy lunchtime snacker in a multi-department supermarket...part of a large national chain.. Sandwich demand varies from day to day, month to month, season to season...and may be affected by other factors, such as the weather, temperature, sports events, traffic conditions, strikes....whatever! In addition, the products bought with the sandwiches may vary....on a hot day, its water or sodas...on a cold day, coffee is favorite.*

*The store prepares the sandwiches in-house, daily, using a variety of ingredients...bread from the bread department, tomatoes, pickles, onions, mushrooms from produce, condiments, coffee bags etc from other departments.*

*The challenge is to ensure all the ingredients are available in just the right proportions for the type of sandwiches being prepared, as well as ensuring the affinity items (such as coffee and sodas) are also available. If just one ingredient is missing, the whole sandwich line may be sunk...if too many sandwiches are made, with a shelf life of one day at best, then the level of waste may be significant....not to mention the cost of wasted labor!*

*With stores across the nation, lunchtime in Yonkers is some 3 hours ahead of LA...so if a pattern of changes in the volume and type of sandwich bought in Yonkers differs from what was expected, it's too late for Yonkers...but not too late to change the mix for LA. While some factors may be local, some are national, and the business has learnt to see patterns of correlation between the sales mixes in similar stores, wherever they are located.*

*Now, it's Midday in El Segundo, and based on selective basket analytics run on the lunchtime baskets on the East Coast, the Manager of the El Segundo store has received a message alerting him to reduce sandwiches containing mushrooms today. Apparently, a news scare about poisoned mushrooms hit the wires around 10:00am in NYC, and over 22% of sandwich shoppers asked to leave mushrooms out of their sandwiches! The projected impact on El Segundo adjusted the local sandwiches with mushrooms to around 12% less than originally forecast. The Manager instructs the deli department accordingly.....`*

## Store Operations Management

Applying technology to store operations has historically been constrained by the volume and granularity of data as well as the level of connectivity the stores have had to centralized computing resources.

With the advent of affordable telecommunications, scalable data warehousing technology and wireless devices, the intelligent near-time enterprise can now support store level operations.

Utilizing detailed history of store sales and inventory transactions as a baseline, the intelligent retail enterprise can analyze what is happening in your stores on a dynamic basis and alert managers or personnel to perform actions when required. Alerts can direct personnel to perform actions such as cycle counting, shelf substitutions, scheduling changes, shelf labeling or fraud intervention.

- Identify and take action on fraudulent activity before the customer or associate leaves the store by analyzing individual POS transactions as they occur.
- Identify customers returning merchandise not purchased in the store. Detect situations where it appears that a customer and cashier may be in collusion. Reduce POS and customer fraud by as much as 50%.
- Flex store staffing and skills based on the current day's selling trends and historical performance.
- Reforecast and schedule staff for the evening shift based on hourly sales patterns, historical sales, staffing and promotional activity.
- Complete your sales audit process just moments after your stores close every day.

## Acceleration vs. Transformation

The intelligent 'near-real-time' (or 'near-time') retail enterprise will present a myriad of opportunities to enhance profit through increased agility. Some of these opportunities will emerge by accelerating the pace at which detailed information is analyzed and reacted to; taking processes which currently run on fixed schedules and executing them on a more dynamic basis. In most processes, however, there will come a "tipping point", where speed to insight, coupled with rapid response enables an entirely new way to operate. These transformational opportunities will have greater financial impact; however, both acceleration and transformation characterize the agility unleashed by the intelligent near-time retail enterprise.

For example, the process of optimizing on-shelf availability can be transformed by applying intelligence on an hourly basis. Typical replenishment systems review sales and inventory on a daily or weekly basis and generate replenishment orders to the Distribution Center once a reorder point is reached.

As systems capability evolves from weekly to daily replenishment reviews, the process is accelerated but it is still the same process. As the "activeness" of data warehousing capabilities is accelerated to hourly, a "tipping point" is reached where the process can be driven differently by directing store stock room personnel to replenish shelves **before** they are empty. If there is no stock in the store they will be alerted to substitute the item that has been historically proven to generate the most substitution sales in that specific store. Agility and time will be on your side and will be reflected in revenues and customer satisfaction.

Implementing the near-time enterprise is not a "big bang" systems replacement project and should be attempted incrementally. As different areas of the business are integrated, a retailer will attain critical mass in terms of the data which is captured and the analytics which are embedded. Once critical mass is attained, deploying additional capabilities can be achieved with moderate incremental effort. Over time, tooling for the intelligent enterprise will have diminishing marginal cost and increasing marginal returns.

There will be a significant human element to this retooling. Business transformation efforts have created huge operational and organizational efficiencies by speeding and integrating processes. The next wave of transformation will focus on eliminating the human involvement in routine decision making. The key will be to automate where possible and greatly empower associates where automation is not sufficient. Both automation and empowerment will create significant labor economies and present major restructuring opportunities.

### In Conclusion

The intelligent near-time retail enterprise leverages Information technology ... mainly Data-Warehousing technology - to drive greater agility and dramatically improve the ROI for **investments already made in business intelligence**. With the right infrastructure and aligned information, people and processes, retailers can remove disconnects and improve communications between merchants, vendors, customers and associates throughout the day, enabling them to cohesively respond in near-real-time to business events which can drive increased profitability. .

Gathering and integrating the collective experience of your organization enables a more timely and consistent response to new and untapped revenue opportunities.....while they're still opportunities ...and before your competition do it first.