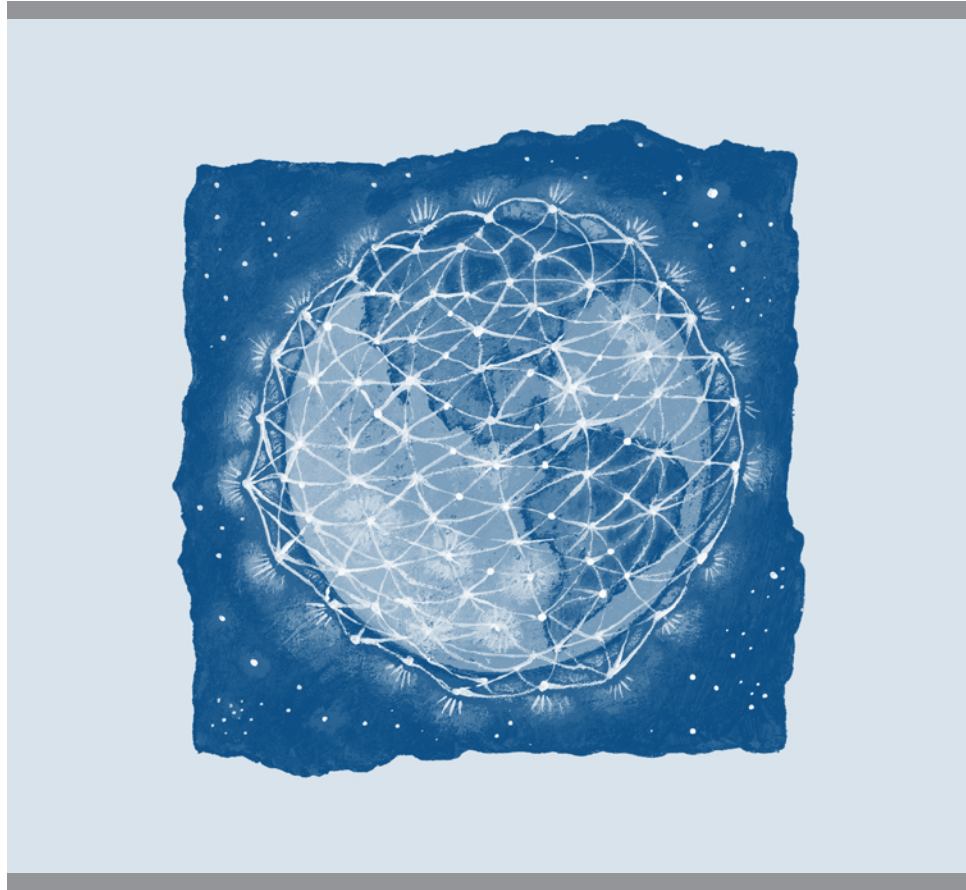


# *Synchronizing the Extended Retail Ecosystem*



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## INTRODUCTION:

### RETAILERS IN THE MODERN EXTENDED RETAIL ECOSYSTEM SYNCHRONIZE TO THRIVE

Retailers today are challenged to be a “brand” unto themselves. It is no longer a viable strategy to merely sell commoditized products at a competitive price, or to offer convenience. For example, instead of selling food, successful grocers are enablers of “healthy lifestyles.”

Consumer behaviors have changed. In today’s world, the consumer deals in the currencies of time, value, and information. With the power of the Internet, consumers are better informed than ever before about products and services, and are searching for solutions. Retailers are being challenged by the consumer to provide solutions quickly and efficiently (“Time”) by offering the right combination of products and service and 100 percent “trip assurance” (“Value”) and making actionable information available at the point of decision (“Information”).

**Definition:**

Ecosystem Synchronization is the way by which retailers, manufacturers, wholesales, logistics companies, and other service providers define and align in real-time, processes, data and metrics to ensure faster time to market and unsurpassed consumer experience across all channels.

Those retailers who can consistently deliver on the currencies of Time, Value, and Information across all channels create a brand promise of an unsurpassed consumer experience. In addition, retailers are leading innovation by designing and producing their own branded products. To achieve the promise of unsurpassed consumer experience and innovative branded products across all channels, retailers must think beyond the four walls of their businesses. Merely focusing on internal operating efficiencies does not create the kind of seamless experience that consumers demand. In the Extended Retail Industry (ERI), retailers are part of an ecosystem of participants including manufacturers, wholesalers, logistics companies, and other service providers that work together to create solutions for the consumer.

What are the foundational capabilities required for retailers to establish with trading and service partners in order to create a thriving ecosystem? Three capabilities stand out:

- Process Synchronization.
- Data Synchronization.
- Metrics Synchronization.

### WHAT PROBLEMS DOES A SYNCHRONIZATION STRATEGY ADDRESS?

In the traditional retail value chain, product availability and superior consumer service levels are guaranteed by over-investments in human capital, manual processes, and last but not least, physical inventory. For example, in order to ensure that a retailer has the product needed for a promotion, a distributor will tend to over-inventory in order to meet the service level requirements of the retailer.

By the same token, store operators frequently over-order inventory from their own warehouses, which in turn can cause the warehouses to order more inventory than is necessary from the distributors or manufacturers in order to meet perceived demand. The net result of over-investing in inventory throughout the value chain is slower inventory turns, sell-off of excess inventory, and negative financial impact (money invested in inventory, and lower gross margins).

The question to be answered in this white paper is, “What is the value of ecosystem synchronization?” The assumption to be explored is that real-time synchronization of processes, data, and metrics between retailers and suppliers can enable faster time-to-market for products in the supply chain and a superior consumer experience through better merchandising and consistent point-of-presence messaging across all channels. This white paper discusses why and how to achieve these goals.

This white paper is targeted toward VPs of Merchandising, CIOs, and CFOs. However, anyone with a vested interest in getting products from source to market in a timely, efficient fashion that satisfies both consumer demand and the need for all value chain participants to realize a profit should pay attention to the theories, facts, and conclusions presented herein.

## THE FIVE KEY BENEFITS OF ECOSYSTEM SYNCHRONIZATION

Obviously, no two participants in the ERI face the exact same challenges in managing their value chains or sharing data with trading partners. Therefore, no two companies will receive the exact same benefits from synchronizing their ecosystems.

Yet it is safe to say that there are five general areas where the typical ERI company would obtain the most value from synchronization efforts. These five key benefits are:

1. Supply chain optimization.
2. Seamless cross-channel consumer experience.
3. True retailer-supplier collaboration.
4. Reduced IT systems friction.
5. Reduced technical complexity.

Depending on the nature of an individual company, an ecosystem synchronization project may deliver some or all of these key benefits. While different organizations will have different benefit propositions, there are some broad generalizations that can be made about how each key benefit is provided and what its impact is.

### 1. SUPPLY CHAIN OPTIMIZATION

Ecosystem synchronization delivers supply chain optimization that enables faster time-to-market for both replenishment goods and new offerings, while increasing inventory turns. Simply put, it allows ERI companies to promote and present the right product to the right consumer at the right time with less cost.

Enhanced procurement and physical movement of goods, along with the ability to provide accurate, up-to-date product information to consumers at the point of presence, can drive the critical push that a new product needs during its first 18 to 24 months of release. Even a long-established product can receive significant sales lift from the type of supply chain optimization that ecosystem synchronization offers.

### 2. SEAMLESS CROSS-CHANNEL CONSUMER EXPERIENCE

Ecosystem synchronization enables a superior consumer experience by ensuring that in-stocks and accurate product information are made available to the consumer at the point-of-presence. This is achieved by ensuring that the master data (product, vendor, location, consumer data) and the processes by which it is created, enriched and disseminated is normalized and aligned both internally and throughout the ecosystem. Further, back-end processes such as order fulfillment and tracking also need to be normalized and aligned across points-of presence and the ecosystem. These capabilities enable the delivery of a seamless cross-channel consumer experience.

With easy access to consistent master data, ERI companies who synchronize their ecosystems can quickly determine what the desired good is, where it is in the pipeline, and how it can be delivered to the consumer who wants to buy it as painlessly as possible. A store that is out of stock can locate an item at another store, at a corporate DC, or even at a supplier's warehouse. The standardized definition of the item at the consumable level allows for all parties to be working off the "same page" at all times. Streamlined and standardized order processing and fulfillment processes across the ecosystem allow for a seamless cross-channel experience. Now Web and catalog shoppers can have their purchases shipped to nearby stores for convenient pick-up. In a synchronized ecosystem, anyone can obtain access to any item at any time. Channel divisions become a thing of the past.

### 3. TRUE RETAILER-SUPPLIER COLLABORATION

Ecosystem synchronization enables true collaboration among retailers and their suppliers. What defines "true" collaboration, as opposed to the numerous collaboration projects that ERI companies have launched in the past five to 10 years? True collaboration entails all the different value chain partners responsible for bringing a product from source to consumer acting as a single unit.

The raw materials provider in Bangladesh should have the exact same data at the exact same time as the store unit in Nebraska. Beyond the nine steps of CPFR or the instant communication capabilities provided by data exchange standards such as AS2, ecosystem synchronization eliminates the boundaries between trading partners completely. The foreperson of the factory halfway across the world is as integrated into a retail supply chain manager's daily routine as the co-worker in the next office.

### 4. REDUCED IT SYSTEMS FRICTION

Across the ERI, today's IT systems have significant friction because of erroneous, redundant, and unsynchronized data. This frequently leads to the problem of "garbage in, garbage out" of multiple transactional (ERP, SCM, etc.) systems throughout the ecosystem. The most sophisticated data warehousing application available cannot do much with untimely or inaccurate value chain data.

Ecosystem synchronization ensures that clean, reliable, singular pieces of data are entered into the IT systems governing value chain activities. By defining and implementing a common set of data standards and processes by which you create, manage and disseminate data throughout the ecosystem, IT systems friction is eliminated.

### 5. REDUCED TECHNICAL COMPLEXITY

In addition to reducing IT systems friction, ecosystem synchronization also reduces the overall complexity of the supply network architecture. All too often, each partner in a value chain runs a proprietary system that must then be somehow patched and connected to all the other proprietary systems in the value chain.

In contrast, a synchronized ecosystem consists of partners running flexible, Web-services-based systems that can be easily integrated via a business process management (BPM) platform. The technical steps necessary to achieve genuine ecosystem synchronization will mandate that all partners scale back the technical complexity of their IT architectures, creating benefits that reach every facet of the enterprise.

## HOW TO ACHIEVE ECOSYSTEM SYNCHRONIZATION

### 1. PROCESS SYNCHRONIZATION WITH TRADING AND SERVICE PARTNERS

Any synchronization strategy must begin with an agreement between the partners about the key processes to be addressed. Key processes in the ERI include:

- Assortment planning and merchandising.
- New product introductions, changes, de-listings.
- Promotions.
- Customer care and returns.
- Invoice reconciliation and settlements.
- Replenishment and inventory control.

Process synchronization is achieved by:

- Identifying the key parties involved in the process.
- Defining the steps (parallel and serial).
- Identifying the inputs and outputs to each step.
- Defining the duration of each step and the entire process and gaining agreement.
- Automating the rationalized processes.

### 2. DATA SYNCHRONIZATION WITH TRADING AND SERVICE PARTNERS

Partners must agree on what key data is to be synchronized, as well as its definition, how it is created, updated, and used, and how it will be managed. Key data to be synchronized in the ERI includes:

- Product.
- Location.
- Vendor.
- Customer.

Data synchronization is achieved by:

- Identifying the key data attributes that will be used in any specific synchronized business processes (e.g. new product introduction).
- Agreement on definition of each data attribute.
- Agreement on valid values and thresholds.
- Agreement on formats of data to be synchronized.
- Agreement on methods of synchronization of key data.

### 3. DEFINITION AND SYNCHRONIZATION OF KEY METRICS WITH TRADING AND SERVICE PARTNERS

Metrics for the synchronized processes must be built into the processes themselves, so that processes can be self-governing (as opposed to being managed by periodic external audits).

Synchronization of key metrics is achieved by:

- Identifying the key metrics for each process.
- Identifying the performance thresholds of each metric.
- Ranking the importance of each metric.
- Identifying the consequences of failure to perform within the performance thresholds.
- Benchmarking metrics.
- Agreeing on how metrics will be monitored.

### THE TIBCO VIEWPOINT: ECOSYSTEM SYNCHRONIZATION IN ACTION

One of the most common examples of ecosystem synchronization is the industry's global data synchronization network (GDSN) initiative. Multiple retailers have embraced this initiative as they see it as the foundation to a much broader ecosystem collaboration platform. TIBCO has worked with the leaders in the extended retail industry to enable ecosystem synchronization. One of TIBCO's customers, a leading grocery retailer, faced significant costs in its supply chain due to unsynchronized data and processes. The absence of a common understanding on key master data elements such as net weight, gross weight, Ti-Hi, and cube led to shipments of palettes which had dimensions that did not meet the warehouse

slotting specifications. This error, which may be viewed as minor, has major implications in delays and costs in getting the product to shelf. Furthermore, the most basic errors, such as interchanged net weight and gross weight values for an item, had significant impacts, such as the wrong calculation of effective price brackets and the ensuing overpayment of invoices. The grocery retailer took a holistic approach and implemented a comprehensive ecosystem collaboration and synchronization effort.

1. It first began with defining the appropriate processes for receiving key item data from trading partners.
2. Internal processes for ensuring that the data was appropriately enriched and validated by the business owners were established.
3. GS1 data and process standards were adopted to ensure that suppliers were not burdened by proprietary standards.
4. A common data model for item data was established – again the GS1 data standards were leveraged.
5. Key metrics were established and communicated across the extended ecosystem – specific internal metrics such as the number of suppliers “on boarded”, the quality of the data, etc. were defined.

By partnering with TIBCO and deploying its industry-leading Collaborative Information Manager (CIM) platform, the grocery retailer was able to dramatically reduce costs in its supply chain. The initiative has not only reduced costs, it has greatly enhanced the relationship with the top strategic suppliers. “This is an excellent example of how overall business synchronization can drive significant benefits to the extended retail industry. It forms the foundation to driving the change required of the 21st century ERI,” says Prakash Nanduri, Global Head of Consumer Markets Solutions, TIBCO Software.

## CONCLUSION

Simple data-sharing methods, such as exchanging purchase orders via EDI or adopting standard item definitions, are a start, but not sufficient by themselves to ensure ecosystem health. Unless all partners equally commit themselves to best practices and open interoperable advanced technologies for data synchronization, an extended retail ecosystem will not thrive. This includes, but is not limited to, participation in the GDSN initiative, adoption of BPM practices and systems, adherence to common data standards such as GS1, and collaborative process definition. Inventory turns, gross margins, and overall customer satisfaction will suffer. And if left uncorrected, this suffering will not continue for long before it turns into something far worse. Ecosystem synchronization when implemented in a pragmatic and holistic manner can deliver significant and sustainable benefits to the ERI.

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## ABOUT TIBCO SOFTWARE

TIBCO Software Inc. is a leading software company with thousands of customers in a variety of industries including retail, financial services, manufacturing, and telecommunications. TIBCO's software and services help organizations dramatically improve their business in the following areas:

- Service-Oriented Architecture (SOA) – Accelerate internal initiatives and go-to-market cycles.
- Business Process Management (BPM) – Increase operational efficiency, effectiveness and control.
- Business Optimization – Improves operational visibility, collaboration and responsiveness, and even enable proactiveness.



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## ABOUT RETAIL SYSTEMS ALERT GROUP

Retail Systems Alert Group is a global research and events company that has followed the advancements of technology applications within the retail, CPG, and apparel industries for more than a decade. The company provides analysis and insight about a broad spectrum of issues and trends through publications, conferences and expositions, Internet services, special reports, and customized research. Retail Systems Alert Group has organized the annual Retail Systems Conference & Exposition, America's leading Retail IT and Supply Chain Event for more than 15 years. For more information, visit [www.retailsystems.com](http://www.retailsystems.com).

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