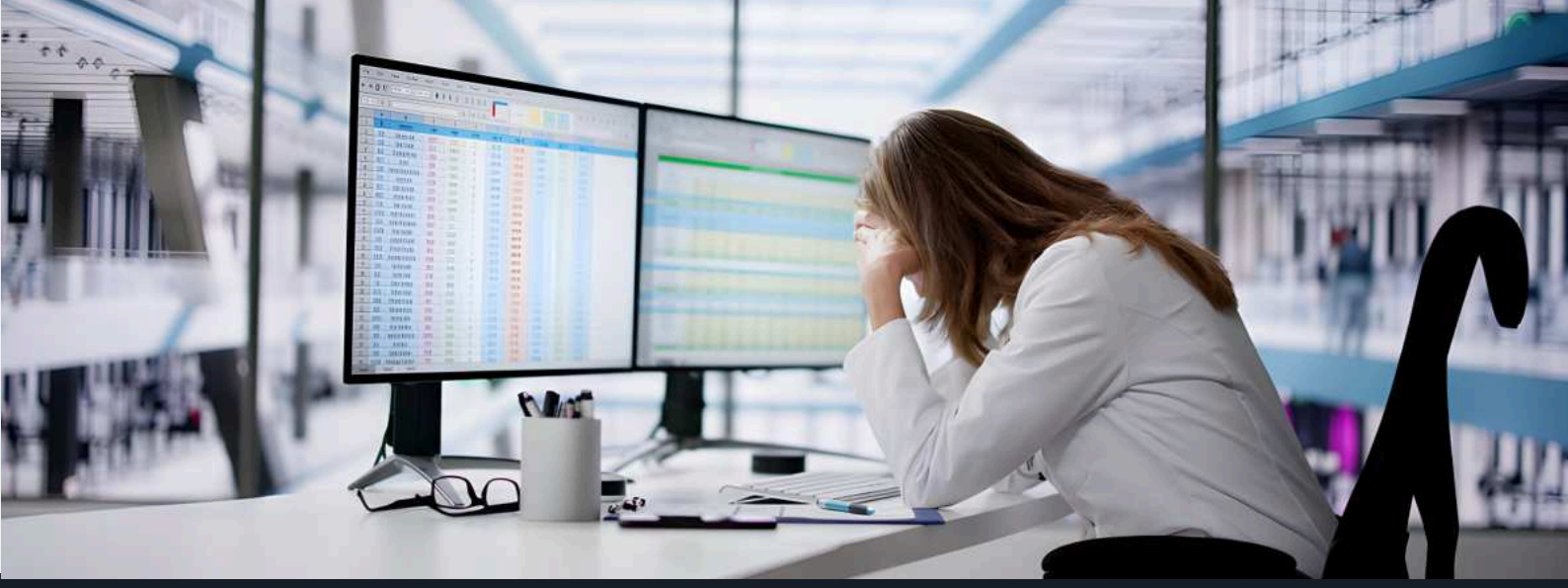

Escape from Excel

Why Retail Can't Survive and Thrive on Spreadsheets

7thonline®

What you will learn:

How artificial intelligence and machine learning are being leveraged for end-to-end solutions for retailers.

How to ditch Excel in exchange for a single version of the truth.

How to have more intelligent information at your fingertips to make better decisions.

How to get Monday morning’s aggregated sales/inventory/profit reports with flexible roll-ups at any level.

How 7thonline's solutions are quantitatively helping retail managements improve their businesses.

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Agenda

Executive Summary

To boost sales, improve margins and maximize profits, retailers must deliver the right styles, colors, and sizes in the right quantities of merchandise to each store to match local demand. However, that's much easier said than done.

Matching local demand requires grueling, time-consuming work that involves continuously reevaluating their merchandise mix as demand and supply factors change. To be successful and get ahead of the competition, retailers require the necessary tools for intelligent historical performance assessment and accurate forecasting of what lies ahead.

This is no small feat considering the volume, complexity, and inaccessibility of relevant data and the fast-paced nature of the retail business. Merchants must be able to interpret dynamic demand, supply, and planning information 24/7 from a single access point. Retailers require a 360-degree view of their business so that they can capture a single version of the truth.

Surprisingly, **more than 70% of retail companies** still use Excel as their principal tool for planning and demand forecasting, leaving them in a continual state of inefficiency and disruption many have come to refer to as "spreadsheet hell." Sometimes hundreds of spreadsheets are used throughout an organization and its extended enterprise — with incorrect or inconsistent formulas, inaccurate numbers, no central repository of information, and no version control.

This leads to major inefficiencies, frustration, and decisions made based on incomplete information. Enormous amounts of data on sales, inventory and profits are scattered across an endless array of spreadsheets — data that generally is not available in an aggregated view to allow for intelligent, timely action.

This white paper explores areas in a retail operation where your company could be caught in "spreadsheet hell" and provides ideas and solutions to escape from Excel and tap into the latest in artificial intelligence (AI) and machine learning (ML) technology.

For us, AI and ML are not just marketing buzzwords — they're essential tools that help retailers improve margins based on the most up-to-data data on customer preferences and current trends.

You will also read a case study and some real numbers examining how 7thonline's AI-powered retail platform has helped and could help CEOs and CFOs make more informed decisions about managing their retail businesses.

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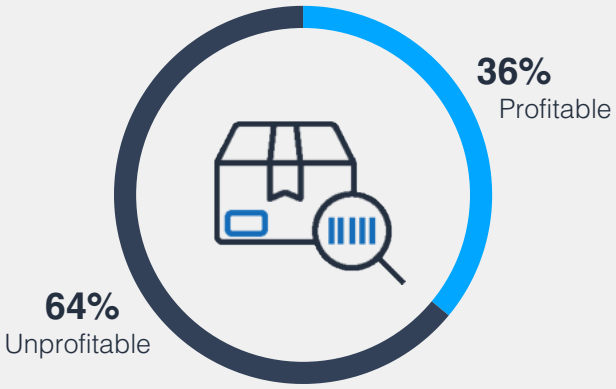
Case Study

7thonline developed an AI/ machine learning tool for a very large fast-fashion retailer that sells seasonal products. After evaluating the business over several years, the retailer found that 36% of its SKUs were profitable, while 64% were either unprofitable or didn't contribute any profits.



Initially, the retailer bought 80% of its inventory pre-season with 20% in-season open-to-buy. 7thonline's AI/ ML tool ranked the top-selling items and identified the worst sellers two weeks after the season started. Using the tool, the retailer was able to slash its pre-season buy from 80% to 50% and use the remaining 50% of its Open to Buy budget for additional quantities of top-selling SKUs chosen from the first two weeks of selling.

Result

7thonline's AI/ ML tool boosted the retailer's productive SKU count from 36% to 50%, lifting the gross margin by 30% to 35%.

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The Numbers

$1

A large conglomerate received a $1-per-piece price cut on its garments by being able to place its production buy earlier.

6X

7thonline estimates a net benefit of 6x for major retailers after the first year using its platform.

$3M

For one large retailer, this means a $3.1 million decrease in lost sales for year one, a number that balloons to $4.6 million by year five.

$8M

7thonline projects an $8.25 million decrease in markdowns in year one for the same retailer, which expands to $12.1 million by year five.

4X

On a wholesale basis, 7thonline projects a net benefit of 4x for major retailers after the first year.

$5M

For one large wholesaler, this amounts to $5.25 million in additional revenue realized through more proactive selling for year one, which grows to $12.8 million by year five.

$10M

7thonline also projects $10.4 million in additional revenue due to higher fill rates in year one for the same wholesaler, which will grow to $25.2 million by year five.

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Planning

Every retailer faces challenges with effectively and efficiently planning and executing unique, store-level assortments that match local consumer demand.

Vast amounts of dynamic data spanning supply and demand, product attributes, location, historical performance, current trends, and strategic and financial objectives are at the retailer's fingertips — if only they could make sense of it all in time to make quick decisions to maximize profits by determining the appropriate merchandise mix for each location.

The Problem:

All this data typically resides on disparate systems or spreadsheets, and decisions involve input from multiple parties across various business functions and locations

The Solution:

Retailers need an intelligent platform capable of coordinating, analyzing, and sharing all this data in real time — and then translating it into optimal merchandise plans that include localized assortments by style, color, and size by store and week.

Excel lacks forecasting capabilities and can't intelligently seed assortments based on demand drivers, promotional/ markdown strategies, historical performance, product attributes, and location.

However, the latest in AI and ML technology integrates the art and science of merchandising in a user-friendly environment to enhance merchant usability and adoption. Management requires complete visibility into all planning activities to ensure their plans are aligned with company objectives — and that they enable them to react to opportunities and challenges as they arise.

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Demand Forecasting

Competition among retailers has never been more difficult, with even the most vibrant retail stores operating on razor-thin margins. Merchants constantly deal with inaccurate assessments of changing consumer demand, which can have immediate and devastating impacts on profits and ultimately, viability.

Retailers must strategically plan how to effectively outperform current and new competitors across all their channels.

The Problem:

When dealing with data spread across multiple spreadsheets and platforms, the original plan has virtually no chance of matching reality. Ever-changing consumer preferences and buying activities are constant challenges, as is variability in supply and deliveries, which impact in-stock inventories. No collection of static Excel spreadsheets can capture these ever-changing metrics on a continually up-to-date basis.

The Solution:

Retail forecasting algorithms can provide a way to track and predict in-season performance so that merchants can react as quickly and efficiently as possible to meet changing supply-and-demand metrics.

Although the art of balancing supply and demand will never disappear, AI and ML algorithms can augment it by providing an efficient, objective, and statistical approach to forecasting demand. Retailers must be able to cleanse, organize, and mine the mass amounts of retail transaction data to project customer demand into the future, ensuring they have the right products in the right quantities in the right place at the right time.

This new approach will enhance the accuracy of retailers' future merchandise and assortment plans while improving customer satisfaction and the overall efficiency and profitability of retail operations. It will enable merchants to sufficiently stock stores to meet customer demand while keeping them from being so overstocked that too much capital is tied up in inventory or significant markdowns may be necessary.

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Optimization

To optimize store assortments, retailers must consider financial and strategic objectives, historical sell-through and missed opportunities, local demographics, and other secondary factors relevant to their specific business.

The Problem:

Though much of this data is available in Excel, the volume and complexity of it prevent merchants from effectively leveraging it. As a result, merchants are forced to rely on their own number crunching and intuition, typically resulting in missed sales opportunities and excessive markdowns. Retailers must be able to invest in the correct merchandise mix for each store to maximize profit potential.

The Solution:

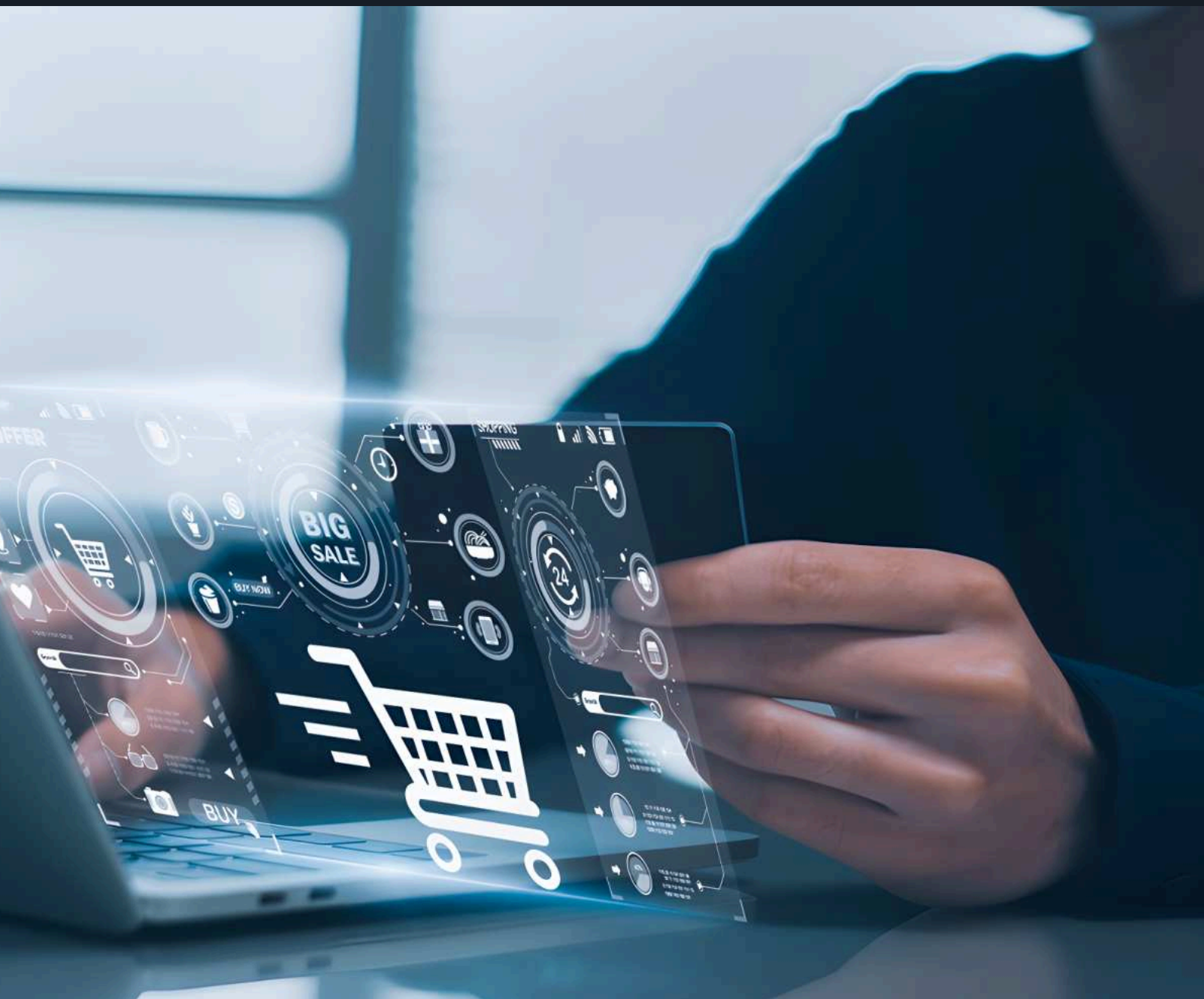
Today's size analytics and optimization technology can generate the optimal category, class, and SKU breadth and depth to meet local demand based on historical performance, customer data, and strategic objectives. This optimization can be performed at various levels, depending on the retailer's requirements.

Thanks to AI technology, merchants can avoid unnecessary sales and margin losses with powerful size analytics and optimization capabilities. Through historical POS analysis and proprietary optimization algorithms, the proper optimization determines the optimal size distribution by store that will minimize lost sales due to early size breaks without increasing inventory. For case-pack styles, the algorithms determine the optimal size mix for each pre-pack and the optimal distribution of available pre-packs to each store.

Every retailer loses a significant portion of sales and gross margin due to a mismatch between size distribution and local demand. Clearly, the amount of manual quantitative analysis to achieve this by using Excel is prohibitive.

Furthermore, manual calculations of size distribution often end up being oversimplified, not taking into account the price, revenue, and margin impact of missed opportunities, stockouts, and overstocks in particular sizes. Without correcting for past mistakes, history is repeated rather than improved upon.

By fully leveraging all the available data, merchants are now able to turn it into actionable information and make the right recommendations that provide maximum profit potential.



Escape from Excel with 7thonline's AI-Powered, Cross-Channel Merchandise and Assortment Management Platform

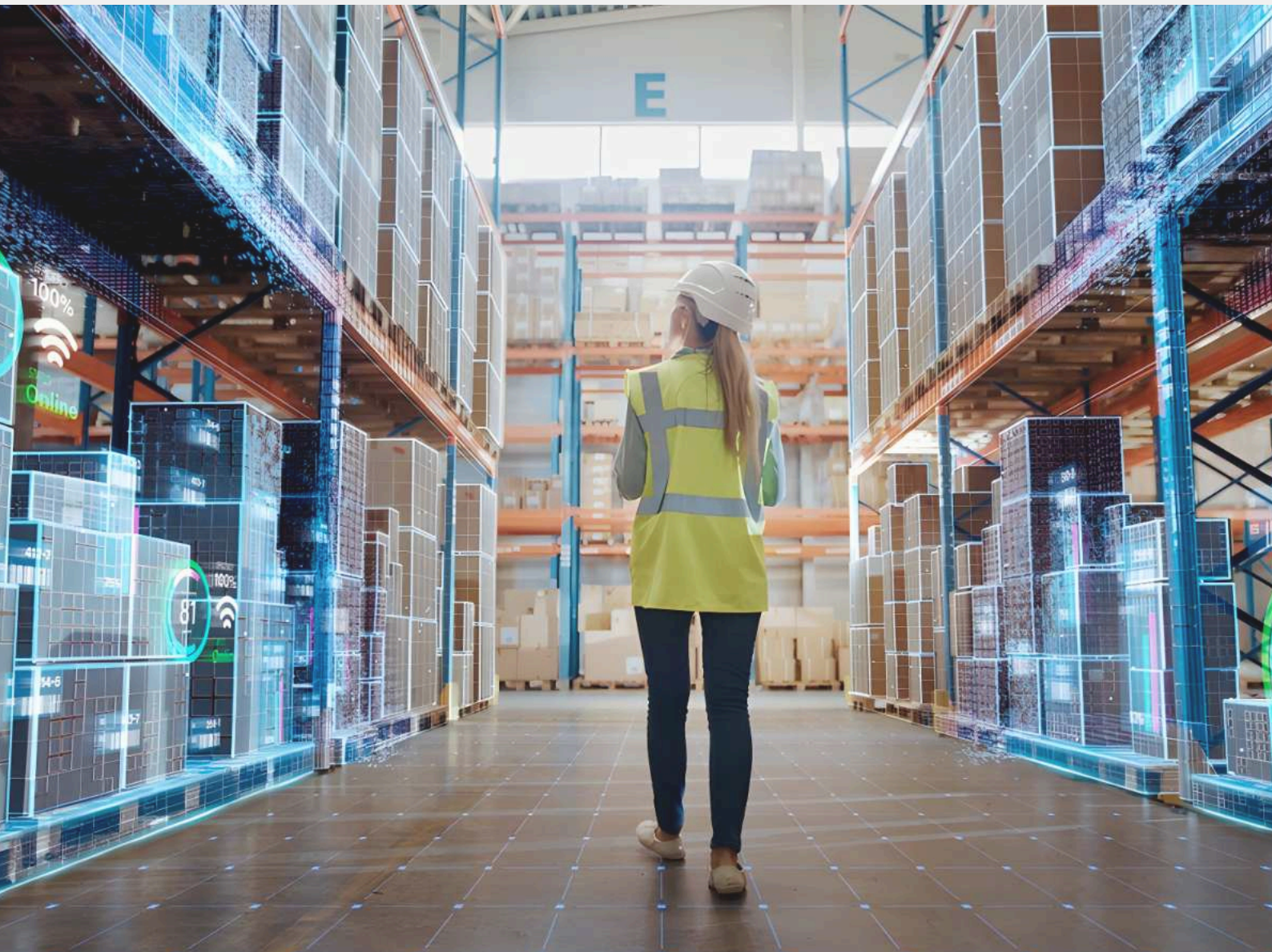
7thonline addresses the challenges of relying on Excel with its industry-specific, cross-channel merchandise and assortment management solutions. It spans the entire retail process from planning and demand forecasting to optimization solutions. 7thonline's platform enables merchants to work more intelligently and efficiently at every step of the process by leveraging AI to unlock the power of art and science.

Retailers with increased visibility across all channels and earlier demand insight can now better plan and analytically reduce markdowns and out-of-stocks while greatly improving inventory turns. Management can be confident that strategic and financial objectives are met — and that they are investing in a merchandise mix that maximizes profit potential.

Built-in Business Intelligence and Analytics

7thonline's platform encompasses merchandise financial planning, visual and analytical assortment planning, in-season merchandise management, and order execution, all based on powerful optimization, forecasting, and AI-powered collaboration engines.

Embedded across 7thonline's enterprise solution is a real-time, easy-to-use reporting engine to drive productivity throughout the retailer's business processes. With the visibility and business intelligence provided by the platform, management can quickly produce optimal assortments driven by current trends, historical performance, financial plans, local demand patterns, and supply constraints.



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7thonline's AI-Enabled, Cross-Channel Merchandise & Assortment

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7thonline's AI-Enabled,
Cross-Channel Merchandise & Assortment

Management Key Capabilities

Build Profit-Maximizing Merchandise Plans Driven by Forecasts

- Build door-level merchandise plans driven by forecasts that are analyzed with AI / ML algorithms; Forecasts are based on current trends, dynamic in-season data, and multiple-year historical seasonal selling patterns
- Reconcile top-down vs. bottom-up vs. historical vs. forecast.

Demand-driven rather than supply-driven allocation

- Utilize dynamic store modeling rather than static store quantity, enabling store-level demand and allowing flexible product delivery.
- Consolidate discrete items like online returns or broken sizes with advanced allocation models to drive full-price selling
- Leverage sales indexing instead of top-down clustering to maximize individual store sales and margin potential
- Tap into proprietary algorithms to incorporate demand and capture lost sales while driving seasonal full-price sell-through.

- Integrate sales forecasting methodologies to anticipate dynamic, in-season trends.
- Create industry-specific color dispersion algorithms for optimal assortment color mix by selling door
- Support multi-echelon allocation strategies via robust stock-balancing capabilities
- Drive product management efficiency and scale through exception-based reporting and analysis.

Produce Optimal Assortments Driven by Store Demand

- Build optimized assortment plans — style, color, and size by store by week — to meet local demand and satisfy business objectives
- Use AI to intelligently build assortments with business drivers (e.g., Target Stores, Lifecycle, Sales Potential, Distribution Constraints, etc.) to automatically generate store plans
- Determine and incorporate promotional/markdown and reorder strategies
- Generate optimal category, class, and SKU breadth and depth to meet local demand.

Localization of Assortment to Match Customer Demand

- Capture product and store attributes for better targeting of local customers
- User-definable planning worksheet to build assortment by attribute
- AI recommends target stores for products with certain attributes based on local demand.

Visibility and One Version of the Truth

- Industry-specific reporting/analytics using 7thonline's platform, from the widest company roll-up down to SKU by location by week.
- Visibility to modifications throughout the planning process.

Quickly Generate Custom Reports from the User Level

- AI algorithms are built in and embedded, providing domain-specific business intelligence tools for custom reporting (e.g., LY and POS analysis) across the solution stack.
- No additional cost or implementation.
- User-friendly: simple user interface, non-IT dependent.
- Reports for the enterprise and the extended enterprise, like trading partners.

Ladder Planning

- Track and adjust weekly flow planning activity (sales and receipts) by item by location; platform automatically reconciles to assortment plan.

Extend to Order Execution and In-Season Management

- Execute assortment plans from product selection through order placement and collaborate with trading partners on product data and plans.

- Dynamic in-season assessment of merchandise assortment with robust forecasting engine.
- Track in-season performance and forecast sales, inventory, and receipts by week.

Store Clustering

- Shrinks the size of the store-planning task by categorizing stores into groups, or clusters, based on common characteristics or attributes
- Cluster stores by performance (e.g. volume), by location (e.g. warm weather vs. cold, strip vs. mall, downtown vs. suburbs), or by target customer (e.g. resort, retirement, ethnicity), or by store size and layout.

Facilitate Communication and Collaboration

- Share real-time financial and assortment plans at any time internally and externally; Improved communication among production, sales, sourcing and store operations and corporate to field, wholesale to retail and eCommerce.

Reduced Operational Costs

- Significantly reduced administrative tasks and error rates, thanks to AI and ML algorithms.

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About 7thonline

7thonline is the leading provider of cross-channel merchandise and assortment management solutions to the retail and wholesale industry. The company's cloud and enterprise software enables more effective planning, demand forecasting, and optimization for global and fast growing brands.

7thonline's embedded business intelligence and analytics offer multi-channel inventory visibility for retailers, eCommerce, and vendors, allowing for greater operational performance, increased sales, reduced markdowns, and improved margins. Customers include Birkenstock, Calvin Klein, Tommy Hilfiger, Canada Goose, Nautica, Bestseller, Phillips-Van Heusen, VF, and others.

7thonline is headquartered in New York City with global offices.

For more information, please visit www.7thonline.com