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Foreword

New technologies continue to transform how consumers communicate, interact and research—and how they choose and shop for goods and services. Agile innovators have taken advantage of technology to develop new business models, services and offerings that have disrupted the retail landscape and changed consumers’ expectations. Retailers must respond by finding new ways to understand, engage and serve consumers in an always-on world.

The physical and digital worlds are converging, and seamless shopping—true omnichannel retailing—is table stakes for today’s retailers. Mobile and social engagement, together with the Internet of Things (IoT), where machines and wearable technology generate data from connected devices, open up new opportunities to gain competitive advantage through insights and innovation. Added to this, cognitive computing enables a rich dimension by allowing companies to understand new sources of data at scale, provide an improved customer experience and create a more efficient business. In retail, this presents an opportunity to understand things more deeply, faster, to become more relevant to consumers and to run businesses more strategically and more efficiently.

In addition to this, there are certain industry fundamentals that remain as true as ever. For retailers, there are three imperatives that all organizations should focus on:

- Shopping and customer experience: Engage customers personally and seamlessly across all touchpoints
- Merchandising and supply networks: Differentiate through superior offerings, dynamic supply chain and partner collaboration
- Operations and innovation: Innovate for agile operations, profitable business models and empowered employees

These imperatives can drive retail success—connecting with consumers, operating efficiently, capturing loyalty to gain market share, and driving profitable growth.
Technology-based enablers help retailers get the three universal imperatives right. Mobile and social engagement technologies allow contextual and relevant connections with consumers, employees and suppliers.

New capabilities such as Blockchain and new hyper-localized data points such as weather forecasting can support increased operating efficiencies, transparent processes and agility in retail, to deliver the products and services consumers expect. Big data and analytics decode patterns, preferences and trends that enable better and quicker marketing, merchandise, supply chain and services decisions.

Cloud computing and other innovative approaches provide the new capabilities consumers are demanding more quickly, efficiently and reliably. And enterprise security ensures the company’s most important information—especially customer data—is protected.

IBM offers everything retailers need to transform based on what consumers are demanding: roadmap development, solutions, infrastructure, research sciences, consulting and interactive user experience design. We help retailers deepen customer relationships and offer differentiated assortment while driving operational excellence enterprise-wide to spur profitable growth.

This guide showcases IBM solutions for retail. It provides a quick overview of what retailers need to do within each of these areas, and the IBM solutions that can support those efforts.

Please contact your IBM representative to arrange for a briefing on any of the IBM offerings in this solutions guide.

Sincerely,

Your IBM Global Retail Industry Team

Cognitive Computing

Cognitive computing refers to systems that understand data (both structured and unstructured), reason with purpose, learn at scale, and interact with humans through natural language. Rather than being reliant on pre-programming, Cognitive systems learn and reason from their interactions with us and from their experiences with their environment.

Cognitive systems allow businesses to leverage the ever-growing volume, velocity and complexity of information produced by customers, systems and connected devices in today’s world. They represent a critical requirement to remaining competitive and profitable.

The Internet of Things

The Internet of Things (IoT) refers to the growing range of Internet-connected devices that capture or generate an enormous amount of information every day. For customers, these devices include mobile phones, sports wearables, home heating and air conditioning systems, and more. In an industrial setting, these devices and sensors can be found in manufacturing equipment, the supply chain, and in-vehicle components. IoT in retail merges the best of digital with the physical retail store to help deliver new shopper insights and customer experiences, streamline store operations, and create intelligent merchandizing and supply networks.

Blockchain

Blockchain can create a single shared ledger that maintains a single, complete, authoritative record of all transactions related to a given asset. Blockchain shifts the paradigm from information held by each individual company or organization, to a shared, complete record showing the lifetime history of transactions—across all parties and participants. It can help develop trust, accountability and transparency across multi-party business networks.

Cognitive, IoT and Blockchain, on their own or together, can be transformational in retail, advancing operational efficiency, customer experience, traceability and agility within the organization.
Introduction: The IBM retail imperatives

Every retailer faces a unique business situation and brings a unique set of resources and assets, strengths, and advantages to the marketplace.

But we believe that there are universal imperatives that every retailer must get right to compete—and win.
This guide describes our three imperatives and organizes IBM’s offerings for the retail industry around them to show how we help the world’s leading retailers achieve their business objectives.

On the following pages, we examine these three retail imperatives and IBM’s offerings within each.
Retailers that deliver a more satisfying shopping experience interact with consumers in ways that provide each of them with a timely, relevant and personalized experience.

To compete in a world where consumers expect to be treated as individuals, you must strive to have your customers feel as if you know them personally, understand their lifestyle needs, wants and aspirations, and that you have their current interests, needs and wants in mind. This level of intimacy can ultimately create long-lasting and rewarding relationships for you and your customers.

A satisfying shopping experience must also be beyond the notion of separate “channels”: customers should be able to interact with you in the store, on the web, via mobile devices or through call centers—in an absolutely seamless way—with the flexibility to connect, research, shop, receive and return merchandise as they’d like.

What does it take to deliver these shopping experiences? A complete view of customers across all touchpoints and a single commerce and marketing platform for interaction and engagement.

IBM helps retailers collect, secure and analyze big data generated through mobile, social and the Internet of Things, allowing them to get to know each customer as an individual in context. Using all the information that’s available—from new sources, structured and unstructured, inside and outside the organization—it becomes possible to not only understand an individual’s history, but also perceive each person’s interests and current lifestyle needs and wants.

Do it in real time, and you can determine exactly what information, message or merchandise to deliver to each consumer, right at the moment of awareness. Do so consistently, and you can deepen your relationship and motivate consumers to keep you top-of-mind.
What it takes to deliver a more satisfying shopping experience

First, you need a single, comprehensive picture of individual customers—across all touchpoints.

Then, you have to interact with customers using relevant messages and offers that reflect the fact that you really know them—personally and individually—at any point in time.

And finally, you have to deliver like clockwork—every single time a customer interacts with you.

Turn the page to learn about the portfolio of IBM solutions that enable a better customer experience.
SHOPPING AND CUSTOMER EXPERIENCE

SINGLE VIEW OF CUSTOMER

WHAT YOU NEED

Insight to understand each of your customers as an individual—a customer master hub
This includes information on who your customers are, where they live, and their demographics, interests, activities, attributes and preferences, all stored in one place.

Visibility into each customer’s transactions and interactions with you as a retailer—a customer transaction repository
This includes visibility across channels and activities: what customers have bought, where, when and how they’ve shopped, who they’ve contacted, what marketing they respond to and what merchandise they prefer.

Information on each customer’s activities and interactions with others—a customer activity repository
Learn about customers’ online interactions with others, including friends, family, other retailers, brands and groups—comments, reviews, likes, dislikes, compliments and complaints.

Big data and analytics to gain insight from new sources of information
Capture and secure new sources of data from inside and outside of the organization and apply analytics and leverage cognitive computing to gain insight into behavioral drivers, so you can further personalize shopping to spur better loyalty, sales and margins.

BUSINESS CONTEXT EXAMPLE

HOW WE DEFINE IT

Getting to know your customers as groups, individuals, and through lifestyle changes, and effectively using that information to build solid relationships is a critical competitive issue. But most retailers struggle with the problem of how to make this happen.

The answer is now within reach by uniting the physical and digital worlds and applying the power of prediction to this information. Inside stores, retailers can now observe customer behavior closely, including things like the paths they take, the time they spend in each area of the store, and how often they actually purchase.

Collecting this data and combining it with customer interaction history, online behavior and external data, and applying analytics to reveal the current activities, wants and needs of each consumer at any point in time is what we call a single view of the customer. Converting such insights into action can make you stand out to shoppers in the competitive marketplace.

But this can’t be achieved with just a single system or process. You have to collect as many pieces of available information as you can, from inside and outside your organization, and then use it to drive insight and power into your customer interactions.

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HOW WE DELIVER IT

The set of capabilities we refer to as the single view of the customer can be achieved via a number of architectures, but it requires close integration of people, processes and technology. First is the establishment of an advanced customer master hub using IBM® InfoSphere® Master Data Management to get a single, consistent view of each customer’s information across profile, preferences and other attributes. A key goal here is to establish a process to manage attributes, identify the most important pieces of information, and define how to make critical information available to every system and process that needs it, in real time.

The next piece is an advanced customer transaction repository. The goal here is to pull together available data on sales across channels and then combine this data with information on other customer activities. These can include visits to your stores and contacts with your store associates and call centers as well as online shopping and mobile marketing to establish a comprehensive view of each individual’s buying habits and interactions.

For this purpose, IBM Big Data and Analytics solutions provide incredible power to manage and sift through vast quantities of customer transaction data at record speeds as well as the ability to distribute this information throughout the organization. IBM SPSS® software brings powerful statistical modeling capabilities to help predict customer behavior with greater accuracy and drive insights. IBM Watson® is the Cognitive computing platform, which uses natural language processing to discover new patterns and insights in a matter of seconds. Additionally, Watson uses social sentiment and blogs to create psychological profiles about customers to better understand new patterns or habits, personality insights and shopping preferences.

To complete the picture, we build an advanced customer activity repository using social media analytics solutions from IBM to capture customer interactions and activities with third parties, including blog entries, emails, posts and comments on social media, ratings, reviews, complaints, and website analysis. This customer activity repository can help drive your understanding of customer sentiments, identify influencers, pinpoint customer satisfaction opportunities, and even monitor your brand reputation and trust level with consumers, all of which can help you become essential to your customers.

IBM offers a wide range of platforms to support these functions, as well as a number of pre-built retail-specific solutions that leverage these platforms.

SELECTED IBM OFFERINGS

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More information on each of these offerings is available on the ibm.com® website. Contact your IBM representative to arrange a briefing.

CASE STUDIES

HONEST CAFÉ

This self-serve coffee shop chain from the UK used IBM Watson Analytics to gain a better understanding of customer behavior, thereby increasing loyalty and drive upsell.

- Enables increased learning about how customers buy from the brand
- Drives smart growth by understanding the unique attributes of each new café
- Identifies the most valuable customers, and target them for loyalty offers

ROSSMAN

This Polish drugstore chain implemented IBM Big Data and Analytics to better understand the shopping habits and expectations of its 600,000+ customers and improve their shopping experience. Using IBM Big Data and Analytics, Rossman has:

- Reduced the time it takes to generate most customer reports by a factor of 60x
- Simplified and optimized performance of data services for applications
- Established relationships between single products and groups of products

LUXOTTICA

This major international eyewear retailer used the IBM PureData Solution for Customer Insight to establish a 360° view of customers and gain actionable customer insight for marketing activities.

- Identified the highest-value customers out of a population of nearly 100 million
- Targeted individual customers based on unique preferences and histories
- Anticipate a 10 percent improvement in marketing effectiveness
HOW WE DEFINE IT

To engage in a contextual and relevant manner with each customer, you have to find ways to connect the dots between advertising, marketing and merchandising. Making this happen requires a deep understanding of each individual customer as well as great precision in defining offers and targeting communications at the right point in time via the right medium — digital, push notifications, SMS, email, in-store, or print — to those consumers who will find the offers motivating and worth acting on. All this needs to leverage new forms of hyper-local data, such as pinpoint weather forecasting, traffic info, local news, and the like.

Success here is measured in the ability to understand changing lifestyle needs and influence customer behavior in real-time, drive dramatically higher return on marketing spend, increase sales and improve customer satisfaction.

WHAT YOU NEED

Marketing operations that can help ensure that all campaigns and promotions are executed as planned
Dependable processes to translate marketing strategy into an integrated, coherent marketing plan and to manage plan execution to deliver a consistent brand message in virtually every consumer interaction and communication.

Campaign planning processes that are tightly interconnected with merchandising
There is a critical need to integrate the processes by which retailers select merchandise and appropriate offers with the processes by which they define effective marketing campaigns for this merchandise.

Campaign execution to deliver digital and in store experiences, meaningful interactions and convert prospect to loyal customers
Marketing campaigns must no longer be exercises in broadcasting. They must be carefully targeted to reach individual consumers with personalized offers, based on history, behavioral drivers and current lifestyle needs, to drive shoppers to take the desired action.

Advanced analytics that draw widely from available customer data to develop and grow relationships
Retailers must leverage a vast array of available historical and real-time internal and external data to understand each customer as an individual — and in context — and to determine the best action at any time and place.

BUSINESS CONTEXT EXAMPLE

INTERACTIONS that are timely, relevant and personalized

Marketing strategy, budget and plans
- Master calendar
- Manage and track spend
- Campaign and promotion plans

Marketing operations

Advanced analytics

- Marketing mix optimization
- Price optimization
- Promotion optimization
- Customer behavioral and transactional history
- Customer segmentation

Campaign planning

Campaign execution

- Contact frequency
- Offer optimization
- Channel optimization
- Interaction sequence

- Store
- Web
- Mobile
- Social
- Kiosk
- Call center
- Email
- Print

POTENTIAL BENEFITS

Improved conversion rates

Improved customer loyalty

Increased return on marketing investment
The first puzzle piece here is an advanced marketing operations system based on IBM Marketing Cloud featuring Journey Designer and Universal Behavior Exchange. This system can act as the central hub to let you use the customer data collected across all touchpoints and turn them into insights through your analytics solutions. Armed with insights, you can define highly effective marketing campaigns and optimize execution by streamlining internal processes to deliver advertising and marketing efforts on time and in sync with real-time customer demand.

The next requirement is omnichannel campaign planning based on IBM Marketing and IBM Omnichannel Merchandising software. This enables execution of personalized offers to individual customers and can optimize how you connect with your customers via different touchpoints. Promotions can quickly be turned into emails, for example, and campaigns can be pushed to call center associates to make outbound marketing calls. The increase in mobile shopping means retailers need to take special efforts to connect with consumers to improve online sales, drive in-store traffic and engage shoppers with personalized offers.

For campaign execution, today’s marketplace requires the ability to engage the customer in a continual interactive dialogue. IBM Marketing Cloud solutions can allow you to influence the path to purchase via a number of methods, such as display ads that reflect previous browsing history and product recommendations to deliver exceptional experiences across all channels. In addition, the IBM Watson Customer Experience Analytics solution can highlight additional opportunities in your digital channels, such as cart abandonment as a result of issues in the website experience. Customer experience management solutions from IBM can provide critical visibility, insight and answers to help companies meet online conversion and customer retention objectives. In an integrated marketing management environment, this feedback can loop back from campaign execution to campaign planning to harvest learning and intelligence.

The linchpin that ties all this together is advanced analytics with IBM SPSS software. SPSS software is designed to harvest the latest insights into customer likes, interests and preferences, based on their responses to your current offers, to allow you to connect in real time to deliver the most relevant and timely offers to individual shoppers. Analytics software can also allow you to close the loop on the marketing process cycle by providing the data for optimizing your marketing budget, with visibility to planned and in-progress marketing activities.

To stand out in marketing today, relevance and personalization are key. IBM offers a comprehensive spectrum of capabilities that can bring this to life.

### SELECTED IBM OFFERINGS

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<td>• IBM Mobile Customer Engagement</td>
<td>• Customer Experience Design and Management</td>
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More information on each of these offerings is available on the ibm.com website. Contact your IBM representative to arrange a briefing.

### CASE STUDIES

#### MACY’S

This US retailer built a cognitive mobile shopping solution based on IBM technology, to give in-store customers many of the key benefits of online shopping.

- Deeper customer insights, enabling personalized recommendations
- Deeper in-store customer engagement, leading to more repeat business
- Increased revenue per store, due to fewer customers leaving in frustration

#### BOOTS UK

With a new sales assist app that uses IBM Bluemix to integrate data from internal systems, this health and beauty retailer can now empower in-store employees to offer a new level of customer assistance and engagement.

- More up-to-date product and promotion information
- Provide customers with the latest product information, ratings and reviews
- Encourage more sales through quicker service and personalized recommendations

#### SEPHORA (SHANGHAI)

This Chinese cosmetics retailer used IBM Tealeaf to better understand customer behavior online, including which roadblocks frequently lead to cart abandonment.

- Tracking campaigns across channels to know what works and what doesn’t
- Increased sales up to 3.5 percent by making the online shopping experience easier
- Set the stage for a new cognitive recommendations engine
Commerce is the broad term for the set of capabilities that enables interaction with your customers seamlessly across any touchpoint by uniting the physical and digital worlds for a single view of customers and merchandise. Develop a new storefront using the rich capabilities of mobile, social, cloud and security to execute transactions and flexibly source and fulfill customer orders. Doing so enables your customers to research, buy, track, receive and return purchases wherever, whenever and however they please.

At the same time, commerce solutions from IBM can leverage improved inventory visibility and rich analytics capabilities to help maximize retail operational efficiencies: each customer order can be automatically executed via the most efficient location, sources and fulfillment paths, based on costs and conditions, to help make every sale as profitable as possible for you while meeting customer expectations.

A single digital engine for commerce capabilities to handle all customer interactions with world-class efficiency and flexibility

Your customers must feel that their shopping experiences are seamless, simple, engaging and confidence inspiring—a single storefront regardless of where they shop. As they move among channels and touchpoints, and as they go from awareness, browsing and research to purchase and then to support interactions, they must sense at every moment that they can count on you to be consistent, competent and trustworthy in every interaction—and their history and interactions go with them regardless of where or when they connect with you.

Order management processes that help fulfill each customer order via the most efficient and cost-effective path

The complexity of modern supply chains can mask potential cost savings and opportunities for faster fulfilment. Your order management process must take advantage of new insights and capabilities to drive fast, cost-efficient execution that can increase customer satisfaction—and your profitability.

Advanced digital analytics to ceaselessly monitor your customers’ changing activities and responses to enable quick learning and identify the next paths to success

The key here is to enable a learning cycle that keeps you a step ahead of your competition in identifying trends and spotting emerging opportunities, resolving on-line struggles, crafting timely new offers, and delivering them efficiently, especially to increasingly powerful mobile devices. The secret to driving profitable growth is making your customers feel like you know them and understand them far better than any other retailer does.

- Dynamic personalization
- Search and navigation
- A/B testing
- Rule-based associations
- Internationalization and global commerce
- Mobile
- Digital payments
- Point of sale
- Visibility into the actual customer experience
- Quickly diagnose and resolve site obstacles
- Search engine optimization
- Impression attribution
- Benchmarking
- Product recommendations
- Display advertising
- Session replay
- Inventory sourcing, flexible fulfillment and value-added services regardless of order channel or changes
- Universal inventory visibility, including store associates

Reduced customer acquisition cost
Improved order accuracy
Improved customer satisfaction
HOW WE DELIVER IT

Commerce is about having universal visibility to inventory and customers across virtually all touchpoints. IBM’s approach to omni-channel commerce is balanced to coordinate shopping, insight, inventory management and fulfillment to offer a personalized and outstanding shopping experience.

We begin with an advanced single digital engine for e-commerce and mobile capabilities based on IBM Commerce on Cloud software. Our solution is distinctive in that it can support business-to-consumer (B2C) and business-to-business (B2B) models equally well. IBM Commerce on Cloud software can also confidently support global retailers with multi-brand, multi-country requirements using an integrated, uniform design that can be easily accessed on a variety of mobile devices.

The next critical element is world-class customer order management and fulfillment capabilities delivered by a distributed order management system based on IBM Order Management. Order management orchestrates each order to take advantage of the most beneficial inventory sourcing and flexible fulfillment paths.

It is designed to enable continuous global visibility into orders, regardless of channel, and any order changes that may take place. Sterling also supports vendor-direct fulfillment and a wide variety of value-added services, including assembly, service delivery and installation. And Sterling supports functionality via a dedicated application for mobile devices, equipping store associates for mobile picking of in-store fulfillment and inventory visibility for items not in the store.

Opt-in intelligent location awareness technologies, like those from IBM, give you new insight into customer behavior in stores. This new source of Insight combines data on store visits, dwell time, and sales and traffic patterns with online activities to give a complete picture of shoppers. This allows you to connect activities across channels to help drive store revenue, improve customer loyalty, and differentiate the brand.

To complete the picture, we enable sophisticated advanced digital analytics capabilities based on the IBM Watson Customer Experience Analytics suite of software, which allows you to detect how customers are reacting to your personalized targeting. These insights help establish a learning feedback loop to drive continual improvement in your e-commerce and order fulfillment processes.

Given the growth in mobile sales, efficiently connecting to customers’ personal devices is key. Our MobileFirst platform lets you build once and deploy to multiple mobile platforms, including mobile applications for store associates and other employees in ways that can be managed more securely to better serve customers.

Omni-channel commerce solutions from IBM are designed to work smoothly in concert with our other solutions, particularly Single View of Customer and Marketing and Engagement, to provide a single, digital backbone for customer interactions. The goal is to let your customers place their orders via web, mobile, tablet—wherever they like—and to select from among value-added services. In addition, your mobile-enabled store associates can more easily check on and deliver inventory and customer orders, while your call center representatives can quickly make order changes.

IBM technologies are designed to work seamlessly together to deliver a truly superior shopping experience that can drive customer loyalty and help you outclass the competition.

SELECTED IBM OFFERINGS

Software and cloud solutions
- IBM Commerce on Cloud
- IBM Order Management
- IBM Configure, Price, Quote
- IBM Pay
- IBM Store
- IBM MobileFirst
- IBM MobileFirst for iOS Store Associate and Manager Suite
- IBM Watson Order Optimizer
- IBM Watson Customer Experience Analytics
- IBM Watson Commerce Insights
- IBM Watson Content Hub

Process improvement and implementation services
- Digital Platform Transformation
- B2B and B2C Commerce
- Customer Experience
- Customer Analytics
- Cross Channel Order Management and Fulfillment
- Commerce on Cloud
- CEI (Customer Experience Index)
- Customer Engagement Platform
- Point of Sale (POS)

Managed services
- Commerce as a service (Commerce and Order Management)
- Payment systems
- Marketing and Consumer Analytics
- Retail Customer Service Operations
- Website Content Management
- Commerce on Cloud
- Location Insights and Marketing Services

Technology platforms
- IBM Commerce on Power Systems
- Commerce on Cloud on SoftLayer
- IBM Order Management on Power Systems
- IBM Bluemix
- Watson Internet of Things

More information on each of these offerings is available on the ibm.com website. Contact your IBM representative to arrange a briefing.

CASE STUDIES

STAPLES
Through IBM Cognitive Business Solutions, this US office supplies retailer is now able to better serve customers by making it quick and easy to reorder supplies.
- Growing revenue per customer, due to smoother transactions
- Increasing customer base, due to the draw of extreme convenience
- Increasing satisfaction and loyalty through more personalized, efficient transactions

PERFORMANCE BICYCLE
This US bicycle retailer used IBM WebSphere Commerce to deliver a seamless shopping experience, regardless of channel.
- Connects both online and in-store customers with highly knowledgeable employees
- Increasing sales and profits with ship from store and buy online, pick up in store
- Simplified customer experience that leads to long-term loyalty

MARKS AND SPENCER
This UK retailer implemented an IBM customer experience management solution, allowing them to offer a better online experience to customers.
- Increased sales conversions through the online channel
- Increased loyalty and repeat business
- Faster problem remediation — as soon as 5 minutes after an issue is identified
While merchandising is often viewed as an art, new technologies—and Cognitive capabilities—can add science to these processes. By quickly identifying shifting trends, consumer sentiments and selling opportunities, buyers can make the best choices so as to maximize their return on inventory and avoid markdowns.

Traditionally, success in retail was determined by placing the right merchandise in the right store locations at the right time at the right prices. Even with all the changes and complications in today’s world, this vital role of bringing together products and consumers remains as critical as ever.

What’s new is augmenting the core merchandising system with effective preseason assortment planning and in-season management, and adding in the customer dimension. Taking into account targeted consumers, you can develop tailored and differentiated assortments—by location or channel—that achieve the highest sales, margin and customer satisfaction.

With regard to products, the key is to approach this with a view to the full offering you define: where you offer specific items and what quantity, placement, information and context you provide around each product in alignment with the perennial factors of price and timing.

At the same time, the processes that carry merchandise from suppliers to stores and customers must take advantage of the latest supply chain optimization and customer fulfillment tools to drive the highest-possible efficiency, transparency and accountability.

And, the management of products must be continuously informed by a real-time awareness of the consumer dimension—what consumers are saying to each other, how their behavior is changing every day—using the leading technologies that leverage social media, mobile, big data analytics and cloud.
What it takes to build better merchandising and supply networks

First, you need to be able to accurately anticipate customer needs and align a compelling offering of products, prices and promotions. This requires accurate enterprise product information and the latest intelligence on consumer sentiment and behavior, to define the optimal pricing and promotional strategies across channels.

Real-time universal inventory visibility is necessary for optimizing your planning and fulfillment processes, so as to create a supply network that can provide dependable delivery against changing demand, while also maximizing inventory productivity and profitability.

Turn the page to learn about the portfolio of IBM solutions that enable better merchandising and supply networks.
HOW WE DEFINE IT

Product assortment and pricing are central to every retailer’s brand. In a world where merchandise is often indistinguishable, merchants struggle with the challenge of offering a unique set of products, often with shorter lifecycles and constant promotions, across multiple geographies and customer touchpoints—all to appeal to an increasingly empowered and discriminating consumer.

But today’s consumer-insight-based planning and analytical solutions are enhancing core merchandising systems, making it possible to blend art—experience, taste and judgment—with science. Advanced analytics can drive a deeper understanding of buying propensity and the drivers of demand, so that you can determine the most desirable and profitable products, touchpoints, locations, events and promotions. Cognitive capabilities can make systems much more intelligent, driving deeper understanding and finding hidden patterns. And new kinds of hyper-local data, such as weather, traffic, news, events, and even localized social buzz, can now be leveraged in an efficient way to align assortments and inventories with pinpoint demand fluctuations.

WHAT YOU NEED

Enterprise product information leveraged to drive competitive advantage
Is enabled by cross-functional workflows to manage a single, comprehensive view of product, supplier and location attributes
• Incorporates validated external and internal data sources for accuracy and speed
• Provides seamless integration of attribute data to analytical, operational and customer-facing applications

Tailored assortments that match the right products with the right locations, to provide what customers want to buy
Flexible planning and analytic tools help create demand forecasts that are based on insights into the key drivers of buying behavior for targeted customers, channels, locations and product categories. You can align product lifecycles and balance the mix of private-label and branded products to drive better category performance, margins and assortment to achieve space and financial objectives.

Integrated merchandise visibility and control, focused to improve accuracy and speed of merchandising decisions and actions
You need transparency to the drivers of current performance, future consumer demand and your business objectives, including trends as they emerge through social media. Analytic techniques like roles-based graphics, exception alerts and what-if scenarios help you understand performance and take action to drive increased productivity. Integrating planning and decision support analytics with execution systems gives merchants better tools to make better and quicker preseason decisions, in-season adjustments and spot buys.

BUSINESS CONTEXT EXAMPLE

PRODUCT DEVELOPMENT

1. Enterprise product information
2. Customer insight
3. Hyper-local trends
4. Core merchandising
5. Tailored assortments
6. Optimized price and promotions

POTENTIAL BENEFITS

1. Increased sales
2. Improved gross margin
3. Improved inventory turnover
HOW WE DELIVER IT

Each retailer’s journey to enabling new merchandising capabilities will be unique, depending on starting point, goals and resources. Strategy and implementation services from IBM are a key to our offerings here. The goal is to help ensure the successful implementation of IBM solutions as well as solutions from third-party providers such as Oracle, SAP and JDA Software.

It all starts with accurate enterprise product attribute information. **IBM InfoSphere® Master Data Management** software allows for the gradual rollout of channel-to-enterprise product attributes with a supplier portal, cross-functional workflow, and integration into core merchandising and customer-facing systems such as WebSphere Commerce software.

**IBM SPSS** software provides advanced customer analytics to identify the factors beyond point-of-sale (POS) data that drive buying behavior and that predict future behavior at the SKU, category, cluster and location levels so you can tailor assortments. **IBM Cognos TM1®** software is designed to enable the creation and management of top-down and bottom-up financial and assortment plans across channels, at all levels, from corporate-wide to individual SKUs, locations and time periods. **IBM Omnichannel Merchandising** software is designed to develop **effective pricing strategies** and manage the price lifecycle across all channels, coordinate promotional events and personalized marketing offers. Optimal product prices and markdowns are determined based on user-defined objectives, and while closely monitoring the pricing of key competitors, with business users being able to schedule and manage the number and type of price and promotion changes.

Throughout the season, you need comprehensive **merchandise visibility to control stock levels**. IBM Big Data and Analytics capabilities provide exception-based, graphical, multilevel comparisons of plans, forecasts and history so merchants can more clearly understand and efficiently manage performance.

IBM can deliver on the complex integration requirements across these capabilities with our best-in-class integration solutions and software.

**SELECTED IBM OFFERINGS**

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<th>Software and cloud solutions</th>
<th>Process improvement and implementation services</th>
<th>Managed services</th>
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</table>
| • IBM Cognos (Business Intelligence and TM1)  
• IBM InfoSphere Master Data Management  
• IBM SPSS  
• IBM Omni Channel Merchandising suite, including Promotion Management, Markdown Optimization and Dynamic Pricing  
• IBM Commerce on Cloud  
• IBM Sterling Order Broker  
• IBM MobileFirst for iOS Merchant Suite  
• IBM Metro Pulse | • Merchandise operations strategy  
• Core merchandise management  
• Master data management (product information management)  
• Price and revenue strategy  
• Integrated merchandise planning  
• Advanced analytics for merchandising  
• Cross-channel marketplace portal  
• Price, promotions and assortment optimization  
• Promotion and trade analytics  
• Weather and location data analytics from The Weather Company | • Application management services for Oracle and SAP  
• Core Merchandising systems on private clouds  
• Weather data and insights from The Weather Company | • Core merchandising on Power Systems and IBM PureApplication® System  
• IBM PureData System for Analytics  
• Watson Internet of Things |

More information on each of these offerings is available on the ibm.com website. Contact your IBM representative to arrange a briefing.

**CASE STUDIES**

**AZBUKA VKUSA LLP**

This Russian supermarket chain teamed with IBM to build a cloud-based merchandising solution, to optimize their pricing strategy and increase profits.

- Tracks sales data, competitive pricing, and region-specific consumer demand
- Sets business rules to automatically assign prices that will lead to the ideal outcome
- Increased profits by up to 3 percent

**NEIMAN MARCUS**

With a suite of IBM solutions based on IBM InfoSphere Master Data Management, this US luxury retailer will implement unique product identifiers and better manage inventory across its retail divisions.

- Allow divisions to coordinate using a single consolidated merchandising system
- Save millions of dollars by reducing total inventory 7 – 10 percent
- Increase revenue by reducing the need to mark down merchandise

**COMERCIAL DPORTEÑIS S.A. DE C.V.**

This Mexican sporting apparel retailer deployed a comprehensive reporting and predictive demand-planning solution based on IBM technology, to make smarter, faster decisions about merchandising and demand.

- Achieved 100 percent ROI in six months by reducing lost sales due to stockouts
- Reduced the time to create store-level performance reports by 90 percent
- Significantly reduced losses through data-driven risk assessment
HOW WE DEFINE IT

With consumers now expecting to have complete flexibility in how and when they buy, receive, change and return merchandise, traditional channel-specific warehouse, allocation and replenishment processes may no longer fulfill demand efficiently. In today’s omnichannel environment, supply chain managers can no longer rely on a standard set of simple order-flow methods for moving products from source to consumer. Front-office and back-office processes must be connected to enable true “anytime, anywhere” commerce.

To fulfill on demand, leading retailers are driving agility across the supply chain ecosystem by investing in a number of improvements that can drive significant value for the retailer and the consumer. From the expanding Internet of Things—the world of connected vehicles, appliances and devices—to the realm of hyper-local data, including real-time weather, traffic, news and social buzz, supply chains can become more on-point and efficient than ever before. And, with new tools like Blockchain, which can establish a single, reliable view of all interactions by various counterparties, many sources of error, misunderstanding and conflict can be eliminated.

SUPPLY NETWORKS AND FULFILLMENT

WHAT YOU NEED

- **Optimized inventory planning**
  New demand forecasting capabilities based on insight into the drivers of buying behavior for each channel, location and product category, driving higher turns and margins. Advanced algorithms provide multiobjective, multiechelon scenario modeling that can help you optimize supply and distribution networks, transportation routing, product flow, service, and safety-stock levels.

- **Near-real-time inventory visibility**
  Visibility to inventory, purchase and customer order status, and available-to-promise across channels is now table stakes for omnichannel retailers. This enables the timely matching of supply to demand, with a near-real-time view of planned, actual and forecast consumer demand and inventory levels.

- **Omnichannel distribution and fulfillment**
  Fulfilling on the promise of omnichannel retailing is the next competitive battleground. To streamline the coordination of customer order, fulfillment and return processes, retailers need efficient, dual-purpose store and customer-order distribution facilities and the ability to manage inbound and outbound logistics operations networks.

- **Sourcing and supplier collaboration**
  Retailers must manage the global integration of bid sourcing and international inbound logistics, automate the flow of information with suppliers and with other supply network partners and manage contracts and performance agreements to optimize their supply network.

BUSINESS CONTEXT EXAMPLE

POTENTIAL BENEFITS

- Reduced operating costs
- Faster delivery times
- Improved product availability
HOW WE DELIVER IT

As with merchandising capabilities, each retailer’s journey to enabling new supply chain capabilities will be unique and will depend on starting point, goals and resources. Strategy and implementation services from IBM are key to our offerings here. The goal remains to help ensure the successful implementation of IBM solutions as well as solutions from third-party providers such as Oracle, SAP, Manhattan Associates and JDA Software.

To optimize inventory planning you need to detect what factors beyond POS data drive buying behavior and predict future behavior at the SKU-location level. IBM SPSS software provides this advanced customer analytics. And IBM Decision Optimization supply chain optimization applications use multiple variables, user-defined weightings, scenario modeling and optimization analytics to provide new insight into distribution networks, sourcing strategies, transportation routing, inventory levels and source-to-consumer flow activities. These insights help drive performance improvements that align with changing demand patterns.

IBM Cognos Business Intelligence and IBM PureData Analytics powered by Netezza software can enable exception-based, graphical, multilevel comparisons of plans, current state, forecasts and history so you have near-real-time inventory visibility for decision-making. IBM Supply Chain Visibility provides a comprehensive view of your inbound supply and outbound fulfillment activity across your supply network by providing and leveraging “anywhere, anytime” connectivity to your trading partners and enterprise applications.

Coordinating the customer order fulfillment processes across your enterprise and network of suppliers is the key to offering true omnichannel distribution and fulfillment for customers. IBM Order Management is designed to enable rules-based inventory sourcing, flexible fulfillment paths and continuous global visibility to all orders, regardless of what channels they are flowing through or what order changes may take place. IBM Watson Order Optimizer is designed to optimize the use of stores as fulfillment nodes for online orders, including the routing of individual customer orders.

The final core competency is sourcing and supplier collaboration. IBM B2B Integration is designed to provide visibility into the data and automate the complete “buy-sell-ship-pay” business process that involves a range of documents shared with trading partners, such as suppliers, banks and third-party logistics companies.

SELECTED IBM OFFERINGS

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<td>• Supply chain planning and execution</td>
<td>• Application management services for Oracle and SAP</td>
<td>• Warehouse and transportation applications on IBM Power Systems and PureApplication System</td>
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<tr>
<td>• IBM SPSS</td>
<td>• Sourcing and procurement</td>
<td>• Core Merchandising systems on private clouds</td>
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<tr>
<td>• IBM PureData Analytics powered by Netezza software</td>
<td>• Supply chain analytics</td>
<td>• Weather data and insights from The Weather Company</td>
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<tr>
<td>• IBM MobileFirst™ for iOS Store Associate Suite – Sales Assist and Pick and Pack</td>
<td>• Weather and location data analytics from The Weather Company</td>
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<tr>
<td>• IBM Metro Pulse</td>
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<td>• IBM Order Management</td>
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<td>• IBM Cloud Brokerage Solutions</td>
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<tr>
<td>• IBM B2B Integration</td>
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<tr>
<td>• IBM Enterprise Source to Pay</td>
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<tr>
<td>• IBM Enterprise Contract Management</td>
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<tr>
<td>• IBM Watson Order Optimizer</td>
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More information on each of these offerings is available on the ibm.com website. Contact your IBM representative to arrange a briefing.

CASE STUDIES

**ELIE TAHARI**

This US-based fashion brand implemented a predictive analytics platform based on a suite of IBM solutions, to make accurate forecasts about demand for their products several months in advance.

- Predicts product demand with better than 97 percent accuracy
- Reduced supply chain costs up to 30 percent by optimizing production to meet demand
- Increased sales and profits by ensuring popular products are available in stores

**DUSKIN CO., LTD.**

This Japanese food service retailer will use a predictive analytics solution based on IBM technology to make more informed merchandising decisions.

- Reduce costs by storing 50 percent less inventory
- Improve sales of existing products by reducing out-of-stock situations
- Support new product launches by better targeting customer preferences

**LA PERLA**

This designer and retailer of luxury apparel implemented IBM Decision Optimization to reconcile, synchronize and optimize its logistics and shipping operations.

- Established transparency to inventory availability and use
- Significantly increased compliance with customer shipping requirements
- Improved the efficiency of log...
Operations and Innovation encompasses a range of improvements that are designed to streamline back-office processes; take advantage of reduced-cost delivery models; optimize people, process and system capabilities at the store and enterprise level; protect the business in the face of fast-evolving threats; and establish much better visibility into organizational performance.

A host of new options are now available to retailers that need to consider ways to improve efficiency and reduce the cost of many back-office processes, including security, finance, administration, HR, recruitment, non-merchandise procurement and real estate management. By leveraging global delivery models and the high-quality execution available through managed services, the cost savings can be startling.

IT is another area in which recent advances have opened the door to efficiencies that were previously out of reach. New technology platforms such as cloud and mobile offer ways to deploy new applications and functionalities far more quickly and cost-effectively to employees, stores and partners, while advanced analytics can dramatically improve the efficiency of application portfolio management. In fact, cloud-based approaches can be a vital differentiator to help retailers cut IT costs, make IT much more flexible and robust, and quickly enable a wide range of critical business innovations that would otherwise be impractical.

Given the dangers of today’s environment, retail executives must address the challenge of digital security in a long-term, strategic way, using a multi-layered approach. It’s very important to anticipate security threats and put in place in-depth defenses to minimize the likelihood of a successful attack, use advanced, automated detection mechanisms to detect patterns and intrusions quickly, and establish a culture of informed vigilance that is prepared to react swiftly to attacks.

Likewise, the latest offerings in performance measurement and reporting can drive critical advances in the establishment of transparency across functions, timeliness of reporting, and the ability to align metrics and incentives to drive cross-organizational coordination, planning measurement, accountability and performance.
What it takes to drive innovation in operations

First, you should reconsider how each of your support functions is performed, taking advantage of the state-of-the-art options now available to leverage lower-cost, higher-productivity tools and resources.

Then, you must ensure that you are using the highest-quality, lowest-cost infrastructure to support your business processes, leveraging cloud computing, supporting mobile and other interactive capabilities for your stores, and ensuring security and privacy for your organization and for your customers.

Finally, you must establish leading-edge planning, analytics and reporting to give you an edge in serving customers and to uncover new ways to drive value from investments and operations.

Turn the page to learn about the portfolio of IBM solutions that enable better operations.
HOW WE DEFINE IT

Retailers are always under pressure to improve operational efficiency, reduce costs and increase productivity at the store and enterprise levels. Back-office processes can be one of the most fruitful areas to look for savings.

Our vision for back-office transformation leverages advances in cloud, social and mobile technologies to streamline and transform back-office operational capabilities, helping retailers manage their relationships with customers, employees and suppliers more effectively while also improving visibility into organizational performance across the enterprise.

WHAT YOU NEED

A strategic approach to determining which processes to consider for out-tasking
Look for processes that are critical to operations but offer little opportunity for competitive differentiation. Finance and accounting and nontrade procurement are just two of many examples in the retail sector.

A business partner that can leverage global scale and resources to deliver reliably, securely and with quality
Broad global capacity is needed to take advantage of the best talent-to-value choices, as are state-of-the-art quality and controls, including attention to the escalating importance of data security and privacy. Make sure retail’s distinctive needs, such as offering HR services across a geographically dispersed population of store employees, are provided for.

A well-developed methodology to tailor your managed services for your specific business requirements and circumstances
Proven methodology to institute quality control and consistency across processes, along with the ability to incorporate learnings into processes to make them more efficient and drive incremental productivity are core competencies for managed services providers.

BUSINESS CONTEXT EXAMPLE

Retailer processes
Merchandising
Supply chain
Sales
Finance
Human resources
Marketing
Operations

Provided through managed services
Enterprise security
Supply chain management
Finance and administration
Continuous process improvement
Recruitment process outsource
Human resources

POTENTIAL BENEFITS
Reduced general and administrative costs
Improved performance management through transparency of key performance metrics and dashboards
Lower risk of data theft and unauthorized release of private customer data
Reduced operating costs
HOW WE DELIVER IT

IBM has a wealth of practical business expertise to help retailers identify measurable growth opportunities to transform back-office processes for immediate cost savings as well as for sustained long-term performance.

Retailers typically consider managed services for operationally critical yet competitively non-differentiating capabilities. Managed services from IBM are focused on several of these, including:

**Finance and administration**: Managed procure-to-pay services from IBM not only help organize spend management and improve visibility into spend but also drive enterprise-wide process and data standards for enhanced business insight, stronger enterprise-wide process and data standards for enhanced business insight, stronger compliance control and improved financial performance.

- IBM supports 40 languages in more than 60 countries.
- IBM manages more than USD 50 billion in revenue for clients as part of our order-to-cash processes.

**Supply chain management**: IBM helps increase the value of retailer spend by leveraging our substantial buying power. This is particularly advantageous to retailers looking to reduce nonmerchandise procurement costs, mitigate risk, improve compliance and directly impact financial performance.

- IBM manages annual aggregate spend in excess of USD 48 billion.
- Clients typically achieve payback within 12 months, with a 5–10x ROI on procurement outsourcing fees.

**Human resources**: IBM integrates our experienced HR, recruiting and learning specialists with proven technology and a focus on core strategic HR and talent initiatives to create a high-quality employee and manager experience that is low in risk and strong on compliance.

SELECTED IBM OFFERINGS

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<tr>
<td>• IBM Emptoris software for sourcing and procurement contract management</td>
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<td>• IBM TRIRIGA® software for store and facilities management</td>
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<tr>
<td>• IBM Maximo® software integration assets</td>
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<td>• IBM Kenexa® software for recruitment</td>
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<tr>
<td>• IBM Watson Talent</td>
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<td>• Many additional IBM software and cloud solutions</td>
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<td>• IBM Finance Healthcheck</td>
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<td>• IBM Enterprise Architecture Assessment</td>
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<td>• IBM Enterprise Asset Management</td>
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<td>• IBM Smarter Workforce Accelerator</td>
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<td>• IBM Security Operations Optimization</td>
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<td>• IBM IT Security Consulting Services</td>
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<th>Technology platforms</th>
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<tr>
<td>• IBM POWER®™, IBM PureFlex™ System, System x</td>
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<tr>
<td>• IBM SmartCloud Enterprise+ (POWER, Intel), SoftLayer (Intel)</td>
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</table>

More information on each of these offerings is available on the ibm.com website. Contact your IBM representative to arrange a briefing.

CASE STUDIES

**BON TON**

This large US department-store chain uses IBM PowerLinux servers running IBM WebSphere Commerce to support significant customer growth and large seasonal e-commerce volume spikes, while also controlling the cost of software licensing.

- Achieved 2.5x greater throughput without increasing software licensing costs.
- Bon Ton is now able to deliver a consistently rich e-commerce experience, to more customers than ever before, even during periods of peak demand.

**YEALANDS**

This New Zealand-based winery implemented IBM Kenexa to enhance processes around employee innovation.

- Employee feedback processes as established with Kenexa increased employee engagement dramatically, and raised participation rates to 100 percent.
- As a result, Yealands is now ranked among the highest-scoring organizations by its employees, in terms of valuing their input and feedback.

**IKEA**

This global home furnishings retailer implemented an IBM asset and facilities management solution to monitor its assets, automate preventive management and track equipment usage and repair trends.

- Helped improve energy efficiency and promote renewable energy usage.
- Improved the customer experience by helping ensure that stores are inviting and in the best working order.
- Anticipate savings of 5 percent of global FM spending over six years.
HOW WE DEFINE IT

Retail IT has matured from being viewed mainly as a cost center to being recognized as a potential competitive differentiator. But the typical retailer spends a significant amount of its IT budget just to “keep the lights on” with existing—and often legacy—infrastructure rather than to deliver new, value-added functionality. This points to a serious opportunity to save on baseline IT costs and to free these funds for new digital capabilities needed to understand and service customers, especially when they are in your stores.

To support the new interactive and mobile capabilities consumers demand and employees need, upgrading store infrastructure is critical. Providing wireless access and bringing the interactivity and excitement of digital shopping into stores is what customers are demanding. Putting contextual information in the hands of associates in real time gives them the ability to seamlessly service consumers.

With these many new touchpoints inside and outside of the enterprise, security is top-of-mind with retail executives. The current environment of organized hacking is increasing attack frequency and sophistication, putting new demands on security operations to anticipate, detect and respond. Implementing stronger defenses, rethinking process controls, and working with law enforcement to investigate intrusion attempts are important strategies to safeguard against digital security failures.

WHAT YOU NEED

Enterprise security strategy to anticipate future security issues through early detection, removal and remedy
Anticipate security threats, use advanced, automated detection mechanisms to detect patterns and be prepared to react swiftly and effectively to arrest attacks. Advanced IT security design is critical to safeguard critical data and systems and protect customers and the enterprise from unauthorized access.

Advanced technology platforms designed to reduce waste and facilitate rapid, low-cost application deployment
Virtualization and cloud-computing models are designed to help reduce your costs and unused capacity. The latest in automated application deployment empowers you to set up environments more quickly and cost-effectively and to drive the quicker implementation of new features, including mobile applications and digital technologies. Advanced application portfolio management facilitates testing, management and security as well as the development of incremental value-add features and functions that help you quickly develop capabilities customers are expecting.

Store IT infrastructure optimization
Upgrade infrastructure, develop new digital capabilities and effectively manage resources to support the mobile enterprise and new computing models in stores. Refresh store architecture, implement in-store networks and end-user applications, and manage devices.

BUSINESS CONTEXT EXAMPLE

POTENTIAL BENEFITS

Reduced overall IT spend
Faster time to deployment of new functionality
Lower probability of security breaches
HOW WE DELIVER IT

Refreshing and securing the enterprise—particularly for stores—typically can’t be accomplished through a single solution or software package. It requires a set of elements tailored to suit your needs and aimed at delivering significant cost advantages to your IT organization. This is an IBM specialty and one we have been delivering successfully for many years. Our approach is designed to free IT funds that are being wasted on current inefficient designs.

By leveraging advanced technology platforms, such as the IBM PureSystems® family, and IBM PureApplication System, we can efficiently consolidate and optimize the use of systems to deliver retail applications such as merchandising, supply chain, store, e-commerce, finance, HR and analytics. We also leverage SoftLayer global cloud infrastructure for cloud computing to expedite the deployment of new workload systems and applications as well as to deliver efficiency and savings via a variety of possible models, ranging from on premises to fully hosted and managed.

As the physical and digital world converge, we help you implement the right wireless infrastructure to bring the interactivity and engagement of online into your stores. Mobile technologies can allow you to have relevant and continuous dialogue with customers.

IBM Global Business Services can help you establish a technology framework with a mobile strategy that aligns with your business goals. We call this Store-as-a-Service.

The next element is to establish an efficient structure for testing, maintaining and managing your application portfolio. By leveraging our skills in managing enterprise applications globally, we can implement efficient testing methods to improve the quality of your capabilities and to develop new features and functions cost-effectively.

Augmenting this is our industry-leading IT security and systems management solutions based on IBM Tivoli® software, which protects the store and the enterprise and helps facilitate data security, privacy and compliance.

IBM offers one of the most advanced and comprehensive portfolios of security-related services and solutions for the retail industry, with our enterprise security strategy encompassing advanced system security to defend every network access point, advanced analytics to continuously scan for and detect patterns that may indicate an intrusion, and effective process controls and rapid response mechanisms to establish a culture of informed vigilance, and to enable quick action when a breach does occur.

SELECTED IBM OFFERINGS

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<td>• Application testing and management</td>
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<td>• IBM Fiberlink® mobile device management on cloud</td>
<td>• Store-as-a-Service</td>
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<td>• IBM Security Maturity Benchmark Assessment</td>
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<td>• Mobile Enterprise Management Services</td>
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<td>• Mobile Infrastructure Integration and Optimization Services</td>
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CASE STUDIES

HOME SHOPPING NETWORK, INC.

This US-based multichannel retailer implemented a security risk management solution based on IBM API Management, allowing them to better monetize customer data without putting that data at risk.

- Reduced costs of security audits up to 50 percent by using fewer servers
- Opened new revenue streams by making it easier for developers to use customer data
- Reduced the risk of data breach

GAMESTOP

This gaming retailer deployed a cloud integration and development environment based on IBM technology. This allowed them to develop apps that improve customer interactions.

- Employees stay highly knowledgeable, allowing them to serve customers better
- Customers get a compelling experience, encouraging them to return
- The company is well-positioned to adapt in a rapidly changing industry

AN INT’L RETAILING GROUP

This international retailing group upgraded its security access management environment to protect user access and improve efficiency.

- Reduced cost 30-40% annually
- Implemented protection against new security threats
- Increased flexibility
HOW WE DEFINE IT

To drive growth and profits across complex organizations, everyone must consistently be working toward a single, coherent and visual set of shared information, business plans, financial goals and objectives. But the fact is that at most retailers, key functions still operate largely in separate silos, with a lack of alignment between operations, channels, marketing, merchandising and supply chain. There is often a disconnect between the financial measurements that drive how people make decisions and individuals’ actual performance. This problem is exacerbated by the lack of effective ways to spot trends and issues early so as to quickly move to react to them.

The answer is to implement the set of capabilities we call performance insights and planning, and then leverage this to drive visibility into performance and the alignment of incentives for performance across the organization. There also needs to be alignment of corporate strategy to operational execution. Retailers that excel in this area put themselves one step ahead of their competitors in understanding what to do next—and that intelligence can be key to driving significant incremental profit.

PERFORMANCE INSIGHTS AND PLANNING

Enterprise-wide financial planning, forecasting and reporting to define metrics and goals for each role in the organization in alignment with the overall business strategy

Developing consistent metrics across departments is key to the alignment of top-down and bottom-up plans and to ensure that everyone is working toward common objectives and projects. What-if analysis and scenario modeling can help you determine the financial impact of business decisions and take the best course of action. Reporting and analytics provide timely identification of execution issues through alerts and trend tracking, while flexible planning tools allow you to re-plan quickly as business conditions change.

Sales performance management to increase visibility into expenses and enable varied types of compensation plans

Automating the process of calculating and reporting variable-based pay provides more visibility and accountability into one of the organization’s largest variable expenses—staffing. Powerful tools allow you to use new kinds of compensation plans that can drive desired sales behavior, reduce commission cycle times and eliminate errors in overpayments.

Advanced analytics to identify root causes and emergent performance gaps and to anticipate changes in marketplace demands

The goal is to be the first to understand root causes; anticipate performance gaps; and identify changes to consumer demand, competitors, suppliers and the economy. Predictive analytics enables rapid reforecasting to adjust to changes and assess alternative courses of action.

Cognitive computing to dive deeper into subjects and insights where perhaps no one has thought to look before

The new era of cognitive technology processes information more like a human than a computer—by understanding natural language, generating hypotheses based on evidence, and accelerating the research and discovery by unlocking patterns across all types of data to answer questions with accuracy and precision.
HOW WE DELIVER IT

The key with performance planning, reporting and analysis is to achieve a tight integration of people, processes and systems to coordinate planning and measurement across the enterprise. The first element, enabling an effective enterprise-wide financial planning, budgeting and forecasting process, is delivered with IBM Planning Analytics enterprise planning software.

Using performance data and assumptions, Planning Analytics software allows you to conduct what-if analysis and to model the effect of business decisions. Building on that, it empowers you to create a company-wide financial plan to establish and govern operational goals and planning for each functional area. This is the way to help ensure that the metrics and incentives as defined for each buyer, merchandise planner, supply chain specialist, marketer or promotion planner, store associate, store manager, and HR professional are directly tied to overall corporate goals. All members of the organization are able to act in concert to drive growth and profits.

Sales Performance Management helps align associate sales performance with corporate strategy. Through automation and new plans, you can increase accuracy, reduce costs and drive desired actions and sales performance though appropriate incentives, delivering measurable improvements for your organization.

The next component, a comprehensive performance measurement and reporting system, is delivered with Cognos Analytics software. Cognos Analytics software can produce reports, provide dashboards, and deliver scorecarding and analysis to track key metrics so managers and executives can track and understand operational and financial performance.

IBM SPSS advanced analytics helps you understand the root cause, anticipate performance gaps and assess alternative paths of actions so you can predict with confidence what will happen next, allowing you to make smarter decisions, solve problems and improve outcomes. In addition to the insight drawn from internal data, leveraging external data sources, both structured and unstructured, from social media sources, news outlets, local events, weather and more, gives retail executives better visibility and insight for decision-making.

Cognitive computing is the final, highly intriguing element here. IBM Watson, a cognitive technology, processes information more like a human than a computer by understanding natural language, representing a major shift in an organization’s ability to quickly analyze, understand and respond to changes in the business. Watson’s ability to answer complex questions with speed, accuracy and confidence is transforming decision-making across a variety of industries, including answering some of the most important and complex problems in retail.

SELECTED IBM OFFERINGS

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CASE STUDIES

DFS

This UK furniture retailer deployed an analytics platform based on IBM business analytics software and running on a SoftLayer cloud infrastructure, to accelerate reporting and analysis.
- Increased productivity and resource allocation by accelerating reporting by 99 percent
- Support strategic growth initiatives by returning data-based insights in seconds
- Reduced capital expenses dramatically with a scalable cloud hosting platform

YOUNGOR GROUP CO., LTD.

This Chinese clothing and textile manufacturer implemented a new business analytics platform based on IBM software, to gaining a significantly improved understanding of their business.
- Make informed decisions quicker by cutting reporting time by 86 percent
- Ensure seamless visibility by integrating data from 10 different divisions
- Pursue new business opportunities proactively, based on 193 KPIs

DESTINATION XL GROUP, INC.

By developing a sophisticated cloud-based compensation modeling solution with IBM Sales Performance Management, DXL sales associates now focus on customers’ preferences and style, not body type or size. Sales Performance Management at DXL has resulted in:
- Increased customer loyalty due to improved experience and service
- Greater visibility to performance metrics for sales associates
- Reliability in a solution that reduces HR workloads, audits and compliance challenges
IBM’s commitment to the retail industry

IBM has more than 4,000 professionals focused on the retail industry around the world as well as one of the largest global networks serving retail, with almost 2,000 IBM Business Partners.

IBM’s preeminence in the development of leading industry solutions is the direct result of our strong commitment to research and development. We invest more than USD 5 billion annually in R&D, and for 23 consecutive years have been the leading patent-earning organization in the United States. IBM earned 7,355 patents in 2015 alone.

IBM ANALYTICS
IBM Analytics enables anyone to engage with data to answer the toughest business questions, uncover patterns and pursue breakthrough ideas. Manufacturer-specific advanced analytics solutions help consumer products organizations transform insight into action.

IBM WATSON
IBM Watson, a cognitive system that enables a new partnership between people and computers that enhances, scales and accelerates human expertise. IBM Watson Analytics brings intuitive visualization and predictive analytics to every business user. IBM Watson Ecosystem developers and partners can embed cognitive computing APIs (application program interfaces) into their cloud-based applications to deliver innovative Watson-powered consumer products industry solutions.

WATSON MARKETING
Tap into new insights from inside and outside the organization, revealed by customer behaviors, patterns and sentiment to fuel new business opportunities.

WATSON SUPPLY CHAIN
Solve problems proactively with an embedded expert at your side giving you recommendations and helping the entire team get ahead of problems before they arise.

WATSON COMMERCE
Better understand customer preferences, behaviors and market influences to capitalize on opportunities and trends and deliver personalized customer experiences.

IBM MOBILEFIRST
Combine the power of enterprise data and analytics with an elegant user experience to redefine how you empower your consumer products organization to interact, learn, connect, and perform.

IBM SECURITY
Our security software and services help clients protect against advanced threats, fraud protection, identity and access management, and leading application, data and infrastructure security capabilities.

IBM CLOUD
IBM cloud solutions includes infrastructure as a service, software as a service and platform as a service offered through public, private and hybrid cloud delivery models. By leveraging the power of agile cloud development, organizations can make faster and better business decisions with total visibility and control.
FOR MORE INFORMATION
For more information on any of the solutions described in this solution guide, contact your local IBM representative or visit ibm.com/retail.

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