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# Business Analytics in Retail

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## *Learn to:*

- Put knowledge into action to drive higher sales
- Use advanced analytics for better response
- Tailor consumer shopping experiences
- Integrate business functions to create efficiencies

**Jennifer LeClaire  
Danielle Dahlstrom  
Vivian Braun**





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**by Jennifer LeClaire,  
Danielle Dahlstrom,  
and Vivian Braun**

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## **Business Analytics in Retail For Dummies® 2nd IBM Limited Edition**

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# Introduction



**D**ata is the key that unlocks greater sales potential for retailers — but the truth is you may be overwhelmed with so much data that it can seem impossible to make sense (much less value) of continuous information streams. This book offers principles and tools you can use to discover how your customers behave — and how to put that knowledge into action to drive more sales.

## *About This Book*

Business Analytics isn't a new concept, but new technologies and capabilities have emerged that make it possible for average business users — from finance to marketing to merchandising and beyond — to analyze and understand a plethora of data. If you're looking to find out how to tap into the power of these technologies to discover insights that, when acted on, drive revenue growth and improve customer relations, this book is for you. If you work for a consumer product manufacturer that wants to improve the go-to-market strategy by better understanding consumer behavior or simply wants to achieve great efficiencies, this book is also for you. Welcome to *Business Analytics in Retail For Dummies*, 2nd IBM Limited Edition!

## *Icons Used in This Book*

Every *For Dummies* book has small illustrations, called *icons*, sprinkled throughout the margins. These tiny images call special attention to text for one reason or another. Following are the icons used in this book.

## 2 Business Analytics in Retail For Dummies, 2nd IBM Limited Edition



The Remember icon highlights points to keep in mind as you immerse yourself in the world of Business Analytics.



Right-on-target information you can use to help make the most of any investment in Business Analytics is next to this bull's-eye.



The Warning icon does just that — warns. It helps you avoid common mistakes, misconceptions, myths, and pitfalls. Be sure to look for it so you don't do more harm than good as you wade through the world of Business Analytics.

## Beyond the Book

We recognize that we can't cover every last detail about Business Analytics in this book, so if you want to discover more in-depth information in white papers or case studies, check out [www-01.ibm.com/software/analytics/retail](http://www-01.ibm.com/software/analytics/retail). Hopefully, this helps you further understand how other retailers have tackled the challenges that you face. Or you can visit the URL just for information on events, where to go for assistance, and what useful tips are out there for you.

## **Chapter 1**

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# **Understanding the New Consumer**

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### ***In This Chapter***

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- ▶ Looking at retailing in the 21st century
  - ▶ Understanding and adapting to the characteristics of modern consumers
- 

**D**o you *really* know your customers? Do you know who they are? Do you know how likely they are to buy your products or services? Do you know where they shop and how they shop? Would you like to know? Retailers who know their customers — and apply what they know about their customers' preferences — are finding a competitive advantage in the marketplace. Customers leave footprints — whether they actually make a purchase or not. Those footprints are created when customers and potential customers browse your website, perform mobile searches, answer surveys, question your staff, contact your call center, and, of course, make purchases. Those footprints leave clues about who your customers are, who influences them, what they're buying, how often and where they shop, and much more.

Much like a detective relies on his trusted evidence collection kit to solve a case, you can use Business Analytics to gather customer clues that demystify shopping preferences, and apply those clues to draw insight and reach conclusions. *Business Analytics* includes the technologies and applications that allow organizations to mine data to glean insights that improve decision making. Indeed, with a clear picture of your customers, you can develop and deliver a complete offering that consistently reflects back to them — as they engage with your business — what they've "told" you they want from you, the retailer.

In this chapter, you familiarize yourself with the challenges of retailing in the 21st century, the characteristics of modern consumers, and how to adapt your business model accordingly.

## *Retailing in the 21st Century*

Digital communication is the new norm for most 21st century consumers. This reality along with the speed of technological innovation and the various types, volume, and speed of consumer data created today are impacting every industry — but few are feeling the effects more than the retail industry.

Think about it for a minute. There's a social media platform to suit every niche. Online product reviews and recommendations are the new "word of mouth" marketing, with much greater reach. Mobile devices are more pervasive than ever before in history, spanning geographies, social status, and demographics. New purchasing channels continue emerging and consumers are more empowered and informed about their choices.

The result is increased complexity for retailers to accurately understand customer behavior and purchase patterns, develop meaningful customer segments, predict demand, optimize delivery, protect margins, and drive profitability. Making matters more complex, consumers are demanding a seamless experience from the retailer, regardless of touch point, what they need, or how they're shopping. That makes customer attainment, retention, and growth more critical yet more complicated.



So, what's the 21st century retailer to do in this game of survival of the fittest? Adapt. Indeed, the retailers who best adapt to the current consumer-driven landscape are the retailers who build loyalty and drive the strongest results.

# *Understanding the Characteristics of Modern Consumers*

The IBM Institute for Business Value has identified three characteristics of 21st century consumers. You take a look at these characteristics in this section.

## *Modern consumers are instrumented*

With the Internet, mobile devices, in-store technologies such as tablets, and public kiosks — among other continuously emerging new technology as well as traditional marketing media — consumers have instant access to a wealth of information about retailers and their products. Consumers are actively using this information to decide what to buy, where to buy, what price to pay, and what payment method to use. Consumers can shop with a few mouse clicks through comparison shopping engines or through online retailers that carry the same product from several vendors.

Younger consumers, particularly Millennials and Generation X, are especially quick to embrace new technologies to enhance their individual shopping experience. Consumers living in emerging markets are even more enthusiastic about tapping technology for e-commerce because it opens a world of shopping choices that were previously unavailable due to economic conditions or logistics. As a matter of fact, more than 500 million mobile devices are in use that are owned by individuals who don't have electricity in their homes and rely on solar power or village charging stations.

Despite this reality, focus can't completely shift from brick and mortar to digital formats. Keep in mind that consumers use mobile devices for retail purposes that range from finding stores to checking prices and inventory to subscribing to promotional offers. At the end of the day, brick-and-mortar stores are still the instrumented consumer's primary purchase channel.

## *Modern consumers are interconnected*

The ways consumers learn about retailers and products have radically changed. Once upon a time, retailers were the primary source of information about their stores and goods. Now, consumers rely surprisingly little on retailers for input. That's because millions of people around the world are interconnected via social networking sites and read customer comments and product reviews online.

In other words, consumers are listening more to other consumers than they are to retailers. Consumers are influencing purchase decisions of other consumers they don't even know — and sometimes that sway is happening on a retailer's own social network. One-third of the consumers IBM polled are likely to "follow" a retailer on a social network, chiefly to try new products and get preferred customer status. But these same consumers will rely on other consumers for information about product satisfaction.

This phenomenon will only grow in the years ahead. The world's population is expected to grow around 12 percent over the next decade, according to United Nations census data. More people are now living in cities than rural areas, and half of the emerging world's population is considered middle class by their country's standards. The result is a larger pool of more prosperous, more diverse, more technology-savvy, and more demanding consumers.

## *Modern consumers are intelligent*

Consumers are not only becoming more instrumented and interconnected, but also they're intelligent about how to embrace technology for smarter shopping. Today's consumers have clear ideas about what they want — and what they expect — from retailers.

In its consumer study, IBM used *Max Diff analysis*, where respondents compare different attributes just as they do when shopping in real life, to identify what matters most when deciding where to shop and where they think retailers most need to improve. IBM discovered that consumers believe retailers should focus on offering better promotions and

prices, and making product improvements. More specifically, consumers want personalized discounts and consistently available products, followed by better value, quality, and variety. Nearly two-thirds of consumers also said that they would spend more money with a retailer if that retailer made the improvements they suggested and offered a personalized brand experience.

## *Adapting to the 21st Century Customer*

In the game of survival of the fittest, the 21st century retailer needs to adapt. Indeed, the retailers who best adapt to the current digital media-driven landscape are the retailers who drive the strongest results, quarter after quarter after quarter. To deal with the challenges and opportunities of the modern retail world, savvy retailers are turning to Business Analytics. Business Analytics isn't an ancient theory executed by statisticians; it's a necessary business tool that's applicable to all decision makers in the organization to meet the needs of customers and increase their loyalty.



Business Analytics helps retailers adapt to this new breed of consumers in these ways:

- ✓ Analyzing customer behavior, buying patterns, and sentiment — and responding to their individual needs
- ✓ Delivering personalized promotions for the right products at the right time and in the customer's preferred method in order to motivate purchases
- ✓ Accurately predicting demand in order to optimize assortment, protect margins, and drive profitability
- ✓ Understanding top customers, how to retain and grow them, and how to develop additional customers
- ✓ Creating a brand experience to build customer loyalty, taking into account the omni-channel approach of many customers who want to leverage all channels on their shopper journeys
- ✓ Gathering information about and analyzing influencers of your customers and understanding how they impact your customers' purchasing decisions

These new retail realities are not only changing the way retailers conduct business, but also they're significantly impacting the way retail organizations are structured and where investments are targeted. For example, running channels in silos is more costly for retailers, and it fails to address the needs of the omni-channel customer who wants a consistent and cohesive brand experience whether he researches or shops online, in a store, at a kiosk, over the phone, or by using a mobile device.



Presenting a unified brand experience to the customer depends on alignment of the customer strategy and access to the right information across the entire retail organization. This can be a challenge, but it's one that pays significant dividends. Indeed, this investment in organizational alignment is critical in the customer's path to purchase and ultimately builds customer loyalty while staying true to the overarching corporate strategy.

## **Chapter 2**

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# **Big Data Meets Business Analytics**

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### ***In This Chapter***

- ▶ Harnessing the power of information
  - ▶ Understanding the components of Business Analytics
  - ▶ Coming to informed and risk-aware decisions
  - ▶ Aligning business strategies to outcomes
- 

**I**magine harnessing the power of information to create a demand-driven merchandising and supply chain, reduce costs, and drive operational excellence to new heights to deliver a shopping experience that outdoes your competitors. Business Analytics makes that possible.

In this fast-paced information age, the need to effectively manage and understand information has never been more vital. Retail has always had a lot of data (just think transaction logs), but now Big Data is entering the scene. An explosion of customer and business information, in a variety of forms, is creating countless challenges for retailers. Consumers are more connected, more empowered, and more demanding, and they can choose where, how, and when they want to shop. It's truly a buyer's market.

Forward-thinking retail organizations armed with access to this data, and who are able to translate that data into actionable insights, are turning these challenges into profitable opportunities and building customer loyalty. Call it an information-led transformation. This change in thinking and approach to data and insight give retailers the ability to better understand history and what's happening today to predict future trends.

In this chapter, you discover how to harness your data to identify the pain points that could be impacting your growth and how to extract key information from your data to soothe those pains. You also learn how to make the case for Business Analytics in your organization and begin to align your business strategy to desirable outcomes.

## *Harnessing Data: Variety, Volume, Velocity, and Veracity*

Data is being generated at a rate never before seen in history. Retailers are working to collect, organize, and leverage that data appropriately to gain insights that can drive actions and decisions leading to greater customer satisfaction and loyalty, and ultimately impacting bottom-line profits. Business Analytics makes that data capture, translation, and next best action possible.

The current digitization of virtually everything creates new types of large and real-time data across a broad range of industries. As this book is being written, people are creating 2.5 quintillion bytes of data daily across the globe, with 17 terabytes coming from Facebook and Twitter alone. Consider the implications of this statistic: Ninety percent of the data in the world today has been created in the last two years — and there are no signs that data creation is going to slow. In fact, the volume and speed at which data is being created will bring new challenges to retailers in the years ahead. Making matters more difficult, much of the data is in non-traditional and unstructured forms. Organizations struggle to establish the accuracy of much of the data, so they need to combine and measure data across multiple sources to create a more accurate and useful data point.

These facts are sparking questions about how to best capture the data and how insights derived from that data impact a retailer's strategy. The answer for many retailers is to tap into the advantages of advanced analytics technologies and strategies to extract insights that help retain existing customers and attract new ones. Business Analytics capabilities create new opportunities for retailers to meet the needs of their consumers and create a competitive edge in the marketplace.

## Identifying retail pain points

Before you can harness the power of information, you first need to understand the specific problems you hope your data insights will solve. The overarching challenge for many retailers is to cost efficiently provide a seamless, *omni-channel shopping experience* — an experience geared toward consumers who interact with your brand online, in a store, over the phone, by using a mobile device, at a kiosk, from a catalog, or all the above — to your customers. Your goal is to provide the right product, at the right price, in the right place, and at the right time. But many obstacles are in your path.

When you drill down into this challenge, for example, you have to determine what consumers want and work the dynamics of supply and demand to deliver on those expectations in real time. Ultimately, you need the best tools available to win customer and brand loyalty, while avoiding unnecessary costs.

## Asking the critical questions

Every day, retailers are taking steps to increase their efficiency, improve their customer experiences, and develop smarter retailing strategies. Retailers who don't enter this race will be left behind.



To find out if your organization is working smarter in retail, start by asking some critical questions:

- ✓ To what extent do your employees have access to the information they need at the time and place they need it?
- ✓ With which suppliers have you moved beyond cooperation to constructive collaboration?
- ✓ Which of your operational processes are able to adapt and respond quickly to changing marketplace demands?
- ✓ How much value are you getting out of the information stored across your organization? How much external information do you leverage in your strategy and decision making?
- ✓ How well do you know your customers' preferences?

## *Extracting meaning from the mountains*

Data pours in from multiple systems, channels, and regions around the clock. The challenge is how to consolidate, organize, and extract meaning from the various data sources to inform decision making and enable productivity and agility in the face of multi-faceted market demands.

Business Analytics has the keys you need to unlock the mysteries hidden deep within your data and empowers your organization to spot trends and discover underlying causes and issues. Today's Business Analytics tools offer flexible, user-friendly reporting, analysis, modeling, predictive, and planning capabilities that make it possible for everyone in your organization to tap into the information they need to make informed decisions across all departments, locations, functions, and roles.

## *Creating an interconnected organization*

As you extract meaningful information from the mountains of data you collect, it's vital to make sure the various stakeholders in all departments in your retail organization understand how to take action on that data — and how those actions impact other parts of the organization. Business Analytics software enables you to tailor the information to each individual's role for security purposes and to avoid information overload.



Industry leaders are distinguished by their ability to leverage all information, all people, all perspectives, and all decisions at the point of impact. The aligned and insight-driven retailer has the opportunity to improve performance in areas critical to the organization:

- ✓ Creating a smarter shopping experience means that the retailer uses insight into consumer behavior and purchase patterns to provide a personalized path to purchase perceived as valuable to consumers and thereby increases customer advocacy and brand loyalty.

- ✓ Building smarter merchandising and supply networks helps the retailer provide the right merchandise in the right place at the right time for the right price. That maximizes revenues, minimizes stockouts and markdowns, and protects margin.
- ✓ Driving smarter operations allows the retailer to improve planning and be more agile in the dynamic retail environment. Keeping stores, labor, assets, and business processes aligned around strategic initiatives and corporate *Key Performance Indicators (KPIs)* — detailed specifications used to track business objectives — creates an environment of visibility, accountability, and collaboration.

## *Understanding the Business Analytics Pillars*

Business Analytics is a broad set of technologies and practices used to understand and enhance business performance. In this section, you take a look at the pillars of Business Analytics.

### *Business intelligence*

*Business Intelligence (BI)* includes the concepts, methods, and technologies that gather and analyze data to drive better decision making.



BI has been around since 1958, when IBM researcher Hans Peter Luhn first used the term. Decades later, technologies are available that have made BI a mainstream business function.

BI uses querying, reporting, analysis, scorecards, and dashboards to make it easier for business users across the organization to find, analyze, and share the information they need to improve decision making. Visualization, ad-hoc functionality, mobility, drill-down, and drill-through are just some of the capabilities that allow users to understand the current state of business and why they're experiencing a certain level of performance.

BI has come a long way, and capabilities continue to evolve, offering deeper insights that can be applied across the organization by any user. Without this evolution, organizations wouldn't be able to cope in this world of Big Data. With modern-day BI, business users across marketing, merchandising, finance, supply chain, and so on can easily access and consume data relevant to their roles.

## ***Advanced analytics***

*Advanced Analytics* (AA) leverages historical, current, and future possibilities to help retailers see potential results if certain decisions are made and executed. AA includes data mining, predictive modeling, what-if simulation, statistics, and text analytics to identify meaningful patterns and correlations in data sets to predict future events and assess the attractiveness of various courses of action. Algorithms automatically find significant patterns, and models "learn" from past data and update predictions for current or new business questions.

With AA, retailers move from foundational reporting to differentiating and breakaway capabilities, leading to a significant competitive advantage. AA allows the retailer to predict a consumer's response to an offer and use that result to draw conclusions about financial performance, supply chain requirements, and operational needs. AA is game-changing for retail organizations as they generate greater results and efficiencies with better information and insights into predictions about future outcomes. It allows them to become prescriptive through targeted offers and other incentives to encourage certain consumer behavior and interaction.

## ***Performance management***

Business Analytics is rounded out by capabilities in *Performance Management* (PM), which allows for simplified, structured, automated, and dynamic modeling to understand the implications of various scenarios. BI and AA drive the input to what-if planning in PM.

PM gives the business the flexibility to build best-case and worst-case scenarios; for example, modeling outcomes of changes in demand, then pushing those scenarios through to merchandising and operations to get a full picture of

the impact, and finally driving those decisions through to finance to understand the implications to the bottom line for the organization.

PM creates the opportunity to link financial and operational plans through driver-based modeling and rolling forecasts, and gives users visibility and access to the right information at the right time to build confidence in the data and results. This modeling environment also ensures consistency between corporate strategy and field execution, creates a culture of continuous planning, and keeps the entire organization aligned around the strategic objectives of the organization.



An additional string to the PM bow is risk management, which helps the organization understand and act in accordance with various risk areas, including market, credit, and liquidity risk to optimize decisions and satisfy external and internal governance requirements.

## *The analytical decision management advantage*

When it comes to retail, decision making is hardly automatic for most organizations. Many managers spend hours collecting data, crunching numbers, and doing collective gut checks in high-level boardroom meetings. Unfortunately, those old-fashioned methods don't always produce new market success. The competitive advantage in today's global marketplace is the ability to manage, optimize, and automate decisions through *Analytical Decision Management* (ADM), a solution that allows you to prioritize and execute business strategies faster and more effectively than the competition via informed choices.



Your challenge is to make better use of data in decision making, knowing there is a vast amount of data and not enough time to analyze to make informed decisions. ADM can help you guide business processes and customer interactions, even in the face of changing conditions, by employing business rules, a decision process framework, and predictive analytics to optimize and automate decisions, enhance outcomes, and solve specific business problems.

## Making More Informed and Risk-Aware Decisions

Improving business results by optimizing decision making is the end goal, but understanding the types of decisions to be made, who owns those decisions, and whether those decision makers have access to the right data and understand the information provided are critical to the success of the organization.

Risk management solutions help companies make risk-aware decisions through smarter enterprise risk management programs and methodologies. The result: stronger business performance and better outcomes. Risk management capabilities can help your company achieve profitable growth and address increasing demands for regulatory compliance in today's volatile and complex market conditions. Specifically, risk management solutions enable you to

- ✓ Improve decision making by providing risk analysis, insight, and transparency.
- ✓ Increase return on capital by making risk-informed decisions on how to optimize capital allocation and comply with Sorbanes-Oxley requirements.
- ✓ Accelerate and streamline risk processes to reduce cost from credit losses and manage operational risk.
- ✓ Reduce the cost of regulatory compliance.
- ✓ Dynamically evolve with a risk architecture that can efficiently adapt as risk management practices, market demands, and regulations change.

Broadly speaking, three primary decision types exist: strategic, tactical, and operational with some crossover among roles. Armed with a clear understanding of decision types, you can start determining which decisions can be automated and optimized for your operation's financial benefit. The key is to optimize and automate decisions in ways that make data-driven business strategy the foundation for action.

## *Making strategic decisions that set direction*

Strategic decisions set the long-term direction for an organization. A strategic decision could be an initiative that results in guidelines from which tactical decisions are made. Strategic decisions require flexibility and are often made in response to or in anticipation of changes in business or market conditions. Strategic decision makers include C-level executives, vice presidents, and directors who make decisions about issues such as what top level consumer segment to target, what channels to invest in, and whether to acquire a company to expand market coverage. With Business Analytics, these strategic decision makers can evaluate scenarios to explore potential outcomes before making any concrete moves.

## *Gaining visibility to determine tactical decisions*

Tactical decisions generally include forming policies or processes and focus on a specific project or objective executed at an operational level. They serve to make operational decisions more similar and anticipatory and are driven by the need to establish efficient, repeatable, scalable processes by using accurate and timely information. Tactical decisions require visibility into the business and an understanding of external conditions and influences, and the decision makers include line of business managers, system managers, and business analysts who deal with decisions about issues such as returns policies, category mix, and promotions guidelines.

## *Using real-time information to make operational decisions*

Operational decisions are commonly frontline actions that apply a policy, process, or rule set to a specific case. These types of decisions lend themselves to automation and make outcomes more consistent and predictable. They require accurate and often real-time information for peak effectiveness, and given the fast-paced environment surrounding these decisions, providing this information in an easily consumable and role-specific format through Business Analytics is critical.

Operational decision makers include customer service representatives, marketing managers, store managers, sales associates, and automated systems such as website recommendation engines. People in these roles make decisions about issues such as when to try to up-sell a customer or when to issue a refund and what products to offer on promotion.

## *Aligning Outcomes to Your Business Strategy*

Business Analytics technologies are user-friendly enough for any contributor in your organization to drive valuable insights with a minimal learning curve. Although the short-term return on investment (ROI) on Business Analytics tools can be exponential, even when deployed in isolated areas, you need buy-in from your organization's key stakeholders to drive the most value from these tools and create an integrated organization with transparency and visibility into data and results and alignment of plans.



It's critical to make the case for Business Analytics with executives, business users, and other stakeholders in the organization because decision makers need to wholeheartedly support how these technologies and practices can drive positive impacts to top-line sales and bottom-line profits.

In a recent IBM CEO study, participants were asked how effective their organizations were at deriving value from their data. Across the three dimensions of access, insights, and action, the organizations able to leverage data to make confident decisions were identified as outperformers and far surpassed their underperforming peers. They're insight-driven and use those insights to make critical business decisions.

## *Communicating the value of analytics*

Data by itself isn't useful. In fact, it can be overwhelming unless you can extract value from it. Business Analytics helps retailers overcome four key data challenges:

- ✓ **Lack of insight:** Retailers need strategic insight into the organization's performance to avoid managers making critical decisions without the information they need.
- ✓ **Inefficient access:** Most managers don't have access to the information they need to do their jobs well. Without access to data at the level required, they're forced to make decisions based on instinct versus insight.
- ✓ **Inability to predict:** Predictive capabilities drive better decision making. Without advanced modeling capabilities and an understanding of the real drivers of performance, decisions can be made that are sometimes costly.
- ✓ **Inability to act as one:** Planning capabilities allow decisions to be shared, the impact understood, issues negated, and strategies to be implemented at the front line.

## *Aligning around the point of impact*

The entire retail organization is affected, and must be aligned around the point of impact, from merchandising to human resources to operations to marketing and beyond. Business Analytics helps you

- ✓ Give the merchandising team the ability to dynamically change and tailor assortments based on insight into consumer purchasing patterns and demographic, location and other demand drivers.
- ✓ Ask Human Resources to secure appropriate resources and generate staffing and hiring plans based on forecasts, growth, and skill sets required, in addition to creating compensation plans and targets that are aligned around corporate strategy and customer loyalty.
- ✓ Increase operational efficiencies by optimizing inventory and minimizing stockouts and markdowns, resulting in stronger margins and increased revenues.
- ✓ Allow marketers to analyze consumer data from all sources, create relevant and granular customer segments, and personalize promotions to motivate consumers to purchase.

- ✓ Align corporate goals and KPIs around the organization's strategy, which drive down operating costs and improve profitability, and align finance to operations.
- ✓ Integrate plans, budgets, and forecasts across merchandising, distribution, stores, and finance to build efficiencies, reduce bottlenecks, and maximize profitability.
- ✓ Create a brand experience and build consumer loyalty, regardless of channel, by giving customer-facing employees across the organization access to the information required to understand consumer preferences, reactions, and experiences and integrating such insights into the execution at digital channels, including e-commerce, mobile, kiosks, and so on.
- ✓ Help store managers increase same store sales, leveraging forecasts and predictions, and give store managers insight into consumer information, promotional impact, and assortment plans, as well as enabling them to manage their controllable expenses for optimization of their P&L.

Business Analytics can improve performance and results in every part of the retail organization and keep all functions focused on the overall strategy and success of the company.

# **Chapter 3**

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# **Marketing in a Consumer-Driven Era**

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## ***In This Chapter***

- ▶ Recognizing consumer behavior and trends
  - ▶ Exploring the value of unstructured data
  - ▶ Making customer-driven decisions
  - ▶ Understanding product affinities and the impact of influencers
  - ▶ Improving the effectiveness and efficiency of running promotions
- 

Retail has evolved significantly, and savvy retailers are working to refine the customer experience in order to keep the customers they have — and gain new ones. Retail hasn't changed merely due to factors like globalization and advances in technology. Retail is also morphing because consumers themselves have changed. The combination of these two realities poses serious challenges — and opportunities — for today's retailers.

Beyond economic conditions, technology, and shifting competition, two of the most powerful influences on modern retailers are the growing number of purchasing channels and the rise of digital media (and its influence on consumer behavior). The bottom line is that retail marketers are charged with adjusting marketing strategy from one that's product-driven to one that's consumer-driven. Practically speaking, retailers must constantly strive to meet and exceed customer expectations while delivering a smarter shopping experience. The only way to succeed is to leverage Business Analytics to make sense of information and gain actionable insights with a constant focus on building customer loyalty.

In this chapter, you look at consumer buying behavior and trends, and explore the new age of Business Analytics and how to handle burgeoning content.

## *Understanding Consumer Buying Behavior and Trends*

Retailers are leveraging consumer data — both inside and outside of the organization — to attract, retain, and grow customers. Understanding consumers, their affinities, their influencers, how they prefer to purchase, and what offers to which they're most likely to respond, helps retailers better segment and service their customers and make the right offers at the right time. This helps retailers uncover up-sell and cross-sell opportunities, and maximize marketing dollars. Delivering targeted offers that customers want and value allows you to avoid unnecessary promotional spend or discounting. Additionally, product markdowns can happen before a product loses its attraction, thereby still generating some profit, and resources can be reassigned to appropriately focus on the most profitable lines.



In order to leverage data for insights and turn those insights into action, it's critical to remember the five Cs of the customer's path to purchase: *customer, context, community, content, and commerce*. In this section, you explore each of the Cs in further detail in order to better understand how retailers are turning insights into action.

### *Leveraging customer data*

The most important data for a retailer to organize and leverage is *customer data*. Retailers are moving to advanced customer segmentation — from segments of many to segments of few to segments of one — based on the deep knowledge that customer data reveals. Bear in mind that information on the customer can originate from any number and type of sources, and it's by consolidating all this data that real insight is generated. With this insight, retailers can analyze buying patterns and preferences by segment, identify actions that might encourage a customer or group of customers to respond to the right offer, and use advanced modeling to predict their likelihood to respond to each potential offer.

## *Putting information in context*

After the customer is understood from all touch points — or from a 360-degree view —customer data can be put in broader contexts. For example, you can combine external data, such as weather patterns and demographic details, to analyze performance drivers. You can also combine it with internal data, such as current stock levels of items the customer is interested in or that you may want to introduce through a special offer.

Context is also about the situation in which the customers find themselves and delivering a proposition in real-time that takes into account what device they're using, what time of the day, and how they reach that particular website. This reflects the fact that people have different behaviors and preferences depending on where they are and what they do, such as commuting on a Monday morning using their tablets, or relaxing over the weekend on computers, or visiting a store and using a kiosk or talking to a sales associate.

Not all customers will respond to the same products in the same way through the same offer, nor will they respond the same way all the time, so providing context to the information helps you make insightful decisions about what to offer the customer.



## *Clicking with consumer communities*

In addition to information you have about the customer through interactions, many other influencers impact a customer's decision to move toward a purchase. Understanding the customer's social communities, sentiments, and influencers — and how the retail brand and products are perceived through these channels and by those that influence your customer — can be leveraged in the retail decision making and targeted offer to the customer. Leveraging influencer ratings and comments will strengthen your offer to the customer.

## *Keeping content in mind*

While knowing a great deal about the customer and her community, internal content also drives the offer you should make to encourage a transaction. You need to make sure the right products are available through the right channels. That

## What you don't know could hurt you

What you don't know about what your customers are saying about you could hurt you. Or it could offer clues as to what the next hot trend in your niche will be. Why chance missing out on any of this information? You can measure consumer sentiment about your products and brand(s), evaluate how your customers feel about your competitors, test new product or marketing strategies, and understand how your customers prefer interacting with retailers from data gathered on social media, blogs, and other

web services and networks. By using natural language processing (NLP), retailers can now analyze everything from product names and industry jargon to slang and emoticons. They can even understand whether certain words are positive or negative given the context. Business Analytics software is available today that lets you uncover and analyze information from social media sources and then merge that information with internal data to yield faster, more accurate insights and predictive intelligence.

makes integrating merchandising, marketing, and supply chain critical to the path to purchase you're creating for the customer. What's more, driving certain promotions based on stock levels creates an opportunity to shift slow moving products and maximize margins.

## *From personalization to commerce*

Customers demand a personalized approach from their shopping experiences, regardless of the touch point or preferred method of commerce. Retailers continue to refine this path to personalization to retain their best customers, grow existing customers, and attract new customers to generate commerce.

## *Looking at Unstructured Data: The New Age of Business Analytics*

If you're like most successful retail leaders, you always seek new business insights to drive your organization forward. You identify the root cause of problems, spot opportunities

quickly, and anticipate and exploit future market trends. You've probably turned to *Business Intelligence* (BI) solutions to track key metrics on your consumers and your business. BI includes the concepts, methods, and technologies that gather, analyze, and present data to drive better decision making.

But that's not the whole picture. Across the enterprise and on the Web, the market speaks volumes. Customers, prospects, and influencers write comments, fill out forms, and talk to sales, marketing, and customer service personnel. This information should be factored into decision making. Instinct and anecdotal information also contribute to good decision making. But this is unstructured content, different from what is typically analyzed in your BI.

## *The unstructured data challenge*

Unstructured content is exploding; in fact, as much as 80 percent of information generated daily is unstructured. Some of this information is held internally, but much of it exists on the Web in the form of blogs, tweets, or online exchanges between a customer and customer service staff. The information contains potentially relevant and valuable business information.

This semi-structured or completely free-form information often escapes careful scrutiny. It's difficult to corral and leverage because it isn't organized. This info can't be queried like a database, yet it contains critical business information that can be used to identify customer preferences, support concerns, sales issues, product quality, competitor position, supplier feedback, and other business-critical information that can help retailers be more successful.

## *Recognizing the untapped analytics opportunity*

Smart retailers recognize the untapped business value in unstructured content. For example, companies can use this content to answer questions:

- | ✓ Do customers relate to our brand?
- | ✓ What are customers saying about our new store format?

- ✓ Are they recommending our merchandise to their friends?
- ✓ What unmet product or service demands are emerging?

Retailers need a systematic way to find, distill, and analyze the massive amount of unstructured content that exists today. Content analytics solutions provide the answer. *Content analytics* and *social media analytics* are emerging (and related) fields within Business Analytics that empower companies to unlock the insights contained in unstructured content whether held internally or externally.

## *Customer-Driven Decision Making*

Many retail managers supplement insights from BI reports with anecdotal information about external market variables by reading blogs, perusing product reviews, and talking to customers and field employees. However, this approach is time-consuming and subjective.

With content and social media analytics, companies have a powerful, objective means of culling business insights from massive amounts of unstructured content. This empowers retailers to move from data-driven decision making to customer-driven decision making, which considers both internal and external variables for optimal decision making.



Consider the example of a retail chain that's making a decision about investing in a new private-label product line. Using data-driven evidence, the retailer has solid information about the costs and sales trends associated with the product line. By adding external market insight, the company can gain a more comprehensive view of the marketplace, including customer preferences and perceptions as well as competition. By combining the two types of data, the retailer can make a more fully informed business-driven decision about whether to take a risk on the new product line.

## *Content Analytics in Action*

A substantial return on investment can be achieved by retailers that use content analytics to monitor and act on targeted areas, such as customer complaints, warranty issues, and fraud

claims, thereby positively impacting a company's bottom line. This section offers an example of content analytics in action.

When a leading language lessons retailer needed to capture and analyze consumer responses to uncover hidden trends in the text, it turned to content analytics solutions. The retailer used predictive analytics to analyze responses from online customer product reviews, competitor websites, and open-ended survey questionnaires.

By tapping into the insights provided by unsolicited, unbiased customer feedback, managers were able to clearly recognize why certain customers were brand promoters or brand detractors. The company also improved customer satisfaction, product development, and marketing effectiveness. Executives continue to monitor blogs, news feeds, and other public text sources to keep a pulse on how the public perceives its products — and the competition.

## *Understanding Affinities between Products and Customers*

The most successful retailers work to continuously identify and analyze past and present consumer buying and behavior trends to predict future trends that drive greater customer loyalty and profitability. Business Analytics empowers you to pinpoint consumer buying and behavior trends by mining historical and real-time data to uncover nuggets of valuable information, such as affinities between products, affinities between customers, and combinations of the two. Armed with such information, you can clearly see past and present trends and set the stage for predicting future outcomes.

## *Advanced affinity analysis*

Conducting affinity analysis with IBM Business Analytics helps retailers gain insight into buying patterns to offer products and promotions that match shopper preferences and behavior, and link purchases to specific buyers to create tailored offers. Retailers can implement more precisely targeted campaigns to drive higher returns for bottom-line results.

Such analysis can support processes and decisions executed in — or across — any channels, which is particularly important to those retailers who operate a multi-(or omni-) channel business.

## ***Market basket analysis***

Advanced affinity analysis incorporates market basket analysis, which uses algorithms to analyze individual transactions, customer data points, purchasing history, and more, and then builds predictive models that can be applied to.

- ✓ Decide what categories or products to display or promote together.
- ✓ Determine an offer that is valid for a particular customer or group of customers.
- ✓ Predict the probability that the customer(s) will respond to the offer.
- ✓ Calculate the value of the customer accepting the offer.

## ***Understanding customer preferences***

Advanced affinity analysis also helps retailers understand customer preferences based on the analysis and segmentation, the product correlations, and the affinities from the market basket analysis. It can also generate multiple scenarios, related offers, and calculate the likelihood of customers responding to the offers. This analysis allows the retailers to choose the next best action for their customer, build loyalty in that customer, and increase revenues and margins for the organization.

## ***Anticipating the customer's next move***

*Predictive analytics* offers insight that helps retailers anticipate what customers will do next, which ones are likely to leave for a competitor, or which ones will respond favorably to up-sell or cross-sell campaigns. Predictive insights can

identify areas of potential risk and fraud or spot new and emerging market opportunities. Retail organizations that can automate and optimize decisions informed by predictive analytics have a significant advantage over competitors.

## *Improving Retail Promotions*

Marketing and promotion costs can significantly impact a retailer's bottom line. By applying insights discovered through Business Analytics, you can drive higher returns and achieve a competitive advantage while protecting gains.

For example, Business Analytics empowers marketing managers to plan promotion campaigns, model and evaluate promotion options based on costs or sales lift, monitor results, and analyze promotions for optimal return on investments. Business Analytics delivers an intuitive top-down and bottom-up planning and reporting environment so marketers can understand the financial impact of promotional programs.



## Chapter 4

# Making Smart Merchandising Decisions

### *In This Chapter*

- ▶ Merchandising more efficiently
- ▶ Improving merchandising plans
- ▶ Looking at the demand-driven supply chain
- ▶ Using technology to your benefit

**M**aking smart merchandising decisions means both understanding and predicting consumer wants and desires while simultaneously controlling costs. If that sounds like a daunting task, it can be unless you tap into the power of *Business Analytics*. If you haven't figured it out already, *Business Analytics* is one of a retailer's best friends.

Indeed, *Business Analytics* is changing the way merchandisers make decisions as they now have access to multitudes of data, including consumer sentiment and response to retailer actions that can aid in making merchandising and assortment decisions. You can learn what shoppers want, create and supply the products they demand, provide the right quantities through the right channels, and set yourself apart from the competition while building trust, loyalty, and brand advocacy.

In this chapter, you discover how to enable new merchandising efficiencies, improve merchandising plans, and much more.

## *Enabling Merchandising Efficiencies*

Business Analytics is a boon in the realm of merchandising efficiencies. These technologies and applications make your organization more efficient through four key functions:

- ✓ Predicting customer demand
- ✓ Financial and operational merchandise planning
- ✓ Optimizing assortment
- ✓ Minimizing stockouts and markdowns

By offering actionable insights in near real-time, Business Analytics helps merchandising teams dynamically change and tailor assortments based on consumer purchasing patterns, upcoming trends, and demographic and location insights.

Applying learnings from affinity analytics helps you continuously refine what to stock with a view of not only individual product performance but also the cross-sell potential. Certain product affinities may be impacted by seasonality or current events. This offers you the ultimate flexibility to improve customer shopping experiences for different demographics while offering new opportunities to focus efforts on the products/product combinations that generate the greatest profits, highest margins, and strongest customer loyalty.

Integrating merchandising, assortment, and supply chain with initiatives being driven by the marketing organization is critical as retailers strive to create a brand experience for consumers. Having the right product in the right place and at the right time is driven by customer analytics. These activities are vital because they keep the organization aligned around the customer. What's more, creating an environment in which merchandising can quickly adjust plans based on consumer response means that retailers can optimize their supply chain, improve inventory position, minimize markdowns, and protect margins.

# Reconciling Top-Down and Bottom-Up Plans

Reconciling top-down and bottom-up plans is a challenge for many retailers. A Business Analytics solution for assortment planning offers a way to establish consensus so retailers can synchronize plans.

For example, based on targets, retailers can develop top-down merchandise financial plans by department or category. They can also create bottom-up item-level plans for channels, stores, or clusters of stores. Retailers can preset or customize profiles for basic and seasonal merchandise, “waves” for promotional or products stocked only temporarily, or mini-seasons to facilitate pre-season planning. And predefined seasonality profiles help retailers create custom profiles to plan sell-through patterns for goods.

## Developing dynamic retail assortments

Managing assortment through Business Analytics aligns merchandise plans, demand plans, and financial plans and helps retailers develop dynamic item-level assortment at the division, channel, department, and category levels. Enabling these processes through analytics also helps retailers analyze and understand variances among the plans and develop what-if scenarios to understand the impact to the corporate goals and key performance indicators.



After the top-down and bottom-up plans are reconciled, a strategic stock plan manages inventory levels and key metrics. Retail chains can then

- ✓ Analyze in-season sales information.
- ✓ Compare results to plans.
- ✓ Reforecast as needed to meet customer demand and market conditions.
- ✓ Conduct scenario planning in a “sandbox” to determine how to address possible sudden changes in the market.



- ✓ Receive alerts that support workflow.
- ✓ Make changes (such as to targets or costs) that are instantly available to all stakeholders.

With this approach, you can realize several key benefits:

- ✓ Working with the same dynamic plan ensures that pertinent information about changes in targets, demand, cost, or supply constraints is shared.
- ✓ The impact is instantly visible to all stakeholders.
- ✓ Timely action can be taken to ensure that the retailer exploits any new opportunities and deals constructively with any issues.

## *Aligning store-level assortment with demand*

Product demand isn't likely to be the same in every store. Simplistic segmentation, such as store size, location, age, or layout doesn't take into account differentiators or unique store characteristics. To stay on top of customer demand and inventory, retailers need to be able to understand purchase patterns by store and by SKU. Predicting sales and assortment at the individual SKU level and enacting plans to make smart inventory investments are critical capabilities.

A recent retail study showed that a 10 percent reduction of low-volume SKUs can increase sales by 4 percent because of space reallocation. With store-level assortment analytics, retailers can predict the probability of selling individual products by store for a specific time period, which helps them meet customer demand better and optimize inventory levels, so sales increase and inventory carrying costs decrease.

Advanced analytics automates this process by building separate predictive models for each and every SKU in the portfolio. Here's how it works:

1. Each model assesses the relative impact of any potential predictors available to the retailer on store, product, category, or environmental conditions.

2. Individual models are created to allow for unique relationships at store level and between each product and intuitively match how product and category managers see the world.

The individual modeling approach complements the decision-making process by managing the sheer volume of products at the same time it makes the most of valuable detailed local influences that are often lost at higher levels of planning.



The benefit of a more intelligent assortment planning forecast is that it identifies the items with the highest probability of selling at highest margin, so retailers can develop dynamic and detailed merchandising plans with effective assortments that increase sales, competitive advantage, and customer satisfaction.

Business Analytics solutions for assortment planning go beyond the limitations of spreadsheets, cookie-cutter ERP systems, or custom applications that require significant technical support to help you

- ✓ Develop a differentiated assortment.
- ✓ Make smart buys and protect profits.
- ✓ Understand trends and respond to changing market factors quickly.
- ✓ Model scenarios and understand financial impact of business decisions.
- ✓ Control stock levels and maximize inventory investment.
- ✓ Provide logistics with exact requirements, avoiding redistribution of excess stock.
- ✓ Increase customer satisfaction and wallet share.

## *Creating a Demand-Driven Supply Chain*

Business Analytics ultimately helps you create a demand-driven supply chain. Considering that retailers' assets are typically over 70 percent inventory, enhancing the demand

forecast accuracy at the SKU level and thereby reducing the amount of inventory held can significantly benefit the balance sheet.

Are out-of-stocks an issue at your stores? Do you often find you have excess inventory that you eventually have to return to the supplier, sell at a costly markdown, or discard? Using technology to support the planning processes helps you manage this two-edged sword.

By tailoring inventory offerings and levels according to near real-time performance analysis and customer insight, you can save your company working capital and increase ROI. At the same time, customer satisfaction will go up, as your customers find what they want, where they want to buy it.

## *Leveraging Proven Technology*

IBM has the tools and services to help you achieve a competitive advantage and increase sales through tailored retail offerings:

- ✓ **Customized solutions:** Products and services address the needs of core customer segments, enabling custom solutions versus one-size-fits-all offerings.
- ✓ **Localized assortment planning:** Merchandise categories and item assortments are tailored and optimized for local market and customer segment needs.
- ✓ **Customer-focused store strategies:** Key store activities such as staffing and in-store promotions are aligned with the overall merchandising strategy and customer segment needs and goals.
- ✓ **Consumer-driven supply chain:** The supply chain network is aligned to support flexibility and responsiveness, and to deliver the desired customer experience.
- ✓ **Product innovation collaboration:** Customer insights can be shared with vendors, partners, and third parties in new product development processes.

## Chapter 5

# Overcoming Supply Chain Challenges

### *In This Chapter*

- ▶ Highlighting key metrics in your supply chain
- ▶ Anticipating and negating performance issues
- ▶ Creating mutual benefits with vendors

**S**upply chain challenges are nothing new in the retail world, but managing the supply chain in the age of the *omni-channel shopping experience* — an experience geared toward consumers who shop online, in a store, over the phone, using a mobile device or all of the above — is even more complex.

From unforeseen bottlenecks to supplier miscommunication to inaccurate forecasts that result in overstocks or out-of-stocks, retailers are faced with a myriad of data challenges that in 21st century retailing is exacerbated by the number of channels, and jeopardizes retailers' ability to provide consumers a seamless experience. Making sure your customers get the products they want, when they want them, is critical to maintaining satisfaction and improving loyalty. Supply chain challenges can easily result in a customer switch to a competitor, making retailers increasingly interested in supply chain effectiveness to meet customer demand.

In this chapter, you explore how Business Analytics can help retailers gain greater visibility into the supply chain, resolve problems before they arise, and align corporate strategy and store execution to drive a seamless customer experience across all channels.

## Gaining Visibility across the Supply Chain

If you can't see it, you can't fix it. Improving customer shopping experiences demands visibility into key metrics across the supply chain: sales, labor, inventory, and deliveries (actual, in transit, and forecasts).



### Business Analytics

- ✓ Helps retailers lower costs and improve margins with a consistent supply chain management process based on integrated analysis of information from multiple systems
- ✓ Delivers cross-functional insight that helps organizations analyze spending and supplier performance quickly and cost-effectively
- ✓ Makes sure goods are optimally sourced to maximize purchasing power by understanding procurement patterns from *Key Performance Indicators* (KPIs) — detailed specifications used to track business objectives — such as pricing, delivery reliability, and vendor contribution to total spend

## Resolving Operations Problems Before They Arise

With the ability to drill into performance issues, operations managers can get to the roots of problems — and resolve them quickly — to maintain a seamless shopping experience for customers, reduce costs due to supply chain bottlenecks or inaccurate forecasts, and improve customer service.



Retailers use Business Analytics in operations in three key ways:

- ✓ Reporting on performance and opening and closing stock position by channel, division, region, store, or account, as well as category or product, using benchmarking and comparisons between periods or actual versus plan to identify potential for improvements to overall efficiency.

- ✓ Analyzing sales transaction and traffic data to understand demand, build forecasts to meet demand, and improve in-stock position while reducing overstock or out-of-stock situations. Having the right products in the right location to meet customer demand improves performance for the retailer, reduces customer service challenges or call center needs, and improves brand loyalty with customers.
- ✓ Keeping operations aligned with the efforts in marketing and merchandising to further solidify the customer experience. When customer-facing employees are aligned with the cross-organizational performance, targets, and plans, they can educate customers about marketing initiatives and promotions, while taking inventory or stock levels into account. The same can be achieved when consumers shop online, by automating the integration and analysis of these data points and providing an optimized proposition. This improves the performance and creates a more enjoyable experience for the consumer.

## *Collaborating with Vendors*

Vendors are obviously a key component in the retailer's value chain. Providing performance visibility and sharing — or even jointly developing — forecasts with vendors enable them to optimize their upstream processes, which in turn allows them to better meet the retailer's delivery demands and cut costs across the value chain. If the vendor's processes and systems are sufficiently advanced, daily and store-level transaction data will provide a more agile response to unforeseen changes in demand and lead to higher forecasting accuracy than if only aggregated data is shared.

Performance against Service Level Agreements (SLAs) as well as transaction data can be shared through a portal or other electronic and automated routes. This can also be a facility for providing performance benchmarking to vendors, encouraging them to meet the standards of leading vendors. Working together to establish the causes of sub-target performance is also a key driver of optimization.



## **Chapter 6**

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# **Managing Your Brand to Drive Loyalty**

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### ***In This Chapter***

- ▶ Creating loyalty in the digital age
  - ▶ Meeting the challenges of brand loyalty
  - ▶ Studying the consumer data
  - ▶ Satisfying empowered customers
- 

**B**rand loyalty. These two words are potentially worth millions of dollars for your retail organization. Brand loyalty is vital to your long-term success for several reasons:

- ✓ It increases the lifetime value of your customers.
- ✓ It turns your customers into brand marketers via word-of-mouth, social media posts, and product reviews.
- ✓ It increases your overall sales per customer.

Brand-loyal customers give you valuable feedback on what you're doing right and what you're doing wrong — and what you may want to do next. Building and maintaining this coveted brand loyalty isn't an easy task, but remember that customer loyalty is built on customer satisfaction.

During the last economic downturn, retailers learned that brand loyalty was critical — it's easier to keep a customer than to find a new one. But beyond loyalty and retention programs, Business Analytics plays a key role in helping you understand what you need to do to drive brand loyalty.

In this chapter, you look at building brand loyalty in the digital age, overcoming brand loyalty challenges, and meeting the needs of empowered customers.

## Building Brand Loyalty in a Digital Age

In this era of the *omni-channel shopping experience* — an experience geared toward consumers who shop online, in a store, over the phone, using a mobile device or all the above — managing your retail brand to drive loyalty and create a compelling and cohesive consumer experience is increasingly challenging. In order to understand what drives loyalty, retailers need to ask themselves a few questions:

- ✓ How do we keep our most loyal customers?
- ✓ Which customers are dissatisfied?
- ✓ Can we fix the relationship with unhappy customers and turn them into loyal customers?

Driving brand loyalty isn't merely about a rewards system based on dollars spent or visits made. Modern consumers are loyal to retail brands that understand what they need and want, deliver on those needs and wants, and reward the customer for their loyalty. One thing modern customers want is customized experiences at every stop along the path to purchase, from awareness to engagement to the actual sale, and even beyond. Regularly analyzing mountains of data to understand their expectations and continuing the customer dialog help retailers retain their customers.



Business Analytics offers insight into data that reveals which channels are the best to engage with particular customers at particular points in the purchase process (discussed more in Chapter 3). These technologies also offer clues about what products your customers are interested in or could be interested in, which marketing message and offer should be presented to achieve a sale and satisfy the customer, how to customize that message or offer for the customer, and so on. Business Analytics helps you predict, based on similar customers' past behavior, affinities and current interactions, how to best

serve and reward your loyal customers — and how to manage your retail brand(s) to drive loyalty from new customers.

By combining the capabilities of Advanced Analytics and Business Intelligence, retailers can uncover patterns and trends in customer behavior and sentiment and use that insight to predict future outcomes and make smarter and quicker decisions. Results can rapidly be delivered to decision makers through reports, scorecards, and dashboards or feed directly into marketing automation tools, triggering an action. Self-learning predictive models ensure that each iteration of customer information is more accurate than the one before.

## *Overcoming Brand Loyalty Building Challenges*

While it's easier to retain a customer than to win a new one, that doesn't mean it's easy, and retailers must constantly strive to meet the needs and demands of their most loyal customers. Consider these statistics:

- ✓ Fifty-six percent of survey respondents would be at least somewhat likely to switch brands based on customer service options.
- ✓ Women are nearly 10 percent less likely than men to feel loyalty toward a brand.
- ✓ Twenty-five percent of U.S. adults don't feel loyalty toward any type of brand.

The truth is that people switch from one retailer to the next for many reasons — pricing, special promotions, convenience, and poor customer service. Indeed, sometimes customers switch to another retailer because the regular store is out of stock on must-have products, or increasingly because their current retailer doesn't offer the omni-channel experience that the customer prefers.

The good news is that Business Analytics can help you discover downward trends in product sales so you can determine what's causing the plunge and work to stop the dive. Additionally, it can help you draw insights from products and services that

perform well, what might be driving the uptick, and how to leverage those insights to increase basket size and revenues. Business Analytics offers tools that help you build brand loyalty through better customer service, better offerings and assortment, better fulfillment, better pricing and promotions, and other factors.

## Making Sense of the Data Explosion

A new global IBM study of Midmarket Chief Marketing Officers (CMOs) revealed that building and sustaining brand loyalty is the top concern for today's midmarket CMOs, yet 72 percent don't feel sufficiently prepared to effectively build this loyalty. What's more, 70 percent of midmarket CMOs are concerned about data explosion. They're tasked with making sense of highly complex information generated constantly from a variety of sources, such as consumer blogs, tweets, mobile texts, and videos. It can be overwhelming, to say the least.

The proliferation of social media and mobile devices is creating a new breed of consumers who are digitally savvy and able to quickly compare and evaluate which products and services they want to buy. Shrewd marketers are gaining insight from social media and incorporating it into their strategies.



The key is predicting what consumers will want and then adapting marketing strategies to give them the right offering when, where, and at what price they want it. Business Analytics offers insights that help you use the right key to turn the brand loyalty lock.

## Meeting the Needs of Empowered Consumers

CMOs need tools to manage the demands of empowered consumers who are impacting brands instantly on Twitter, Facebook, and other social channels. Yet nearly two thirds of midmarket CMOs are struggling with how to manage the impact social media will have on their marketing function and how the organization can capitalize on social media activity.

Some retailers invest resources in responding to individual queries on their Facebook pages or through other social media but omit conducting analysis on those very same dialogues. Also, fewer than half of midmarket CMOs are taking the time to understand and evaluate the impact of consumer-generated reviews, blogs, and third-party rankings on their brands.

By using social media analytics tools, retailers can identify emerging business opportunities or problem areas that need fixing, often outside of the control of the digital customer service person. The organization needs to easily relate this market feedback to KPIs such as sales and service levels and prioritize and invest in suitable action. This process helps increase ROI on the social media investment by not only enhancing the experience of one customer being dialogued with but also leading to improvements across the customer base.

## *The rise of mobile commerce*

The proliferation of social media and mobile devices is creating a new breed of customers who are digitally savvy and able to quickly compare and evaluate which products and services they want to buy. Mobile commerce is expected to reach \$31 billion by 2016, yet 62 percent of midmarket CMOs report being underprepared to deal with the proliferation of channels and devices.

This increase in the mobile shopping trend further increases marketing challenges, complicates data collection and analysis, and threatens both customer service and customer retention. Again, Business Analytics can help you mine mobile data to better manage your brand, and provide your customers with the shopping experience to ensure their ongoing loyalty.

## *Realizing ROI on marketing dollars*

CMOs are being held more financially accountable to their organizations to produce business outcomes at a faster pace. While CMOs believe ROI on marketing dollars spent will be the most important measuring stick for determining success of their business by 2015, an IBM study revealed that 72 percent of CMOs are underprepared to manage the plummeting level

of brand loyalty. Business Analytics shows you immediately which marketing efforts are working and which aren't so you can adjust on the fly.

## ***Building trust with consumers***

Aside from current economic conditions, there's an even bigger factor impacting brand loyalty. Innovations in technology, changing competition due to that technology, and the spread of social networking have provided customers with new tools for discovering, comparing, evaluating, choosing, and experiencing brands. With the growth of social networks and a need for transparency, trust and personal exchanges between the consumer and the marketplace are now forming the cornerstone of marketing efforts. Business Analytics can help you communicate marketing messages and promote content that resonates with your target audience and helps build the trust that breeds brand loyalty.

Additionally, aligning the entire organization around customer satisfaction — leading to customer loyalty — helps you build that trust and ongoing relationship with your customer. When every part of the retail organization, from marketing to merchandising to store operations, is aligned around meeting the needs of the customer, brand loyalty is generated. Empowering frontline personnel with access to data, and the insight to make the best decision or offer to properly handle customer queries and problems and to reward high-value customers, will continue to foster that loyalty.

# Chapter 7

# Managing Store Performance

## *In This Chapter*

- ▶ Getting stores involved in the planning process
- ▶ Rewarding customer-focused employees

**P**roviding an outstanding shopping experience while increasing sales and protecting profits and margins is always a balancing act for retailers. In fact, you may even call it a Holy Grail. Nowhere is this more critical than at the storefront, where the organization's planning, preparation, and execution play out. After the focused hard work of everyone from corporate to the field, it all comes down to the customer shopping experience across channels.

Keeping stores integrated in the planning process and giving store managers access to information and key metrics mean that retailers can act as one brand, which helps drive customer loyalty. What's more, compensating those at the store level around key metrics and corporate initiatives ensures all parts of the organization are working toward a common goal. In this chapter, you discover how Business Analytics gives you the information you need and the ability to drive this integration and manage compensation.

## *Integrating Stores in the Planning Process*

Disconnected and limited planning results in breakdowns across the retail organization. Failing to drive key corporate plans and metrics through to the store level results in lower

margins, reduced sales, and a disappointing consumer experience. To help steer a true course and drive better store performance, retailers are turning to Business Analytics to manage and plan store operations and tie store management to corporate plans, marketing activity, and merchandising projections.

## *Identifying ineffective processes*

In most chains, planning cycles are long and tedious and have to cycle through several iterations that are difficult to consolidate. What often develops is silo-based planning, where each area (finance, operations, merchandising, marketing) completes its own bottom-up planning. These plans don't often support strategic initiatives or tie into a single set of top-down financial targets, which results in misalignment between corporate strategy and field execution.



Departments, divisions, regions, and channels can also be disconnected; consolidation of plans is a time-consuming and error-prone process. With so much effort spent on process and so little spent on analysis, it's difficult to keep pace with changing consumer needs, trends, and shifts in the marketplace. Retailers can lose out on potential profits if they are unable to react rapidly to changing market conditions, consumer sentiment, competitive pressure, or supply chain challenges, and predict and plan for likely outcomes.

## *Identifying ineffective technologies*

Most planning, budgeting, and forecasting solutions are designed to project annual revenues and expenditures based on performance of a previous period with an increase or decrease applied across the board. These plans usually can't provide the ongoing insight needed to course-correct strategic decisions, build an environment of dynamic planning, and engage all decision makers and influencers in the process. Effective store planning relies on the integration of corporate targets into marketing plans that drive merchandising decisions and assortment plans that are executed by channel.



Still, many retailers find themselves with a technology environment that hinders effectiveness:

- ✓ Spreadsheets are slow, disconnected, and error-prone. They create islands of financial and operational data where each contributor works independently of colleagues, often in an offline environment. Additionally, it's near impossible to rapidly consolidate this information for a corporate-wide view.
- ✓ Building what-if models and evaluating the potential results of changes versus plan is cumbersome in traditional spreadsheet planning environments. This eliminates the ability to leverage insight to make informed and confident decisions with certainty of the impact across the retail organization.
- ✓ ERP or general ledger solutions aren't designed for the granular level of planning for revenue, expenses, labor, and initiatives that chains need.
- ✓ Off-the-shelf solutions may offer broad generic functionality but don't address the unique needs of a retail business, including the integration of finance with departmental plans in marketing, merchandising, store operations, and channel management. For data collection and roll-up, typical solutions can be cumbersome. When you need complex modeling — such as what-if scenarios — most ERP, planning and budgeting, and spreadsheet-based systems can grind to a halt.

## *Discovering a pattern for success*

Managing store operations through Business Analytics provides the retailer with high-performance, high-volume item-level planning, multi-dimensional modeling and data visualization. You can rapidly analyze data, model business requirements for your entire organization, and use the results to budget and forecast with confidence for better business outcomes.

For example, you can collect more information from more people — including regional, district, or even store managers — more often, and tie those bottom-up plans to top-down targets to keep the entire organization aligned and managing to the same outcome. Business Analytics allows for high participation, increasing visibility and accountability,

and analytic processing automates contribution from systems. Planning managers can easily understand the maturity of the planning cycle, eliminate delays in rolling out plans, and quickly evaluate the impact of plans and forecasts to make adjustments. With all stakeholders looking at the same plans, conversations with store managers are facilitated, and management and corporate executives access meaningful reports showing impacts of plans.



With multiple scenario support, managers can model the financial impact of business decisions and create many versions of plans (for example, best or worst case) so stores, groups of stores, regions, divisions, and whole companies can respond faster to changing conditions. Users can understand daily, weekly, and monthly store performance, conduct analyses to understand trends, and measure performance versus plans. The visibility to store performance across the organization allows all stakeholders to understand the impact of marketing programs and merchandising decisions, and quickly make adjustments if needed.

## ***Driving better P&L analyses***

Managing store operations through Business Analytics encourages better analysis of the store level Profit and Loss, resolves the challenges of limited corporate visibility into store-level planning, and improves the involvement of store management into strategic decisions and execution. Additionally, regional and divisional managers are able to advance their analysis of store performance through measurement by hierarchy or store attribute and track variances from plan to actuals to uncover trends and understand the tools and processes being leveraged by the highest and lowest performing stores. With this, they can determine whether strategies should be replicated or scaled down.

## ***Managing Incentive Compensation***

In addition to more closely aligning store operations planning to the overall organizational targets, retailers are restructuring how their employees are rewarded and compensated to

further align to the consumer-focused efforts. IBM Cognos Incentive Compensation Management (ICM) solutions are part of the Performance Management pillar and help simplify incentive compensation management for organizations through linkage between sales targets and customer-focused measures of compensation. ICM further provides increased accuracy in commission and bonus calculations, reduced administrative or outsourcing costs, and higher employee motivation.



Eliminating slow, costly, and manual administrative processes helps minimize calculation errors that lead to commission overpayments and payment disputes.

In automating the compensation process and tying it to various performance targets, sales professionals and managers have extensive visibility into their pay, which can significantly reduce the time and effort spent on reconciling commissions, bonuses, and other incentives. Sales representatives also gain easy insight into their own quotas and performance and can analyze their gaps to targets over time.

Compensation administrators can implement new plans more efficiently to respond to changing requirements, from new business imperatives to tactical promotions. Retailers may also use incentive plans to support stock clearance targets, for example, at the end of a product life cycle, and in some categories, vendor-sponsored incentives are common and need to be tightly managed for trouble-free settlement with the vendor. Omni-channel retailers want to analyze and reward behavior that generates sales away from the original touch point.

For example, store staff can facilitate an online purchase of an item that's currently out of stock or not carried in the physical store. Some retailers may want to reward buyers or category managers, or even marketers, to reflect relevant hard and soft performance targets that these individuals can influence. Analysts are able to model and better understand the financial impact of incentive programs prior to rollout for more accurate cost management and forecasting. With a detailed view of the entire compensation plan portfolio along with tracking capabilities, organizations are able to have more control over sales compensation administration as well as to meet audit requirements.

Cognos ICM provides retailers with the ability to

- ✓ Automate compensation plans.
- ✓ Drive more accurate payout results.
- ✓ Provide personalized commission statements.
- ✓ Create and deploy plans rapidly.
- ✓ Empower business users.
- ✓ Model compensation plans with visibility of financial impact.
- ✓ Adhere to governance and compliance requirements.

# Chapter 8

# Tapping HR as a Strategic Resource

## *In This Chapter*

- ▶ Identifying high performers within your business
- ▶ Connecting human capital performance and strategy to wider business goals
- ▶ Tending to strategic human capital challenges

**W**

hat's happening in your business? Why is it happening? How will your actions affect performance? Insightful, actionable data and analysis can help answer those — and other — vital questions. But it's not just about supply chains or promotional offers; Human Resources (HR) also plays a key role in an integrated retail organization.

You can tap into HR as a strategic resource for your retail organization using *Business Analytics* — technologies and applications that allow organizations to mine data to glean insights that improve decision making.

Indeed, with access to the right information and analytic capabilities, retailers can use workforce information, needs, and desired skill sets in all parts of the company as the basis for decisions and strategies. HR measures and data can become key drivers in your daily operations. More retail organizations are engaging in workforce analytics and making it a key aspect of their overall strategy.

Analytics plays a critical role in enabling HR organizations to take a more proactive approach to corporate strategy. In this chapter, we discuss using analytics to optimize staffing plans, determine HR analytics signposts, and address strategic human capital challenges.

## *Using Analytics to Optimize Staffing Plans*

Many retailers lack the insights to help identify high performers, make sure the right employees are acquired and retained, and shift valued resources to the right parts of the business in line with the overall strategy. The result? Retailers are powerless to seize opportunities that could further differentiate their value in the market.

### *Drilling into HR analytics*

With these realities in mind, IBM surveyed more than 400 North American HR professionals on the use of workforce analytics and the challenges of applying analytics to organizational decision making. The IBM survey findings require reflection on the several noteworthy themes we talk about in this section.

No matter the economic environment, workforce analytics play a vital role in addressing strategic human capital challenges. Indeed, workforce analytics are a key capability for HR organizations seeking a more proactive role in driving business strategy.

According to survey results, companies that have invested in analytics have the upper hand in addressing workforce challenges. A statistically significant difference exists in the level of effectiveness in addressing human capital challenges between organizations that employ workforce analytic applications and those that don't.

### *Challenges to implementing analytics remain*

Both technical and skill-related issues stand in the way of implementing HR analytics. Specifically, retailers face difficult decisions about how best to maximize the productivity and effectiveness of various asset types. Unfortunately, many organizations have not invested in defining, capturing, and analyzing workforce data to the same extent as in other critical business areas, such as procurement and finance.

Many of these functions have standard performance indicators that make it possible for organizations to more effectively adjust their operations to business cycle fluctuations. HR professionals, however, have had a harder time defining their human capital requirements in a business performance context. Additionally, retailers are faced with the fluctuating staffing requirements due to the seasonality of the industry.



Business Analytics can help you make the path to defining HR requirements clearer and play an important role in migrating HR from an administrative to a more strategic discipline.

## *Determining HR Analytics Signposts*

HR professionals need analytic signposts that help connect human capital performance and strategy to wider business goals. For many retailers, these markers are absent, and they're finding themselves with a lack of insight around a number of areas that must be addressed.

### *Defining the necessary knowledge*



Defining the necessary knowledge, skills, and capability requirements needed for the execution of business strategy is vital to optimizing human capital. Organizations need a firm understanding of what skills and capabilities they have in-house, where gaps exist according to the current and future needs of the business as it works toward meeting strategic goals, and the best ways to fill those gaps through external hires or internal mobility.

### *Evaluating workforce performance*



Organizations typically want to differentiate high performers from low performers, compensate and reward these individuals accordingly (see Chapter 7 for more information on Incentive Compensation Management), and identify opportunities to close performance gaps. Having those insights helps you optimize workforce performance, resulting in better performance for the organization and greater customer satisfaction.

## *Retaining valuable talent*



Along with identifying top performers, organizations should have retention plans to keep these employees highly motivated and engaged. This helps ensure the continuity of operations and enable future growth. Business Analytics can give you clues as to what retention programs are most effective with various segments of your workforce.

## *Addressing Strategic Human Capital Challenges*

Retailers need to address strategic human capital challenges from redeployment and retraining to understanding knowledge sharing to developing succession plans and beyond.

## *Determining HR strategies*

Organizations can minimize the impact of layoffs and the subsequent loss of employees' intellectual capital through reassignment, retraining, and reallocation of resources to higher-priority areas. Business Analytics lets you drill into workforce metrics that uncover human capital optimization strategies.

## *Understanding collaboration and knowledge sharing*

Now, more than ever, organizations need to take steps to make sure critical knowledge is retained. Downsizing and early retirement programs make it difficult to hold on to institutional memory as Baby Boomers retire and leave a workforce shortage. You'd likely want to keep tabs on employees and who holds the most knowledge, what stage of their career they are in, and who's in line to receive knowledge sharing. Furthermore, formal career pathing and succession planning are vital to accelerating time-to-competency and minimizing productivity losses due to departures.

## *Putting Your Plans into Action*

For organizations looking to maximize their human capital investments and increase the strategic value of their HR functions through the use of workforce analytics, the following areas of focus are important:

✓ **Defining workforce challenges:** What workforce-related problems do you need to solve and how does addressing those workforce challenges impact your organizational effectiveness? During this phase, organizations should ask questions such as the following:

- Does my organization have a sufficient number of individuals with the right skills to support digital channels?
- What training interventions would be most useful to increase the productivity of my offshore contact center?
- What are the factors that differentiate higher-performing managers in my most productive stores?

Without clearly identifying problems that have a direct impact on business performance, organizations run the risk of investing time and energy in areas that aren't a priority.

✓ **Identifying data requirements and ensuring consistency in data collection:** Definitions of basic data points — such as "Who is a full-time employee?" and "Where is the employee located?" — can differ from system to system. And that difference can make it extremely difficult to develop comparisons. Without agreement around fundamental metrics, definitions, and standards, you may end up with inaccurate analysis that leads to incorrect conclusions and sub-optimal decisions.

✓ **Defining a common workforce analytics platform:** This step helps integrate and analyze data from multiple sources into a single platform. This platform should be able to integrate data from different HR, ERP, learning, management, and finance systems, so HR professionals and executive management can access and analyze data to make fact-based performance and strategic decisions.



✓ **Making the platform easy to use:** Make sure people both inside and outside HR have the ability to conduct analyses and display results. For some user groups, packaged reports that rely on leading performance indicators and offer access to dynamic dashboards that display data about critical jobs may be sufficient. Other user groups, however, may need to drill down using trend analysis and cross tabs to segment data and diagnose underlying workforce issues.

With a strong analytic foundation, HR departments and their personnel can more effectively manage workforce data and establish greater business context for human capital decisions. This helps HR professionals not only justify their decisions using rigorous analysis, but also contribute more effectively to the creation of business strategy.

## **Chapter 9**

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# **Generating Revenue Growth**

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### ***In This Chapter***

- ▶ Undergoing a planning cycle transformation
  - ▶ Measuring your practices that indicate key financials
  - ▶ Measuring the performance of success factors
  - ▶ Comparing and benchmarking performance for healthy growth
- 

**S**avy retailers are always exploring ways to generate revenue growth. Indeed, most markets are experiencing growth, so although competition is fiercer, there's an ever-increasing pie for which to compete. In fact, the global retail market will see a compound annual growth rate of 3.9 percent every year to reach more than \$20 trillion by 2017. U.S. online retail sales alone are set to hit \$370 billion by 2017, according to Forrester Research.

The opportunities are real. The question is whether you're poised to leverage information to turn those opportunities into revenue-generating activities. Business Analytics can help you compete for your fair share of the retail market growth. In this chapter, we offer insights into how to radically transform your entire planning cycle, design best practices for results analysis, keep tabs on Key Performance Indicators (KPIs) — indicators of performance against identified success factors — and increase cost savings and results.

## *Radically Transforming Planning Cycles*

In order to maximize the opportunity, you may need to radically transform your entire planning cycle, from strategic planning, target setting, budgeting, and rolling forecasting all the way to predictive demand planning, reporting, analysis, and scenario building. IBM's Performance Management capabilities (see Chapter 2) give you the Business Analytics tools you need to undergo that transformation. This software allows you to

- ✓ **Tap into powerful analysis capabilities:** Create and analyze sophisticated budgeting models and forecasts, even those based on large data sets.
- ✓ **Drive flexible modeling:** With a guided modeling environment, your business owners and analysts can develop and deploy even your most complex planning models, even adding predictive modeling capabilities.
- ✓ **Foster collaboration with many users:** Include input from thousands of users across the organization — exchange commentary and documents.

## *Designing Practices for Results Analysis*

With increasingly demanding shoppers and pressure on margins, well-designed practices for company-wide planning and analysis of results are critical to success. A differentiated shopping experience that meets or exceeds consumer demand ensures chains will be able to increase sales, protect profits, and satisfy customers.



You can use Business Analytics to establish and measure key financial indicators. Those indicators include comparable sales, labor, cost of goods, gross margin, and operating profit. The tools can also help finance, merchandising, marketing, and operations plan collaboratively to achieve a single set of financial goals and business objectives that will ultimately create a better customer shopping experience and meet organizational targets and goals.

Business Analytics empowers you to quickly and easily conduct meaningful yearly, monthly, weekly, daily, and even near real-time comparisons and projections, pro-rate costs to meet profitability requirements that support sales and margin targets, and measure and compare planned versus actual performance by using scorecards and dashboards. Likewise, comparisons and plans can be broken down by dimensions, such as channel, region, store as well as brand, category, and product to understand and affect the granular drivers of overall performance.



A first-rate plan or forecast is based on a model with formulas that are tied to fundamental business drivers. Building driver-based models into plans ensures consistency across functions and promotes planning collaboration.

For example, by understanding the sales trends and profitability related to particular household products that may fly off the shelves during an otherwise slow period, a retailer can balance product mix, marketing, inventory, and sales expenses to optimize profits.

## *Keeping Tabs on KPIs*

Business Analytics can help you set, measure, and monitor KPIs based on standard financial statements. You can perform what-if analysis of sales, costs, promotional impact, and merchandise financial plans to determine the impact on corporate financial statements and metrics, set targets for financial drivers, and model various business scenarios and use that information to make better decisions. Furthermore, in a fast moving environment such as retail, you may want to deploy Key Performance Predictors (KPPs) — using predictive analytics to model internal and external drivers of performance to predict outcomes and allow you to be a step ahead of the game.



With Business Analytics software, you can ensure ownership and accountability for performance by assigning a primary owner or owners for every metric. You can then organize and view scorecards by status (good, average, poor) and trend (up, down, steady). You can even set alerts and notifications so users are aware when a metric changes, create subsets such as the fastest rising or fastest falling metrics, insert

alerts from external sources, embed other BI capabilities for added context and analysis, and manage corrective actions and initiatives.

For managers outside of Finance, planning may seem like a waste of time that doesn't produce direct benefits. Managers can feel overwhelmed with requests for detailed information and develop their own methods or solutions to analytics and plans. But these inconveniences are minor when compared with the missed opportunities that can result from inflexible and inadequate planning and forecasting, particularly in a fast moving environment.

Understanding the impact of performance in one part of the business or another by setting up KPI impact analysis can also influence decision making toward the greater good. For example, if a department reduces working hours to meet labor cost KPIs but in doing so affects stores' availability KPIs, constructive conversations around the data can be had and modeling carried out to find the right compromise.

## *Increasing Overall Performance*

You can identify opportunities to increase cost savings and grow sales (covered in more detail in Chapter 7) by comparing and benchmarking performance across stores, channels, districts, and regions. Business Analytics streamlines the performance monitoring and management processes, helping the organization deliver healthy growth.

The bottom line is that a well-connected, dynamic planning and forecasting "nervous system" should have alignment between finance and operations and should support high participation throughout the organization. Such a system enables management to engage in aggressive, creative activity to develop intelligent contingency plans and to significantly improve resource reallocation to meet changing business conditions.

# **Chapter 10**

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# **Partnering with IT**

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## ***In This Chapter***

- ▶ Getting on board with information management
  - ▶ Acting on your insight
  - ▶ Moving the organization forward in partnership
- 

**A** divide is growing between retailers in the area of Business Analytics as many retailers are transforming themselves to take advantage of the newfound opportunities Business Analytics offers while others are left behind.

New analytical tools for understanding data and using it to make decisions are helping retailers embrace and succeed with entirely new opportunities. With the digitization of world commerce, the emergence of big data, and the advance of analytical technologies, companies have extraordinary opportunities to differentiate themselves through analytics.

According to “Analytics: The Widening Divide,” a study by the MIT Sloan Management Review and the IBM Institute for Business Value, 58 percent of organizations now apply analytics to create a competitive advantage within their markets or industries. These same organizations are more than twice as likely to substantially outperform their competitors.

In this chapter, you look at the importance of information management and how to partner with IT to drive your retail operation to greater profits.

## Getting the Foundation Right for Business Analytics

Retailers with a strong information foundation can tackle business objectives critical to the future of the entire operation. Their robust data foundation makes it possible to capture, combine, and use information from many sources, and disseminate it so that individuals across the organization, and at virtually every level, have access to it. The ability to integrate information across functional and business silos is a hallmark of best-in-class analytics-minded organizations, which are 4.9 times more likely to do this well than the companies that are aspiring to leverage Business Analytics, according to the study.



This all-important *information management competency* — the use of methodologies, techniques, and technologies that address data architecture, extraction, transformation, movement, storage, integration, and governance of enterprise information and master data management — involves expertise in a variety of techniques for managing data and developing a common architecture for integration, portability, and storage. Business Analytics is vital to deriving value from information management competency.

In a world where the quantity of data continues to rise astoundingly, IT is tasked with establishing consistent standards for data quality consistency across all business units and functions. Consider the following questions:

- ✓ Is data being extracted from disparate data sources, both internal and external, accurately and thoroughly?
- ✓ Can it be used by multiple business units and functions? And are the various functions working from the same set(s) of data?
- ✓ Is the data compatible with existing processes? How difficult is it to adjust to organizational changes?
- ✓ Can it be managed in real time, or nearly so?



This competency also involves a rigorous approach to data governance, a structured management approach designed to track strategic objectives against the allocation of analytical resources. Decision makers at every level of the organization

can then be confident they have the right information to do their jobs effectively and make informed decisions using analytics to guide day-to-day operations and future strategies.

## *Moving Fast on Actionable Insights*

Customers' wants and needs change rapidly, and you have to act fast to respond to the insight you glean: that requires collaboration. Business Analytics also delivers built-in collaboration and social networking to drive the exchange of information, ideas, and activities essential to effective decision making.



In a collaborative environment, people proactively exchange knowledge and cooperate with one another, eliminating communication barriers and improving the organization's ability to be ready for what comes. Having access to the same performance data and plans reduces the risk of information or actions getting lost in transit and ensures a more informed and aligned business — one that's more efficient, effective, and that adapts quickly to internal and external change. Collaboration closes the loop from data to insight to action, and enables everyone to work together, agree, decide, and act.

## *Business and IT Jointly Delivering Continuous Improvement*

Business Analytics can help drive retail sales growth to position you to outperform your competitors — and it doesn't have to be an extraordinary undertaking. You can take a step-by-step approach as you work toward your company's vision:

- ✓ Start anywhere and grow your analytics investment as needed by your organization.
- ✓ Take insight to action to ensure strategic decisions are taken at point of impact.
- ✓ Satisfy individual, workgroup and organization-wide needs through right-sized analytics for your organization.

- ✓ Deliver value at every step through analytics that you won't outgrow.
- ✓ Balance freedom and control with analytics that enable the business user and respect IT standards.

If all this seems overwhelming, stop and take a deep breath. You don't have to get all of these systems up and running on your own. Driving value from Business Analytics is a partnership between various organizations in your company, from finance to sales to marketing — to the Information Technology (IT) department. IT can help you tap into the right tools, layer Business Analytics tools, and give multiple departments the access they need to these technologies.

Business Analytics can deliver actionable insights and performance management capabilities to every department within your organization, from operations to marketing to finance, and tailored to every decision maker's requirements, from shop floor to board level. These capabilities can reduce costs, improve your business performance, and strengthen your overall retail operations.



Open the book and find:

- The inside scoop on retail analytics
- Ways to boost your customer numbers and your profits
- How to put Business Analytics to work for you

## Get insights to find new customers, keep the ones you have, and grow profits

Business Analytics isn't a new concept, but new technologies are emerging that make it possible for average business users to access, analyze, and understand the data required to make decisions. This book offers principles and tools you can use to discover how your customers behave—and how to put that knowledge into action to drive more sales.

- ***Understand the basics of Business Analytics — know what solutions are available to unlock the possibilities of discovery***
- ***Maximize marketing spend — understand what offers segments and individuals will respond to***
- ***Measure consumer sentiment through social media — harness the powerful information in social media today***
- ***Improve merchandising and assortment — leverage consumer sentiment and history to better plan assortments***
- ***Integrate operations into organizational planning — align store operations and sales teams with overall strategic goals***

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