

A Forrester Consulting
Thought Leadership Paper
Commissioned By Intel

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Disrupting With Data In The Age Of The Customer

Using In-Store Data To Optimize
Cross-Channel Insights

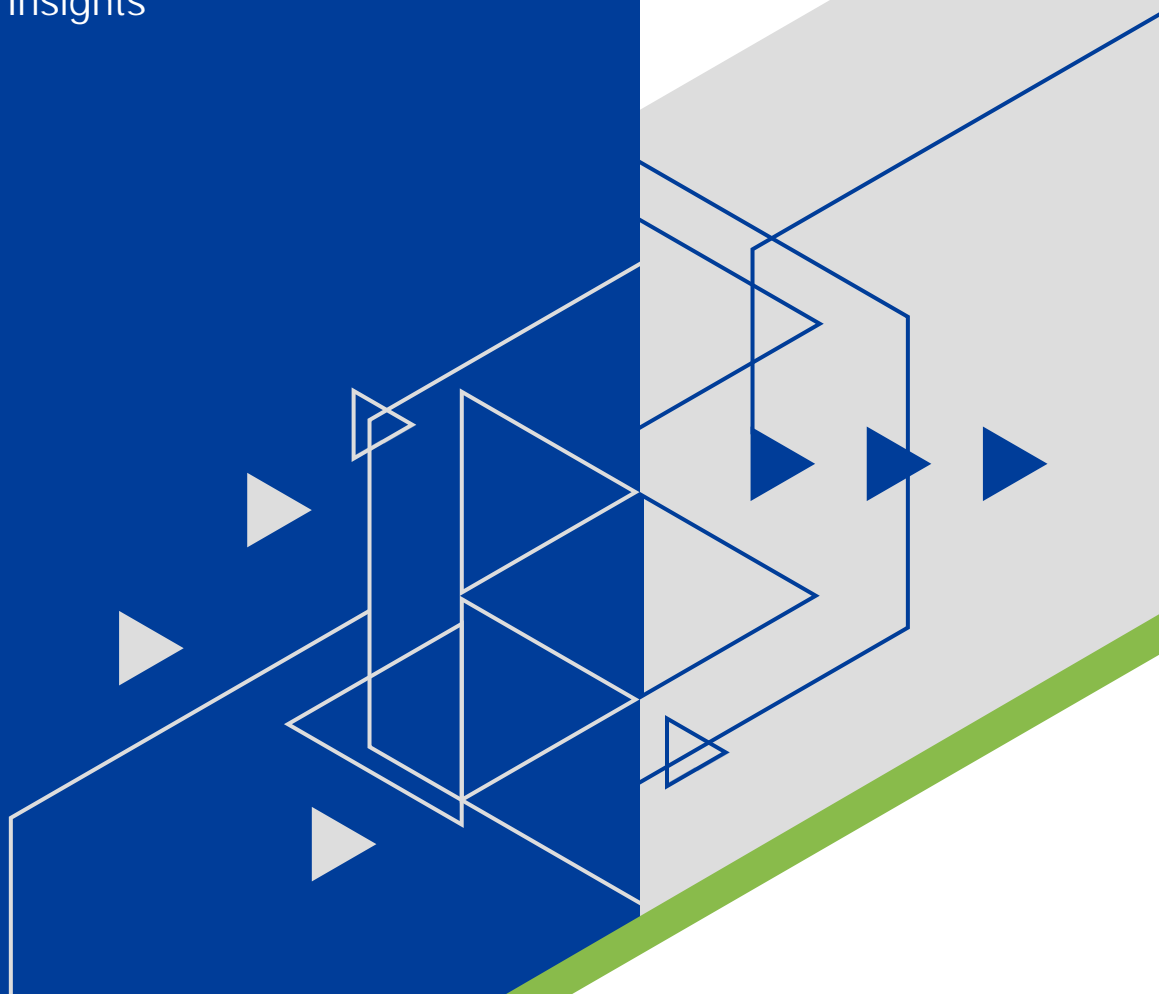


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Retailers have the data; they just need to leverage the data to create “always learning” enterprises that will serve customers with authentic and personalized interactions.

Executive Summary

Today’s connected shopper craves an authentic and customized experience that delivers on a retailer’s promise of curation and immediacy. In turn, retailers now recognize that they must deliver tailored customer experiences to retain those customers, and provide relevancy and value across digital and in-store transactions. They must also use various types of data to fuel that level of personalization, while leveraging data equally on the back end to improve operations and inventory management. However, while most retailers are proficient at collecting data from across operational, marketing, and merchandising channels, they struggle with turning the data into actionable insights. Without integrated analytics platforms, data languishes in siloed systems, experiences fail to be optimized, and customers are driven to the competition due to their needs not being met.

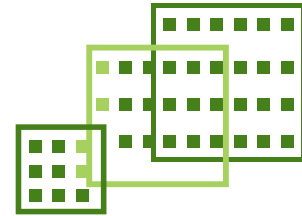
In February 2017, Intel commissioned Forrester Consulting to evaluate how retailers leverage data to arm employees, from the warehouse to the sales floor, with the tools and information they need to deliver superior customer experiences in the age of the customer. Through in-depth surveys with 507 retailer decision makers in the US, the UK, Germany, China, and Japan, Forrester found that retailers are eager to harness the power of advanced analytics but struggle with integrating their disparate data sources to drive those analytics.

KEY FINDINGS

- › **Retailers recognize the need to capture data enterprisewide, but they struggle with cross-channel data sharing.** Retailers recognize the need to collect customer data across all touchpoints in their journey — from online searches to warehouse inventory to in-store questions fielded by sales associates — and they eagerly collect data from myriad sources. However, they struggle with bridging the gaps between disconnected data sources to paint a complete picture of their customer, who craves authentic and evolved interactions.
- › **Insights are difficult to attain.** Sales associates must be more than information providers in the modern retail experience — they must guide customers seamlessly through their journey and provide tailored, personalized experiences to effectively engage with them. Providing this level of service requires superior operations that optimize the use of data and analytics to serve the customer.¹ When customer data is not robust or well-integrated, retailers struggle to properly analyze and track their end-to-end supply chain. They’re also unable to properly equip their associates with tools that allow them to facilitate a personalized customer experience.
- › **Retailers are eager to leverage customer and operational data to drive seamless experiences and empower sales associates to personalize interactions.** Customers expect seamless experiences across channels, and retailers are turning to digital technologies to improve their in-store experiences. At the top of the in-store investment priority list for retailers are personalization technologies, but retailers must not forget that personalization capabilities are only as effective as the data that powers them.

Data Fuels The Modern Retailer

To facilitate the digital transformations that modern retailers must take to deliver seamless customer experiences across screens and channels, they must take action on the data that they are collecting. Data capture and collection can happen at any number of digital touchpoints throughout the customer journey. However, retailers struggle with cross-channel data sharing and data integration from other areas of the business — such as marketing and operations — to truly harness the power of data to improve customer experiences and create “always learning” enterprises that evolve as the data evolves. From customer performance data to real-time inventory analytics, retailers struggle to go beyond data capture to leveraging and operationalizing on the basis of their data analytics.



- › **Retailers are collecting data from a variety of sources but tend to lack metrics on the customer experience.** Seventy-seven percent of retailers surveyed always or often measure themselves against inventory position; 70% do so against average basket value; and 69% do so against conversion rate. Conversely, less than two-thirds of retailers are measuring themselves against more complex and customer-centric metrics such as Customer Effort Score (CES) and Net Promotor Score (NPS).²
- › **While retailers are confident in their overall data capabilities, they struggle with cross-channel data sharing.** Retailers mostly have the systems that they need to measure engagement. But less than a third of organizations surveyed said they feel that they are very strong at measuring customer behavior and perceptions across channels, highlighting the challenge of deriving insights from the full picture of disparate data sources (see Figure 1).
- › **Retailers recognize that store operations, merchandising teams, and marketing teams must all have access to data to create positive customer experiences.** Using data to implement cross-channel marketing/acquisition campaigns is a capability found in only 23% of retailers, and less than a quarter, 24%, are able to implement cross-channel loyalty reward and/or customer retention programs. Brick-and-mortar stores need to drive foot traffic into their stores. Without being able to operationalize on these data insights across channels, retailers are unable to improve their customer experience in innovative ways and create new in-store experiences.

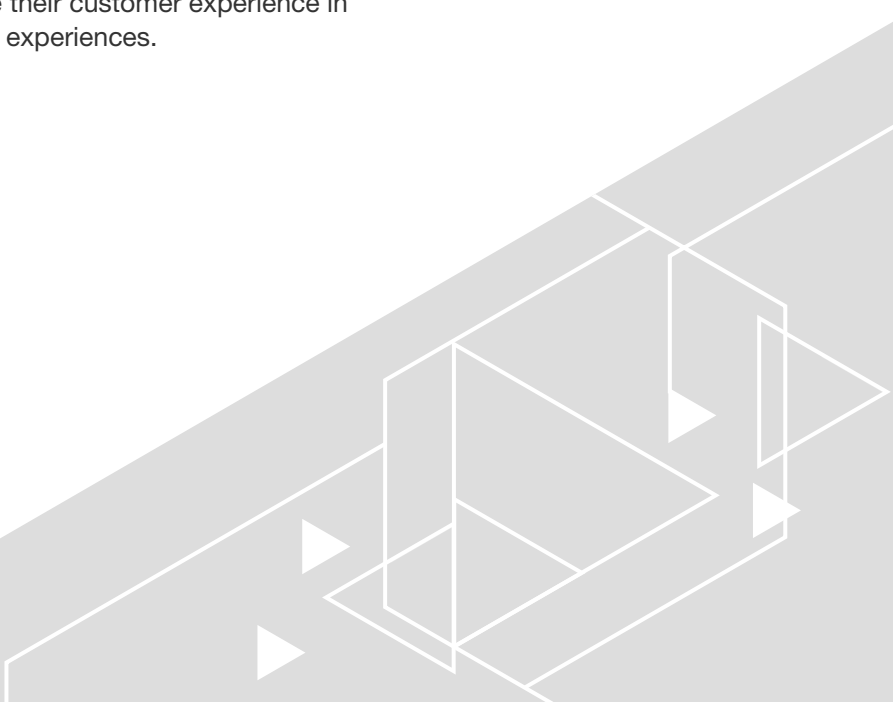
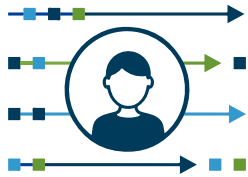
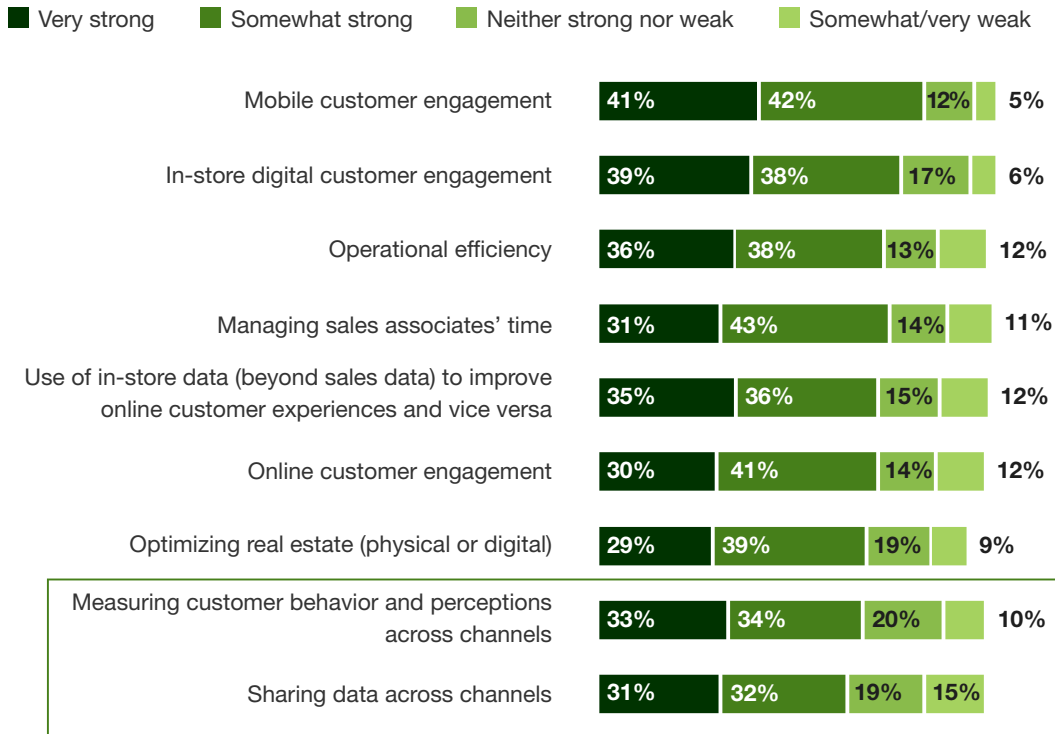


Figure 1

“How do you rate your organization's capabilities in the following areas?”



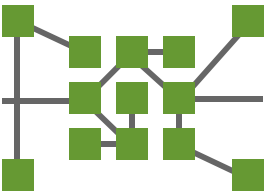
Less than a third of retailers are “very strong” in cross-channel data sharing capabilities.

Base: 507 manager+ IT and business decision-makers responsible for technology purchasing decisions
 Note: Not all responses are shown
 Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

Retailers Must Integrate Online And In-Store Technology To Drive Deeper Consumer Insights

While retailers recognize the importance of the data they are collecting, they struggle with generating actionable insights. Forrester has found that retailers have not invested significantly in digitizing support operations, leading them to be the worst-performing industry in inventory productivity.³ Organizations need to get their back-end infrastructure in order to better focus their limited resources on serving the customer. Retailers must focus on systems and processes that integrate and derive insights from various data sources — from inventory to in-store analytics — to empower sales associates to improve customers’ experiences. Our study found that:

- › **Retailers are challenged by siloed data systems.** Across retailers’ various channels, client data is stored in an average of 12 separate data systems, making it almost impossible for retailers to be able to evaluate the complete customer journey. Eighty percent of retailers say that improving customer experience through innovation is a top priority for their organizations, yet 63% say that their customer-facing sales associates struggle with siloed data systems (see Figure 2), hindering their ability to provide personalized customer experiences.



63% of retailers say they use 10 or more discrete systems to store client data across their channels.

Figure 2

“To what extent do you agree or disagree with the following statements?”



Base: 507 manager+ IT and business decision makers responsible for technology purchasing decisions
 Note: Percentages may not total 100 because of rounding.
 Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

- › **Retailers struggle with analytics.** The top three challenges for retailers regarding measurement and analytics of data are managing data protection/customer privacy, having the talent to perform analysis, and ensuring the data quality from a variety of sources. Customer data is spread across a range of systems, making security complex and time-consuming and analysis difficult. Additionally, connecting and/or replacing legacy systems and infrastructure is complicated and costly; however, these disparate systems must be integrated to produce meaningful consumer insights. By cobbling together data sources, retailers will be much more adept at deriving insights from the data collected. Going forward, part of this solution may be leveraging real-time learnings that will enhance the shopper experience through operational and engaging internet-of-things (IoT) solutions.
- › **Sales associates are not able to act on potential customer experience insights, since critical customer journey and preference data is siloed.** Only 36% of retailers have brand preference data available across all channels, and fewer than a third of retailers have personal information, including general preferences, readily available across the various sales and marketing channels (see Figure 3). These are crucial pieces of the customer journey puzzle. When missing, it is challenging for a sales associate to be able to deliver high-quality experiences for customers, potentially driving the in-store customer to online competitors. To that end, only 20% of retailers strongly agree that they can use data insights to increase customer engagement in real time in stores. Retailers must digitize and optimize their operations using information from across channels in order to bring top-of-the-line experiences to their customers.

Figure 3

“To what extent do you have the following data about your individual customers readily available across your various sales and marketing channels?”



Base: 507 manager+ IT and business decision makers responsible for technology purchasing decisions
Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

Leverage Seamless Technology To Drive Better In-Store Experiences

In the age of the customer, retailers need an integrated technology infrastructure that arms their employees, from the warehouse to the sales floor, with the tools and information they need to deliver what the customer wants, when they want it, and via the channel they demand. Retailers recognize the disconnect between their priorities and their actions — while they want to improve the customer experience through innovation, they are measuring themselves against predominately revenue-specific metrics. Retailers are taking steps to enhance their integration. When asked, they cited creating a comprehensive strategy for addressing digital and emerging technologies as a top business priority. Steps that retailers are currently taking include:

- › **Building out enterprisewide fulfillment capabilities to drive cross-channel integration.** The top three cross-channel capabilities retailers are planning to implement are integrated inventory information, same-day delivery, and endless aisle capabilities, all of which require breaking down inventory-to-store data silos (see Figure 4). Brick-and-mortar stores are evolving into mini-distribution centers through buy-online-pickup-in-store options, and they must be able to compete with next-day shippers for delivery and ease of use. By creating seamless inventory delivery systems for customers, retailers are better able to not only retain digital-savvy customers who demand near-instant gratification, but also help to drive in-store foot traffic and increased revenue by leveraging inventory across the organization to meet demand.⁴ For example, some retailers are considering use of RFID tags to improve inventory visibility while monitoring inventory flow and accuracy.
- › **Empowering sales associates by seamlessly integrating online and in-store customer data.** Customers' expectations are shaped by their digital experiences, and brick-and-mortar retailers must be able to compete with their digital counterparts by delivering seamless experiences for customers. Twenty-three percent of US consumers expect sales associates to know their preferences and past purchases when they are approached in-store.⁵ Providing sales associates with critical customer data from across channels not only allows them to serve customers using tailored experiences, but also gives the retailer valuable insights into the success of their in-store customer engagement operations.

Figure 4

“You said that you are planning to implement the following capabilities. Which is your top priority?”



Making real-time systemwide inventory information available online



Same-day delivery



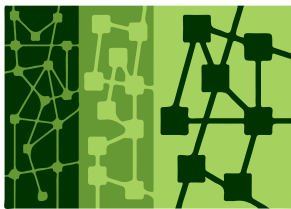
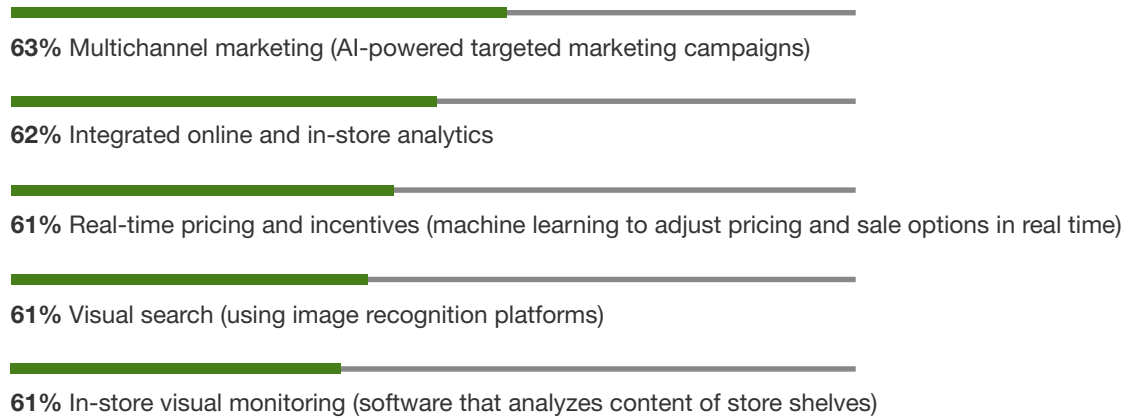
Buy from store, ship to customer/home (endless aisle)

Base: 501 manager+ IT and business decision makers responsible for technology purchasing decisions
Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

› **Harnessing the power of AI to better integrate analytics.** Although retailers are not quite able to implement artificial intelligence capabilities just yet, within the next 24 months, nearly two-thirds of retailers surveyed are planning on utilizing AI-powered marketing campaigns to make their cross-channel marketing most effective (see Figure 5). Artificial intelligence may replace some of the repetitive tasks that sales associates have traditionally needed to do, which will free these associates up to work on more targeted outreach to customers, creating new in-store experiences. Similarly, AI could help retailers integrate their analytics from across online touchpoints and in-store experiences to help drive the seamless experience and modernize businesses, ensuring that they are constantly evolving with new real-time information.

Figure 5

“What are your firm’s implementation plans for the following artificial intelligence capabilities?”
 (Only “Planning to implement” responses were included)



Nearly two-thirds of respondents plan on implementing AI to drive their organization into the future.

Base: 507 manager+ IT and business decision makers responsible for technology purchasing decisions
 Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

Key Recommendations

To succeed in the age of the customer, retailers must reach a state of constant connection to the customer through data and understanding to create seamless, relevant, and authentic customer journeys. At the core of this capability lies the need to easily and effectively capture, store, organize, manage, and utilize data. Why? Because rich, accurate, reliable data is the gasoline that fuels the technologies, insights, and analytics enabling a truly unified commerce experience. In today's rapidly changing retail environment, business professionals must:



Champion the organization to become a data-driven machine.

Digital professionals must take the lead in helping the organization move away from using opinions and assumptions about the customer, experiences, and operations to make business decisions. Customer-obsessed retailers use rich, reliable data and insights to shape their company's culture, organizational processes, technology investments, and metrics for measuring initiatives against company goals and objectives.



Build a system for either connectivity or consolidation of data. To create seamless, connected experiences for customers and efficiencies in operations, data cannot live in multiple, disconnected systems. Creating a single data repository is the optimal route to take that will yield lower maintenance costs and management expenditure over time. Those who don't have the time or resources to accomplish this should at the very least create connectivity between data systems so any business user in the organization can access relevant data.



Educate the entire organization on strategic objectives for optimizing the customer journey. It is critical for every business decision maker in the company to understand the "why" of business decisions before taking actions on the "when, how, and where" of company initiatives. Identifying pain points and opportunities for improvements in both customer journeys and operations will help business users classify what data is useful for aligning these decisions with company goals.

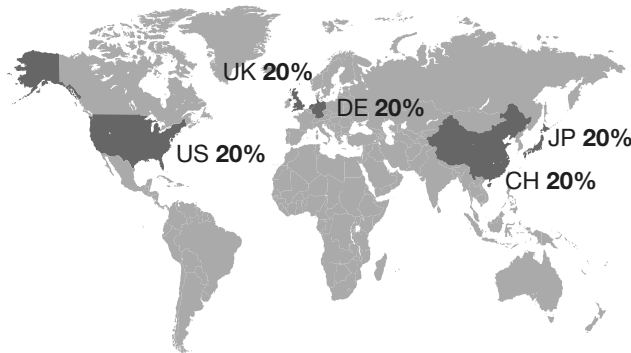


Empower each individual business unit through real-time insights and analytics. Retailers today must move at the speed of the customer in order to meet their expectations. But real-time insights and systems must not be reserved for just marketing or eCommerce teams. Today's retailers must all be operating at the same rapid pace, and that includes the often-forgotten areas of store operations, merchandising, and even back-office teams like inventory and procurement. For the more data-driven teams, like business intelligence and CRM, more powerful tools built on predictive, prescriptive, or even AI-based analytics may be required.

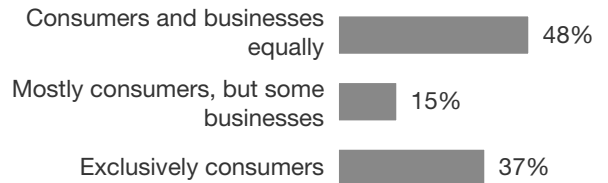
Appendix A: Methodology

In this study, Forrester surveyed 507 retail organizations in the US, the UK, Germany, China, and Japan to evaluate trends related to data integration and management in the retail industry. Survey participants included decision makers in roles of managers and above at organizations with 500 or more employees. Respondents were offered an incentive as a thank you for time spent on the survey. The study began in January 2017 and was completed in February 2017.

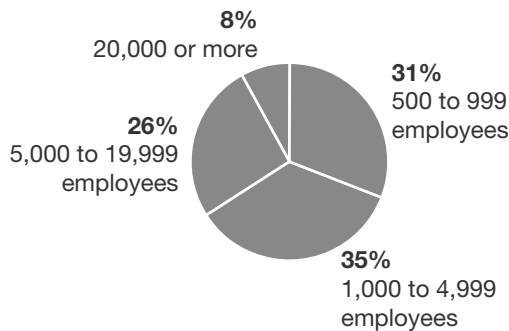
Appendix B: Demographics/Data



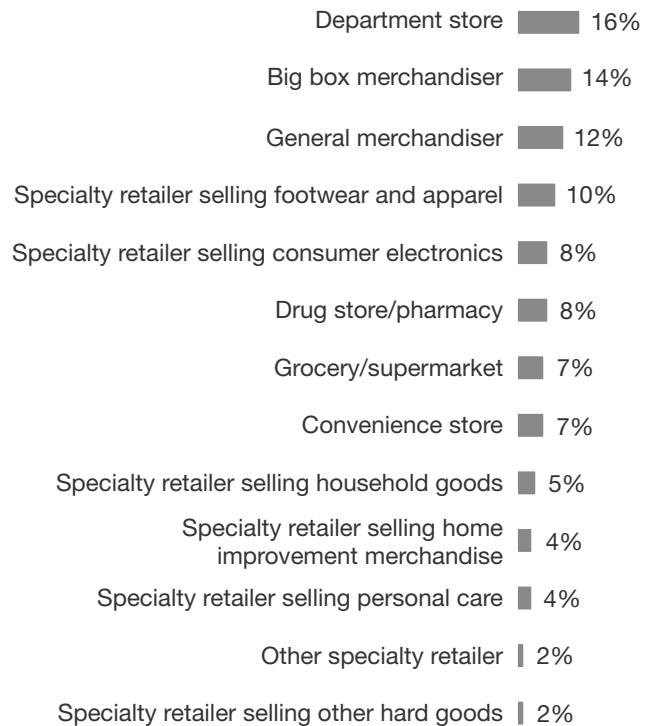
“To whom does your company primarily sell?”



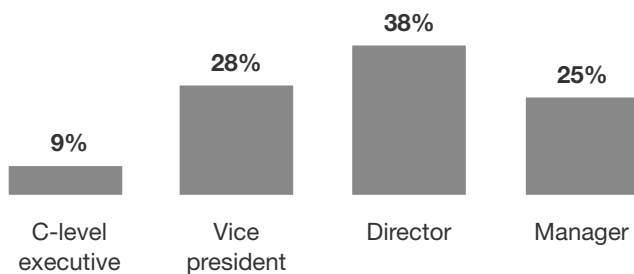
Company size



Industry sub-verticals



Respondent level



Base: 507 manager+ IT and business decision makers responsible for technology purchasing decisions
 Note: Percentages may not total 100 because of rounding
 Source: A commissioned study conducted by Forrester Consulting on behalf of Intel, February 2017

Appendix C: Endnotes

¹ Source: “The Insights-Driven Business,” Forrester Research, Inc., July 27, 2016.

² Net Promoter and NPS are registered service marks, and Net Promoter Score is a service mark, of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

³ Source: “Aligning Emerging Technologies With Retail Operations Priorities,” Forrester Research, Inc., April 4, 2017.

⁴ Source: “The Future of the Digital Store,” Forrester Research, Inc., March 6, 2017.

⁵ Source: “Just For You: Use Personalization Technology To Help Associates In The Retail Store,” Forrester Research, Inc., July 23, 2015.