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## Consumer connectivity

Using consumer data to enable  
breakthrough products, services,  
and business models



Consumers are becoming increasingly connected to businesses through digital technologies. As a result, the amount of consumer data available for analysis is exploding.

Forward-thinking companies are capitalizing on this trend by using consumer data to drive breakthrough innovations in their supply chains and manufacturing operations. These innovations go far beyond the decades-old idea of using customer data for simple demand planning, affecting everything from product development and feature selection to marketing and consumer engagement.



## Understanding consumer connectivity

### What is consumer connectivity?

It's a supply chain's ability to digitally sense, motivate, and serve consumers, giving them exactly what they want at any time and place.

Consumer connectivity is powered by three types of consumer data:

- **Sentiment:** What consumers say they will do. ("I would really like product X"; "I want this type of feature"; "I am looking for something in this price range"; "I like to shop in this channel")
- **Behavior:** What consumers actually do. (Shopping behavior, impressions, brand interactions, return rate, purchase price)
- **Social:** How consumers react to and share their experiences. (Reviews and ratings, referrals, personal discussions, social media comments)

This data can be acquired from first-party sources, such as the consumer. It can also be obtained or purchased from another party.

Consumer data can help a company understand who its end customers are, what they value, how they act, and what they're thinking and feeling after a purchase or recent interaction. At a strategic level, it can also provide powerful insights into the consumer forces that are shaping industries. Ultimately, consumer data can help create a sustainable competitive advantage that separates winners from losers.

## Turning consumer data into supply chain innovation and business value

Increased consumer connectivity in supply chain management can change how a business is organized and how products are delivered to market. This has a broad impact on all key business drivers, including overall profitability.

Harnessing the power of connected consumer data enables a supply chain to react more quickly to market shifts and can help leaders understand (and proactively address) consumer needs. The results? Increased loyalty, sales, and profits.

Consumer connectivity can also shift the entire supply chain paradigm. In the past, supply chains focused on cost or speed, despite the availability of broader business data. But now, thanks to the explosion in connected consumer data and the growing awareness of how data insights can drive value, companies are able to curate the right products, services, and experiences throughout their supply chains. This can help deliver organic revenue growth and enhanced operational efficiency.

For example, if a consumer is willing to pay more for a sustainably sourced product, a connected supply chain can satisfy that preference while building loyalty through satisfaction and at a higher price point. Improved consumer connectivity can also help an organization identify and understand shifts in consumer preferences to proactively assess the implications and capitalize on emerging opportunities.

As supply chains start to collect, collate, and apply the three types of consumer data, they can form a more complete view of consumers. But even before that, supply chain managers can apply data analysis to make more strategic decisions around sourcing, distribution, or returns to improve opportunities across the entire supply chain.

## Consumer connectivity by industry

Using connected consumer data to drive innovation in supply chain and manufacturing is important for every industry, but the potential business impact and current maturity level vary widely.

### How consumer connectivity applies across industries

	Potential impact	Current maturity
 Automotive	Medium	Medium
 Consumer products	High	Low
 Government	Medium	Low
 Life sciences and health care	Medium	Medium
 Oil and gas	Medium	Low
 Retail	High	Medium
 Travel and hospitality	High	High
 Technology, media, and communications	High	Medium



## Automotive

The auto industry will soon be more customized, intelligent, and consumer-led. While the lion's share of mass customization in the auto industry is still years away, capturing consumer data to understand preferences, product-market fit, and market size is crucial to unlocking new business models and partners. Companies that find ways to add value to functions like consumer sensing, production, distribution, customization, and maintenance will all have a role in tomorrow's auto market.

### **Ford: Connected cars, connected consumers, connected company**

Ford's focus on consumer connection across its products, fleets, and offerings is evident in its business footprint. It's also evident in its priority to develop a future of fully networked vehicles. And it's evident in the company's external consumer offerings, such as FordPass Rewards, which allows consumers to access maintenance, rewards, and roadside assistance via remote connectivity.

By training a laser focus on the use of data to inform choices, conduct training, improve products, and run the business more effectively, Ford maintains its consumer orientation in design and product decisions. And it continues to innovate and unlock new value in its operations, product, and delivery functions.



## Consumer products

In this sector, there's already strong customer segmentation, with consumer data widely used to inform product development, planning, and distribution. However, digital data is increasingly influencing purchase decisions. With e-commerce and direct-to-consumer platforms generating vast amounts of data about consumer behavior and preferences, organizations have an opportunity to uncover more about what consumers are considering. With this new visibility, consumer products companies can better target consumers with ads, reminders, outreach, and, ultimately, purchases.

### **Prada: Complete product control**

Prada's physical product is the most important part of its brand value. Yes, the consumer ordering process is critical. But the "Prada experience"—the pristine delivery of the company's products—matters more.

So while Prada allows other platforms and e-commerce sites to take orders for its products, the company itself maintains full end-to-end control of the product supply chain. This autonomy on the product side helps ensure:

- Product security (no sneaking counterfeit product into the supply chain);
- Product quality (no risk of third-party handlers or retailers damaging the product or degrading the unboxing experience); and
- Inventory flexibility and control (no uncertainty with respect to exactly where products will be sold).

Complete product control allows Prada to pool its global inventory and ship items to the correct destination after an order has been placed. This form of connected fulfillment enables the company to sell anywhere in the world without overproducing product, preserving the combination of scarcity and quality that is so crucial for a high-end brand.



## Government

In the government sector, a strong emphasis on data privacy and equitable access to public services limits the ability for organizations to tailor their offerings through consumer and citizen data. Yet citizen data is increasingly being used to inform decisions about program funding, geographic distribution, and allocation of services to people with the greatest identified need. Program performance and ROI data can help inform and refine funding and development decisions over time.



## Life sciences and health care

Across the rapidly evolving life sciences and health care space, data around medical care, treatments, and product supply are critical inputs for forecasting and planning. Understanding consumer preferences and having increased monitoring and measurement for point-of-care needs presents an opportunity to better serve the market and unlock desired health care outcomes.

### Sensing, scaling, and resiliency in medical supplies

During the COVID-19 pandemic, monitoring and understanding consumption patterns and resource availability has helped companies better prepare for their supply needs. That's because care data, combined with forecasts and scenario planning, can help medical supply chains:

- Build resilience, potentially through new partnerships that improve scalability;
- Identify upticks in demand to trigger production schedules; and
- Work more closely with fulfillment partners and customers to jointly manage fulfillment when supply is limited.

For a supply chain, capitalizing on these opportunities is likely to require:

- A better understanding of suppliers and supplier risk (producers of critical medical supplies and what factors are affecting them);
- Considering when redundancy (multiple suppliers for the same products) makes sense when managing supply risk;
- Exploring marketplace partnerships to pool buying power and allocate resources in high demand (among hospital networks, across state lines, and through government organizations); and
- Monitoring and understanding patient needs at both the local and regional level to inform which products and how many are purchased in the event of concurrent demand in multiple markets, supplier performance issues, or shifts in demand.

The challenges of the past year have raised awareness and understanding of data for medical supplies. Continued management and monitoring of critical supply chains, including more real-time data to inform choices and increase agility, vividly illustrates how the connected supply chain concept is applicable to the global health care market.



## Oil and gas

In the oil and gas industry, a strong understanding of broad consumption patterns is highly relevant for production and distribution. Furthermore, an up-to-date understanding of regulatory trends and consumer preferences provides important context for longer-term planning and investments. It can also reduce volatility in real-time energy consumption. On the chemical side of the industry, increased competition and shifts in end-product usage are elevating the importance of customer experience data. This data can inform R&D cycles and help companies differentiate their product portfolios to fit the broader set of use cases now in the marketplace.



## Retail

Consumption and preference data at the retail level can be used to identify similar markets, stores, and categories. This enables retailers to identify and test successful strategies in select markets and later apply those same strategies across a broad network of stores. Similarly, localized consumer data, combined with data about weather and other identifiable patterns, can be used to identify needs or opportunities to reallocate inventory across markets. This can help retailers capture the highest price for a product while minimizing waste.

### **Nordstrom: The consumer platform model**

As both a branded retailer and e-commerce platform, Nordstrom.com offers consumers a one-stop shop for curated brands that match their preferences. The company's web storefront model offers value to clothing brands by freeing them from having to present their own front ends and attracting consumers to their individual sites. Also, Nordstrom's model pools various external brands and inventories into a single online shopping basket, allowing for more diverse basket-building and incremental addition of products.

For consumers, the storefront model reduces search costs and offers an integrated process and single point of contact for purchases, support, and returns. For Nordstrom, the model helps manage and limit inventory risk by not having to own and physically distribute products to stores across the country. Instead, Nordstrom can leverage customer data and buying patterns to create valuable experiences regardless of buying preference.

Consumer-related data used by Nordstrom includes the following:

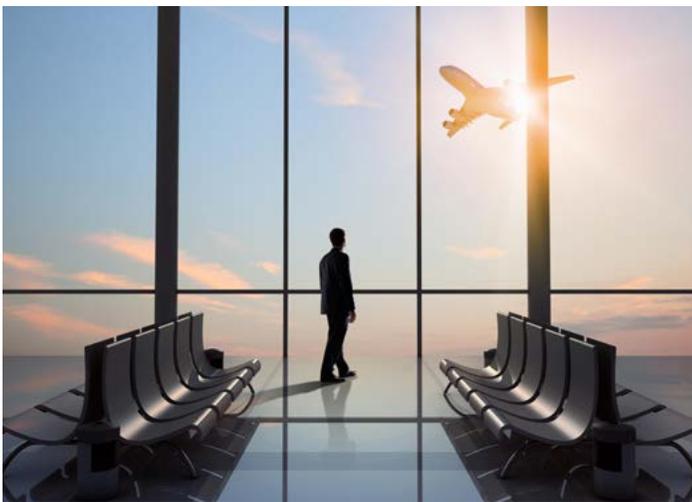
- Search engine optimization (SEO)
- Onsite consumer behavior
- Items added to cart
- Cart abandonment rates
- Pricing and discount data
- Repeat purchase analytics
- Demographic characteristics, such as estimated age range, gender, and income level

Nordstrom gets to know consumers and understand their buying preferences without having to bear the full costs of inventory acquisition, management, and fulfillment. The company can then use those insights to identify trends and better curate future product selections.



## Travel

Consumer data from travel and hospitality membership and loyalty programs enables companies to actively and dynamically manage prices, offers, and inventory. Surveys and trend data can be used to inform mid-to-long-term planning. Platform and crowdsourcing data can be used to cocreate and curate future travel and hospitality offers.



## Technology, media, and telecommunications (TMT)

TMT is the industry with arguably the most opportunities to create business value by tracking, analyzing, and understanding consumer behavior. Compared with companies in other sectors, TMT companies often have more consumer interaction points and better infrastructure to understand, test, and analyze behavior. This enables TMT companies to glean deep insights from consumer data and then apply those findings to enhance the customer experience. It also gives them an advantage when pursuing opportunities to further monetize consumer technology platforms and insights across industries.

### Disney: Integrated consumer preferences

MagicBands—colorful, waterproof plastic wristbands worn by visitors at Disney theme parks and resorts—contain RFID radios that make it possible to collect real-time data on consumer behavior, preferences, spending, and consumption. This helps Disney customize and tailor in-park offers to consumers and better understand performance against the company's plan. It also allows the company to continue bundling and making offers via partners long after consumers have left the park.

## Cost versus action—and the cost of inaction

Today, every supply chain should be collecting data to understand how consumers behave and to measure business performance against expectations. Doing so allows a supply chain to:

- Further explore and hone demand signals that can inform both forecasts and logistics;
- Understand changes in consumer behavior and changes in demand and consumption;
- Explore opportunities for new or adjacent market offerings or partnerships, especially if consumers do something surprising or if spending was skewed in an unexpected direction; and
- Design, develop, and deliver new offers and also support internal or external business cases.

A key challenge when pursuing consumer connectivity is the vast scope and volume of data now being generated, along with the rising costs of shifting to (and delivering against) new business and operating models. For example, digital health care models and direct-to-consumer shipping provide the opportunity for higher margins and fewer intermediaries, but they likely require new technology infrastructure and higher spending for fulfillment

and returns. As companies shift to digital-first and consumer-oriented models, they will need to actively manage costs to maintain profitable growth.

Another key challenge for organizations looking to harness the power of consumer data is building trust, reassuring consumers that their data is being used appropriately and securely.

Despite the additional challenges and investments associated with consumer connectivity, this isn't the time to stay on the sidelines while competitors lean into capitalizing on insights from consumer data. As companies get better at targeting consumers and choosing what features to deliver, organizations will need to achieve a similar level of targeted product design, influence, fulfillment, and purchasing to stay competitive.

Integrating connected consumer data into your fulfillment model will help you deliver the right product to the right consumer at the right time. And with the right price, organizations can create a virtuous cycle of happy consumers, repeat purchases, and word-of-mouth referrals.

## Getting started

Here are three steps to begin harnessing the full power of consumer data in your supply chain:

- **Define your ambition.** What role do you want to play in the value chain? How do you want to serve customers and consumers? How will you differentiate your offerings? Are there any recent trends or potential headwinds that could affect your objectives?
- **Assess where you are.** What consumer data is already available to you (e.g., segments, preferences, buying patterns)? What data will you need to achieve your ambition? Where are the gaps?
- **Create and operationalize your metrics.** What levers and investments will be needed to close the gaps in your understanding of consumers? How will you monitor performance and measure success?

The idea of using consumer data to improve supply chain planning has been around for decades. But as consumers become increasingly connected, the volume and depth of data about them is growing exponentially. By capitalizing on that wealth of data, supply chains can significantly improve their operational performance. But more importantly, they can use those new insights to enable breakthrough products, drive organic revenue growth, and create sustainable competitive advantages.

### Consumer trust articles:

[Navigating consumer trust](#)

[A new measure of trust for consumer industries](#)

[The value of resilient leadership: Renewing our investment in trust](#)



## Get in touch

### How can your organization leverage consumer data to develop an innovative, customer-centric supply chain?

Reach out to us and let's talk about it:

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