CDW ® PEOPLE WHO GET IT™

THE CONNECTED RETAILER

How retail businesses can better connect with shoppers through insightful collaboration and innovation.

EXECUTIVE SUMMARY

Shoppers want their brick-and-mortar buying experiences to be as easy as their interactions with retailers online. Accustomed to the one-click simplicity of the web, today's customers expect to quickly find the item they're looking for, immediately learn more about products and assume retailers will quickly address their needs on the fly.

Too often, though, physical stores can fall short of these high expectations. Shoppers don't have the high-quality experience they expect. They don't find the products they want in stock or get the personal service they demand. When a store fails to meet shoppers' expectations, that's when customers begin to look elsewhere, either at another store or online.

Through the use of a sophisticated digital strategy, retailers can provide customers with the seamless shopping experiences they crave. Solutions such as mobile devices, mobile beacons, wearables and advanced data analytics empower the sales associate and personalize retail interactions for the customer. When deployed thoughtfully and effectively, these emerging technologies help retailers connect with their customers like never before.

A New Era of Customer Service

In years past, when most people did their shopping in neighborhood stores, retailers knew their customers'names and their buying habits. By maintaining long-standing relationships with their clientele, shopkeepers were able to better serve customers — anticipating their needs and providing personalized experiences. Over time, as retail moved away from mom-and-pop shops and toward department stores and big-box outlets, this level of intimacy between shoppers and shopkeepers was largely lost. While some customers today are still on a first-name basis with their baristas and their barbers, most buy their clothing, groceries and electronics from strangers.

Through the tracking of customer data, retailers are beginning to re-establish some of those lost connections. When used correctly, data analytics can enhance customers' experiences, saving them time and money and making them feel valued. In this instance, however, more isn't necessarily better. If shoppers feel like a retailer is tracking their every move, they may become uncomfortable and disengage with the brand completely.

91%

The percentage of non-IT retail managers who say that the ability to draw intelligence from data is one of their organization's top priorities[1]

the retailer can email deals the next winter for related items such as motor oil and rock salt.

It is essential that retailers have a digital strategy in place to guide investments in the underlying technologies supporting these capabilities and to ensure that deployments are helping the company meet its bottom line and customer service goals. At the same time, such strategies must be flexible enough to accommodate changes in both the technological landscape and the retail market.

Retailers must remember that not all of their customers are ready to utilize all of the technology tools they're able to offer. A substantial digital divide remains between some consumers and others, largely following generational lines. While it often seems that "everyone" is glued to his or her mobile device, a survey by the Pew Research Center showed that more than one-third of U.S. residents still did not own a smartphone in 2015. In practice, this means that while many shoppers prefer to engage with a retailer's customer service team over social media, others still want to call the company's customer contact center.

The Customer Journey

Providing customers with a great experience in the digital age doesn't merely mean allowing them to interact with a brand in a number of different ways. A retailer can support text and video chat for customer service inquiries, give customers access to useful and interactive mobile apps, and target customers with tailored advertisements and offers based on their purchase history. However, if these systems are disconnected from one another, customers might still have a frustrating and unproductive experience, regardless of a retailer's new investments in technology.

Unifying the customer experience across all channels and devices, on the other hand, can create the deep personalization that customers value and have come to expect. It builds a loyalty that encourages shoppers to maintain the relationships they have with specific retailers. For example, a shopper might begin comparing snowblowers on a retailer's website while sitting at home. If the retailer has real-time asset tracking, the shopper can see which models are in stock and may decide to drive to the store to view the machines in person. If the shopper has the store's mobile app installed on her phone — assuming the store's website has machine compatibility with its mobile app — the app can recognize the shopper the instant she walks into the store. Then, the app can take a number of actions to help convert the sale, such as giving the customer in-store directions to the snowblowers or pushing out a buy-now discount. If the customer does make the purchase,

The Next Generation of Customer Service

Retailers can exceed customers' expectations by making strategic investments in technology, engaging in sophisticated data analysis and carefully managing their various digital channels. Many shoppers are conditioned to feel satisfied if a retailer is able to solve their problems on even a basic level in a reasonable amount of time. When retailers are able to go above and beyond this level of service, they can create a real competitive advantage for themselves. But this next-generation customer service takes thoughtful planning, and retailers must also be careful not to overstep the invisible boundaries that will make customers feel as though a store is watching and tracking them, rather than helping.

Next-generation customer service starts the minute a customer walks into a store, and continues long after a sale has been made. For instance, by tying purchase history data into a mobile app, a clothing retailer can be ready to provide personalized service when a customer returns to the store. If the customer purchased a gray suit on her last visit, perhaps a sales associate can greet her with a matching blouse, belt and necklace. Once a customer has brought a product home, retailers can continue to provide next-generation customer service with a solid presence across self-help channels that customers use, including social media and web searches. Retailers should also monitor online communities and forums to engage with customers who post questions and concerns. Tools such as click-to-chat or click-to-call should be

SOURCE: [1]"CDW Retail Innovators Report," January 2016

supported across channels — including text, voice and video — to give customers multiple ways to engage with a company.

Providing these tools alone, however, won't ensure a great customer experience. Along with technology, retailers must implement policies and procedures that ensure a quality experience. If a retailer merely uses social media platforms to express empty sentiments such as "We're sorry you're frustrated" — rather than working to solve shoppers' problems — then customers are likely to remain unsatisfied and possibly use social means to vent their dissatisfaction with the brand.

Another pitfall of next-generation customer service is the "creep-out" factor that shoppers sometimes experience when they feel like they're being relentlessly monitored and

aggressively targeted. While many consumers appreciate receiving tailored marketing messages and deals, they don't want to search online for a lawn mower one time and then see nothing but lawn mower advertisements on their web browser, phone and mobile apps for the next two weeks. Even if targeted messaging is subtler than this, customers sometimes tune out when they are bombarded with the "digital noise" of constant emails and push notifications. It is often better to target a customer through a single portal, such as a mobile app, than through many channels all at once.

Infrastructure Support

When done effectively, next-generation customer service feels organic and seamless to shoppers. But this doesn't happen by accident. These efforts must be supported by investments in robust, modern infrastructure that can power the connectivity and data analysis needed to provide a personalized customer service experience.

A retailer looking to deploy advanced solutions must shore up its entire network, from the data center out to wireless access points in individual stores. It does little good to roll out a sleek custom mobile app if customers are unable to utilize it because retailers lack the proper Wi-Fi infrastructure. Retailers should also explore emerging technologies and investigate whether investments in these areas can create value for the company and its customers (for example, mobile beacons that connect with customers' mobile and wearable devices). Finally, investments in data collection and analytics are necessary to capture and use real-time insights about customer location and behavior. Many retailers are exploring cloud solutions — public, private or hybrid — as a way to host this new infrastructure and software.

The First Step in Building a Customer Connection

Even with all the technology in the marketplace, customers choose where to shop for the same reasons they always have. They want to go to stores where they can find exactly what they need, when they want it and where they know they'll have a great buying experience.

Technology therefore helps retailers deliver what shoppers have always expected. Strategic technology upgrades can draw customers into stores, deliver personalized experiences to them, enhance the ability of sales associates to assist them in a meaningful way and ensure that they leave the store with precisely what they want. In short, cutting-edge technology has the power to facilitate the sort of engagement that can lead to lifelong customer relationships.

Looking Good

Digital displays and kiosks can help to connect retailers and customers shortly after shoppers walk through the doors — or even before. Eye-catching, ruggedized digital displays can be placed outside of a store to entice shoppers

On the Cutting Edge: IoT and Retail

According to [Cisco Systems](), 79 percent of retailers expect to increase their investments in Internet of Things technologies in the near future. For a retailer with $20 billion in revenue and 1,000 stores, Cisco estimates, IoT has the potential to deliver $107 million annually in earnings.

The term Internet of Things refers to a network of physical objects that collect data via internal sensors and connect to the Internet through wireless or wired connections. For retailers, much of the potential value of IoT lies in improving customer experiences and optimizing supply chain and logistics efficiencies.

Some retailers are already using location-based beacon technology to connect with smartphone-carrying shoppers while they're in the store. Combined with a custom mobile app, this technology allows retailers to push out personalized marketing messages and promotional offers to customers at the right time and in the right place. Stores can also track customers' paths through the aisles, helping managers to improve layout and more strategically place merchandise.

IoT systems can also help retailers to track inventory, reducing the incidence of out-of-stock items in stores. Additionally, data produced by these tracking efforts can help managers optimize fleet operations.

IoT-enabled energy systems can both cut costs and improve customer experiences by allowing managers to monitor and control things such as lighting and temperature in real time.

to walk in (many of these solutions enable retailers to transmit content and control signals from a distance, so that media players and other content delivery devices can be kept indoors and away from the elements). A number of retailers use digital kiosks at the front of their stores, enabling customers to browse product offerings, check in-stock status and order delivery to their homes if a product is out of stock.

Digital signage can display the same sorts of messages as traditional signs, such as directions to restrooms or advertisements for specific products. However, digital displays are much more flexible than traditional signage, allowing retailers to instantaneously rotate messaging or

Retail's Wearable Future

Wearable devices such as smart watches are still catching on with consumers, but forward-thinking retailers are already considering how these emerging technologies can help improve customer experiences and make their sales associates more effective.

According to a 2014 PricewaterhouseCoopers report, retail deals are near the top of the list of information that consumers would like wearable technology to provide them — ranking behind only dietary, exercise and medical information. Fifty-one percent of millennials (along with 45 percent of the general population) said they'd like to receive retail deals from wearable devices — and these numbers could conceivably go up as shoppers become more accustomed to this sort of messaging.

Wearable devices can also be tracked through mobile beacons and tied into store loyalty programs, giving retailers new ways to connect to customers and deliver the most relevant and timely promotional messages possible.

Additionally, stores can equip sales associates with wearable devices of their own, helping to create a "hands-free" sales force with access to the real-time information necessary to deliver exceptional customer service. For example, users wearing smart glasses might one day greet customers by name at the door and point out new items that may interest them, based on their shopping history. Or, depending on how interconnected a customer's wearables are with other devices — and how much access to data the retailer is given — these associates might even give recommendations based on the shopper's Internet browsing history.

use more dynamic content. This technology improves accuracy and drastically cuts down on the number of user hours spent refreshing content. Also, digital displays are still something of a novelty for many shoppers, and therefore they may be more likely to catch a potential customer's eye.

Mobile apps and devices take customer engagement a step further. Rather than "automating" the retail experience, these digital solutions can actually drive more meaningful face-to-face interactions, giving shoppers the sort of personalized, one-on-one attention that is lacking in many retail environments today. For example, retailers can provide shoppers with mobile apps that allow them to schedule store appointments from their phones. When a shopper arrives, he or she can check in using an app on a storefront tablet, or the store's mobile beacon technology can notify sales associates of the customer's presence. Then, a sales associate armed with a tablet can greet the customer and guide him or her through a personalized shopping trip, using a mobile device to pull up information on customer preferences.

Such solutions are ideal for high-end luxury retailers, where shoppers are accustomed to receiving personal attention. They are also a good fit for specific use cases, such as when a customer is creating a gift registry or a customer who participates in a loyalty program is refilling her favorite cosmetics. Shoppers creating gift registries for weddings or baby showers routinely register for thousands of dollars in merchandise, and loyal customers want to ensure that their favorite perfume will be available when they are ready to make a purchase. In either scenario, they are more likely to work with a retailer that offers that personal shopping service meant specifically for them.

A Deeper Relationship

Shopper loyalty programs, frequently tied to customer mobile apps and the data produced by these programs, can also be integrated with the mobile devices carried by sales associates. This connectivity adds value to the mobile app for customers, potentially increasing the adoption rate of the app and thus giving retailers greater ability to connect with these shoppers through a single portal. At the same time, the tie-in also adds value to shoppers' interactions with sales associates, who are able to provide better service through access to information such as purchase history.

Technology is even following shoppers into fitting rooms, in the form of smart mirrors. Through the use of RFID tags or beacons, these mirrors can recognize clothing items and deliver branded content to consumers, such as suggesting an accessory that goes well with a particular shirt. From a shopper's perspective, smart mirrors streamline — and even add a bit of fun — to the often time-consuming and occasionally frustrating experience of trying on clothing.

Some smart mirrors allow customers to take photographs or even short video clips of themselves wearing and moving in different outfits. (One extremely popular feature of smart mirrors among shoppers is the ability to see a 360-degree

view of each outfit through video clips.) These images and videos are saved on the mirror, allowing shoppers to quickly refer back to a previous outfit without having to try it on all over again. Customers can also compare outfits side by side. Images of a shopper wearing an outfit can be shared with friends or spouses for instant feedback, and customers can save the images to a mobile app for future reference. Smart mirrors have the power to drive sales conversions days or even weeks after a customer has left the store. The customer can save these images in the retailer's mobile app to act as a sort of digital shopping cart. A customer can decide at any time to finalize the purchase of a certain outfit using the app. Additionally, retailers can target these customers with special offers on items of clothing that they know the shoppers have already tried on.

$155.2 billion

The value of sales via mobile apps globally in 2015, a 68 percent increase from the previous year[2]

Augmented reality features can add a "wow factor" to smart mirrors — and can also help stores drive sales — by allowing shoppers to easily see a range of buying options. For example, a customer might see a dress change from one color to another while looking in the smart mirror, or see how an outfit looks with a variety of accessories.

Keeping an Eye on Business

Many retailers are leveraging technology to make use of their in-store video surveillance systems beyond traditional security and loss-prevention functions. When used effectively, video analytics systems can enhance business applications related to areas such as marketing, human resources and operations. One of the most popular retail uses of video analytics is simple people counting: using video footage to determine how many customers

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Lessons from Retail Innovators

In a 2015 survey, CDW asked more than 300 retail line-of-business managers to rank "the ability to draw intelligence from data" on their organization's list of priorities. One-third of respondents said that this sort of data analysis was their top priority.

CDW bestowed this group with the title of "retail innovators" and found significant differences between these innovators and their retail peers. While the vast majority of all respondents considered data-driven insights to be valuable, innovators who truly prioritize data analytics are using these insights to improve the customer experience and their bottom line in concrete ways.

For instance:

45%
Forty-five percent of retail innovators gave their organizations an A when asked to grade the collaboration between IT and line-of-business managers on IT projects aimed at improving the customer experience and sales. Only 13 percent of all other respondents graded their organizations this highly.

67%
Sixty-seven percent of retail innovators said managers at their organizations can always translate data fast enough to make critical business decisions, compared with 32 percent of other respondents.

2 hours
Within two hours, 54 percent of retail innovators can retrieve business information and get it to the appropriate managers. Just 32 percent of other respondents can get information to the appropriate managers within that time frame.

91%
Nearly all (91 percent) retail innovators are using mobile apps in some capacity, easily outpacing other respondents (79 percent).

SOURCE: "CDW Retail Innovators Report," January 2016

SOURCE: [2]Internet Retailer, "2016 Mobile 500," August 2015

enter and exit a store, and how many are within a given area at a given time. Analyzing this data helps retailers make decisions about where to place certain products and how to best direct their customers to those products. When compared alongside data generated by point–of–sale systems, these numbers also can help retailers better understand their conversion rates and take action to improve the number of sales completed for each customer who walks into a store. People–counting analytics can also deliver customer service applications. By tracking the length of lines at checkout lanes, stores can make improvements that reduce wait times and enhance the customer experience.

Heat mapping, which provides graphical, color–coded representations of how shoppers move through stores and how much time they spend in particular sections, is another important application of video analytics. Heat mapping can help retailers make better decisions about store layout, and can provide stores with empirical evidence to back up the rates they charge brands for premium placements within a store.

Connection at the Point of Sale

If a store's shoppers are standing in long lines to pay for their items in cash (because the store doesn't accept their preferred method of payment), something is wrong. This sort of negative shopping experience may make customers less likely to return. Some may even leave the line and skip their purchases altogether. And to make matters worse, the store is missing out on a prime opportunity to collect data from its customers.

There's a better way. In fact, there are many better ways. Innovative point–of–sale solutions can streamline sales transactions, leading to both improved store efficiency and happier customers. POS solutions can include a payment terminal, cash drawer, mounted cash register and receipt printer, or they may be mobile and tied to a tablet or a dedicated POS device.

Increasingly, retailers are equipping their sales staff with devices that enable mobile point–of–sale (mPOS). These solutions are popular with retailers of all sizes: large appliance stores, high–end retailers, heavy traffic outlets, even small shops. Small retailers that don't need large, sophisticated cash registers can instead opt for small credit card readers that connect with tablets. Larger retailers use mPOS solutions to alleviate congestion at the front of stores and to process transactions from anywhere on the sales floor.

Retailers understand the need to have various checkout methods to meet the preferences of different customers. An mPOS solution not only provides a convenience to customers, who can make their purchases and be on their way without having to thumb through tabloids at

71%

The percentage of in–store shoppers who use smartphones for online research who say their device has become more important to their in–store experience[3]

the checkout stand, but it also has the potential to increase the efficiency of sales associates. Instead of standing idle at the front of a store while waiting for customers to check out, these associates can move around the sales floor and help customers anywhere they're needed. In effect, a single worker becomes two sales associates: first, a customer service representative, and then a cashier.
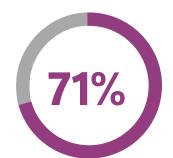
Many modern POS solutions are integrated with retailers' enterprise resource planning systems. Without this integration, sales data often must be manually entered into ERP software to update the system so that it can generate forecasts and production orders. Tying POS and ERP systems together creates a more streamlined process, in which sales data is automatically relayed to the ERP system so that production and replenishment forecasts are instantly updated.

A key feature of state–of–the–art POS systems is the ability to accept a variety of payment types, including methods of payment that either did not exist or were uncommon only a few years ago. One example is EMV (Europay, Mastercard and Visa) credit cards (also known as "chip" cards) that provide additional security beyond what is offered by cards that store data on magnetic strips. EMV cards, and POS systems that are capable of reading them, have become common in the United States since the run–up to an October 2015 deadline created by major credit card issuers that shifted fraud liability to merchants that are not EMV–compliant.

While EMV capabilities are now all but mandatory for POS systems, mobile payment methods such as Apple Pay, Google Wallet and Samsung Pay are still emerging. While such payment types may be something of a niche today, they are growing quickly, and many customers are attracted to their ease of use. These payment methods also have advantages for retailers, who can integrate them with existing loyalty programs and use them to track customer behavior and increase checkout speeds. By 2017, purchases made with mobile payments are expected to surpass $1 trillion worldwide, and by 2018, more than half of consumers in mature markets are projected to begin using their smartphones or wearable devices to make mobile payments.

Data–Backed Decisions

To connect effectively with customers, retailers first must understand them. That's where data analytics comes in. Billions of connected devices and sensors are being used in stores (many of them in the form of customers' smartphones), creating both new challenges and new opportunities for retailers.

SOURCE: [3]Google, "Digital Impact on In–Store Shopping: Research Debunks Common Myths," October 2014

Sources of data include:

Mobile apps: Customer-facing apps help track buying behavior, frequency and duration of store visits, online product browsing and responses to specific deals and marketing messages. Mobile apps can also incorporate credit card and loyalty program information, but shoppers are sometimes reluctant to enable these tie-ins due to privacy concerns.

In-store systems: Digital signage, mobile beacons, wireless networks and smart mirrors can all collect valuable information. Even if a shopper doesn't have a store's mobile app installed on his or her phone, a retailer's wireless network can track the frequency and duration of visits through device recognition.

Protecting Privacy: Don't Be a Digital Creeper

Many shoppers are concerned about their digital privacy, but most are willing to give retailers access to some of their digital data — as long as they understand what's being collected, how it's being used and how it will benefit them.

According to a survey by Create with Context, a California-based research and design firm focused on user experience, 97 percent of consumers say they would give retailers access to at least one piece of personal data — such as a telephone number or the photos and contacts stored on their phone — in exchange for a discount. But, the firm notes, shoppers are 2.5 times as likely to provide information when it "makes sense" to them— for example, giving retailers access to their current location for a store mapping app.

This balance between protecting privacy and chasing deals is already familiar to the many shoppers who carry store loyalty cards. A 2016 Pew Research Center survey found that 47 percent of consumers are comfortable with grocery store loyalty cards that offer discounts in exchange for allowing the store to track shopping habits and sell the data to third parties.

A number of respondents said their willingness to enter into such a deal would depend on how much they trusted the retailer, and what will happen after they allow access to their data. In particular, they worried about being inundated with unwanted direct mail and email advertisements, especially from third parties.

➡️ *To learn more about how CDW can help you modernize your retail operation, visit CDW.com/retail.*

Point-of-sale systems: By tracking sales data, stores can replenish stock in real time, ensuring that empty shelf space doesn't lead to frustrated customers and missed opportunities for sales. Customer information such as email addresses can also be collected at the point of sale.

Mobile devices for sales associates: As with point-of-sale systems, sales staffers' mobile devices can be used to track inventory when associates use the devices to process sales, or when they pull an item to hold for a customer. Associates can also use mobile devices to assist customers in ordering out-of-stock items, leading to the capture of additional data.

Supply chain systems: Radio frequency identification (RFID) tags allow retailers to track the location and availability of assets in real time, enabling "smart shelf" systems that automatically generate orders based on tag and inventory data.

Social media: While some retailers chase "vanity metrics" such as Facebook likes and retweets, much of the value of social media for retailers lies in the data that customers provide about their personal tastes and preferences. By analyzing which pages their customers like and which posts they share, retailers can better predict what these shoppers want in new product lines.

Customer engagement: By deploying data analytics at customer engagement centers, retailers can deliver a much higher level of service. They can track customer contacts via a variety of channels, such as email, telephony and social media, and compile this with data collected at stores to gain a greater understanding of the customer relationship for more personalized service.

And the sophisticated use of data analytics has a number of benefits for retailers, including:

Improved personalization: Customers are able to receive an online experience — and, increasingly, an in-store experience — that is uniquely suited to them. Rather than sorting through coupons for items ranging from infant formula to adult diapers, shoppers receive information about the products they want to buy.

Increased customer loyalty and retention: Data-backed customer service and support can resolve problems quickly and amicably, leading to happier shoppers who are more likely to return.

Enhanced staff productivity and efficiency: Mobile devices can deliver important information about customers to sales associates, helping them to provide better and faster in-store customer service. For example, if a customer arrives at a home improvement store looking for touch-up paint, but has only a vague notion of what color his living room is painted, an associate with access to the customer's buying history can find out which paints that shopper has purchased in the past.

Decreased fraud: By spotting anomalies in buying data (for example, big-ticket, out-of-character purchases made far from a customer's home), retailers can catch possible fraud and identity theft early on.

Increased revenue: All of the smaller benefits of data analytics can add up to one big one: a healthier bottom line. For example, Macy's attributes a 10 percent increase in store sales to improved analytics capabilities.

CDW: A Retail Partner That Gets IT

Emerging shopping platforms and services promise to help retailers open the door to new customers in both domestic and global markets while building stronger and deeper bonds with existing customers. Yet a bewildering maze of new technologies prevents many retailers from adding essential new systems and services — technology that will enable them to compete and thrive in a rapidly changing retail environment — while upgrading their existing infrastructure.

CDW helps retailers approach the new shopping revolution and transform exciting new technologies into a tactical advantage. From inventory management and other back-end systems to mobility platforms, storefront technologies and customer experience solutions, CDW provides retailers of all sizes with the integrated solutions and services necessary to attract new shoppers, expand engagement and drive revenue. The retail revolution has started. Don't get left behind.

The CDW Approach

ASSESS
Evaluate business objectives, technology environments and processes; identify opportunities for performance improvements and cost savings.

DESIGN
Recommend relevant technologies and services; document technical architecture, deployment plans, "measures of success," budgets and timelines.

DEPLOY
Assist with product fulfillment, configuration, broad-scale implementation, integration and training.

MANAGE
Proactively monitor systems to ensure technology is running as intended and provide support when and how you need it.

YOU and CDW

Boost application performance on Intel® architecture-compatible processors with Intel® Parallel Studio XE. Achieve high performance on today's and tomorrow's Intel® architecture-compatible processors and coprocessors by simplifying the creation of fast, reliable parallel code. This suite of software development tools combines industry-leading compilers, performance and data analytics libraries, error checking and performance profiling. Intel Parallel Studio XE integrates into leading development environments, leveraging investment in existing code. Choose from three editions: Composer, Professional and Cluster.

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IBM® SPSS® Modeler is a powerful, predictive analytics platform that is designed to bring predictive intelligence to decisions made by individuals, groups, systems and your enterprise. SPSS Modeler scales from desktop deployments to integration with operational systems to provide you with a range of advanced algorithms and techniques. Applying these techniques to decisions can result in rapid ROI and can enable organizations to proactively and repeatedly reduce costs while increasing productivity.

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