WIZELINE®

How Digital Automation in Retail Can Supercharge In-Store Customer Experiences

Contents

Executive Summary	3
Customer Engagement Challenges for Retailers	5
Automation's Role in Solving These Problems	6
Enhancing the Retail Shopping Experience	7
Using Automation to Identify Consumer Patterns	10
Experimenting with In-Store Robots	11
Conclusions and Recommendations	12
About Wizeline	13

Executive Summary

More than ever before, today's retailers are faced with the challenge of differentiating themselves from the competition. This means taking a renewed direction toward improving customer experience (CX) and aligning with ever-changing consumer demands, exacerbated by rapidly evolving end-user technology.

Luckily, technology is also helping to defuse those challenges, with digital automation, in particular, creating a competitive edge for the forward-thinking retailers already adopting it. There have been numerous successes in the application of automation to backend warehouse and supply chain operations, but not much noise about the huge benefits of in-store, customer-facing digital automation solutions.

This white paper uncovers how automation can solve the challenges retailers face in evolving their in-store customer experience, offering insightful recommendations for leveraging the technology as a powerful tool.

Despite computer automation being available since the 1960s, there is still a perception that the technology is "next-gen" or far from being ready. In fact, automation software is already prolific across multiple enterprises and verticals, considerably changing the way companies are doing business.

In retail, like most industries, automation has been an attractive prospect due to the benefits it promises: lower labor costs, a boost in productivity, and, most vitally, happier customers. These benefits are the result of a variety of software solutions, e-commerce sites, physical robotics, artificial intelligence (AI), and data science, as well as hybrid versions of these technologies.

Total retail sales in the United States is predicted to hit $5.68 trillion by 2021.

Source: e-marketer.

Retail giants like Amazon and Walmart have the resources to apply automation on a massive scale. Most retailers, however, are opting to first automate individual aspects of their business, instead of undertaking the difficult task of full enterprise automation—a much easier pill to swallow.

In-store digital automation is the first step to capitalizing on this opportunity. With an initial solution, retailers have been able to better measure KPIs and optimize the technology's positive impacts, making it much easier to transition into subsequent implementations.

The global retail automation market value is expected to reach USD$18.99 billion by 2023.

Source: Research and Markets.

"Rather than embarking on full enterprise automation, retailers are first opting to automate individual aspects of their business."

Common usage examples of customer-facing retail automation include self-service checkouts and e-commerce payment or checkout processing. However, there are numerous examples of more innovative solutions being applied to specific areas of the customer journey, each highlighting the range of possibilities available to retailers today.

57% of retailers are planning to invest in some form of automation by 2021.

Source: Zebra Technologies.

Customer Engagement Challenges for Retailers

Across the global retail industry, stakeholders face a variety of customer engagement challenges that are emerging as a result of evolving consumer trends. Here are a few of the most impactful problems currently faced by retailers of all sizes.

Creating repeat business and building customer loyalty

Customer satisfaction in retail is everything, so retailers are forever facing the challenge of maintaining customer loyalty through enhanced experiences.

Today's consumer wants complete flexibility over how to order and receive their products, whether online or in store, basing their experience on how smoothly that process goes. They demand convenient, digital-first experiences that can meet their needs and exceed their expectations at every turn, leading to a consumer preference for retailers that are leveraging technology to provide better CX.

82%	Americans consult online reviews when purchasing something new.
46%	Feel that reviews make them more comfortable.
45%	Feel that reviews make companies accountable to their customers.

Source: Pew Research Center.

Increasing and maintaining visibility

With the dawning of the digital age, retail is now everywhere. The Internet has enabled brands to become globally recognized household names, making overall market visibility a challenging hurdle to overcome in this competitive environment.

Furthermore, with the Internet becoming a soapbox for satisfied and disgruntled shoppers alike, customers have easy access to a digital yardstick by which to measure brands against the competition. The challenge now comes down to providing an enjoyable, memorable customer experience (both offline and online) that leads to positive shopper feedback and an organic improvement in visibility.

> "Customers demand convenient, digital-first experiences that can meet their needs and exceed their expectations at every turn."

Utilizing and understanding data

Retailers are collecting masses of customer data, from personal information and purchase histories, to taste preferences and buying patterns. Even so, they often don't know how to gain value from it, or simply lack the tools to do so.

The challenge lies in using that data to personalize the customer experience, tailor communications and special offers, and predict which products might be of interest to which customers—a challenge that can only be addressed through the use of technology.

Automation's Role in Solving These Problems

When implemented thoughtfully and correctly, digital automation solutions have plenty of benefits for retailers and their customers.

- They create a consistent brand focus and customer perspective
- They lower costs and offer an impressive return on investment (ROI)
- They level the playing field for small and medium-sized retailers
- They free up time for workers to focus on higher-value tasks, such as sales and marketing.

A robust and reliable in-store automation solution can incentivize customers to return to the store again. It can help to personalize their experience from end to end, or actively communicate with customers when a new product or promotion may be of interest. This, in turn, solves the problem of generating repeat business and customer loyalty—once customers start backing a brand and sharing positive experiences, the brand's visibility will begin to increase.

Once an initial automated solution is implemented, artificial intelligence (AI) can be applied to these systems to create intelligent automation services (IAS), which have the power to transform the customer experience even further. With access to data, AI and IAS can identify things that human associates may not notice about customers, resulting in insights that enable brands/companies to take innovative approaches to customer engagement.

Evolving consumer habits contributed to nearly 7,000 retail store closures in 2017.

Source: Forbes

The philosophy behind successful CX automation

Wizeline has determined three core principles that should be applied when developing any form of customer experience automation.

1. **Reflect excellent human experiences in digital form**. An unnatural question or request will still feel unnatural when digitized. It's important to consider the entirety of a customer's experience and study their real needs to provide more natural digital interactions.
2. **Automate transactional tasks and ensure help is available for more complex requests.** Customers appreciate and enjoy doing transactional things faster with automation, like finding a specific product and then purchasing it. When they need more in-depth help, a knowledgeable person should be within reach to provide clarity and guidance.
3. **Support—rather than replace—employee and customer interactions.** While automation tends to reduce total interactions, employees should have better and more meaningful interactions with customers. Making these easier for employees is just as important as improving things on the customer side, and enriches the experience for all.

These principles should form the DNA of a successful automation project, allowing companies to focus on the first stage in implementing such a solution: determining exactly what needs to be automated.

The following use cases shed light on some of the practical applications of the technology being conceived and used today, highlighting the simplicity of leveraging automation to generate quick, impactful wins in in-store customer engagement.

Enhancing the Retail Shopping Experience

One of Wizeline's recent Proof of Concept (PoC) applications involved a self-service digital solution to streamline in-store cell phone purchases for a Fortune 500 retail company.

The company faced a common problem: customers that bought a cell phone in stores faced a 30-minute shopping experience, on average. Wizeline's solution reduces that time by 40 percent, to an average of just 18 minutes or less.

66% shoppers prefer self-service over interacting with a sales associate

77% customers would be comfortable with self-service only retail experiences.

67% said mobile technology enabled them to save time.

Source: e-marketer

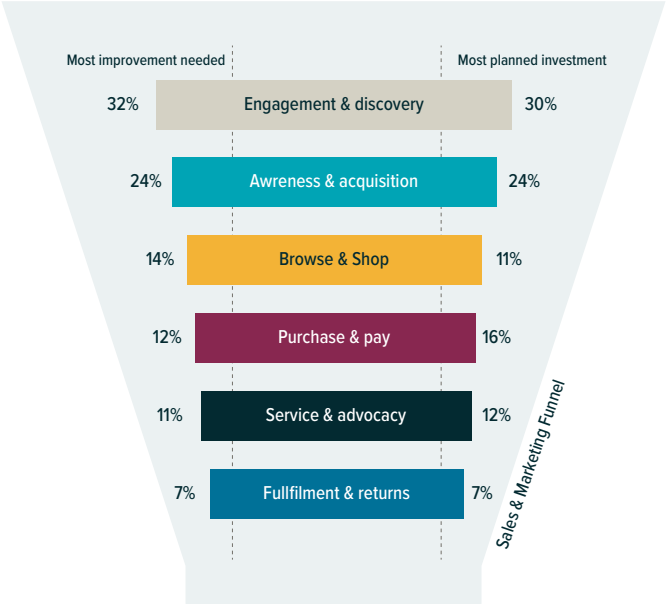
By 2021:

87% of retailers plan to invest in mobile PoS devices to process sales anywhere in store.

85% want to invest in tablets to engage with shoppers and provide more detailed product information.

Source: Zebra Technologies

Top consumer experience improvements and investment areas



Source: Forbes

Purchasing power at the customer's fingertips

The final concept was an automated virtual assistant on a digital tablet, designed with a user-friendly interface that expedites the purchase process. Within the solution, customers can enter their personal data, outline their plan requirements and handset preferences, and choose from product recommendations based on the information provided.

The system prompts people to select the primary usage requirements of their preferred handset, such as music, photography, social media, gaming, entertainment, or business/work. It then asks them to choose from a range of apps to include in the phone plan: WhatsApp, Facebook, Messenger, Twitter, Gmail, LinkedIn, Netflix, Spotify, YouTube, and Instagram. Finally, they are asked to select their preferred screen size, camera quality, storage and memory requirements, battery life, and manufacturer brand.

The customer is then prompted to input or register their client number and scan their fingerprint (a feature that was not entirely possible with the tablet's capabilities, but could have been implemented with an additional scanning device). Once all of this information has been entered, the system presents them with a range of handsets based on their personal preferences, along with a choice of payment plans.

An in-store automated system like this is not limited to cell phone purchases. It can be used to improve the customer buyer journey for any type of product with various specifications or features, such as laptops, televisions, cameras, and even clothes or furniture.

Expected results and ROI

This digital tablet experience was designed to reduce the duration of the cell phone shopping experience, resulting in more satisfied, loyal customers. It also enables lower staffing requirements than the company's current hiring model and is expected to drive more purchases of promoted products.

Following a user experience workshop, Wizeline found that none of the participants reported any frustration with the prototype. They expressed an overall positive experience, along with a willingness to use the solution individually. In the end, 40 percent of the participating users decided to purchase the cell phone and plan that was suggested by the solution.

In a retail environment, a digital solution like this can impact the company's ability to serve more customers in any given day, and even concurrently. This means that the company's initial investment was expected to be rapidly recouped within the first year of implementation. In fact, Wizeline projected that payback would occur in just five months, with nearly 200 percent ROI being accrued within year one.*

40% of consumers have purchased something more expensive because their experience was personalized.

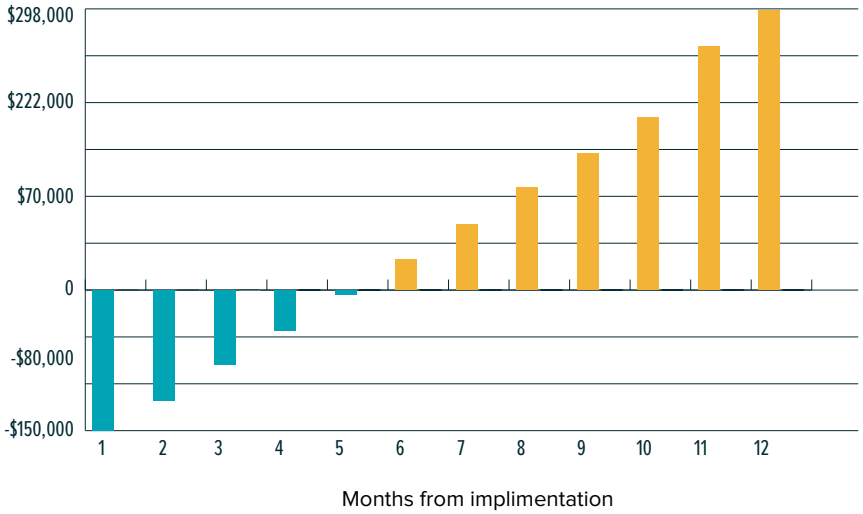
Source: Segment State of Personalization Report 2017

After a personalized experience:

44%	of consumers will likely become repeat buyers.
32%	will be likely to leave a positive review.
39%	will be likely to tell friends or family.
22%	will be likely to post a positive comment on social media.

Source: 2017 Segment study

Payback in <5 Years, nearly 200% ROI within 1 year



*While accurate, these projections are not representative of the client's conclusive results.

Key Findings and Recommendations

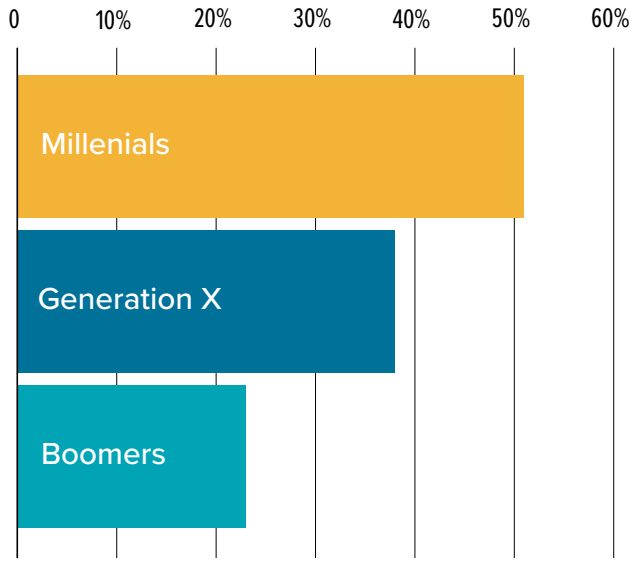
Digital shopping solutions and automated virtual assistants have massive potential to positively impact customer experience. However, the agile development required to create such a solution relies on accurate baseline measurements of customer satisfaction in order to plan and build a data-driven, customer-focused product that creates profit.

With this particular innovation, the company's existing data services were useful for establishing that initial baseline, making it easier to accommodate the delivery of this digital solution without heavy modification. With that in mind, our first recommendation is that retailers begin measuring customer satisfaction at scale, before running similar experiments.

Secondly, a virtual assistant solution requires a number of initial innovation sprints and tests in order to validate its viability. With the introduction of a functional prototype to one or two brick-and-mortar locations, it is possible to accurately measure its impacts on staffing, customer engagement, promotions, and overall CX.

These sprints should then be continued in order to deliver the final solution and consequent

Would find an in-store visit more exciting if the retailer used technology



enhancements, as the process is necessary to design an optimal automated solution for the ultimate shopping experience. By applying this approach, retailers are able to evaluate opportunities for further innovation, along with the possibility of implementing similar applications across appropriate lines of business.

Using Automation to Identify Consumer Patterns

Automation solutions already have the power to leverage existing data to pinpoint consumer trends and buying patterns, enabling retailers to make better decisions about product development and marketing. This was Wizeline's mission objective behind another proof of concept that was outlined for a Fortune 500 sports clothing brand.

The PoC was designed to give the company's product line managers the power to identify how fashion trends and consumer patterns were evolving day to day, allowing them to mobilize much faster on the development of new products and clothing categories. The solution enhances the company's in-store CX by enabling them to stock new garments on a much shorter timeline, giving customers access to next-generation products before the competition.

Addressing the Problem of Too Much Data

When it comes to deciding which new clothing lines to develop and launch, the company uses multiple different sources and forms of data in the decision-making process. When data is spread across silos like this it creates the risk of insights based on biased and incomplete information, which can lead to product suggestions being sent upstream too early.

The problem was clear: how could the team consolidate these data silos to ensure they had the complete picture before making decisions?

Using advanced data analytics, the loading, processing, and transformation of this information can be automated, and the addition of machine learning models allows the creation of intelligent insights that reduce bias, minimize effort, and limit the number of data silos being used.

The solution: automate the market research process

Wizeline proposed the development of a web-based application that combined a mix of machine learning algorithms and intelligent automation to analyze images of people and their clothing. Using Deepomatic image recognition software, the system was designed to detect the type and color of the garments in each image. We also leveraged Amazon Rekognition software to detect the person's gender.

The aim of the project was to reduce the time and human resources required to manually research fashion trends and buying patterns, while also providing new insights that could help stakeholders make better decisions.

With constant streams of data and pictures flowing into the application, machine learning algorithms integrated into a digital platform are able to maximize value and provide intelligent insights. This enabled key stakeholders in the product and brand teams to translate the insights into new product category development.

When adding functionality to include photographs from additional sources such as Instagram, Pinterest, and online catalogs, the tool can become much more powerful at detecting bleeding-edge fashion trends, further bolstering market intelligence for product development teams.

Automated tools like this allow brands to get ahead of the curve, reducing the extensive market research normally required in the fashion sector. For retailers competing against fast-moving, highly visible brands, the insight provided by this solution can help level the playing field. Innovations like this allow time and resources to be funneled into higher value tasks while also utilizing data predictively to support customer demands, resulting in a marked improvement in overall customer experience.

Experimenting with In-Store Robots

With companies like Boston Dynamics developing numerous breakthroughs in advanced robotics, a future filled with humanoid helpers is much closer to reality. In fact, one retailer has implemented a fleet of automated in-store robots as an experiment in next-generation customer engagement.

U.S. home improvement retailer Lowe's was finding that customers were regularly asking salespeople to direct them to specific products or aisles, wasting a lot of its employees' time. The company wanted staff to focus on high-value tasks, such as offering more specialized knowledge and assistance, instead of being regularly distracted by lost customers.

Today

95% of retail shelf inventory checks are conducted by store associates.

By 2025

50% of inventory and pricing checks to be handled by robots or automation.

Source: Gartner Research

To address this, Lowe's introduced LoweBot, an autonomous retail service robot developed by Fellow Robots. The robot detects customers in the store using 3D scanners and actively engages with them, audibly asking "can I help you find something?" LoweBot also speaks multiple languages and leads customers to their desired products using GPS navigation and laser sensors, automating what was traditionally a human-to-human interaction.

The robot has a built-in touchscreen interface that serves as an in-store digital catalog, allowing customers to search for a specific product and follow the robot to its location on the shop floor. It also has the ability to answer simple customer questions, monitor inventory in real time, and gather data on shopping patterns, helping the store understand which products are moving off the shelves and how quickly.

Since their introduction in 2016, Lowe's has not released much data to determine the success of LoweBot from a CX perspective. This is likely because people are not yet accustomed to being greeted by a robot instead of a human—it still feels somewhat unnatural. However, the experiment did cause a stir in the media, with dozens of news outlets reporting on LoweBot's introduction, massively increasing brand visibility.

The company's automation project is a noteworthy example of how brands are adopting a forward-thinking, innovative mindset, looking to the future and taking risks in order to stand out against the competition. While Lowe's has a large budget for these kinds of experiments, retailers of all sizes should embrace a similar kind of thinking, determining how automated technology can radically improve their own customer experiences.

Conclusions and Recommendations

Mirroring the rise of e-commerce, enabling technologies like automation are already disrupting the status quo of retail customer experience. Those that failed to recognize the seismic shift brought about by online shopping and, more recently, digital transformation—think the likes of Blockbuster, Toys R Us, and Borders—are now examples of how not to operate, giving today's surviving brick-and-mortar retailers valuable lessons to learn from.

Between 2000 and 2018 online retail grew 300%, while department store sales dropped almost 50%.

Source: U.S. Commerce Department.

The implementation of a CX-focused automation solution is essential to the process of digital business optimization, which entails an improvement in productivity, revenue, and customer engagement. This makes automation is a great place to start when looking to digitize the customer experience—it doesn't require an overhaul of the existing business model and can be implemented at relatively low cost. When a new automation solution is applied to specific in-store processes in the business, it can be contained within an initial digital business strategy, or simply plug into a transformation that is already underway.

"Digital automation is there to support—rather than replace—employee and customer interactions."

Again, the core principles of customer-facing digital automation should be considered before development begins. Throughout the product development lifecycle, retailers must always consider the entirety of the customer journey in order to reflect excellent human experiences in digital form. Solutions should be designed to automate transactional tasks, while not overlooking the fact that human help is necessary for more complex requests.

Digital automation is there to support—rather than replace—employee and customer interactions, and is just as important for employee experience as it is for customers, so it must enrich the experience for everyone. Aligning with these core principles is an essential part of the journey toward developing an in-store digital automation solution.

Today's customers respond best to memorable, unique retail experiences that make their lives easier. Whether it's an in-store virtual assistant, a tool that can help companies stay ahead on consumer trends, or a helpful robot to guide customers to the right product, these are all great examples of how automated innovations can provide those experiences.

So before investing in expensive drones, autonomous vehicles, or large quantities of new point of sale equipment, consider which in-store, customer-focused processes could be enhanced with a transformative automation solution. Innovating the right way will improve brand visibility, provide the power to utilize valuable data, and boost customer loyalty, ultimately leading to business sustainability in today's competitive retail market.

2 out of 3 shoppers in the US are more likely to shop somewhere that makes technology part of the experience.

Source: U.S. Commerce Department.

About Wizeline

Wizeline is a global product development company that helps clients solve their biggest challenges with design and technology. Headquartered in San Francisco, Wizeline is committed to collaboration without borders by sharing Silicon Valley innovation with the rest of the world. The company has offices throughout Mexico, Vietnam, Australia, and the U.S. For more information, please visit www.wizeline.com/consulting.

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