WHITE PAPER

Challenges Facing Today's Self-Service Industry

Improving the customer service experience is key to sustaining growth..

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The self-service industry has been rapidly growing in recent years, driven by advances in technology and changing consumer preferences. The global self-service technology market was valued at $33.1 billion in 2021, according to research firm Prescient Strategic Intelligence, and is expected to grow at a 9.8% compound annual rate over the rest of the decade, reaching $76.8 billion by 2030.

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Still, there are several challenges that businesses in this industry continue to face.

Among those challenges are:

Technology reliability: Self-service machines are heavily dependent on technology, and any glitches or failures can result in frustrated customers and lost revenue. Ensuring the reliability of the technology is critical for the success of the self-service industry.

Maintenance and support: Self-service machines require regular maintenance to ensure they are functioning correctly. Businesses need to have the resources in place to provide timely maintenance and support to avoid any downtime.

Cost: The initial investment required to set up self-service machines can be high, and ongoing maintenance and support can also be costly. Businesses need to ensure that the benefits of self-service outweigh the costs.

But one of the primary challenges facing self-service devices is the customer experience. Although self-service machines can be convenient for customers, they can also be confusing and frustrating if not designed and implemented properly.

Overall, the self-service industry has great potential to improve customer experiences and increase efficiency, but these challenges need to be addressed to fully realize its benefits. Ensuring a seamless and easy-to-use customer experience is critical to the success of self-service.

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Frictionless payment processes

One way to improve the customer experience and reduce frustration is to simplify the process of paying for the service a kiosk offers.

In recent years, there has been a significant shift towards cashless payments, and more and more people are using mobile payment methods. Statistics compiled by the trade website BusinessofApps.com show that mobile payments are currently used by more than two billion people around the world, with millions more expected to adopt the process each year. The number of people using mobile payments is expected to top 4.8 billion by 2025.

As part of that, QR code payments and ticketing is becoming increasingly popular due to their convenience, security, and speed. Customers can simply scan the QR code on their mobile phones at the kiosk, and the payment will be made or entry to a venue granted within seconds. According to ResearchandMarkets.com, the global QR code payment market is expected to reach $33.13 billion by 2030, growing at a compound annual rate of 16.9%.

By installing a station with a QR code payment scanner, deployers of self-service devices can cater to the growing number of customers who prefer

to use mobile payment methods. This will provide a seamless and efficient payment experience, enhancing customer satisfaction and retention.

Furthermore, using a QR code payment scanner can also improve the efficiency of business operations and offer increased security. It eliminates the need for physical cash handling and reduces the risk of errors and fraud, saving time and resources that can be used to improve other aspects of our business.

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Real-world applications

When Boynton Beach, Fla.-based technology company KioSoft was searching for new ways to incorporate QR code payments into its self-service devices, it partnered with Newland AIDC.

KioSoft is the world leader in unattended payments. Whatever your unattended application may be, the company has the self-serve expertise and complete set of solutions to make your kiosk or vending a success.

Whether it's indoor or outdoor, street-side, in a mall, or on the road, KioSoft offers seamless turnkey systems that empower your concept to maximize revenue.

The companies originally worked together on KioSoft's KioCafé, a robot café solution that can be set up anywhere, craft consistent beverages, and operate through a painless automated payment system.

When a customer ordered a drink at the KioCafé via their mobile device, they would scan a QR code and use their digital wallet to pay. The kiosk would prepare the drink and the customer would take it away.

Because the KioCafé would be installed on the wall as a semi-outdoor application, the scanning solution had to work in direct sunlight. KioSoft had tried a scanning solution from another company that failed to work as expected because of the sunlight issue.

And because KioSoft already had several cafés deployed, a replacement solution needed to be compatible in size, eliminating the need to redesign the units to accommodate the new scanner.

After evaluating several vendors, KioSoft selected Newland AIDC's barcode scanning solutions, based on its superior decoding performance. The FM3080, initially implemented for semi-outdoor applications, significantly contributed to KioSoft's operations. Later, the company introduced the EM20-80, a sleek, compact scanner optimized for indoor usage, further enhancing its interior models.

KioSoft's decision to choose Newland AIDC's embedded scanning solution was based on a thorough evaluation of various options and consideration of its needs. The scanner needed to be able to operate continuously for 24 hours a day, seven days a week, with stable scanning of products at a speed suitable for a fast-paced environment.

The scanner could read on-screen barcodes as well as printed paper barcodes from coupons and vouchers. The KioSoft team simulated some extreme scanning scenarios on Newland AIDC's barcode scanners, and the Newland technical team provided timely and sufficient support to solve any issues that arose.

The project went from conception to deployment in just three months.

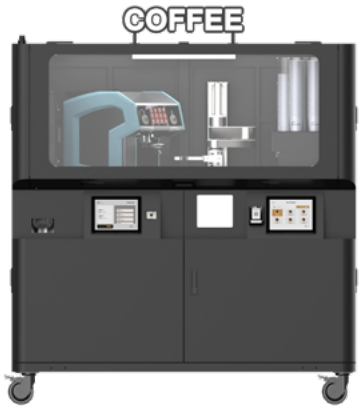
Newland AIDC's embedded scanning solution offers unparalleled speed, accuracy, and reliability, providing the ability to scan a wide range of barcodes, including 1D and 2D codes, even from difficult angles and surfaces. With Newland AIDC's advanced scanning technology, the robot cafés can handle even the most complex scanning tasks with ease.

In addition to its technical capabilities, Newland AIDC's embedded scanning solution is also durable and designed to withstand long periods of continuous use. This means the kiosks will be able to operate reliably for extended periods, even in high-traffic environments.

Furthermore, Newland AIDC's scanning solution is highly customizable, allowing it to be tailored to meet the specific needs of clients. With Newland AIDC's flexible APIs and SDKs, the scanning solution can integrate seamlessly with kiosk software, creating a smooth and intuitive user experience.

Installing a station with a QR code payment scanner was a necessary step that enabled KioSoft to keep up with changing payment trends and improve business operations, providing a better payment experience for the company's customers and increasing its operational efficiency.

KioSoft create a self-serve, fully automated robotic café with its new KioCafé



Before KioCafé came into existence, KioSoft technology had been making automated, unattended payment solutions possible in several different markets. From the car wash to vending machines to laundromats, to parking, KioSoft technology made it possible to provide simple, self-serve automated systems for all kinds of vendors.

This same adaptable technology is what fuels KioCafé, making the automated, unattended café solutions the success that they are. KioCafé launches in North America with four coffee kiosk solutions, Solo Cafe, Lite Cafe, Prime Cafe, and Solo Cart, with a fully customizable menu and branded software.

Laundry Solutions: Soap Station

KioSoft further enhances the laundry facility's revenue through an assortment of convenient Soap Stations. These stations allow customers to conveniently buy Detergent, Bleach, and Softeners on-site, facilitated by QR code scanning payments. These transactions are processed by the compact EM20-80 scanner, a device that's thinner, lighter, and smaller, making it ideal for such infield applications.

Additional Scanning Solutions

Newland AIDC also offers a host of additional scanning solutions.

N1 Barcode Scan Engine

The N1 showcases some of Newland AIDC's most impressive barcode decoding technology. At only 21.5 x 9 x 7mm, it stars as our smallest scan engine to date, without compromising on performance. Armed with 6th generation UIMG scanning technology, its accuracy and speed are optimal, even for otherwise hard-to-read 1D and 2D barcodes.

EM20-85 Barcode Scan Engine

With an integrated NFC reader module, the EM20-85 allows customers to read either barcodes or NFC tags. This opens up a range of new and exciting possibilities in customer self-service. The EM20-85's strength lies primarily in scanning paper, plastic and metal. But don't worry - scanning screens are also more than convincing.

EM20-80 Barcode Scan Engine

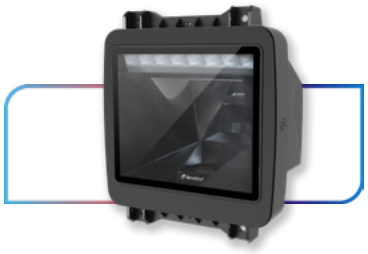
Designed for user-facing applications, the EM20-80 packs intuitive features to enhance the scanning experience. Its soft white illumination enables the user to scan without experiencing light flickers or glares.

FM3080 Fixed Mount Barcode Scanner

Prepared for integration in your kiosk or counter, the FM3080 combines performance and customization. The large scan window is optimized to read barcodes from a mobile phone, even codes with large amounts of data.

FM431 Fixed Mount Barcode Scanner

With its high motion tolerance, the FM431 adds more speed and accuracy to the FM430 Series. Its design allows for the scanning of 1D and 2D barcodes, even under direct sunlight, making the FM431 a versatile fixed-mount scanner perfect for indoor and outdoor applications.



FM80 Fixed Mount Barcode Scanner

As shopper expectations are evolving, retailers turn to technology for strong solutions that keep up pace. The FM80 offers an easily integrated barcode scanner to build into such self-service kiosks or complete POS units. It's large scan window and fool-proof features offer a great solution for self-service kiosks for inexperienced customers.

ABOUT THE SPONSOR:

By partnering with Newland AIDC, you can leverage our industry-leading technologies, shorten the development cycle, and optimize your spending on development. Your incumbent market position + Newland AIDC's proven track record of success = Maximum ROI.

Newland AIDC
Scanning Made Simple

With one of the most diversified & cost-efficient OEM portfolios in the industry, from all-in-one to split up, from 1D linear to 2D imaging to RFID, Newland AIDC develops scan engines, modularized scanners, and software decoders for use in a variety of vertical applications, including self-service kiosks, vending machines, access control, ticketing, payment POS, gaming, lottery, parking, In-Vitro diagnostics and much more.

By leveraging extensive experiences in the development of scanning and enterprise mobility, and capacity of manufacturing for supply chain, Newland AIDC is ready to provide professional contract manufacturing and product support services to our customers.

They have a strong focus on research and development, with over 40% of their employees working in R&D. Newland AIDC is committed to providing high-quality products and excellent customer service to their clients around the world.