Smart Retail Display Solutions

Industry Overview

Under traditional retail modes, retail stores/outlets purchase goods in bulk and display the goods in the existing physical space for consumers to buy. Such process hardly involves modern technology. With the innovation and change of modern technology, retail enterprises can provide consumers with more value-added services. Today, touch monitors can be found everywhere in various offline stores and plazas, such as multimedia advertising machines, smart guide screens, scene maps, and POS systems. By virtue of technologies, the smart retail industry will provide more personalized and intelligent services and consumers will have better shopping experience in the future.

Development Status

Transactions start from the formation of human society. Early transactions took the form of bartering. With social development and transformation, today's retail is at a new development stage. Market competition is also changing accordingly, with the following trends playing a dominant role:

Firstly, the development of retail brands has accelerated. The market competition now focuses more on corporate branding and cultural image than product price and quality.

Secondly, with the development of Internet technology and the popularity of e-commerce, the traditional retail industry is gradually transforming to a new retail format that effectively combines online and offline strategies. How to provide personalized services based on consumers' needs and experience has become a key factor for retail enterprises to think about nowadays.

Finally, the development of information technology and intelligent technology is driving the development of new marketing models. The integration of systems such as consumer data analysis and information-based product lists provides a rational and complete solution for data statistics and accurate pushing. With information technology, enterprises can greatly improve the operational efficiency of their products and enhance the shopping experience of consumers.

Pain points

- It is impossible to display all the sample products considering the wide product categories

- Traditional retail modes lack consumer portraits, making it difficult to upgrade products in a rational manner

Prospects

- Great changes are taking place in traditional service models based on the achievements of information technology

- Consumer experience is improved with services focusing on their needs

Summary of Solutions

Vantron smart touch monitors, ARM and X86 series, are equipped with Rockchip, NXP, MediaTek, Intel and other high-performance processors. The products support various operating systems such as Windows, Linux, and Android. Diverse wireless communications keep your device online all the time. Multiple installation options make it suitable for a variety of application scenarios. The products are water-proof, dust-proof, shatter resistant, explosion resistant, and anti-bacterial so as to guarantee the best performance in any environment.

BlueSphere MDM is an intelligent management solution for deployment and management of single-purpose devices. With fast and convenient deployment of multiple devices, retail enterprises will be able to realize centralized management, single-device lockdown, remote upgrade and maintenance of such devices to reshape the user experience of enterprises and consumers.

Requests & Solutions

01

▌ **Public places have a high demand for the durability and hygiene of the devices**

- Vantron can provide displays with explosion-proof and anti-bacterial glass based on different application scenarios and requirements to ensure the safety of the users.

02

▌ **Different scenarios may require different product dimensions**

- Vantron provides displays covering all dimensions ranging from 5 inches to 55 inches to meet the requirements of users in different scenarios.
- Such displays can be applied to handheld mobile devices, desktop cash register, all-in-one touch monitors, digital kiosk, wall mount screens, etc.

03

▌ **There is need for custom system and data integration**

- Vantron has rich experience in operating system development and supports system tailoring and driver transplant according to customer requirements. Be it a real-time operating system or complex Linux/Android system, Vantron provides full-stack development services covering drivers, frameworks and applications, and also provides integration of data from different operating systems.
- The solution helps to collect data on consumers' shopping preferences to update marketing strategies.

04

▌ **There is need for centralized management and maintenance of multiple devices**

- BlueSphere device management platform provides cloud access for the touch monitors so there is no need to worry about deployment and update of the devices.
- Real-time management, remote maintenance, and online troubleshooting of multiple devices are attainable.
- The devices could be locked down to certain images or videos to attract consumers.

Large-size guide screen

Large-size guide screens can display featured products or image/video carousels to promote the products and facilitate the product selling.

Information check machine

Consumers will directly access the product specifications, price and other information on the information check machine, and enterprises can learn about the consumer preferences to launch more user-friendly products.

Human machine interface (HMI)

The HMIs attract consumers with more intuitive experience. Consumers will have fun in this process and are more likely to consume.
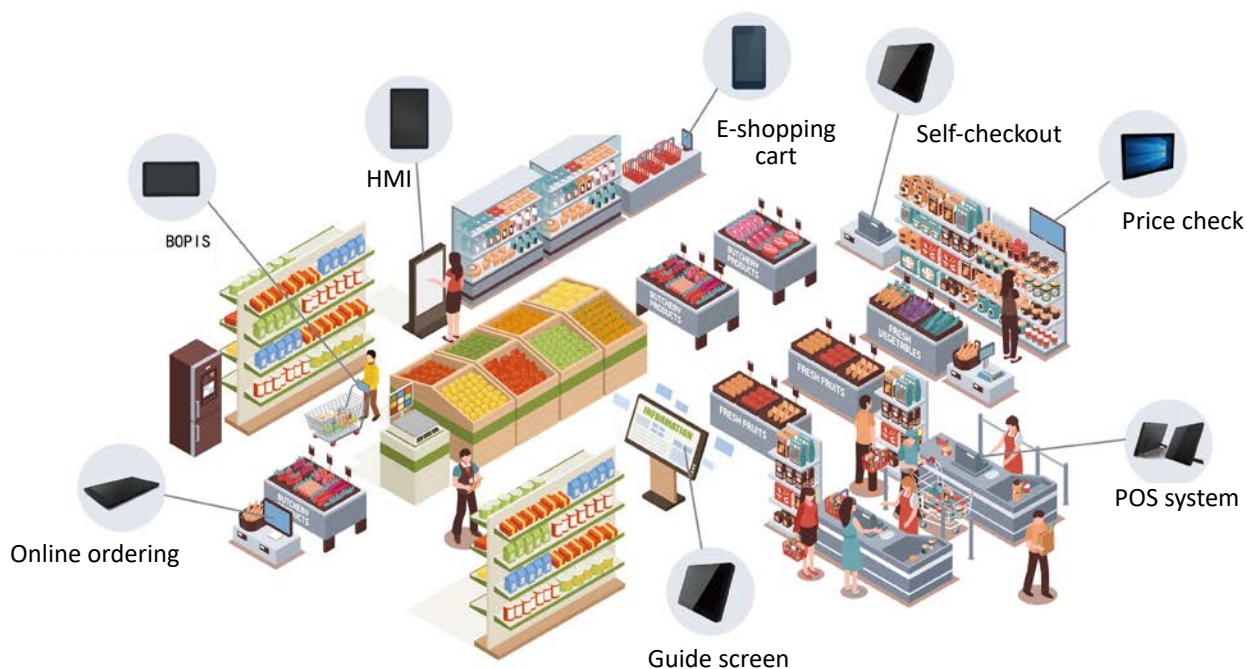
POS system

Consumers can get a brief information of the goods purchased while checking out, such as price, and goods list. Consumers can choose a more convenient payment method between card payment and mobile payment as supported by the checkout system.

Self-service checkout kiosk

With self-service checkouts, consumers may save the trouble of waiting in a queue for checkout and avoid unnecessary contact with potential risks. Therefore, such checkouts will contribute to the improvement of operational efficiency and reduction of labor cost.

Application Scenario

BOPIS

HMI

E-shopping cart

Self-checkout

Price check

Online ordering

Guide screen

POS system

Benefits and Advantages

Our smart retail display solutions addressed current pain points of the industry and enhanced consumer confidence and reliability on retail enterprises. With integration of big data analysis technology, retail enterprises can improve the product release scheme and new product development plan on an ongoing basis. This contributes to the improvement of operational efficiency and reduction of product damage to maximize enterprise' interests.

About Vantron

Since 2002 established by two Silicon Valley entrepreneurs, Vantron Technology has been a pioneer in connected IoT devices and IoT platform solutions. Today, Vantron serves countless customers all over the world, some of them are Fortune 500 companies. Products lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere device management cloud platform.

Vantron has over 20 years of experience in R&D of embedded edge intelligent hardware like SOM board and motherboard, and provided users with various embedded solutions with ARM and X86 architecture, from Linux to Windows, from embedded to desktop level, from gateway to server. At the same time, we provide our users with system clipping, driver transplantation and other services.

Vantron industrial display systems, ARM and X86 series, are equipped with Rockchip, NXP, MediaTek, Intel and other high-performance processors. It supports various operating systems such as Windows, Linux, and Android. Diverse wireless communications keep your device online all the time. Multiple installation methods make it suitable for a variety of application scenarios. Features like waterproof, dustproof, shatter resistant guarantee the best performance in any environment.

Vantron has been a solution provider of IoT Gateways for many years, having accumulated very rich experience in this field. The products support both wired and wireless communication accesses to make remote operation and maintenance possible. From electricity and transportation to smart retail, medical and warehousing, Vantron IoT communication device can be deployed anywhere in any business section. Up to now, Vantron's IoT Gateway solutions have helped many companies finish their digital transformation, significantly improved efficiency of manufacturing and productivities.

Vantron BlueSphere device management platform, a software product, is playing a big role in Vantron overall IoT solution. Today, Vantron puts more focus on offering complete cost effective, leading-edge yet reliable solutions to help customers carry out their visions.