Lighting Up Your Business by Analytic Insights

Dahua smart retail operation solution V8.1.1

Comprehensive Insights

Data Visualization

Chain Store Operation

Challenge

For brick-and-mortar stores, the lack of effective, accurate and real-time store data always poses challenges, especially in improving store performance. In addition, as shopping experience plays a vital role in establishing consumer loyalty, creating a great shopping environment to attract more customers and ensuring all shoppers are satisfied have also been the major concerns of shop owners.

- What is the real reason behind poor performance?
- Where is the hottest region in the store?
- What captures customers' attention?

STORE

- How to display the right ads at the right time?
- How to reasonably optimize staff service?
- How to reduce queuing time of shoppers?

What we offer

The Dahua Smart Retail Operation Solution provides deeper business insights into in-store data and shopper's behavior. The system collects various in-store data and presents this information visually, aiding users in decision-making and implementing changes to improve customer experience and business performance including staff optimization, store layout adjustment, etc.

Solution Overview

Customer Operation
- Customer traffic
- Queue management
- Latent customer analysis (customized)
- Conversion rate (customized)

Merchandise Operation
- Customer traffic heatmap
- Dwell time heatmap
- Merchandise popularity analysis
- Smart replenishment

Marketing Operation
- One-click release ads plan
- Targeted advertising
- Advertisement effect evaluation (customized)

Chain Stores Operation
- Center management
- Remote access by DSS Web
- Data wall

Merchandise Operation
- Dwell time: 3 minutes
- Number of people: 105
- Customer traffic heatmap
- Dwell time heatmap
- Most popular product: XXX

Customer Operation
- Total traffic: 1,182
- Gender: 56% Female, 44% Male
- Age: 60% Youth
  ...
- Gender: Male
- Age: 30-39
- 3rd time this month
  ...
- Waiting time alarm
- Number of people alarm
- Queue 1: 13 people
  ...
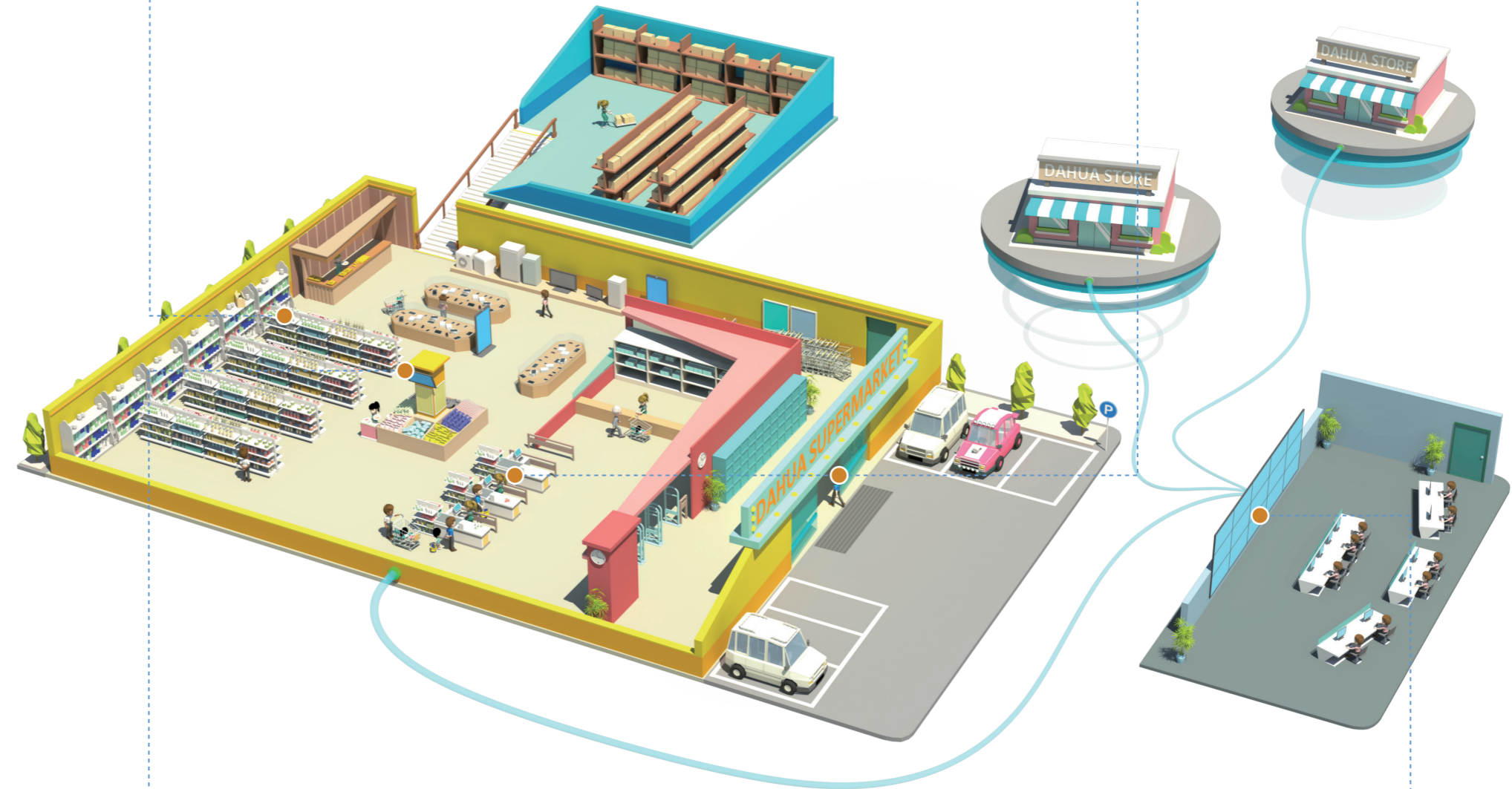
Marketing Operation
- Manage all digital signage
- Display the right ads at the right time according to gathered data

Chain Stores Operation
- Manage all stores
- Access to in-store data anytime, anywhere
- Data visualization
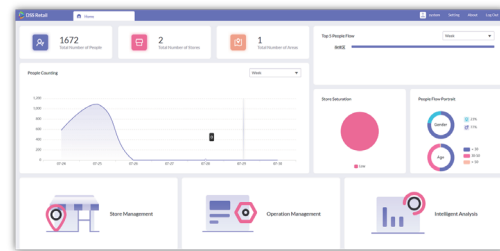
Solution Introduction

Web based BI module

Users can access the platform anywhere and anytime to view data, and thus manage the stores and make operation adjustments in real time.

Web interface access

The retail module can be easily accessed on the DSS Web interface.

Homepage of DSS Retail

Different sectors can be accessed via the homepage of DSS Retail.

Customer Traffic Analysis

Customer traffic analysis enables store managers to identify traffic cycles based on daily, monthly and yearly reports.

This allows managers to reasonably assign staff according to customer traffic to provide better service. It is an effective way to boost sales because conversion potential increases when there is a spike in customer traffic. Moreover, the manager can measure marketing campaign performance by monitoring the number of people who enter a retail store after a marketing campaign is released.

Customer Demographics Analysis

Knowing more about customer demographics can help managers develop more effective marketing strategies. This solution's customer demographic analysis provides deep insights into customer profiles including age, gender distribution, and the time they entered the store. It allows store managers to be more agile in meeting customer expectations by adjusting merchandise or digital displays.
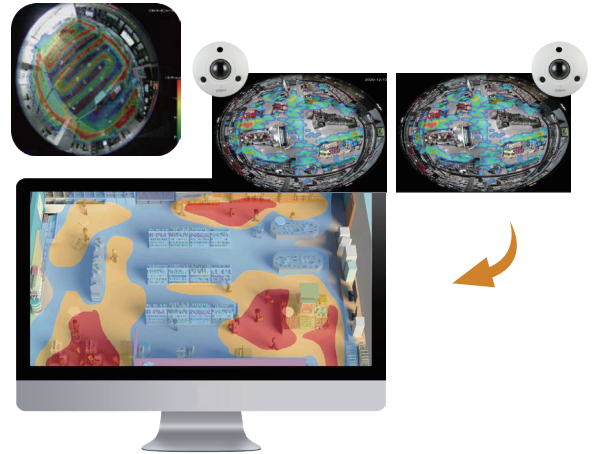
Heatmap Analysis

• AI Heatmap

Understanding the hot and cold zones in the store can help formulate business strategies. The heatmap function of this solution indicates the areas where most customers pass by and where customers stay longer.

• Heatmap overlay

Heat distribution of all the areas that cameras covers in the mall can be displayed on the real architectural plan to help operators know the overall condition. They can easily pick out the cold zones and make adjustments of the sales and operation strategies to improve sales performance and gain more profits.

Merchandise Popularity Analysis

Aside from heatmap, the system can also generate a merchandise popularity analysis report, which includes the number of customers and their dwell time at each area. It provides significant insights into which products attract more attention, and shows the effectiveness of advertising and promotion strategies by determining how long visitors stay in particular locations.

Queue time alarm   Queue No. alarm
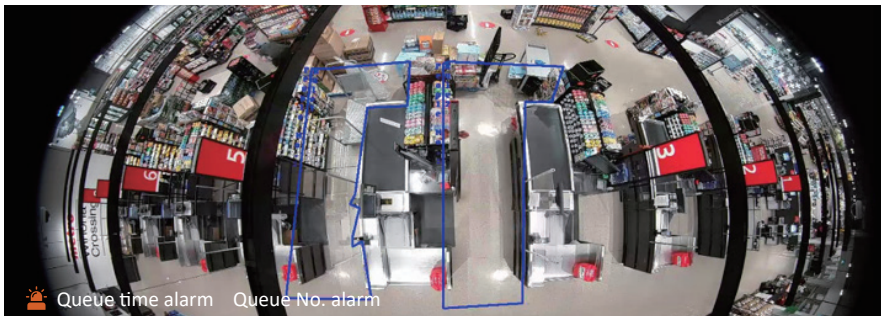
Queue Management

Long and crowded queue lines can lead to sales loss and bad shopping experience. Customer satisfaction is of paramount importance in building long-term relationships with shoppers.

• Queue Monitoring

With our queue management solution, the manager can receive alarms in time onwhen the number of people in a queue or the waiting time exceeds the preset value. This will prompt staff to open up additional checkout counters to provide service without delay.

• Queue Analysis Report

The queue report on DSS Web shows the dwell time and the number of people in each queue. It can significantly help the manager to evaluate staff performance. It can also enable managers to optimize staff scheduling based on data history.

Success Case

BAKKEN AMUSEMENT PARK (Klampenborg, Denmark)
"It is a solution that we expect to make much more use of since the data and statistics provided creates a lot of other potential business and marketing possibilities for us."

-Niels Erik Winter, CEO of Bakken

• Challenge

Bakken, the world's oldest amusement park owned by the Danish government since 1583, was facing strict restrictions from the government in order to reopen the park for visitors.

• Solution

Equipped with people counting and flow control, the Dahua Technology's PCFC Solution turned out to be the perfect choice for Bakken Park. It consists of seven HFW5442E-ZE, five PFS3110-8ET-96, and DSS Pro License 64 Channels + BI Module, covering 5 open entrances of the park. The Dahua AI-based People Counting Camera (HFW5442E-ZE) with its 140DB WDR function and large image sensor achieves an astonishing counting accuracy of 97.5%, even under difficult outdoor environment with lots of shadows.

• Result

The DSS PRO+BI made it possible to export valuable counting data for future business opportunities such as traffic flow during peak hours, the impact of weather and temperature on customer flow, etc., thus increasing the park's appeal to its customers. In addition, the park can even conduct marketing campaigns based on the amount of visitors coming in at specific entrances and at specific timeslots.

Solution Topology
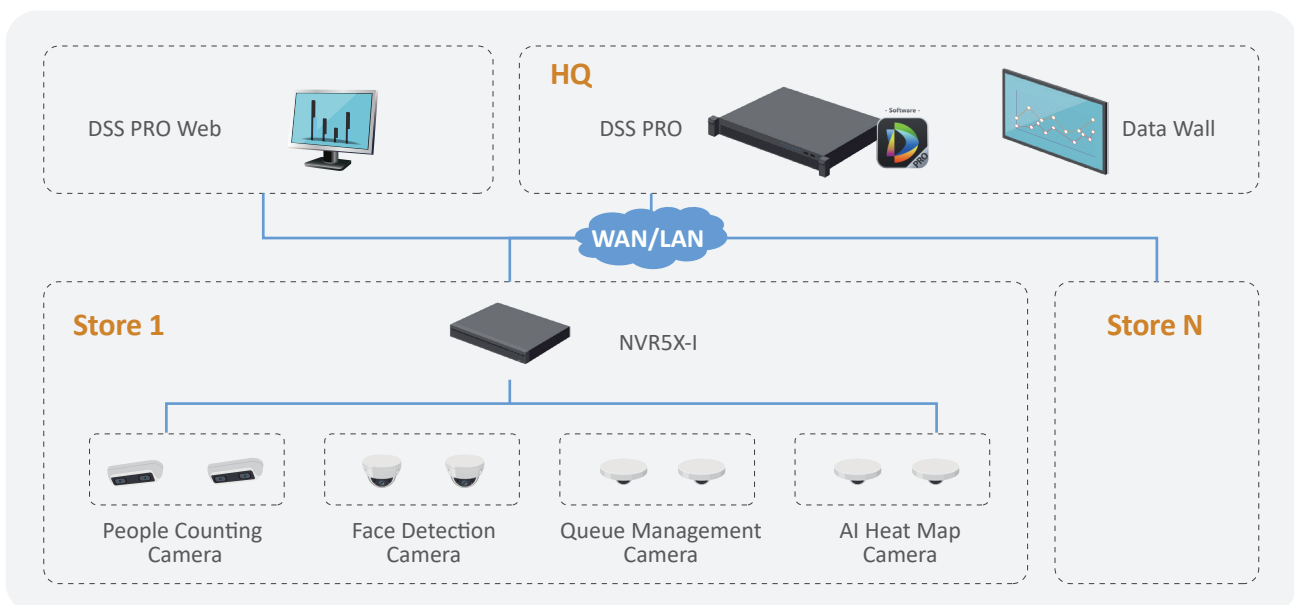
Recommended Products

IPC-HDW5442T-ZE
4MP IR Vari-focal Eyeball WizMind Network Camera

• People counting by tripwire
• Face attributes analysis

IPC-EBW81242-AS-S2
12MP IR Fisheye WizMind Network Camera

• AI heatmap analysis
• Multi-area people counting
• Queue management

IPC-HDW8441X-3D
4MP WizMind Dual-Lens Network Camera

• People counting based on face detection

NVR5216-8P-I/L
16Channel 1U 2HDDs 8PoE Wizmind Network Video Recorder

• Metadata
• AI search

DSS PRO V8.1.1 (Retail Version)

• Professional visual BI Module for the retail industry
• Access to chain store's data through the DSS web anytime, anywhere
• Comprehensive and expandable Dahua VMS

- Software -

* Design and specifications are subject to change without notice.

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