Hikvision Deep Learning-Based Heat Map Solution

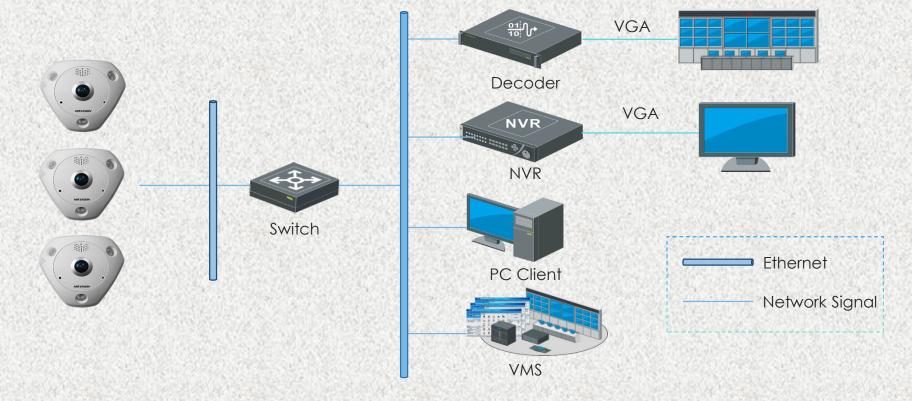
HIKVISION

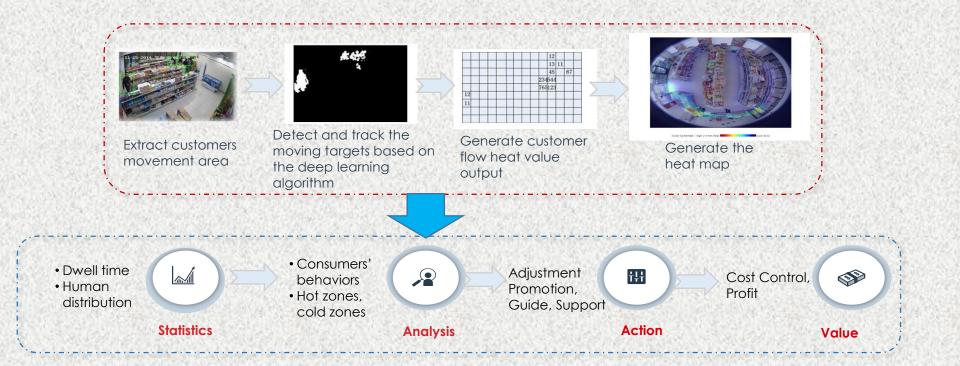
Pain Points

- Low efficiency and accuracy on manual data statistics and analysis of checking which goods attract the consumers most.
- Failed to adjust the shelves design and layout in time and promote the more profitable items
- High-cost retail space needs the retailers to not only attract shoppers but also convert sales.
- Understanding consumer behavior becomes one of the biggest challenges for brick-andmortar retailers.



System Architecture



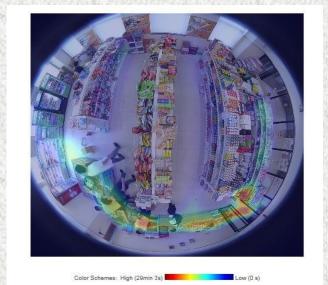


Solution Highlights

Deep Learning-Based

- Based on deep learning technology
- People detection accuracy at up to 96%
- Presenting more detailed and clear information

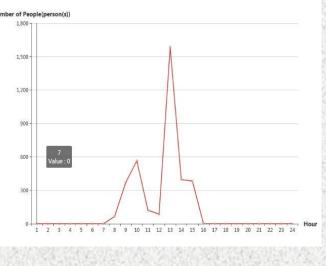


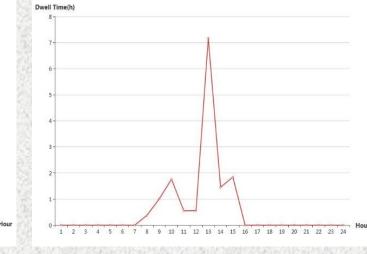


▲ By people number

▲ By dwell time

• Show more concrete data on how many people visit the shop at different time



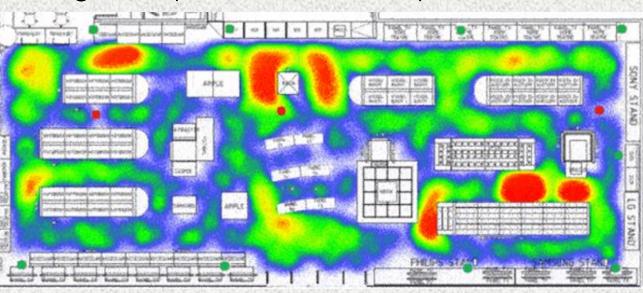


▲ By people number

▲ By dwell time

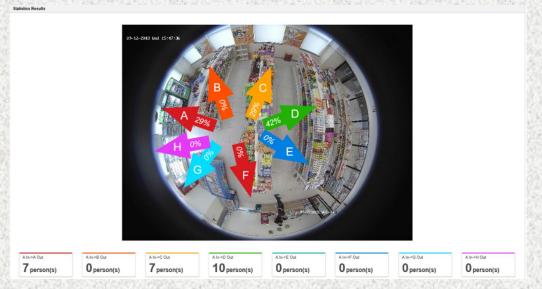
Global Heat Map

Several heat maps generated from different fisheye cameras can be stitched together and output as a global heat map, with which we can clearly identify the most popular consuming areas in the whole store or supermarket. A store's floor plan can be loaded as a background picture of heat map.

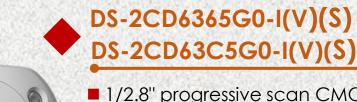


Flow Analysis in Different Zones

Show people flow in different zones and directions in the intersections of a shopping mall or supermarket.



Product Showcase



- 1/2.8" progressive scan CMOS
- Up to 1920 × 1080 resolution
- H.265+/H.265 video compression
- 120 dB WDR, 3D DNR
- Manual/Auto/Event tracking
- Up to 50 m IR distance





DS-9600NI-18 NVR

- ■16-ch @ 1080p
- Max. 12 MP camera access
- H.265/H.265+
- Dual-stream recording
- Up to eight 10 TB HDDs connectable



HikCentral Management Software

- Central management of devices
- Live view and playback
- Health status monitoring
- Receive analysis data and generate business intelligent reports