Press Release   *We MOVE with Trust*

Hanwha Techwin's Top 5

Video Surveillance Trends for 2023

1 How to use AI technology effectively

In the video surveillance industry, AI has evolved to the point of reducing the frequency of false alarms and enabling accurate forensic searches based on object attributes.

However, AI based on basic metadata has become commonplace and does not attract the end users to make purchases anymore. Customers now prefer reprocessed information oriented from a user's perspective such as vehicle type statistics by period or a customer's gender and age, rather than just merely aggregated metadata such as vehicle, gender or age data. This enables clients to find insights and make business decisions by managing the information directly. Information becomes valuable when users are able to use it efficiently.

Currently, the video surveillance industry is focused on developing solutions for the efficient management of tremendous amounts of metadata collected by AI. From now on, a dashboard or a report which can collect and reproduce AI metadata and reproduce as insight or information that requests user's decision will be increased.

Hanwha Techwin will directly deliver valuable information to the end user through Wise BI (Business Intelligence) and present customized solutions that customers in different industries can use.

2 Unified Solutions with On-premise and Cloud

As cloud-based services become more common, the number of companies that provide cloud services increases. Users can easily integrate devices and systems using cloud services without needing to purchase or install additional servers.

However, due to security policies, network status or budget, many companies prefer to maintain their conventional on-premise infrastructure by installing servers and software directly. Based on this, a hybrid system combining on-premise and cloud are becoming increasingly common. For example, a company may use one method or combination of two ways according to environmental requirements (on-premise for overall management and cloud-based back-up for critical data)

Hanwha Techwin provides two solutions: Wisenet Wave VMS (for on-premise) and Wave Sync (for cloud service). The Wave Sync cloud allows thousands of on-premise systems to be remotely accessed, managed, and kept up to date.

3 New possibilities with Edge AI

Edge AI technology, which was simply used for detection and classification of objects, is now enhanced with Neural Processing Unit (NPU). As NPU grows more technologically advanced, Edge AI's functions expand to include behavior analytics and abnormal behavior detection, for example. In addition, it's also possible for users learn AI algorithms directly according to their customer's needs. **Hanwha Techwin** recently released WiseDetector, which learns specific properties based on each customer's requirements.

4 Converging technologies for the future

Conventional physical security solutions such as video surveillance, access control or intrusion alarms are being expanded through integration with the Internet of Things

(IoT), AI, or the Cloud. For example, IoT-enabled sensors that detect smoke, temperature, humidity or motion are becoming part of a sophisticated total surveillance solution through integration with an AI security system. Specifically, this type of total solution delivers insight to users based on data analysis with the Cloud system.

Hanwha Techwin plans to gradually expand its solution by combining AI, IoT, and Cloud with Vision technology. Security solutions traditionally focused on video monitoring by collecting video data, event alarm information and saved search data. Looking ahead, information will be collected and analyzed by AI and IoT sensors at the Edge and previous pattern analysis for recognition of present situation and predicting future events from big data analysis will enable prediction/prevention solution.

* NPU indicates AI semiconductors that can learn independently and process video, audio, text or images at the same time by imitating a human's nerve network.

5 'Zero trust' and Cybersecurity

Awareness of personal information and cybersecurity risks are heightened as new business models and solutions are extended through technological integrations with AI, Cloud, and IoT. Hanwha Techwin has been focusing on video surveillance business based on vision technology for over 30 years and has been emphasizing the significance of security. For example, security specialized team S-CERT proceeds security test constantly. In addition, Hanwha Techwin has also acquired official certifications such as UL CAP, FIPS and TTA to manage internal security systems. Since Wisenet 7's launch in 2020, several enhancements such as software/hardware security management and detailed security functions such including mutual certification between machines based on the Edge's advancement have been added. Recently, 'Zero Trust' is growing as a trend in the cybersecurity industry. Zero Trust requires every single device and application on a network undergo a qualification process, based on the assumption there is no inherent security in those devices and applications, and a company should have Zero Trust in them.

Hanwha Techwin takes its responsibility toward the significance of personal information, data and cybersecurity seriously, while expanding its solutions using AI and Cloud. Hanwha Techwin plans to continue to review and upgrading its solutions from a Zero Trust perspective.