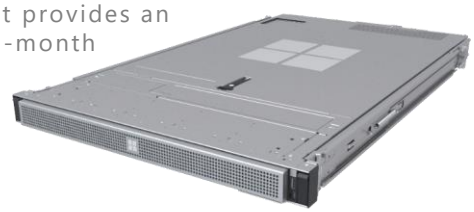
STOCKVIEW

Reduce of medical supplies stockout with AI-powered detection

StockView helps providers reduce the duration of medical supply out-of-stock and generate analytics-driven supply-chain insights by automatically detecting missing items on shelves across locations.

StockView uses customized vision AI models running locally in a hospital, or any other medical facility, at the edge of the cloud to visually detect missing products. It then enables providers to build powerful analytics across locations, regardless of the quality of their internet access or the number of supply closet locations.

Powered by Microsoft Azure Stack Edge, StockView offers a scalable and cost-effective solution that leverages the power of the Azure cloud platform at the facility level. It provides an easy to predict TCO with a fixed per-month and per-device business model, regardless of the number of video streams and other locally deployed containerized services.



REDUCE OUT-OF-STOCK DURATION

With StockView, customers can immediately detect out of stock items and ensure appropriate actions are taken.

From instant notifications on mobile devices, dedicated apps or advanced integration with existing workflows and supply chain solutions, StockView allows nurses to focus on patients not medical supply stock.

BUILD POWERFUL ANALYTICS

Providers can analyze stockout data over time and across locations and generate meaningful analytics models.

These can used for predictive purposes, supply-chain improvements, or for reporting via dashboards and visualizations. These report can be at the closet, hospital, or group-level. It helps better understand and improve pharmacies' supply chain efficiency..

SCALE COST-EFFECTIVELY

StockView leverages the scalable Azure Stack Edge device. One device can support multiple supply closets (each with one or multiple cameras) and is available through a straight-forward fixed monthly cost per device.

As customers scale across locations, they only need to add additional devices per location without large initial hardware investment.

NEAL ANALYTICS

How does StockView work?

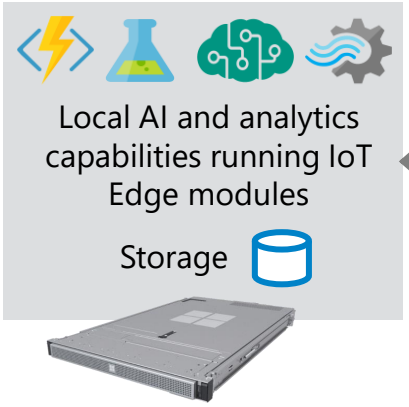
Microsoft Partner
Microsoft
Gold Data Analytics
Gold Cloud Platform

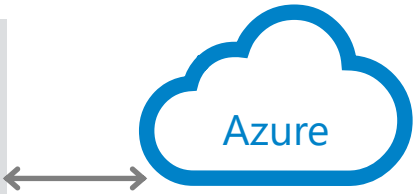
As depicted in the diagram below, StockView runs a customized vision AI model on an Azure Stack Edge device. The model is trained by Neal Analytics experts, starting from a baseline shelf gap detection model Neal developed. This baseline model is then augmented with labelled data unique to each supply location. This data, i.e. pictures of provider's real-life closets, will help StockView adapt to individual conditions such as shelves positions and types, lightning, etc.

Once the model is trained, its service container is deployed from the Azure cloud onto the Azure Stack Edge devices located in one or multiple locations. The devices and their service containers are then monitored, managed, and updated transparently from the standard Azure administration tools as if they were running in an Azure datacenter.

Once deployed locally, StockView AI models process in near real-time the high-definition video streams pointing at the shelves and coming from one or multiple cameras. It then automatically detects empty sections of the shelves. A sample app is provided to showcase where StockView detected the gaps.

IP camera





- Storage
- Vision AI training
- Deployment
- Management

In each supply closet

In each location (hospital, facility)

In Azure datacenters

Activating StockView insights

Depending on the selected use case multiple insights activation are possible through Microsoft Power Platform. These activations can be real-time (e.g. to immediately notify the user of missing items) or done over time (e.g. to build predictive models based on historical data).

Because this detection happens locally, the applications and workflows will continue to function even in the event of lost or poor internet connectivity

What is Azure Stack Edge?

Azure Stack Edge brings the capabilities of the Azure cloud platform to an Intel-powered local and ruggedized server that can be deployed anywhere local AI and other advanced computing tasks are required. It can be used from real time processing of videos through vision AI models to running any type of advanced analytics.

It is an ideal solution for situation when it is not technically or economically viable to run AI models on the cloud at scale.

intel

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