

# Smarter Retail and Shelf Monitoring Solutions

Version 1.0 | As seen on [Smarter Retail and Shelf Monitoring Solutions](#)

# The retail industry is changing fast

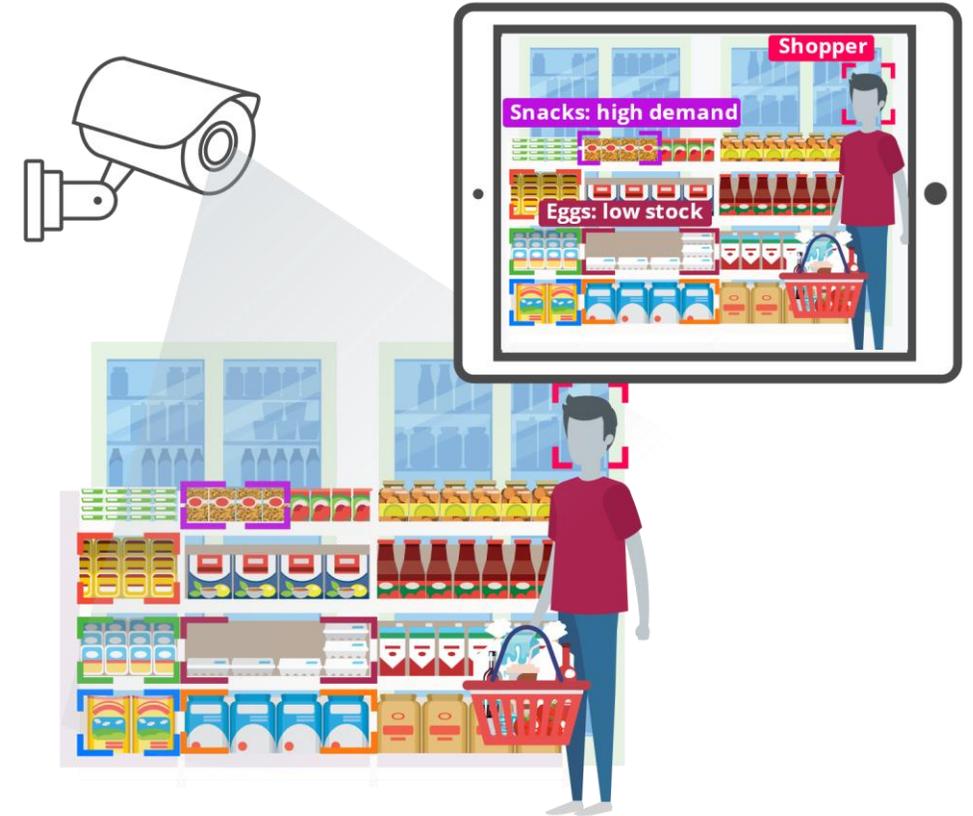
The [retail apocalypse](#) has been hitting brick and mortar stores very hard in the US and abroad, and the trend is accelerating. And it's accelerating. In 2019 alone, 9,302 stores closed in the US, a 60% jump from 2018. In January 2020 alone, over 1,200 stores have been closed or are scheduled to close imminently. Numbers of store closures related to the COVID-19 pandemic are not known yet, but they already look abysmal.

The reasons for store closures are multifactorial, but many North American and European consumers have shifted towards e-commerce. It has been described as the [Amazon effect](#).

Online shops have several advantages over brick and mortar stores:

- [Consumer profiling & analytics](#)
- Nonexistent consumer side theft
- Real-Time inventory (shelf) management

AnyConnect helps offline store owners by giving them the tools to facilitate in-store analytics, theft prevention as well as shelf management.



# Reduce deployment time and cost



Deploying cameras systems in stores usually means an expensive and lengthy installation job. Miles/Kilometers of [network cables](#), with [switches](#) and [racks](#), Network Video Recorders ([NVRs](#)), [PCs](#) with software running on [Windows](#). On top of that, you'll have a lot of chores, like [maintenance](#), [antivirus](#), [network administration](#), etc.

AnyConnect smarter camera platform supports almost all network interfaces, such as [Wi-Fi](#), [Ethernet](#), [4G/LTE](#), and [5G](#). It gives you the guarantee to find the fastest, most cost-efficient, and easiest deployment method for your store.

Supercharge in-store [Device Onboarding](#) with near zero-touch mass onboarding. It allows faster and more secure installations, by, for instance, not sharing your corporate [Wi-Fi credentials](#) with your installation contractors. AnyConnect proprietary technology makes it possible today. It will be possible through [DPP \(Device Provisioning Protocol\)](#) or [Wi-Fi Easy Connect](#) once they are available.

# Shelf monitoring & better merchandising services

[Planograms](#) are an essential tool for optimal [visual merchandising](#). The implementation of planograms in-store has several challenges, such as mistakes in planogram execution, sufficient supply of merchandise, etc.

AnyConnect provides a solution to oversee the quality of the planogram execution.

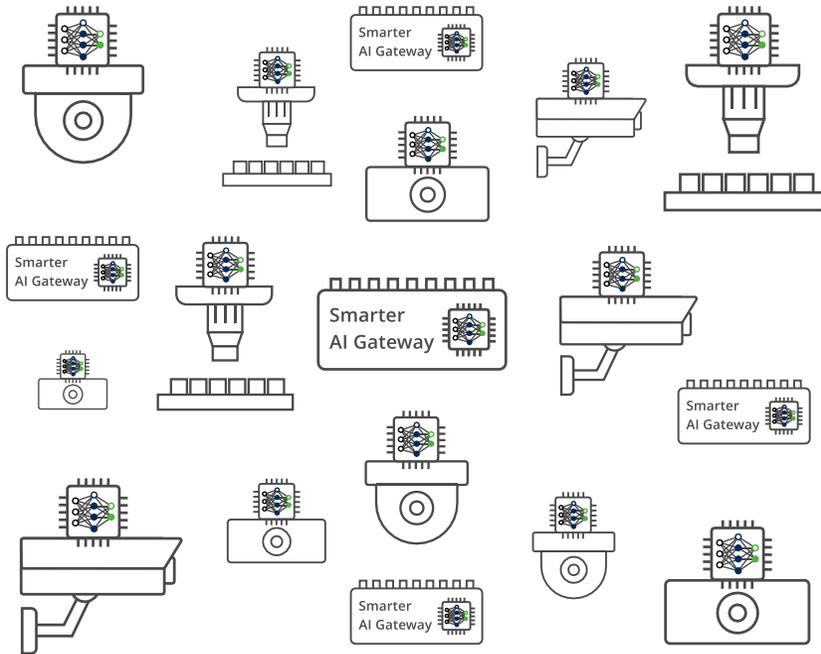
This solution has three parts:

- Smarter Shelf Cameras: battery-powered, Wi-Fi, high definition, shelf cameras. These shelf cameras are straightforward and rapid to install and have more than a year of battery life. They take high definition pictures of their shelves, one to multiple times per day.
- [Smarter AI Gateways](#) receive all images from Smarter Shelf Cameras and uses AI models to infer the percentage of compliance with the shelf planogram as well as identifying empty shelves. Smarter AI Gateways usually work in pairs for redundancy (two are generally enough for a large store).
- AnyConnect Smarter camera platform provides the overarching system to the Smarter AI Gateways and Smarter Shelf Cameras. It sends real-time notifications to store employees when some work is needed on a shelf (missing product) as well as data to the store planners and data scientists as well as the operations managers.

AnyConnect works with Standard CCTV cameras ([ONVIF Profile S](#) & [RTSP](#)) as well, as long as they are correctly positioned.



# Deploy AI to the edge



AnyConnect Smarter Camera Platform features [AI Containers](#) and an AI Repository. Planogram's product content changes regularly (changes in the product catalog, etc.). AI models have to change at the same time. Frequent AI models update on a large camera deployment is not a problem for AnyConnect Smarter Camera Platform. AnyConnect [Over-the-Air \(OTA\) Programming](#) technology enables store owners to update AI Containers (which is an AI application with trained AI Models), securely and OTA from AnyConnect [Console](#).

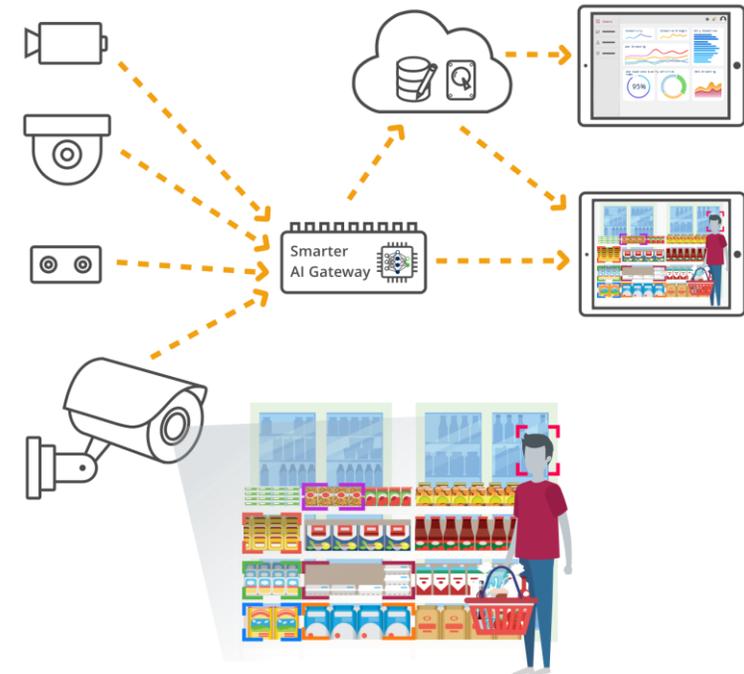
AnyConnect supports many [AI Frameworks](#), such as [ONNX](#), [TensorFlow](#), [MXNet](#), [Caffe2](#), [PyTorch](#), etc.

AnyConnect Smarter Camera Platform gathers all the metrics about inference quality as well as all the inference data. It can trigger instant notifications and actions, e.g., pushing a notification to the phone of a store attendant if a theft attempt is detected or if some products are missing on a shelf.

# New and legacy cameras

Many stores have existing IP camera-based CCTV systems. Repurpose those IP cameras with AnyConnect Smarter Camera Platform. Smarter AI Gateways transform simple IP cameras into AI-driven, connected cameras. Smarter AI Gateways enable you to deploy any AI models to the edge, like theft prevention, employee management, in-store analytics, etc., as well as all the great features of AnyConnect Smarter Camera Platform, such as Instant Connections, Adaptive Bitrate Streaming, Cloud Video Recording, etc.

AnyConnect Smarter AI Gateway works alongside existing Video Management System (VMS) and Network Video Recorders (NVRs). Smarter AI Gateways allow a smooth transition from your legacy system or just to have two systems at the same time for two different applications.



# Enhance your store operational performance, powered by AI!

Speak to a smarter camera expert today

[CONTACT US](#)