

Solution Brief

Intel® AI: In Production

Cathexis deploys AI to improve the effectiveness of their Video Surveillance management solution

Cathexis' stable, flexible, and highly integrated Video Surveillance Management Software (VMS) suite utilizes Intel® Distribution of OpenVINO™ toolkit to help keep premises safe and secure.

AI Video Analytics Market

\$11.7 Billion

The estimated worth of the global video analytics market by 2025¹

19%

The expected CAGR of global video analytics market over a forecast period of 2020 to 2025¹

At-a-glance

Cathexis is a South African-based electronic and software systems development and manufacturing company specializing in Video Surveillance Management solutions over the last 20+ years. Cathexis' flexible and customizable solutions address use case needs across all verticals and markets. The company prides itself on high-quality solutions and excellent service to its customers.



As the world adapts to the new normal, there is a growing reliance on AI video analytics technology

Organizations across industries are looking to harness the power of AI and video analytics to manage the safety and security of their campuses. Traditional video management solutions lack the power of AI intelligence, making it difficult to manage events and lacking capabilities beyond basic video storage. This creates inefficiencies in security management and can increase exposure to threats.

To address these challenges, organizations need a solution that delivers:

- **AI-powered video analytics** for a wide variety of use cases
- **A high degree of flexibility** with upgradeable architecture for future-proofing, customizable analytics, and third-party systems integration

CathexisVision provides the tools needed to secure premises and minimize risk

CathexisVision is an open architecture Video Management Software suite that enables seamless integration with IP cameras and third-party systems, providing complete optimal solutions for the widest range of applications.

The solution offers a plethora of benefits and flexibility for businesses to optimize the solution to their specific needs. The user-friendly interface allows users to easily configure the provided algorithms with both live and recorded video footage, to automatically provide triggers to the system, and to enable specific user-defined actions depending on the specific trigger received.

The solution is adaptable for use cases across all verticals and markets. Using Intel® Distribution of OpenVINO™ toolkit trained models, Cathexis is able to optimize the performance of their analytics suite to help organizations manage safety and security.



1. Markets and Markets, "Video Analytics Market...", 2020

Leveraging the capabilities of Intel® Distribution of OpenVINO™ toolkit

OpenVINO enables Cathexis to significantly boost the performance of their AI solutions. Cathexis leverages OpenVINO's pre-trained models to optimize software solutions, enabling advanced use cases to protect people and environments. Leveraging the Intel® Distribution of OpenVINO™ toolkit gives Cathexis' AI vision solutions the ability to run complex machine algorithms and perform advanced functions efficiently on low power machines, saving energy costs and improving performance.

CathexisVision Software Features, include:

- Open Architecture VMS platform
- Enterprise, Multi-Site Architecture
- Video Analytics including AI
- Automatic License Plate Recognition (ANPR)
- Third-party System Integration (e.g Access control, Fire, Intrusion, Point-Of-Sale)
- Sophisticated Command Centre Environment
- Advanced Video Search
- Cyber Protection and Failover Redundancy
- Multiple Language Support

Cathexis pandemic solutions

Temperature Monitoring

The solution provides a visual representation of temperature and trigger alerts at pre-determined thresholds. The real-time visual and audio alerts will notify users, the system can also be configured to take other actions, and the solution is fully customizable.

Mask Detection

Quickly detect whether someone is wearing a mask and provide real-time, informative overlays and alerts for operators.

Social Distancing

CathexisVision allows users to custom thresholds for social distancing for people proximity analytics.

Video Analytics

CathexisVision offers countless number of other video analytics solutions that empower organizations to maintain health safety standards and keep campuses safe and secure. These features include presence detection, line crossing, time stopped in area and [more](#).

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer to learn more. Cost reduction scenarios described are intended as examples of how a given Intel- based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction. *Other names and brands may be claimed as the property of others. **Any third party information referenced on this document is provided for information only. Intel does not endorse any specific third party product or entity mentioned on this document. Intel, the Intel Logo and other Intel marks are trademarks of Intel Corporation or its subsidiaries in the U.S. and /or other countries. Copyright Intel Corporation. Intel is committed to respecting human rights and avoiding complicity in human rights abuses. [See Intel's Global Human Rights Principles](#). Intel's products and software are intended only to be used in applications that do not cause or contribute to a violation of an internationally recognized human right

Ski Dubai calls on Cathexis to integrate future-proof video management system

"The installation completed for Ski Dubai demonstrated the capability of CathexisVision to reliably operate in an environment that would require further upgrades and installations in future and exceptional integration with current third-party systems"

– Ski Dubai

Ski Dubai was in search of a cost-effective, future-proof solution with advanced functionality and the capacity to allow for future integration with third-party systems such as Access Control, Fire Detection and Point-of-Sale. Additionally, being in extremely cold environment meant that integration with specific brands of cameras was a major requirement.

In keeping with the client's requirements, Cathexis was able to provide a highly efficient and effective, fully integrated Video Management Software (VMS) system that would successfully replace the existing VMS system, and support 279 IP Cameras, with the capability to upgrade and integrate over 400+ cameras in the future. Additionally, the Advanced Video Search feature allowed the control room operators to eliminate the need to review irrelevant footage. CathexisVision provided Ski Dubai with the flexibility and capabilities needed to manage their business efficiently.

Learn more

Intel® AI: In Production is an ecosystem focused on reducing deployment complexities, promoting partner AI offerings, and increasing collaboration between its partners.

Learn more about Cathexis and Intel® technologies:

- [Home – Cathexis](#)
- [CathexisVision Solution](#)
- [Intel Artificial Intelligence](#)
- [Intel® AI: In Production | Overview](#)