



# Transforming Video Analytics into Business Results



## Accenture Video Analytics Services Platform

A flexible end-to-end platform that easily adapts to many use cases found in today's data-centric world—offering real-time insight into operations and interactions for immediate course correction:

- Includes model training, video ingestion, business rules, and visualizations
- Readily adapts to any client-specific use case
- Leverages existing video cameras; video inputs can be connected to Video Analytics Services Platform (VASP) to extend the value of existing infrastructure investments
- Enables users to create business processes for:
  - Alerts for immediate intervention based on objects, process adherence, and timing
  - Validations of process pre-conditions and conditions
  - Structured data sets for longer-term analysis/optimization
- Supports flexible deployment in multiple modes—cloud, on-premises, and hybrid
- Includes the Intel® Distribution of OpenVINO™ toolkit for developing applications and solutions that emulate human vision; Intel® Movidius™ Vision Processing Unit (VPU); and Intel® Arria® 10 FPGAs

## Background

Since 1942, video cameras have been used for surveillance in public and private places. The first systems recorded events and then delivered video footage after the fact. Modern video surveillance cameras leverage the internet and wireless communication to deliver images in real time.

Internet-based video surveillance systems are good, but can they get better? Can they deliver:

- Comprehensive monitoring
- Proactive alerts
- A clear understanding of the right equipment to use in each scenario/use case
- Recommendations for safety and process improvements
- Better business outcomes

The answer is yes. By enabling the systems to “see” like humans, Accenture has found a way to transform video analytics into real business value.

Accenture's VASP is a comprehensive solution that applies analytics to video data to expose new business insights. VASP receives video feeds from video cameras already installed, processes the video data, and then delivers insights that support fast, accurate decisions. With VASP, businesses can take appropriate action

### Authors

**Jill King**

Intel Alliance Marketing Lead  
Accenture

**Stephen Lim**

Sr. Manager  
Platform Solutions Marketing  
Intel Programmable Solutions Group

based on alerts generated by deep analytics and artificial intelligence (AI). With Accenture VASP, organizations can:

- See business processes from a new perspective
- Gain real-time insight into operations and interactions so they can take immediate action
- Leverage granular “ground truth” data for longer-term trend analyses

## Solution

Powered by the Intel® Distribution of OpenVINO™ toolkit, Intel® Movidius VPU, and Intel® Arria® 10 FPGAs, Accenture VASP includes everything you need for a video analytics solution. This comprehensive, fully integrated platform includes five pillars:

- Video surveillance—Combines existing video surveillance capabilities
- Siloed video analytics—Incorporates previously disparate video analytics assets
- Video analytics platform—Places all video analytics capabilities in one central location
- Streaming analytics and business rules—Uses business rules and filters to provide business alerts
- Situational awareness and reporting—Brings all intelligence into one command center for analysis

Intel® FPGAs provide flexibility for AI system architects searching for competitive deep learning accelerators that also support differentiating customization. The ability to tune the underlying hardware architecture, including variable data precision, and software-defined processing allows the FPGA to deploy state-of-the-art innovations as they emerge. Underlying application use include in-line image and data processing, front-end signal processing, network ingest, and I/O aggregation.

Intel® Movidius™ VPUs drive the demanding workloads of modern computer vision and AI applications at ultra-low power. By coupling highly parallel programmable compute with workload-specific hardware acceleration, and co-locating these components on a common intelligent memory fabric, Movidius VPUs achieve a unique balance of power efficiency and high performance. Movidius technology allows device makers to deploy deep neural network and computer vision applications in categories such as smartphones, drones, intelligent cameras, and augmented reality devices.



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## Solution in Action

While the use cases for Accenture VASP will expand over time, the most common use cases today include:

- Providing raw data from simple separate detections, such as face recognition, crowd counting, traffic monitoring, or license plate recognition
- Adding meaning to contextual events, such as footfall tracking, safety risks, incident detection, or suspicious behavior
- Leveraging big data to support real-world use cases, such as enabling the police to complete post-event analyses and cross camera tracking

## Customer Focus

A Singapore Government Agency selected Accenture to manage its Safe City pilot program. During the program, Accenture VASP was integrated into the existing video monitoring systems used across the city to increase situational awareness, streamline operations, and enhance the response times of city authorities to public safety incidents. Results of the Safe City pilot program include:

- 44 requirements trials, including operational use cases across six agencies—Police Force, Civil Defense Force, Land Transport Authority, National Environment Agency, Public Utilities Board, and the Ministry of Home Affairs
- Nine agile sprints
- 48 “live” feed sources integrated city-wide
- 12 simulation models built, with 150+ parameters (on average) defined for each model
- More than 20 aggregated business rules created, leveraging common data formats integrated from visualization to sensor
- Four video analytics software solutions integrated

## Call to Action

Contact your Accenture representative today. Find out how the flexible VASP platform can offer real-time insight into your organization's operations and interactions—enabling you to make immediate course corrections to drive better business results. You can also visit [accenture.com](https://www.accenture.com)