Airports and seaports are among a city’s busiest locations. With air passenger growth doubling to 7.8 billion annual passengers globally by 2036\(^1\) and seaports preparing for larger cruise ships, officials are under pressure to provide safer and more efficient operations.\(^2\)

Many of these airports and ports are deploying video technology that helps with wait-time management and delivers volumes of data from facial recognition software, suspicious object detection systems and social media. However, this flood of information from disparate systems is more than operations officials can effectively manage.

Officials need an end-to-end solution that leverages innovative internet of things-enabled (IoT-enabled) analytics to deliver real-time insights. Armed with this new data, facility administrators can respond faster to security incidents, enhance business success in terminals, and deliver a higher level of service.

\(^1\) [http://www.iata.org/pressroom/pr/Pages/2017-10-24-01.aspx](http://www.iata.org/pressroom/pr/Pages/2017-10-24-01.aspx)

\(^2\) International Airport Travel Association, 20 Year Forecast, 2016.
Gain Greater Visibility Into Airport and Port Operations

Airports and ports are increasingly using intelligent technology to make their facilities smarter and safer, and to improve the customer experience. By utilizing big data integration, and reporting and integrating video feeds, event data and other sources like social media, Hitachi Smart Spaces and Video Intelligence solutions provide real-time information and historical data. Airport and port officials can act on this information to support smarter operations, security and planning.

Hitachi Vantara Delivers Comprehensive, End-to-End IoT Solutions for Airports and Ports

Hitachi Smart Spaces and Video Intelligence provides airport and port officials with an integrated view of passenger activity, operations and safety issues. It supplies the intelligence officials need to make faster, more informed decisions. Airport and port managers gain a map-based, single-pane perspective that combines real-time video from cameras, building systems, analytics tools and insights, social media and smart devices.

Hitachi solutions for smart ports also support smarter, more efficient airport and port operations with integrated IoT solutions. These solutions include integrated data visualization, video and analytics, workflow automation, activity analysis, queue detection, vehicle counting and analysis, and directional people counting. Further, the solutions include Hitachi Video Analytics with policy-driven, automated alerts that are triggered when long wait times, suspicious activities or other issues are detected.
Smart Features for Safe and Efficient Ports

**One View for All Data and Intelligence**
Hitachi Visualization Suite's geospatial software and smart edge-capture devices are integrated to provide a map-based view. This view includes video, operational data, GPS tracking of moving assets, building and vehicle data, social media and other sources, along with native analytics and workflow automation.

Provides a single-screen view to monitor and proactively respond to issues in real time. Delivers greater situational awareness and data-driven insights to improve safety, passenger experience and operations.

**Suspicious or Left-Behind Object Detection**
Unattended objects like suitcases or backpacks are urgent concerns for airports and ports. Hitachi Video Analytics detects static objects left unattended or triggers an alarm if an object is removed.

Allows officials to monitor all areas of large facilities and react faster and more effectively when suspicious objects are detected. Enables quick return of objects to customers.

**Live Facial Recognition and Privacy Protection**
Hitachi Video Analytics integrates with facial recognition databases to detect selected subjects on real-time video feeds, alert officials or search video to provide subject’s history. It also provides intrusion and object detection, license plate recognition, and people, traffic and parking insights.

Continuously delivers proactive threat detection with built-in privacy protection to guard against intrusions to personal privacy, leveraging next-generation technology to maximize accuracy.

**Automated Intrusion Detection and Direction Control**
Hitachi Video Analytics automatically detects intrusion of people or vehicles into critical areas and when objects move in a restricted direction, and immediately alerts security operators. It identifies intrusions indoors or outdoors.

Provides enhanced awareness that allows more effective and efficient protection for important areas and greater situational awareness for first responders.

As airports and ports continue to expand, challenges to travelers and retailers become more complex. In today's connected world, Hitachi Vantara solutions offer officials a way to use data-driven insights to make travel more convenient and safer for everyone.

- Provides the tools organizations need to leverage data from sensors, IoT, video, social media and more to improve operations and customer service.
- Delivers real-time insights to help transportation centers react faster to security and operational issues, improve wait times and better predict when and where incidents will occur.
- Enables greater situational awareness to respond more effectively to security incidents.
Queue- and Wait-Time Detection
Hitachi Video Analytics detects overcrowding and optimizes utilization by analyzing paths, directions and dwell times. It also automatically alerts operators when a defined waiting line length is reached.

Enables facility managers to rapidly deploy more resources to minimize wait time and improve the passenger experience.

Enterprise-Scale Video Management
Hitachi Video Management Software (HVMS) is a secure, elegant video solution that works across platforms to provide an intuitive experience. Hitachi Video Management Platform (VMP) provides converged server, storage, flash modules and VMware virtualization along with platform-as-a-service (PaaS) capabilities. It integrates with the majority of industry video management software offerings to manage video and devices, and to work with hardware with analytics and smart cameras with built-in central processing units (CPUs).

Simplifies airport and shipping port video system deployment and management with an all-in-one, integrated solution. Built from the ground up for video.

Deep Web and Social Media Intelligence
Hitachi Social Intelligence Analyzer (SIA) enables geofenced tweet searches and alerts for keywords that can notify security of a potential threat, in-progress incident, or danger to residents and city staff.*

Replaces inefficient, costly and manual social media searches, and provides security officials with deep web insights to proactively address threats to public safety.

*Some restrictions exist for law enforcement in the United States.
Smart Cities Have Smart Airports

At Hitachi Vantara, we view airports and ports as interactions of people, communities and technology, places where all of these come together to improve our lives. Hitachi Smart Spaces and Video Intelligence supports smart cities to achieve three basic goals.

- Improve quality of life: Increase economic opportunity, create vibrant communities, reach sustainability goals and improve public safety.
- Increase resiliency: Enable cities and communities to adapt quickly to economic, organizational and environmental changes, now and in the future.
- Operate efficiently: Optimize travel times, reduce energy consumption, and utilize technology to reduce costs and help travel officials be more effective.

We leverage Hitachi’s deep experience and expertise, to provide solutions for smart cities across the globe.

This [Hitachi Vantara] solution enhances our security by integrating our cameras, our DVRs, our wireless antennas into one central communication system. It also gives us the flexibility to stay on board and see what is going on in real time on our vessels. We see opportunities to further enhance public safety and track vessel telemetry. The possibilities are endless.

Jonathan Figueroa
Director of Facilities
Billybey Ferry Company
Next Steps

Hitachi Vantara is helping airports and ports become safer and smarter today. Using IoT, analytics and other proven technologies, smart cities are driving intelligence that increases efficiency and safety, improving the way people work and live. Ready to learn more about the benefits of Hitachi Smart Spaces and Video Intelligence for your organization?

**Hitachi Visualization Suite Datasheet:** Correlate disparate data and video systems geospatially, enabling public safety officials to find the assets they need to assess any situation in real time. [Download](#).

**Hitachi Video Analytics Overview:** Transform security cameras into IoT sensors that enable smarter operational, security and business intelligence. [Download](#).

**Hitachi Video Management Platform Solution Profile:** Empower video analytics, security and monitoring with a converged video solution that stores and manages video with high availability and fault tolerance. [Download](#).

**Business Analytics Solution Brief:** Leverage big data integration from various systems and deep analytical insights for smarter business. [Download](#).

To learn more about Hitachi Smart Spaces and Video Intelligence, visit our [website](#) or send us an [email](#). We’d be happy to discuss its benefits for your organization.

**Hitachi Vantara at a Glance**

Your data is the key to new revenue, better customer experiences and lower costs. With technology and expertise, Hitachi Vantara drives data to meaningful outcomes.