GTAA elevates customer experience with digital operations powered by Wipro HOLMES®
Wipro’s artificial intelligence (AI) and automation solution powered by Wipro HOLMES® enhances core operations and delivers exceptional passenger experience at the Toronto Pearson International Airport

Client Background
Client name: Greater Toronto Airports Authority (GTAA)
Industry type: Airport Operator
Areas of Operation: 180+ global destinations including 60+ American cities
Key Products & Services: International passenger traffic, air cargo, freighter service
49.5 million passengers served, 473,000 flight operations and 557,400 metric tonnes of cargo operations managed in 2018.
The airport, the second largest employment zone in Canada, facilitates 50,000 jobs.
Number of Customers: 30+ airlines and 49.5 million annual passengers

The Challenge
GTAA had a disparate array of IT and airport systems managed by multiple stakeholders. Frequent disruptions in IT services adversely impacted passenger experience, airport, airline, government agencies, and concessionaire operations.

Airports are rated based on passenger experience across various touch points at the airport terminal. An efficient and well-connected IT system enables efficient airport operations at every step of the passenger journey – from check-ins using kiosks/check-in counters, baggage check-in, and complimentary Wi-Fi for passengers at the airport to retail and F&B services and smoother boarding processes supported by the airline system. GTAA was looking to enhance their business capabilities by leveraging information technology to achieve their vision of becoming the best airport in the world. GTAA entered into a long-term strategic partnership with Wipro to deliver business transformation, innovation, and end-to-end IT services for the airport.

The Solution
Wipro’s comprehensive transformation service delivery model addressed key facets of technology, process, and operations to achieve the GTAA objective. Automation was identified as a key driver for delivering improved IT services. Wipro introduced measurable KPIs to monitor the success of automation deployment across various business operations.

Toolsets at GTAA were rationalized by qualifying and retaining only those that were compatible with futuristic, digitally transformed airport operations. AI and Automation solutions from Wipro HOLMES® complemented existing toolsets and successfully transformed the airport system IT operations and terminal services from a manpower-centric model to an advanced, automated system. The new system also adheres to security and compliance requirements of GTAA for higher operational availability of IT systems in a multi-vendor system environment.

Canada’s largest airport facility leverages AI-powered automation platform, Wipro HOLMES®, for unified airport operations

Case at a glance
The Greater Toronto Airports Authority (GTAA) successfully delivers exceptional passenger experience by streamlining daily operations through AI-powered automation.

Key requirements:
Enable business transformation, innovation, and end-to-end IT services for the airport
Ensure efficient airport operations that deliver a superior passenger experience
Deliver real-time flight information and on-time boarding
Facilitate seamless passenger/baggage check-in
Business Impact

GTAA and Wipro achieved remarkable success in delivering round-the-clock IT services to passengers, airlines, government agencies and concessionaire partners. Automation, process excellence, adherence to airport industry best practices, and end-to-end outcome-based services delivery with a single point of accountability led to a successful transformation. Benefits included:

- Over 85% reduction in IT systems outage
- More than 85% reduction in Mean Time to Resolve (MTTR)
- First Call Resolution (FCR) over 90%
- Approximately 25% of all tickets were automated on an average every month
- Over 30% of all infrastructure and related IT concerns were eliminated

The above improvements significantly enhanced passenger experience and added capacity to support growth while maximizing the value from investments.

Key automation use-cases and resulting outcomes are as indicated below:

1. Auto-pilot mode with self-heal for Common Use Passenger Processing System (CUPPS) end devices - Automated remote diagnostics and troubleshooting of business critical devices in passenger processing enhanced system availability by 100% for CUPPS crash events. This ensured faster processing and an enhanced passenger check-in experience.

2. Automated application health check of critical airport systems and Message Queue (MQ) Monitoring - Automated monitoring of baggage servers, CUPPS, resource management systems, baggage information (Baggage Tracking & Reconciliation system) monitoring reduced revenue loss for airlines. It also improved the turn-around time (TAT) for incident resolutions, facilitating critical monitoring of compute and WEB URLs, and customized monitoring of billing data flow with early detection of issues.

3. Auto pilot mode with self-heal for Wyse (POC completed) – Automation eliminated task dependency on vendor (for hands and feet support) and also led to enhanced system availability with early detection and auto resolution. Proactive event detection, automated ticket log and resolution resulted in better MTTR and lower user reported incidents. High availability of display systems and passenger processing devices facilitated the most important KPI of the airport i.e. On-time flight departure and Airport Service Quality (ASQ).


Key Outcomes

The technology transformation resulted in highly efficient airport operations across key customer touchpoints.

- 85% reduction in IT systems outage
- 85% reduction in Mean Time to Resolve issues
- 25% automation of tickets per month
- 10% decrease in service desk call time
- First Call Resolution (FCR) over 90%
- 50% reduction in downtime of parking devices with proactive monitoring
- 35% auto resolution of incidents with effective event correlation and automated remediation
- 60% reduction in ticket resolution time and ticket hop
- Wait time reduction from 2 days to less than 1 hour
Targeted automation use-cases in business operations

1. AI-enabled contact center transformation – Voice-enabled AI implementation for the Toronto Pearson contact center helpline automated over 30% of the calls and reduced the average wait time to less than one minute.

2. Procure to Pay (P2P) Anomaly Detection – Wipro’s P2P Anomaly Detection platform, enabled by HOLMES, proactively monitors potential anomalies in procure-to-pay transactions and generates 33 reports every quarter using ERP transactions data.

3. AI / ML enabled spend data correction - AI / ML corrected spend data mapping for around 650k records and achieved over 80% accuracy. This also led to a 70% reduction in manual efforts to validate and correct the spend category mapping.

4. AI-enabled document intelligence – Leveraged HOLMES platform to explore usage of AI for natural language search and documents retention management.

Automation use-cases in IT Operations

1. Service Desk and End User Services
   a. Self-service and self-heal led to a 20-30% reduction in ticket count. It also decreased machine downtime which led to enhanced work efficiency of airport employees. Additionally, it led to a 10% decrease in Service Desk call time and consistently improved first-call resolution.

2. IT Infrastructure and Application Support Services
   a. Availability Monitoring
   i. Automated proactive monitoring of ETL (Extract, Transform, Load) process for data sync, without human intervention with 100% coverage

   ii. 50% reduction in overall downtime of parking devices with proactive monitoring of devices that ensured timely incident reporting.

   b. 35% of incidents auto resolved with effective event correlation and automated remediation.

   c. 60% reduction in ticket resolution time and ticket hop through auto ticket assignment and automated resolution.

   d. Patch and Software compliance management - Time savings of 1.5-man hours’ effort per day by improving patch compliance to 97% across end points.

   e. Self-service software request and automated deployment - Wait time reduction from 2 days to < 1 hour resulted in improved end-user experience.

   f. Backup and Storage Manager Bots- Better planning and forecasting of resources with real-time dashboards of overall health of commvault system solution and storage OEMs.

Automation Use Cases

Airport Systems:
• Auto-pilot mode with self-heal for Common Use Passenger Processing System (CUPPS)
• Automated application health check of critical airport systems
• Auto-pilot mode with self-heal for Wyse
• Automated monitoring of self-service kiosks

Business Operations:
• AI-enabled contact center transformation
• Procure to Pay (P2P) anomaly detection
• AI / ML enabled spend data correction
• AI-enabled document intelligence

IT Operations:
• Self-service and self-heal
• Proactive ETL monitoring
Toronto Pearson is the busiest airport in Canada and one of the key gateways to North America. High availability, resiliency, and security of IT services is essential for seamless, 24x7 airport operations. Wipro, as the Strategic IT partner, has helped us reduce IT systems outage and MTTR turnaround by 85%. This has significantly improved the passenger experience and added capacity to support growth while maximizing the value from our investments. AI-enabled automation, through the Wipro HOLMES® platform, has helped drive innovation across business functions. We are excited by the opportunities that AI and automation presents in unlocking value for our customers and passengers”.

– Glenn Evitt, Director - IT Services & Architecture
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