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The Future of OTP:

IT Solutions for Agility & Sustainability

Point B Presentation
April 2, 2025

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Who's Here Today



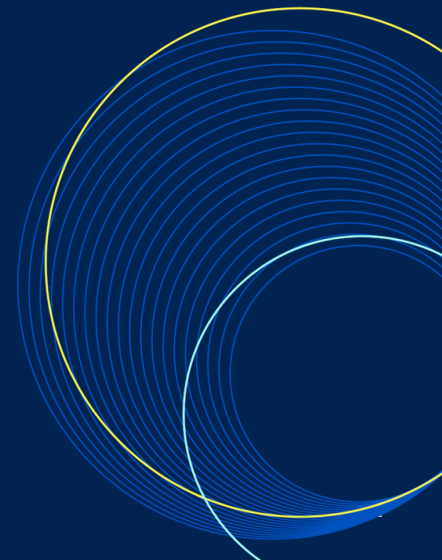
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Today's Session

The Transformation
Imperative Today

Improving your OTP through
3 Key Activities

Bottom Line Impact

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Digital Transformation Risks

Navigating Challenges to Achieve OTP Gains

For OTP, ensuring seamless integration of emerging technology is crucial, yet many airlines face challenges in achieving these operational improvements. Understanding these risks and adopting a proactive, data-driven approach can be the key to overcoming these challenges and driving success.

“Despite the significant investments, estimates of digital transformation failures range from 66% to 84%.¹⁰”

“A survey of nearly 1,000 senior executives at Fortune-sized U.S. companies found that nearly **84% of businesses struggle with digital transformation and fail to see the expected results**, including improvements to OTP.¹¹”

- “Organizational culture and alignment with operational goals have a direct impact on the success of technology programs.^{12 13}”
- **1 in 10 projects** is delivered on budget.
 - **1 in 10 projects** is delivered on time.
 - **1 in 10 projects** delivers the expected benefits.
 - **1 in 1,000 projects** delivers on all three.

Our Approach to Optimizing OTP

By leveraging benchmarking, simulation, and our LINQ platform, we mitigate risks to OTP through predictive analytics, enabling proactive decision-making, streamlining operations, and ensuring timely departures and arrivals.



1. Assessing Organizational Baseline

- Industry Benchmarking
- Internal Benchmarking
- Process Benchmarking
- Technology & Systems
- Disruption & Recovery

2. Applying Simulation and Best Practices

- Turnaround Time (TAT) simulation
- Crew & Flight Scheduling
- Air Traffic & Routing
- Passenger Flow & Board Simulation
- Disruption Management & IROPS Simulation
- Baggage Handling & Transfers
- Predictive Management Simulation to reduce aircraft-related delays

3. Activating your Future Organization

- Predictive Analytics & Delay Mitigation
- Streamlined Communication & Collaboration
- Integrated Systems for Operational Efficiency
- Weight & Balance optimization
- E-Logbook & Maintenance Optimization
- Offline & Realtime operational support

Accelerating OTP across your operations



Flight Planning & Scheduling

- Realistic Scheduling
- Slot Management
- Contingency Planning



Ground Operations & Efficiency

- Turnaround Time Optimization
- Ramp Coordination
- Gate Assignment Optimization



Aircraft Readiness & Maintenance

- Predictive Maintenance
- Spare Aircraft & Parts Strategy
- Quick Turn Maintenance Protocols



Passenger & Baggage Flow

- Self-Service & Automation
- Efficient Boarding Procedures
- Baggage Handling Performance



Crew Management

- Optimized Rostering
- Proactive Crew Standby
- Real-Time Comms



Air Traffic Maintenance & Flight Ops

- Collaboration with ATC
- Dynamic Flight Re-Routing
- Fuel Efficiency & Speed Adjustments



Benchmarking



Simulation



LINQ

Benchmarking in Practice

Cultivating a benchmarking culture ensures a **data-driven approach** to identifying gaps, improving efficiencies, and fostering continuous improvement, ultimately enhancing OTP and reducing delays

Technology & Systems Benchmarking

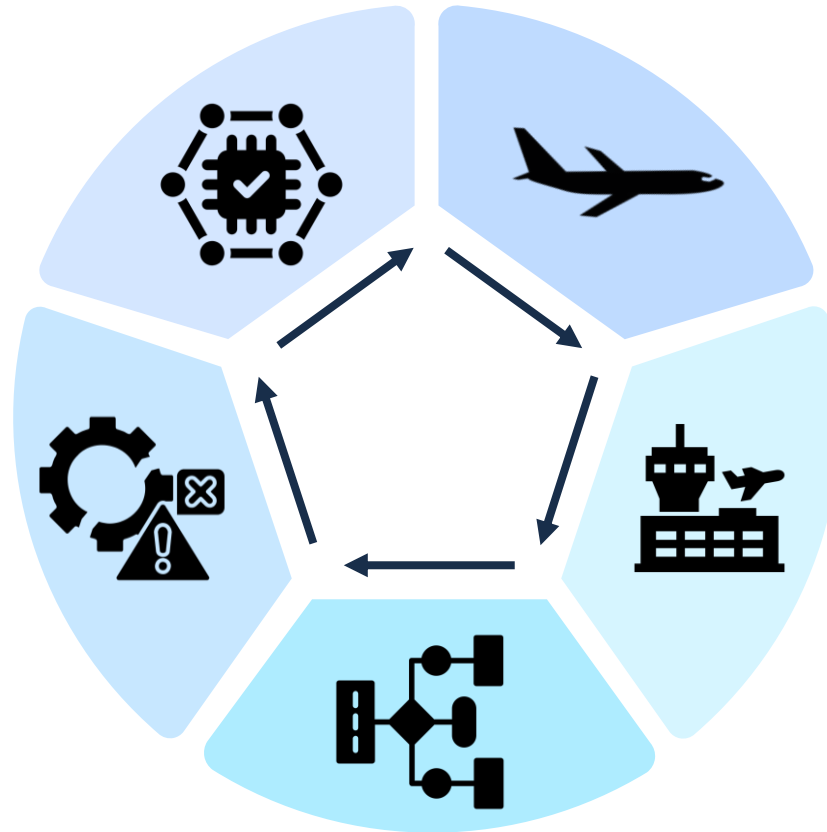
Culture of Innovation

- Data integration/ automation
- Predictive analytics
- System integrations

Disruption & Recovery Benchmarking

Culture of Agility & Crisis Mgmt

- Irregular Ops (IROPS)
- ATC mitigation
- Passenger rebooking & comms



Industry Benchmarking

Culture of Continuous Improvement

- OTP Performance
- Competitors
- Best in class

Internal Benchmarking

Culture of Accountability

- Internal across airports
- Aircraft Type
- Seasonal OTP Variations

Process Benchmarking

Culture of Standardization

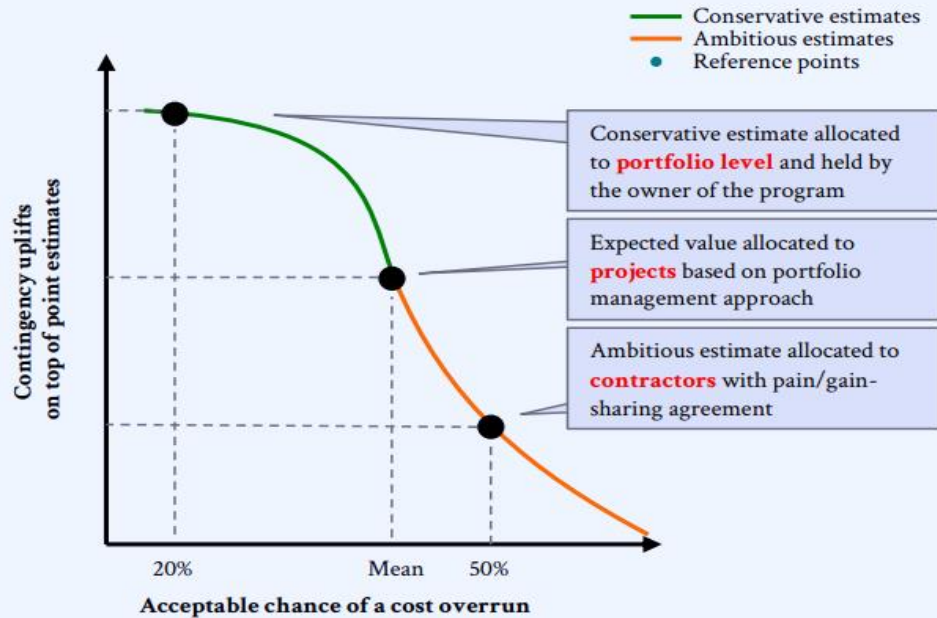
- TAT
- Ground Handling/ Processing speed
- Crew Scheduling efficiency

Examples of Benchmarking

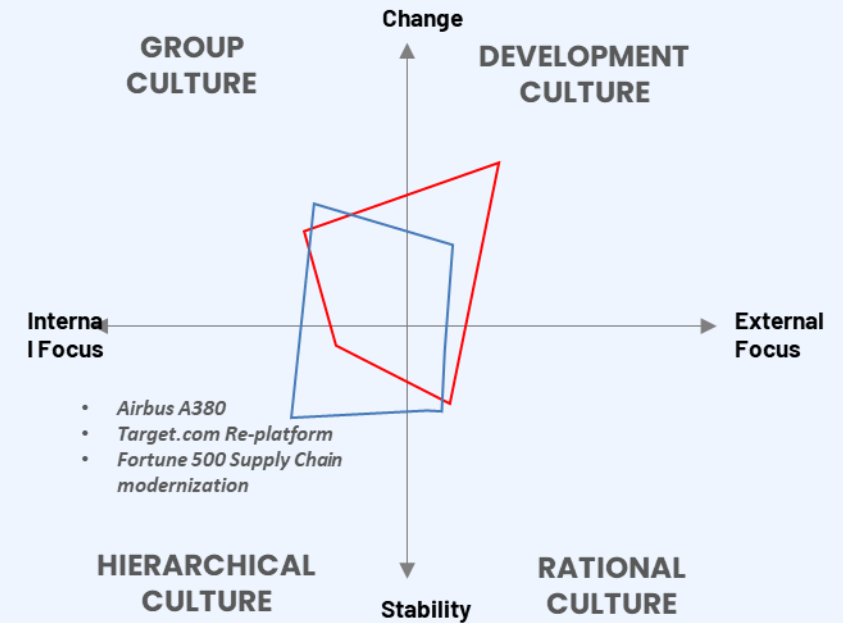
Benchmarking helps reduce risk in transformation and improves capital allocation as a result



Technology & Systems Benchmarking



Internal Benchmarking



25%+

Cost overrun avoidance in large scale tech projects

15-40%

Improvement in Schedule Realism

10 – 20%

Improved capital allocation

40-50%

Reduction in risk

20-40%

Innovation Output Improvement

10-25%

Revenue Growth

10-25%

Improved Employee Engagement

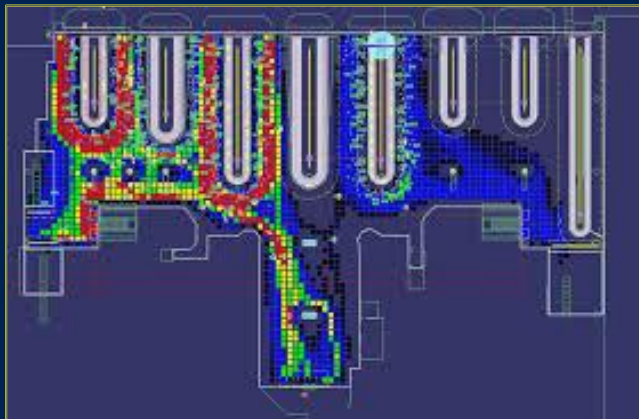
15-35%

Faster Time to Market

Simulation in Practice

By **simulating disruptions, turnaround processes, and network-wide impacts**, organizations can:

- Proactively identify bottlenecks,
- Test mitigation strategies
- Improve decision-making to minimize delays and ensure seamless operations



Above: Terminal simulation helps reduce bottlenecks

Airlines can significantly enhance OTP by leveraging simulations to model, analyze, and optimize how aircraft, crews, ground services, passengers, and equipment interact in real time.

Crew & Flight Scheduling *Reduce Crew-Related Delays*

- Crew pairing & rostering strategies
- Crew duty time limitations
- Crew deployment strategy

3-10% Increase Aircraft Utilization

Passenger Flow & Board *Improve Onboard Efficiency*

- Boarding strategy
- Late-arriving passengers & gate changes
- Security & immigration

5-25% Reduction Gate TAT

Disruption Management & IROPS *Improve Delay Recovery*

- Weather/ mechanical/ crew shortages
- Alternate aircraft swaps
- Passenger rebooking strategy

5-15% OTP

Baggage Handling & Transfer *Prevent Connection Delays*

- High volume baggage handling
- Minimum connection time (MCT) optimization

**5-20% Reduction
Baggage Connection**

Predictive Maintenance *Reduce Aircraft Delays*

- Predict component failures
- Optimize scheduling & maintenance checks
- Unexpected aircraft simulations

**10-30% Reduction
Maintenance Delays**

Air Traffic & Routing *Minimize Airspace & ATC Delay*

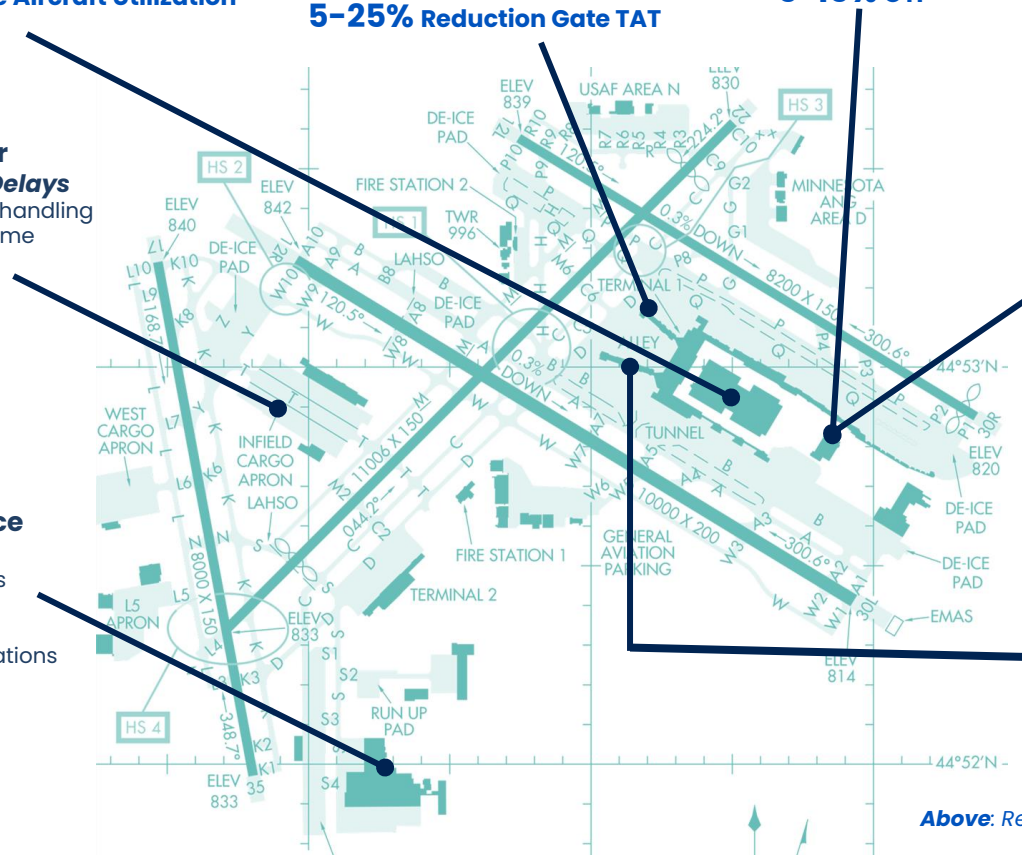
- Flight path/rerouting strategy
- ATC restrictions & slot constraints
- Departure sequencing

2-5% Improvement Fuel Efficiency

Turn around Time (TAT) *Optimize Ground Ops*

- Aircraft turnaround processing
- Ground handling Ops
- Station delays

10-20% Ground Handling Costs



Above: Representative only



Technology in Practice: LINQ

Integration of ...

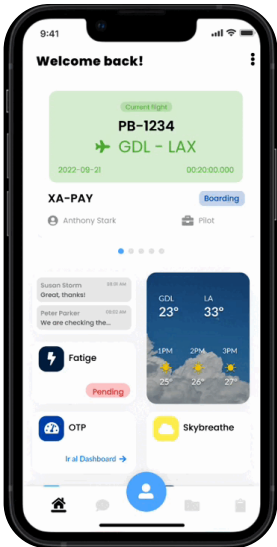
Scheduling

Crew Management

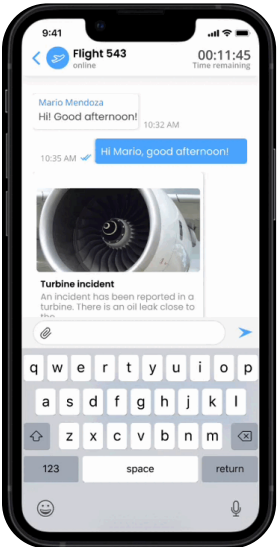
Maintenance Systems

... allows Airlines to proactively detect potential delays, automate decision-making, enhance operational coordination to keep flights on time

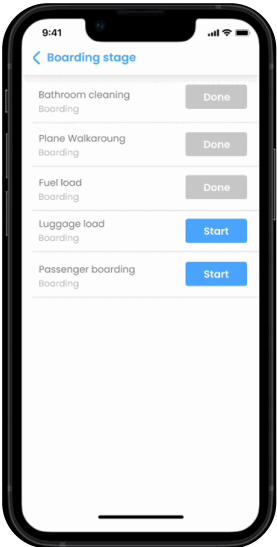
Flight-Centric Communication Channels for Real-Time Collaboration



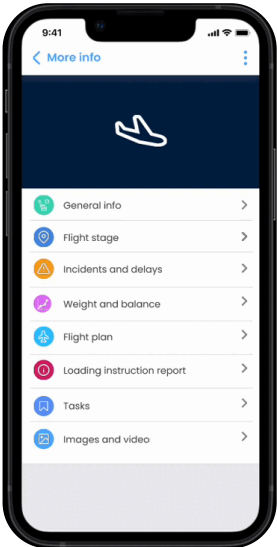
Robust Task Checklists and Automated Compliance



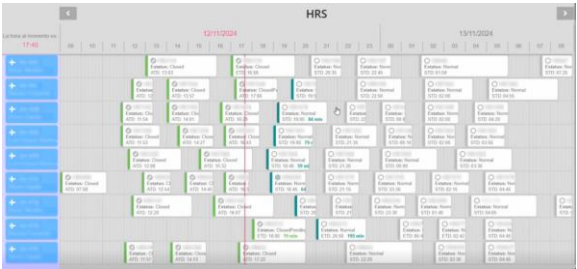
Document Distribution, Real-Time Signing, and Task Assignments



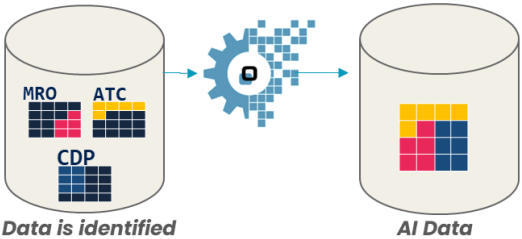
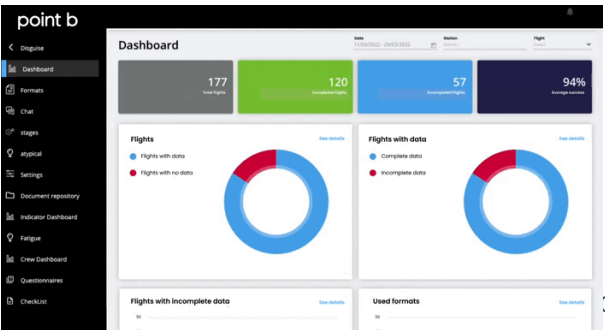
Enhanced Passenger Service with Situational Awareness



Real-Time Task Tracking with Predictive Delay Alerts



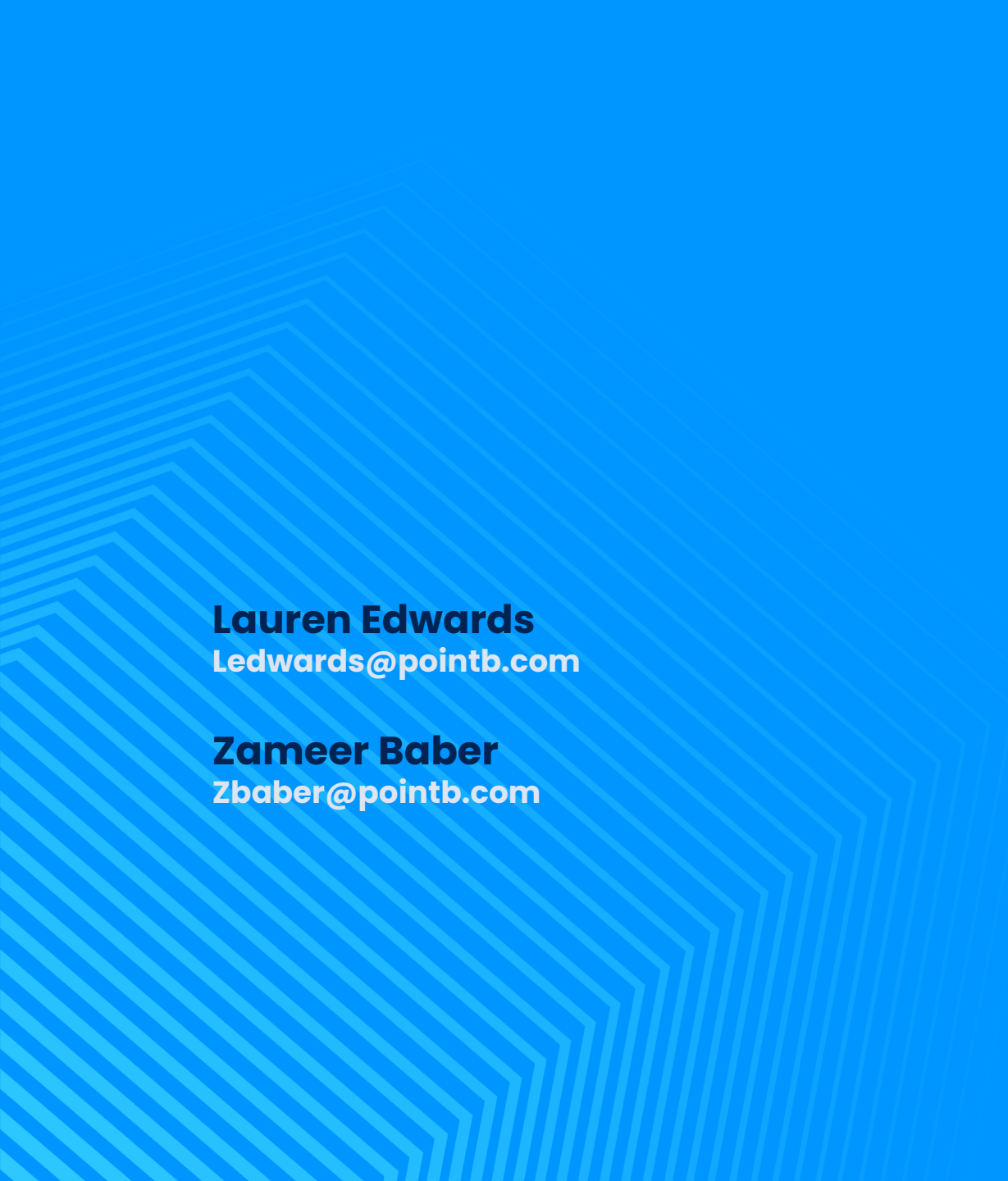
Performance Analytics and Root Cause Insights



aws Microsoft 365 mongoDB.

90%
reduction in data fragmentation

15%
improvement in on-time performance



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Go beyond
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Appendix

We have extensive experience developing technology to help leading airlines reduce risk and improve operations



Designed and implemented a communication platform for real-time collaboration, **integrating operations center, pilots, crew, and ramp staff**. Established dynamic, role-specific channels to streamline coordination, **reduce risk as a result of miscommunication, and enhanced task visibility**.



Implemented a dynamic role-based access system for flight-critical documents, ensuring secure and efficient collaboration among flight crews, operations, and ground staff. **Enhanced operational security** by protecting sensitive data, such as passenger information and operational checklists.



Implemented real-time task tracking with predictive delay alerts to **proactively identify potential delays before disruption of flight schedules**. As a result, the airline was able to **reduce cost impact of cascading delays**.



Deployed dynamic compliance tracking system to standardize flight operations and enhance regulatory adherence. As a result, the airline saw **reduction in operational risk, improved compliance, and enhanced operational efficiency in high-intensity environments**.



Developed in-flight analytics system which identified operational bottlenecks through predictive analytics of flight data, task completion rates, and user performance. As a result, the organization **saw an improvement in on-time performance and operational efficiency**.



Implemented a document management system to streamline the handling of weight and balance sheets, passenger manifests, and operational updates. As a result, the airline **reduced operational delays, improved task handoffs, and enhanced real-time collaboration between ground and flight crews**, leading to **more efficient boarding and turnaround times**.

What trends are airlines discussing about OTP?

AI and Predictive Analytics enable real-time delay prediction, automated decision support, and proactive disruption management to improve schedule reliability.

Digital Twin and Simulation Technologies help to model and optimize turnaround times, gate management, and crew scheduling to reduce operational bottlenecks.

Integrated Operations Platforms are removing silos by unifying flight ops, crew management, maintenance, and passenger experience into a single data-driven ecosystem.

Automated and Data-Driven Delay Recovery is reducing reaction time by leveraging AI-driven scenario modeling to optimize aircraft swaps, crew reassignments, and passenger rebooking.

OTP Benchmarking and Performance Metrics are helping airlines set realistic goals by comparing against industry leaders and best-in-class turnaround processes to drive continuous improvement.

Sources

1. <https://www.thebusinessresearchcompany.com/report/airline-technology-integration-global-market-report>
2. <https://www.itpro.com/business/digital-transformation/british-airways-eyes-cloud-overhaul-and-ai-deployment-in-pound7-billion-it-upgrade>
3. <https://mediacentre.britishairways.com/pressrelease/details/19166>
4. <https://bitsinglass.com/wp-content/uploads/2023/06/BitsInGlass-Modernizing-Passenger-Service-With-API-Integration.pdf>
5. <https://www.gao.gov/assets/gao-13-264.pdf>
6. <https://www.sita.aero/resources/surveys-reports/air-transport-it-insights-2023/>
7. <https://www.sita.aero/globalassets/docs/surveys--reports/sita-activity-report-2023.pdf>
8. <https://www.sita.aero/pressroom/news-releases/aviation-industry-doubles-down-on-cybersecurity-as-it-spend-climbs-to-new-highs/>
9. <https://www.alvarezandmarsal.com/insights/cybersecurity-budgets-spend-more-or-spend-better>
10. <https://hbr.org/2016/07/7-questions-to-ask-before-your-next-digital-transformation>
11. <https://www.forbes.com/sites/brucerogers/2016/01/07/why-84-of-companies-fail-at-digital-transformation/>
12. <https://www.amazon.com/Intelligent-Change-Science-Digital-Transformations/dp/1394304595>
13. <https://www.amazon.com/Megaprojects-Risk-Ambition-Bent-Flyvbjerg-ebook/dp/B00INYG7C0/>