Qlik

Customer Solution Snapshot

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Customer Information

- Company Name: United Parcel Service, Inc. (UPS)
- Industry: Couriers and Express Delivery Services
- Location: Atlanta, GA
- Primary Contact: Wayne Bosch
- Position: Sr. Director, Global Customer Solutions
- Contact Information: Email, wbosch@ups.com; Work Phone, 647-393-9041

Background

- Problem / Challenge Information:

UPS was challenged with a PowerBI solution which was unable to scale due to the various customers, large datasets, inability to be agile and maintain their solutions in addition to the costly financial resources required for data storage and hardware. Qlik was brought in with Qlik Cloud and the ability to leverage feature such as automations, the associative engine, and the ability to embed Qlik within the UPS customer portal to delivery analytics both internally and externally facing customers. The initial analytic modules involved three applications. Performance, Billing, and Visibility for roughly 300+ customers, with 150 customers sharing the three modules combined. UPS customers are some of the largest data producers across the globe which Qlik supports with a big data implementation (400 approach with the need to have access to near real time data.

- UPS Customer Solutions Group

  - Intelligent Analytics (IA)

  - Transportation Operation Management Services (TOMS)

    - MIST (Management Intelligent System Tracking), aka TOMS Risk

Solution

- Product/Service Used:

  Qlik Cloud. Qlik Professional Services

  Implementation Process:

  The Qlik Professional Services team worked with the customer to break down the migrations of PowerBI reports into manageable sprint releases of customers for up to 10 different batches with a bi-weekly release.

  The Qlik team worked with UPS and its IT partner to enforce rigorous data validation and QA process to ensure the integrity of the data released to customers. As result, Qlik Analytics became the master of data record and PBI rather obsolete quickly.

  Engagement / Implementation Details and Timeline

- Start Date:

  May 2022 to Current

- Key Milestones:

  March 2023, Migrated over 300 UPS customers from PBI to Qlik Cloud. Subsequently developed several more modules/apps, released throughout 2023.

  Completion Date: *Ongoing*

- Engagement Team:

  1. PS Leadership: John Sacco, Ran Kassovitz
  2. Product/R&D: Floyd Kelly, Dave Channon, Jeff Goldberg, Joel Carter
  3. Account Executive: Brandon Ebben, James Clifton
  4. CSM: Greg Williams
  5. CSE: Steve Ams
  6. PS Consultants: Emad Hasan, Damien Trippeda
  7. PS Investment Consultants: Gabriel Wingard, Chiranjeev Shuka
  8. Partners: Igor Amorin, Dharani Annadurai, Elizabeth Frias, Charles Huang

Results and Achievements

- **Successful conversion from Power BI to Qlik for Customer Solutions:** Completed migration of existing 4 modules for 300+ CVA clients into the rebranded Intelligent Analytics (IA) on Qlik Cloud.

The framework was leveraged to develop additional 3 IA modules with new business objectives and data sources.   In addition, the TOMS team created MIST, which moved them from manual spreadsheets to a robust modern monitoring platform.

Per Wayne,

> *At the beginning of this, I challenged Chris and team to get these migrations completed for mid-year. A tall order indeed. I appreciate all the hard work from each of the groups, UPS IT, Europe team,TOMS and our team from Qlik.*
>
> *This allows us to sunset the dependency on Power BI and reduce the spend that is required to maintain two products. It also puts in place the necessary user authentication we require from all our applications.*

- **Advance Data Archiving and Great User Experience:** Qlik enabled IA to support up to 10 years of historic data and increased our export data size to 1 million rows per each download. The performance of the reports loading is much faster compared to PBI.

- **TOMS Partnership and addition of New Modules to IA:** with Qlik Multi tenant architecture IA team was able to add new modules like Weather Forecast, Claims, and GPS Tracking with very less Turnaround times. With Qlik support IA successfully delivered all business needs for TVA and At-Risk shipment monitoring platforms for our TOMS partners. The same design can be repeated and easily customized for other internal partners like HealthCare and SCO.

- **One Stop Shop for TOMS:** MIST is seamlessly integrating a range of technologies such as Qlik, IA, EDI Nucas, TOMS notes and IVP producing significant process efficiencies. This tech synergy has not only streamlined our execution team but also set the stage for further growth.

Per TOMS leadership,

> *Our operational gains have been significant.*
>
> *The integration of FreshDesk is set to revolutionize our customer escalation process, ensuring a seeemless and more effective customer experience.*
>
> *This tool is going to drive us towards slicker processes, happier customers, and some serious high-tech strides forward.*

Adoption and Usage
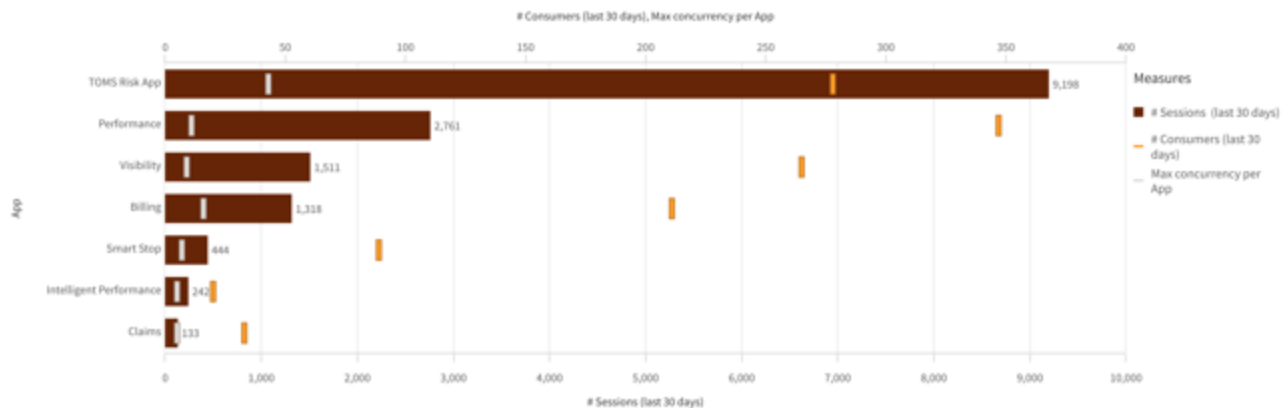
UPS Module - Sessions and Consumers
Last 30 days

App	# Sessions (last 30 days)	# Consumers (last 30 days)	Max concurrency per App
Totals	15,607	1,243	43
TOMS Risk App	9,198	278	43
Performance	2,761	347	11
Visibility	1,511	265	9
Billing	1,318	211	16
Smart Stop	444	89	7
Intelligent Performance	242	20	5
Claims	133	33	5

Source: Entitlement Analyzer 2/6/24

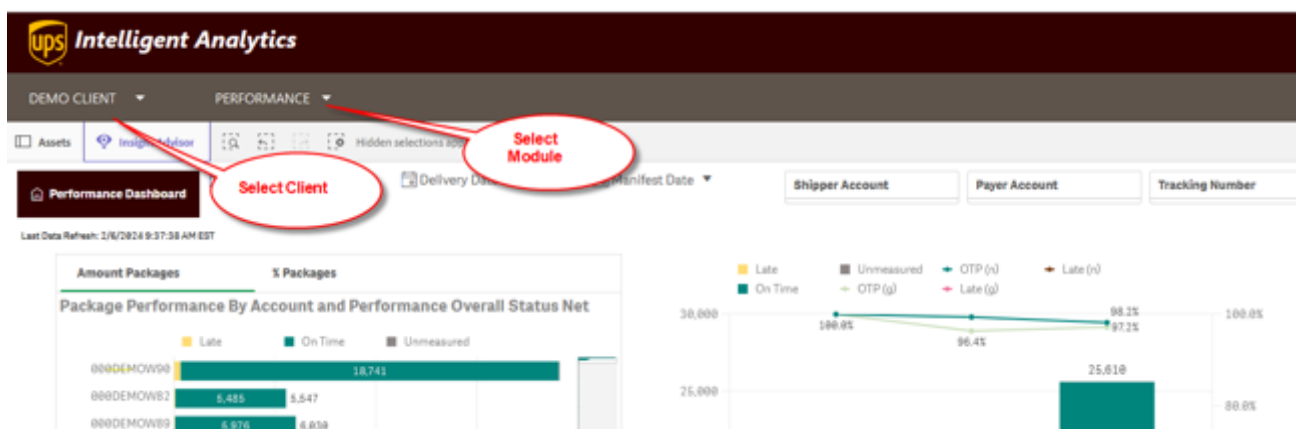UPS Module - Sessions and Consumers
Last 30 days

Source: Entitlement Analyzer 2/6/24

Operational Impact

- **Automated and accelerated Report onboarding for new IA clients:** Qlik Automations and single Master Report App template design for all clients have significantly reduced report onboarding time to 2 days per new client where it used to take up to 2 weeks per client for PBI report creation.
- **TOMS Monitoring Platform:** empowering our execution team to swiftly identify and proactively address issues through automated logic, resulting in significant operational efficiencies and FTE savings.
- **TOMS onboarding process optimization:** by reducing the time-to-market for each project engagement by 10-15 days, we are not only increasing efficiency but also enabling rapid responses to market demands.

- **TOMS Data/Notes Write Back:** UPS agents and execution team leverage Qlik to writeback notes to explain circumstances around delayed shipments and remedies.

- **TOMS Near Real-Time Data Refreshes:** MIST app is partially refreshed every 5 minutes to enable TOMS execution team to track key shipments closely and proactively address delayed shipments.

- **IA Data retention and History:** Increased data retention, reporting to 10 years of historic data and also increased export data size to 1 million rows, significantly improving user experience with faster report performance.

- **Robust security Model:** Multi layered role and data level security using Cloud's multi tenancy and data spaces to effectively segregate clients' data into secured containers. Each client is allocated its own managed space. In addition to applying data level access within each dashboard to ensure client's data is 100% secured.

- **Enhanced reporting and UI experience**: Embed Qlik within the UPS customer portal to deliver guided analytics to both internal and external facing customers. External customers leverage Insight Advisor for self-service and customize reports.

Financial Impact and Business Value

- **Decommission Microsoft PBI:** UPS achieved roughly $1. 3M annual cost savings by sunsetting PBI and its related licenses, infrastructure, and services.

- **Reduce DBMS data storage costs:** Since multiple years of data history are maintained in Qlik QVDs, UPS was able purge old historical data from the On Prem and Cloud Azure databases and in turn, saving on additional storage costs.

Long-Term Impact

Expand and Grow. UPS is currently in year two of a multi-year journey with Qlik. The long-term potential growth with Qlik is immense, especially expanding to other line of businesses and organizations within UPS. The immediate short plans is to grow in multiple areas:

1. Update and addition of new reporting modules:

   a. **Intelligent Performance Module 2.0**: Update current Module. Migrate IA Performance data source from Azure SQL to GCP. Enhace the UI and user experience leveraging Qlik's recent charts release.

   b. **Visibility Module 2.0**: Update current module. New GCP data source called VIBE which would require migration of existing clients to the new module.

   c. **IAT (Live shipment tracking and alerting)**: New module. Enable TOMS execution team the ability to track packages, pallets, etc. across the world in near real-time. The IAT utilizes GPS tracking devices attached to trucks and packages. Further, Qlik will integrate with Freshdesk to create system tickets to alert agents about potential problems with valuable shipments like medical equipment specimen, frozen food items, etc.

2. **Multi Tenancy, 300+ tenants:** Convert current managed spaces to a dedicated tenant for each external client to reduce automations bottleneck and segregate client's data. In addition to leverage Qlik's alerting.

Visuals

Improved Analytics for IA & TOMS Modules
Developed Core Functionality, now focused on Enhancements

Area	Module	Status	2023-Q2	2023-Q3	2023-Q4	2024-Q1
IA	Performance*	Prod				
	Visibility*	Prod				
	Billing*	Prod				
	Smart Stop	Prod				
	TVA Visibility	Prod				
	Claims	Prod				
	Non-Enterprise Billing	Prod				
TOMS	At Risk	Prod				
IAT	Control Tower	POC				
IA	Intelligent Performance	Dev				
TOMS	Intelligent Performance	Dev				

Qlik **Q**   *Standard modules

.... Core Development   ● Go Live
──── Enhancements Dev   ► Enhancements Go Live

- Before and After:

Intelligent Analytics

CVA -> IA

Key Modules
1. Performance   External Users
2. Visibility   Internal Users
3. Billing

	before Qlik	with Qlik
Overall Solution Approach	PowerBI	Qlik
	Power BI	Qlik **Q**
Onboarding new clients	Manual	Automated & Accelerated
	2 weeks per client	2 days per client
Deploying enhancements to existing modules	Manual, deployed to each individual client app	Automated
	XX weeks per client	2 days per client

TOMS MIST

Management
Intelligent
System
Tracking
	Enhanced TOMS support to assist customers with identifying packages in distress.
	   1. Escalations only
	   2. Reactive - focused on exceptions
	   3. Proactive - focused on all packages
		Two primary groups
		   1. Execution Team (agents track & trace - monitoring)
		   2. Development (Carlos, Jorge, etc under Fabian)

	before Qlik	with Qlik
Overall Solution Approach	Labor intensive process w/spreadsheets & manual integrations	Robust Modern Monitoring Platform via Qlik apps

	Disparate data sources across many systems, not integrated	Integrated efficiency, resulting in streamlined Execution team
		   Qlik, IA, EDI Nucas, TOMS notes, IVP and IAT Gold tracking de
		
		Enhanced Customer Support capabilities
		   For instance, having access to freight collect shipments and
		   data like accessorial indicators, including the identification of
		   dry ice packages and premier shipment, that we were not
		   able to identify in the past on this tool.
		
		Streamlined onboarding process
		   Reducing the time-to-market for each project engagement
		   by 10-15 days, we are not only increasing efficiency but also
		   enabling us to respond quickly to market demands.
		
		Upselling Tool
		   empowers our customer-facing teams to strategically position
		   TOMS , with the potential to drive commerce revenue growth

	before Qlik	with Qlik
Development Team Impact		
Time to onboard new clients (ie, development ready for go live)		
1. Internal At-Risk & Customer Dashboard	1 month	1 week
2. Performance (new source GCP) >>> Intelligent Performance	2-3 weeks	1 week
Cost reduction for development, accelerating clients time to market	6-7 weeks	2 weeks
Execution Team Impact		
Notes submission, correction, resubmissions		
1. Execution (track & trace - monitoring)	significant downtime during submissions & corrections	minimal downtime during process
2. Development (carlos, jorge, etc)	additional development support required	minimal interaction from dev team required
Frequency of sharing & reviewing changes	3-4 times per day >>> but in reality, fewer	48 times per day
		Significant operational gains, estimated 10 FTE

- Customer Logo:

Executive Summary

UPS Customer Solutions was on a multi-year journey using PowerBI for their analytic solutions.   After several years, they recognized that PBI was limited in making improvements for their modules in addition to requiring significant operational oversight.   The migration from PBI to Qlik Cloud has enabled them to deploy and manage their data more effectively. This has resulted in 9 modules being deployed to production (8 IA, 1 TOMS), along with their 300+ clients and data being imported into Qlik. Most of these customers are amongst the Fortune 500 (Xerox, Ascena, Cisco, AT&T, Abercrombie &

Fitch, AWS, Adidas) with large data footprint. This is Qliks biggest data deployment with at least 400 GB of data across seven tenants.

Qlik

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade AI/ML and pervasive data quality. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our AI/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

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