

Agenda



Welcome



System Overview



Solution Innovation



Service Discussion



Cost Drivers



Talking with you today



Josh Mellor
Account Manager



David Yemm
DRT Product Manager



Lucy Naylor
General Manager



Catherine Lawrence
Operations Manager



Paul Dias
Project Manager



Brian Canivet
Product Manager
North America



Roger Helmy
Product Director, North
America



Douglas Spears
Product Director, UK &
Europe

Executive Sponsor



Douglas Spears

Product Director
Modaxo, UK and Europe



European Director of
product strategy –
working closely with
North American and
Australian colleagues

Driving innovation
change and leadership

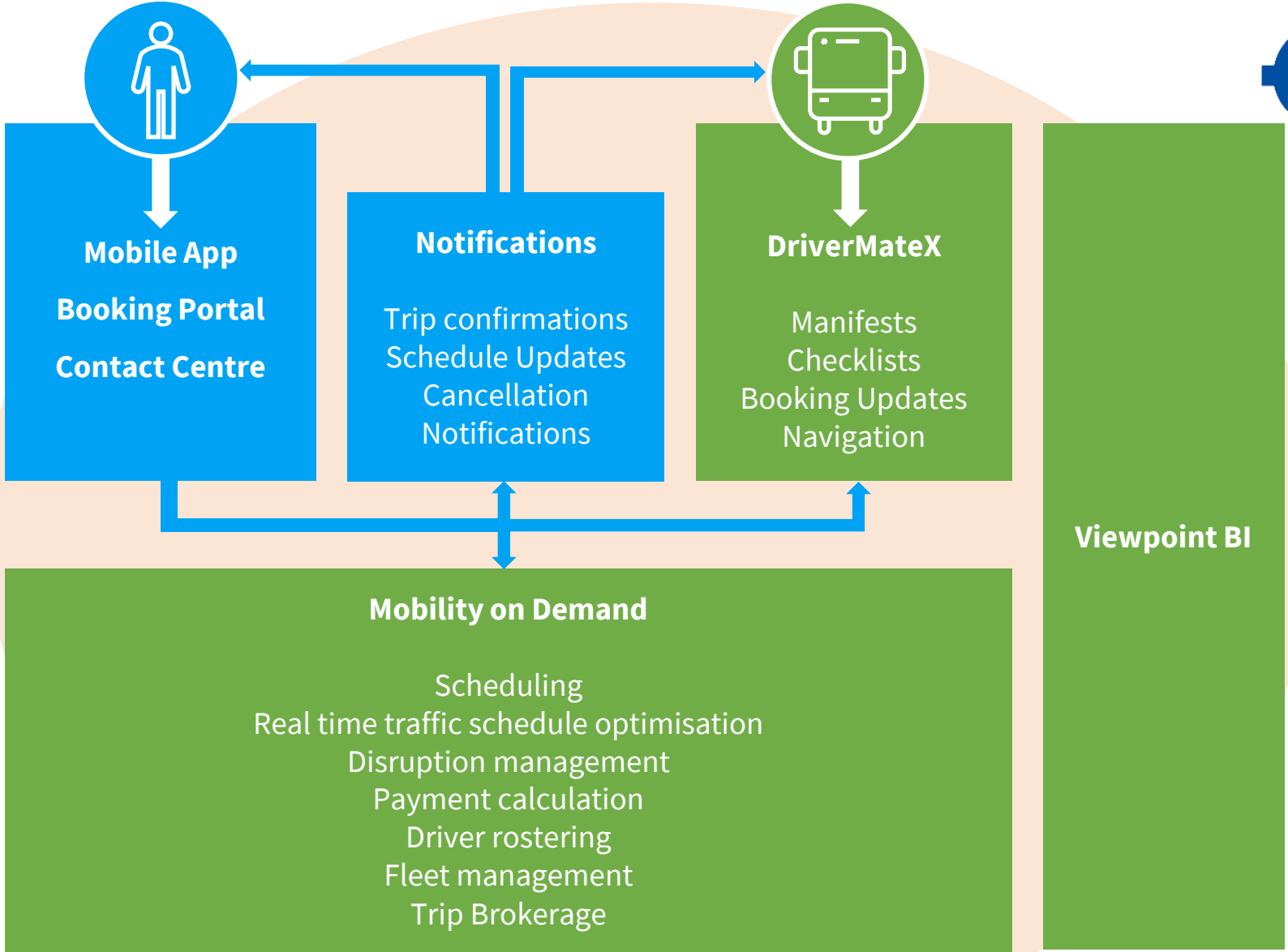
16+ years of experience
in demand-response
transportation industry

Committed to work in
partnership with TfL
for this project and in
the future



System Overview

System Overview



Azure Hosting



Customer Experience Challenges



- Phone/email is the only way of booking, amending and cancelling
- All manually inputted into the system

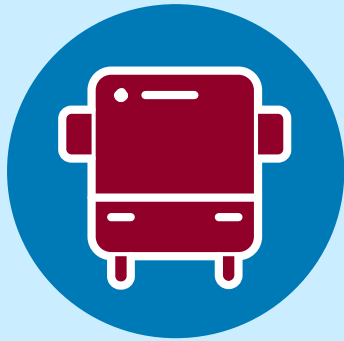


- 30-minute window given for pick-up/drop off
- Limited advanced customer notifications of arrival time



- High on-the day cancellations of 19%
- Regular bookings have compounded this issue

Online Applications/Eligibility



“The current system is not configured for customer self service, a key deliverable for ATS.”

“It’s confusing for customers to understand the range of travel options”

Self serve applications

Simple for users

Application direct to Mobility on Demand

Status indication

Keeping users informed

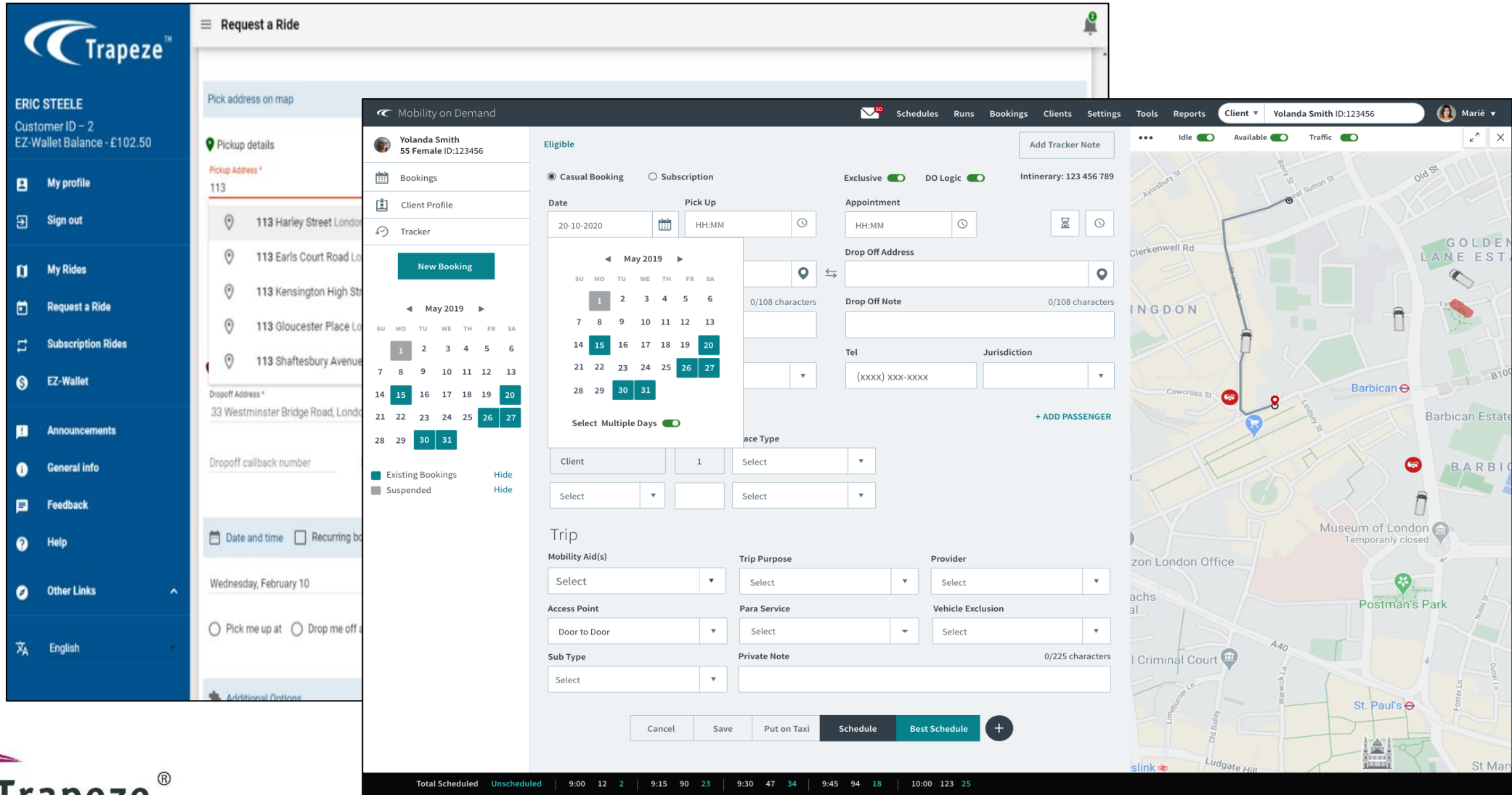
Overview status dashboards

Intelligent Forms

Users only fill out relevant form fields

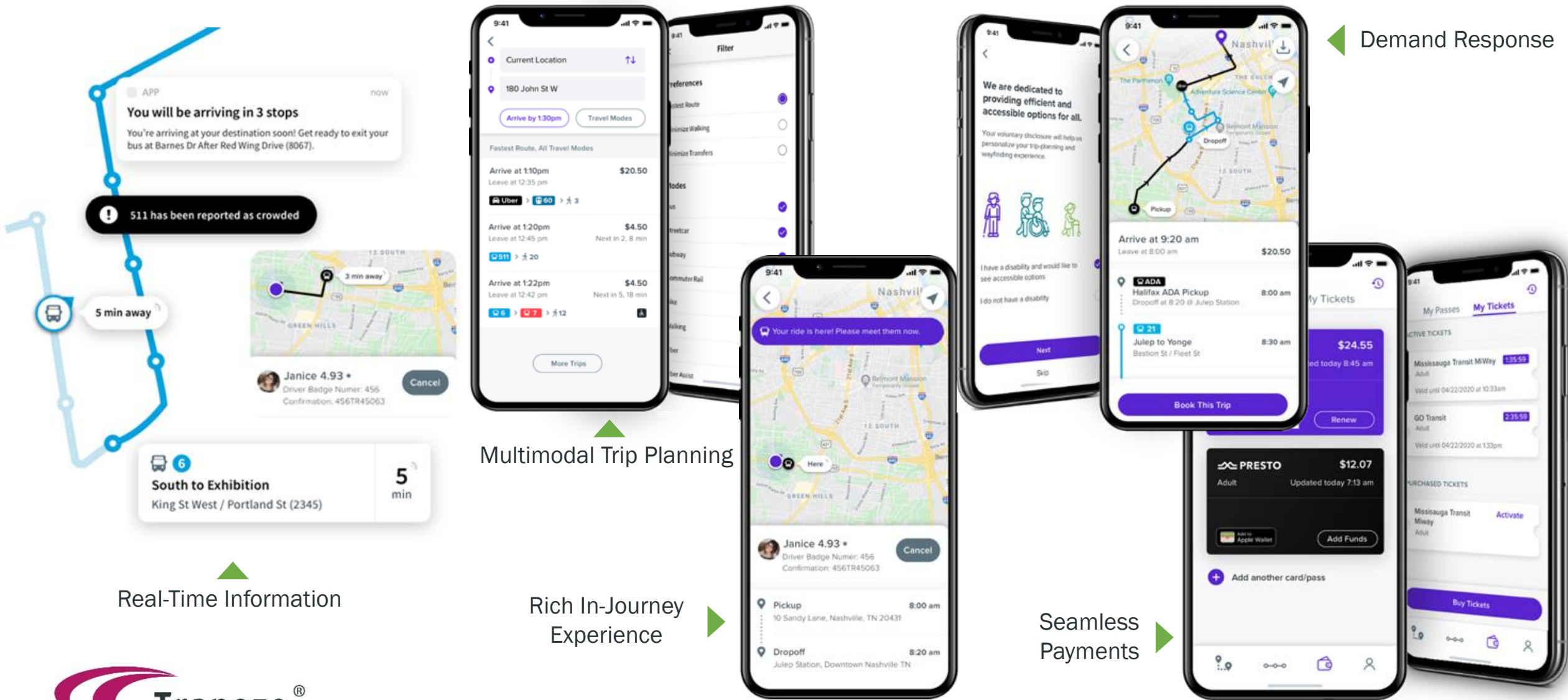
A single front door for Assisted Transport

Self Service Booking



The screenshot displays the Trapeze self-service booking interface. On the left is a blue sidebar with the user's name 'ERIC STEELE', Customer ID '2', and EZ-Wallet Balance '£102.50'. The sidebar contains navigation links for 'My profile', 'Sign out', 'My Rides', 'Request a Ride', 'Subscription Rides', 'EZ-Wallet', 'Announcements', 'General info', 'Feedback', 'Help', 'Other Links', and 'English'. The main content area is titled 'Request a Ride' and includes a map for pickup address selection, a list of recent pickup addresses, and a 'Dropoff Address' field. A central 'Mobility on Demand' booking form is open, showing a calendar for May 2019 with the 15th and 20th selected. The form includes fields for 'Eligible' (Casual Booking or Subscription), 'Date', 'Pick Up' time, 'Appointment' time, 'Drop Off Address', 'Drop Off Note', 'Tel', 'Jurisdiction', 'Client', 'Trip Purpose', 'Provider', 'Access Point', 'Para Service', 'Vehicle Exclusion', 'Sub Type', and 'Private Note'. A 'New Booking' button is visible in the calendar area. At the bottom, there are buttons for 'Cancel', 'Save', 'Put on Taxi', 'Schedule', and 'Best Schedule'. A status bar at the very bottom shows 'Total Scheduled' and 'Unscheduled' counts along with a time-based schedule.

Customer App



Potential Impact of Self Service

Average cancellations handled
per day of 1120 (pre-COVID)

Average cost per inbound
contact of £3

Achieving a 30% reduction in
cancellation calls by using self
serve = 336 less calls

336 calls at £3 cost per call is
£1,008 per day

Over a year that is **£367,920**
in potential OPEX savings

Driver Application



“No dynamic trip scheduling - For example, if there are on-the-day cancellations”

“No real time information is available. ie for traffic delays”

Dynamic Schedules

New trip notifications

Updated manifests

Real-Time and Driver Aids

Real-time navigation

Mapping/Street view

Passenger Info and Safeguards

Passenger information: mobility aids, load time

Notifications when driving safeguard

Dashboard Overview & Tracking

Mobility on Demand

Schedules Runs Bookings Clients Settings Tools Reports Client **Yolanda Smith ID:123456** Marié

Hello Marié

September 10, 2019 Rain 12°C

Idle Available Traffic

PERFORMANCE

Total OTP

98.50

Goal 97%

17 Late Pullout 7%

ON TIME PERFORMANCE

AM	Performance (%)
1 AM	100
2 AM	85
3 AM	75
4 AM	65
5 AM	55
6 AM	55

DRIVERS

Logged in On Break

57 5

OTP 89% Predicted Late 14%

Run **123ABC**

Vehicle Van ABC123

Driver Patterson, Richard (345890)

Booking Date 20-09-2020

SCH 12:00 pm

EST 12:15 pm

Capacity 8 x AM 2 x WH / 1x SC 11

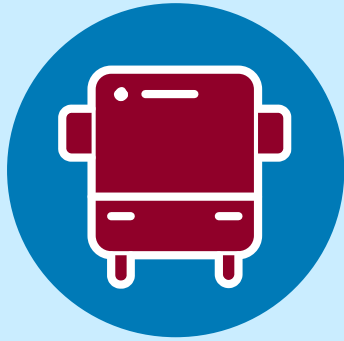
On board 2 x AM 1 x WH 3

Idle 13:00 - 14:15 1h 15

(123) 456-7890



Smarter Scheduling



“Manual intervention is required to find available trips if first time request is unsuccessful”

“We need more efficient scheduling to allow more demand to be met within available resources”

Real-Time Optimisation

Just-in Time Scheduling (JIT)

Real-Time Traffic & Routing

Algorithm Performance

Zonal Cache

Shadow Scheduling

ML-Based Automation

Automated Costing Weights

Automated Street Speeds

ML-Based Insights & Costing

Gain actionable insights to improve service delivery

☰
Live Sunday 11-08-2020
🔍 🔔 📧 👤

Passengers / Hour
2.14 ▼ -22%

Total Time
326h23 ▼ -14%

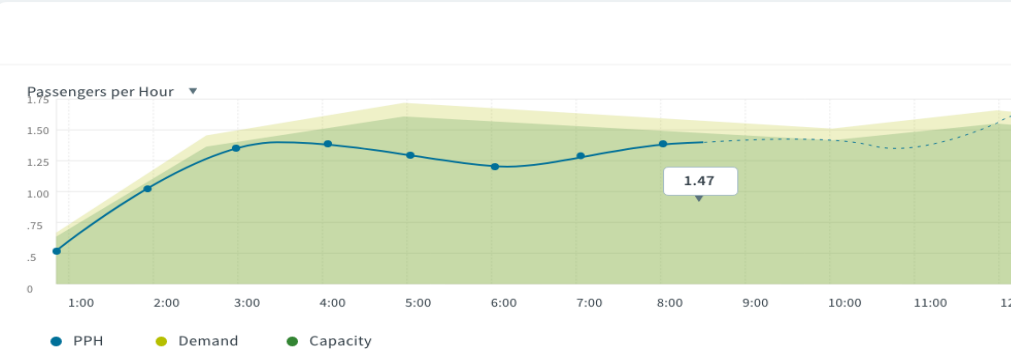
Revenue Hours
309h23 ▼ -14%

Non-Revenue Hours
18h ▼ -14%

Total Miles
373.22 ▼ -14%

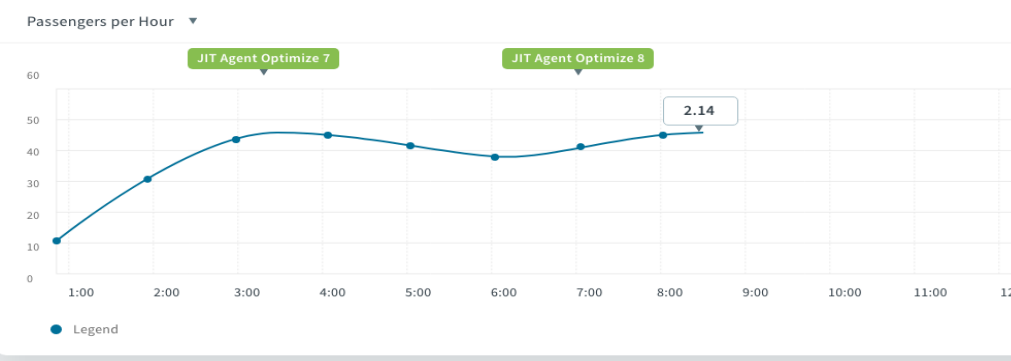
Revenue
3

Passengers per Hour



● PPH ● Demand ● Capacity

Passengers per Hour



● Legend

Notifications

Reduce Cost Cost

View suggestions on reducing costs such as brokering trips or reducing hours.

[LEARN MORE](#)

Improve On-Time Performance Productivity

There are time periods where your actual OTP is significantly lower than your target OTP.

[LEARN MORE](#)

Improve Productivity OTP 80%

There are time periods where your productivity is significantly lower than your target.

[LEARN MORE](#)

VIP Alert VIP

One or more VIPs are projected to experience a delay or service violation.

[LEARN MORE](#)

Add Capacity Capacity


Service delivery metrics could be improved by adding capacity during specific times.

[LEARN MORE](#)

Extreme Late Trips Lates

3 passengers are reaching their maximum OBT. View suggestions to improve it.


[LEARN MORE](#)



Brokering Trips Tutorial

Watch series of video tutorials to learn more about brokering trips to save money and improve service.

[GET STARTED](#)



“Reporting, analytics and BI is fragmented across DaR systems. The tools are limited in scope.”

ViewPoint Mobility on Demand - Benefits

1. Simple, Flexible, & Intuitive
2. Built Atop Microsoft BI Stack
3. Real-Time Monitoring & Alerts
4. Pre-Built Content
5. Ad-hoc Reports & Dashboards
6. Automated Content Delivery
7. Integrates w/legacy TfL PASS data
8. Clean Data for Better Decisions

HARNESS THE MOST RELEVANT DATA...

80%

time cleaning
& prepping data

20%

analysing/visualising
& getting value



...TO MAKE BETTER DECISIONS

20%

time cleaning
& prepping data

80%

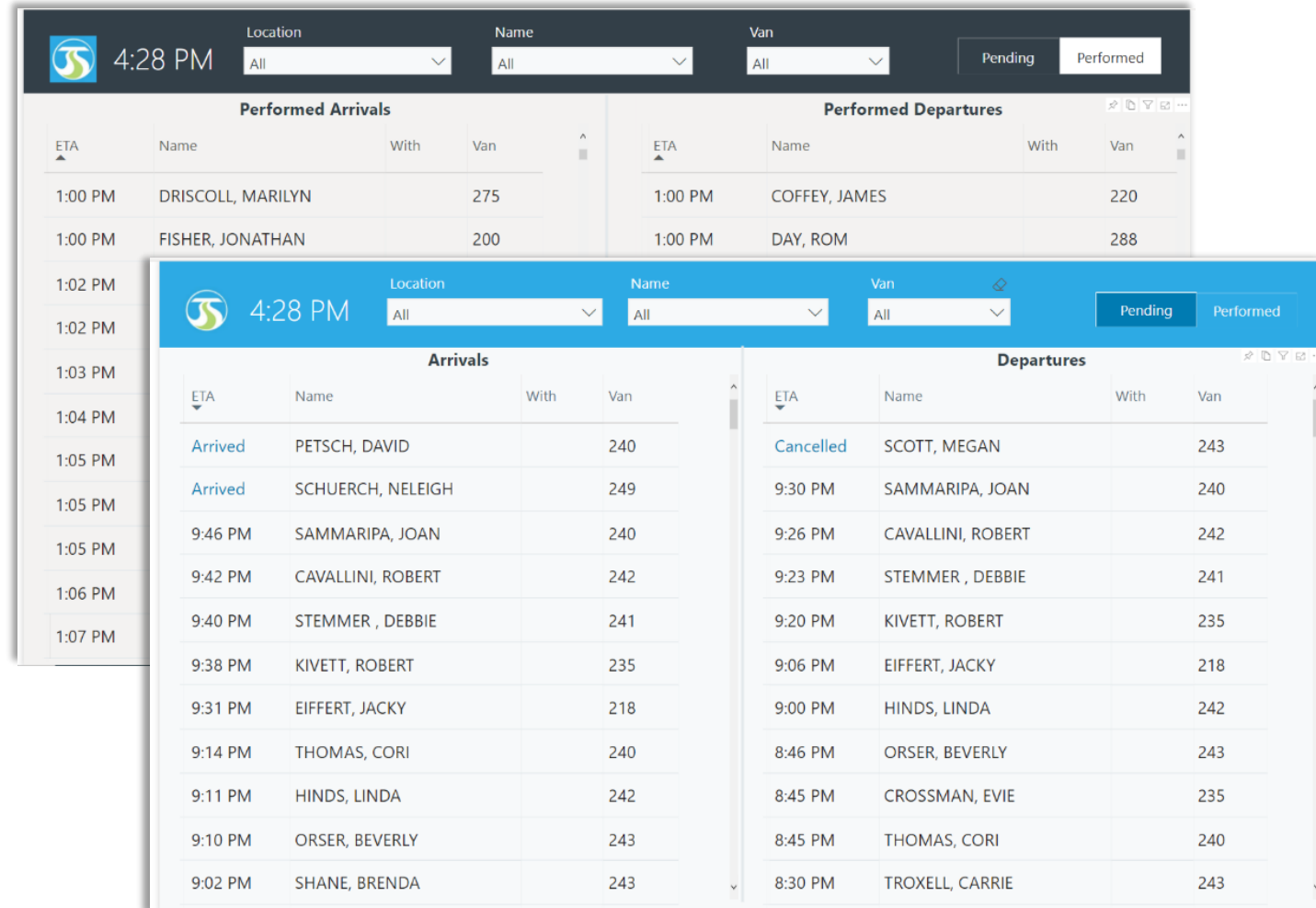
analysing/visualising
& getting value



Customer Use Case

Washington State - Departure Boards

- Deployed on-location screens at health centers
- Displays vehicle departure and arrivals in near-real-time
- Health centers better prepared for supporting customers



The screenshot displays a digital departure board interface. At the top, there is a header with a logo, the time '4:28 PM', and three dropdown menus for 'Location', 'Name', and 'Van', all set to 'All'. There are also buttons for 'Pending' and 'Performed'. The main content is divided into two columns: 'Performed Arrivals' on the left and 'Performed Departures' on the right. Each column has a table with columns for ETA, Name, With, and Van. The 'Performed Arrivals' table shows entries for DRISCOLL, MARILYN (275) and FISHER, JONATHAN (200) at 1:00 PM, followed by a list of arrivals from 1:02 PM to 1:07 PM. The 'Performed Departures' table shows entries for COFFEY, JAMES (220) and DAY, ROM (288) at 1:00 PM, followed by a list of departures from 9:02 PM to 9:30 PM. A second, larger screenshot is overlaid on the bottom right, showing a similar interface but with a blue header and a list of arrivals and departures for a different time period.


ETA	Name	With	Van
1:00 PM	DRISCOLL, MARILYN		275
1:00 PM	FISHER, JONATHAN		200
1:02 PM			
1:02 PM			
1:03 PM			
1:04 PM			
1:05 PM			
1:05 PM			
1:05 PM			
1:06 PM			
1:07 PM			

ETA	Name	With	Van
1:00 PM	COFFEY, JAMES		220
1:00 PM	DAY, ROM		288
9:02 PM	SHANE, BRENDA		243
9:10 PM	ORSER, BEVERLY		243
9:11 PM	HINDS, LINDA		242
9:14 PM	THOMAS, CORI		240
9:31 PM	EIFFERT, JACKY		218
9:38 PM	KIVETT, ROBERT		235
9:40 PM	STEMMER, DEBBIE		241
9:42 PM	CAVALLINI, ROBERT		242
9:46 PM	SAMMARIPA, JOAN		240
Arrived	SCHUERCH, NELEIGH		249
Arrived	PETSCH, DAVID		240

ETA	Name	With	Van
8:30 PM	TROXELL, CARRIE		243
8:45 PM	THOMAS, CORI		240
8:45 PM	CROSSMAN, EVIE		235
8:46 PM	ORSER, BEVERLY		243
9:00 PM	HINDS, LINDA		242
9:06 PM	EIFFERT, JACKY		218
9:20 PM	KIVETT, ROBERT		235
9:23 PM	STEMMER, DEBBIE		241
9:26 PM	CAVALLINI, ROBERT		242
9:30 PM	SAMMARIPA, JOAN		240
Cancelled	SCOTT, MEGAN		243



Solution Innovation

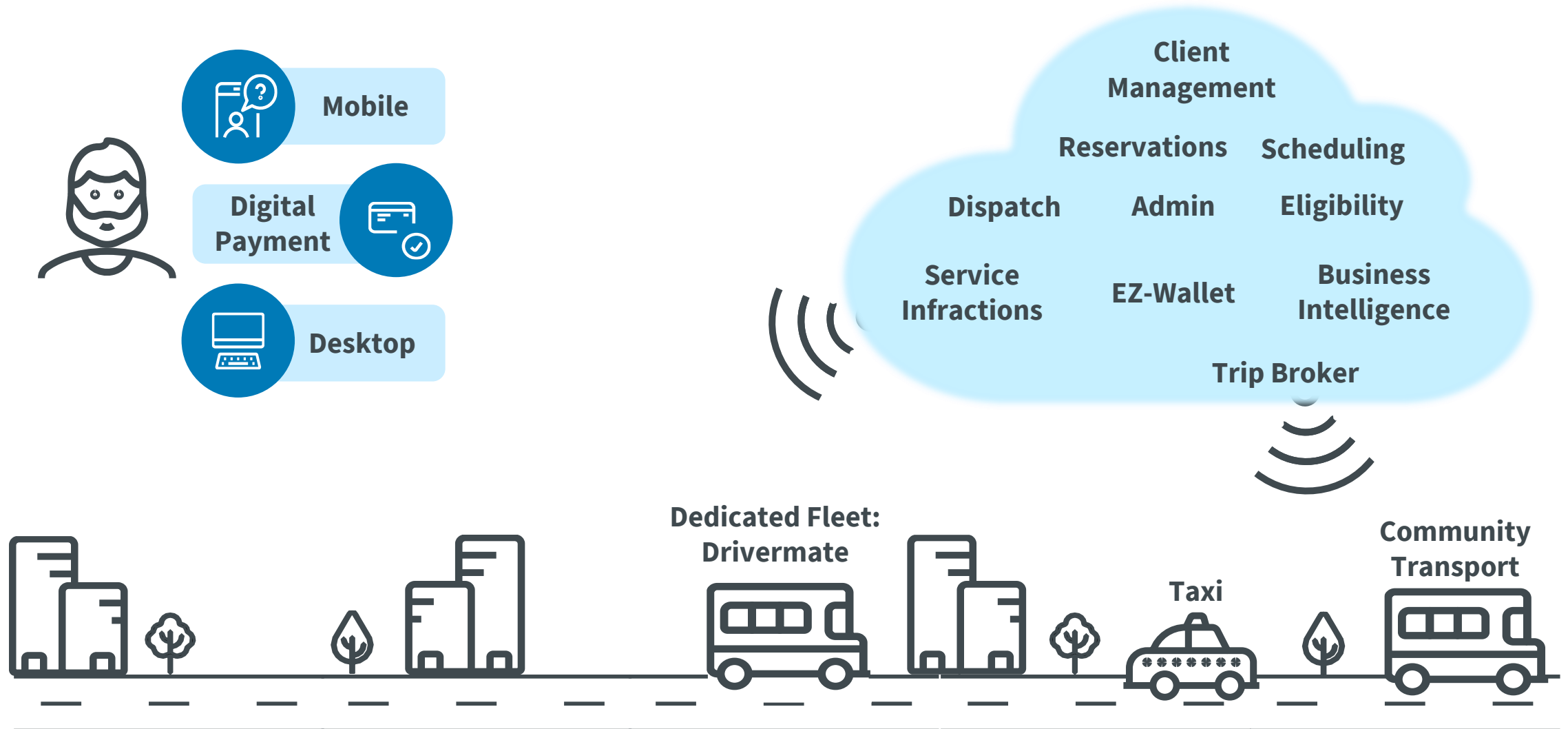


Complex business processes have grown around the existing DaR system which are inefficient and difficult to change

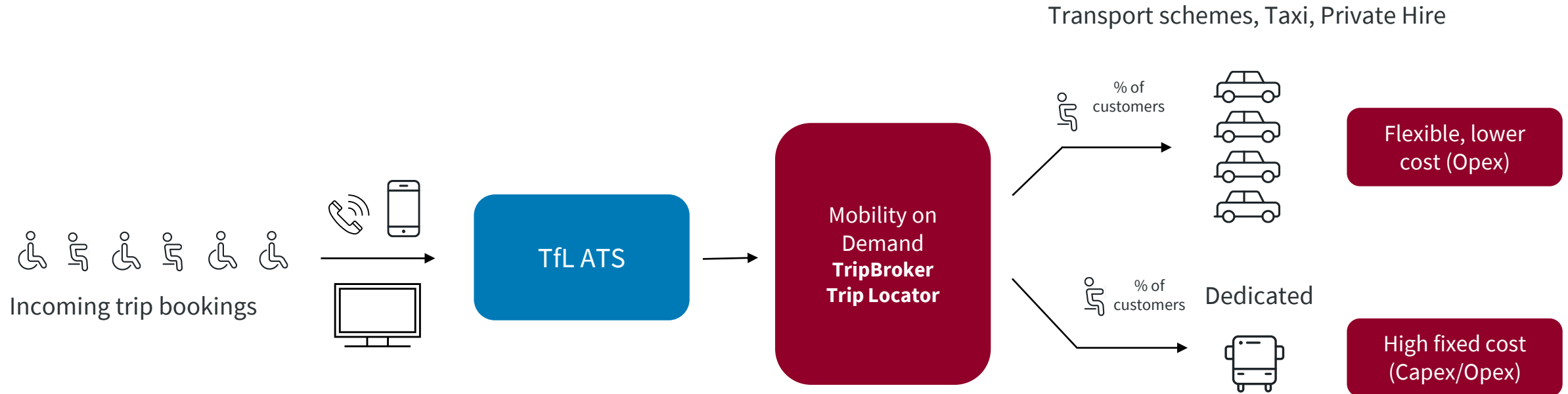
The existing system uses two distinct layers... with complex integration which ties each tier down to each other

“Deliver a one stop shop single platform to access core ATS services” – Mayor’s Transport Strategy

TfL as a “Facilitator of Mobility”




Integrating 3rd Party Transport Providers



Key Drivers:

- Burst capacity
- Lower cost per trip
- Single platform for passengers



“With Esri as the global leader in GIS, many of the cities we serve are already leveraging their platform.

By embedding their technology into Trapeze solutions, our customers will be able to eliminate significant manual work and coordination, eliminate error prone processes, and obtain a singular source of data truth across numerous functions in transit.”

Roger Helmy – Director, Product Management, Modaxo

Commenting on the partnership between Esri and Trapeze

Promoting Air Quality

1

Accurate measurement of air quality

2

Real time air quality intelligence

3

Safeguarding drivers

4

Safeguarding passengers



10 vehicles

3 months

Air quality monitoring

Air cleaning units

£0 cost to TfL

Key Points

1

Collaborative solution design in partnership with our clients

2

User experience and scheduling optimisation has been transformed

3

Ease of migration and reduced operational risk

4

Leveraging historical data for analysis

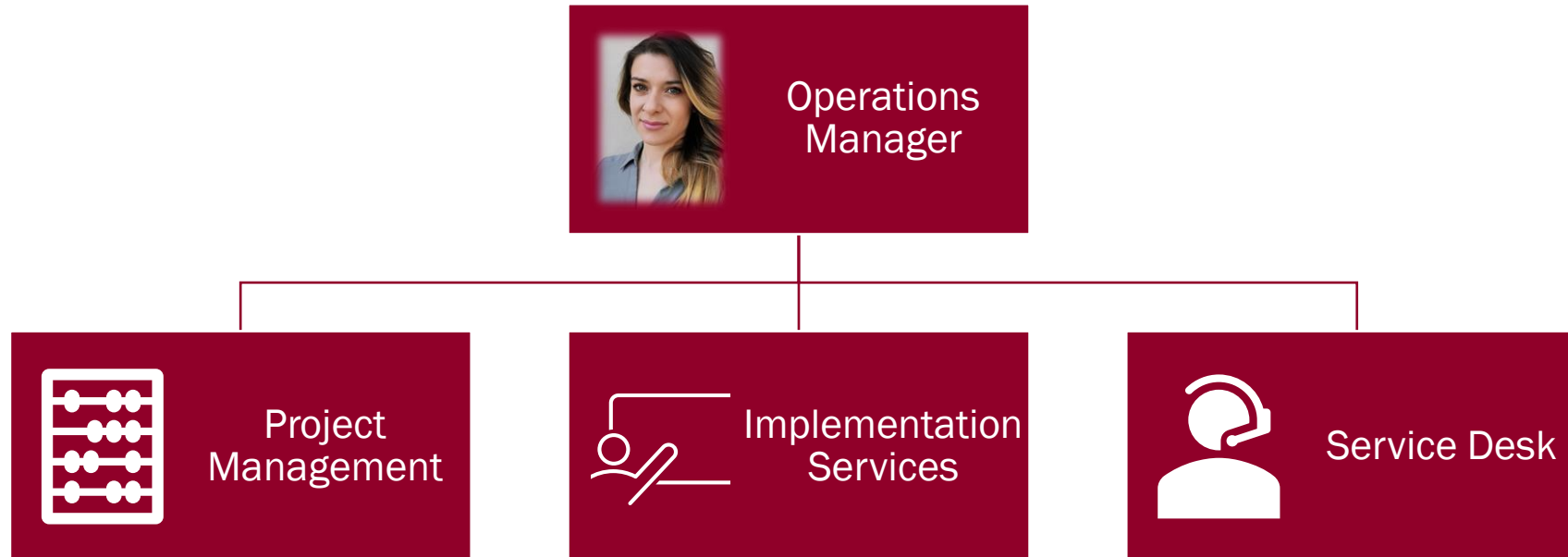
5

The platform to enable the next generation of Assisted Transport Services



Service Discussion

Operations Structure



Service Delivery



SLA's and KPI's set the bar
– We look to get ahead
before we start



We focus on providing
excellence, so the
customer has time to
focus on improvement



ITIL trained staff enhance
and develop automated
processes which ensure
businesses can run as
usual

Exceeding Excellence



Availability – 99.99%
Azure Guarantee



Proactive Performance
Management



Route cause analysis
reporting

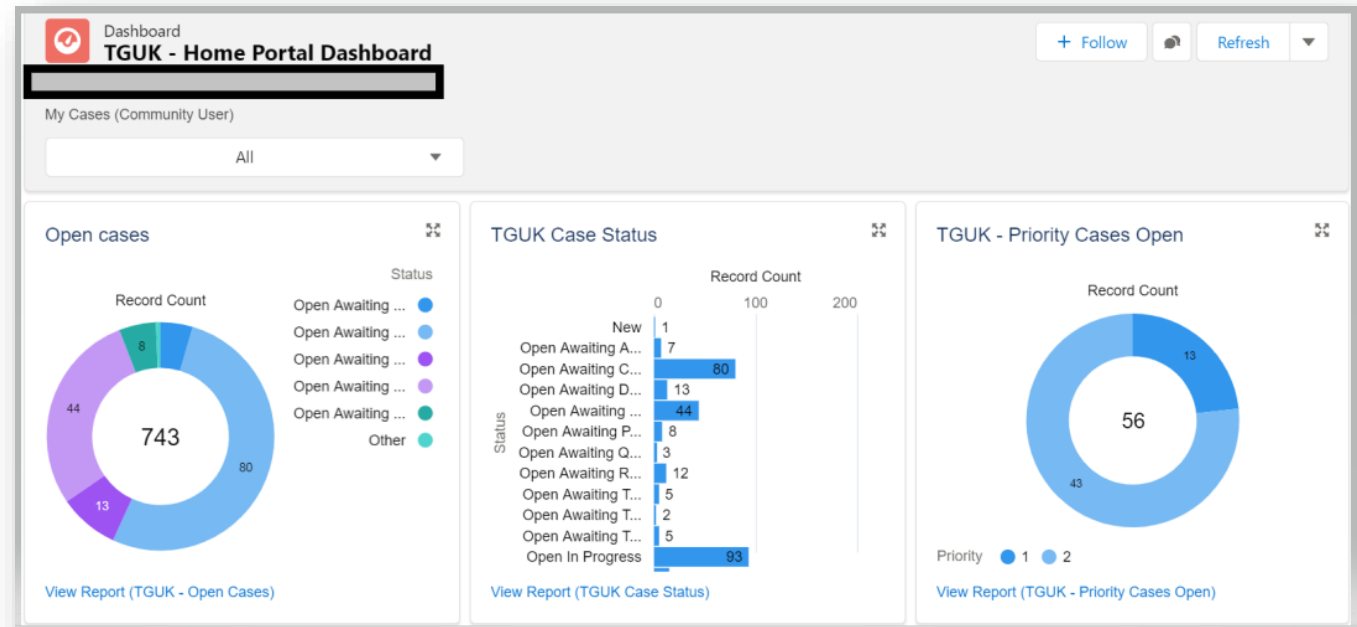
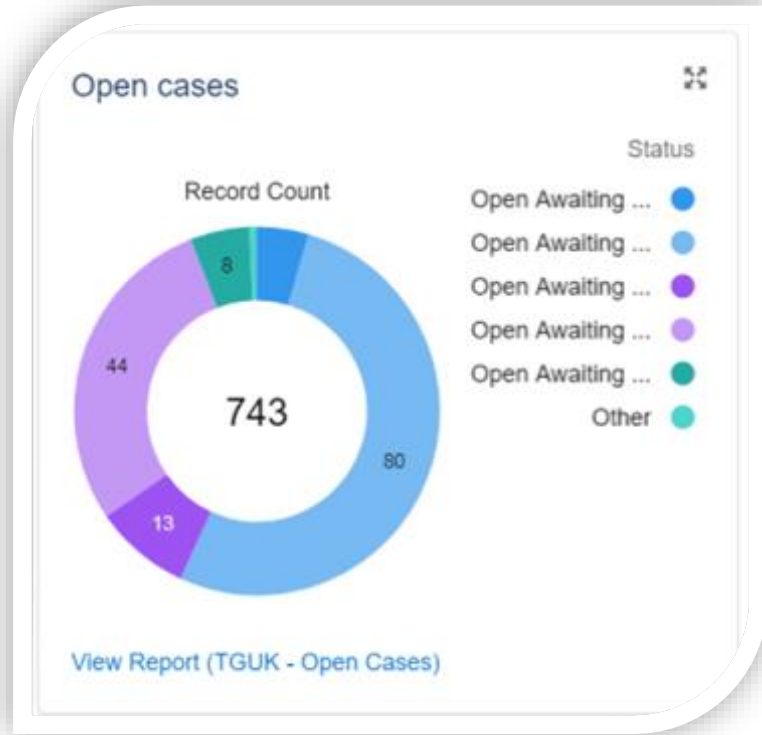


Safe by Design

Scalable Support Offering

Service Deliverables	Gold solution	You are Here Platinum Out of the box	Premier Enhanced Solution
TfL KPI Guarantee	✓	✓	✓
TfL SLA Management	✓	✓	✓
24/7 Support	✓*	✓	✓
Lead Support Analyst		✓	✓
Dedicated SDM			✓
On call Implementation (10 days)			✓
Bespoke Webinar Sessions			✓
Annual Health Check - Onsite			✓
Enhanced dashboard reporting			✓

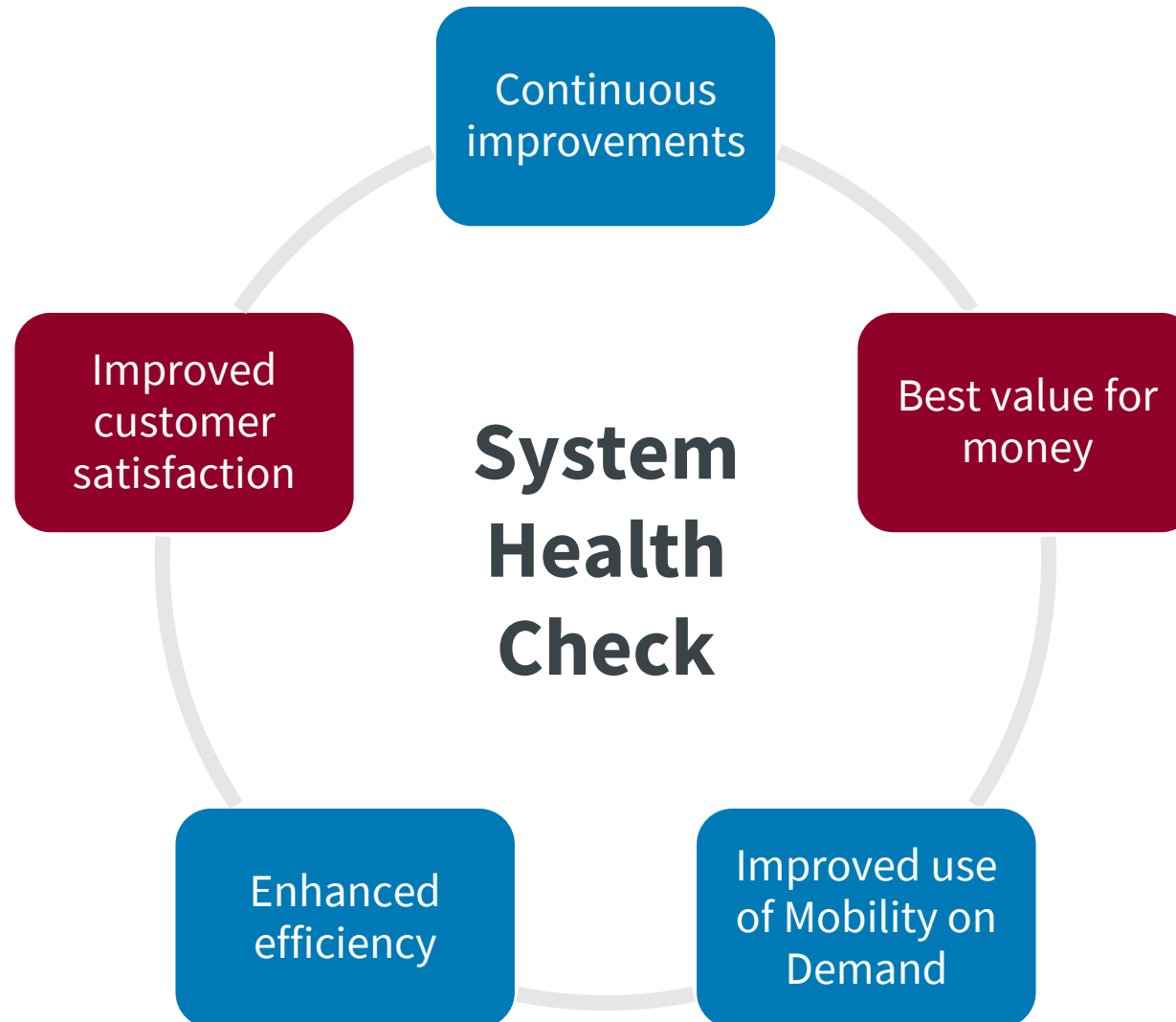
Live Dashboard Reporting



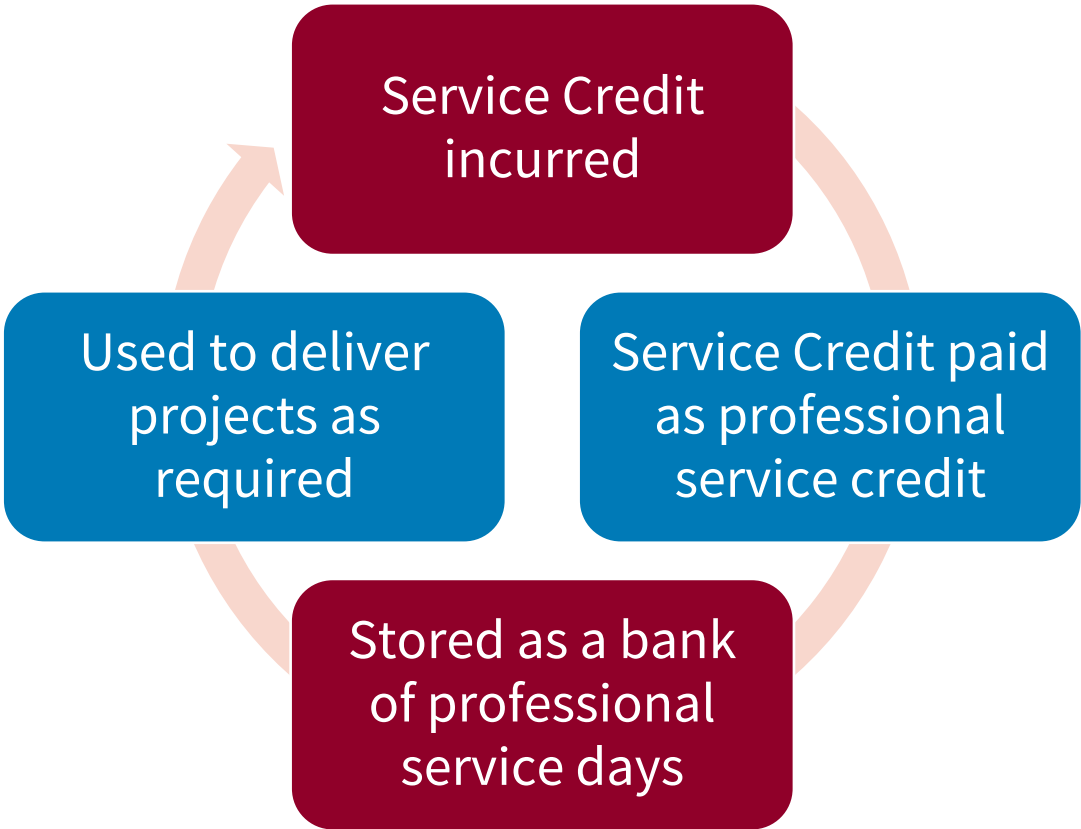


Service Innovation

Annual System Health Check



Service Credits and Professional Services



- 1 Service credits used to drive Continuous Improvement
- 2 Ensures service credits directly benefit the system
- 3 Additional work can be delivered quickly
- 4 £1k of service credit = 1 professional service day
- 5 Regular balance updated



Onsite Support

- 1 Face to face Service Delivery Management meetings
- 2 Rotation with Account Manager and Technical Lead, throughout the contract
- 3 Available for the full working day
- 4 Direct, regular contact with Trapeze people
- 5 Effective channel to raise and explain issues

Cost Drivers

Cost Drivers



Hosting



Support Delivery



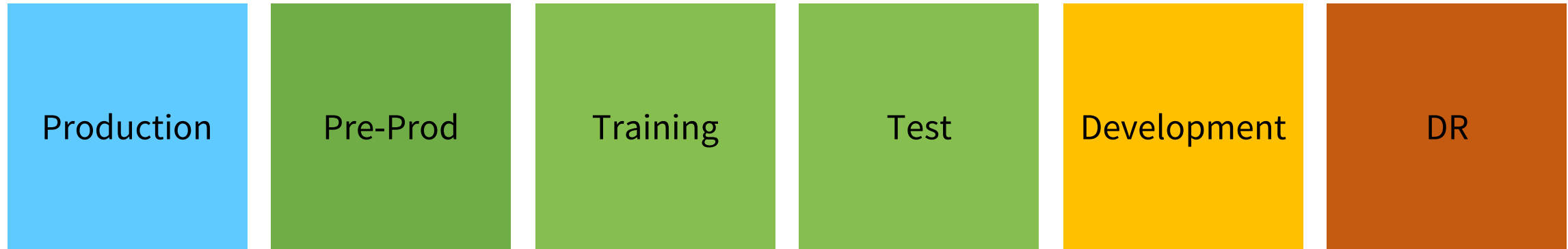
Configuration



Project Design Approval

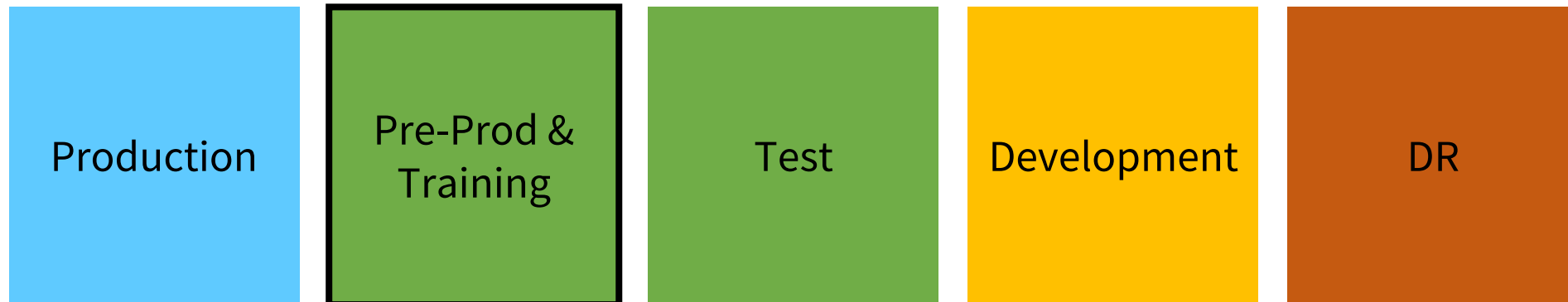
Hosting Environments

Current



£1290.00/month

Proposed



£860.00/month

Saving per year: £5,160.00
PS Saving: £24,375.00
Saving over 7 years: £60,495.00

Scalable Support Offering

Service Deliverables	Gold solution	You are Here Platinum Out of the box	Premier Enhanced Solution
TfL KPI Guarantee	✓	✓	✓
TfL SLA Management	✓	✓	✓
24/7 Support	✓*	✓	✓
Lead Support Analyst		✓	✓
Dedicated SDM			✓
On call Implementation (10 days)			✓
Bespoke Webinar Sessions			✓
Annual Health Check - Onsite			✓
Enhanced dashboard reporting			✓

Support Delivery

Platinum

24/7/365 Support Desk – 1st, 2nd, 3rd line support - Trapeze

Proposed Gold

Working hours – 1st line – TfL Service Desk

Out of Hours – 1st line - Trapeze

24/7/365 – 2nd, 3rd line support - Trapeze

Proposed Gold Saving

Saving per year - £18,050
Saving over 7 years - £126,350



Configuration Cost savings

Potential Saving: £23,484

Requirement 089 Save £8062

The ATS System shall suggest to the Customer or TfL User making the Trip Request an alternative date, pick-up and/or arrive-by time for a Trip Request (within the Availability Search Window) where it cannot schedule the requested date, pick-up and/or arrive-by time requested by the Customer or TfL User in accordance with the Scheduling Factors.

Requirement 102 Save £3505

The ATS System shall automatically reschedule Trips when there are changes to any Booking Details.

Mobility on Demand has a pop-up.

Requirement 161 Save £701

The ATS System shall enable TfL Users to Configure the number of scheduled Trips and the amount of minutes ahead in the Trip Itinerary that the Driver can view via the Mobile App.

Requirement 162 Save £701

1. The ATS System shall prompt the Driver, via the Driver App, to confirm the Trip Status when the Driver reaches the start and end destinations for each Trip.

Requirement 166 Save £701

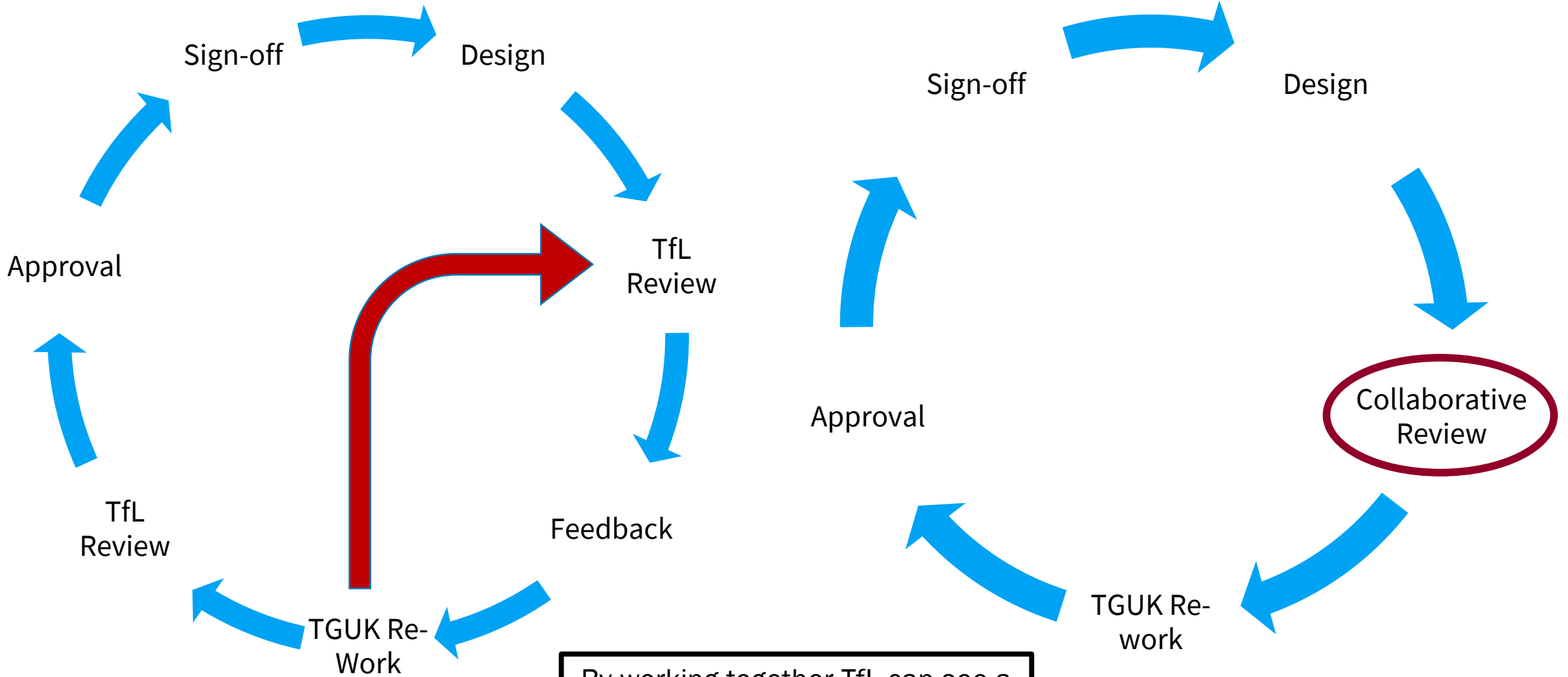
The ATS System shall enable a Customer and TfL User and the Driver delivering the Trip (via the Driver App) to view the expected time of arrival of the Vehicle assigned to the Trip, based on factors such as each Vehicle's GPS location and live traffic data

Requirement 175 Save £9814

1. The ATS System shall ensure that Drivers are able to give feedback on Trips at any time after the Trip has been completed via the Driver App, and prompt any Driver providing feedback to select a Feedback Category for their feedback.

2. The ATS System shall ensure that TfL Users are able to give feedback on Trips at any time after the Trip has been completed.

Project Design Approval



By working together TfL can see a potential saving of £23,000

Savings Summary

Project Delivery Saving – **£70,859**

Maintenance & Hosting Saving 7 years – **£162,470**
(Maintenance & Hosting Saving per Year - £23,210)

Total Saving – £233,329



Hosting
£60,495



Support Delivery
£126,350



Configuration
£23,484



Project Design Approval
£23,000

Thank You!

