IATA AVIATION DATA SYMPOSIUM

ATHENS, GREECE 25 – 27 JUNE 2019

PAYMENT & FINTECH

Sponsored by: AMERICAN EXPRESS

IATA

Opening Remarks

Juan Ivan Martin, Head of Digital Finance, IATA

Payments & Fintech

-Opening Remarks-

Aviation Data Symposium

Athens, 25 June 2019

Juan Iván Martín

Head of Digital Finance

FDS - Transformation

IATA

Video Richard Attias & Associates

Change Drivers

Society

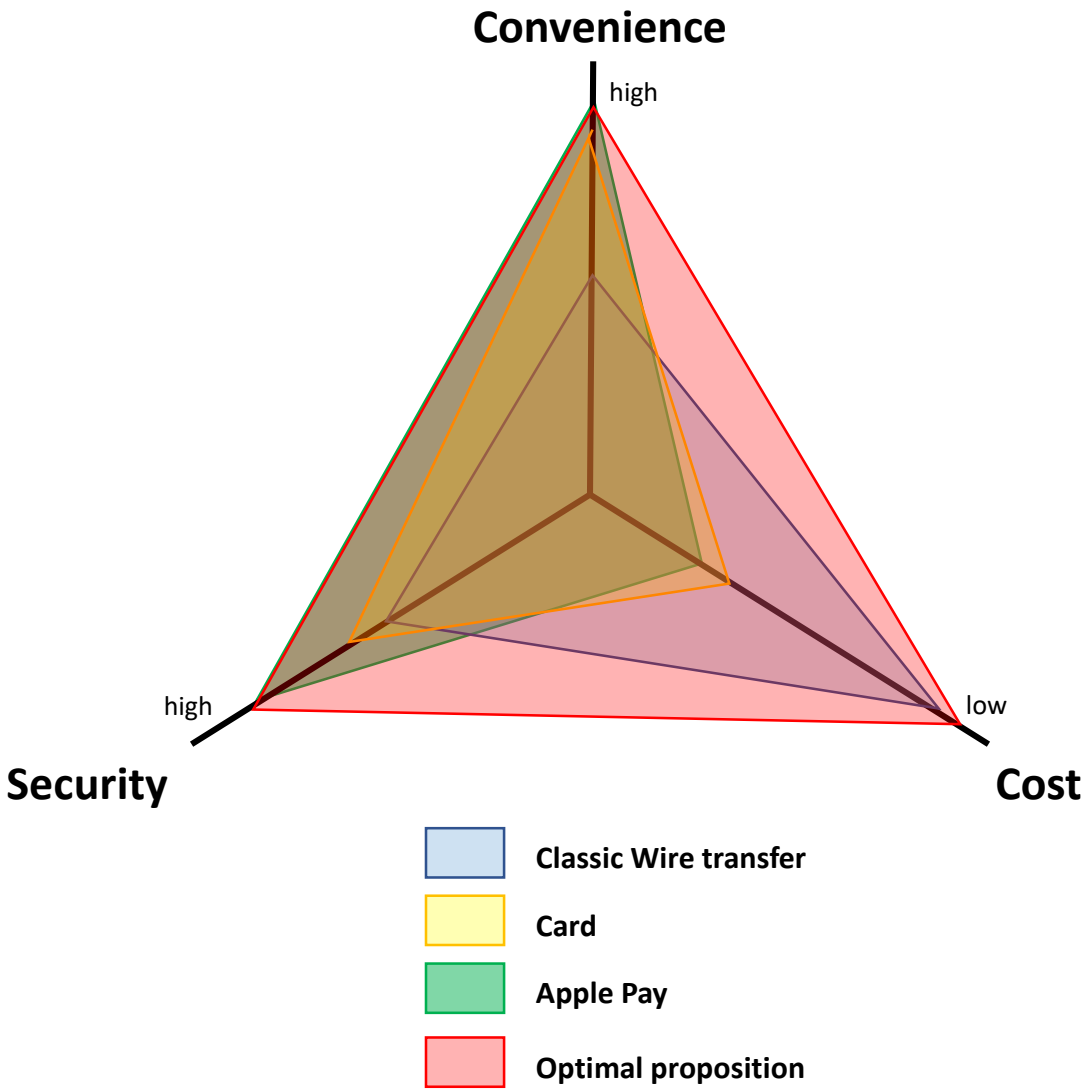
Technologies

Environment

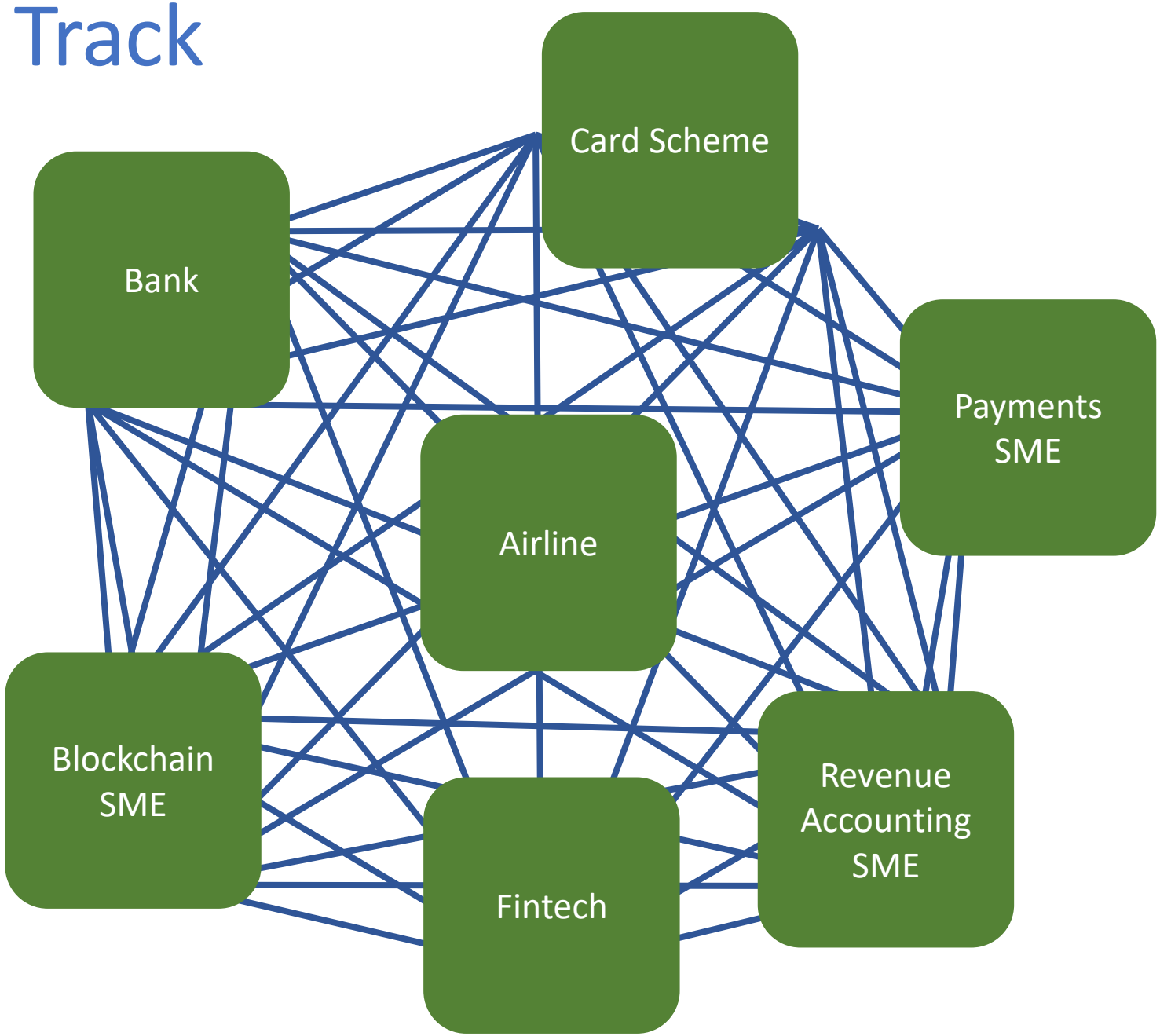
Economy

Politics

Payment riddle



During this Track

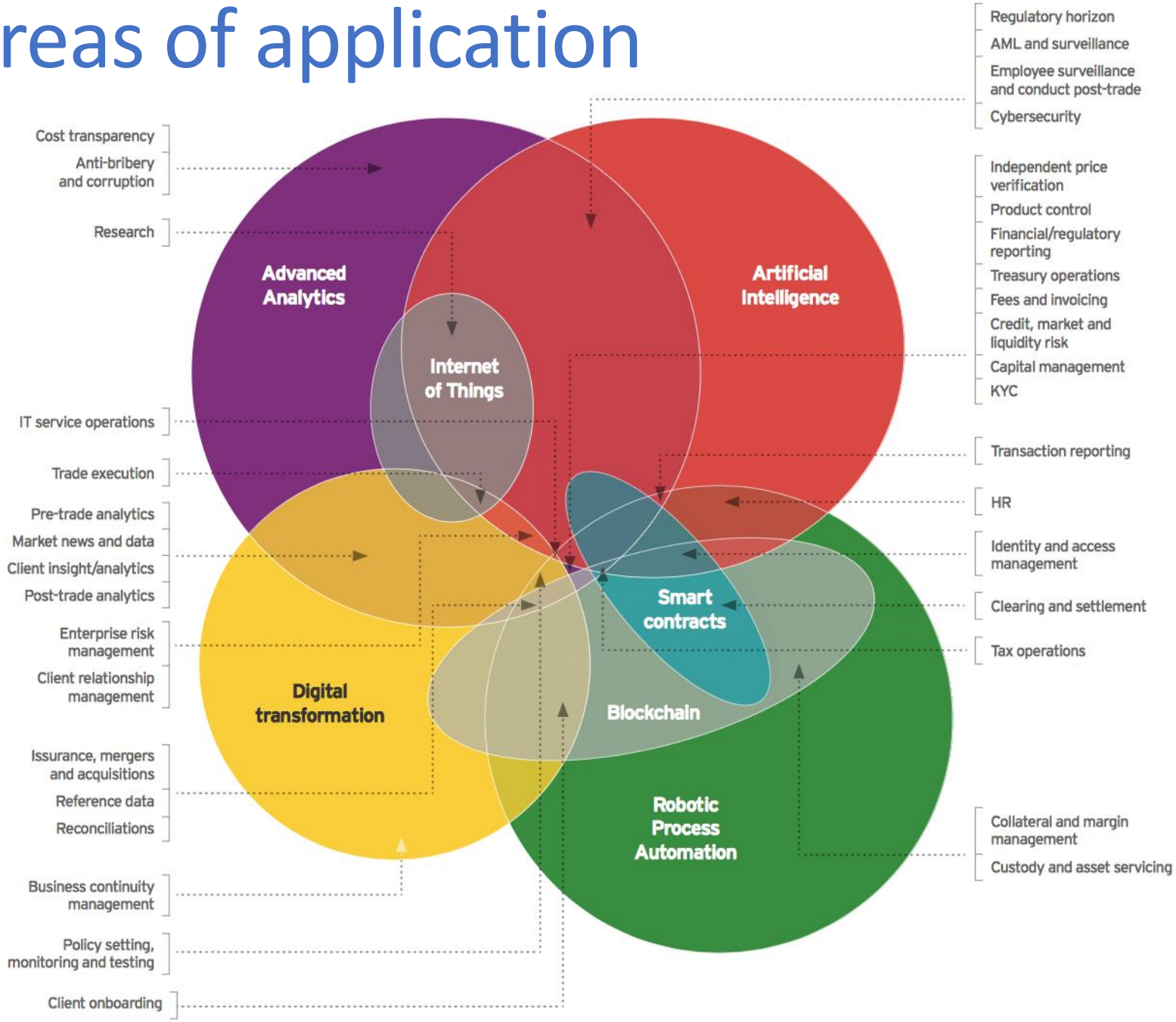


What is IATA doing?

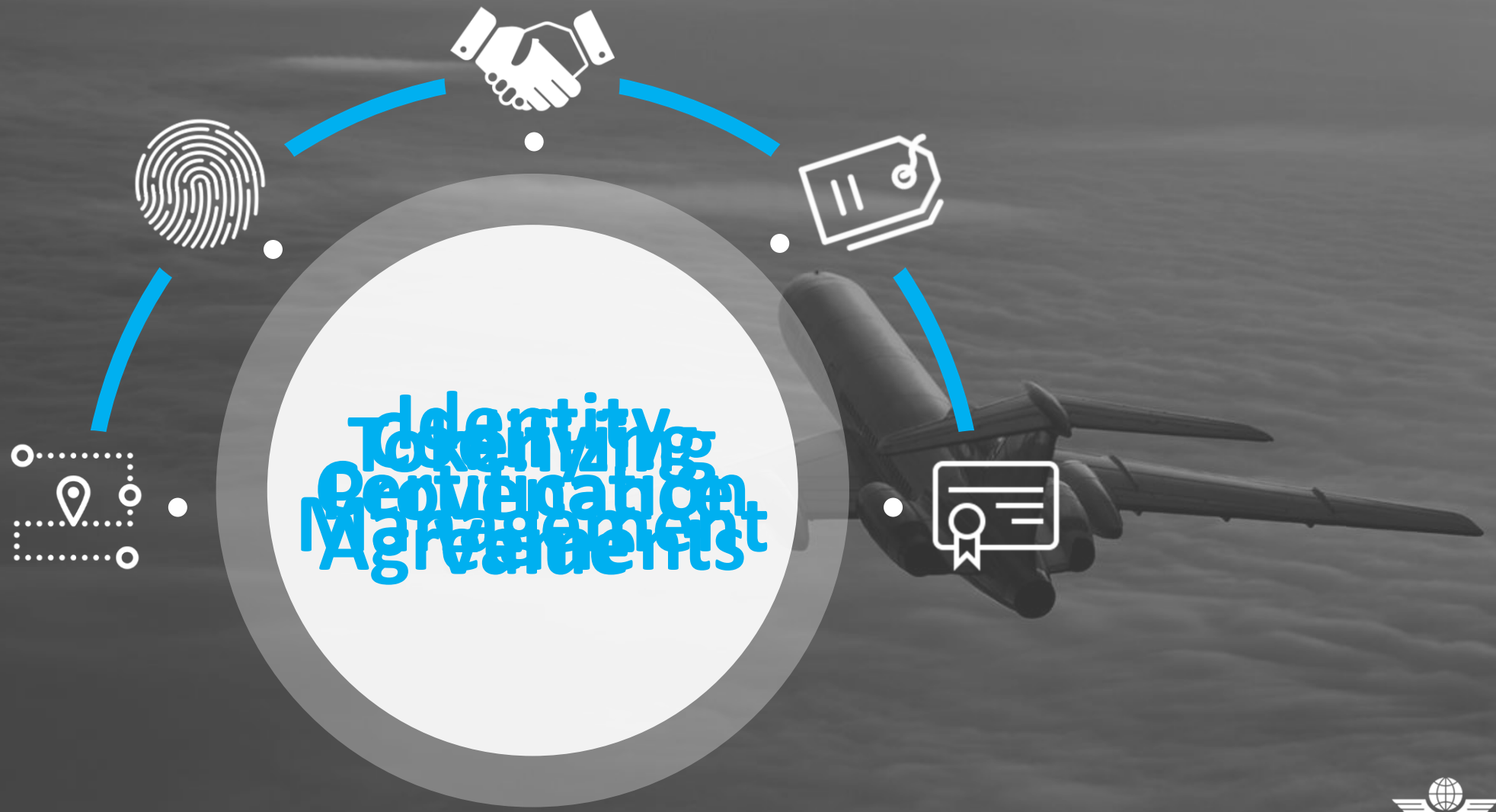
A digital airline vision

for finance and distribution

Fintech areas of application



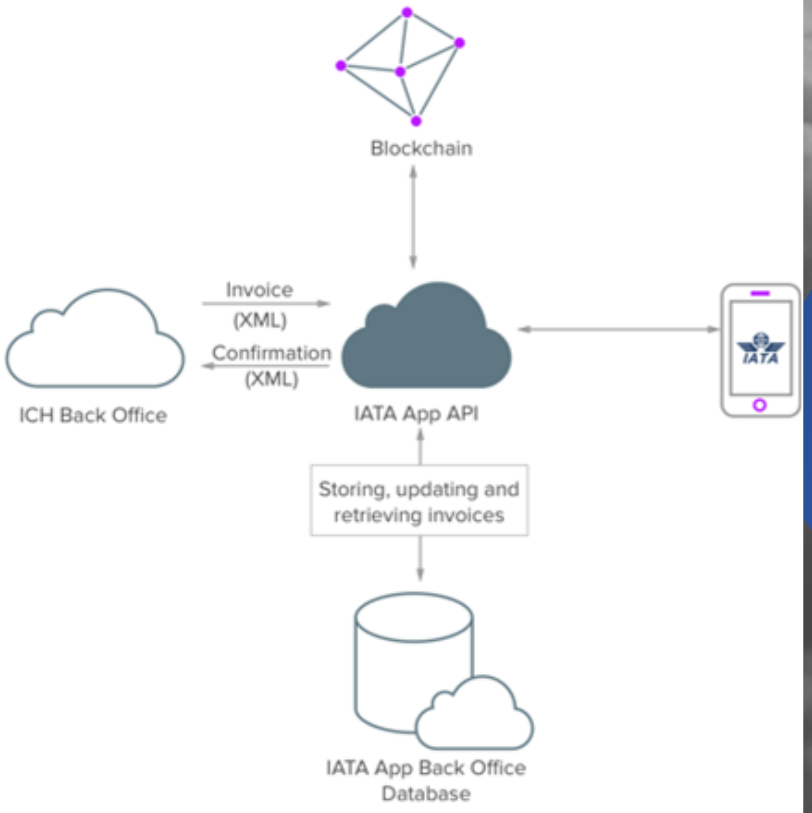
Blockchain in Aviation

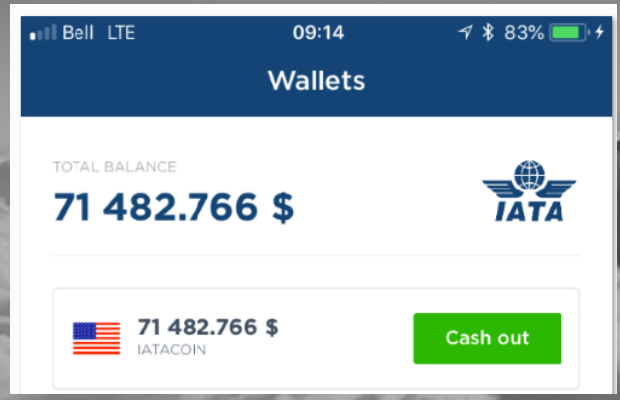


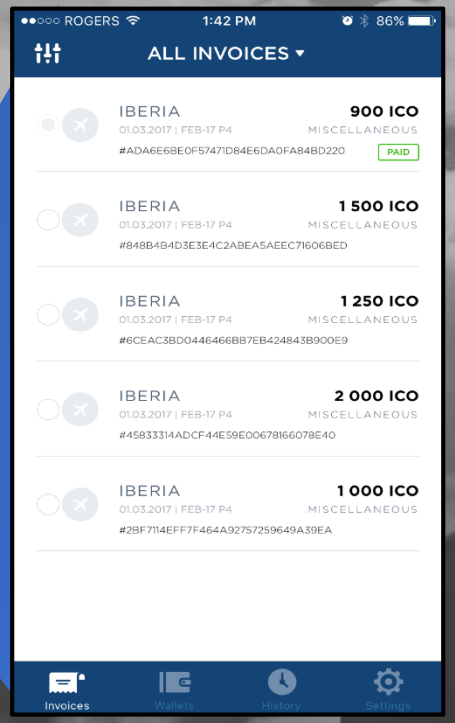
IATA Coin

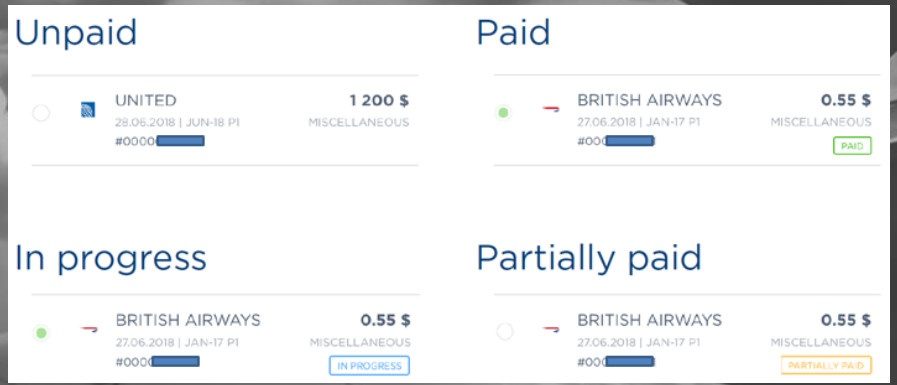
Moonshot:
Real time cross border payments at cero cost

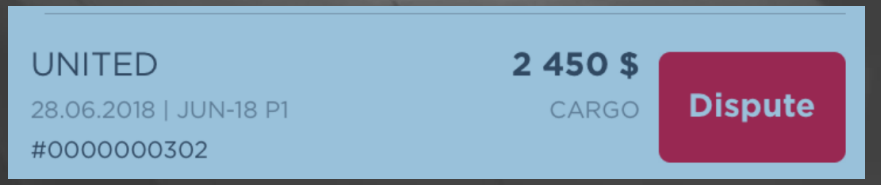
IATA Coin - Pilot











IATA Coin - Conclusions

- **Tech works**
- **Data and cash-flow acceleration**
- **Too soon**
- **Risk Adversion**
- **Systems not ready**

Thank you!

- Juan Iván Martín
- martinj@iata.org
- www.iata.org

The big picture: Facts, Figures, Market trends & regulatory framework

Pascal Burg, Director, Edgar, Dunn & Company

Today we will discuss key payment trends and their implications for Airlines

Edgar, Dunn & Company

What are the demand-side trends among the two types of customers in a payment transaction: (a) buyers and (b) airlines ?

Buyer Side

Demand

Merchant (Airlines)

Edgar, Dunn & Company

On the buyer side:
1. Younger consumers are different from previous generations

Younger Consumers More Willing To Enjoy Life

…and spend

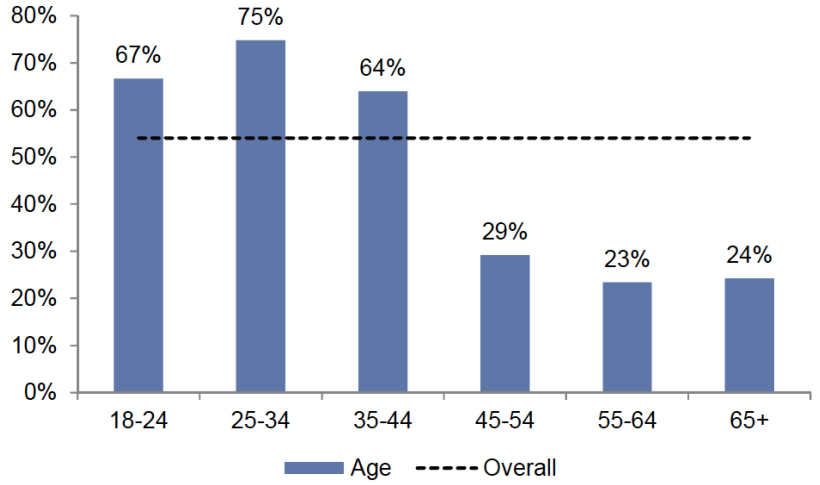
Taxis & Ubers – 53%
(Middle: 29%; Older: 15%)

Fancy Coffee – 60%
(Middle: 40%; Older: 29%)

Eating Out – 79%
(Middle: 66%; Older: 56%)

More Willing To Move To Person To Person Commerce

% of respondents who used P2P lodging sites in the last year

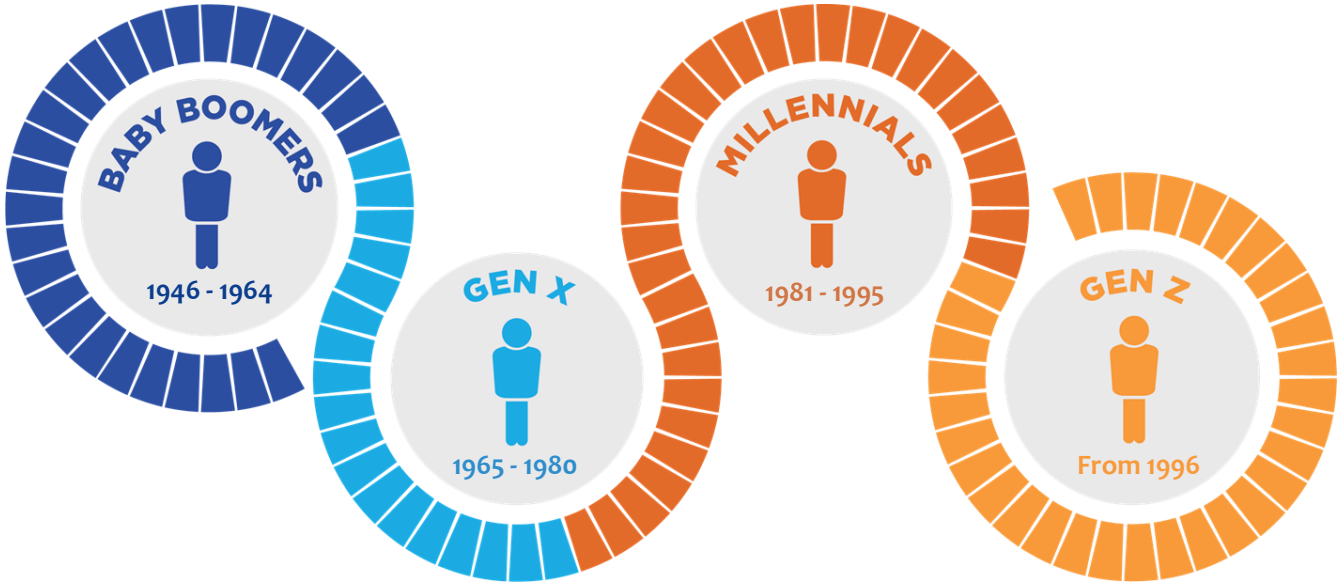


Source: Goldman Sachs Survey

Edgar, Dunn & Company

Source: Charles Schwab survey: "I spend money on.."
Note: Survey categorizes Millennials (younger); Gen X (Middle); Boomers (Older)

Millennials and especially Gen Z are the first "mobile natives", which influences their decision-making behavior and relationship to money



68% of Gen Z reads at least 3 reviews before making a first-time decision – 16% reads 9 or more reviews

25% of Gen Z is working part-time, 23% does odd jobs and other short-term work, and 22% earns their allowance

In 2015 Millennials Became The #1 Source Of Global Income, Spending, And Wealth Creation

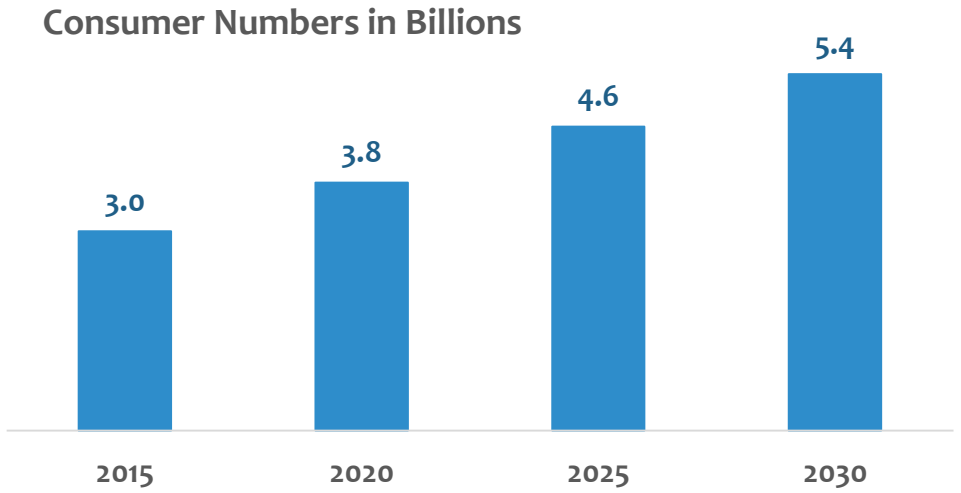
76% of Millennials' financial Engagements Are Mobile

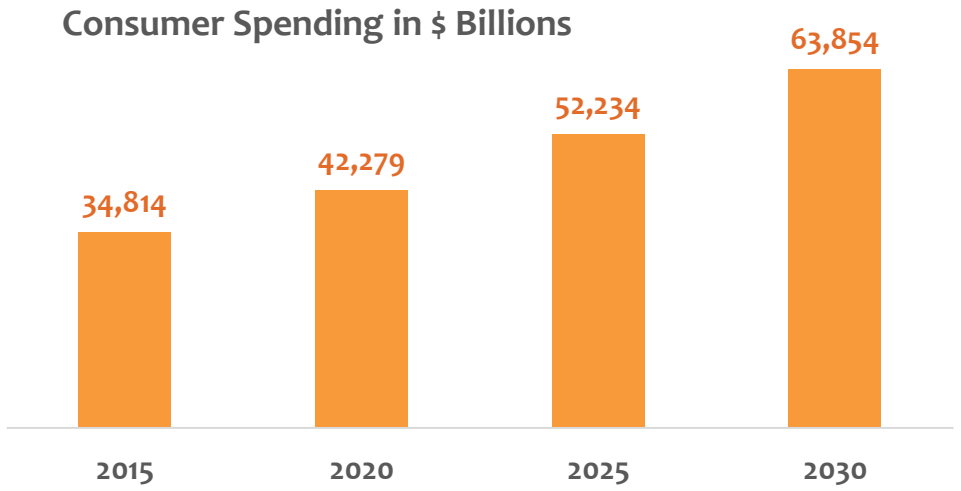
60% of Millennial Consumers Are Willing To Share Their Bank Account Credentials With Third Parties

Edgar, Dunn & Company

2. Mass affluent consumers are showing a notable and sustained growth that could be addressed by Airlines

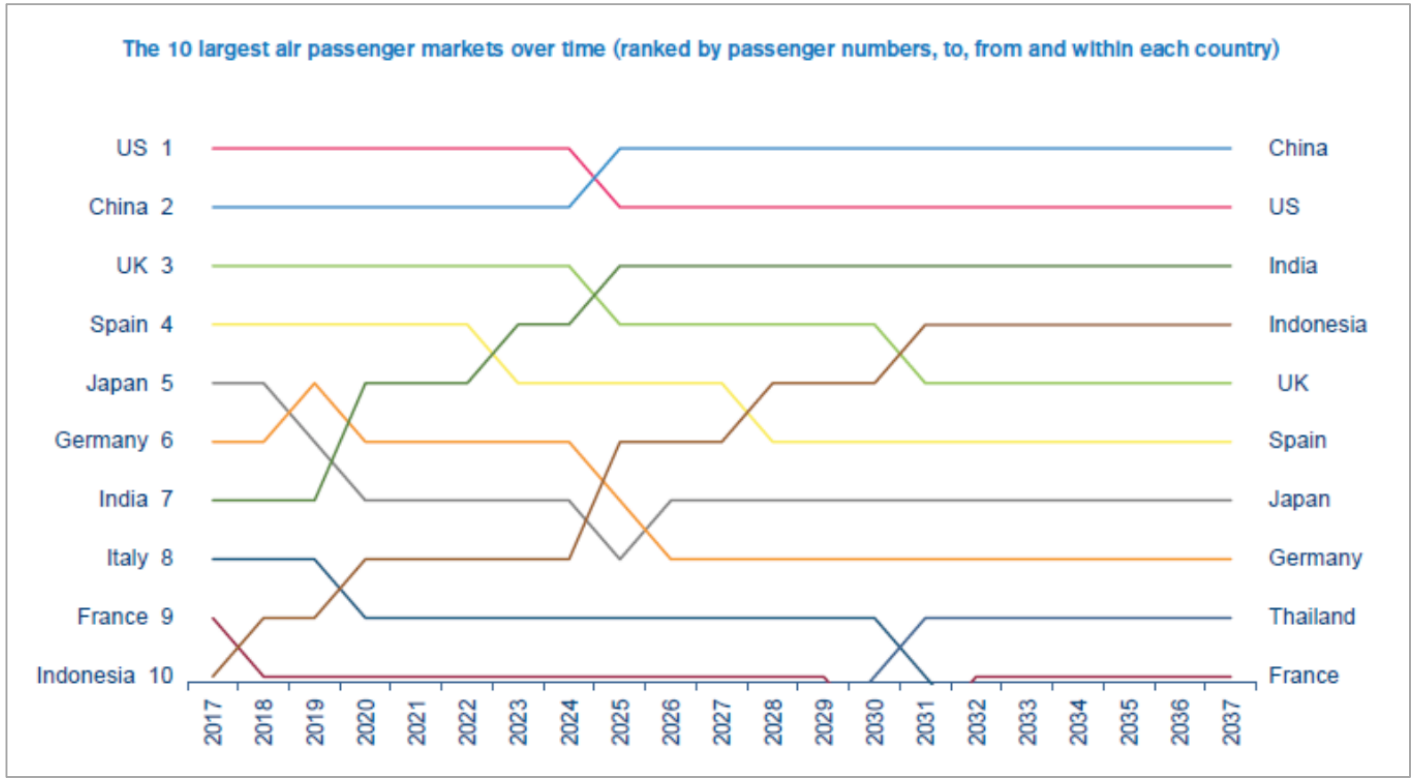
Rapid growth in mass affluent consumers





Edgar, Dunn & Company

3. The higher growth is coming from consumers in developing economies such as China or Indonesia



Source: IATA

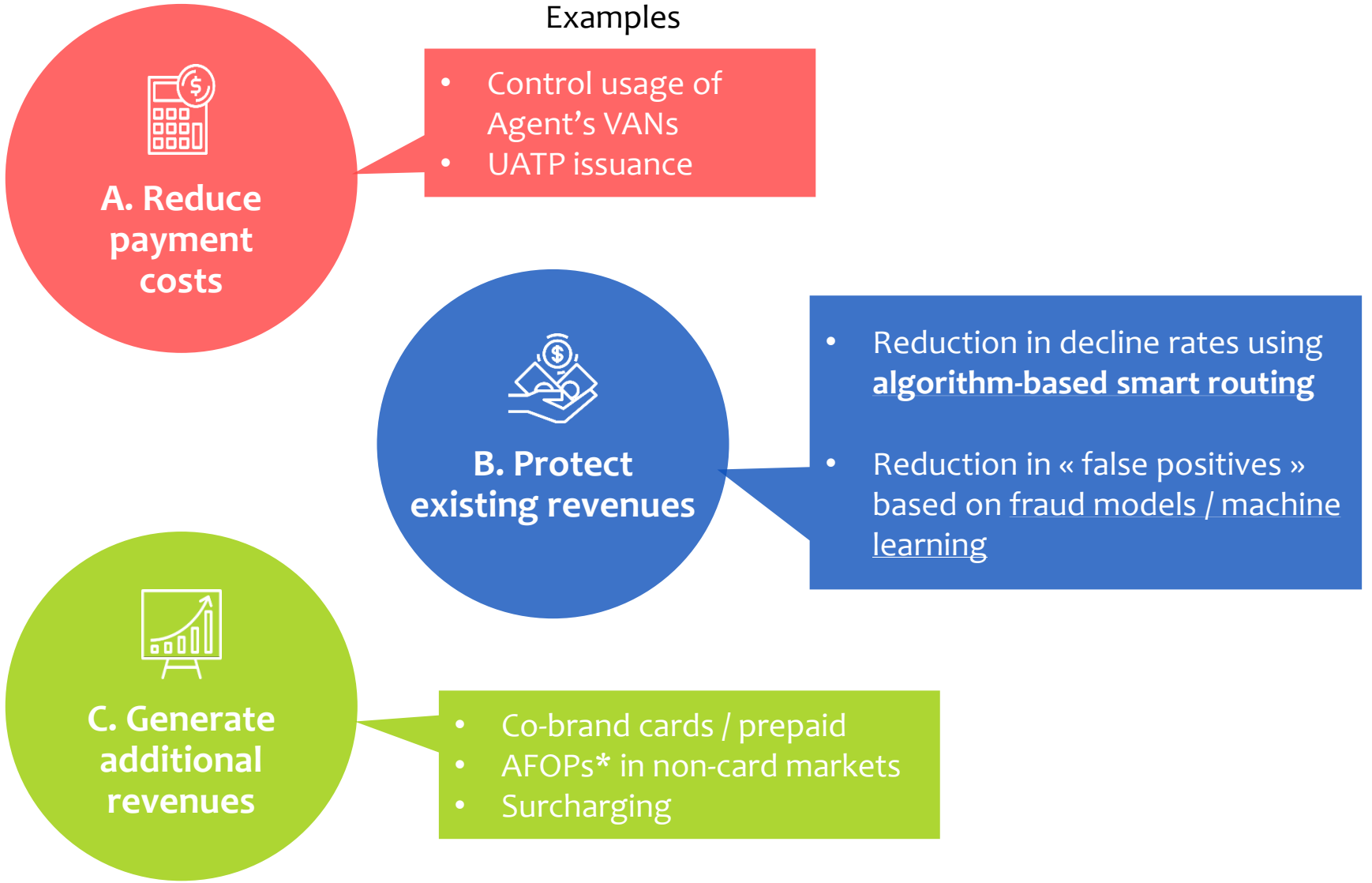
Annual additional passengers from 2017 to 2037:

- **China:** 1 billion new passengers
- **US:** 481 million
- **India:** 414 million
- **Indonesia:** 282 million

Edgar, Dunn & Company

On the airline side:
Increasing focus on managing payments more strategically and on leveraging payment data

Airlines are increasingly leveraging data to reduce payment costs AND increase payments-related revenues



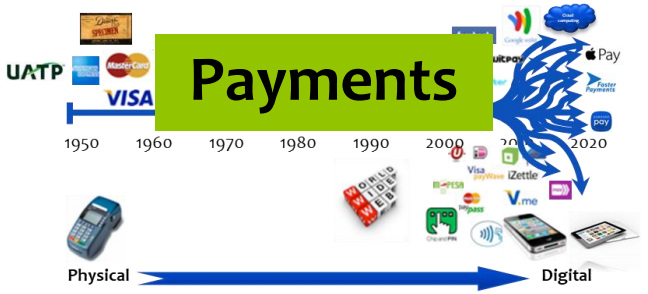
Edgar, Dunn & Company

*Alternative forms of payment

Today we will discuss key payment trends and their implications for Airlines

Edgar, Dunn & Company

Supply-side trends:
What are the relevant payment trends?



Payment technology

New payment players

Payment regulation

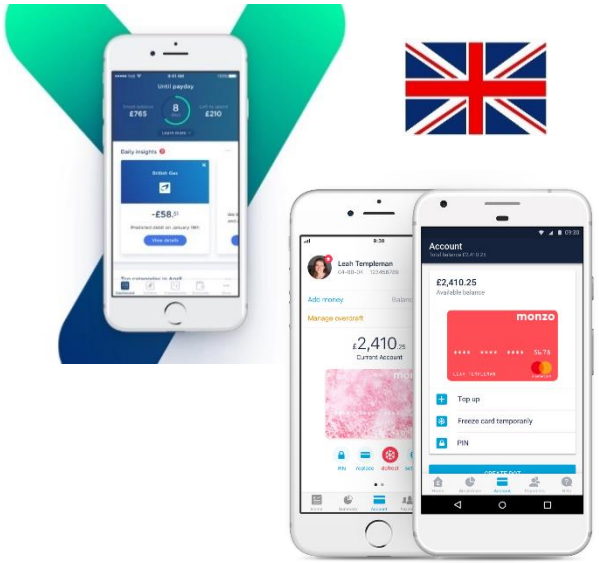
Edgar, Dunn & Company

1. New technologies such as API access to bank data (via "open Banking") and Instant Payments create new opportunities for Airlines

QR Code

Singapore - World's first unified payment QR code, the **SGQR** is compatible with 27 payment schemes

Open Banking & APIs



Instant Payments

Groupe BPCE now offers instant payments to customers

Wednesday 4 July 2018 | 10:30 AM CET

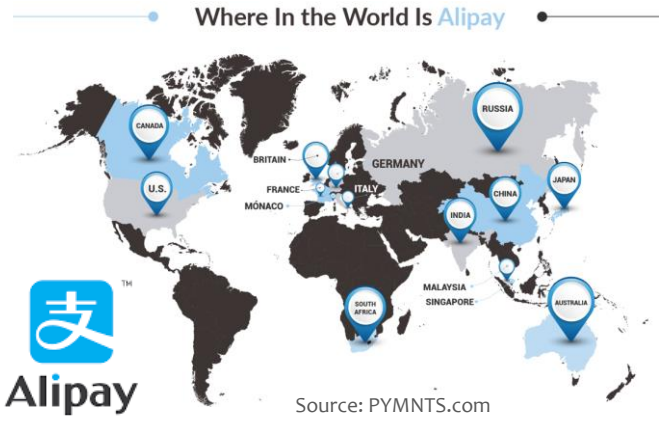
With Natixis Payments, Groupe BPCE has become the first banking group in France to offer instant payment to its customers.

Instant payment allows for the completion of account-to-account payments within 10 seconds. Groupe BPCE's introduction of this new service – a first in France – offers many advantages for all categories of banking and insurance customers, be they individuals, merchants, companies or administrations.

In addition, Air France and Natixis Payments are today announcing a partnership that places Air France at the vanguard of efforts by French merchants to foster the take-up of instant payment. Through the partnership, Air France customers in Europe will soon be able to buy flight tickets or pay for a service with this new means of payment.

2. New players offer new alternatives, but also create a more complex ecosystem

Alternative Forms Of Payment (AFOPs)



Source: PYMNTS.com

PayPal

G Pay

Pay

New Types of Players

GO JEK

"Motorcycle ride-hailing phone service"

2010

"One app for all your needs"

GO JEK GO PAY

GO LIFE

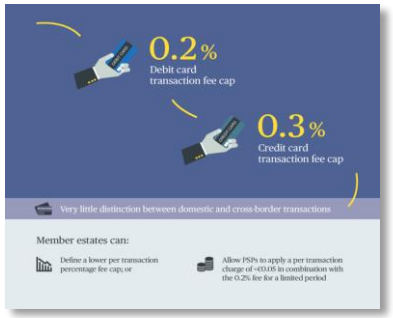
Edgar, Dunn & Company

3. New regulations: it is key to understand the regulation changes in order to potentially gain a competitive advantage (e.g. SCA exemptions in EU)

Wide range of EU payment regulations

SCA*

Interchange Fees



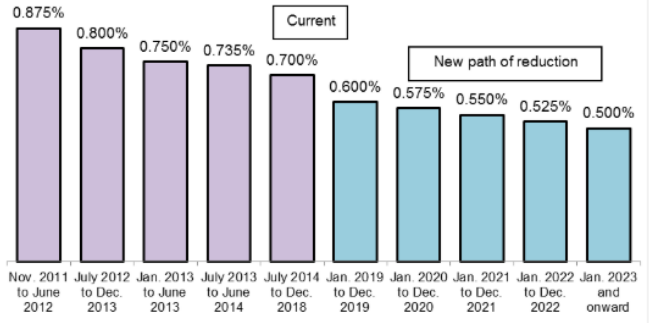
PSD2

In other markets, regulators are also reducing interchange fees …

RECOMMENDATION 17.1 BAN CARD INTERCHANGE FEES

The Payments System Board should introduce a ban on card payment interchange fees by the end of 2019. Any other fees should be made transparent and published.

Figure 1:
Final path of reduction of the interchange fee for deferred debit transactions.



*Strong Customer Authentication

Edgar, Dunn & Company

Today we will discuss key payment trends and their implications for Airlines

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So what?

Do you have a dedicated payments team to … ?

Edgar, Dunn & Company

EDC would suggest a three-phase approach to pro-actively manage payments with a P&L focus …

Phase 1

360° Payments Diagnostic / Audit

What - Identify priority payment opportunities

Phase 2

Future State / Roadmap

How - Steps to do it? Payment projects on roadmap

Phase 3

Roadmap Execution

On-going usage of payment data and focus on payment optimisation

Edgar, Dunn & Company

… and build the internal set-up and partner relationships to be able to pro-actively manage payments and leverage payment data

Buyers / travelers

Customer-Facing

- Policy
- User Experience

Airline

Internal

- Strategy / roadmap
- Payment team
- Ops processes
- Dashboard / KPIs

Partner – Facing

- Gateways
- Acquirers
- Fraud
- Tokenisation
- Other

Edgar, Dunn & Company (EDC) is a global strategy consultancy focused on payments and with a Travel practice since 2002

EDC: International consultancy focused on payments and on travel

- Founded in San Francisco in 1978, the firm is widely regarded as a trusted advisor to its clients, providing a full range of **strategy consulting services focused on payments**
- **Travel payments practice since 2002**, working with the entire travel value chain, including airlines, IATA, card issuers, merchant aacquirers, etc.
- If you want to discuss payments-related topics with us:

pascal.burg@edgardunn.com

EDC Office Locations

●Office locations

Shaded blue countries represent markets where EDC conducted client engagements

Edgar, Dunn & Company

What can you do with Payment Data? How to extract value from customer transactions

Joseph Pabst
Vice President, Airline Risk Management, American Express

Networking Break

SITAONAIR

IATA AVIATION DATA SYMPOSIUM

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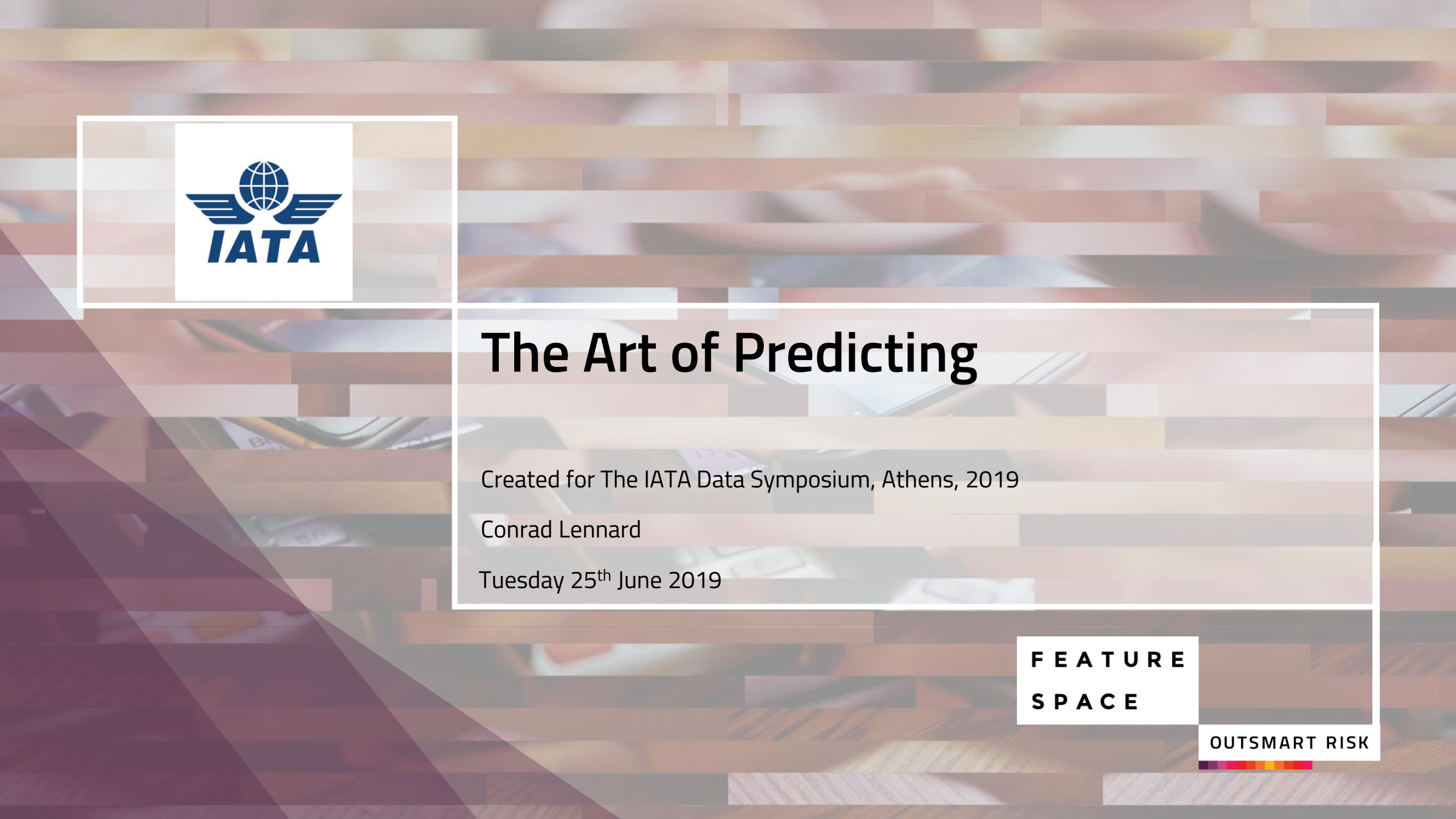
IATA

The art of predicting

Conrad Lennard, Sr. Exec, Featurespace



The Art of Predicting

Created for The IATA Data Symposium, Athens, 2019

Conrad Lennard

Tuesday 25th June 2019

FEATURE SPACE

OUTSMART RISK

FOUNDED-2008

30 YEARS OF RESEARCH

Prof. Bill Fitzgerald and David Excell
Inventors of Adaptive Behavioral Analytics

A NEW WAY TO FIGHT FRAUD

Featurespace's world leading **Adaptive Behavioral Analytics** focuses on understanding customer behavior at a granular level – so fraudulent behaviour stands out

Working with

17 major banks globally

including **4 of the 5**

leading banks in the U.K.

worldpay
IATA
Contis
gohenry
TSYS
William HILL
betfair
Clear.Bank
permanent tsb
MIT MERCADOTECNIA IDEAS Y TECNOLOGÍA
Danske Bank

120 MILLION

consumers protected from fraud

BEST ANTI-FRAUD DEVELOPMENT

Capital One U.K.'s use of TSYS Foresight Score℠ with Featurespace named 'Best Security or Anti-Fraud Development' at The Cards & Payments Awards 2018

Best performing models in all areas of fraud having **won every PoC we have entered (12 in 2018)**

LATEST AWARDS

Future Fifty from Tech City

TAG FinTech Advance Awards

2018 Stevie Gold Winner American Business Awards

The Queen's Awards for Enterprise 2018

FT 1000 Europe's Fastest Growing Companies 2018

FStech awards 2018 WINNER Anti-fraud or Security Solution of the Year

TCPA 2018 BEST SECURITY OR ANTI-FRAUD DEVELOPMENT Category Winner

50 Technology Fast 50 2017 UK WINNER Deloitte.

50 Technology Fast 50 2016 UK WINNER Deloitte.

The Sunday Times Tech Track 100 2018

The Card & Payments Awards 2019 CATEGORY WINNER Industry Achievement Award

FStech awards 2019 WINNER Anti-fraud or Security Solution of the Year

The FinTech50 2018

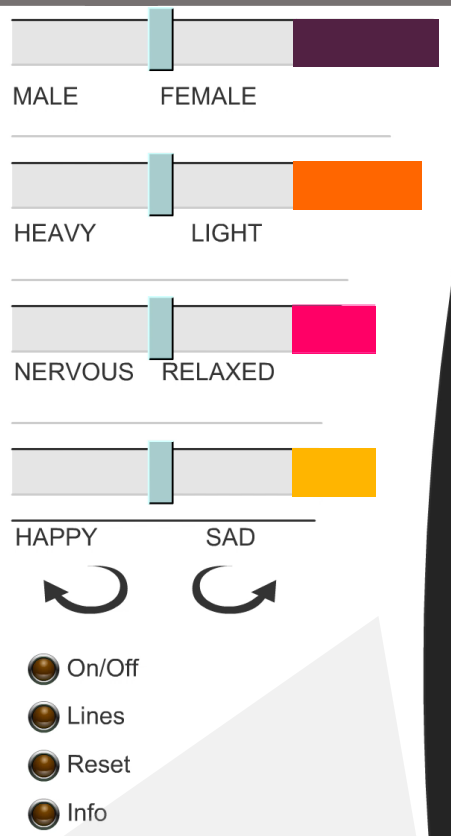
CogX Best Innovation in Predictive Analytics award

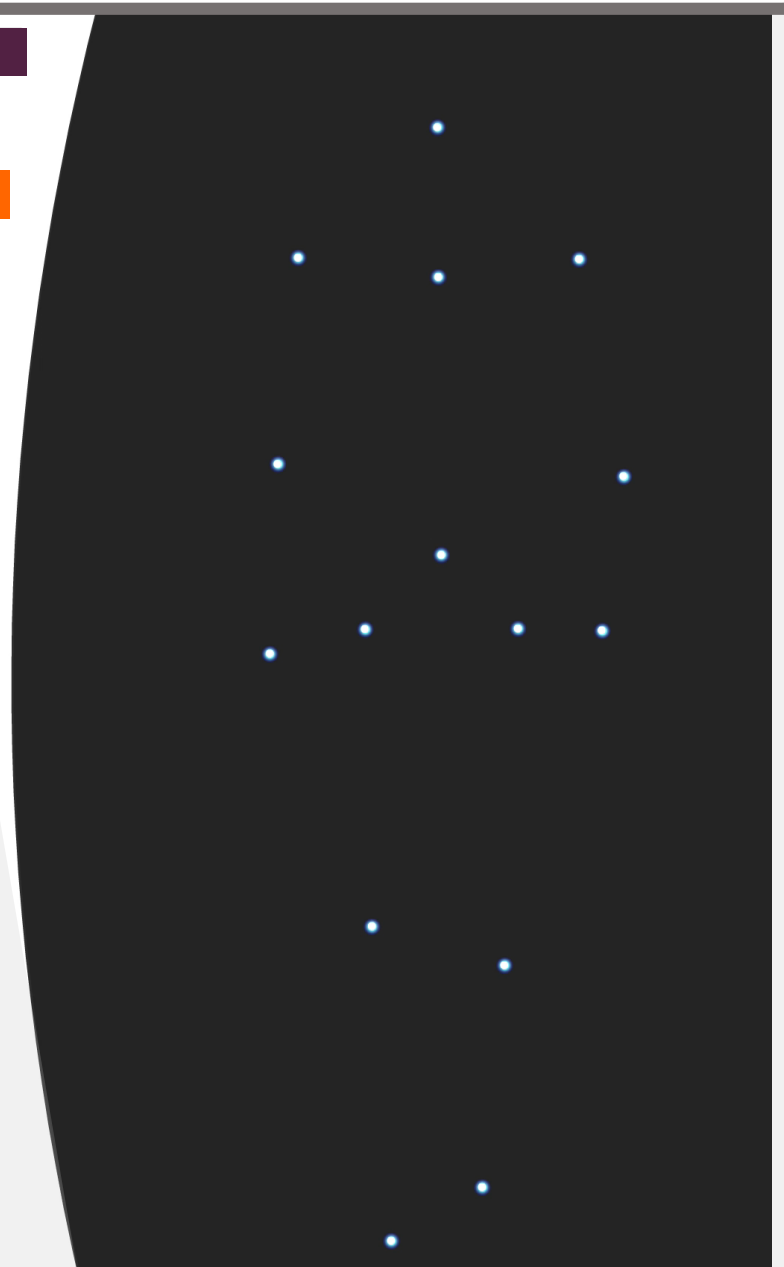
Cambridge Independent Science & Technology Awards WINNER 2018

50.4 BILLION

events processed per year

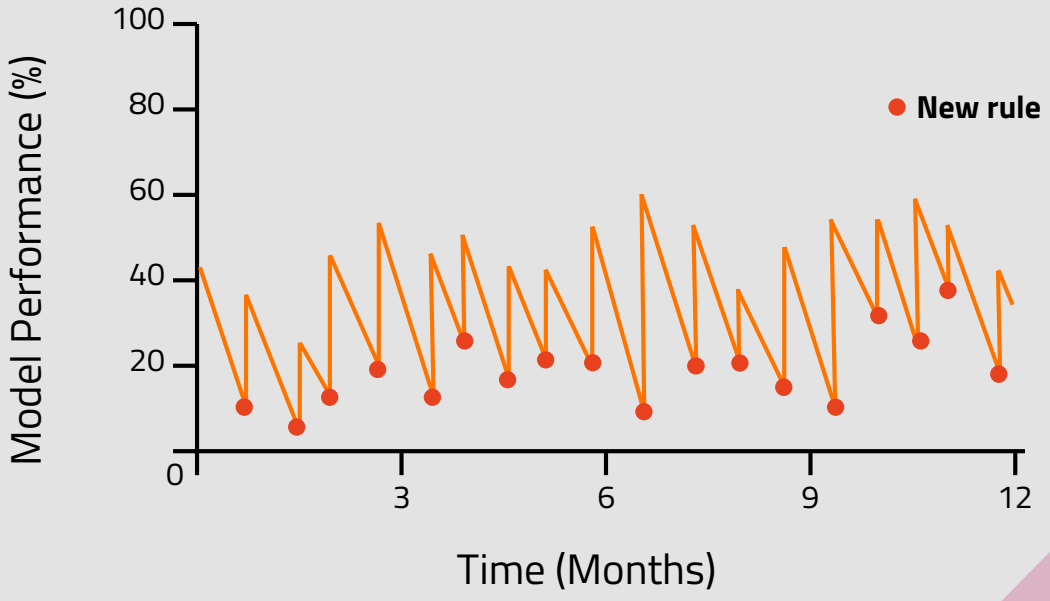
About **Featurespace**





Model **Performance**

The main fraud prevention solutions available today show significant differences regarding their performance.

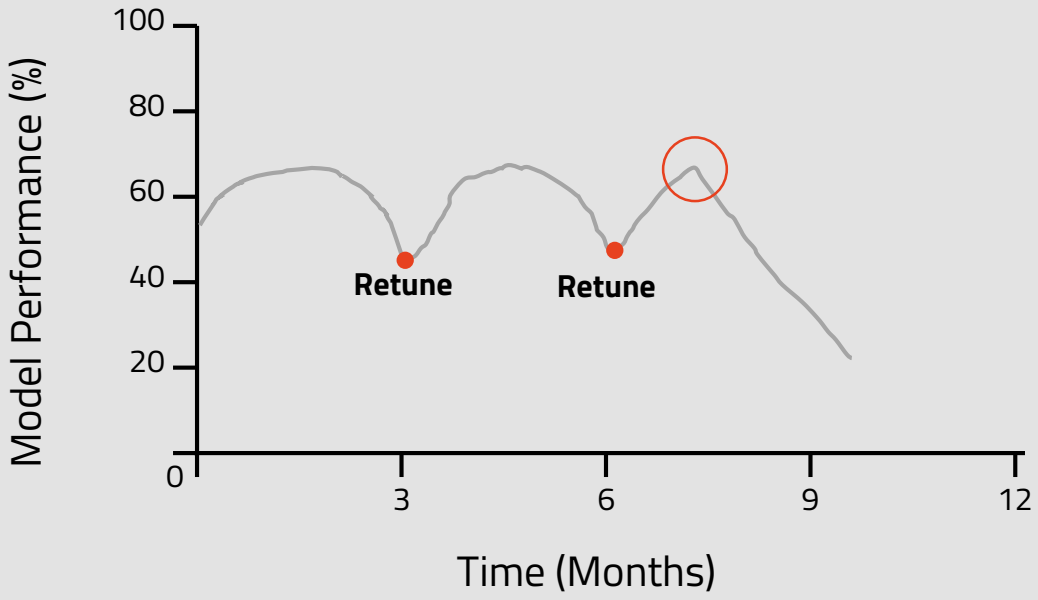


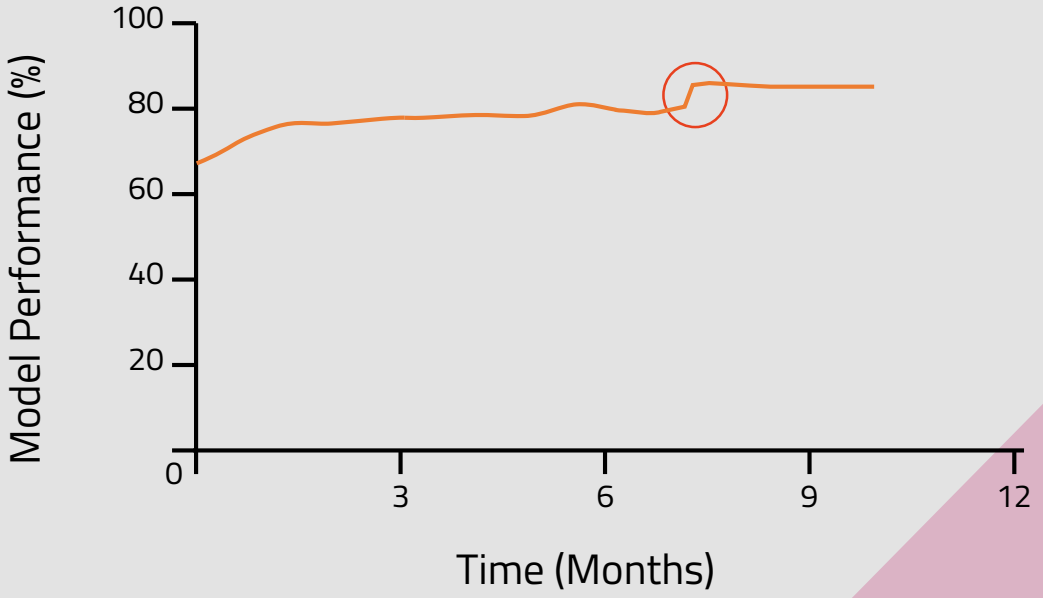
- Rules-Based Fraud Prevention
- Machine Learning Fraud Prevention
- Featurespace Adaptive Behavioral Analytics

Rules-Based Fraud Prevention

- Performance drops drastically as fraudsters change their MO
- High maintenance costs
- Difficult to manage due to the number of rules required and their complexity
- **Cannot prevent new types of fraud**

Model **Performance**





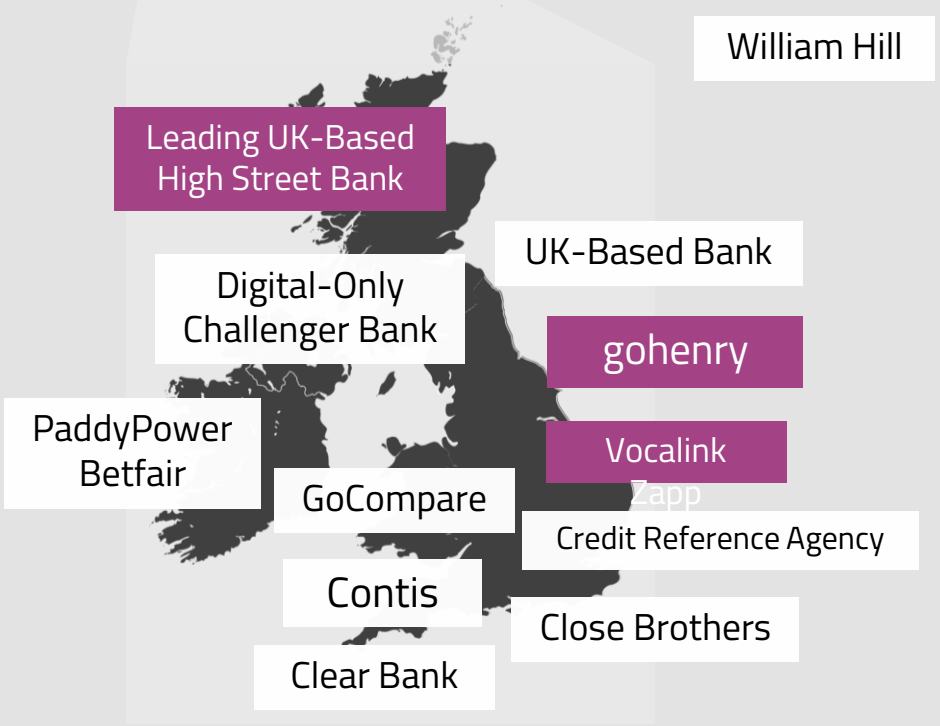
Traditional "Machine Learning" Fraud Prevention

- Frequent retunes needed
- Done quarterly or even yearly
- Model performance may drop dramatically between retunes
- **Cannot react quickly to fraud attacks that happen shortly after retune**

Featurespace Adaptive Behavioral Analytics

- Self-learning models
- No manual retuning required
- **Truly adaptive**

Our **Customers**



Worldwide E-Commerce Merchant

Global Credit Card Issuer

Global Issuing Bank

ComeOn

E-Commerce Merchant

Danske Bank

European PSP

Top 25 US Bank

IATA

TSYS

Worldpay

MIT

William Hill

Leading UK-Based High Street Bank

UK-Based Bank

Digital-Only Challenger Bank

gohenry

Betfair Australia

PaddyPower Betfair

Vocalink

GoCompare

Zapp

Credit Reference Agency

Contis

Close Brothers

Clear Bank

GLOBAL CREDIT CARD ISSUER

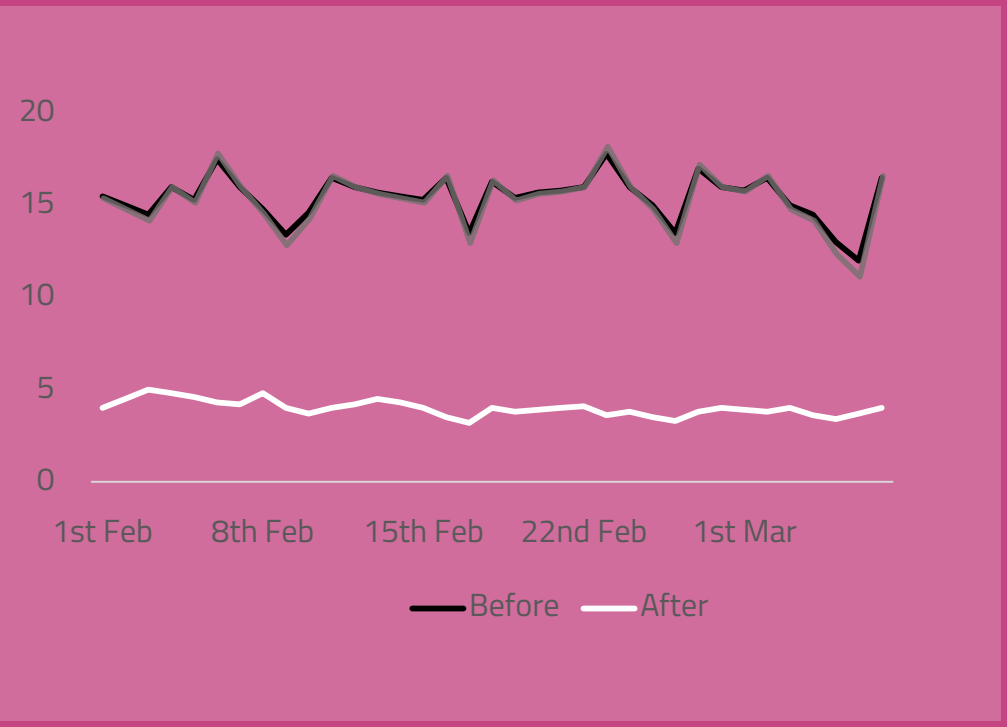
Building a new transactional fraud detection system with a global credit card issuer with over 1m U.K. customers

70%
Reduction in genuine transactions declined

80%
Reduction in genuine transactions declined CNP

39%
Reduction in fraud losses

Number of false positives using Adaptive Behavioral Analytics

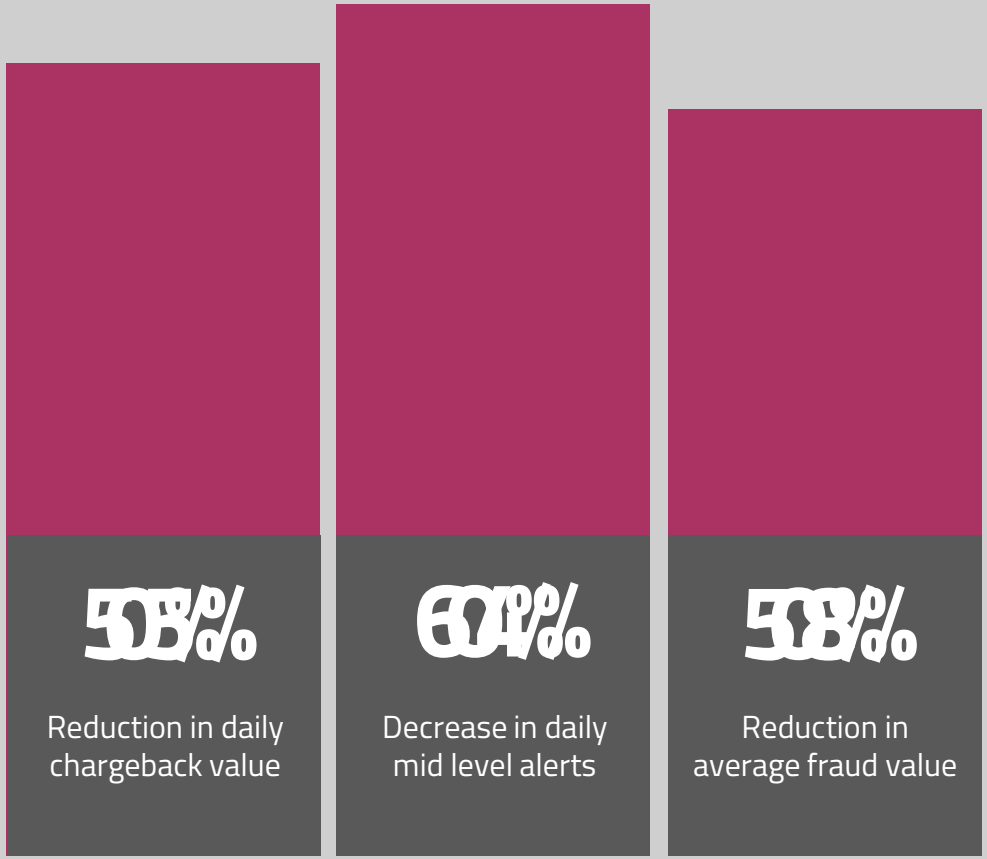


EUROPEAN PAYMENT PROCESSOR

Merchant monitoring for one of the world's fastest growing global acquiring networks

"What is particularly clever about Featurespace's system is that it can learn from new types of fraud; allowing it to keep up with the 'arms race' against innovative criminals."

- Felicity Hannah, The Independent



Offering a real-time risk management solution to the trade organisation for the world's airlines

"IATA has a fundamental responsibility to protect the financial systems that make today's integrated global air transport network possible.

Safer selling is a key component of IATA's NewGen ISS program and this agreement with Featurespace will provide IATA's customers with an additional layer of security."

– Juan Antonio Rodriguez,
Director, Financial and Distribution Services Operation, IATA

IATA represent **290 airlines**, with a **passenger count of 2.7b**

...that's **82% of total air traffic**

International Air Transport Association (IATA) [illegible] **their selling environments' safety as part of the NewGen ISS program.** A key feature is the **Remittance Holding Capacity (RHC)**.

ARIC scores **over 216M transactions** per year

Featurespace's real-time Adaptive Behavioral Analytics platform ARIC™ will [illegible] **travel agents and airlines.**

In 2019 ARIC will score **95% of the world's travel agent airline ticket card sales**

In 2019 ARIC will score **95% of the world's travel agent airline ticket card sales**

Thank You

Get in Touch

info@featurespace.com

www.featurespace.com

FEATURE SPACE

OUTSMART RISK


FEATURE
SPACE
OUTSMART RISK

Open Banking

Benjamin Madjar, Director, Deutsche Bank

Deutsche Bank

IATA Aviation Data Symposium & AI Lab

•June 2019

1. Open Banking (1/2)

Regulators are focused on bringing innovation to the payments world, create a level playing field and promote competition

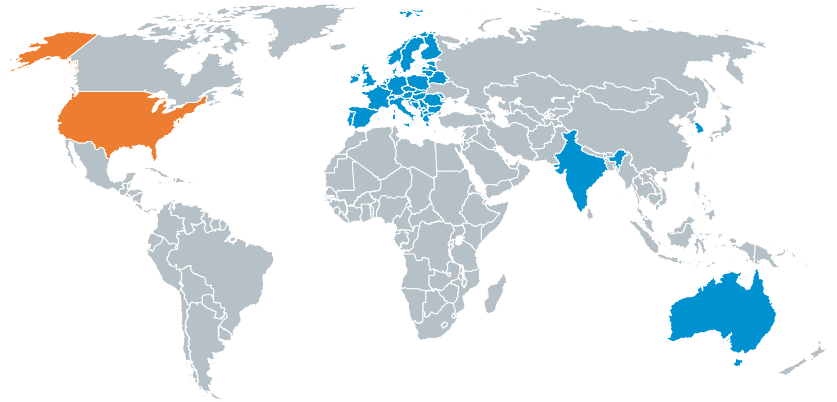
Open Banking will increase innovation and competition in the banking and payments landscape by forcing banks to allow Third Party Payment providers (TPPs) access to data if the account owner wishes

What is Open Banking?

- Banks will have to open up their own systems to incoming API[1] calls from licensed and regulated TPPs to collect account information and instruct payments for consumers
- **Push Payments is one particular service enabled via Open Banking, enabling real or near real time payments via SCT, SCT Instant or local ACH, avoiding card networks and other PSPs, creating a cheaper alternative to card based payments**
- Open Banking is deployed in Europe under PSD2 (Revised Payment Service Directive)

1) Application Programming Interfaces (APIs) are conduits which allow secure and controlled data sharing between systems

➢ Regulators are focused on bringing innovation to the payments world, create a level playing field and promote competition



Specific regional examples

EU is pushing for open banking API's through PSD2

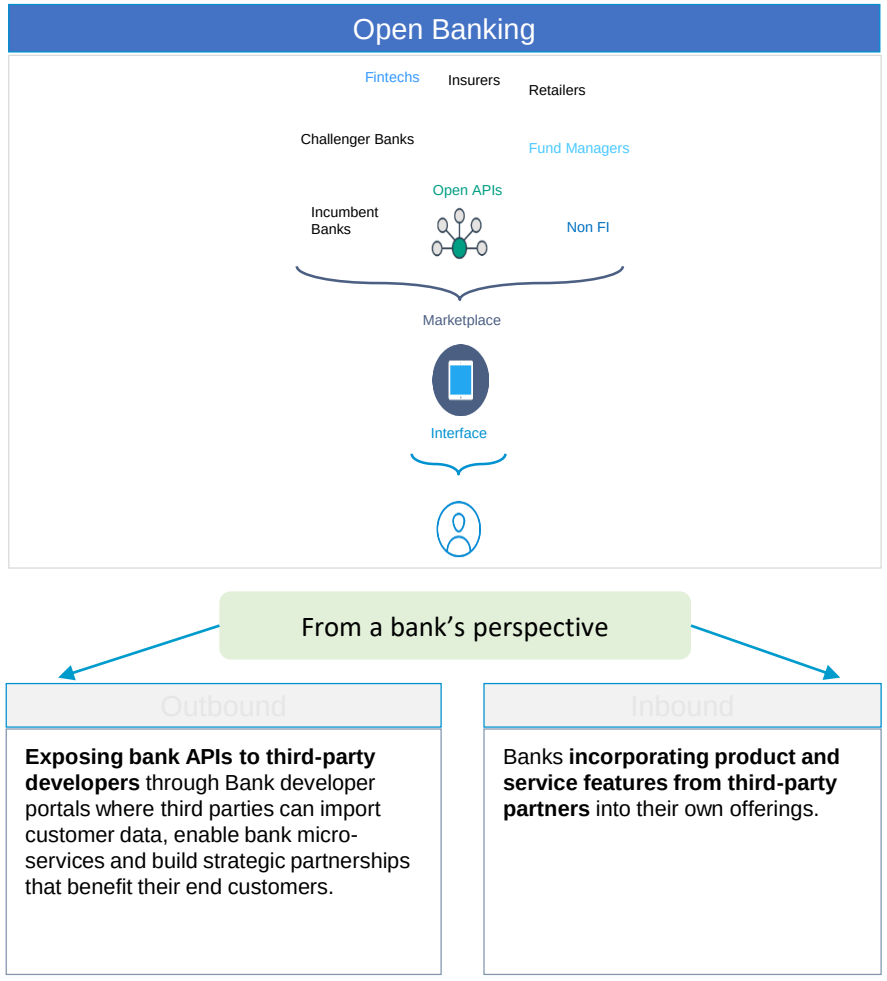
National Payment corporation of India, launched a set of APIs in 2016 to create a payment ecosystem

In Australia, banks have been asked to open up their architecture and share access to data to competition by July 2018

In US, banks have offered API based solutions in collaboration with third party players

1. Open Banking (2/2)

New service models leading to improved client experience



From a bank's perspective

Outbound

Exposing bank APIs to third-party developers through Bank developer portals where third parties can import customer data, enable bank micro-services and build strategic partnerships that benefit their end customers.

Inbound

Banks **incorporating product and service features from third-party partners** into their own offerings.

APIs & Open Banking in numbers

77%

77% of banks will have invested in API or Open Banking initiatives by 2019

2x

The number of existing APIs has doubled since 2014, and increased 4x since 2012

€61bn

Or 7% of the total banking revenue pool in Europe will be associated with Open Banking-enabled activities by 2020

Source: Mckinsey, Accenture open banking, Statista

Increasing pan-European competition and improving customer rights

Main Objectives

- Promoting payment innovation and adjusting legal requirements
- Increasing the safety of payment transactions and payment services
- Increasing consumer safety
- Specifying scope and exemptions

Timelines

Key Stakeholders

European Commission

EBA EUROPEAN BANKING AUTHORITY

National Competent Authority

BaFin

ACPR BANQUE DE FRANCE

BANCO DE ESPAÑA Eurosistema CNMV

National Governments in European Union

Key Changes

- Scope extended to all currencies, and to payments where only one provider is located in the EU/EEA
- It introduces strict security requirements for the initiation and processing of electronic payments, and for the protection of consumers' financial data.

Consent

Strong authentication

- It introduces so-called Third Party Providers (TPPs)
- All TPPs with a „eIDAS“ certificate can access the PSD2 TPP API

New PSD II Services

1

Account Information Service (AIS)

Conduct enquires on accounts information to provide services on information

2

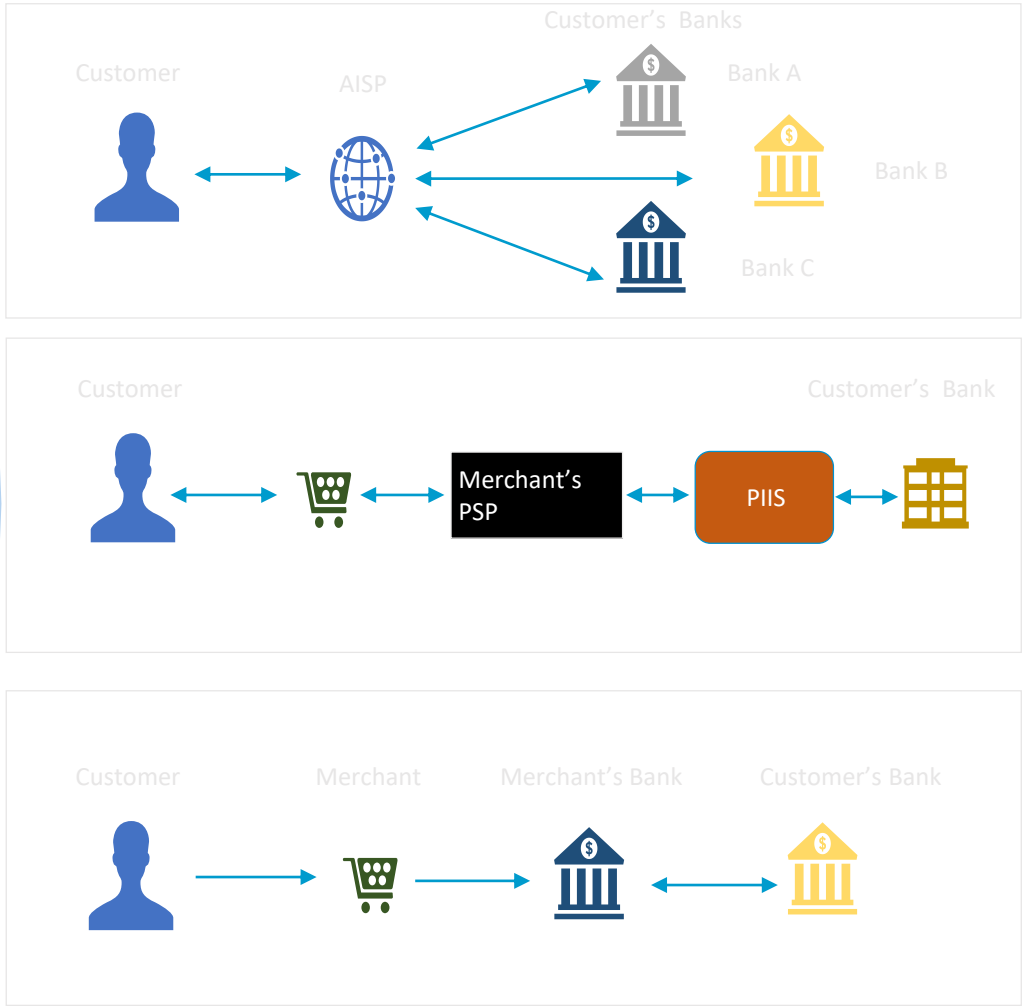
Payment Instrument Issuer Service (PIIS)

Enquire about availability of funds in relation to specific payment instrument

3

Payment Initiation Service (PIS)

Initiate payments from other accounts as a service for merchants



Use Cases (e.g.)

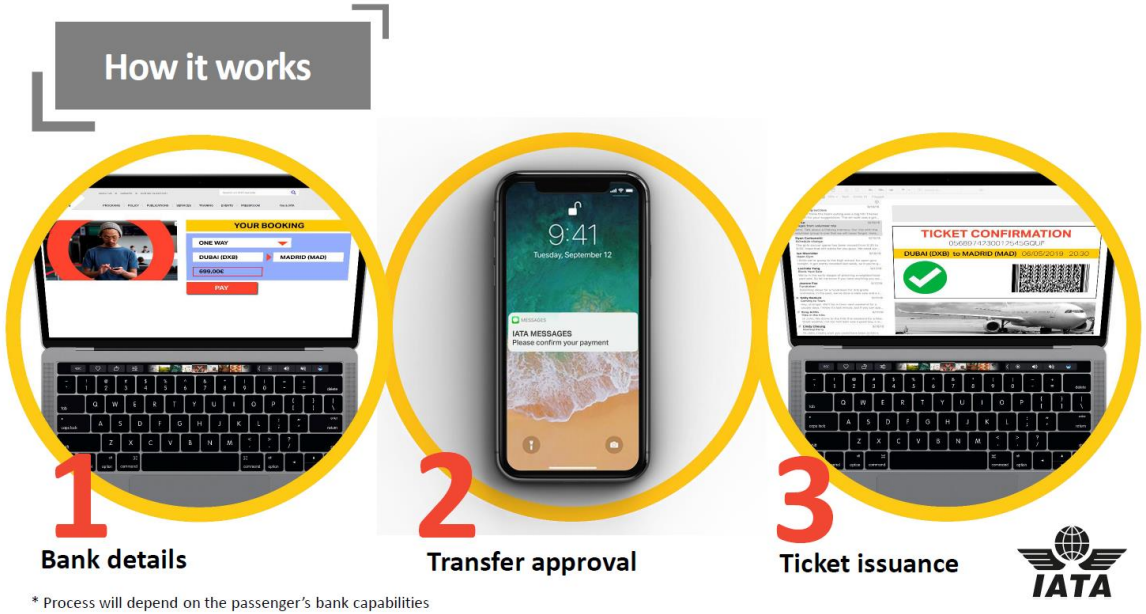
Retail

- Account Aggregation
- P2P payments
- C2B payments

Corporate

- Cash pooling
- Liquidity management

IATA PAY Solution Overview



* Process will depend on the passenger's bank capabilities

Why IATA Pay?

Airlines

1. **Risk free** (low fraud);
2. Instant / **near real-time settlement;**
3. **Eliminated interchange fee** costs.

Passengers

1. **Seamless** passenger experience;
2. DB branding brings **trust & confidence** to solution;
3. Push Payments will be a **familiar payment method** for passengers.

2. PSD2 (4/6) - Payment Initiation Service (PIS)

PIS as an Alternative to Credit Cards

	Factors	Cards 	Push Payments 
	Familarity	Existing solution known to consumers	New payment method – will become more familiar over time as SCT
	Benefits	Credit cards provide credit, travel insurance etc.	To be defined by Merchant – can be tailored
	Trust	High trust – used many times before	Leverage name of DB branding, as well as Industry based solution
	Cost	Merchant may charge booking fee, no SCT Inst. cost	SCT Inst. cost – this will fall over time as it becomes commoditised
	User Experience	3DS is used for 2FA	Redirect user experience, potential to optimise through IBAN capture for frequent flyers Funds flow out of account real-time adds trust
	Refunds	Refund and claim back from Merchant, however not real-time	Real-time refunds
	Price	Charge between 1-2% for Debit Cards, and 2-3% for Credit Cards	Significantly cheaper, especially for higher transaction items
	Finality of Payment (Risk)	Payment not typically final	Using SCT Inst., finality of payment <10 sconds
	Fraud	Card fraud of ~0.25%	Low utilising 2FA
	Liquidity	Typically D+1 – D+3	Real-time utilising SCT Inst. with real-time reconciliation
	Integration	Existing integration	Can be integrated directly, or via certain Payment Gateways to minimise requirements

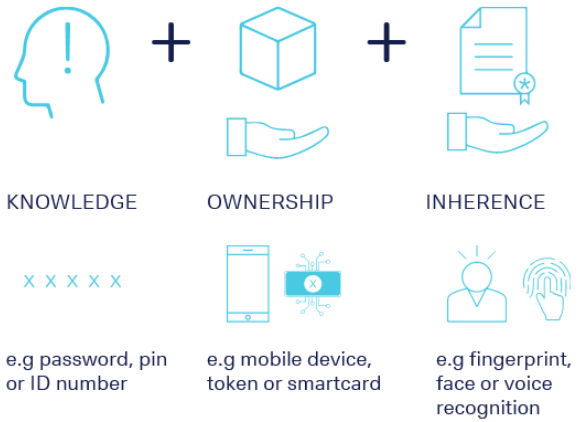
2. PSD2 (5/6)

Implications on GDPR, Data, Cyber Security (1/2)

GDPR

- GDPR is a regulation that requires businesses to protect the personal data and privacy of EU citizens
- It came into effect in May 2018 and covers how data is collected, stored, processed and destroyed

One of PSD2's key requirements is that **banks must add SCAs for all remote access to customer accounts.** This means that when authentication is required, two of three factors will be applied: something the customer is, something the customer has and something the customer knows.



- Failure to implement these capabilities properly may also expose banks to potential loss of sensitive customer data and, under GDPR may lead to fines up to **20mn euros or four percent of worldwide group revenues.**

Data

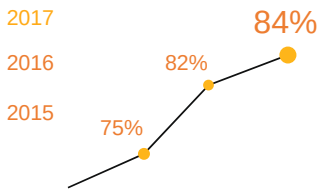
PSD2 isn't limited to bank transfers, the card payments industry is also bound by PSD2 rules around Strong Customer Authentication.

eIDAS: Electronic Identification, Authentication and trust Services – A set of standards for electronic identification and trust services for electronic transactions. This certificate will be granted by the competent authority.

2. PSD2 (5/6)

Implications on GDPR, Data, Cyber Security (1/2)

The cost of cybercrime will continue to increase as more processes, corporates and consumers globally go online

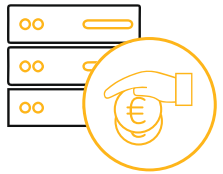


Companies victim to at least one fraud in the past year[1]

$500Bn

Potential cost of cybercrime globally[2]

$3.8 Mio



Avg. cost of a data breach for the average company[2]

Strategic pillars to combat cyber risk in Transaction banking

Customer awareness

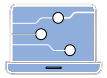
Education, thought leadership and regular updates on current fraud scenarios, countermeasures and best practices

Secure client communication

Information exchanges need to be protected from disclosure to and manipulation by third parties

Strong authentication

Strong means of authentication are required to ensure that only entitled individuals can retrieve information, initiate or authorize transactions on specific accounts



Technical preventive measures

State of the art technical capabilities are required to protect electronic banking channels from third party manipulation

Fraud monitoring & detection

Transaction flows are to be monitored to identify anomalies and unexpected behaviour to alert clients or competent authorities

Source: 1) Kroll, 2) Microsoft

Disclaimer

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Revenue Accounting: final barrier

Mark Costa, Director, Deloitte

Deloitte.

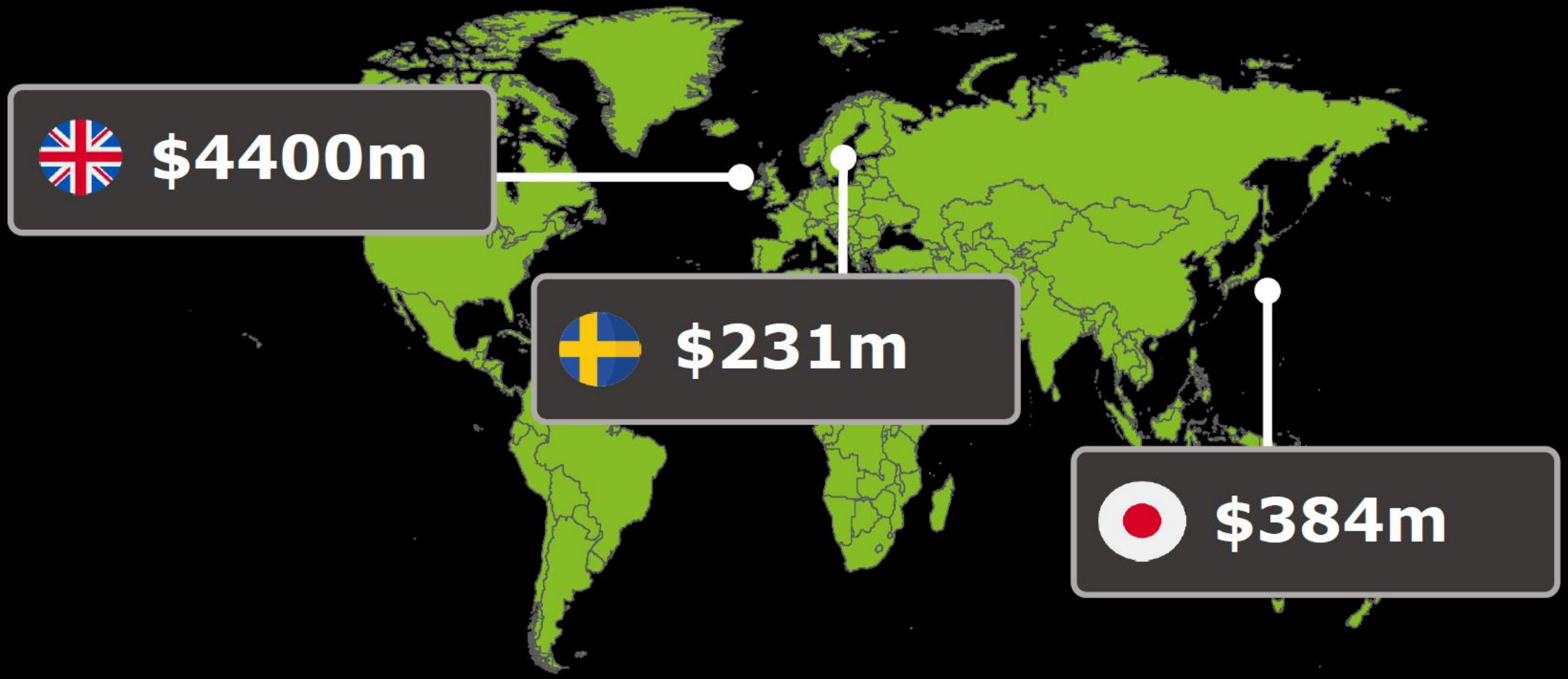
Revenue Accounting: Solving the Data Challenge

Mark Costa, Deloitte

IATA Aviation Data Symposium June 2019

A global trend

The introduction of ticket taxes is taking place worldwide

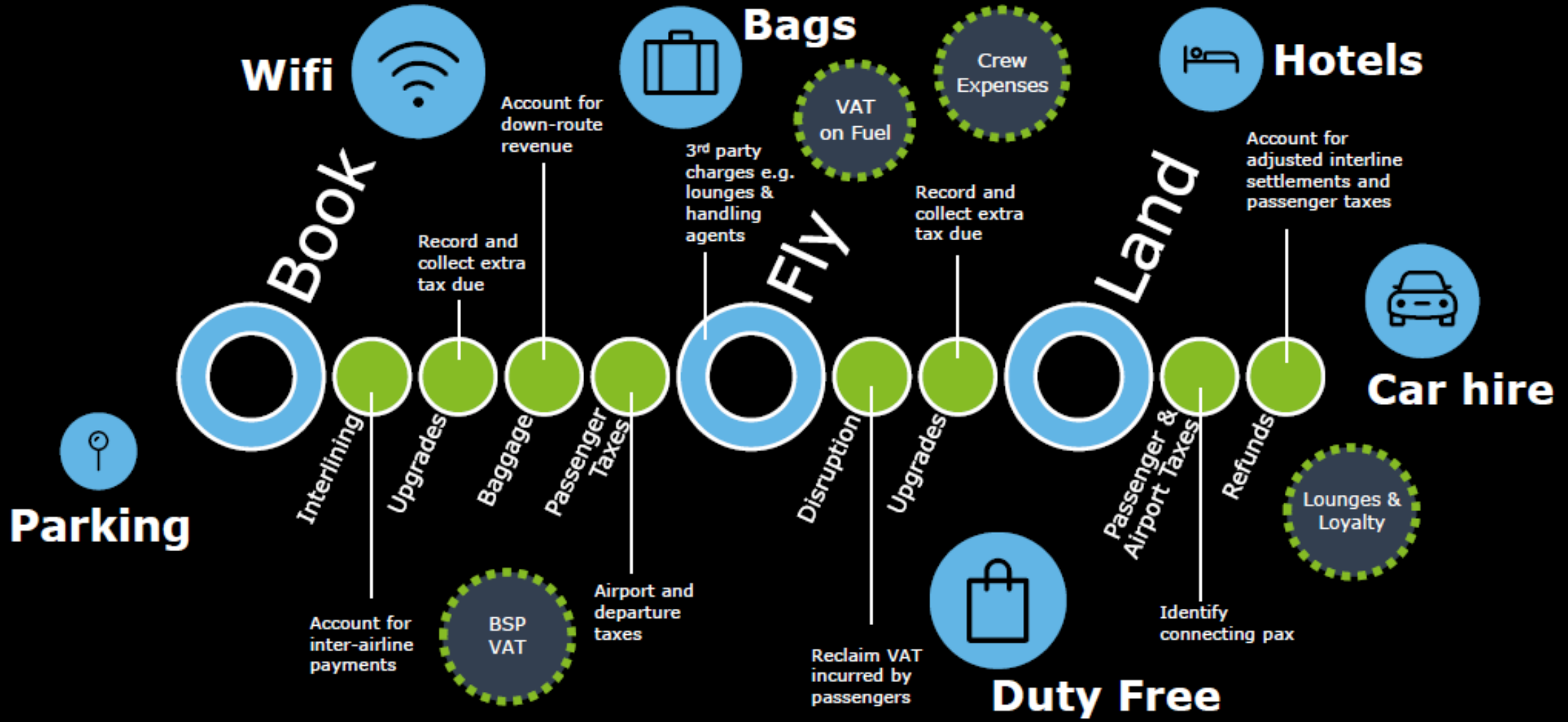


24/7 Airline Operations

A non-stop stream of tax events, from across the globe

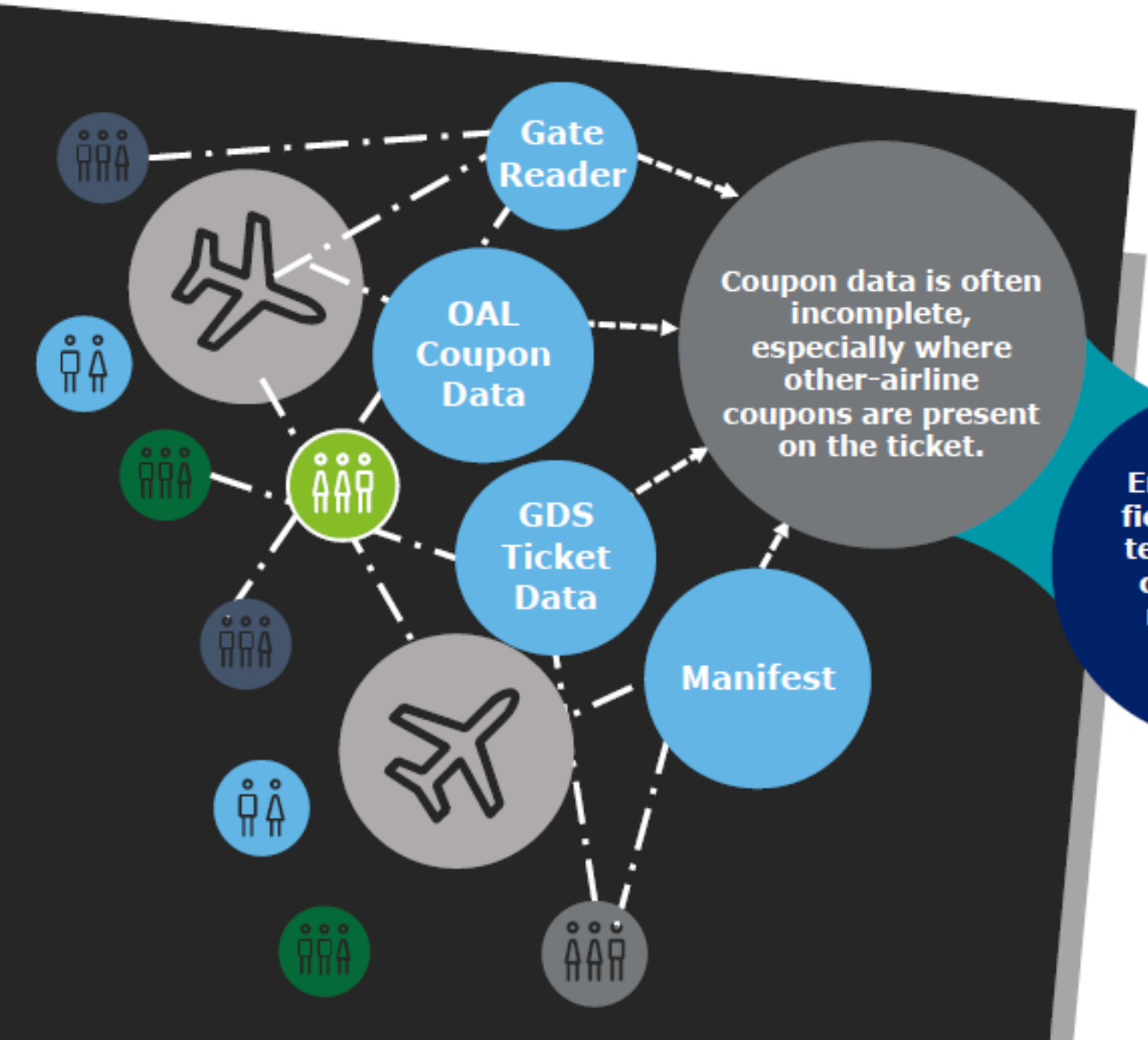
24/7 Airline Operations

A non-stop stream of tax events, from across the globe



The Current Challenge

How to transform data from many sources into useful information?



Coupon data is often incomplete, especially where other-airline coupons are present on the ticket.

Endorsement fields are free text, but hold crucial data needed for reporting

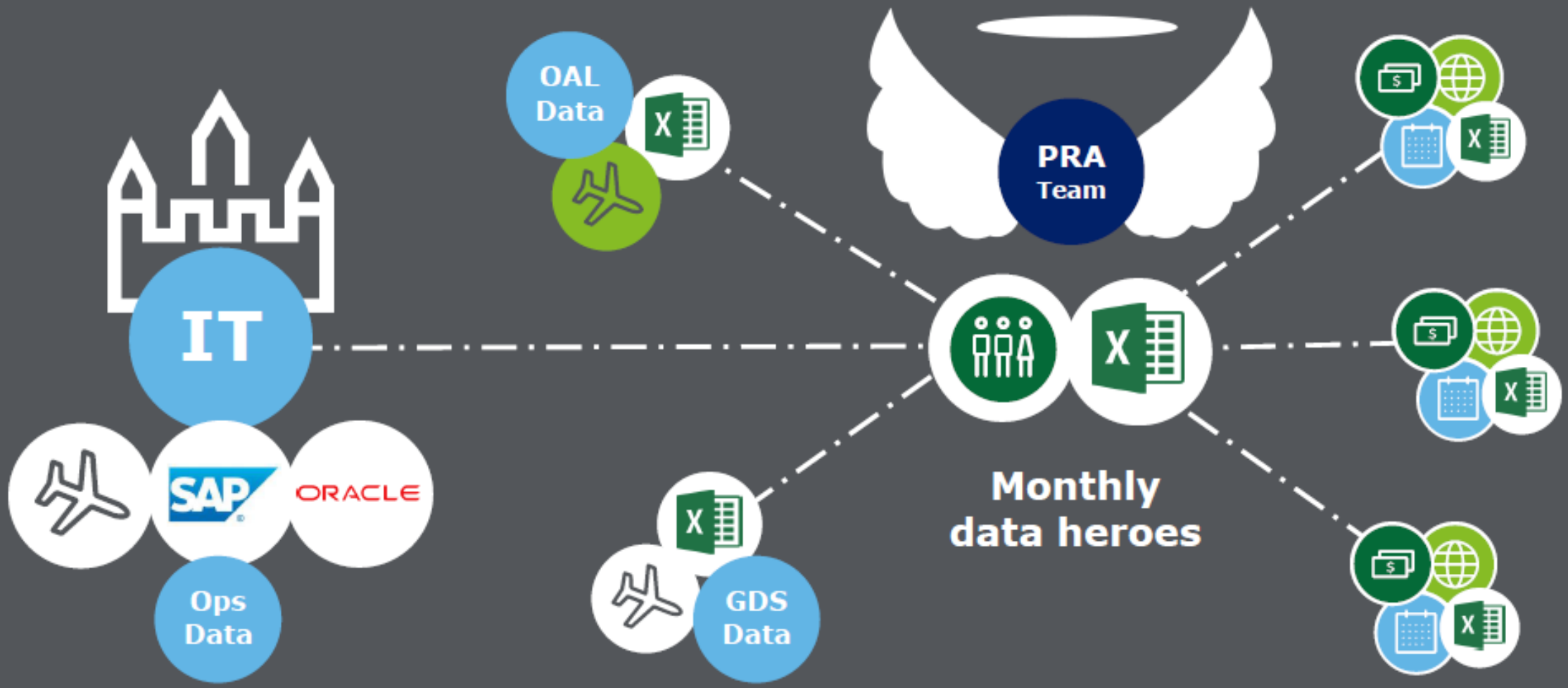
'Missing' data leads to missed exemptions and systemic monthly overpayments

Manual adjustments can cost valuable time every month.

How accurate are your returns?

What happens today, every month?

Reliance on IT + regular, challenging month-end reporting process



Case Study
UK Air Passenger Duty

UK APD

An Overview

Payable on chargeable passengers departing the UK

2018 rates	Economy	Premium Eco, Business or First
Band A	£13	£26
Band B	£78	£156

Not payable on exempt passengers or journeys

Young persons

- Unseated infants (under 2 years old)
- Under 12 years old for flights departing since 1 May 2015
- Under 16 years old for flights departing since 1 March 2016

Connections

- Transfers within the relevant time limits

Others

- Operational Staff, Deportees, NATO

APD Data Compliance Matrix

What are the data points involved?

APD	Flight Date	PAX Identifier	Young Person & Infant Info	APD Charged	Exemption Reason	APD Band
Booking	PNR & Creation Date	Number in Party	PAX Name & DOB	Issuing Station	Flight Times & Numbers	Action Codes
Tickets	Issuing Carrier	Ticket Number	Origin & Destination	Carrier (Op & Actual)	Conjunction Ticket No's	Endorsements
Coupons	Issuing Carrier Ticket Number	Path No & Sequence	Flight Times & Number	Coupon Status Code	Origin & Destination	RBD/Cabin
Check-in	PAX Identifier	PAX Identifier	Check-in Time	GDS/Action Codes	Infant Indicator	Flight Time & Number
Boarding Gate	PNR & Creation Date	PAX Identifier	Check-in Seq Num	Boarded Y/N & Time	Lap Infant Indicator	Flight Time & Number

The potential overpayment for just one daily flight over a year

Based on the configuration and load factor for a typical aircraft

Deloitte Airlines

DO2018 LHR JFK B777 F6/ J49/ Y270

Load Factor 97%	Overpayment Rate 2.0%		
The proportion of seats across all classes that are full. We factor that 9% of these passengers will be exempt from APD for the purpose of this example.			
Total APD 1 Flight	Chargeable Pax 1 Flight	Overpayment 1 Flight	Overpayment 365 Flights
£26,052	286	£521	£190,165

Solutions

What's best in class?

Assurance across your route network

Using an analytics based approach, our tools are able to do a comprehensive review of your data, alongside our tax team advising on process change.

Check the accuracy of your source data

Take a fresh, deeper look through your historical data

Using your lookback to submit corrected returns

Reduce the time are you spending monthly on compliance processes

Use better tools to handle large volumes of data

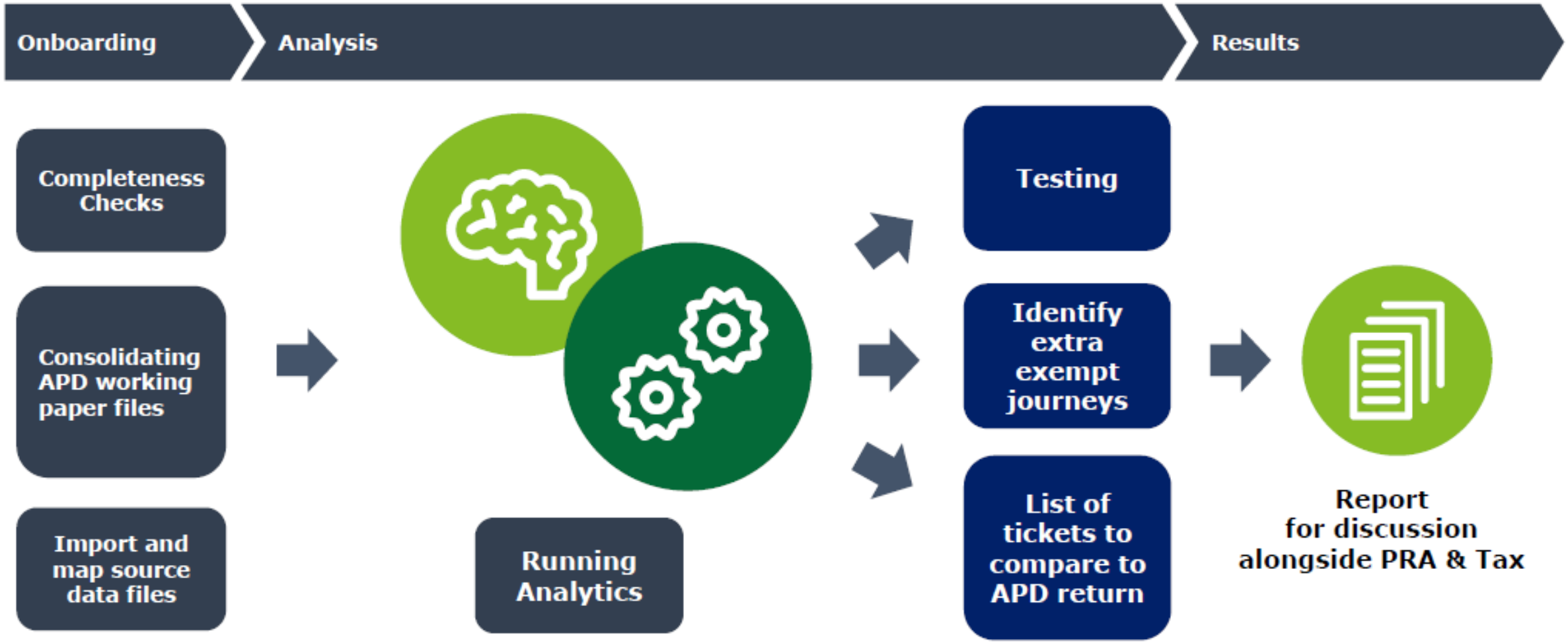
Reduce Risk

Increase Accuracy

Monitor Compliance

Improve Insight

Ticket Tax Review



Demo’s

Any Questions?

Thank you!

Mark Costa
Director
markcosta@deloitte.co.uk

Deloitte.

Is Blockchain fit for Data?

Nicolas Kozakiewicz, Fellow, Atos


The Daily T

Tuesday, June 26, 2019

Cryptocurrencies will work!

...(but maybe not like you think)

Worldline

Currencies = Trade

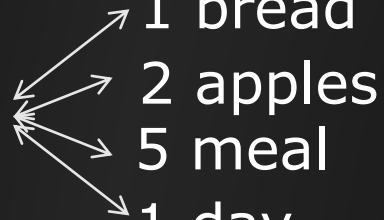
- **Exists since Humanity**
- **Base for Society**
- **Base for Commerce**

Worldline

(easy and Immediate)

Currencies = Mean of exchange, vehicle for Value

- Traded kg of bread for 2 kg of apples
- Traded meal for harvest day
- Needed a standard of conversion (1 Cur)



Worldline

But both require that :

- Users adopt that currency (i.e. believes in its Solvency)
- Exits a vast enough « merchand » network (i.e. enough other users I want to trade with also believes in its Solvency)

It’s a TRUST matter mainly

diate

- **Solvency can**
- **Service embeds vaults, cashier desks, checks, cards, atms, … Anything to make the flow between safely stored currency and payment seamless**

Worldline

bitcoin Era

- **Response of Cyberpunks to the Digital Transformation**
- **Use Internet to replace the fiat currency system just like for the other businesses….**

But…

Solvency

Service

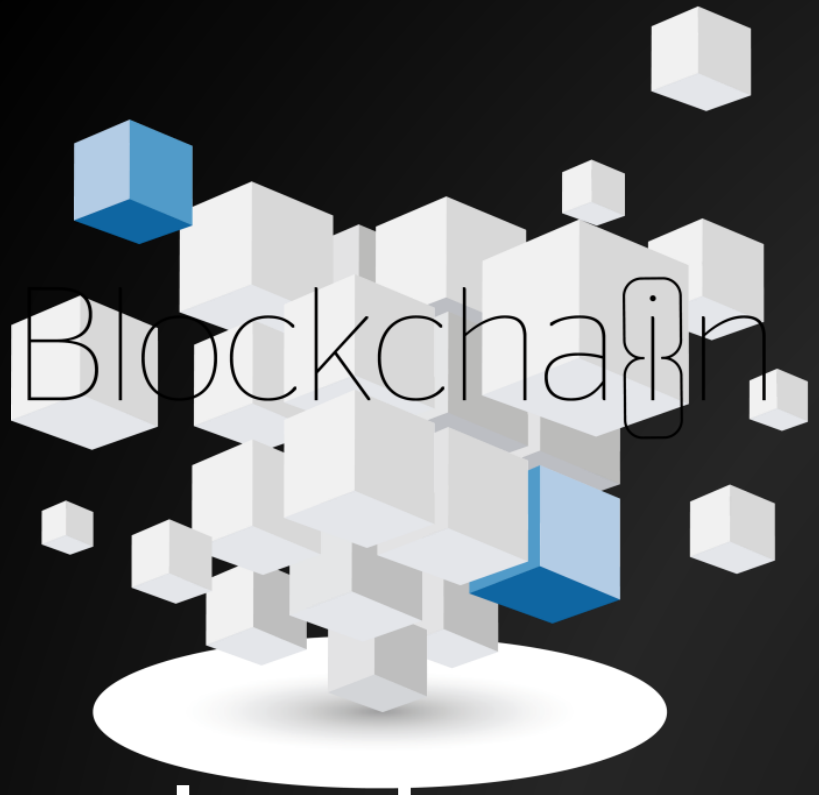
Backed up onto nothing
Full speculatory

Slow (60'), not scalable not eco friendly,
expensive…

Worldline

Blockchain is the new multi-market trust-aceable protocol for End 2 End Digital Services.

Worldline



in short

Worldline

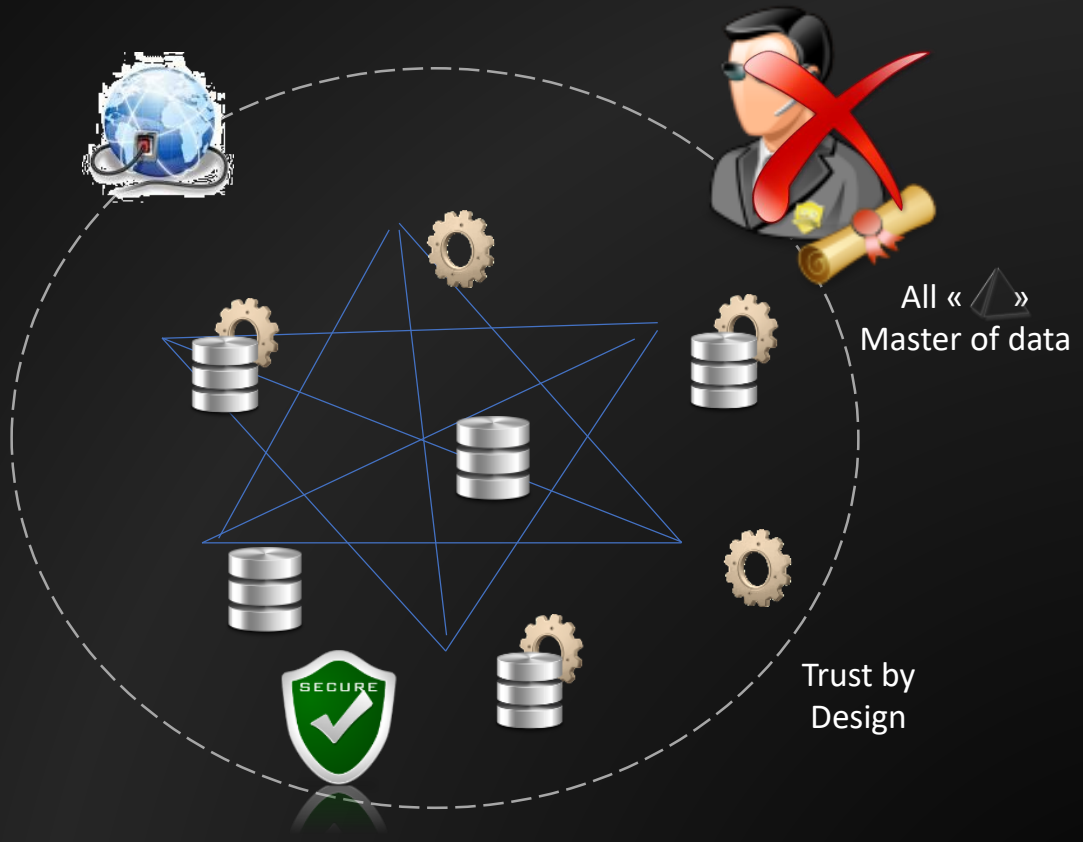
Blockchain Classical Context

Need to trace/ log events or data / But without native trust

Worldline

Going to De/Centralized services

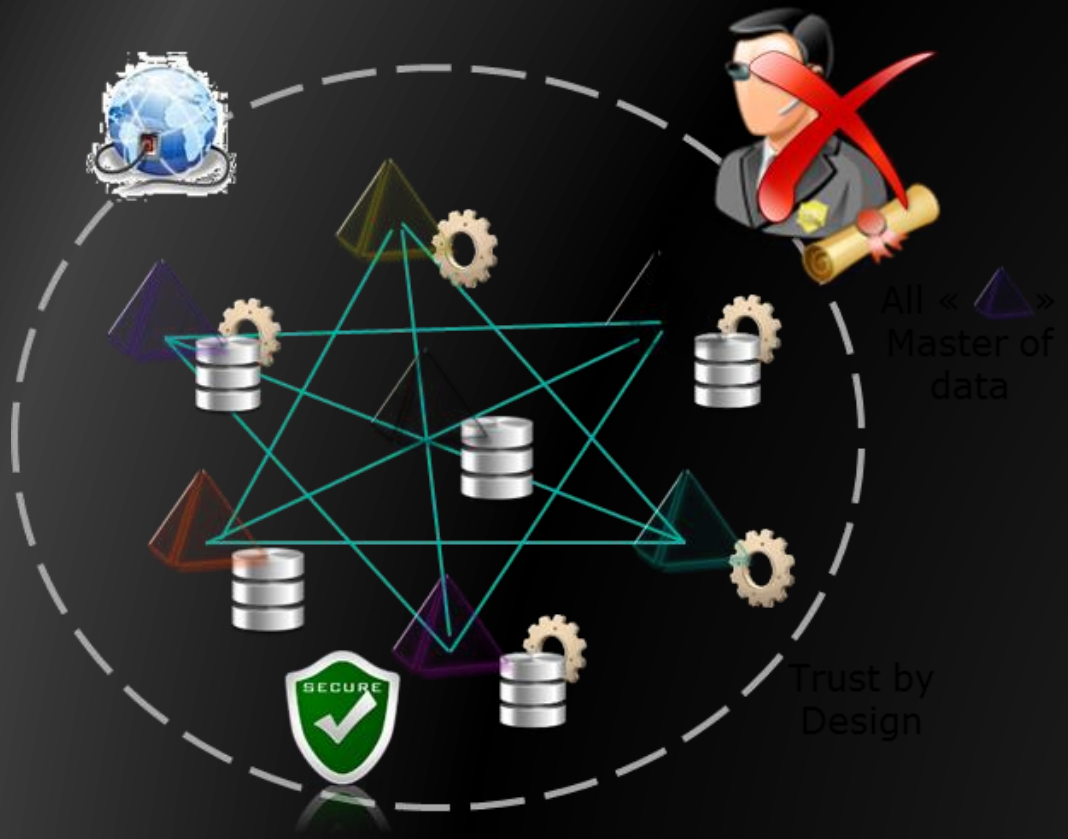
Centralized Governance



Decentralized Governance

Worldline

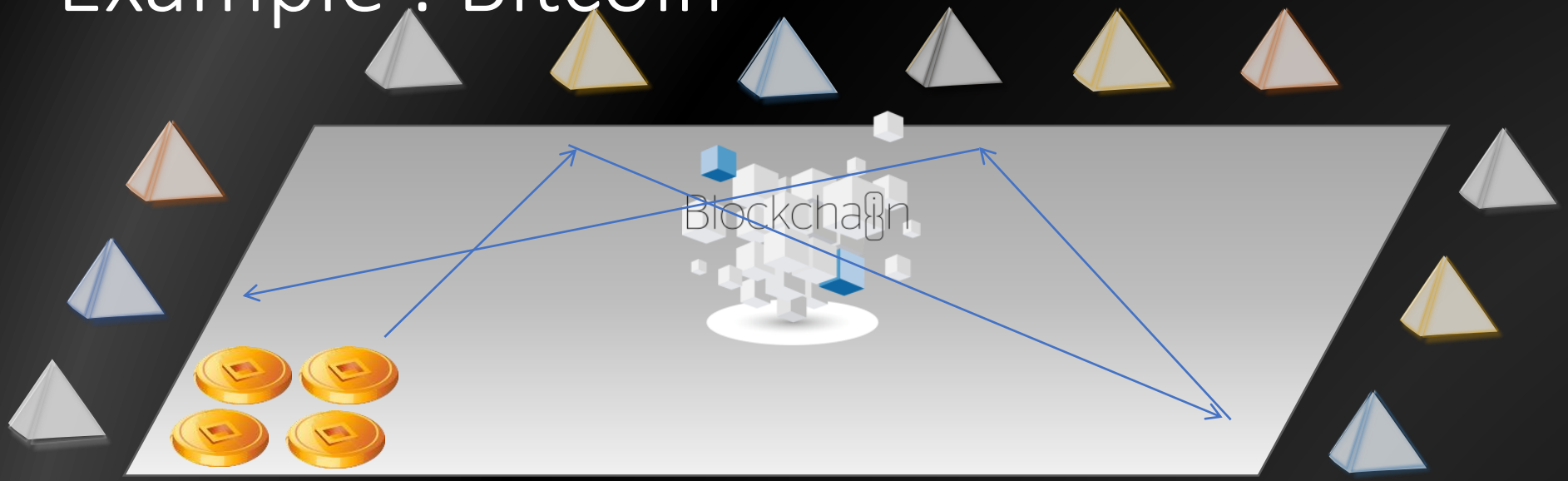
Assets



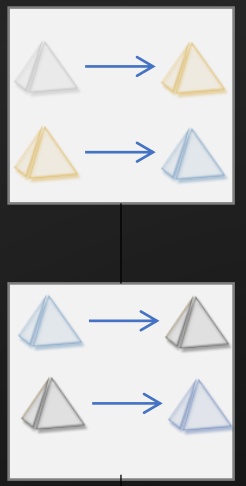
- Trusted-party free yet
- Secured by design
- Scalable by design
- Multi-tenant by design
- Easily interfaceable with ISs
- Stand alone (little traction with other services, simple APIs)
- Managed access to Data
- Easily Auditable by design
- Easily Evolutive by design

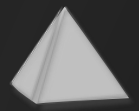
Worldline

Example : Bitcoin



Blockchain plane



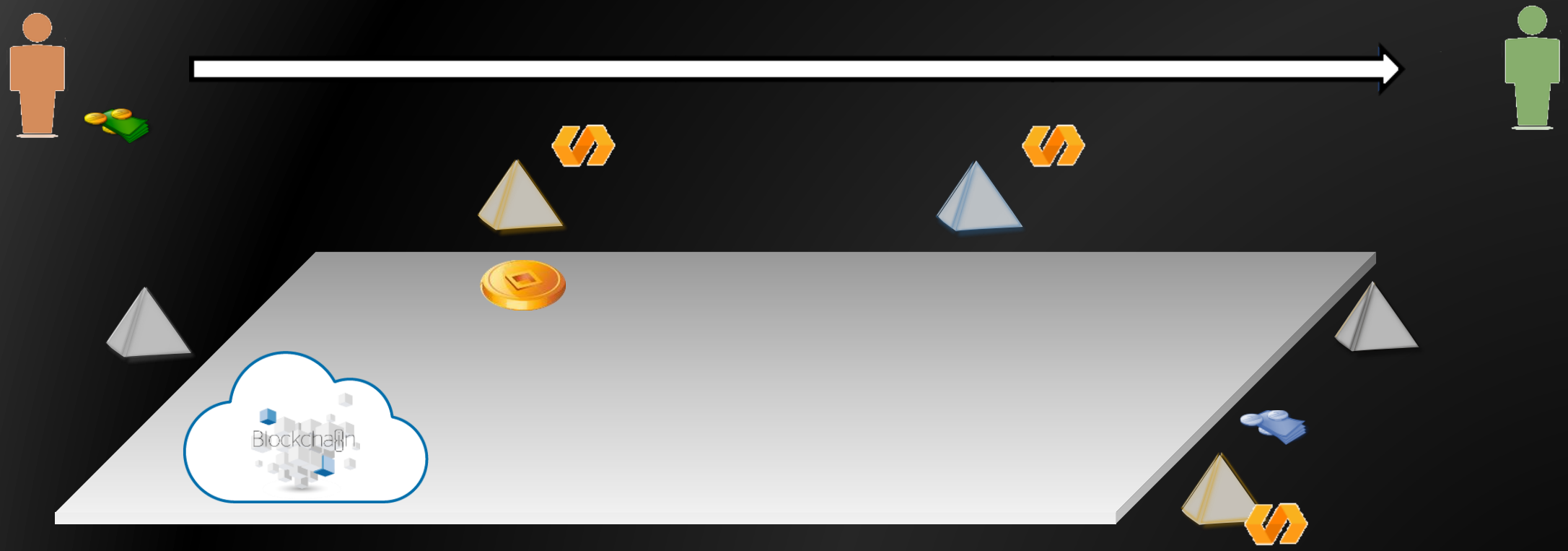
Authentication of all « » 

Trace of all →

Immutability of information

Worldline

xCurrency xBorder



Worldline

What's next ?

- **Currencies are too slow & old and need to evolve**
- **Payment methods at risk with Digital Transformation**
- **(Current) Crypto-currencies are not the solution, but blockhain is valid**

Forbes : Explaining Stable Coins, The Holy Grail Of Cryptocurrency (03/18)
Gartner : The Crytpto Economy (Explaining Stable Coins) (05/18)
Deloitte : Stable coins : le début d'une nouvelle ère pour les crypto-monnaies (07/18)
BitPay : BitPay Introduces Stable Coin Settlements in Gemini Dollars and Circle USD Coin (10/18)
Bloomberg : Crypto 2.0 (Stable Coins) May Be Digital Cash You Can Actually Use to Buy Stuff (11/ 18)

Worldline

Air Travel Use cases

- Hotel, restaurant, transportation vouchers

- Miles / Loyalty points

- Inter-companies legs compensation

- Close loop no-change « asset » management
  (like ticket restaurants)
- Close loop change « asset » management
  (like other currencies)
- B2B multi party compensation chamber

Worldline

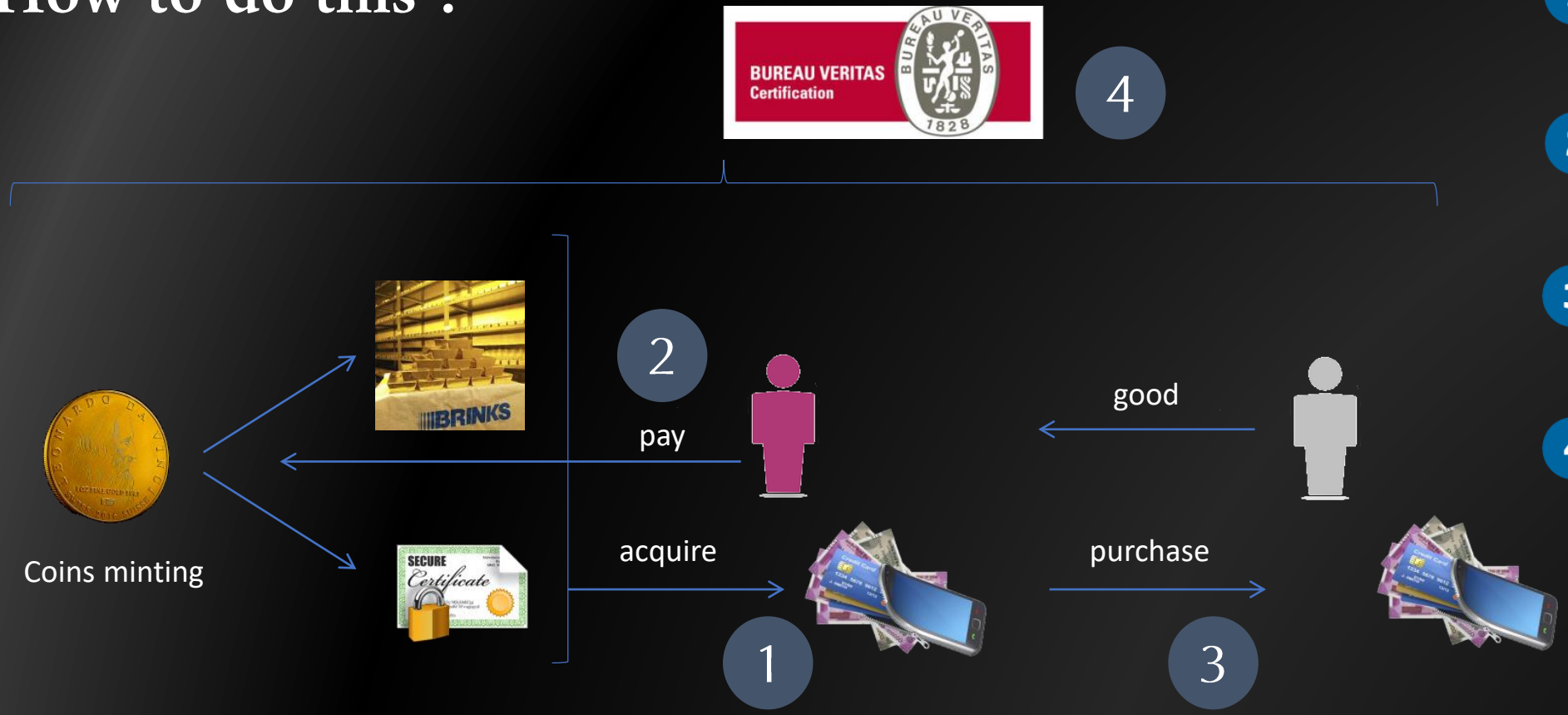
Stable Coin use case:

1- Ease of spending of digital fiat currencies

2- Gold value security

Worldline

How to do this ?

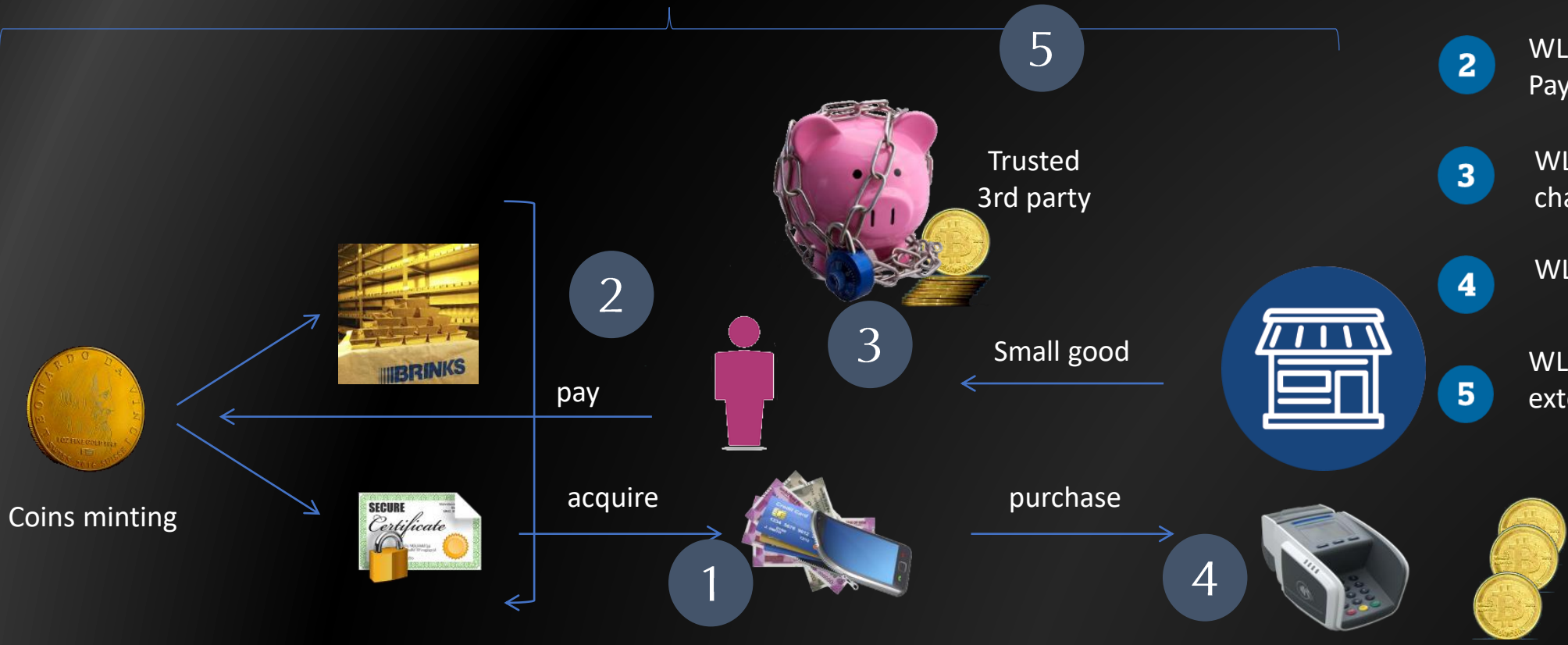


1. WL Wallet; WL Trusted Authentication
2. WL Wallet; WL Payment
3. WL Blockchain Origin
4. WL certification with external 3rd party

Worldline

What's next ?

1. WL Wallet; WL Trusted Authentication
2. WL Wallet; WL Payment
3. WL Compensation chamber
4. WL Blockchain Origin
5. WL certification with external 3rd party



Worldline

What technical assets?

Wallet

Strong Authentication

Payment

Blockchain Platform (with Auditor)

Acquiring Network

Retail presence & Solutions

Worldline

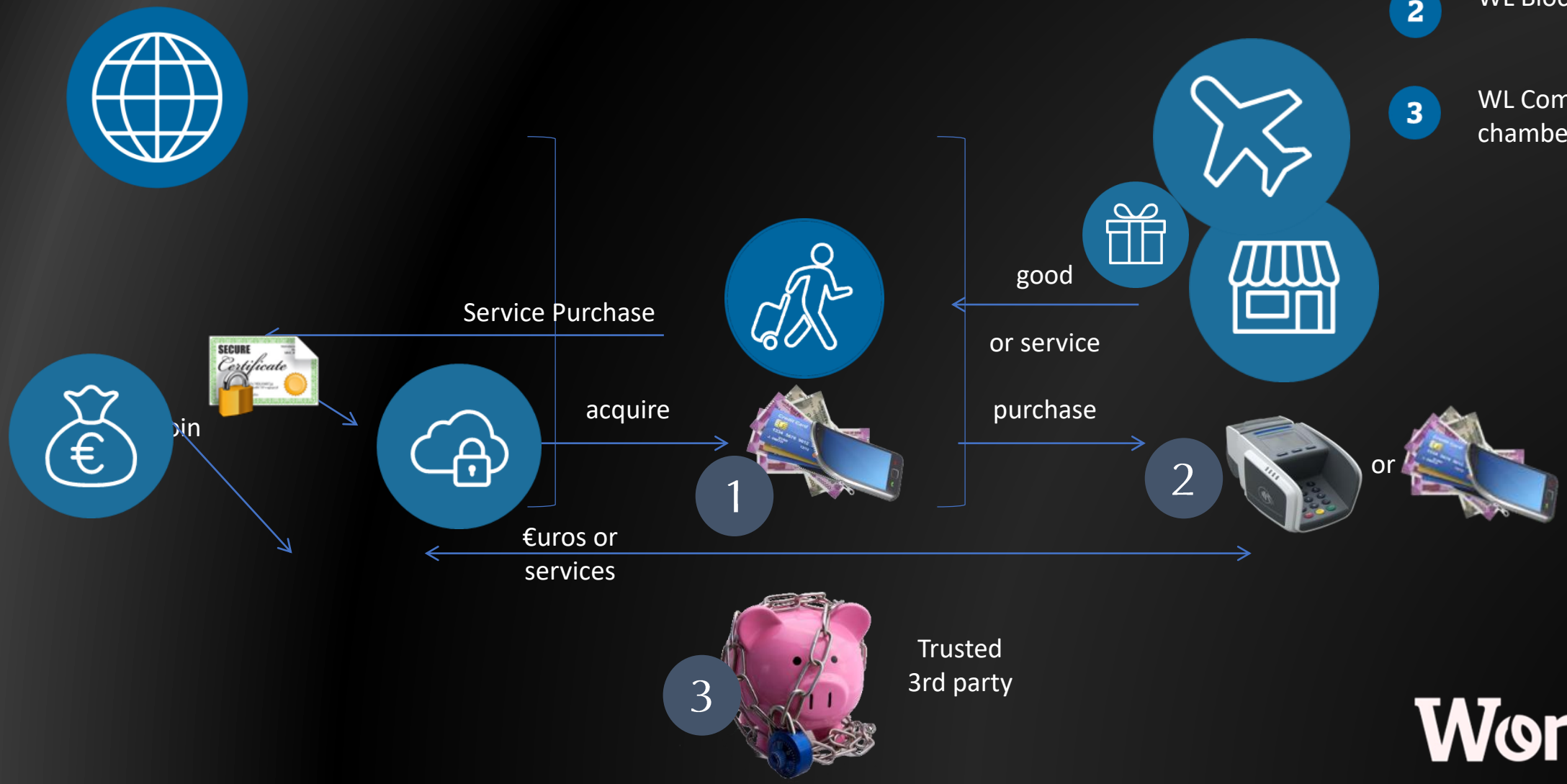
Citizen Action

1. WL Wallet; WL Trusted Authentication
2. WL Blockchain Origin
3. WL Compensation chamber

Worldline

Air Travel Scheme

1. WL Wallet; WL Trusted Authentication
2. WL Blockchain Origin
3. WL Compensation chamber



Worldline

No time to waste!

Let’s put this in practice !

Worldline

Control your Data or someone else will

Moderator: **Juan Ivan Martin**, Head of Digital Finance, IATA

Benjamin Madjar, Director, Deutsche Bank

Mark Costa, Director, Deloitte

Conrad Lennard, Sr. Sales Exec, Feature Space

Nicolas Kozakiewicz, Fellow, Atos

Pascal Burg, Director, Edgar, Dunn & Company

Juliette Iles, VP Finance Strategy & ePayments, Emirates Group

Networking Dinner

AEGEAN

A STAR ALLIANCE MEMBER

ATHENS INTERNATIONAL AIRPORT ELEFTHERIOS VENIZELOS

Buses depart from the Lobby area at 19:00 Sharp