ATPS APAC

Brands working together to deliver a 1st class customer experience
Engage, Experience, Execute

To find the specific presentation you are after you may need to move down several pages as the slides are all merged
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wirecard
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Discover Global Network

ATPS APAC 2019, #ATPS
Networking Reception Sponsor

riskified
ATPS, Asia Pacific

Brands working together to deliver a 1\textsuperscript{st} class customer experience
Engage, Experience, Execute
AI and Machine Learning for Fraud Prevention and a Better Customer Experience – Airline Use Cases

Thursday, Aug 29, 2019

Nikhil Borle

Nikhil.borle@ibm.com
SaaS ASEAN
IBM Global Markets - Cognitive Solutions Unit Industry Platforms
Loyalty Fraud - Challenges in the Airlines industry

An Overview
Airline Fraud MOs – Getting to the miles and cashing out

• Account Takeover
  • Take over Miles account using bought credentials
  • Bot Credential Stuffing with bulk dumps

• Account Creation
  • Create account for non loyalty fraud customer using stole identify >> accrue miles without his knowledge (No victim fraud)
  • Create “mule” accounts to collect miles from other accounts

• Miles inflation
  • Account inflation by redeeming uncredited tickets
  • Purchase high-priced tickets to attain points from their credit card company >> cancel the ticket after points have been sold
  • Issue many tickets to the same client using stolen credit-cards (points gained, CNP will be declined)
  • Buy Many tickets credited to various accounts
  • Transfer miles from multiple accounts to one “mule” account

• Cash-out miles
  • Miles marketplace sites - “Sell you miles”
  • Buy flight with miles for upcoming flights (within 12 hours)
  • Buy flight to cheap (un monitored) destination and than change destination
Digital growth begins with convenience and trust

Customers demand convenience, mobile access anytime, anywhere

Digital Convenience + Manage the Risk of Convenience = Business Growth
Why Punish 100% of the Users Because of the Bad Actions of a Few?

- Most users are GOOD and should be given frictionless access.
- Less than 1% of users are suspected to be ROGUE and should trigger additional authentication challenges.
Customer journey: Dynamically building digital identity trust

Digital Customer Lifecycle

<table>
<thead>
<tr>
<th>ESTABLISH TRUST</th>
<th>SUSTAIN TRUST</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

- **Discover**
  - Discover the app or service and explore new relationship

- **Onboard / Validate**
  - Register for app or service and become an authorized user by proving initial identity claims

- **Login**
  - Authenticate self with established credentials

- **Use**
  - Use app or service in an ongoing context

Level of Trust

- Unknown User
- Trusted User
Our core model - Trust but Verify!!

Traditional Authentication Is Not Enough to Establish Digital Trust

**Authentication Methods**

- **Something you KNOW**
  - Password
  - Passphrase

- **Something you HAVE**
  - Physical Token
  - Devices you have

- **Something you ARE**
  - Physical Biometrics
  - Passive Biometrics

**Potential Attacks**

- User was phished
- Credentials stealing via malware
- Malware/SMS stealers
- Device ID circumvention – Device Spoofing
- Device ID circumvention – RAT
- Fingerprint copy, voice recording
- Location spoofing
Digital Identity Trust begins with context

User
User’s attributes

Behavior
User patterns and journey analysis

Environment
User’s network environment

Device
Strong global & Persistent device fingerprint

Activity
User’s current activity

Digital Identity Trust

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Merge Fraud and Risk with layered identity confidence and trust

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Onboard / Validate

Login

Use

Customer Journey

Discover

Phone number intelligence & email reputation

Cross-channel user behavioral profiling

BOT detection

Activity & transaction analysis

Fraud network

Transparent authentication

User friendly step-up authentication

Phishing

Behavioral biometrics & Journey analysis

Session analytics: location, social engineering, RAT detection

Device hygiene analysis: malware and spoofing

Persistent global device ID

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mastercard
Trust What You Cannot See – AI & ML in Action

**Behavioral Biometrics Similarity**
Determining a score based on Behavioral Biometrics similarity algorithm

**User & Device Similarity**
Determining a score based on Device and User similarity algorithm

**Weighted Score**
Determine a dynamic weighted score based on ‘User & Device’ similarity score and Behavioral Biometrics Score

**User Routine**
Calculate updated score incorporating user routine insights

**User Routine Insights**

**Risk Parameters**
Calculate final score incorporating the session’s risk parameters assessment
Unboxing IBM’s Digital Identity Trust Platform

Digital Identity Trust Platform

Business Solutions
- Account Takeover Detection
- New Account Fraud Detection
- Risk Based Auth
- Open Banking - Aggregator & 3rd Party Risk Management
- Mule Account Detection
- Digital Identity Insights

Identity Analytics Service: Identity Insights + Fraud/Business Challenge >> Digital Identity Solutions

Digital Identity Insights Micro-Services
- Device Fingerprint & History
- Device Spoofing Detection
- Mobile Device Hygiene
- Malware Detection
- Phishing Detection
- Geo Location & ISP Detection
- Location Spoofing Detection
- Virtual Machine Detection
- RAT Detection
- Bot Detection
- Behavioral Biometrics Anomalies
- Behavioral Fraudster Patterns
- Navigation Patterns Anomalies
- Phone # Reputation
- Email Address Reputation
- MFA

Security Research Service: Raw Data + Threat Analysis >> Identity Insights

Raw Data Elements
- Mouse Dynamics
- Keyboard Dynamics
- Connection Information
- Browser Information
- Time Indicators
- HTML Analysis
- Mobile # Intelligence
- Phishing Intelligence
- Email Intelligence
- Mobile OS Information
- Touch Dynamics
- Device Characteristics
- Mobile Dynamics
- Additional Attributes
Digital identity trust lifecycle powered by AI and machine learning

**Trusteer Digital Identity Trust**

<table>
<thead>
<tr>
<th>Trustee Pinpoint Family</th>
<th>ESTABLISH</th>
<th>SUSTAIN</th>
<th>CONFIRM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pinpoint Assure</strong></td>
<td>Assess risk of new and unknown digital identities</td>
<td>Dynamic behavioral risk assessment of known digital identities</td>
<td>Increase trust level with flexible, strong authentication</td>
</tr>
<tr>
<td><strong>Rapport</strong></td>
<td>Detect &amp; remediate malware &amp; protect against phishing attacks</td>
<td>Mobile</td>
<td>IBM Safer Payments</td>
</tr>
</tbody>
</table>

**Intelligence Cloud**
Agile and scalable cloud platform

**Global Identity Trust Consortium**
Correlates among known patterns, devices, and behaviors

INTEGRATION

**IBM Safer Payments**
Omnichannel fraud protection
Accelerate digital growth by dynamically establishing identity trust across the omnichannel user journey

- Continuous digital identity assurance with user-friendly adaptive authentication
- Scalable and agile cloud platform powered by fraud and risk expertise
- Intelligence security service infused with layers of AI and machine learning for deep understanding of trends, patterns and threat landscape.

IBM Trusteer
Discover identity, build trust

Digital identity trust platform

500+ organizations supported
40B+ application accesses a month
1B + user sessions a month
THANK YOU

FOLLOW US ON:
- ibm.com/security
- securityintelligence.com
- xforce.ibmcloud.com
- @ibmsecurity
- youtube/user/ibmsecuritysolutions

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Hardware, software, services and process solutions from IBM and its partners provide an layered approach that builds the foundation for protection. The IBM Security products and solutions, services and processes help customers protect themselves from known and emerging risks by using a context aware strategy.

Comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products or services to be most effective. IBM does not warrant that any systems, products or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.
Breakfast sponsor
Online Payments in the Travel Industry

MENA & APAC on the digital payments adoption curve

Remo Giovanni Abbondandolo
VP MENA
Online Travel space, what’s new in MENA

- Changing travel dynamic
- Impact of millennials on the travel market
- The rise of low cost airlines
- Roles of OTAs and metas
- Religious travel
Within the Saudi market, travelers tend to favor shorter and more frequent trips. Trip durations have declined from 12 days in 2016 to 7 days in 2018. As trip fares have dropped 9% within the past year, travelers are taking advantage and traveling more often.
Travel planning and booking behavior

According to Cleartrip and Flyin, 67% of Saudi travelers book their travel plans via mobile device the same week of travel. 27% of Saudi mobile bookings are made within a 48-hour window prior to travel.
Online Payment. What’s different in MENA

• Highly regulated and fragmented
• Multiple local payment methods
• Mobile adoption
• Trust
• Fraud and chargebacks
Approval rates in online payments

- Because of the high transaction value, the travel industry is observing a slower growth rate than other industries such as e-commerce.

- The MENA region is following close behind global trends regarding online travel acceptance ratios.
3D Secure and chargeback correlation

- The majority of chargebacks are friendly, i.e. a chargeback for a missed flight.
- Merchants enjoy using 3D Secure as it shifts liability off their back, however they should be aware of the possible loss of sales by using 3D Secure.
Transaction declines

There are more than 100 different reasons a transaction may be declined, 90% fall under 4 major categories.
Payment methods

Visa and Mastercard are currently dominating the market in terms of being used for online bookings.
Market share of MADA card in Saudi Arabia
Comparing MENA to APAC
Share of users worldwide who used a mobile payment service in the last month as of 4th quarter 2018, by region

Global mobile payment usage penetration 2018, by region

GlobalWebindex (2019)
Payment methods accepted for direct sales in the airline industry worldwide in 2017, by carrier type.

Accepted payment methods in the airline industry worldwide, 2017.
APAC Gross Domestic Product and Total Travel Market, Annual Change (% Local Currencies) by Market, 2018*

1 GDP and travel market growth projected **ANZ = travel market growth for Australia and New Zealand and GDP for Australia only.

Source: International Monetary Fund, Asia Pacific online Travel Overview 2019

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Spotlight on the largest markets…

China & India
China Payments

• As a nation with high smartphone adoption, it comes as no surprise that digital wallets are used to pay for the majority of all e-commerce transactions, 54% in all. Major players include Alipay & WeChat Pay.

• Mobile payments aren’t limited to small day-to-day purchases.

• Cards are the second on the list with 21% of e-commerce payments.

Top e-commerce merchant segments:

- 29% clothing
- 16.8% consumer electronics
- 15.8% travel

Fraud benchmarks

- 0.10% Chargeback rate
- 0.2% Fraud rate
India Payments

- The average age in India is 27.9 years old. With more than half of its population below the age of 25, and a trend of affordable smartphone devices – mobile commerce is expected to take-off.

- Going in-app. India’s app store downloads grew by 165% between 2016 and 2018. In-app transactions accounts for 82.4% of mobile commerce transactions.

- Credit & debit cards are the most-preferred payment method for paying online, with 29% of transactions. Close behind cards, is the use of digital wallets at 25%. Most popular wallets include Airtel Money & PayPal. WhatsApp pay is set to be launched into the market, targeting their 350-400M users.

- Declining use of Cash. The state is encouraging its citizens to shift to digital payments, by demonetising Rs500 & Rs1000 bank notes. This is part of broader trends to tackle corruption.

Top e-commerce merchant segments:

- 56% travel
- 16.5% consumer electronics
- 10.9% clothing

Fraud benchmarks:

- Chargeback rate: n/a
- Fraud rate: 4-5%
Comparing travel payments in MENA & APAC

Similarities:

• Age demographics – young demographics driving ecommerce and smartphone adoption
• Cracking local payments is key to unlocking the potential in the markets
• Densely populated countries in close proximity within a fragmented region

Differentiators:

• Stronger presence of LCCs
• Greater country-to-country cultural and language differences in APAC
• Higher e-Wallet dominance
Download the report

Checkout.com/travel
Breakfast sponsor
Managing Cross Border Payments with Dynamic Data

Carlos Testa, GM Asia Pacific, Emailage
Budi Waskita, Head of Acquiring, Traveloka
“What is history? An echo of the past in the future; a reflex from the future on the past.”

Victor Hugo
Zheng He (1371-1435)
lessons from history

Christopher Columbus

Source: OSU.Edu
Mercantilist World Economy
1530-1776

Western Europe
- Mints gold and silver bullion from the Americas into currency
- Able to finance trade with India and China
- Able to finance plantations in the Americas
- Profits from all overseas endeavors accumulate
- Able to finance agricultural improvements and the industrial revolution at home

Europe expansion

Middle East
- No longer the main intercontinental crossroads as maritime trade circumvents it

Africa
- Source of slave labor for American plantations
- Market for European manufactures
- Profits from these endeavors accumulate in western Europe

The Americas
- Enormous quantities of gold and silver bullion (looted then mined)
- Enormous quantities of free land (stolen)
- Slaves (first procured locally, then imported from Africa)
- Plantation production of agricultural commodities (especially sugar) for European and global markets
- Profits from all of these endeavors accumulate in western Europe

Asia
- Europeans able to purchase expensive spices and manufactures with cheap American gold (in India) and silver (in China)
- Europeans involved in “country” trade (trade between Asian ports)
- Profits from these endeavors accumulate in western Europe

Source: Eric Ross, 2015
Commodore Matthew Perry (1794-1858) and his “Black” ships arriving at Tokyo Bay, Japan

Source: Stratfor
<table>
<thead>
<tr>
<th>Country</th>
<th>Growth in GDP Per Capita (1968-2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea, Rep.</td>
<td>15711%</td>
</tr>
<tr>
<td>China</td>
<td>10582%</td>
</tr>
<tr>
<td>Singapore</td>
<td>9014%</td>
</tr>
<tr>
<td>Hong Kong SAR, China</td>
<td>6719%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>5885%</td>
</tr>
<tr>
<td>Thailand</td>
<td>4061%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3375%</td>
</tr>
<tr>
<td>Japan</td>
<td>2608%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2280%</td>
</tr>
<tr>
<td>European Union</td>
<td>2222%</td>
</tr>
<tr>
<td>India</td>
<td>1918%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>1610%</td>
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<tr>
<td>World</td>
<td>1534%</td>
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<tr>
<td>Philippines</td>
<td>1281%</td>
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<tr>
<td>United States</td>
<td>1234%</td>
</tr>
<tr>
<td>Vietnam*</td>
<td>1008%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>811%</td>
</tr>
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</table>

### Top 20 Worldwide Internet Leaders 2018

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Region</th>
<th>Market Value ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple</td>
<td>USA</td>
<td>418</td>
</tr>
<tr>
<td>2</td>
<td>Amazon</td>
<td>USA</td>
<td>121</td>
</tr>
<tr>
<td>3</td>
<td>Microsoft</td>
<td>USA</td>
<td>291</td>
</tr>
<tr>
<td>4</td>
<td>Google / Alphabet</td>
<td>USA</td>
<td>288</td>
</tr>
<tr>
<td>5</td>
<td>Facebook</td>
<td>USA</td>
<td>56</td>
</tr>
<tr>
<td>6</td>
<td>Alibaba</td>
<td>China</td>
<td>71</td>
</tr>
<tr>
<td>7</td>
<td>Tencent</td>
<td>China</td>
<td>13</td>
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<tr>
<td>8</td>
<td>Netflix</td>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ant Financial**</td>
<td>China</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>eBay + PayPal**</td>
<td>USA</td>
<td>71</td>
</tr>
<tr>
<td>11</td>
<td>Booking Holdings</td>
<td>USA</td>
<td>41</td>
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<tr>
<td>12</td>
<td>Salesforce.com</td>
<td>USA</td>
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<tr>
<td>13</td>
<td>Baidu</td>
<td>China</td>
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<td>Xiaomi</td>
<td>China</td>
<td></td>
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<tr>
<td>15</td>
<td>Didi Chuxing</td>
<td>China</td>
<td></td>
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<tr>
<td>16</td>
<td>JD.com</td>
<td>China</td>
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<tr>
<td>17</td>
<td>Airbnb</td>
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<td>Meituan-Dianping</td>
<td>China</td>
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<td>Toutiao</td>
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<td>20</td>
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</tr>
</tbody>
</table>

**Total** $1,429

Source: Mary Meeker, Internet Trends 2019

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Asia only 2 names
Today’s (2018) Top 20 Worldwide Internet Leaders = USA @ 11... Asia @ 9...

Source: Mary Meeker, Internet Trends 2019

<table>
<thead>
<tr>
<th>Rank</th>
<th>2018 Company</th>
<th>Region</th>
<th>Market Value ($B)</th>
<th>5/29/13</th>
<th>5/29/18</th>
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<tr>
<td>1</td>
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<td>2</td>
<td>Amazon</td>
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<td>Google / Alphabet</td>
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<td>15</td>
<td>Uber</td>
<td>USA</td>
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<td>16</td>
<td>Didi Chuxing</td>
<td>China</td>
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<td>China</td>
<td>--</td>
<td>30</td>
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</tr>
</tbody>
</table>

Total: $1,429 | $5,788
Internet - Asia Leads in Users + Potential

Internet Users by Region, 2018

Asia Pacific
- Internet Users: 52% of Global Internet Users
- Non-Internet Users: 48% Internet User Penetration in Region

Europe
- Internet Users: 15%
- Non-Internet Users: 85%

Africa & Middle East
- Internet Users: 13%
- Non-Internet Users: 87%

Latin America & Caribbean
- Internet Users: 10%
- Non-Internet Users: 90%

North America
- Internet Users: 8%
- Non-Internet Users: 92%

Internet Users – Top Countries, 2018

China
- Internet Users: highest

India
- Internet Users: 2nd highest

United States
- Internet Users: 3rd highest

Indonesia
- Internet Users: 4th highest

Brazil
- Internet Users: 5th highest

Japan
- Internet Users: 6th highest

Russia
- Internet Users: 7th highest

Mexico
- Internet Users: 8th highest

Germany
- Internet Users: 9th highest

The Philippines
- Internet Users: 10th highest

United Kingdom
- Internet Users: 11th highest

Iran (I.R.)
- Internet Users: 12th highest

Nigeria
- Internet Users: 13th highest

France
- Internet Users: 14th highest

Turkey
- Internet Users: 15th highest

Source: Internet Trends 2019
AIR PASSENGERS-
MAJOR DOMESTIC MARKETS
(million pass. journeys)

Source: IATA

ATPS APAC 2019, #ATPS

Mastercard
Online payment volume is growing fast

CNP fraud expanding even faster...

Payment Volume Card Present vs. Card Not Present

- 2018: Card Present = $2.1 T, CNP = $4.9 T
- 2023 Forecast: Card Present = $4.3 T, CNP = $6.3 T

CNP 15% CAGR, 3x faster

Fraud rates = 5X when compared to Card Present (In Store)

Source: Visa, Experian
Data Breaches are a reality we have to live with…

- **Mobile Service Provider**
  - 2M customers
  - names, phone numbers, emails, zip codes & account numbers

- **Global Airline**
  - 380K customers
  - names, emails, addresses & credit card numbers

- **Global Hotel Chain**
  - 500M customers
  - names, addresses & passport numbers

- **Other Breaches**
  - 145.5M customers
  - Driver license numbers, addresses, phones, DLS, emails & credit card numbers

Source: CISCO, Informationisbeautiful
# APAC - Rise of Fraud Losses

Figure 1: Online fraud losses have increased for 50% of surveyed businesses in Asia-Pacific in the past year

Q: In the past 12 months, has your business experienced more, less or the same in fraud losses?

<table>
<thead>
<tr>
<th>Country</th>
<th>Significantly more/Slightly more</th>
<th>The same amount/I don’t know</th>
<th>Significantly less/Slightly less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>60%</td>
<td>36%</td>
<td>4%</td>
</tr>
<tr>
<td>China</td>
<td>44%</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>34%</td>
<td>43%</td>
<td>23%</td>
</tr>
<tr>
<td>India</td>
<td>65%</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>40%</td>
<td>17%</td>
<td>43%</td>
</tr>
<tr>
<td>Japan</td>
<td>50%</td>
<td>44%</td>
<td>6%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>57%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>48%</td>
<td>40%</td>
<td>12%</td>
</tr>
<tr>
<td>Singapore</td>
<td>63%</td>
<td>29%</td>
<td>8%</td>
</tr>
<tr>
<td>Thailand</td>
<td>40%</td>
<td>20%</td>
<td>40%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>50%</td>
<td>6%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: Experian - Identity and Fraud Report 2019
Connecting more than 1,500 companies around the world to fight transaction and identity fraud. We help companies to scale into new markets and focus on what matters: grow their business.
Digital Identity

Billina Address
59 Normans Road,
Victoria 3318

Hashed CC
1234########

Customer ID
1904608839

Shipping Address
59 Normans Road,
Victoria 3318

Secondary Email
C.Tom9988@Hotmail.com

Email
TomC9998@gmail.com

Phone
(61) 903 535 112

Device ID
a5706XYZ$%

IP Address
1.44.255.255

Last Name
Cook

Full Name
Thomas Cook
Why the Email Address?

91% of users have the same email address for more than 3 years.

51% of users have the same email address for more than 10 years.

130 average number of accounts tied to an email address.

Critical for digital identity validation.
The Email Address:
Lots of History & Behavior

- Address
- Preferred Device
- Personal Phone Number
- Corporate Email
- Personal Email

Years:
1 2 3 4 5 6 7 8 9 10

ATPS APAC 2019, #ATPS
Email is a Frictionless Communication Channel

- Required in Every Online Purchase
- The Only Unique Global Identifier
- Rich With History & Behavior
Here’s the Problem:

Meet Amanda Wallen

Amanda J Wallen
wallenam@yahoo.com
Amanda is not who you may think...

Email Address: wallenam@yahoo.com

Risk Band: Fraud Score 900 to 999

Risk Band Description: Fraud Score 900 to 999

Personal: Andy Wallen

DOB: 01/01/1980
Gender: Male
Location: Erie, PA
Title: Self Employee
Company Name: Air LTDA
SM Link

Domain: yahoo.com

Country: United States
Company: Yahoo Inc.
Category: Webmail

Corporate: No
Risk Level: Moderate
Relevant Info: Valid Webmail Domain from US

IP Address: 27.96.127.251
Corporate Proxy: Yes
Anonymous Proxy: No
Proxy Type: Wired
Proxy Description: m1 connect pte ltd
Connection Type: Broadband
Here’s the Bigger Problem:

What does this email mean to you?

bad2theb0ne@hotmail.com
Actually...

he’s your next great customer!

Risk Band: 1

**Risk Band Description:** Fraud Score 5 to 100

Personal: Jeff Warren Jr.

- **DOB:** 04-16-62
- **Gender:** Male
- **Location:** Provo, UT
- **Title:** Director
- **Company Name:** Volk

Domain: hotmail.com

- **Country:** United States
- **Company:** Hotmail
- **Category:** Webmail
- **Risk Level:** Low
- **Relevant Info:** Valid Webmail Domain from US
Emailage Risk Score

Hundreds of Signals Incorporated

- Card Number
- Customer Full Name
- Customer ID
- Secondary Email
- IP
- Domain
- Email
- Billing Address
- Shipping Address
- Device ID
- Phone

Millions of Transactions and Billions of Data Points

- Transaction Data

Risk Score

High Risk: scores of 800 to 899

Very Low Risk: scores of 0 to 100

Email Centric Fraud Scores Supplemented by Dynamic Data Points

ATPS APAC 2019, #ATPS
The Power of Our Network

- The Top 5 Money Transfer Providers
- 5 of the Top 10 Global Retailers
- 3 of the Top 5 Global Airlines
- 3 of the Top 5 Travel Websites
- 4 of the Top 5 Ticketing Companies
- 3 of the Top 5 Banks
- The Top 5 Fraud Platforms
- 3 of the Top 5 Marketplace Lenders
- The Top 3 Largest Personal Computer Manufacturers
- 4 of the Top 6 Global Credit Card Issuers
2018 by the Numbers

- Prevented $2.8 billion of fraud globally.
- 95% of customers surveyed would recommend Emailage to another company or colleague.
- 164 billion global transaction data points analyzed. (91% increase year over year).
- Processed transactions in 150+ countries by IP.
- 15k fraud emails shared daily on average, via our Global Identity Intelligence Network.
- 5.5 million fraudulent emails shared via our customers fraud feedback loop.
Enriching People’s Lives through Technology
Who we are

Traveloka is a technology company with a mission to enrich lives by empowering people to discover the world around them.

Traveloka provides a wide range of services that includes travel and lifestyle experience in one platform.

ATPS APAC 2019, #ATPS
Serving users along their journey to #EmpoweringDiscovery with multiple products...

100+ Airline partners (FSC & LCC)
1,000,000+ hotels in 100 countries
15,000+ Xperience (Things-To-Do) inventories in over 60 countries
In the 7 years that Traveloka has existed, we have expanded rapidly into 8 countries in the APAC region and continue serving millions of customers everyday.
The widest payment method options

Credit Card

Internet Banking

Online Payments

Bank Transfer

Offline Outlets
Traveloka Goal:
Cross-border expansion without fraud losses

Results:
- Approval rate: up to 24% increase in new markets;
- False negative rate less than 0.5% (99.5% accuracy)
- Among customers that Emailage was able to confidently mark as safe, up to 88% were new customers
Thank you!
Terima kasih!
谢谢！
Breakfast sponsor
Getting the Balance Right

Fraud Prevention vs A Frictionless Customer Experience
The Fraud Prevention Challenge

Improving merchant profitability

- Reduce chargeback or other fraud rates
- Reduce operational costs
- Reduce capital investment costs
- Improve customer loyalty
- Optimize accept rates
- Convert new revenue

Non functional requirements are critical

Availability | Security | Configurability | Scalability | Capacity | Globality
Consortium Data – There’s Strength in Numbers

**Why it’s important**

ACI supports millions of data points for our customers

Profiles can be created and data models shared among institutions with a common geographic, industry or product focus.

Fraud and payments intelligence can be used to protect all customers in a consortium to minimize false positives, enabling better conversion.

Demonstrable value in accessing transactional/fraud patterns and behaviors at consortium as well as local level.

Promotes frictionless transactions for consumers.
Introducing Positive/Negative Profiling

Consortium data provides an additional view on the transaction.

56% of chargebacks are from customers with no history at the merchant level.

Only 39% of customers have a history of higher than 60 days.

On average 30% brand new merchant customers have history elsewhere in the ACI consortium.
Positive Profiling Using Consortium Data – Pushing Conversion

Customer data history looks risky…

- Travel route
  - High risk
- Time to Departure
  - 72 hours
- Telephone Number
  - 0 days history
- IP Address
  - 0 days history
- Card No.
  - 14 days history
- Billing Address
  - 0 days history
- Email
  - 14 days history
- Machine Learning Score
  - 120

But consortium data reduces false positives

- Consortium Merchant 1
  - 200 days history
- Consortium Merchant 2
  - 120 days history
- Consortium Merchant 3
  - 60 days history
- Consortium Merchant 4
  - 150 days history
- Consortium Merchant 5
  - 200 days history
- Consortium Merchant 6
  - 180 days history
## Wider Effect of Individual Merchant Fraud on Other Verticals

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Retail</td>
<td>61%</td>
</tr>
<tr>
<td>Telco and Digital</td>
<td>32%</td>
</tr>
<tr>
<td>General Travel</td>
<td>7%</td>
</tr>
</tbody>
</table>

ATPS APAC 2019, #ATPS
The Power of the Multi-Layered Approach

Consortium data utilizes profiling capabilities applied across global transactional data and known fraud intelligence.

Consortium data should be one feature of several features used within a successful fraud strategy.

Combination of approaches/tools provides best results to minimize false positives and increase conversion.

- Velocity: 17%
- Model: 18%
- Pattern: 14%
- Purchase Behavior: 11%
- Consortium Data: 10%
- Device ID: 6%
- IP Geolocation: 5%
- Address Verification Service: 5%
- Business Rules: 4%
- Email: 1%
Thank you
Breakfast sponsor