



GSMA™

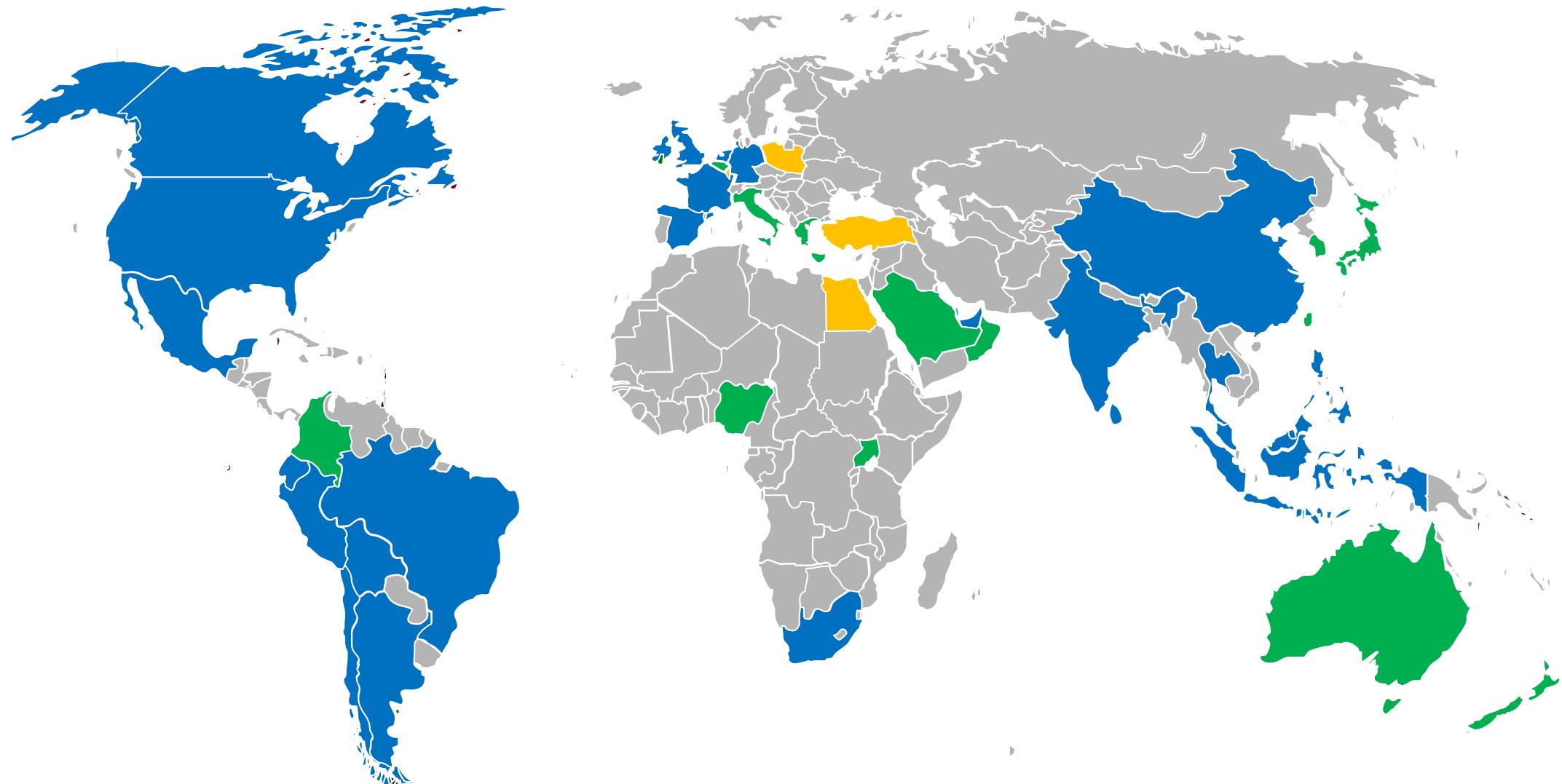
Open Gateway
Global simplification of network exposure

GSMA™

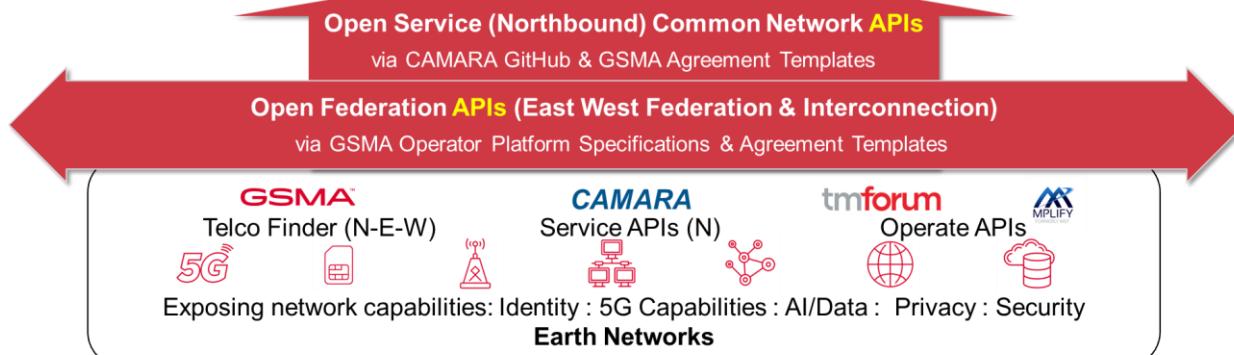
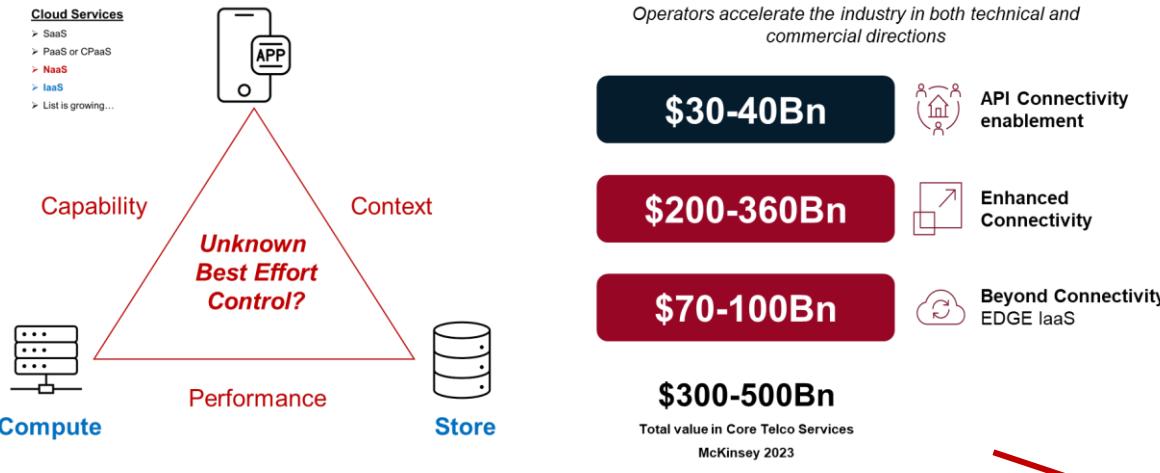


We are close to protecting
 $\frac{2}{3}$ of mobile connections with
commercial Anti-Fraud APIs

Achieved through Market-by-Market alignment of standard Open CAMARA APIs + TMF ODA + MEF LSO + GSMA MoU...



An Industry MoU for simplification and collaboration



Specification by Doing Code, not documentation

Signatories

140

81 operator groups and **61** Channel Partners representing **292** networks covering **80%** of mobile Connections

Assets

237

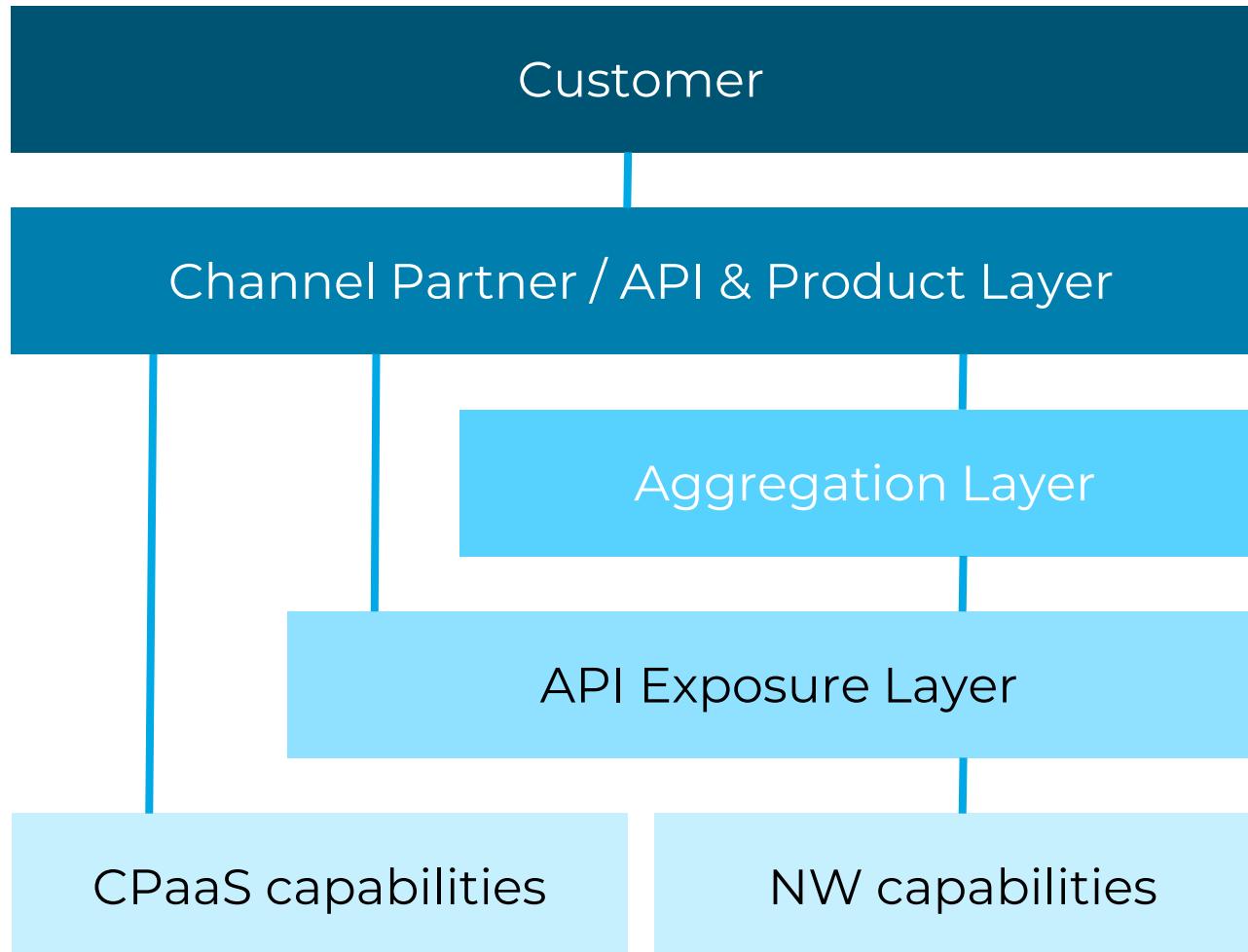
Certified APIs from **33** CAMARA Tagged Released APIs. A further **40** APIs in Development

Delivery

280

API Instances commercially launched across **85** networks in **50** markets of which **27** markets have achieved 100% API Alignment

The API ecosystem



Products

Products / APIs

**Using TMF93x
Operate APIs**

**Open Gateway compliant
exposure platform at operator**

**CAMARA compliant
transformation function**

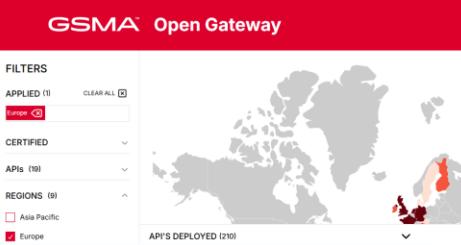
CAMARA API Heatmap – Operator Commercial Launched

| | | | | | | | | 1-4 Operators | 5-9 Operators | 10+ Operators | | | | | | | | | | | |
|---------------|-----------------------|-------------------------------------|----------|------------------------|-------------|----------------------------|---------------------------------------|-----------------------------|-----------------------|------------------|------------------------|--|--------------------------|---------------|-------------------------|---------------------------|------------------------------|-----------------------|--------------------|--|--|
| | Payments and Charging | Authentication and Fraud Prevention | | | | | | | | | Communications Quality | | Device Information | | | Location Services | | | Computing Services | | |
| | Carrier Billing | Number Verification | SIM Swap | Call Forwarding Signal | Device Swap | Know Your Customer - Match | Know Your Customer - Age Verification | Know Your Customer - Tenure | One Time Password SMS | Home Devices QoD | Quality on Demand | Device Reachability Status Subscriptions | Mobile Device Identifier | Device Status | Population Density Data | Device Location Retrieval | Device Location Verification | Simple Edge Discovery | | | |
| North America | | 3 | 2 | | | | | | | | 1 | | | 2 | | | 1 | 1 | 10 | | |
| LATAM | | 9 | 15 | | | 3 | | | 1 | 1 | 1 | | | 5 | 1 | 5 | 11 | | 52 | | |
| Europe | 1 | 21 | 22 | 6 | 5 | 8 | 6 | 2 | 2 | 1 | 2 | 6 | 4 | 8 | | | 5 | | 98 | | |
| MENA | | 4 | 7 | | | | | | 5 | | | | | 3 | | | | | 19 | | |
| Africa | 2 | 5 | 10 | | | | | | 7 | | | | | | | | | | 22 | | |
| APAC | 1 | 17 | 14 | 2 | 1 | 2 | | | 8 | | | | | 2 | | | 8 | 2 | 56 | | |
| Greater China | | 5 | 5 | | | | | | 3 | | 2 | | | 4 | | 2 | 2 | | 23 | | |
| Totals | 4 | 64 | 75 | 8 | 6 | 13 | 6 | 2 | 26 | 2 | 6 | 6 | 4 | 24 | 1 | 7 | 27 | 3 | 280 | | |

Channel Partner Simplification...



Tools v Use to drive simplification



GSMA Open Gateway

FILTERS
APPLIED (1) **CLEAR ALL** Europe 

CERTIFIED
APIs (19) 
REGIONS (8)
APIs DEPLOYED (210)

GSMA API Certified

MARKETS (12)
Austria - Drei Austria SIM Swap - Check  AC 0.33
Austria - Drei Austria SIM Swap - Retrieve Date  CC 0.40
France - Free-Illad Group SIM Swap - Check  CC 1.00
France - Orange Developer SIM Swap - Check  CB 0.23
France - Orange Developer SIM Swap - Check  N/A 1.00
France - Orange Developer SIM Swap - Check  N/A 0.40
France - Orange Developer SIM Swap - Check  N/A 0.40

PROVIDERS (19)
Good Developer Experience often starts before production.

CHANNEL PARTNERS (4)

API PLAYGROUND

GSMA Open Gateway

TEST
API SERVER <https://open-gateway.sandbox.gsma.com>
Authentication Flow 
APIs  <https://test.gsma.com/api>
User  <https://test.gsma.com/user>
Authentication Flow 
APIs  <https://test.gsma.com/api>

API Playground a new tool for developers 

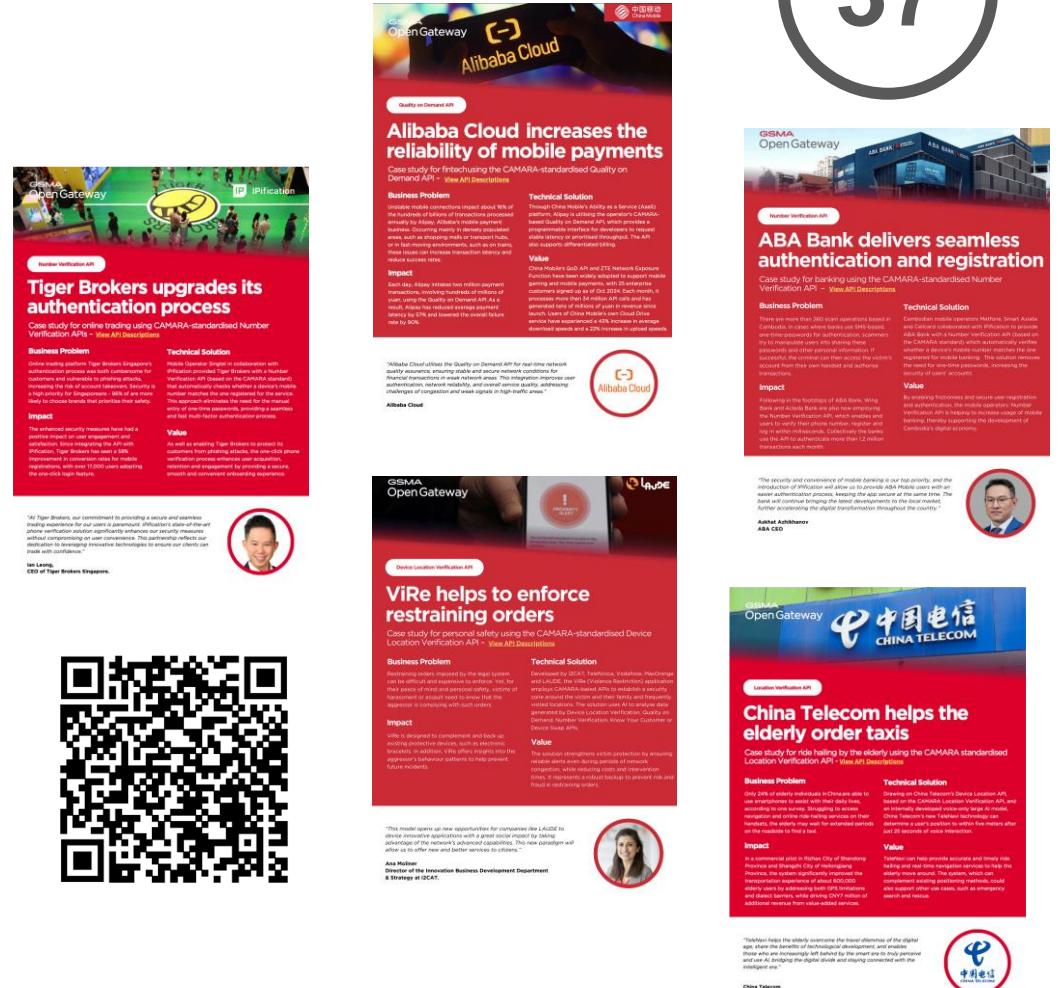
tm forum

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TMF931 Open Gateway Onboarding and Ordering Component Suite API User Guide v5.0.0

Maturity Level: General availability (GA)
Document version: 5.0.0
Release Status: Production
Details:
The following document is the user guide of the REST API for Open Gateway Onboarding and Ordering Operator API. The GSMA Open Gateway initiative aims to establish standardized Service APIs but also homogeneous mechanisms for the integration of aggregators.
Standard(s): Open APIs

Reduces Complexity & Informs



Alibaba Cloud increases the reliability of mobile payments

Case study for fintech using the CAMARA-standardized Quality on Demand API

Business Problem
Unstable mobile connections impact about 8% of mobile payment transactions. Through the CAMARA-standardized Quality on Demand API, which provides a real-time connection quality report, mobile payment providers can quickly identify and prioritize troubleshooting. The API also provides historical data for analysis.

Technical Solution
Alibaba Cloud's QoS API and ZTF Network Exposure Function have been widely adopted to support mobile payment services. The CAMARA-standardized Quality on Demand API has been adopted by many mobile payment customers signed up as of Oct 2024. Each month, it monitors over 100 million mobile payment transactions, generating tens of billions of user in-service history data points. The mobile payment service has experienced a 40% increase in average download speed and a 50% increase in upload speed.

Value
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Tiger Brokers upgrades its authentication process

Case study for online trading using CAMARA-standardized Number Verification API

Business Problem
Online trading platform Tiger Brokers' original authentication process was slow and error-prone. Customers had to submit their phone numbers to verify their identities, which was a high priority for tiger brokers. It was also necessary to choose brands that prioritized their safety.

Technical Solution
Tiger Brokers integrated the CAMARA-standardized Number Verification API on the CAMARA standard. This integration allows users to verify their identities using a single mobile number, which is one required for the service. The CAMARA-standardized Number Verification API also supports one-time password, providing a convenient and fast multi-factor authentication process.

Value
Tiger Brokers' security measures have had a positive impact on user engagement and satisfaction. After the integration of the CAMARA-standardized Number Verification API, Tiger Brokers has seen a 5% increase in user satisfaction and a 10% reduction in user acquisition costs, with over 10,000 users adopting the one-click login feature.

Impact
Tiger Brokers' commitment to providing a secure and efficient trading experience for its users is paying off. Tiger Brokers' one-click phone number verification solution significantly enhances security measures, reduces user friction, and provides a competitive advantage by providing a secure, smooth and convenient user-facing experience.

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Alibaba Cloud

ABA Bank delivers seamless authentication and registration

Case study for banking using the CAMARA-standardized Number Verification API

Business Problem
ABA Bank's QoS API and ZTF Network Exposure Function have been widely adopted to support mobile payment services. The CAMARA-standardized Quality on Demand API has been adopted by many mobile payment customers signed up as of Oct 2024. Each month, it monitors over 100 million mobile payment transactions, generating tens of billions of user in-service history data points. The mobile payment service has experienced a 40% increase in average download speed and a 50% increase in upload speed.

Technical Solution
Cambridge mobile operators Hermes, Small ABB, and ABB bank and ABB bank are now able to provide ABB bank with a Number Verification API. ABB uses the CAMARA-standardized Number Verification API to verify a device's mobile number matches the user's account. This allows ABB bank to verify the user's account from their own handset and authorized transactions.

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China Telecom helps the elderly order taxis

Case study for ride hailing by the elderly using the CAMARA-standardized Location Verification API

Business Problem
Over 20% of elderly individuals in China are able to use smartphones to assist with their daily lives, but many elderly individuals are not familiar with navigation and online ride-hailing services on their smartphones. This poses a challenge for elderly users as they may struggle to find the right bus or taxi and may not be able to use their smartphones to find a ride.

Technical Solution
Developed by China Telecom, the CAMARA-standardized Location Verification API allows elderly users to establish a secure connection with their smartphones. The system uses the CAMARA-standardized Location Verification API to verify a device's location. The system uses this to analyze user behavior and generate location-based restraining orders to prevent user from getting lost or being stranded.

Value
China Telecom's Location Verification API has been adopted by many mobile payment customers signed up as of Oct 2024. Each month, it monitors over 100 million mobile payment transactions, generating tens of billions of user in-service history data points. The mobile payment service has experienced a 40% increase in average download speed and a 50% increase in upload speed.

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China Telecom's Location Verification API has been adopted by many mobile payment customers signed up as of Oct 2024. Each month, it monitors over 100 million mobile payment transactions, generating tens of billions of user in-service history data points. The mobile payment service has experienced a 40% increase in average download speed and a 50% increase in upload speed.

China Telecom

\$\$ drives innovation & adoption

Fuelling adoption through Enterprise Market Demand Indicators



- 5 Markets
- Number Verify
- Age Verification



- 15 Markets
- Scam Signal



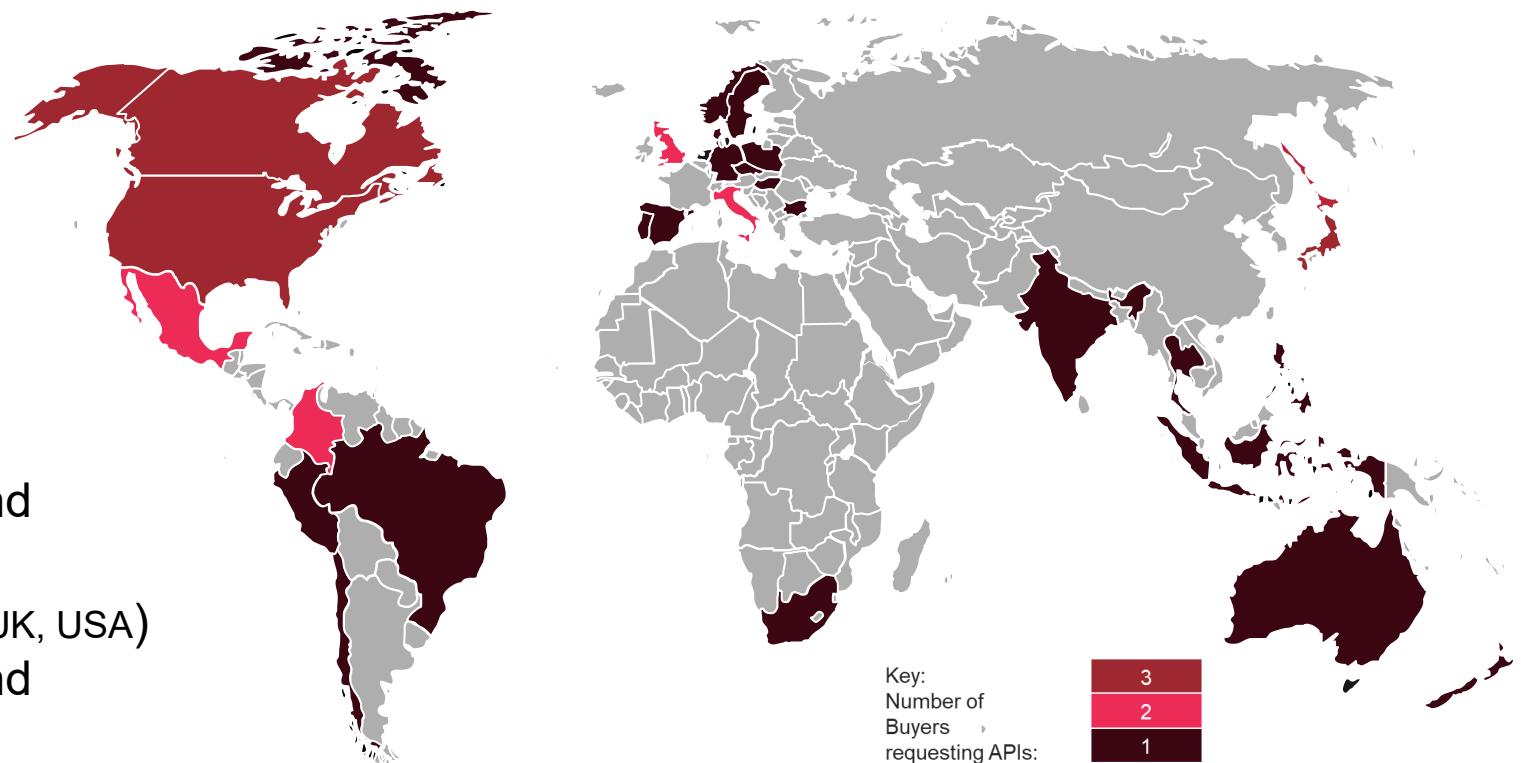
- 17 Markets
- Quality on Demand



- 3 Markets (Japan, UK, USA)
- Quality on Demand



- 3 Markets
- Behavioural Data





Thank you!