



GSMA™

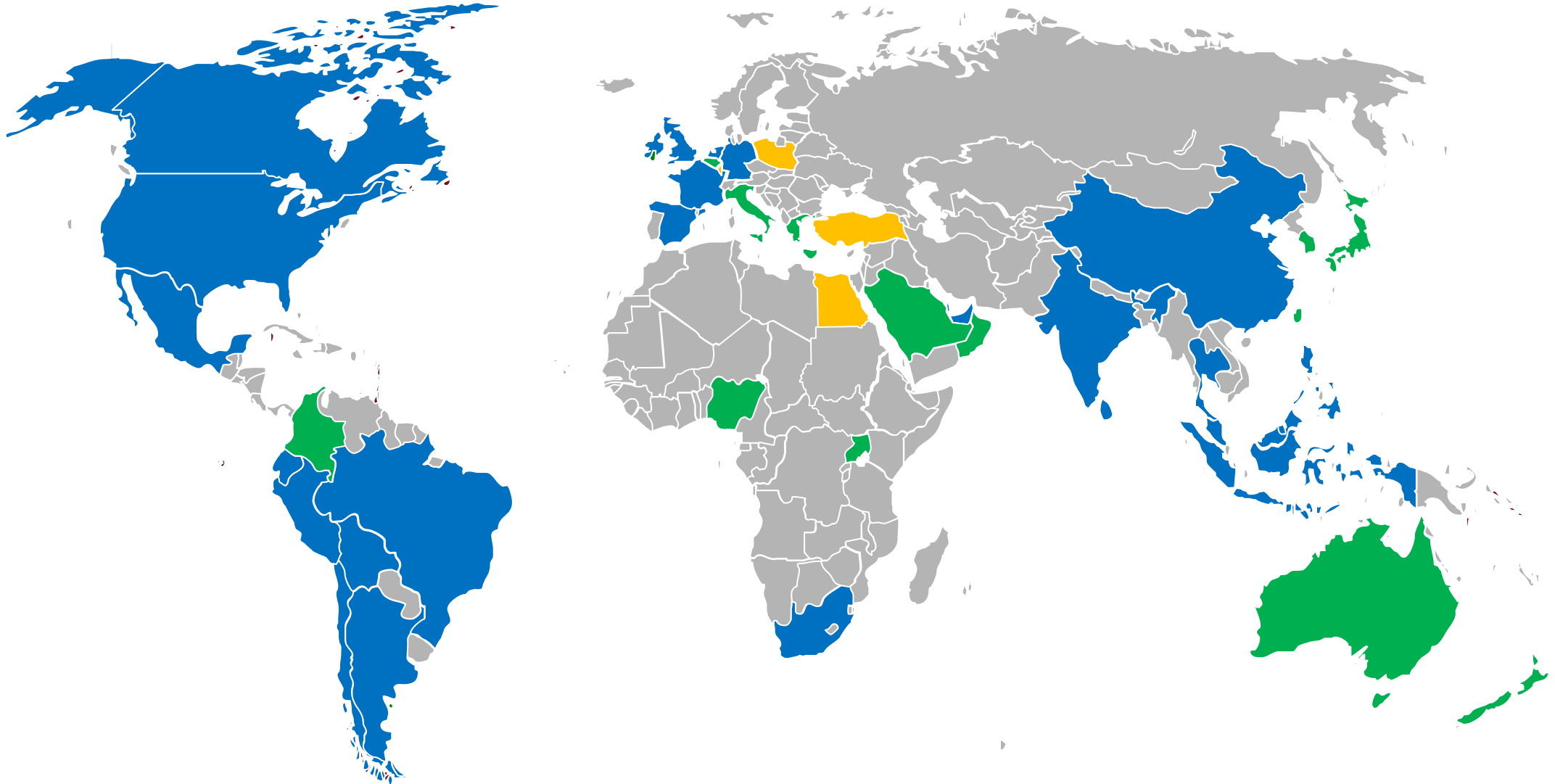
Open Gateway
Global simplification of network exposure

GSMA™

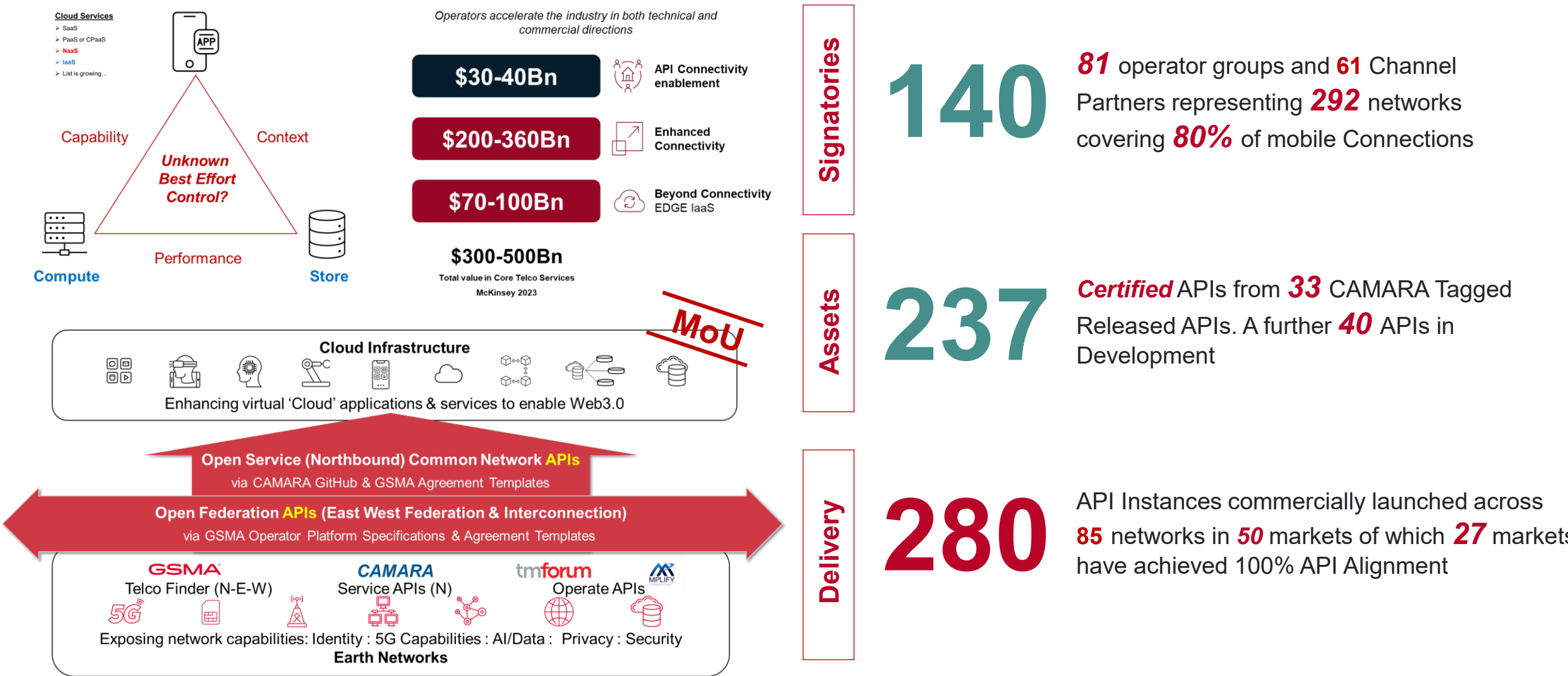
*We are close to protecting
2/3 of mobile connections with
commercial Anti-Fraud APIs*

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

3



An Industry MoU for simplification and collaboration

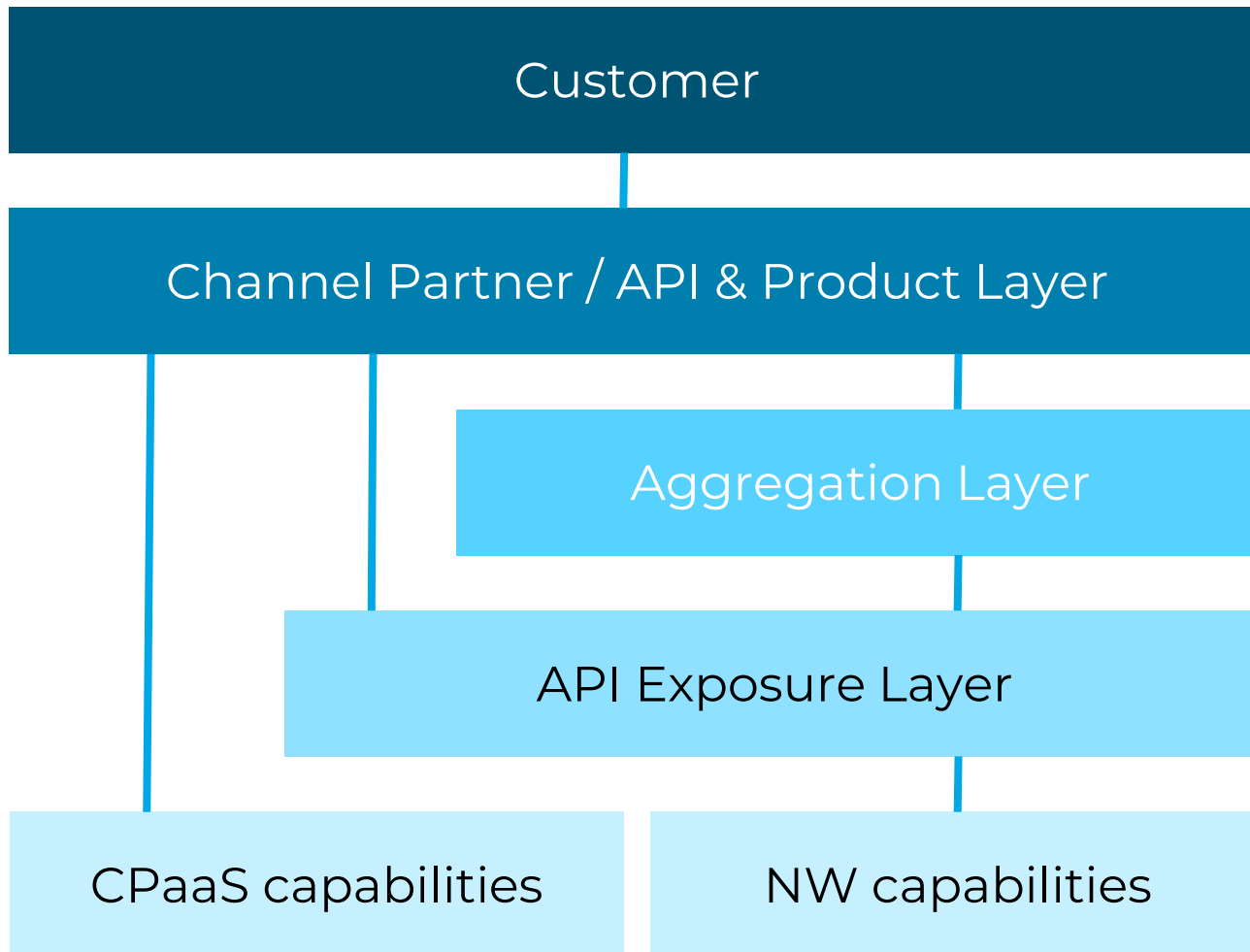


Signatories	140	81 operator groups and 61 Channel Partners representing 292 networks covering 80% of mobile Connections
Assets	237	Certified APIs from 33 CAMARA Tagged Released APIs. A further 40 APIs in Development
Delivery	280	API Instances commercially launched across 85 networks in 50 markets of which 27 markets have achieved 100% API Alignment

The API ecosystem



CAMARA
THE TELCO GLOBAL API ALLIANCE



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

37

GSMA Open Gateway

GSMA API Certified

Filters: APPLIED (1), CERTIFIED, APIs (19), REGIONS (8), MARKETS (12), PROVIDERS (19), CHANNEL PARTNERS (4)

API'S DEPLOYED (210)

Markets: South Asia, Sub-Saharan Africa

Providers: Orange Developer, TM Forum

Channel Partners: Drei Austria, Free-Illad Group

API Playground: A new tool for developers to test and debug APIs.

Repositories: IoNetworkOptimization, ConsentInfo, sandbox-api-repository

Table:

Region	Country	Operator	API Name	Version	Status
South Asia	Austria	Drei Austria	SIM Swap - Check	CC	0.3.1
South Asia	Austria	Drei Austria	SIM Swap - Retrieve Date	CC	0.4.0
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	1.0.0
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	0.2.1
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	1.0.0
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	1.0.0
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	0.4.0
South Asia	France	Free-Illad Group	SIM Swap - Check	CB	0.4.0

API Playground: A new tool for developers to test and debug APIs.

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

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 Operate 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

Tiger Brokers upgrades its authentication process

Case study for online trading using CAMARA-standardised Number Verification API - [View API Description](#)

Business Problem: Online trading platform Tiger Brokers (Singapore) has a large number of users, many of whom are using mobile devices to access the platform. This has led to a significant increase in security risks, particularly around authentication and account security.

Technical Solution: Tiger Brokers implemented the CAMARA-standardised Number Verification API to enhance their authentication process. This API provides a secure and reliable way to verify users' identities, reducing the risk of unauthorized access and improving the overall security of the platform.

Impact: The implementation of the Number Verification API has significantly improved the security of Tiger Brokers' platform, reducing the risk of unauthorized access and improving the overall security of the platform. This has led to a significant increase in user confidence and a reduction in security incidents.

Alibaba Cloud increases the reliability of mobile payments

Case study for fintech using the CAMARA-standardised Quality on Demand API - [View API Description](#)

Business Problem: Alibaba Cloud's Quality on Demand API is a service that provides a reliable and secure way to verify users' identities. This API is used by fintech companies to improve the reliability of their mobile payment systems.

Technical Solution: Alibaba Cloud implemented the Quality on Demand API to enhance the reliability of their mobile payment systems. This API provides a secure and reliable way to verify users' identities, reducing the risk of unauthorized access and improving the overall security of the platform.

Impact: The implementation of the Quality on Demand API has significantly improved the reliability of Alibaba Cloud's mobile payment systems, reducing the risk of unauthorized access and improving the overall security of the platform. This has led to a significant increase in user confidence and a reduction in security incidents.

ABA Bank delivers seamless authentication and registration

Case study for banking using the CAMARA-standardised Number Verification API - [View API Description](#)

Business Problem: ABA Bank's Number Verification API is a service that provides a reliable and secure way to verify users' identities. This API is used by ABA Bank to improve the reliability of their authentication and registration process.

Technical Solution: ABA Bank implemented the Number Verification API to enhance the reliability of their authentication and registration process. This API provides a secure and reliable way to verify users' identities, reducing the risk of unauthorized access and improving the overall security of the platform.

Impact: The implementation of the Number Verification API has significantly improved the reliability of ABA Bank's authentication and registration process, reducing the risk of unauthorized access and improving the overall security of the platform. This has led to a significant increase in user confidence and a reduction in security incidents.

ViRe helps to enforce restraining orders

Case study for personal safety using the CAMARA-standardised Device Location Verification API - [View API Description](#)

Business Problem: ViRe's Device Location Verification API is a service that provides a reliable and secure way to verify users' identities. This API is used by ViRe to improve the reliability of their restraining order enforcement process.

Technical Solution: ViRe implemented the Device Location Verification API to enhance the reliability of their restraining order enforcement process. This API provides a secure and reliable way to verify users' identities, reducing the risk of unauthorized access and improving the overall security of the platform.

Impact: The implementation of the Device Location Verification API has significantly improved the reliability of ViRe's restraining order enforcement process, reducing the risk of unauthorized access and improving the overall security of the platform. This has led to a significant increase in user confidence and a reduction in security incidents.

China Telecom helps the elderly order taxis

Case study for ride hailing by the elderly using the CAMARA-standardised Location Verification API - [View API Description](#)

Business Problem: China Telecom's Location Verification API is a service that provides a reliable and secure way to verify users' identities. This API is used by China Telecom to improve the reliability of their ride hailing service for elderly users.

Technical Solution: China Telecom implemented the Location Verification API to enhance the reliability of their ride hailing service for elderly users. This API provides a secure and reliable way to verify users' identities, reducing the risk of unauthorized access and improving the overall security of the platform.

Impact: The implementation of the Location Verification API has significantly improved the reliability of China Telecom's ride hailing service for elderly users, reducing the risk of unauthorized access and improving the overall security of the platform. This has led to a significant increase in user confidence and a reduction in security incidents.

Reduces Complexity & Informs

\$\$ drives innovation & adoption

Fuelling adoption through Enterprise Market Demand Indicators



- 5 Markets
- Number Verify
- Age Verification



- 15 Markets
- Scam Signal



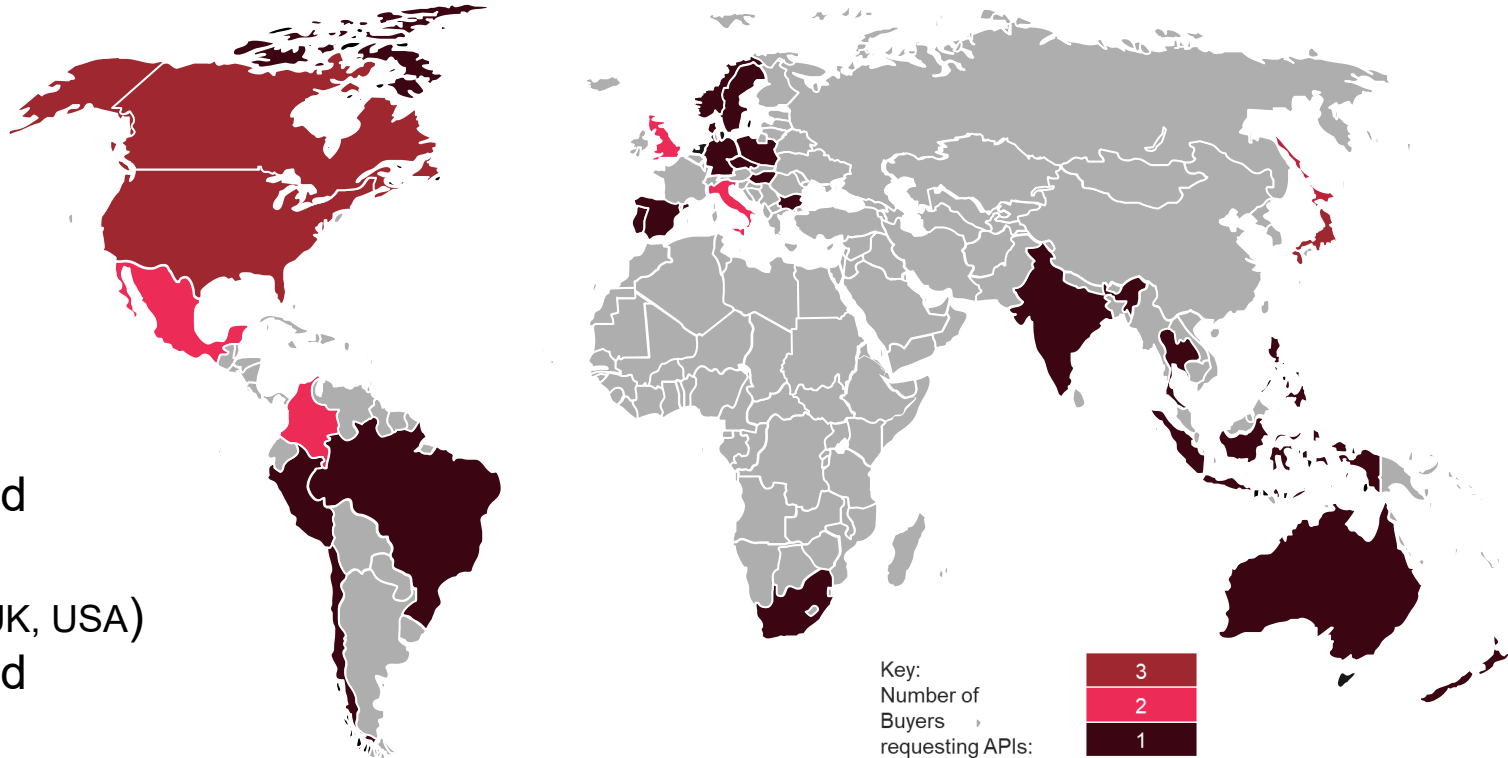
- 17 Markets
- Quality on Demand



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



- 3 Markets
- Behavioural Data





Thank you!