Bridging Telecoms & Digital Identity



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the Future of Mobile Identity

Table of Contents.

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5'

Future of Mobile Identity Training

30'

- Phone number reputation vs. traditional authentication methods. Effectiveness of mobile authentication to other methods like email and biometrics.
- Solutions to today's mobile identity challenges: account registration and takeover (ATO)
- The future of mobile authentication. Future APIs that mobile operators will offer. Passwordless authentication

Q & A Time

15'



In a Digital World, Identity Matters

Cyber crime cost \$9.5T in 2024

	Country/Territory	Forecast +	Year +
	World	110,047,109	2024
1	United States	29,167,779	2024
2	China	18,273,357	^[n 1] 2024
3	Germany	4,710,032	2024
4	Japan	4,070,094	2024
5	India	3,889,130	2024
6	United Kingdom	3,587,545	2024
7	France	3,174,099	2024
8	Italy	2,376,510	2024
9	■◆■ Canada	2,214,796	2024
10	Srazil	2,188,419	2024

Identity fraud cost \$50 Billion in 2024

	Country/Territory	Forecast +	Year +
85	Belarus	73,129	2024
86	✓ DR Congo	72,483	2024
87	Myanmar Myanmar	64,284	2024
88	Uganda Uganda	55,587	2024
89	Macau	53,447	^[n 8] 2024
90	Cameroon	53,391	2024
91	Jordan	53,305	2024
92	Tunisia	52,636	2024
93	Bolivia	48,172	2024
94	Bahrain	47,812	2024

And Still...

- SMS & Voice OTP represent ~40% of the global authentication worldwide
- Other methods include emails and mobile push notification





What's Mobile Identity?



Drivers for more Channels of Authentication and Identity Verification



5B mobile internet users

Up to 5 billion mobile internet users by 2025

GSMA



46% usage growth

Mobile usage grew up 45%+ between 2019-22

Statista



60% digital Payment growth

In 2022 60% of the adult population has been receiving or emitting digital payments

World Bank



80% of breaches

80% of breaches were caused by stolen or brute-force credentials

Verizon Business



95% increase in scams

95% of Scams increase between 2020 and 2022 targeting both consumers and SMBs

FTC





Juniper Research Supporting Data

- As SMS Revenue declines between 2024-2029, MNOs need additional revenue streams.
- MNOs need to implement Network
 Authentication services today to stabilize
 revenue
- The time to start the monetization of Network Authentication is Now!





Network API Market Opportunity

APIs: 2024 opportunity (\$B) and vertical use case count

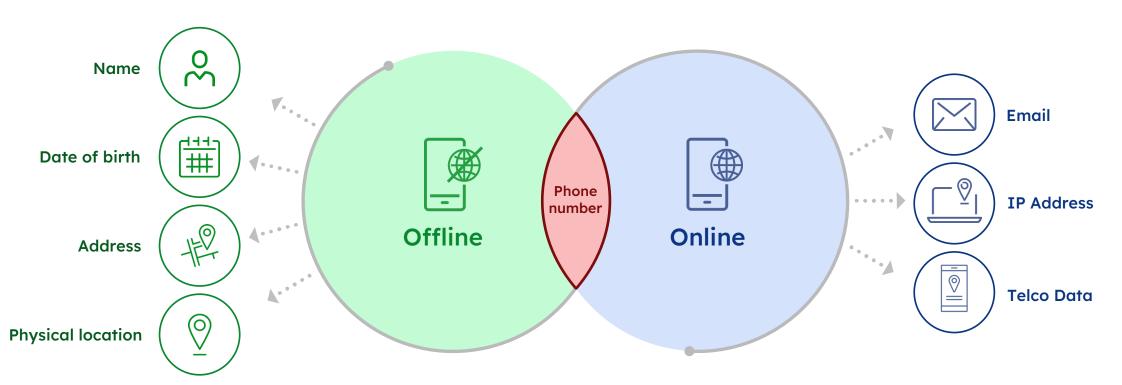




We need to Reinvent Authentication, but not the Wheel

The Phone Number is part of Telco's DNA

Connecting both the offline world and online world





Network Authentication Signals

1	Silent Authentication	Augments SMS OTP. Client passes an IP Address & the MSISDN is returned.
2	Number Verify	Determines whether a MSISDN is attached to a Carrier network
3	SIM Swap / Change Date	Determine when a new SIM Swap to Device pairing occurred
4	Device Status	Determine whether a device is Clean, been Blocked, or Lost / Stolen
5	Call Forwarding	Has Call Forwarding been initiated for a particular MSISDN
6	Roaming Indicator	Is the device associated with a MSISDN roaming, Internationally?
7	Account Status	Is the account associated with a MSISDN in good standing and active?
8	Device Tenure	How long has a SIM and Device been paired to an account?
9	Porting Status	Has a number been ported out recently?
10	Name Verification	With a MSISDN and provided name, we can compare to name on file

And there are dozens of other attributes that can be exposed to prevent fraud, including:

Active Call in Session	Email Verification
Voicemail Divert	Age Verification
Location	Bill Payer
Duration of Call	Bad Debt
Device Type	Device Change
Account Tenure	Billing Type
Recycled Numbers	Reported Lost/Stolen
Address Verification	Account Type

Stay compliant with MC, CAMARA and GSMA Open Gateway Initiative



We all live in high regulation environment

What data means for Number Risk in Digital Identity.

1st Party Data Contains PII Data

2nd Party Data

Contains PII Data

Group
Companies/Affiliates Jand Party
Data

Contains PII Data

Data brokers,
Alternative data suppliers

Peripheral
Data

Contains PII
and non PII Data

Carrier Info, Routing,
Portailbity

Data elements for digital identity solutions

Data elements		Description	How Telcos Can Help?	Notes
	1. PII	SSN, public records, passport, drive license etc.	•	Linked to #2 and amount of data collected at onboarding
	2. High Insurance CRM	CRM Information with strong KYC check at onboarding		
Authoritative	3. Government lists	Blacklists, sanction lists, politically exposed person lists		
Aumornanve	4. Bank account	Ownership and status of bank account, including balance, length of ownership, etc.	•	In countries where Telco's powered financial inclusion
	5. Finances	Auditable financials (e.g., tax, trade activities), trade activities, past transactions etc.	•	Customer payments tenure
	6. Biometrics	Thumbprint, face, voice, retina, and other person's characteristics		e.g. Tanzania
	7. Device ID	Device fingerprinting data (including hardware, software, and network attributes) Geo-location, IP, VPN, device health, application integrity, etc.	•	
	8. Telco Carrier Network	Network Signals such as Active/inactive, SIM Swap indicators/time stamps		
Contextual	9. Behavioral	Users' behavior/interaction with device or browser. Transactional behaviors over different channel of communications, payments	•	Native SDKs
	10. Social media	Data elements contained in social media platforms e.g., LinkedIn, Instagram Network, friends, chat, history/activity, etc.	•	
			Hiç	gh
			Me	edium
			Lo	w/None

OPENGATEWAY INITIATIVE



Quick Recap





Focus	Aims to simplify and secure online logins and transactions by leveraging the mobile phone as an authentication tool. Originally designed for national standards in Auth.	Focuses on creating a single Intl' standard for Network API around telco data		
Evolution	Support various authentication methods, including biometrics like fingerprint scanning and facial recognition. It has also incorporated industry standards like OAuth and OpenID Connect for improved interoperability.	Leverage emerging technologies like blockchain for enhanced security and decentralization.		
Strength	Adoption and flexibility	Standardization and testing		
Weakness	Lack of ubiquity	Adoption, maturity, use cases it can address		



How to Manage Conflictual Channels & Operations?



VS.



so what?



VS.



Enterprises are looking for solutions, not for tech war

You act as an Interoperability Hub

Offer both Integration when available (e.g. SIM Swap) to enterprises

Double Access Period - Long Term Planning and roadmap



A Vast Array of Opportunities



Market opportunities exists for solutions with high assurance and global footprint

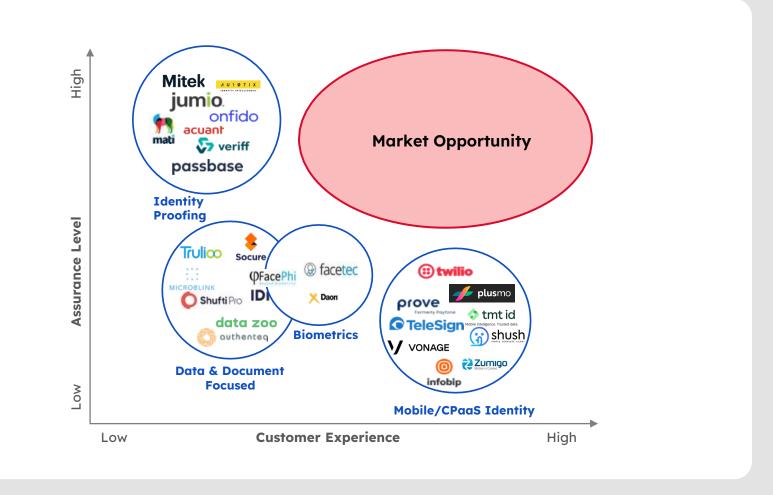
Market Opportunity for CSP Identity Solutions

Notes: 1. Liminal, "Consumer Identity"

2. FTC "Consumer Sentiment..."

3. VOC Calls;

Chart is illustrative





the Future of Mobile Identity

What's next?

- → Understand your local market and available solutions
- → Analyse Use cases/Pain Points
- → Build Business Case
- → Consider: Do it yourself vs. Partner



Who we are

Global Telco Consult GmbH (GTC) is a premier telecommunications consultancy offering expert services in Messaging, Identity, IoT, Recruitment, and M&A.

We serve enterprises, carriers, and service providers, guiding them from SMS to advanced IP messaging and implementing state-of-the-art identity and fraud detection solutions.



our services.

what we do

- → Consulting
- \rightarrow Enabling
- → Outsourcing



our customers.

who we help

- \rightarrow Operators
- \rightarrow Aggregators
- → Platform Providers
- → Consultancy Providers
- → **Enterprises**



our expertise.

what we help with

- → Messaging
- \rightarrow Internet of things
- → Digital Identity



GTC Services today

CONSULT

Productization

- · Strategy Definition
- Product/Platform Launch
- Go-To-Market Strategy

M&A

- Acquisition Strategy
- Due Diligence
- Merger Management
- Integration Support
- "IoT Amplified"

Market Intelligence

- Market Report
- Competitor Analysis
- "Messaging Pulse"

ENABLE

Training

- Sales Training
- Product Training
- NOC Training

Recruitment

- Executive Search
- Permanent & Contract Staffing
- Recruitment Process Outsourcing
- Talent Advisory

OUTSOURCE

Digital ID Managed Services

- Digital Identity Integration
- Project and Product Management

Messaging Managed Services

- SMS Platform Management
- SMS FW Management
- Flash Call Detection
- Network Penetration Testing

Procurement & Sales

- Sales Support
- Procurement Support





Thank you!





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20