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GSMA

BARCELONA
27 FEBRUARY-2 MARCH 2023

VELOCITY

Identity and Data Seminar

Digital Identity: Towards a New Paradigm?

CC7, Fira Gran Via, Barcelona, Spain
Monday 27 February, 2023 | 13:00 - 14:00 (CET)

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Agenda

1. The 2023 Digital Identity Landscape

Cameron D'Ambrosi and Dr. Gilad Rosner, **Liminal**

2. Enabling the future of Digital Identities

Andrzej Ochocki, **Deutsche Telekom**

3. Q&A and discussion

Cameron D'Ambrosi and Dr. Gilad Rosner, **Liminal**

Andrzej Ochocki, **Deutsche Telekom**

Moderator: Helene Vigue, **GSMA**



Mobile World Congress

The 2023 Digital Identity Landscape

February 27, 2023





The digital future is Liminal. We're guiding the way.

Liminal is a boutique strategy advisory firm serving digital identity, fintech, and cybersecurity clients, and the private equity and venture capital community.

We see the solution to complex digital challenges not only as 'what', but 'how.' We don't just tell you about the destination, we show you how to get there.





We work with amazing companies.

We provide private equity firms, strategic, and investors with independent and actionable advisory to uncover hidden value pools across the digital identity ecosystem.

Private Equity & Investors



Strategics & Solution Seekers

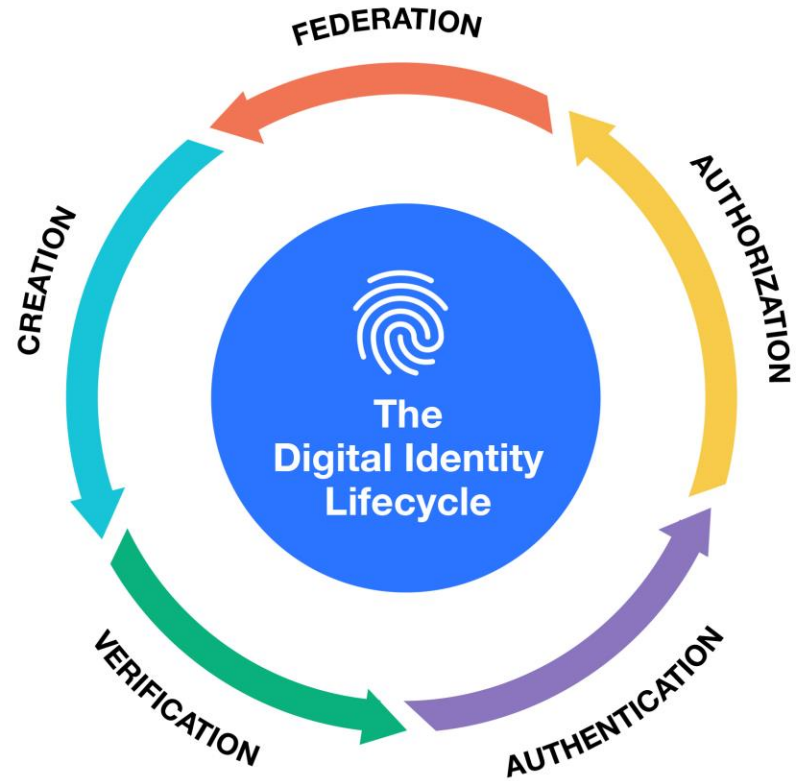


Solution Providers



Our perspective is rooted in the digital identity lifecycle

Rising consumer UX expectations, ongoing data breaches and global regulatory scrutiny are driving the need for privacy-preserving reusable digital identities, anchored increasingly on the needs of the consumer, and not the enterprise.

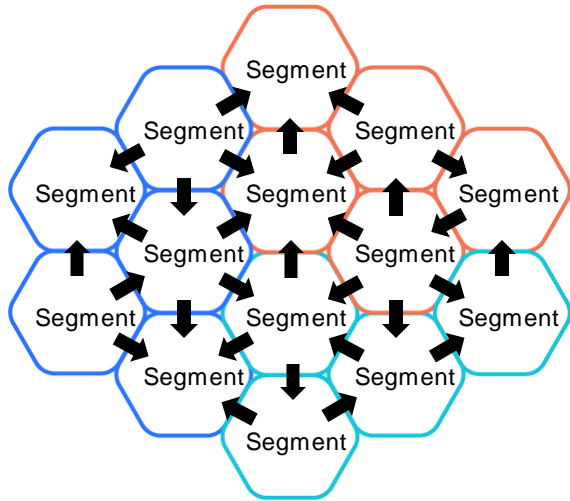


Source: Liminal



Digital Identity **Landscape** 2023

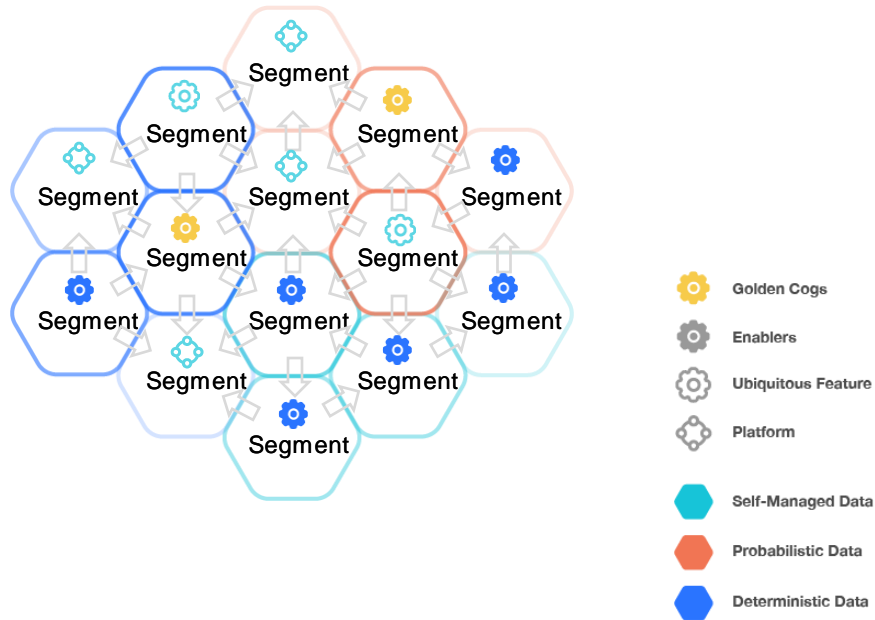
A Liminal Landscape is a tool for creative exploration and decision-making



Landscape Process:

1. Define the landscape
2. Discover the dominating market forces
3. Measure relational value

A Liminal Landscape is a tool for creative exploration and decision-making



Landscape Process:








4. Identify the platforms, enablers, and features

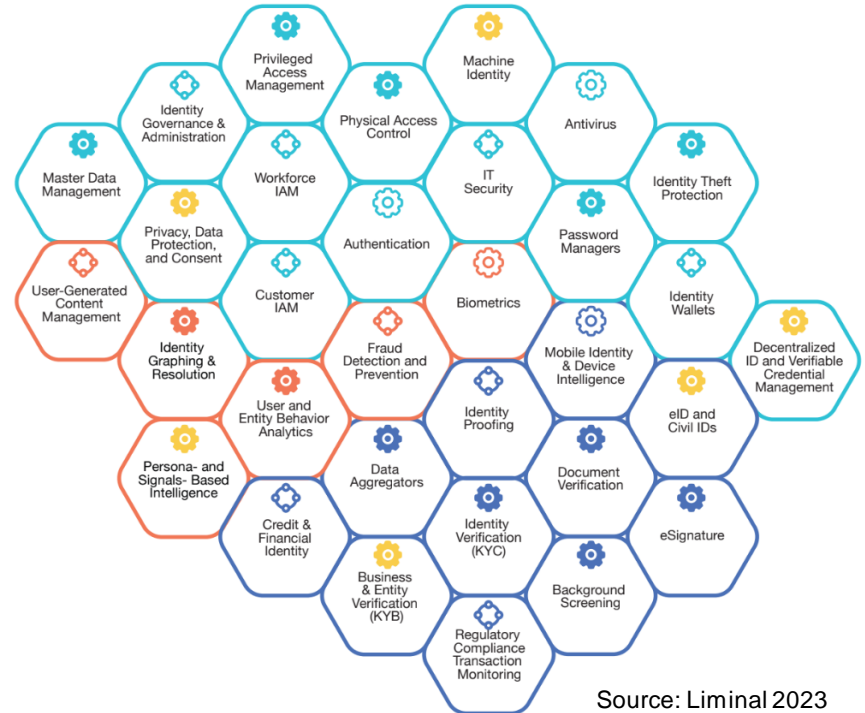
5. Measure solution segment influence

6. Identify the Golden Cog opportunities

We've seen significant progress in technological advancements and business model innovation across the digital identity market over the past year

To make sense of an industry landscape dominated by platforms and enablers, we analyze how each company and product in each market segment interacts with and influences other market segments based on dominate data sources.

-  Golden Cogs
-  Enablers
-  Ubiquitous Feature
-  Platform
-  Referential / Self-Managed Data
-  Inferential / Probabilistic Data
-  Referential / Deterministic Data



Source: Liminal 2023

The 2023 Liminal Digital Identity Landscape



Source: Liminal 2023

Evolving trends in 2023

Business owners across verticals and geographies leverage digital identity products to create better experiences, improve security, and reduce fraud risk.

Today's buyers prefer full-stack and platform solutions over better point solutions - a significant shift in buying behavior.

What's new this year:



The introduction of Decentralized Identity and Verifiable Credential Management



The addition of Persona and Signals-Based Intelligence (PSBI)










UEBA was moved across the landscape to better reflect product feature adjacencies



IoT has evolved to Machine Identity

2023 Golden Cogs



-  Golden Cogs
-  Enablers
-  Ubiquitous Feature
-  Platform
-  Referential / Self-Managed Data
-  Inferential / Probabilistic Data
-  Referential / Deterministic Data



Decentralized Identity and Verifiable Credential Management



Persona- and Signals-Based Intelligence (PSBI)



Machine Identity

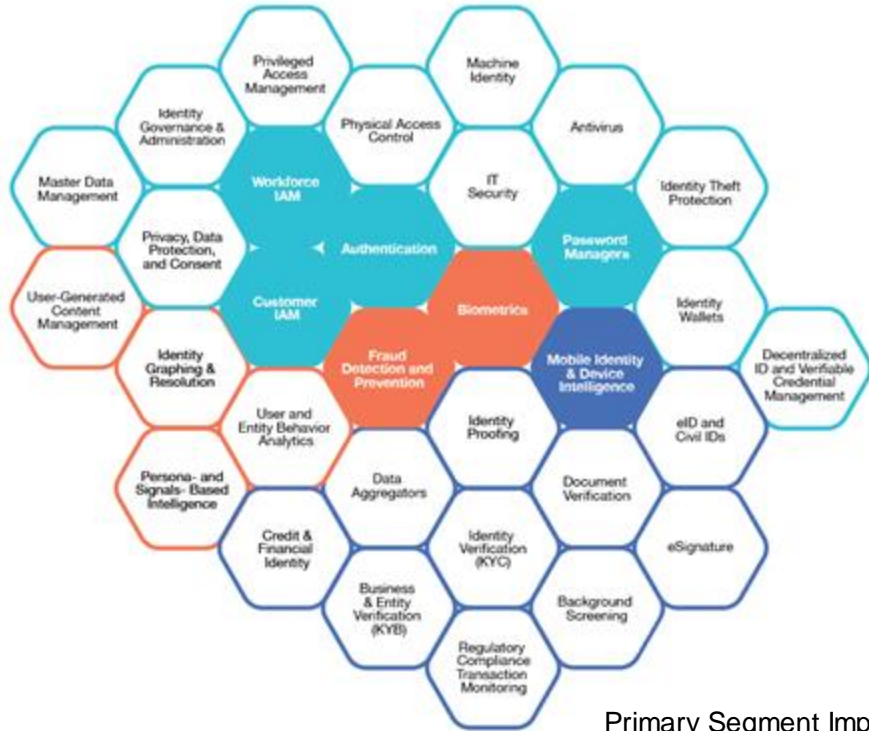


eID and Civil IDs



Privacy, Data Protection, and Consent

Consumer Trend: The death of the password



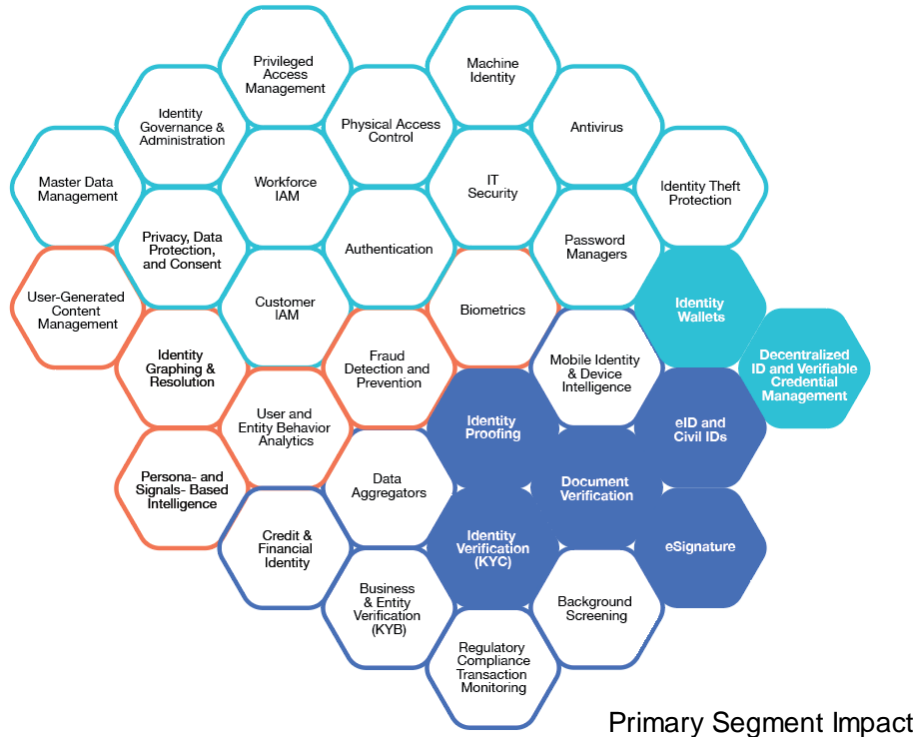
Primary Segment Impact

FIDO2 is accelerating passwordless authentication adoption by introducing secure, open standards that are interoperable across a user's devices

Passwordless authentication reduces fraud risk from vectors like phishing and brute force attacks, shifting fraudster focus to vulnerabilities like synthetic identity

SMS OTP volumes will be impacted as platforms deprecate legacy multi-factor authentication in favor of device-based passkeys

Consumer Trend: The rise of eIDs



Long-term demand is strong for secure reusable identities as governments and commercial processes go digital

Europe is leading the way with 22 eID schemes active or in development; other global initiatives are launching in the US (state-by-state), UAE, Australia, India, and Singapore

Interoperability is an area of opportunity for the private sector as organizations seek to integrate digital identity schemes into their existing infrastructure



**Follow the trends, access
more insights and explore
the 2023 Digital Identity
Landscape**





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Enabling the future of Digital Identities

Andrzej Ochocki, Deutsche Telekom AG

MWC2023, Barcelona, 27.02.2023





Enabling the future of Digital Identities

- 1 Digital Identity paradigm shifts
- 2 What specific Customer problems do we solve
- 3 Telcos enabling the EU ID ecosystem
- 4 Our way forward



Three main paradigm shifts in Identity already happening and we enable them.

1

From Federated - to Self Sovereign Identity

2

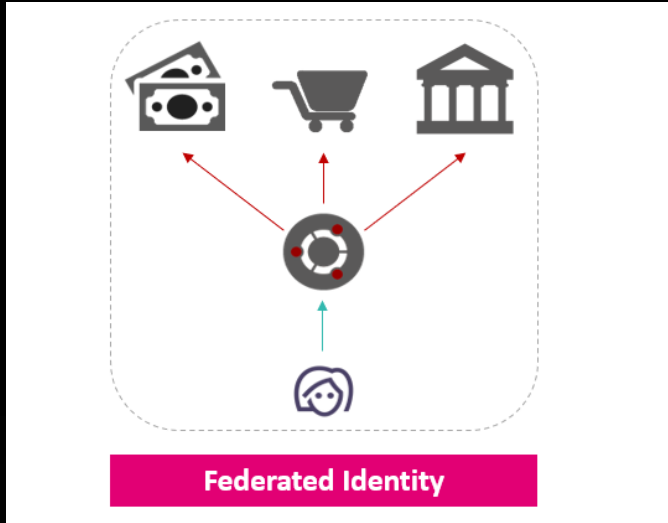
From “GAFAs convenience-based” ID to interoperable Ecosystem based for all citizens

3

Mobile Networks and -Technologies becoming “must have”



From Federated - to Self Sovereign Identity.



In a federated system the user onboards with and has a set of access credentials with their Identity Provider (IDP) and the IDP asserts the user's identity to SPs.



Self-Sovereign-Identity introduces a new approach in which the user manage their identity themselves and can control what is shared, with whom and for what purpose (privacy).



We enable secure transactions in many everyday situations...



A day in the life of Sophia...

She wants to create an online account. Service Provider (SP) sends an SMS to verify her Mobile Number. To prevent fraud, SP checks if her SIM card hasn't been swapped in the last 24 hours.



SIM Swap

While re-registering to her banking app, the bank makes a check if her Mobile Number is the same, she used during the account opening.



Silent Network Auth.

During a creation of an Online Payment account, Service Provider verifies the personal data she has entered to prevent fraud.



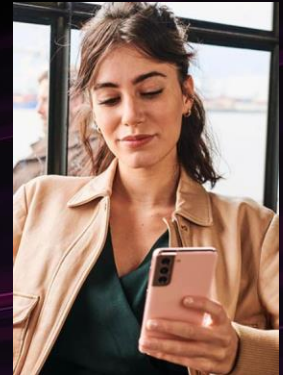
KYC Match

Her bank is processing a bigger amount cash withdraw from an ATM abroad. To avoid potential fraud her bank verifies if she is really in roaming or in the German's home network.



Location verification

She tries to transfer her money to a new payee. To prevent fraud her Bank checks if she's currently on the phone (line busy) as indication of possible scam call attack.



Line busy

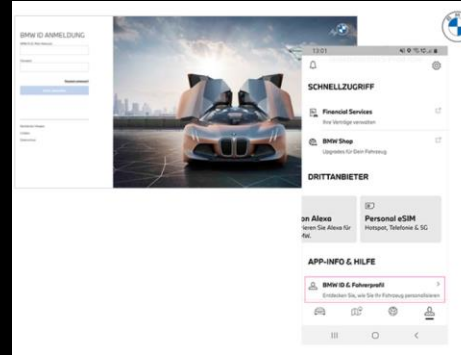


In car eSIM activation & tariff booking with Mobile Connect Seamless Authentication.

Examples

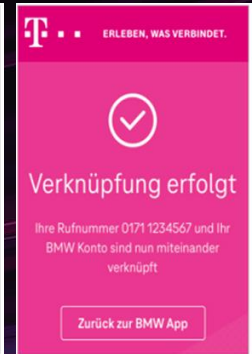
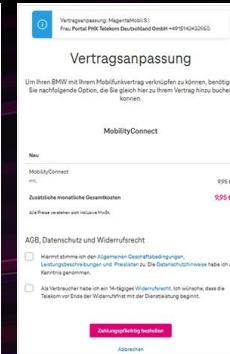
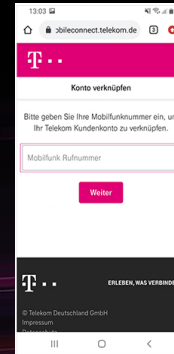
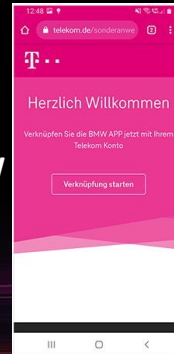


Login with BMW ID



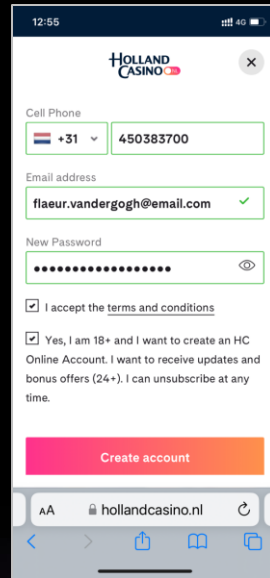
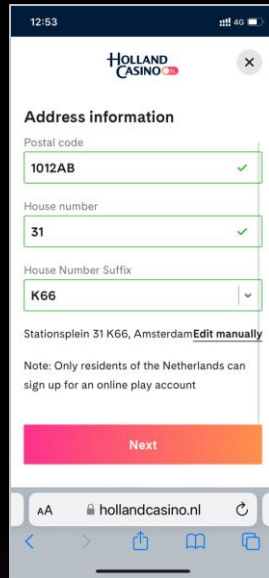
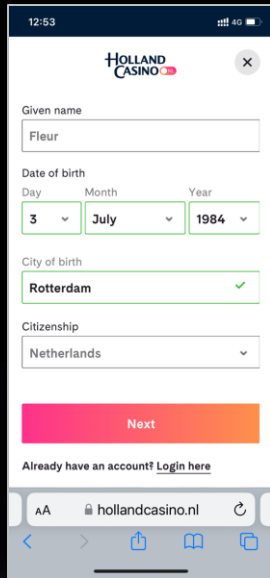
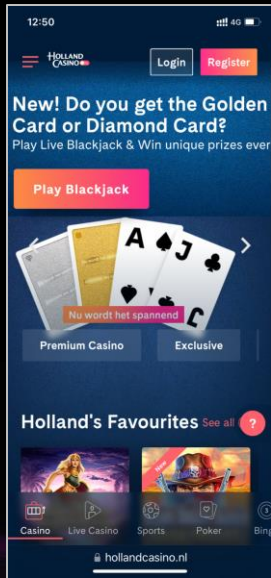
<https://www.telekom.de/hilfe/mobilfunk-mobiles-internet/mobilityconnect/buchen>

Binding Mobile Number with BMW account





Holland Casino account creation with Mobile Connect KYC Match.



1. Customer types in personal data (Mobile Number, Name, Address, ...)
2. Mobile Connect performs KYC Match
 - ✓ Holland Casino asks T-Mobile for match / no match vs. CRM data
 - ✓ T-Mobile matches hashed data and returns "Yes / No".
3. Holland Casino decides on account creation

We enable the upcoming European ID ecosystem by participating in EU Large Scale Pilot...



POTENTIAL

European Consortium
for Digital Identity



EU ID Large Scale Pilot 2023 – 2025:

- 19 EU Member States + Ukraine
- 149 Partners (public and private)
- Relevant Use Cases

<https://www.digital-identity-wallet.eu/>

Use Case "SIM eRegistration":

Simplification and full digitalization of SIM Card registration for EU citizens and residents.

User Journey ²⁾



- 1) B2C, B2B
- 2) Prepaid User Journey

...and proposing our Mobile Technologies to be used in the Ecosystem.

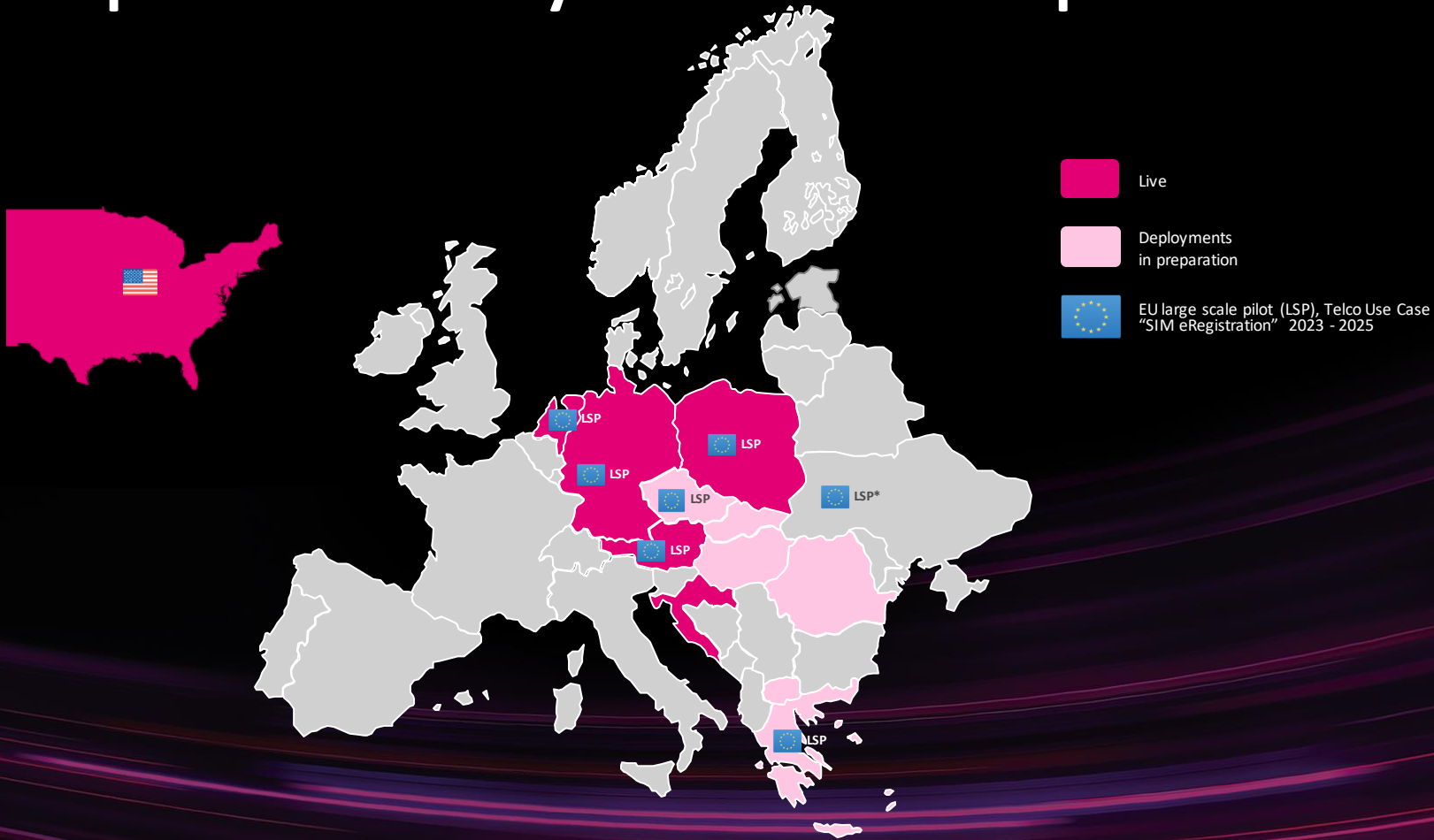


The Mobile Number (MSISDN):

- Human readable and memorable
- Personal and transferable
- Verifiable credential, issued by MNOs
- Relevant for nearly all relying parties
- Fully managed lifecycles by MNOs
- Secured by the SIM and the network, e.g., for authentication purposes



We provide Identity Services in Europe and in USA.

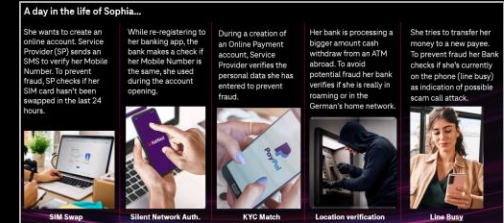




We enable the future of Digital Identities already today!

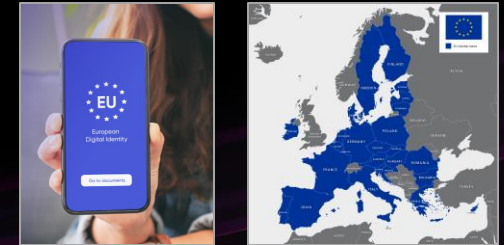
1

We further scale our Identity Services to help solving specific customer problems



2

We enable trusted, interoperable ID ecosystems, e.g., EU ID in Europe



3

Web3 / Metaverse might become additional catalyst for Telco enabled Digital ID



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Q&A and Discussion



Andrzej Ochocki
Head of Identity Management
Deutsche Telekom AG



Cameron D'Ambrosi
Senior Principal
Liminal



Dr. Gilad Rosner
Principal
Liminal



Helene Vigue
Identity and Data Director
GSMA

Continue the
discussion...

Join GSMA
Identity and Data
Community





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Thank you!