MEF GLOBAL FORUM

THE RISE OF DECENTRALISED IDENTITY AND AUTHENTICATION IN A TIME OF DEEPFAKES

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AUTHENTICATION

The Rise of Decentralised Identity and Authentication in a Time of Deepfakes

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Topics

- The Decentralized Identity disruption is coming
- The role of Biometrics
- Threats and Threat Actors
- Significance for the Mobile Ecosystem

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Decentralized Identity is Coming

A **big** change from the past
– from *central* data stores to *personal* data stores

- W3C Verifiable Credentials and ISO 18013 mDLs
- European Digital ID Wallet (eIDAS 2.0)
  (will use both, co-exist)
- America:
  - Apple/Google mDLs e.g. Maryland, Iowa
  - W3C VC for California DMV wallet
  - DHS call for tender for VCs
  - Supporters for each – competition and convergence

Scalable Private Secure

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Decentralized Identity Transition Challenges

Why change?

Governance Frameworks

Commercial Model

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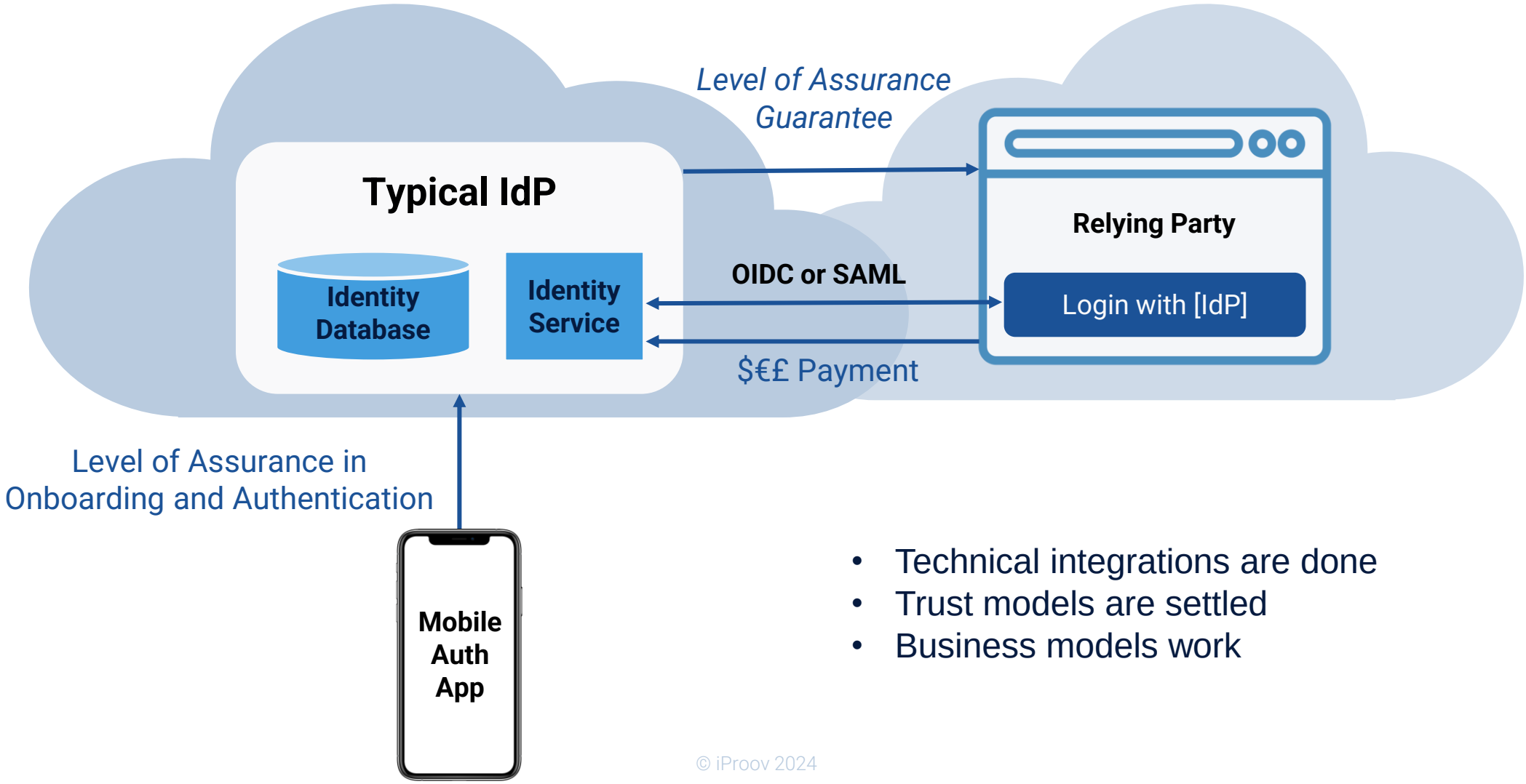
Traditional Identity Provider (IdP)



- Technical integrations are done
- Trust models are settled
- Business models work

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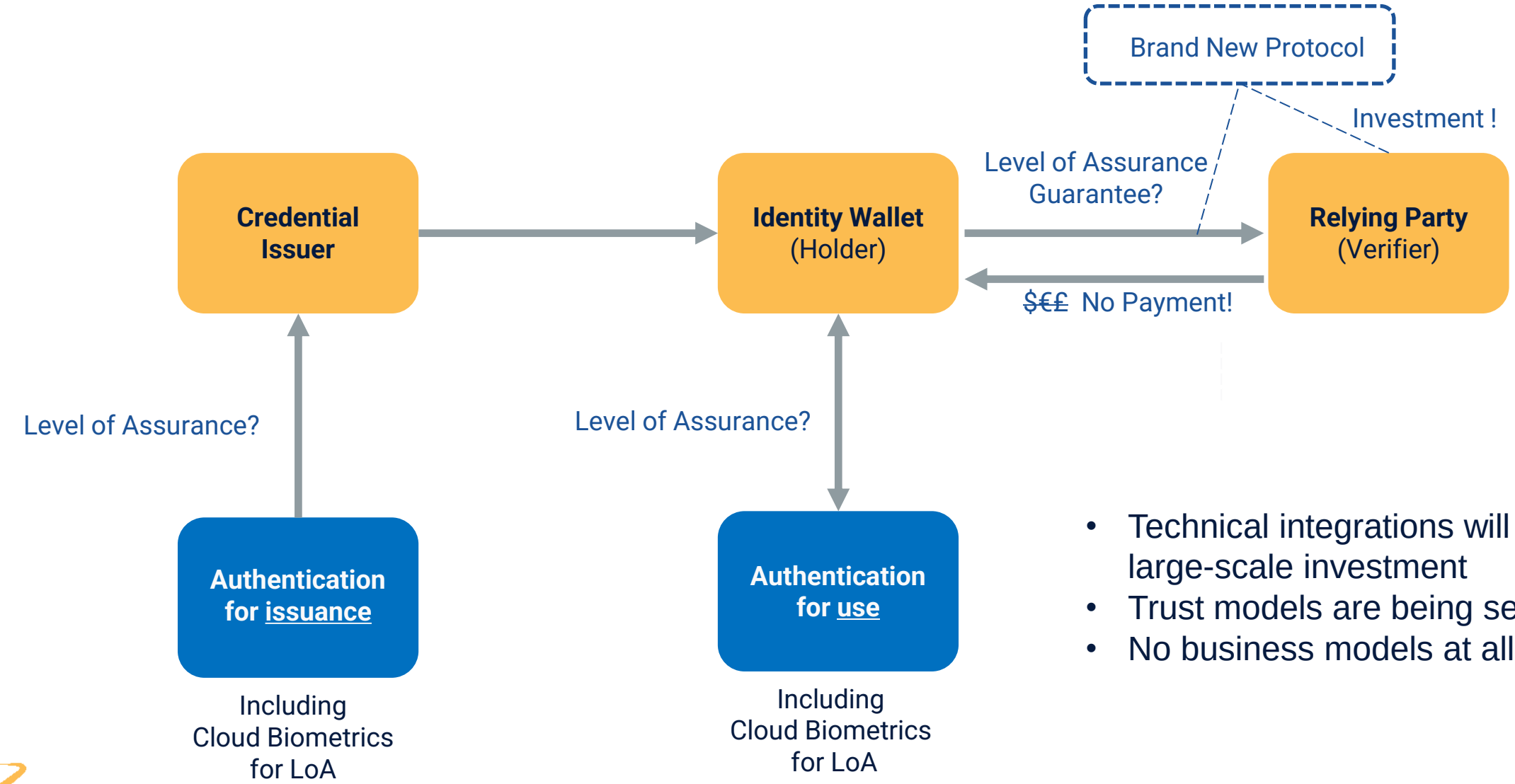
Challenges to Change



- Technical integrations will need large-scale investment
- Trust models are being set up
- No business models at all!

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The Need for Cloud-based Biometrics

Device independence - for usable, inclusive security

Strong Liveness is essential!

-Deepfakes make attacks cheap and easy
-Crucial defences against forgeries **must** be protected from attackers

Adaptive security schemes are vital

-defences against evolving fraud attacks cannot be blind and static

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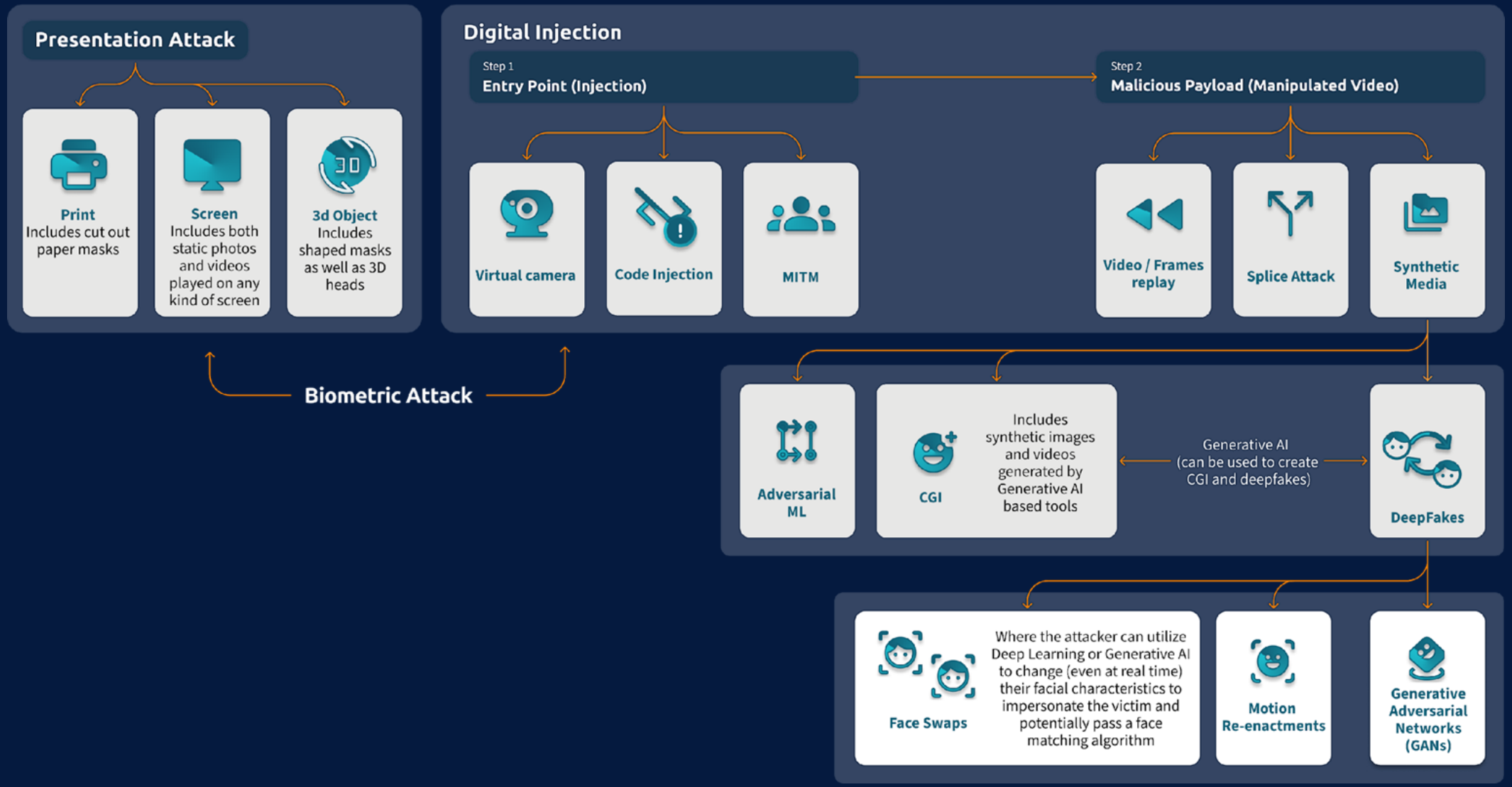
Taxonomy of Biometric Attacks



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Trend One: Face Swaps

Face swaps continue to be the attack of choice amongst persistent threat actors

- Provides maximum control to the threat actor
- Allows great scalability
- Quality now imperceptible to the human eye (even with complex actions)
- Poses a threat to biometric and video identity systems
- Increase in face swap injection attacks of 704%*

* Source: iProov Threat Intelligence Data H2 over H1 2023

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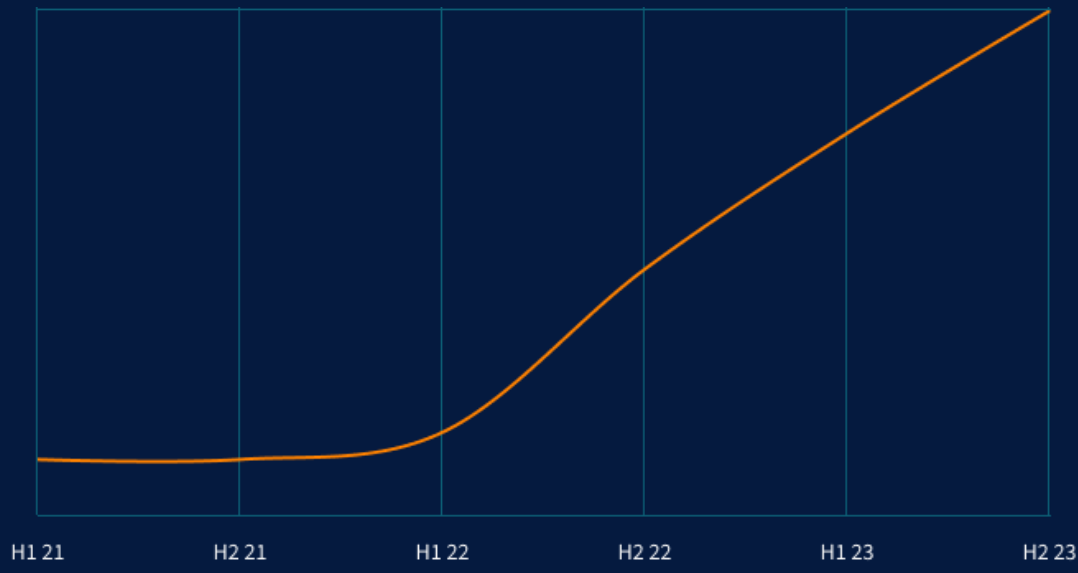
Trend Two: Information Exchange

Significant increase in the number of threat groups engaged in the exchange of information

- **47%** had been created in 2023
- **90% increase** in the number of groups through 2023
- The median value of group members **>1000**



Increase in Identified Threat Groups

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In the Future…

- Everyone will have one or more ID wallets with credentials
- No more SMS OTP: Content and service providers will rely on individuals' wallets instead
- Users will authenticate to their own wallets
- Biometrics will underpin identities and will be heavily attacked
- Rapid change and systemic trust will need collaboration in the ecosystem

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Thank you

Genuine Presence Assurance

Right person, Real person, Right now

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