Worldwide Demand for Identity-based Public Services in the Telecom Sector

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Going digital: digital lifestyle, business and identity

- The world is becoming digital, computing, telecommunications and broadcasting...

- People are spending more time consuming digital media than any other media\(^1\)
  - SMS, email, chat, online dating, gaming

- **Digital identity** refers to the online representation of identity
  - the collection of **claims** made about a person, group or an entity

- Proliferation of social network sites has caused the proliferation of multiple *digital identities* for social interaction and the advent of virtual worlds: Avatars

\(^1\) digital.life, ITU Internet Report 2006
Data security and privacy protection have not kept up

- Technology advances are blurring the boundaries between private and public and crossing space and time

- *Identity management* is required to enable online activities while ensuring security, privacy and trust for individuals, enterprises, service providers and governmental agencies
  - *Individuals* want to know where their information is and control it
  - *Businesses* want to identify and authenticate and share with partners
  - *Governments* have specific requirements

- Technologies need to provide the extremes of “anonymity“ to total “identifiability“ depending on the context and parties involved.

- Trend is towards *federated systems*
  - No single point of failure
  - Information is shared among “trusted“ entities.
Example: Using identity to manage SPAM

• The problem: uncontrolled SPAM in e-mail and SMS.
  - SPAM is perceived as a very annoying problem for users of e-mail.
  - Could be the same for users of SMS.

• The solution: Identity Management to prove sender is trusted and hide sender’s email address
  - The e-mail or messaging providers must trust each other
  - User identity is protected
  - Messaging providers can identify through their trusted partners potential offending customers

• Requirement
  - A standardised framework for Privacy Protection and Trust among many domains
Liberty Alliance

Federated Single sign-on

Identity Management

User-Centric

Domain-Centric

OASIS
WS-*
SAML
SOAP
W3P
3GPP
Liberty Alliance
OMA
OATH

Broadband Cloud
Identity Management is a complex system

It will take time to build the right capabilities
# Liberty Alliance Solution: specifications + policy guidelines

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Telecommunications services market

• Adoption of a *standardised identity management* platform is a key enabler for network operator services
  - m-commerce, m-health, community services from the Internet enhanced with location, messaging, personalisation and presence capabilities

• *Identity management and authentication* will allow network operators to position themselves as “service enablers” to service and content providers

• This could provide new business models

• Revenue potential from two sources
  - Increased usage of data services and
  - Advertising revenues/revenue sharing
Worldwide demand for identity management: scenario analysis

Source: Telecompetition Group, 2006 for Liberty Alliance

**Day in the Park**
- Identity and privacy protection common
- Strong social networking communities
- Advertising supported e-commerce
- Most services free or low cost
- Primarily user-generated content
- Internet relatively safe, spam & virus free

**Safety at a Price**
- Government certified identity providers
- Effective consumer protection
- E-government ubiquitous
- E-commerce thrives
- Highly regulated environment
- Small number of large players

**Anything Goes**
- Fraud prone, insecure communications
- Diverse user identity behaviors
  - Social networking anonymity
  - Ignorance of identity value
  - Identity theft a major concern
- Only “brand names” merit purchase trust

**Vibrant Diversity**
- Services separated from access
- Fragmented, hybrid ecosystem
- Effective user control of identity
  - Identity providers are really protectors
  - Neutral 3rd parties provide trust
- Lightly regulated environment, free market pricing

Source: Telecompetition Group, 2006 for Liberty Alliance
Conclusions

• The digitization of the world and the advent of new players in the communications market make it critical that network operators include identity management in their services platform
  _ Network operators can still provide a higher quality, more stable and trusted communications environment

• *Identity management* is a complex proposition, including
  _ Deploying infrastructure
  _ Strengthening customer perception of trust
  _ Building business relations and federations

• However, network operators have a window of opportunity to retain customers and increase revenues through services enabled by identity management
  _ It is not too early to start now!
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