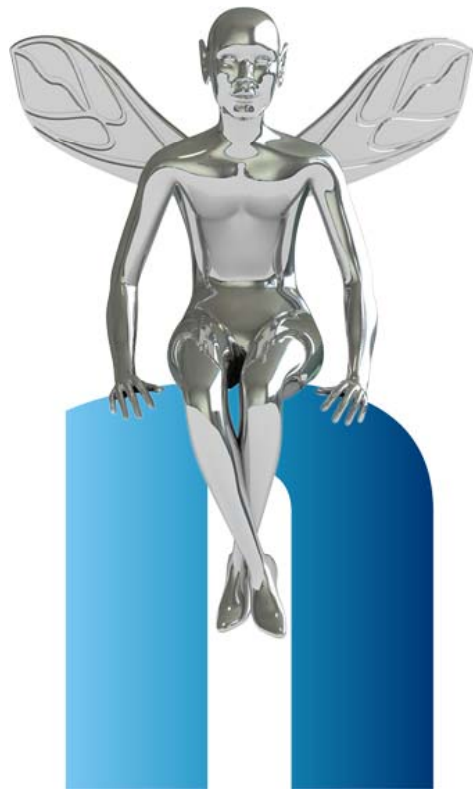


[www.nexussafe.com](http://www.nexussafe.com)



# ISSE 2009

## Strong Authentication with eID Cards

### User acceptance or “Do I really need it”?

Karin Loleit  
CISSP, CISA

07. October 2009



6-8 October 2009  
The Hague, The Netherlands

# Facts about Nexus

- An independent vendor of IT security and eCommunication products and solutions
- Founded 1984
- Listed on Stockholm Stock Exchange since 1998
- HQ in Stockholm, offices in Berlin and Paris
- Strong references in large corporates and organizations as Volkswagen, SEB, IKEA, Bundeswehr, ...
- Strong network of solution and technology partners as Siemens, T-Systems, IBM, HP, Bundesdruckerei, Microsoft, utimaco, gemalto, ...



## eID Cards - "Do I really need it"?

- eID Cards – Various Use Cases
  - Corporate Environment – Acceptance
  - Governmental Usage - Acceptance
  - Private Usage – Acceptance
- German ePA and others
- Blocking Points in using a digital ID
- Successful Implementation Example: Swedish BankID
- What can we learn from the BankID experience?





# Why Strong Authentication?

- Identity theft is becoming the fastest growing crime rate in hightech countries (e.g. Pharming, Phishing, Skimming etc.)
- Internet applications e.g. Online Banking, eGovernment, eHealth etc. need clear and unambiguous identification of a person in a virtual space.
- Fight industrial espionage
- Etc.



## What we (should) get

- Authenticity – no wrong identity
- Confidentiality – no eavesdropping
- Integrity – no data manipulation
- Availability – no data filters

# Example: German ePA Electronic Identity Card

- Issued from 01.11.2010
- Mandatory: digital photograph of bearer
  - for police and border controls only
- Arbitrary: „Internet Identity“
  - name and address
  - date and place of birth
  - expiry date
- Arbitrary: 2 fingerprints
  - For police and border control only
- Optional (extra costs): qualified digital signature



## Der neue Personalausweis vereint den herkömmlichen Ausweis und elektronische Funktionen

Herkömmlicher Ausweis	Elektronische Funktionen
 <p><b>Test Elektronischer Personalausweis</b> 122000123</p> <p>Name: MUSTERWIB GEB. GADOLF</p> <p>FRITZE</p> <p>12.06.1949 DEUTSCH</p> <p>BERG, 34</p> <p>51.10.2010 000001</p> <p>Ab 01.11.2010: <b>Ausweis in Scheckkartengröße</b></p>	<p>Immer (verpflichtend):</p> <ul style="list-style-type: none"> <li>■ <b>digitales Lichtbild</b> (nur für Polizei und Grenzkontrolle)</li> </ul> <p>Auf Wunsch (in der Gebühr enthalten):</p> <ul style="list-style-type: none"> <li>■ <b>Internetausweis</b> (Name, Anschrift, Geburtstag, Geburtsort, Ablaufdatum)</li> <li>■ <b>2 Fingerabdrücke</b> (nur für Polizei und Grenzkontrolle)</li> </ul> <p>Auf Wunsch (mit Zusatzkosten):</p> <ul style="list-style-type: none"> <li>■ <b>Qualifizierte elektronische Signatur</b></li> </ul>

Quelle: Bundesministerium des Innern (Planungsstand: 20.11.2008)

# Blocking Points for the use of a digital ID?

- No unique national ID in Germany (no „numbering“ of the citizens)
- Infrastructure still insufficient
- Suspicion in the German population still high
- A couple of different trust centers who want to run their business
  
- What are others doing?



# Example: Swedish BankID

- BankID is a national solution for electronic identification and signing provided by Swedish banks.
- BankID is used by government, private companies and banks
- BankID is an IT infrastructure, including processes and a business model.
- BankID was developed to meet requirements from the Swedish authorities to enable e-government and also meet security requirements for Internet banking
- Most Swedish banks are connected to BankID
- BankID has been in production for more than 6 years

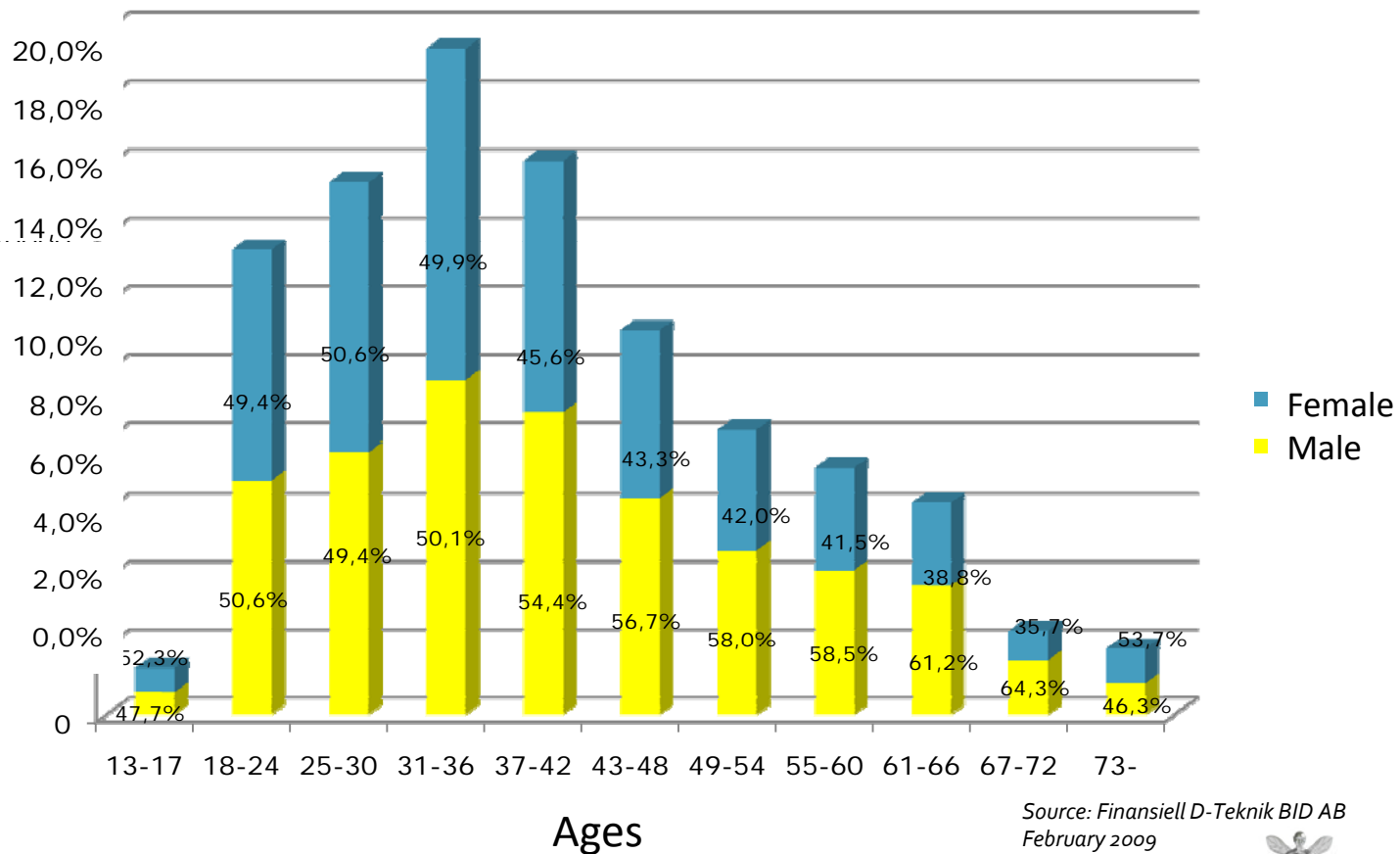


# Some Important facts

- One national ID-number accepted and used by everyone
- The banks issue BankIDs to their Internet bank customers
- The bank guarantees the identity of the BankID user
- More than 60% of the Swedish population are Internet bank users



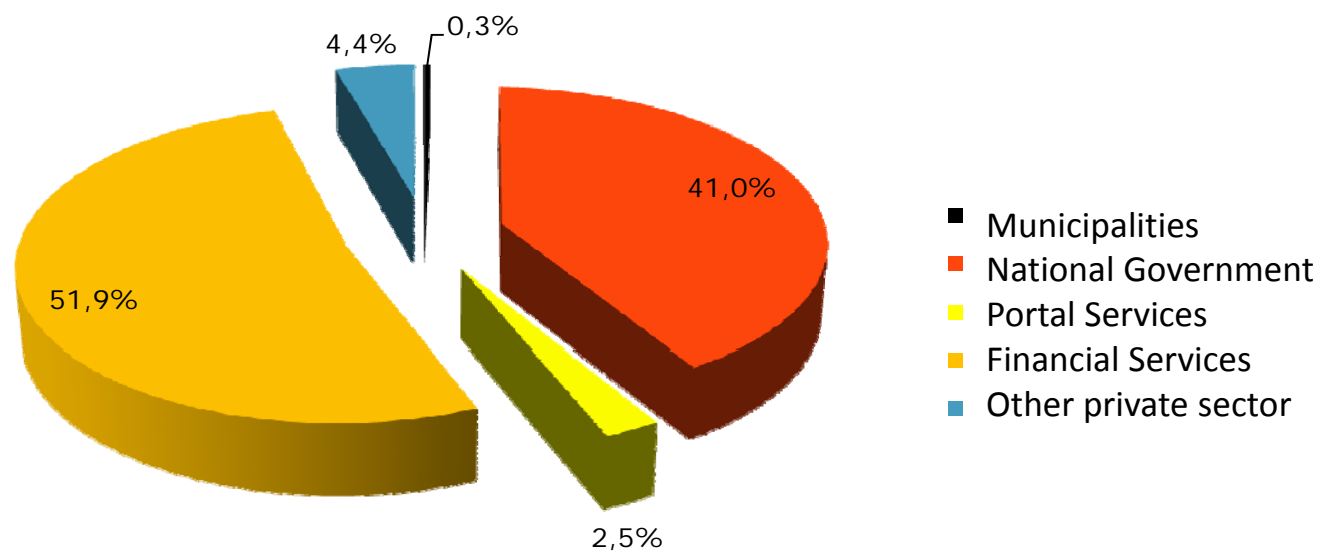
# Gender and age of BankID users



Source: Finansiell D-Teknik BID AB  
February 2009



# Transactions per business sector



# Same user experience

The screenshot shows the Skatteverket website with a navigation menu on the left and a main content area. The main content area has a large heading "Logga in, e-tjänster" and a sub-heading "Logga in, e-tjänster". Below this, there are several sections: "Använd med att lämna din deklaration", "Hög tid att lämna ansökan om skattereduktion", "Deklarera via Internet och få skatteansvaret tidigare", "Deklarationen ska lämnas senast den 4 maj", "Inlämningsställen för pappersdeklarationer", "Viktigt att inlämna bekräftelse på sms-deklarationen", and "Hjälplåning av lagen om kassainläggningar".

The screenshot shows the GE Money Bank website. The main heading is "Lån, kort, sparkonto". Below this, there is a large advertisement for "Spara 495 kr" with a sub-heading "Spara 495 kr" and a button "Flaschläm lånet". To the right, there is a "Logga in" section with a "Logga in med BankID" button and a "Logga in" button. Below the login section, there is a "Låna" section with a "Låna" button and a "Låna" button.

The screenshot shows the IKANO BANK website. The main heading is "Öppna sparkonto redan idag." Below this, there is a large advertisement for "Bankkian från 4,75%" with a sub-heading "Bankkian från 4,75%". To the right, there is a "Logga in" section with a "Logga in med BankID" button and a "Logga in" button. Below the login section, there is a "Låna" section with a "Låna" button and a "Låna" button.

The screenshot shows the Apotek website. The main heading is "Hjälplåning av lagen om kassainläggningar". Below this, there is a large advertisement for "Fem myror barmischar 2 i 1" with a sub-heading "Fem myror barmischar 2 i 1" and a button "Fem myror barmischar 2 i 1". To the right, there is a "Logga in" section with a "Logga in med BankID" button and a "Logga in" button. Below the login section, there is a "Låna" section with a "Låna" button and a "Låna" button.

The screenshot shows the Vägverket website. The main heading is "Service och e-tjänster". Below this, there is a large advertisement for "Service och e-tjänster" with a sub-heading "Service och e-tjänster" and a button "Service och e-tjänster". To the right, there is a "Logga in" section with a "Logga in med BankID" button and a "Logga in" button. Below the login section, there is a "Låna" section with a "Låna" button and a "Låna" button.



# What can we learn from BankID?

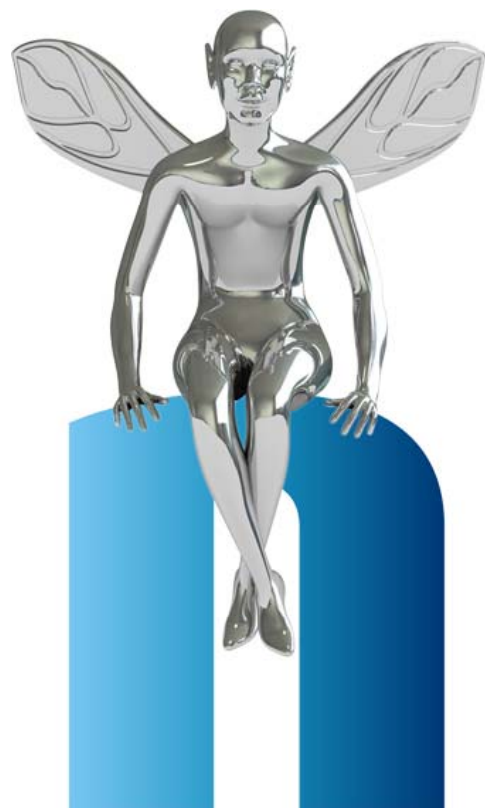
A digital ID which shall really be accepted...

- ✓ ...needs a working business model
- ✓ ...must provide cross industry usage
- ✓ ...must be accepted by governmental institutions as well as by commercial service providers and end users
- ✓ ...should be provided by a dedicated organization that handles all important parts of the infrastructure (need some anchor of trust)
- ✓ ...must provide a cost effective and scalable infrastructure where "one size fits all"
- ✓ ...must be easy to use for all relying parties
- ✓ ...should be free for the user



20/10/2009

[www.nexussafe.com](http://www.nexussafe.com)



# Questions?

Karin Loleit

Technical Account Manager  
CISA CISSP

Office: +49 30 206 14 15 20

Mobile: +49 172 40 33 204

[karin.loleit@nexussafe.com](mailto:karin.loleit@nexussafe.com)

