

New authentication and authorization concepts

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Agenda

- Introduction
- Business, IT and security drivers
- Reference Architecture
- Summary

Introduction

Introduction of Deloitte

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DCE Introduction



First offices opened in 1990
Partner-owned since 1997



17 countries



3,900+ employees
138 partners



Audit, Enterprise Risk, Consulting,
Financial Advisory, Tax & Legal services



5 FSI functions
Audit, Consulting, ERS, FAS, TAX



€268m revenue in FY14



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DCE Introduction

CE FSI Professionals

Partners: 60 

Client Service Professionals: 580 

Banking: 540 Insurance: 40 Investment Mgmt: n/a

Audit: 245 ERS: 68 CNS: 122 FAS: 47 Tax: 98

CE FSI Major Clients

Non Audit Clients



PKO BP



NLB



MKB Bank



Raiffeisen

Audit Clients



Unicredit



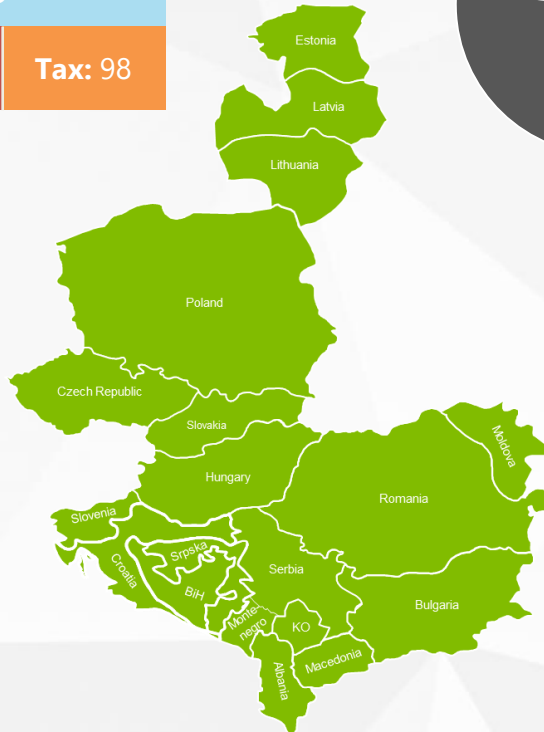
OTP



Santander

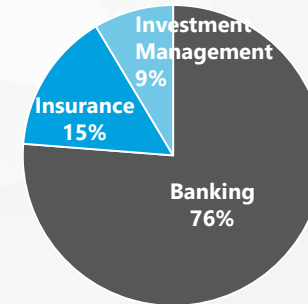


Société Générale

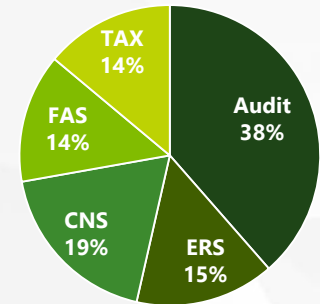


CE Fees by Sectors and Service Lines

FSI by Segment



FSI by Function



CE FSI Recent Major Projects



Intesa Sanpaolo

ERS

CNS



Raiffeisen

CNS



PKO BP

ERS

CNS



NLB

Audit

ERS

CNS

FAS

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What is MEP

*Multichannel Entry Point is authentication and transaction authorization solution that **centralize authentication** within the enterprise and implement a **framework for easy deployment of additional authentication methods**. Five authentication methods are pre-deployed. The solution is based on **open standards**, on **federated login** principles, and built **on robust and modern SOA architecture**.*

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Management summary

The key benefits of an MEP solution

- Better customer experience via new methods and processes
- New and innovative authentication methods for different channels
- Risk-based authentication support
- Centralization of authentication and authorization
 - Apple- or Google-like identity management
 - Cost-effective adoption of new methods
- Multiple application / multiple parties supported thru federated login
- Based on open standards
- Fast reaction to security threads

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Business Drivers

*How the **multichannel solution** can help to **reduce loss, prevent customer churn and generate more revenue** in your banking business.*

Maintaining customer confidence

Trust is the **very foundation** of banking. The cost of recovering the trust might be higher than the cost of preventing.

Ineffective authentication mechanisms may increase the exposure to:

- **Identity theft**, which is one of the fastest growing crimes and the number one complaint to the Federal Trade Commission (FTC)*.
- **Online fraud**, which is a major risk to organizations because of the financial loss and the potential erosion of **user confidence** in online services.
- **Inappropriate access to customer, client, or employee** information which can result in significant brand risk to the organization.

... .. these are all the cases that are happening and can result in a **loss of customer trust**.

*Source: Identity Theft And Your Social Security Number, SSA Publication No. 05-10064, August 2009, ICN 463270; FTC Releases List of Top Consumer Complaints in 2010; Identity Theft Tops the List Again, For Release: 03/08/2011



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Decrease authentication and authorization cost by replacing SMS

New authentication methods (SW OTP, Biometrics, ...) aim to **replace SMS** and dramatically decrease the cost of the service along with **increasing the level of security**.

Risk-based authentication in a combination of biometric (2nd step) authentication method **decreases the cost of the authentication service** and **increases the level of security**.

Cost reduction is valid for **authorization services**.

Adoption of **new methods** in a **single authorization service** has an **effect on all** integrated **bank services**.

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Enhance customer experience

Unfortunately, the use of **current strong authentication methods** might be **unfriendly** and **expensive** for most **customers**. **Customer experience is important** and therefore banks are looking for **innovative authentication methods** that are **user friendly** and working on **any device**.

Incorrect settings of authentication mechanisms may decrease the level of customer experience, which may lead to:

- **Channels are not used as they were designed**, which may decrease revenue per customer because of using more expensive channels for service operations instead of using cheaper ones.
- **Customers switching to competitors**, which leads to a loss for the bank.

... with implementation of new methods **process redesign** is on the table. We are able to help you **enhance customer experience** by **redesigning** authentication **processes** that are really **multichannel** and become the **leader** on the market.

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Bank holds client identity and can act as an **identity** provider.

Identity can be provided:

- **Within the bank group** – to support unified login of global customers
 - to access a local account from a foreign ATM
 - to make available a global account for corporate clients
- **Act as an identity provider** for partners – the bank can become a trusted identity provider and provide authentication services to 3rd parties
- With authentication services **for a global identity provider** (e.g. STORK 2.0)

Bank can re-sell 3rd party products and a **customer can authenticate with the same login** into 3rd party services as the bank one.

IT & Security Drivers

*Build a **modern and flexible architecture** that enables fast and cheap implementation of new business requirements.*

*In modern architecture **centralize, standardize and unify authentication and transaction authorization services** across the whole application portfolio.*

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Modern Authentication Solution

Must be able to protect the bank against any cyber attacks

- Cyber attacks are becoming more and more frequent
- Attackers will always lag behind new authentication methods but it is expected that one day they breach it
- The more complex and difficult the method or a combination of methods is the more difficult is to breach it

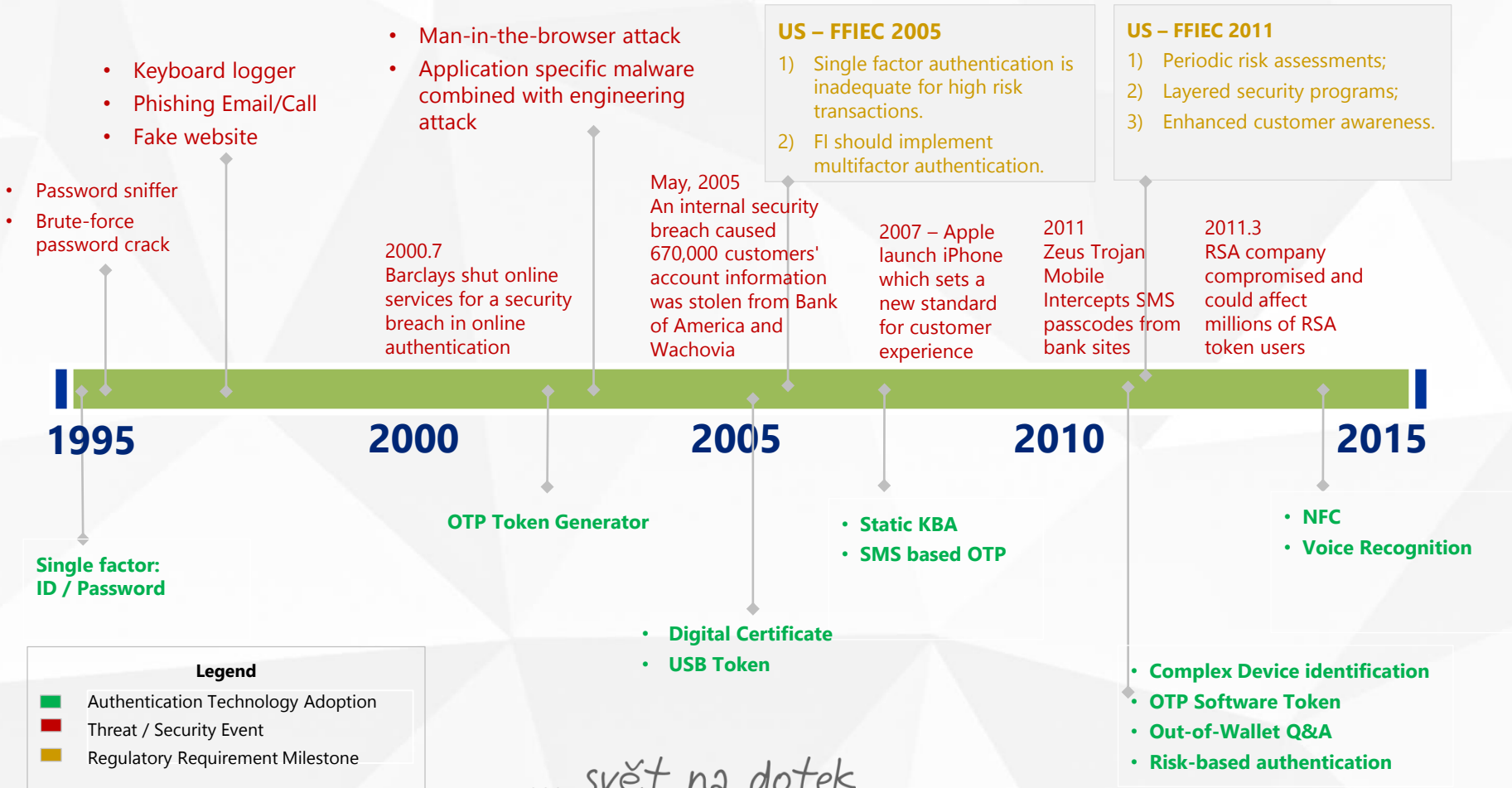
Must be flexible enough to deploy new authentication methods and dynamically respond to assessed risks

- The only way how to prevent cyber attacks is to be first
- Deploying early new methods or combining them
- Must be ready to implement principles of risk-based authentication

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Evolution of Authentication

In the past decade, evolving threats targeting online banking have been growing rapidly in terms of number, diversity and sophistication. In response to these evolving threats, new regulatory requirements have been imposed on banks. This coupled with increasing customer expectations has evolved the authentication solutions landscape.



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Modern Authentication Solution

Must be able to support federated identity concept

- Support for open standards SAML and OAuth

Architecture purity via centralization

- SOA-based architecture
- Centralization of authentication and authorization methods
- Centralization of authentication and authorization processes
- Centralization of User Interface
- Authentication and authorization behave like 3D secure

Easy integration with internal applications

- Support for open standards
- Web Services, RESTful Web Services

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Modern Authentication Solution

Must be Multichannel – support for multiple applications, channels and devices (multichannel, multi-device)

- Set of authentication and authorization method is assigned to the application / channel and device

Must support Risk Bases Authentication and easy integration with Fraud Detection System

- Authentication and authorization method selection based on risk level
- Caller specifies the risk level for every authentication and authorization request

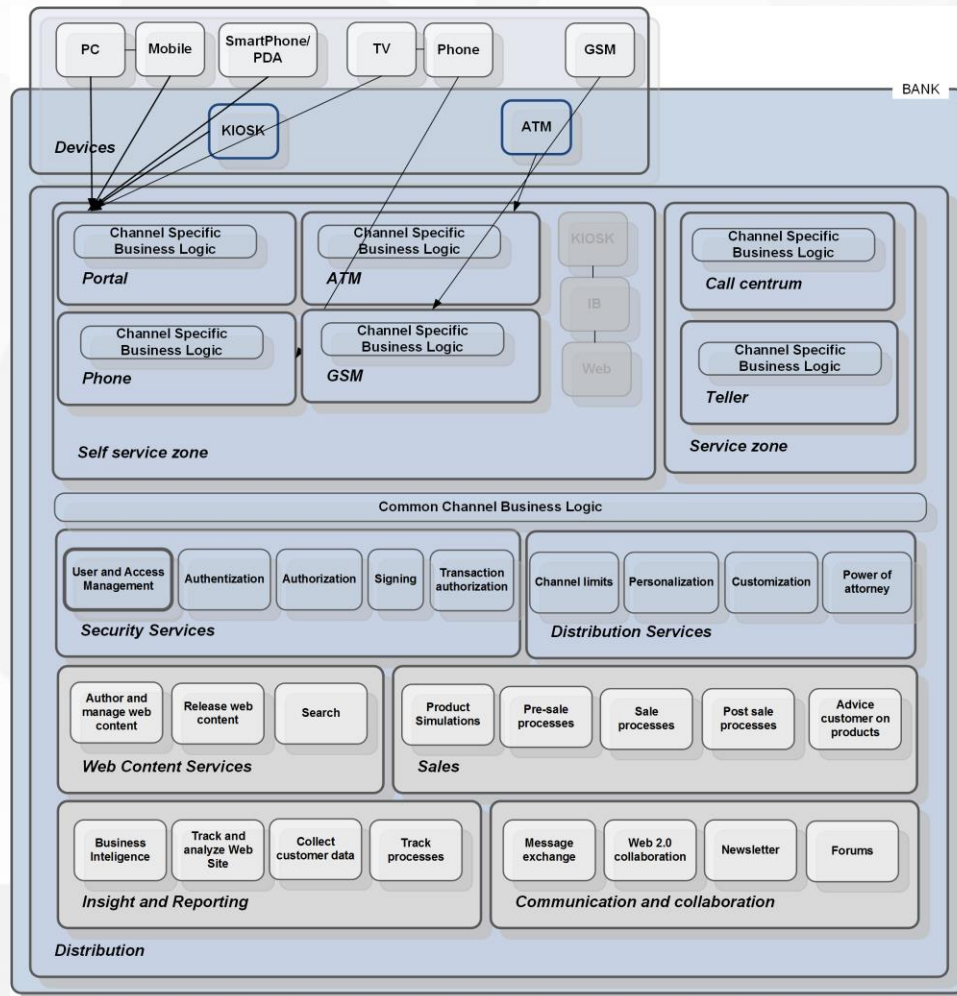
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Solution benefits

- Support of new authentication methods that reduce the risk of penetration and operating costs
- Improve the user experience by implementing new simplified processes
- WebAPI ready
- Open solution for new authentication methods

Business Architecture

Capability model



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Deloitte Legal

Legal and security services

Deloitte provides services that can help the organization with design and implementation of new authentication solution.

We offer following services

- Analytical phase
 - Risk assessment – provide risk assessment of the solution
 - Solution design – propose changes into solution to be compatible with legal and regulatory requirements
- Implementation phase
 - Penetration tests
- Post implementation support
 - Security Architecture Assessment
 - Legal services

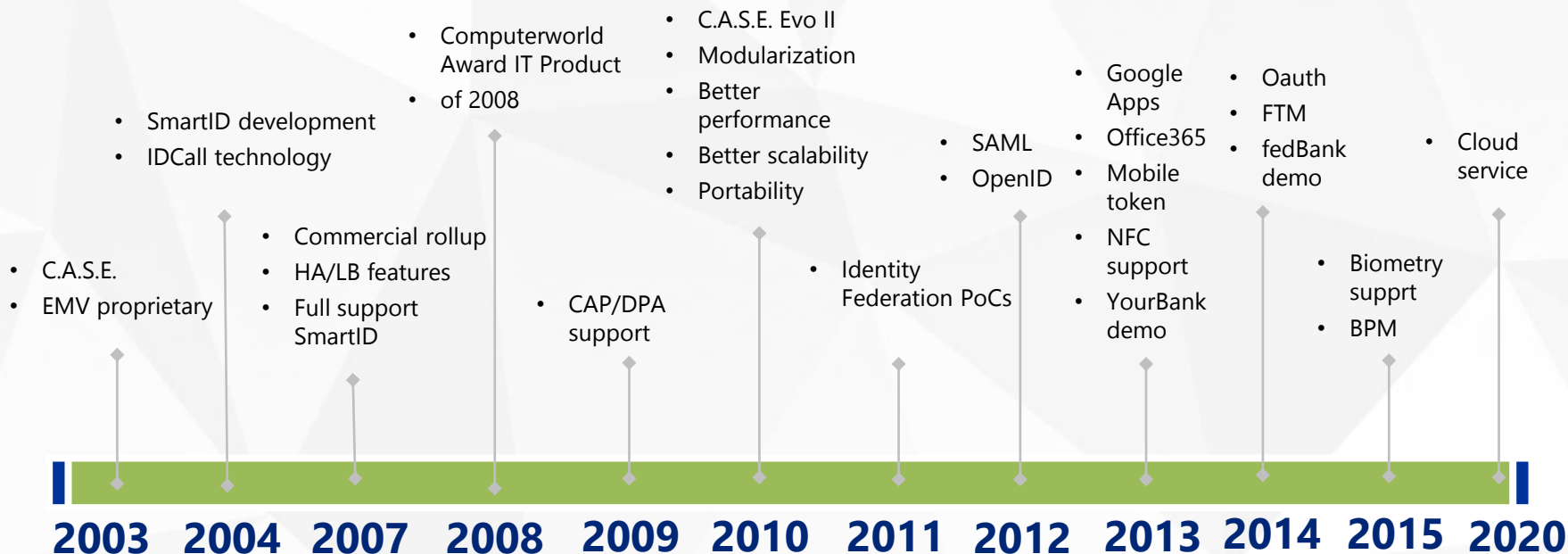
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MEP Solution

Development roadmap



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