

2009-01-28

Integration and SOA at SEB Group IT

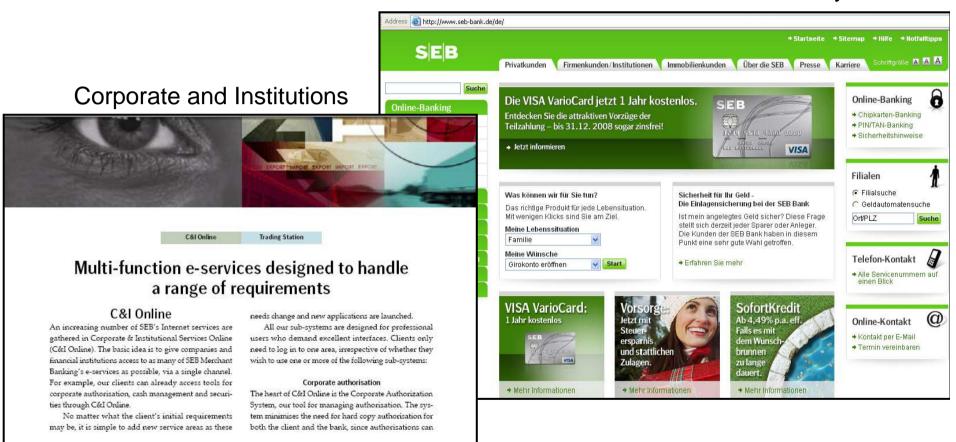
Anders Jäder Head of Application Architecture and ICC

Java at SEB

for what?



Internet bank for SEB in Germany



be checked, distributed and recalled through an electronic interface. Management is therefore able to delegate and closely monitor responsibility for cash and custody accounts.

The authorisation system is the same for all the sub-systems under C&I Online, including Online Cash Management and Online Securities Services.

Trading Station

Our other multi-function e-service is Trading Station. This is a world-leading application for electronic trading in several asset classes. It also acts as a reliable source of information, presenting real-time rate data. Trading Station is available as a standard package but can also be adapted to provide customised solutions.



Integration and SOA – "One Pager"

SMAR

SOA at SEB A North European Financial Group

Group SEB

- 10 countries +
- 20 000 employees
- 600 branch offices
- 3.000.000 Internet customers
- 150 years



IT at SEB

- IT Cost ~ 600 MUSD
- Data centres in 5 countries
- 2200 IT employees
- 1500 applications
- IBM mainframe (IMS, CICS, 5000MIPS)
- 700+ physical Unix machines
- 1300 Windows machines

• ...



Buy and integrate
-"Cherry Picking"

SOA Journey at SEB

- > 13 years
- Gartner best practice -96
- SOA University -96
- 4500 Services
- ~100 Service request/sec
- SOA generation 4
- ICC created 2007
- IBM Integration co-operation

Shanghai

Integration solutions

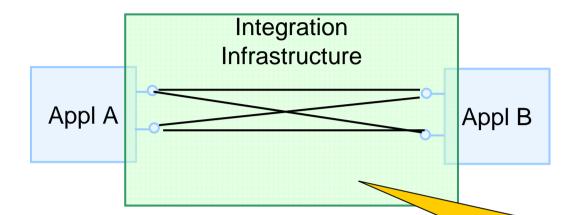
- Information models
- IBM Integration solutions
 - MQ
 - Message Broker
 - WAS
 - WSRR
 - Rational
- Microsoft
- Amtrix
- Axway XiB
- Sonic MQ
- Informatica
-

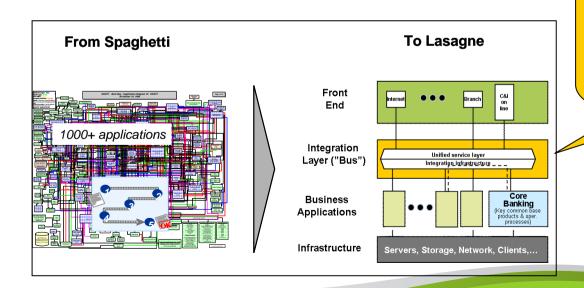


Group IT Integration

Integration Infrastructure







a very important piece that need to be improved as part of the journey from Spaghetti to Lasagna.

But also

as a very critical running component of the business today and forward.

Examples - Integration Infrastructure in operation today



130.000.000 transactions per month.

30% of transactions are Internet related

1.000.000 internet customers registered

120.000 internet customers per day.

7.000.000 transactions per day.

250 transactions per second

100 IMS regions - theoretical =1000 transactions per seconds.

4.000 branch users generates 1.000.000 transactions per day

Volume per channel MQ = 6%, SEB-CS = 51%, Legacy = 41 %

HDD:360

SEB-CS Business Objects:257

SEB-CS Services:3823

Transactions used by SEB-CS Services:2413

Transactions defined in IMS:8681

Test environments: 3 Acceptance, Proj. SysTest (new)

Cobol Modules:14.441 SEBOL Modules:12.001 Assembler modules:3578.

Volumes SEB-CS

The SEB-CS services accounts for 51 % (3.7 million) of the daily IMS transaction volume. The Internet system, private customers IKP, accounts for close to 2 million transactions.

The small businesses Internet system, IKF, accounts for 0.5 million transactions, the branches for 1.1 million transactions. The EMS systems generated 62.000 messages this day.

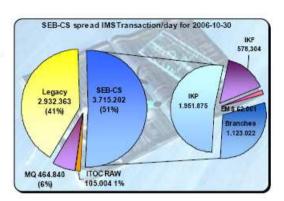


Figure 10 SEB-CS Services details, Internet and branches

Volumes MQ

The MQ messages for the peak day 2006-10-30 are 6 % of the total IMS volume. BMPs are not included in these figures. The ATMs accounts for 361.000, Europay 43.000 and Prator 60.000 transactions.

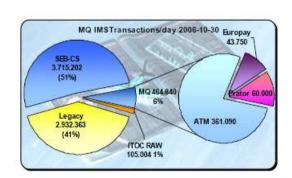


Figure 9 IMS transactions day, MQ view



Integration concept

SEB Overview

Business Function Map

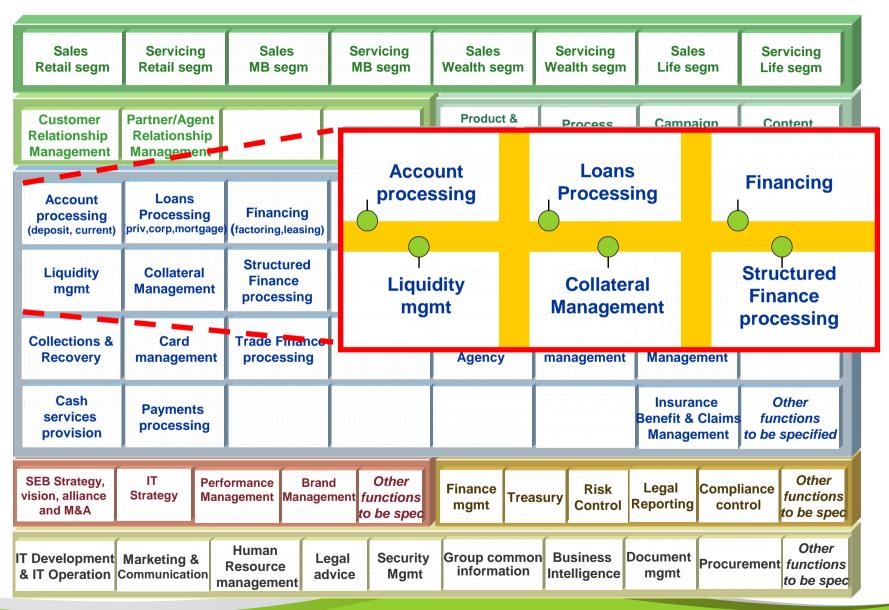


Sales Retail segm	Servicing Retail segm	Sales MB segm	Servicing MB segm	Sales Wealth segm	Servicing Wealth segm	Sales Life segm	Servicing Life segm
Customer Relationship Management	Partner/Agent Relationship Management			Product & Proposition develop. & mgmt	Process development	Campaign plan.& exec.	Content management
Account processing (deposit, current)	Loans Processing priv,corp,mortgage	Financing (factoring,leasing)	Trading	Portfolio Management	Advisory provision	Insurance client contract Services	
Liquidity mgmt	Collateral Management	Structured Finance processing	Custody	Portfolio Accounting	Financial research	Insurance Payments, Billing & Collection	
Collections & Recovery	Card management	Trade Finance processing		Fund Transfer Agency	M&A management	Insurance Underwriting Management	<i>(</i>
Cash services provision	Payments processing					Insurance Benefit & Claims Management	Other functions to be specified
SEB Strategy, sion, alliance and M&A		ormance Brand agement Managen		Finance mgmt Treas	Risk Control I	Legal Compl Reporting con	THINCTION
Development IT Operation	Communication	Human Resource nanagement	gal Security vice Mgmt	Group common information	Business Dintelligence	ocument Procur	Other rement function to be sp

SEB Overview

Business Function Map

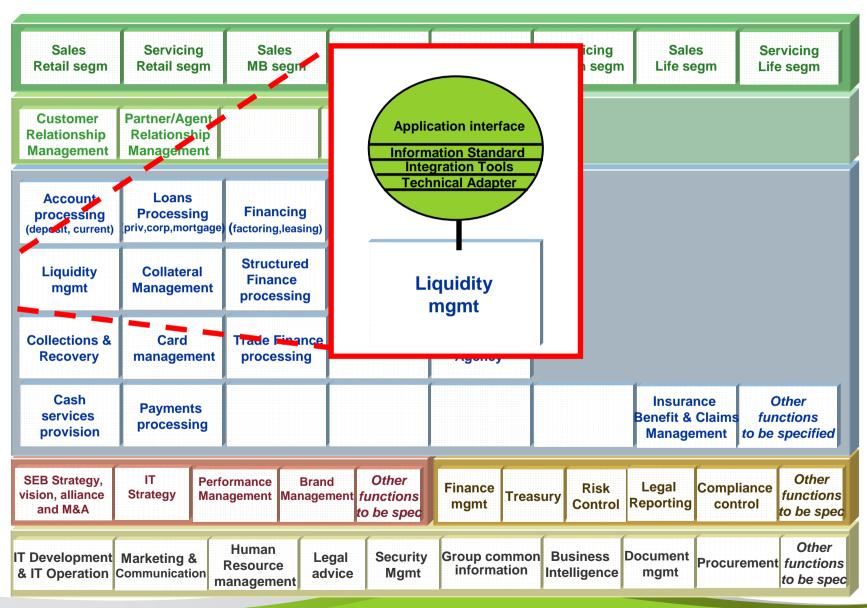




SEB Overview

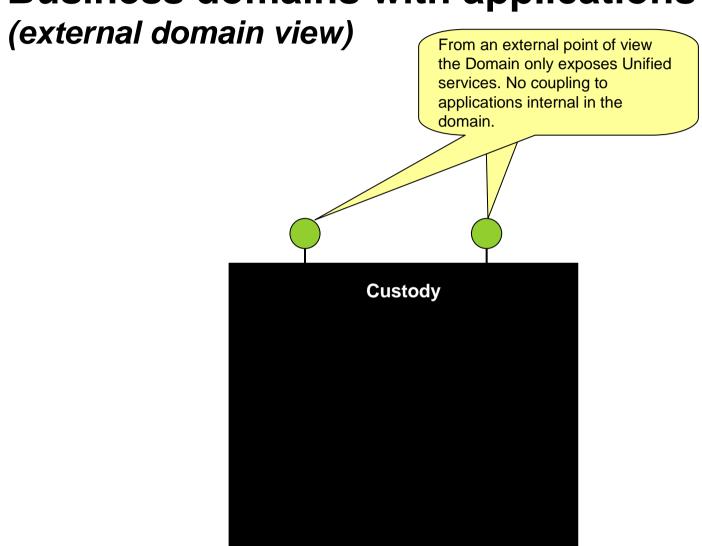
Business Function Map







Business domains with applications



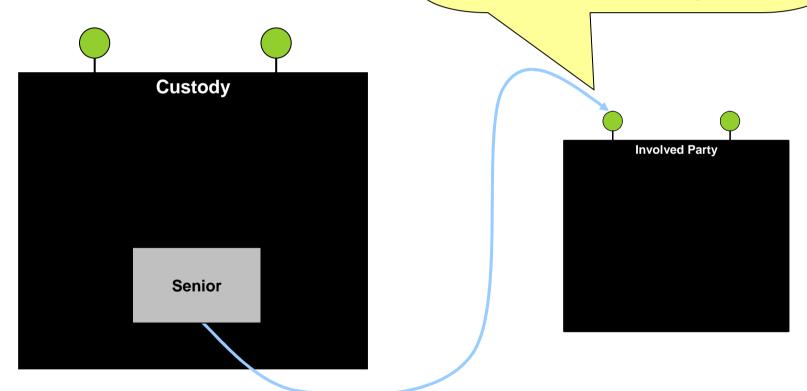


Business domains with applications

(external domain view)

In the example below, applications in the Custody domain calls functions in the Involved party domain.

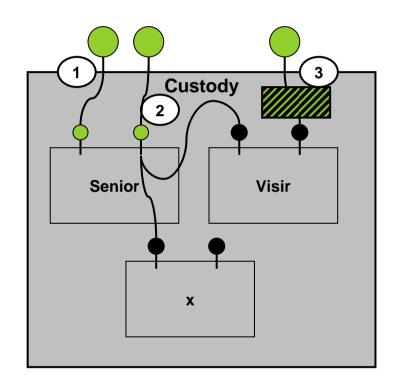
The exposed service has an interface that describes the service. This interface is the contract between the service consumer and provider.





Business domains with applications

(internal domain view)



Unified services are services exposed by the applications in the domain.

The exposed services can be:

- 1 existing services in the applications
- 2 new services that wraps old services
- new services that wraps old services by the Integration platform tools.



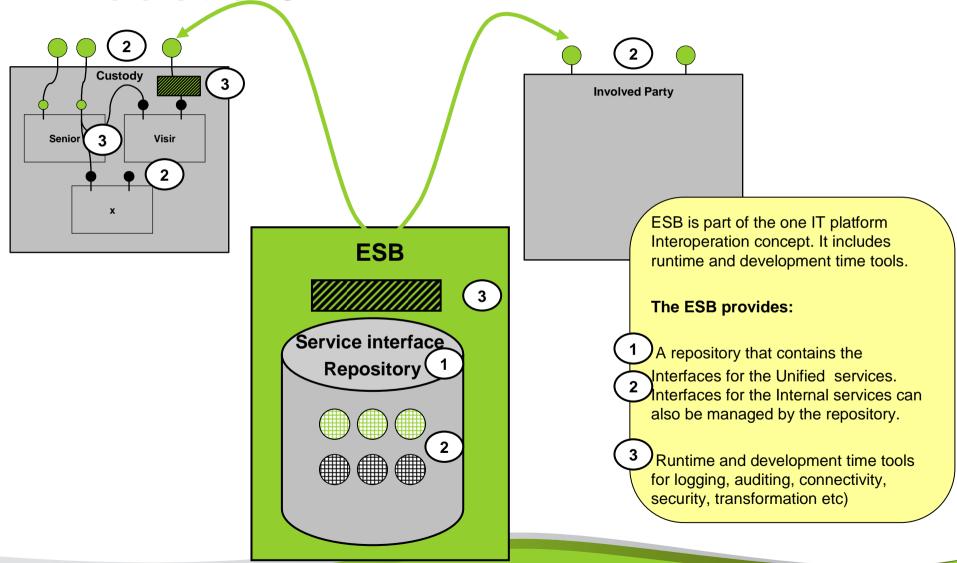
Business domains with applications *OK*, so where is the ESB then?

That is a good question, but...

The application landscape and the application supporting functions are much more important!

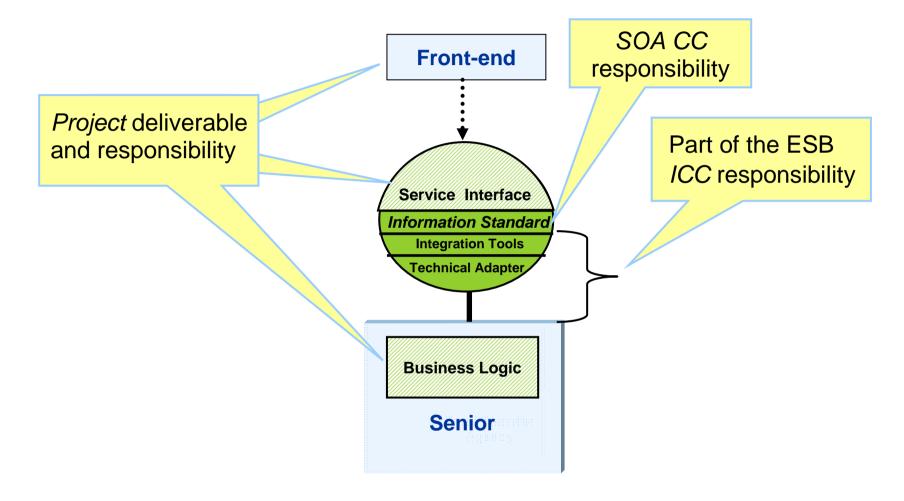


Business domains with applications *Here is the ESB...*





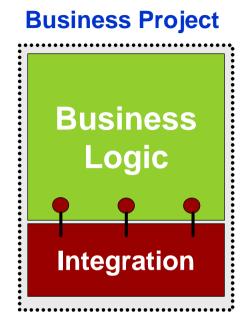
What does a service consist of ...





Group IT ICC and Group IT SOA CC



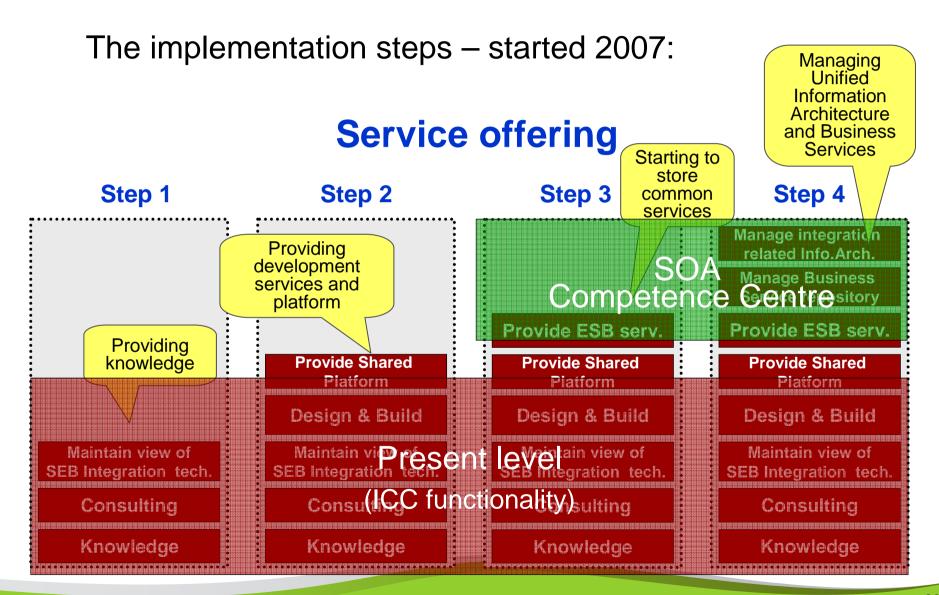


ICC = The Integration Service Provider

Do not develop own integration solutions



ICC Organization roadmap



ICC – Integration Competence Center

a global function enabled via an virtual organization

Operation

- IOC department
- Service Management

Funding and Communication

- Communication Plan
- Contact information
- What and when Integration solutions
- Finance



Funding

Operation

Mgmt

Governance

Delivery

Delivery

- Plans
- Integration projects
- Maintenance org
- Resources
- Dev, test Environments

Governance

- Integration rules
- Financing models
- Target
- Roadmaps



New financial model for Integration operation cost

Common funding model for Development & Test and Integration solutions



"What and why?"

Development environments and test Integration Infrastructure These areas (Dev. test and Integration) are common for all and not dedicated Appl A Appl B for one specific application drivers From Spaghetti To Lasagne Development streamlining and Operational excellence Front Integration Layer ("Bus") Business One function one solution **Applications** Infrastructure

Common funding model for Development & Test and Integration solutions



"How?" Change the cost allocation from per application to per Division according to common key. N.B Continued follow-up and benchmark of the functions as before. Division Development & Test and **Integration solutions** Appl A Appl B