Financial Service Data Model
October 23 2002
SEB Group Structure

Nordic Retail & Private Banking

Retail Market
- Branches
- Telephone
- Internet
- Cards
- Private Bank
- Int’l PrBan
k
- Nor
- Den
- Fin

Trading
- Corporate
- Securitie
- Services
- Corp&Inst

MidCorp
Leasing

Enskilda
Securitie

Baltics
Poland

CIO
IT

Strat. plan
Credits
Contr/Fin
Trz

Retail
Corporation

Inst’l

AM
BO
IT

Hypo

R.Est.

Trz

Captiv

Staff loans

SEB Group Structure

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What is SEB-IM?

- SEB:s Group common information model
- Comprises over 3,000 concepts, definitions and relationships expressed from a business aspect
- Based on the industry standard models FSDM and IAA, customised for SEB
  - FSDM - Financial Services Data Model
  - IAA - Insurance Application Architecture
- Owned by CIO
SEB-IM - History

SEB-IM is the internal name of IBM:s “FSDM” (Financial Services Data Model).

1994 - Pilot (Proof of Concept) of banking model
1995 - Full implementation including customization
1996 - A directive governing usage is issued
1997 - New model issue, this time including Datawarehouse models
2000 - New issues purchased from IBM, including Insurance
2002 - Renewal of internal issues with a Global perspective

Since 1996, most projects in Sweden, have used SEB-IM
A look inside the model
What is SEB-IM

Architecture
Business
Enterprise analysis
Project, analysis
Project, design

A
B
C
C prim
D

Conceptual model
Logical structure
Physical realities
Data Classification

- Classification = definition of a characteristic potentially shared by a number of items

“People”

“Black”

“Male”

“Female”

“Wearing Tie”
Purpose of the Classification Model

- Gain understanding of complex business issues
- Show all viewpoints
- Accurately and rapidly scope projects
- Generate consistent ERD’s if required
- Support effective data management
Defining Bank Data

What is a customer?
Defining Bank Data

Involved Parties
Classified as
Individuals,
Companies,
Banks.....

Relationship
Classified as
Customer,
Agent,
Employee.....

SEB
9 FSDM Data Concepts

- Involved Party
- Arrangement
- Condition
- Product
- Location
- Classification
- Business Direction Item
- Event
- Resource Item

Financial Services Data Model

SEB
Low Interest Home Loan

One SEB Share
Involved Party
Definition

“All participants that may have contact with the Financial Institution or that are of interest to the Financial Institution and about which the Financial Institution wishes to maintain information. This includes information about the Financial Institution itself.”
Involved Party - IP/IP

Involved Party/
Involved Party
Relationship

IP/IP RELATIONSHIP TYPE

Customer Relationship
Employee Relationship
Supplier Relationship
Location
Definition

“A place where something can be found, a destination of information or a bounded area, such as a country or state, about which the Financial Institution wishes to keep information.”
FSDM Data Concepts
Scenario: “The Credit Card”
Scenario: "The Credit Card"

FSDM Data Concepts

Visa Access

to acquire

a contract

Product

RI/PD

Resource Item

AR/PD

IP/AR

Involved Party

provided by

enters into

Visa Card

person

contract

Arrange-ment

Arrangement

provided by

enters into

Visa Card

person

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Why an enterprise model (1993-1994) ?

• Difficulties in understanding between different parts of the organization
• Early efforts of reuse
• Increased demand for fast systems development
• The pressure to work with model-based system development
• First attempts to develop an enterprise Datawarehouse
• C/S - SOA and business objects
Why buy a model (1993-1994)?

- The effort to model the entire enterprise from scratch is time and resource consuming.
- Modeling through projects will not get the whole picture.
  - Most projects are change projects of existing systems.
  - Many areas of the business will not be touched in the near future.

Jump start to support:
- First attempts to apply Service Oriented architecture.
- Datawarehousing.
Why IBM:s model ?

• A banking model from the start
• Not an ERD model but classification hierarchies
• Flexible
• Global
• Covering the whole range of financial services
• Would possibly support an OO-approach
Model Customisation Reasons & Methods

- Country specific
- Organisation Specific
- Extra Requirements
- Terminology

- Project
- Project by Project
- Project by Project by Project
Customisation Projects

- Business Expertise
- Facilitation Expertise
- Systems Design Expertise
- Modelling Expertise
Customization

Key success factors

• Business representatives
• Management dedication
• The model management team
Today's SEB-IM Purpose with SEB-IM

“The purpose of a common information model is to improve the information quality, enable effective information exchange and to reduce costs.”

“To understand and communicate the full meaning of a business issue, it is necessary to define precisely and completely all aspects or viewpoints.”
Objectives with use of the model

- Better and more effective information exchange within SEB Group
- Short lead times
- Reduction of development and maintenance costs
SEB-IM Today
Main types of usage

• Integration (Interface definitions, BO)
• Base model for Datawarehouse
• New in-house systems
• General Business analysis and requirements analysis
Usage and management today:

• Governed by a directive
  • Well used in Sweden, less used outside Sweden

• Integrated in the set of models and methods within SEB

• Owned by group CIO, who finances the model management team
SEB Information models

Business Analysis

SEBIM B-level

C-
Level IFW
Not Impl.

C’
DW model/log appl models

D
Physical DW

C’
Project-specific

D
Physical

Target Analysis
Process definitions
Use Cases
Class Diagram

SEBOM C
BO-model

SEBOM C’
design model

Integration model

Repository

“SEBOM” (O-O)

Implemented
Business
Objects

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Purpose of the B Level

- Communication
- Scoping
- Planning
- Integration
- Navigation
Using the B Level: Entity Modelling
Using the B Level: Entity Modelling
Using the B Level: Database Design

Entity Relationship Models

Database Tables
Using the B Level: Business Objects definition

• Projects

Bus Analysis

SEB IM (IE)

SEBIM b-level

C-Level
IFW
Not Impl.

C-

DW model/
log appl models

d
physical

"SEBOM" (O-O)

Concepts
structures

SEBOM C
BO-model

SEBOM C

design model

Integration model

JAVA code

Bus Analysis

EMS

Component
catalogue

Project
Model Management Tasks

• To keep the consistence and quality within the models
• Deliveries of model copies to local model representatives and to projects
• Keep track of copies in usage
• Preparation of future changes of the models (New issue)
• Receive requests for change
• Helpdesk

Time for a new model issue?

Send the model to Germany
Model Management Group
Skills and Experience

- Business analysis
- Tool competence
- Model content knowledge
- Interpersonal skills
- Methodological & technique knowledge
- IT analysis
- Model administration
Conclusions

• Dedication required for a successful domain model usage
  • Business representatives
  • IT representatives
• Management commitment
• Governance and and financing
• Success stories