

Banking Innovation and ESOA as an enabler

Lloyd Chisholm

IGNITING CHANGE

07

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AGENDA

Innovation

SOA the silver bullet !!!

Process / Service Innovation

Bringing Order (IVN)

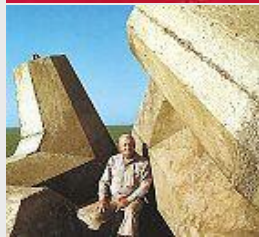
Which One of these was not invented by a South African?



Cat Scan



Wind Up Radio



Dolosse



Action Potential Simulation (APS)



Speed Gun

Tellometer



Kreepy Krauly



Cobb Cooker



Pratley Putty



Innovation Models



Definition: *PEOPLE implementing new ideas to create value*

Innovation Requires:

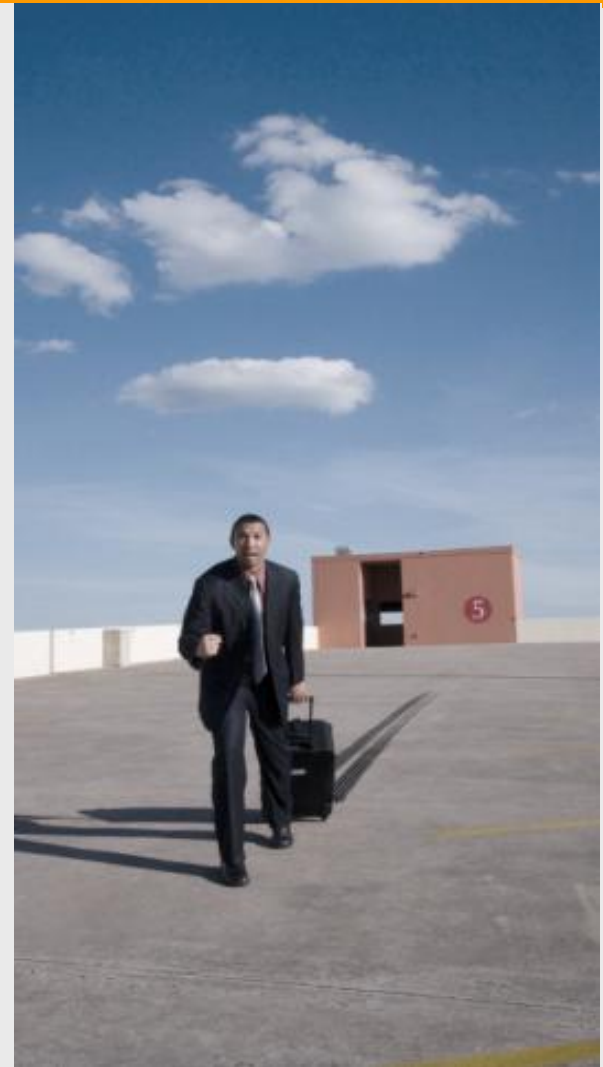
PEOPLE using new knowledge and understanding to experiment with new possibilities in order to implement new concepts that create new value.

Innovation at the level of the firm, might be defined as the application of ideas that are new to the firm, whether the new ideas are embodied in products processes, services, or in the work organisation, management or marketing systems (Gibbons et al 1994)

In business innovation is something that is new or significantly improved, done by an enterprise to create added value either directly for the organisation or indirectly for its customers (business council of Australia 1993)

Banking Innovation

Banking for the poor (Mzanzi, Telephone)
Telephone Banking for Poor (Wizzit)
Satellite Branch communication
Biometrics on cards for pension payments
First to introduce interoperability of ATM
cards through SASWITCH

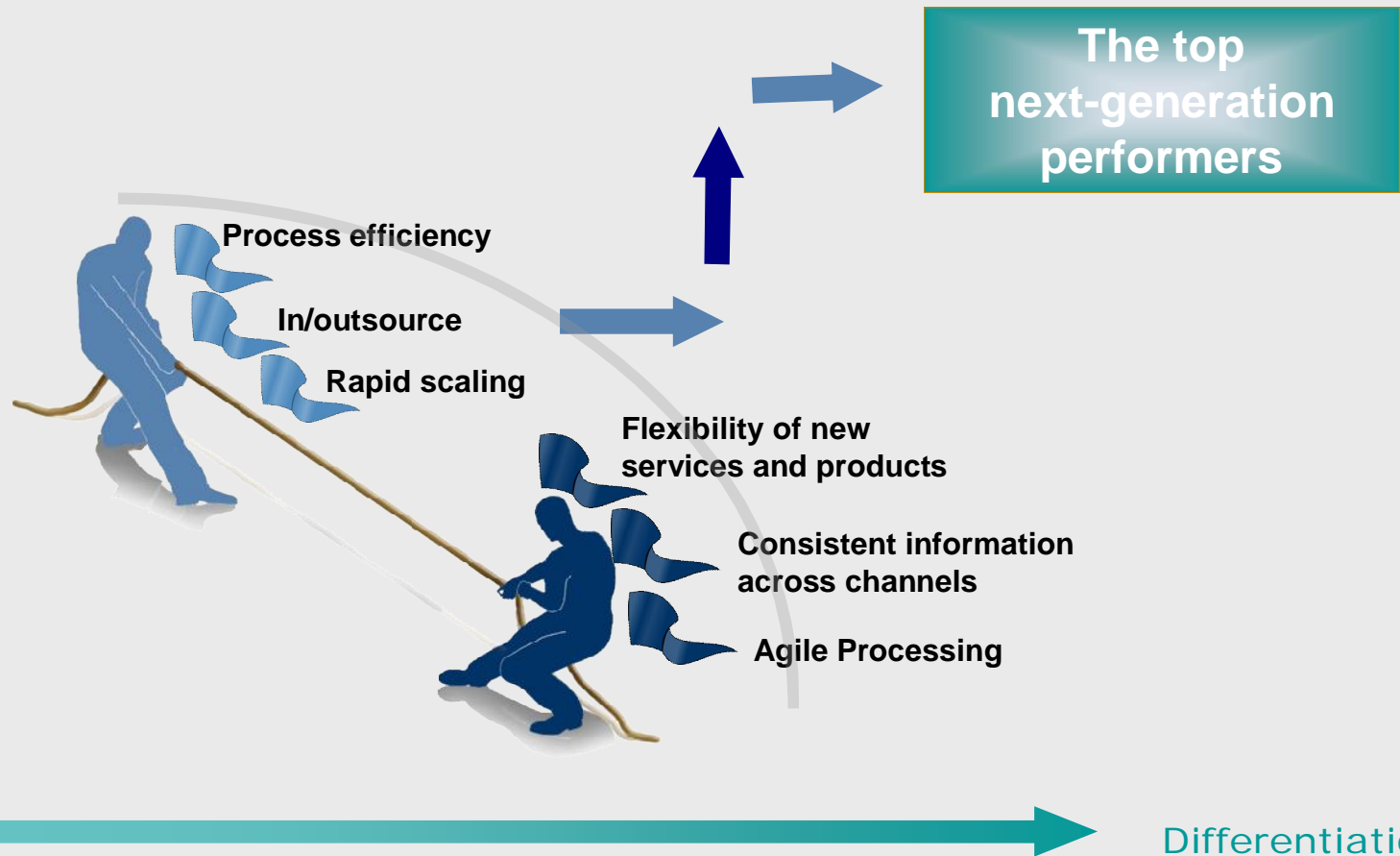


Which bank is perceived as being the most innovative ?

Paths for Market Leadership

Next generation market leaders will master the challenge of efficiency and differentiation

Efficiency



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What is an Enterprise Service

An **enterprise service** is a **callable entity** that provides **business functionality** and is published by SAP in the **Enterprise Services Repository**. Enterprise services are structured according to a **harmonized enterprise model** based on global data types (GDTs), process components, and business objects. They are **well documented**, guarantee **quality and stability**, and are based on **open standards**.

Enterprise service

**Structured according to harmonized enterprise model
(process components,
business objects, interface patterns, and GDTs)**

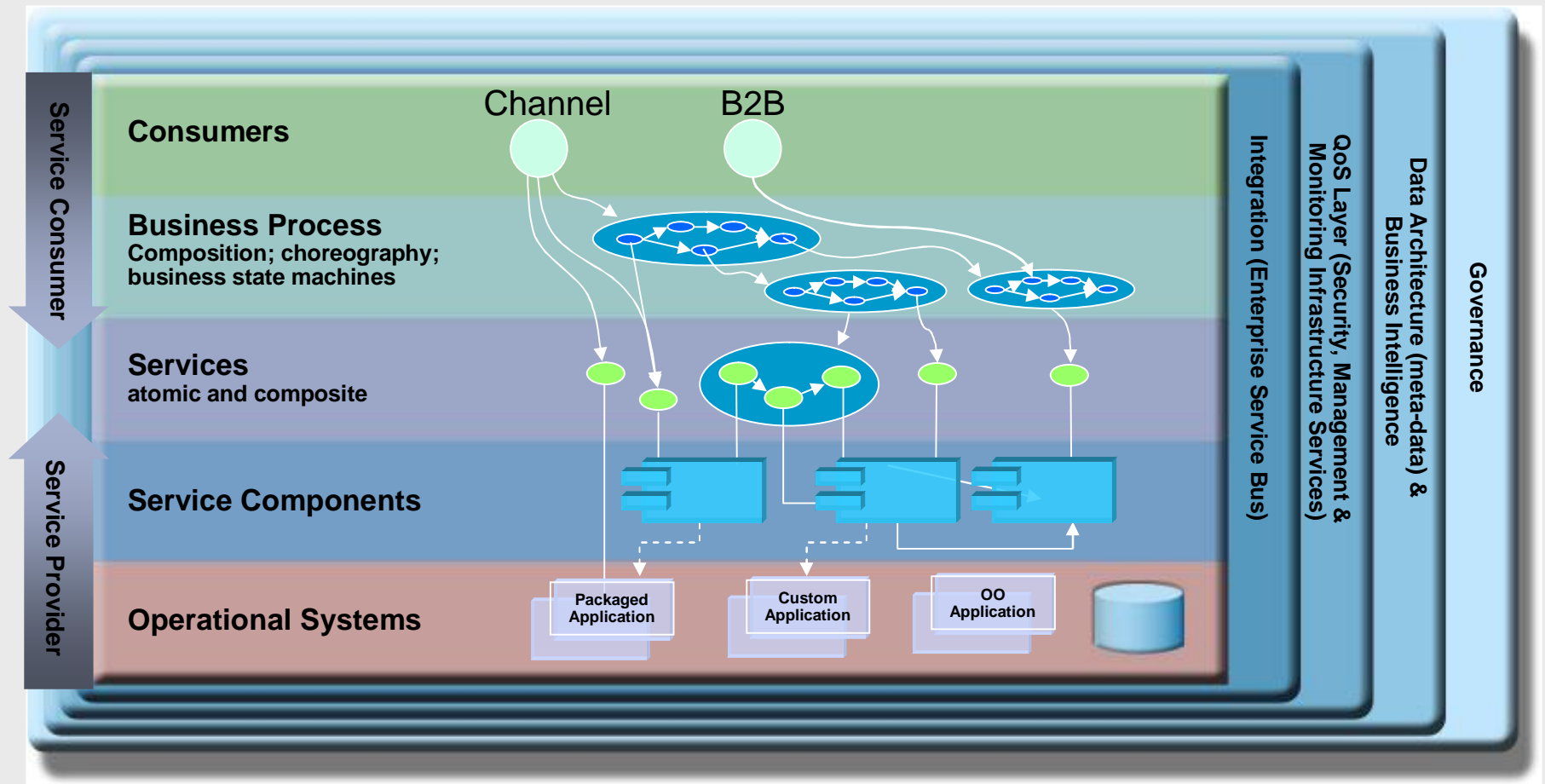
**Published in the Enterprise
Services Repository**

Guaranteed interface stability

**Well-documented contract
and behavior**

**Based on open standards
(WSDL, XML, SOAP, and so on)**

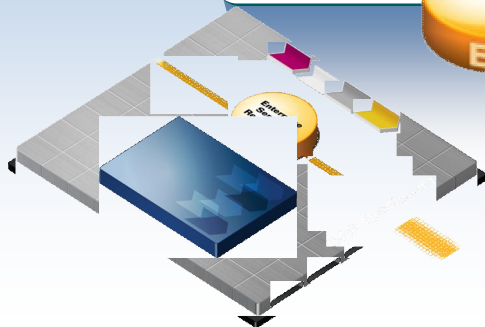
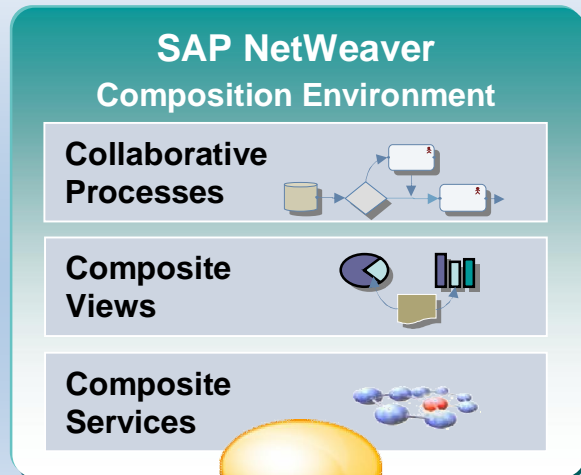
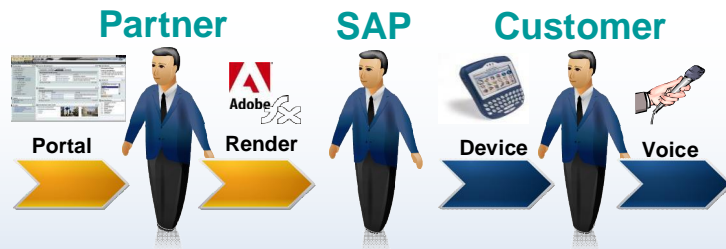
Standardised View of a Service Oriented Architecture



Source: CBDI
www.cbdiforum.com



Outlook: Model Driven Development based on Composition Environment beyond 2008



Composing "edge" applications

- Java EE 5 based platform for building and running applications based on Enterprise SOA principles and industry standards
- Model-driven development for processes, UIs, and business logic
- Integrated UDDI Services Registry

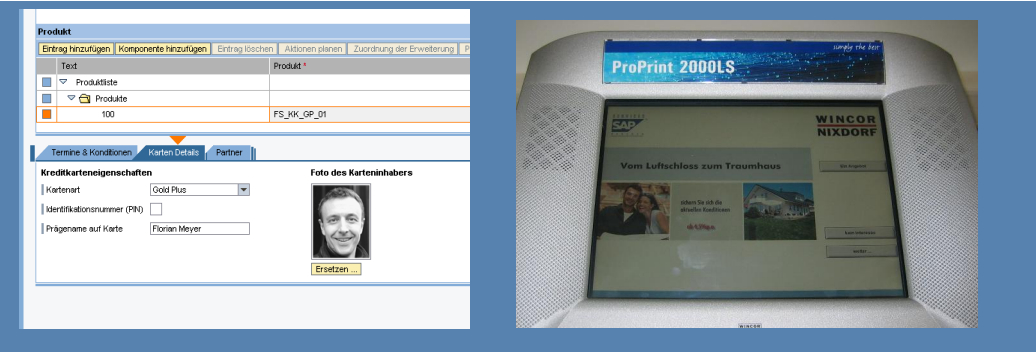
Simplicity and Efficiency

- Fast download & installation in one hour
- Designed for lean consumption, holistic software lifecycle management and model-driven development
- Out-of-the box access to rich business semantics through Enterprise Services Repository (ESR) and Enterprise Services Workplace

Flexibility for Special Transaction Requirements

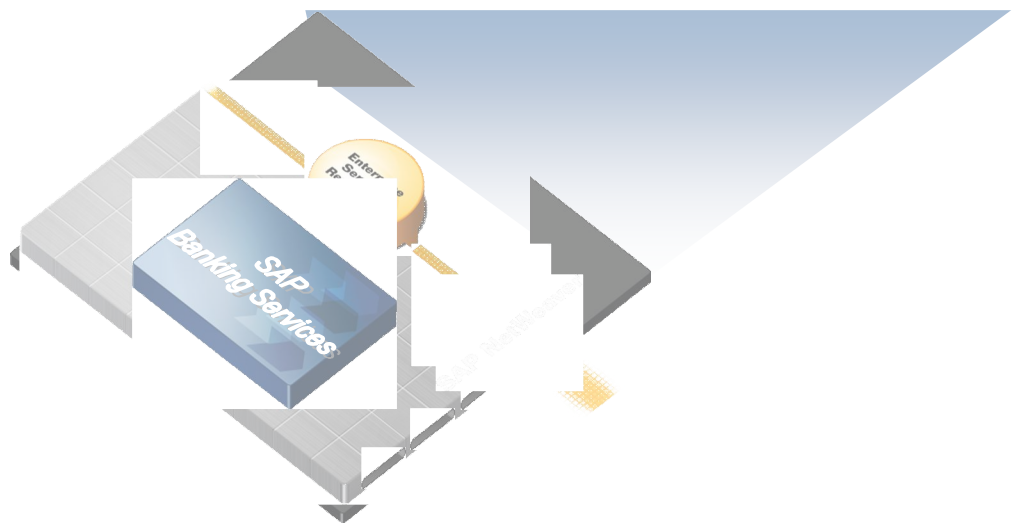
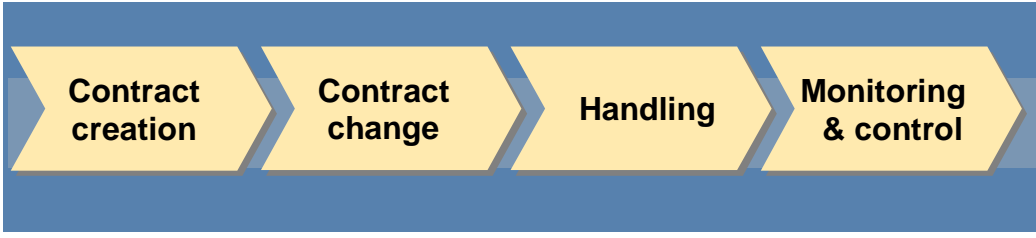
Example: "Personalized ATM"

Front end



WINCOR
NIXDORF
EXPERIENCE MEETS VISION.

Process management



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Process / Service Innovation

Bringing Order (IVN)

Go to Market with Enterprise Services as Bundles

ES Bundles describe "Connecting the dots" between enterprise services for immediate business value based on integration scenarios

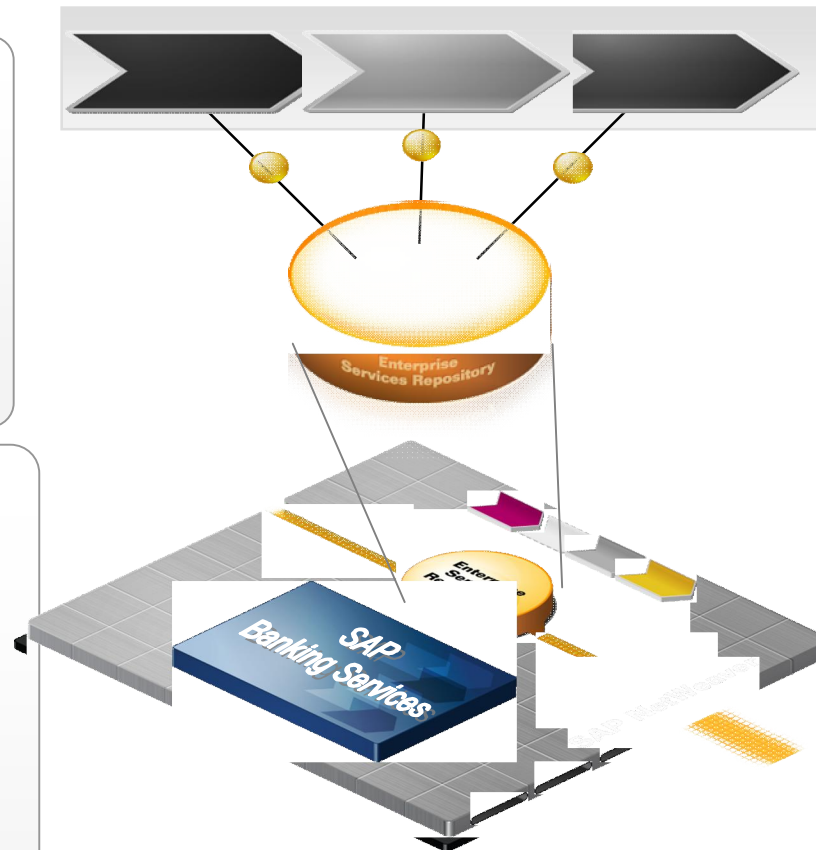
Enterprise Services Bundles

Service definition process shared with the community

- SAP
- Customer, Partner
- IVN

ES Repository Content

- Meta data and Integration Context
- Process Component Model
- Interaction Model
- Business Objects
- Global Data Types
- Service interfaces and operations



SAP DEVELOPER NETWORK

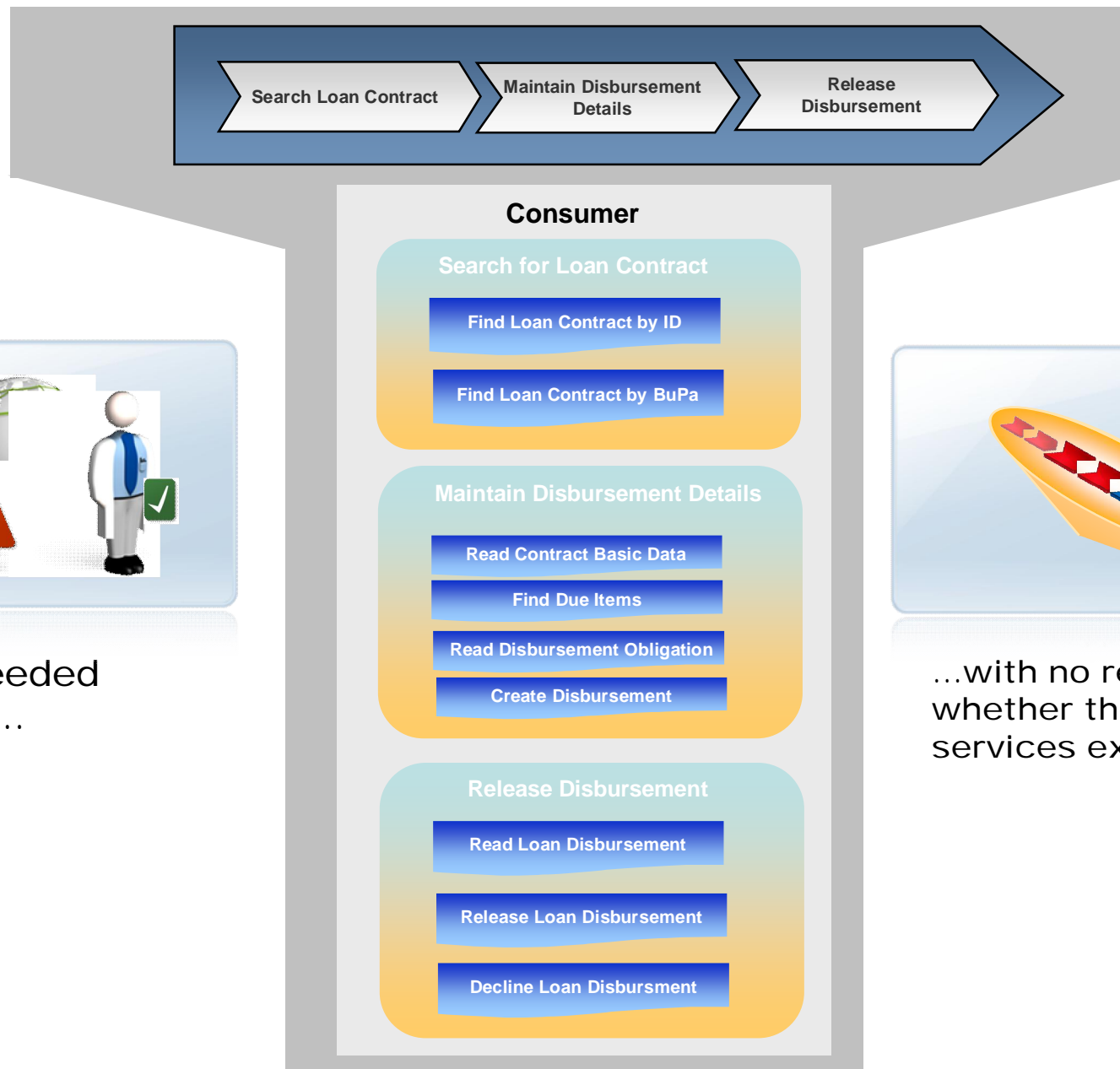
www.sdn.sap.com

Browse & Collaborative Wiki

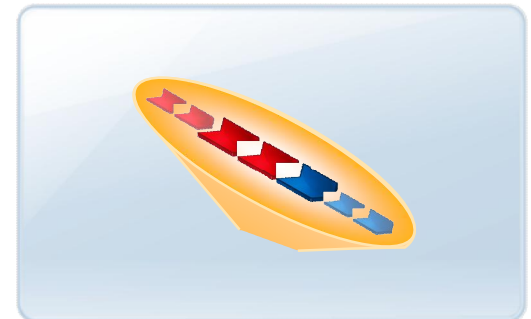
- Enterprise Services Bundles description
- How-to-Use guidance
- Browse Enterprise Service Workplace
- Collaborate via SDN



Define Required Actions and Services

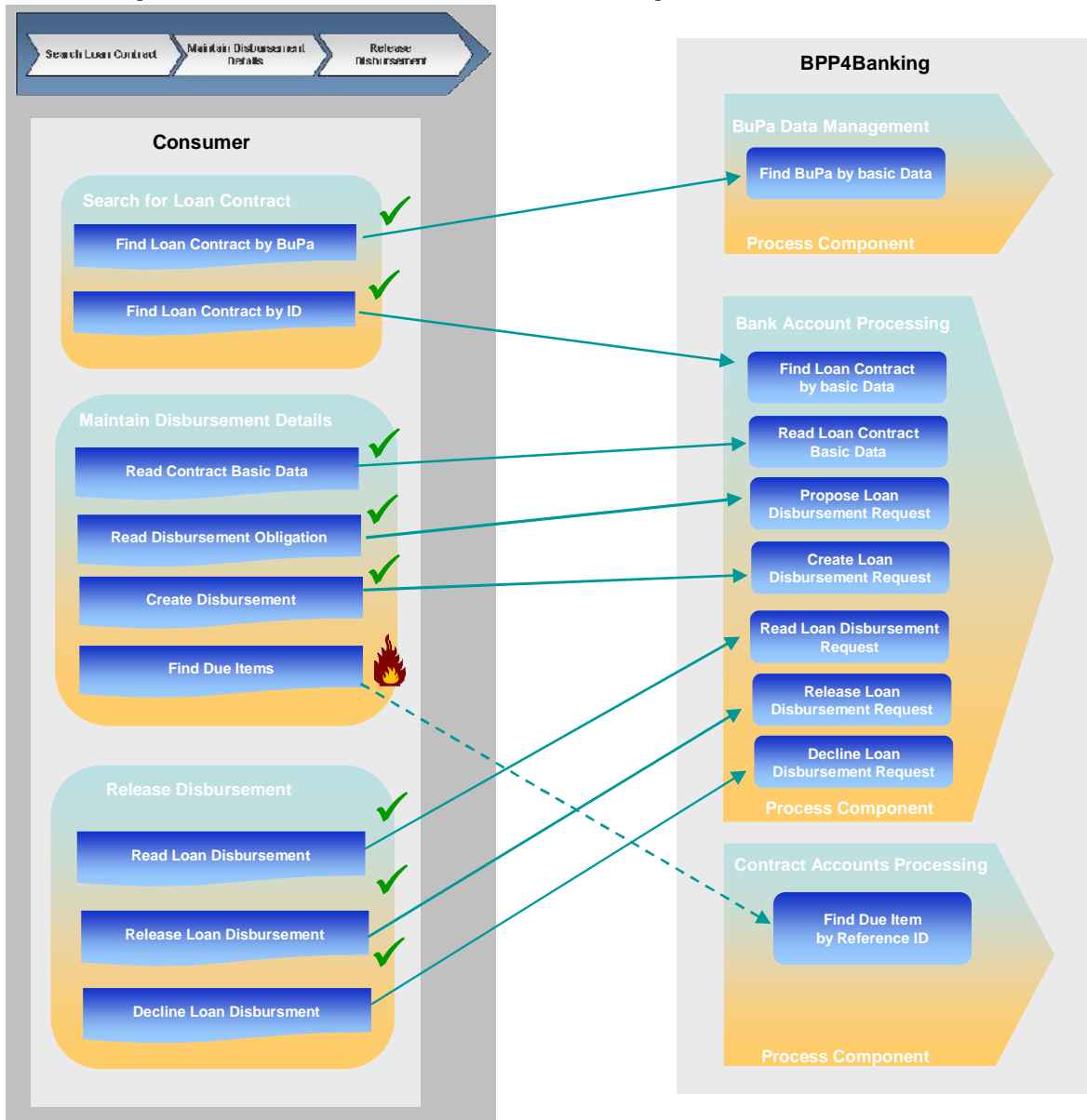


Define needed Services...



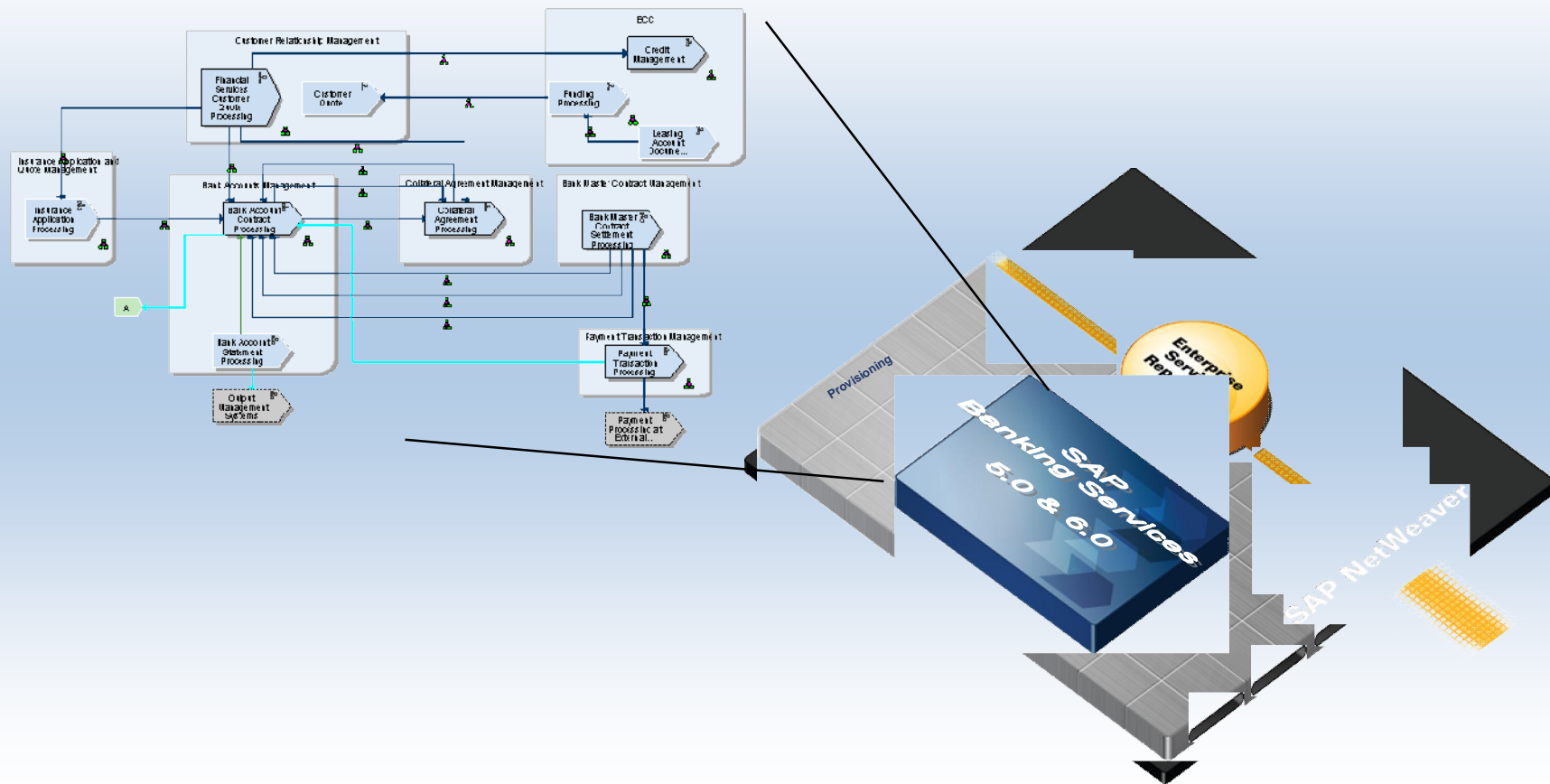
...with no regard whether these services exist or not!

Map Identified Enterprise Services...

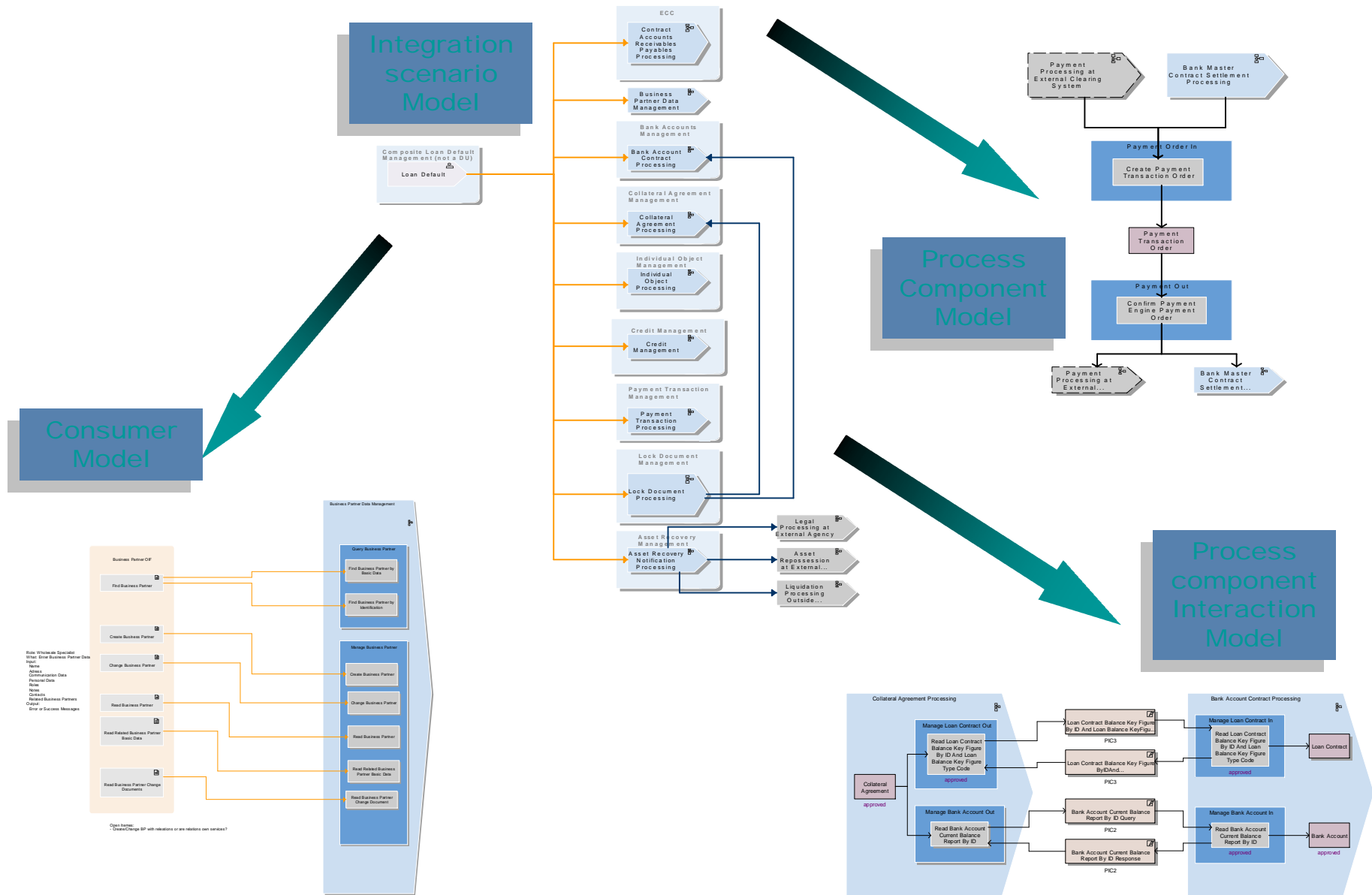


SAP Banking: Architectural Model and Platform shipped

The architectural model allows the customer flexible deployments and integration scenarios based on the described and shipped services



Communication Architecture: Model navigation



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Bringing Order (IVN)

The IVN for Banking in Action

Strong Momentum & Early Success Driving Industry Thought Leadership

High Value Industry Co-innovation on Semantic Definition of Services



Currently 36 member companies

- Banks
- Software partners
- Service providers

More than 130 individuals in 26 expert work groups and C-level community

- C-level representatives
- Business and IT architects
- Business line representatives

Service Definition

- Sales and Service
- Reference Data
- Operations and Execution
- Analytics

Architecture

- Service Landscape
- Meta Model
- Object Model
- Methodology and Guidelines
- Service Quality

Successful Transition to eSOA

- Building Blocks, including
 - Roadmap and Implementation
 - Business Architecture
 - Processes and Organisation
 - Banking Software

The IVN for Banking in Action

Strong Momentum & Early Success Driving Industry Thought Leadership
Business Benefits for Banks
Participating in IVN



Currently 36 member companies

- Banks
- Software partners
- Service providers

More than 130 individuals in 26 expert work groups and C-level community

- C-level representatives
- Business and IT architects
- Business line representatives

- Deliver faster projects, faster time-to-value, and earlier return on investment through SOA best practice for banks
- Jointly with IT colleagues work on getting your current and future business requirements solved
- Lower risk through sharing experience with others
- Acquire additional skills, training and education (“teach-the-teacher”)
- Get guidance for alignment of IT to business

IVN-Membership

Banks / Processors

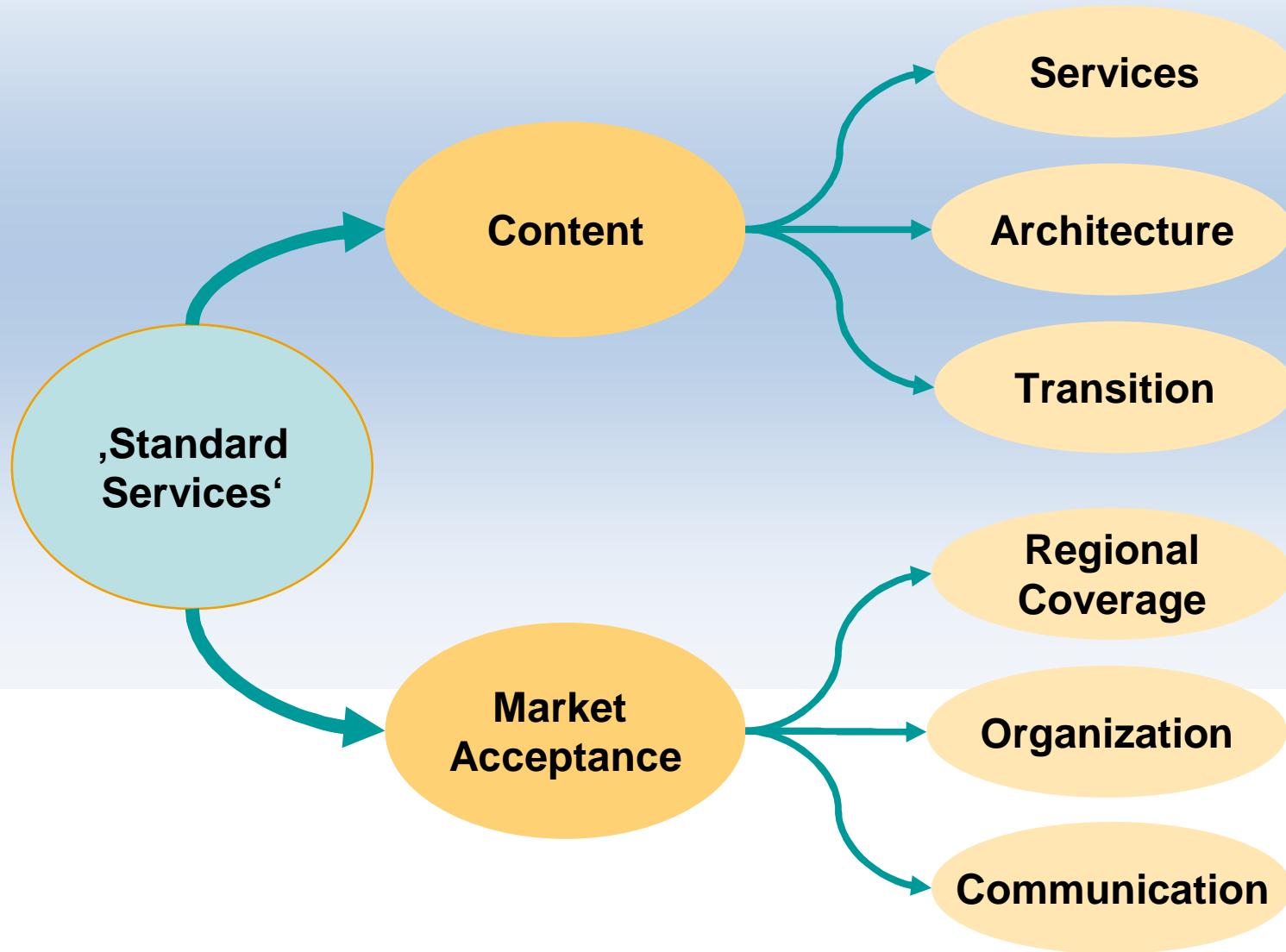
1. **ABN Amro** (Netherlands)
2. **Absa** (South Africa)
3. **Banca Intesa / Intesa Sanpaolo** (Italy)
4. **BBVA** (Spain)
5. **Credit Suisse** (Switzerland)
6. **Commerzbank** (Germany)
7. **Deutsche Bank** (Germany)
8. **Deutsche Postbank** (Germany)
9. **DZ Bank** (Germany)
10. **Farm Credit Canada** (Canada)
11. **FinanzIT** (Data center for savings banks, Germany)
12. **HSH Nordbank** (Germany)
13. **ING** (Belgium)
14. **La Caixa** (Spain)
15. **Nationwide Building Society** (United Kingdom)
16. **Nordea** (Nordic)
17. **Rabobank** (Netherlands)
18. **Standard Bank** (South Africa)
19. **VR Kreditwerk** (credit factory, Germany)
20. **Zürcher Kantonalbank** (Switzerland)

Software and Service Providers

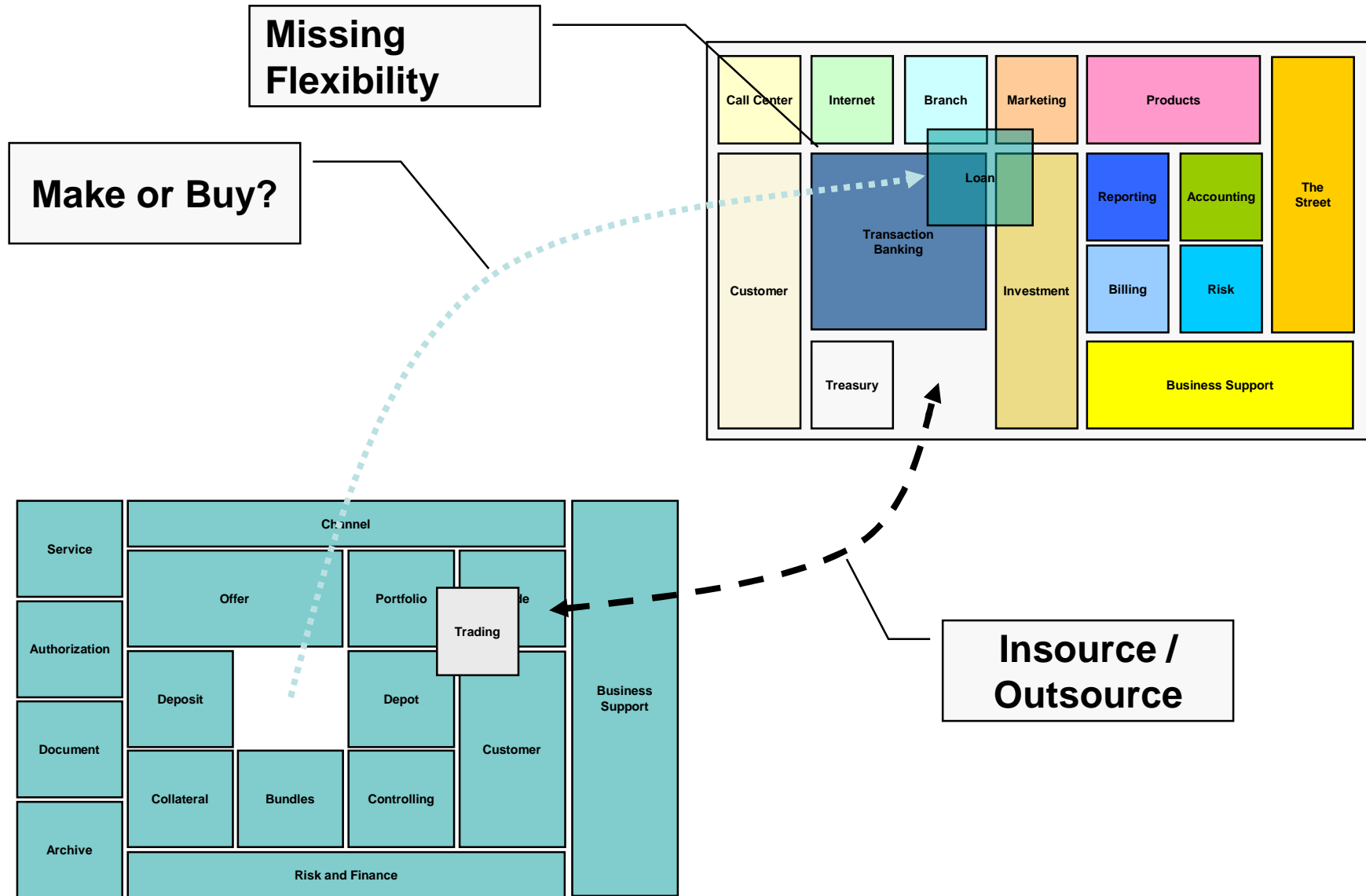
1. **Accenture**
2. **Business Solution Group** (Switzerland)
3. **Callataÿ & Wouters S.A.** (ISV, Belgium)
4. **CSC Deutschland Solutions GmbH** (Germany)
5. **DELOITTE Consulting GmbH** (Germany)
6. **Hewlett Packard EMEA GmbH** (EMEA)
7. **Ifb AG** (Systems Integrator, Germany)
8. **Ikor Financials GmbH** (Germany)
9. **PriceWaterhouse Coopers** (auditor, Germany)
10. **SAP** (Germany)
11. **SPSS** (United States)
12. **Steria Mummert** (France/Germany)
13. **StreamServe** (United States)
14. **SWIFT** (Belgium)
15. **Syskoplan AG** (Systems Integrator, Germany)
16. **TXS Financial Products** (Germany)

Marked in red: Founding members

To be Successful the IVN has to deal with

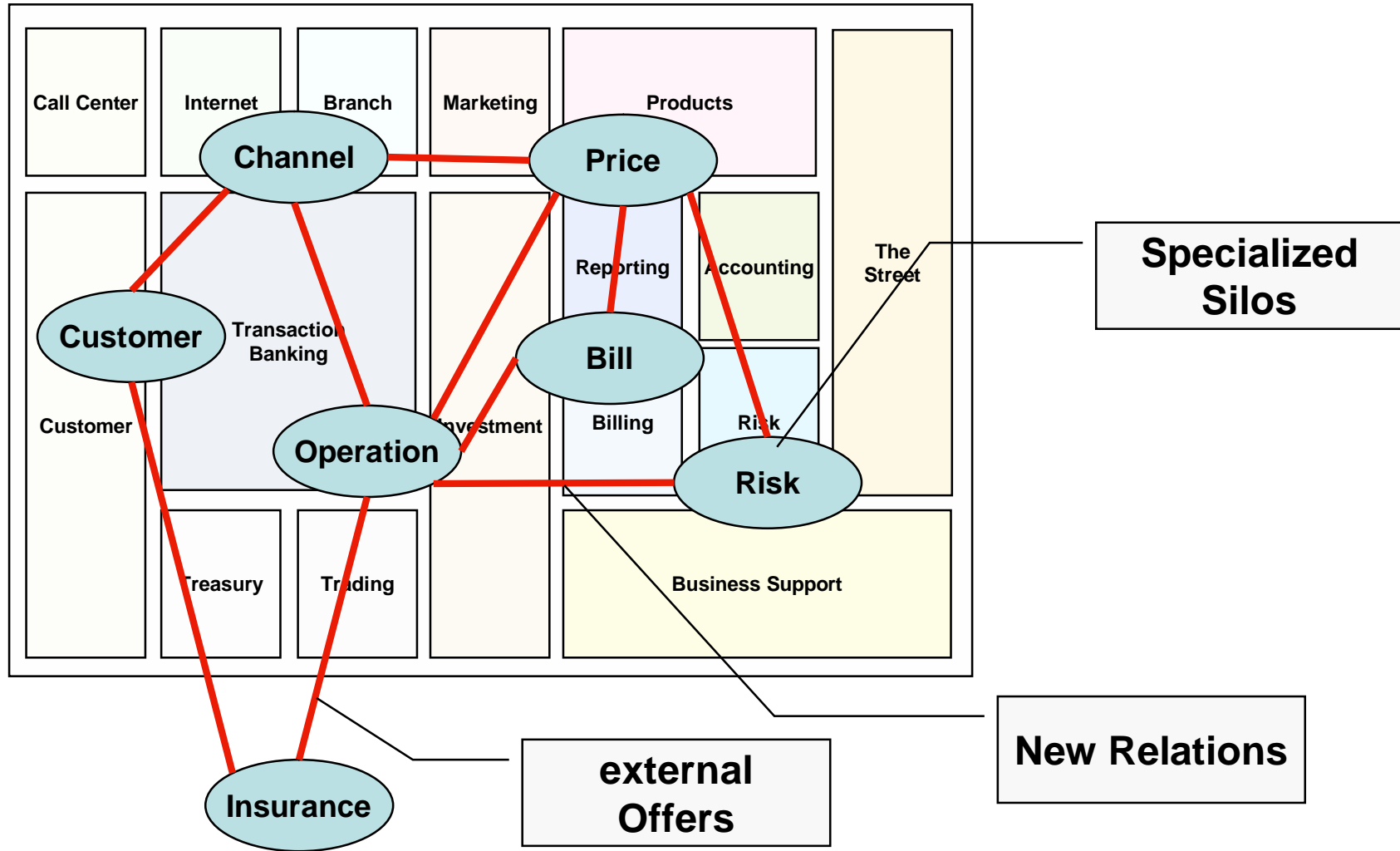


Challenge: Integration Cost



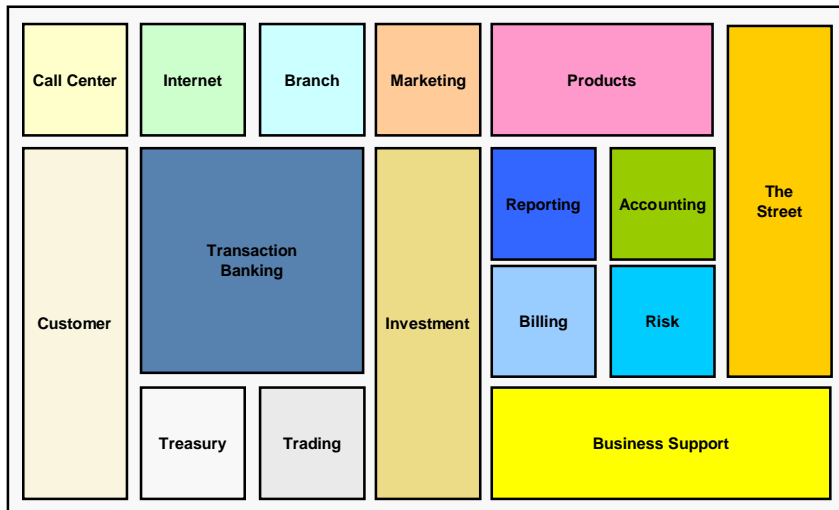
Challenge: Missing Flexibility

Arbitrary Banking
Application Landscape A

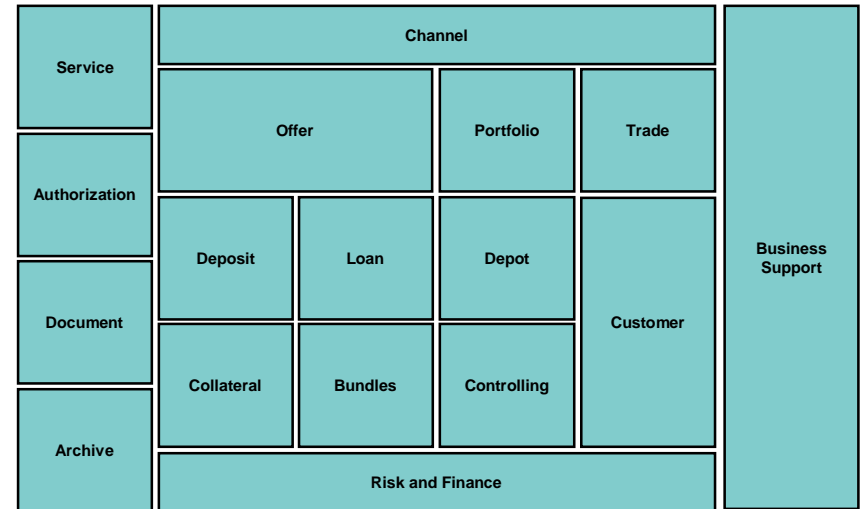


Make or buy/ Insource and Outsource Current Situation Semantic Clashes - a Barrier for change

Arbitrary Banking
Application Landscape A



Arbitrary Banking
Application Landscape B



- A) There is no canonical Application landscape!**
B) There is no harmonized banking semantic!

How to Address These Industry Challenges

Common Understanding of:

- Integration & Flexibility Points
- Semantic
- Borders

What Services offer:

- Well defined Integration & Flexibility Points
- A harmonized Semantic across the landscape
- A canonical set of components for the banking industry

Support the Vision

Lower Integration Cost

- Enable Make or Buy Decisions
- Broader Market for Vendors and Customers
- Enable In- / Outsourcing, BPO, Value Chain changes

Enable Innovation by increased flexibility

- Provide granular set of Business Elements
- Enable recombination

Jointly defined Services

Jointly agreed Semantic

Consensus on Components

IVN 1 - Press Release December 2005

“The strategic Industry Value Network for Banks is tasked to define enterprise services that will bridge the gap between today’s banking systems and the next generation of banking solutions. The work of the Network will help banks and SAP ensure a non-disruptive, stepwise transformation to next-generation solutions, as well as help banks to be able to integrate new functions and services into their existing IT environments.”

What IVN 1 Actually Delivered

A Meta Model / Taxonomy

- Meta Model (ppt)
- Glossary (ppt)

A Service Landscape

- Landscape Model (ppt)

Service Definitions

- 18 Documents describing Service Interfaces (doc)
- Sketch of an iterative Methodology (ppt)
- Service Definition Template

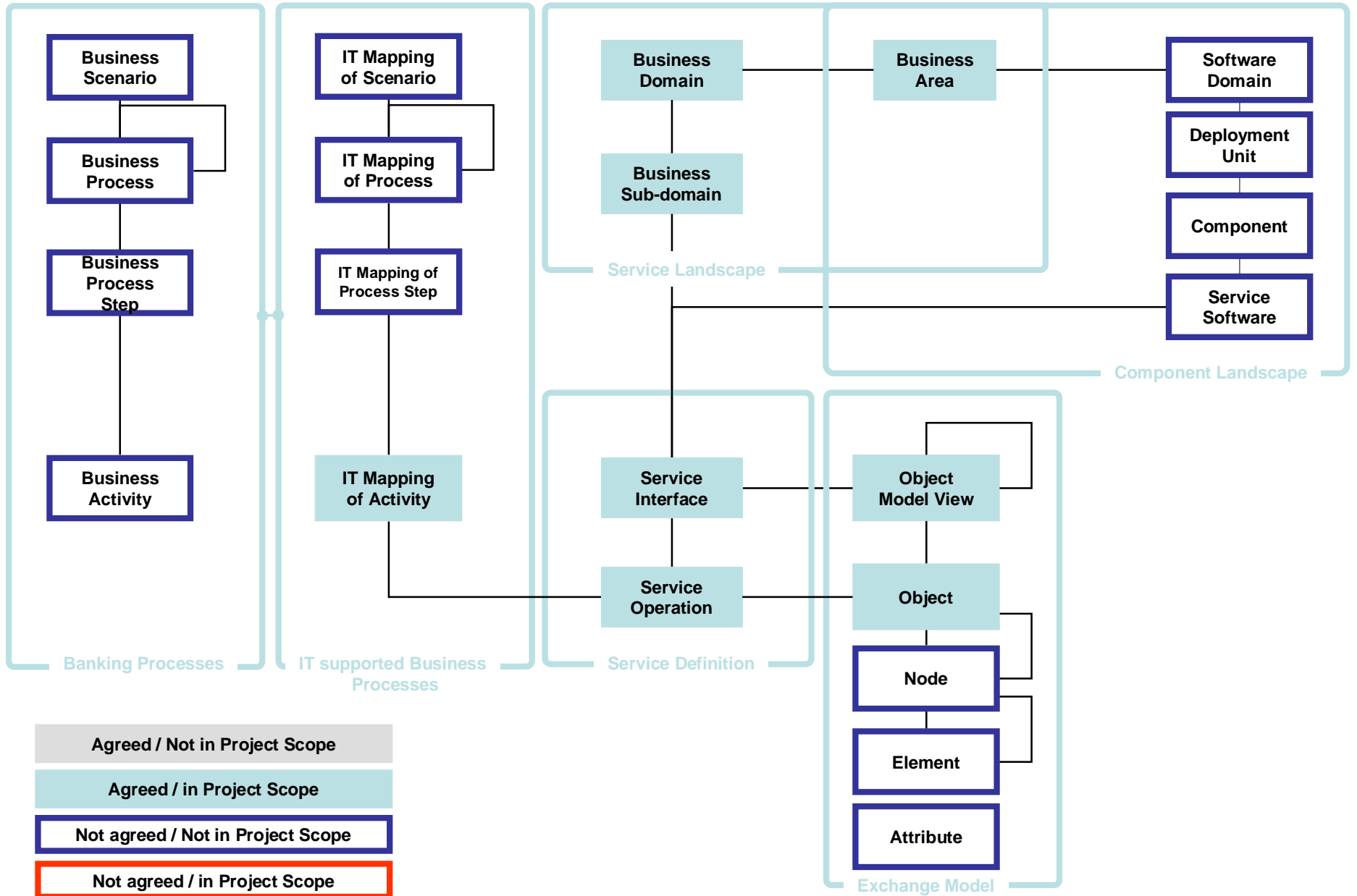
Introduction and Overview **Building Blocks**

- Document describing Building Blocks (doc)
- Other results as part of Building Blocks

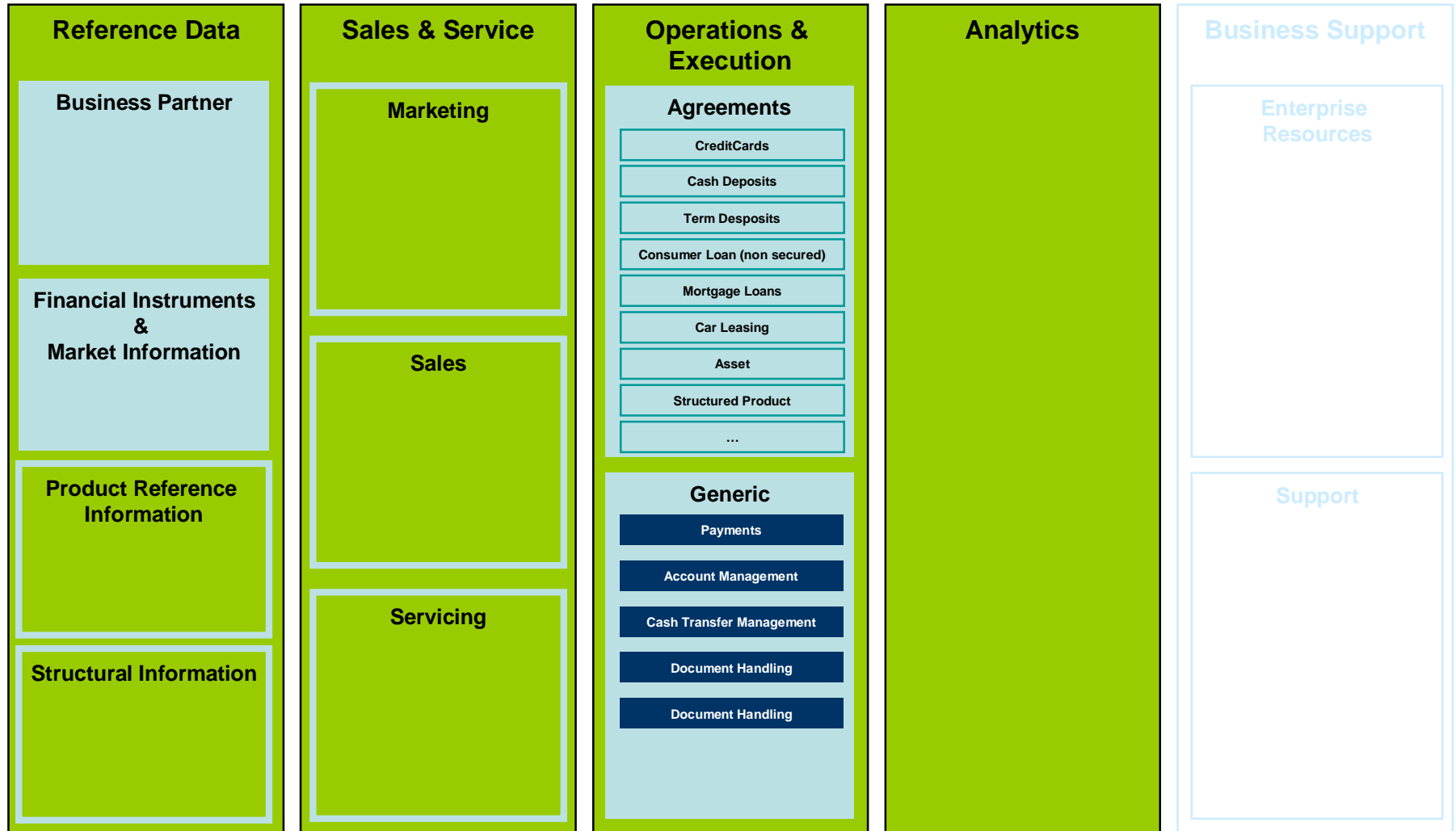
A final Report

- Summary of Results and Project in long and short version (pdf)

Metamodel - The latest Version: Taxonomy - v2.3



Service Landscape Version 3.2



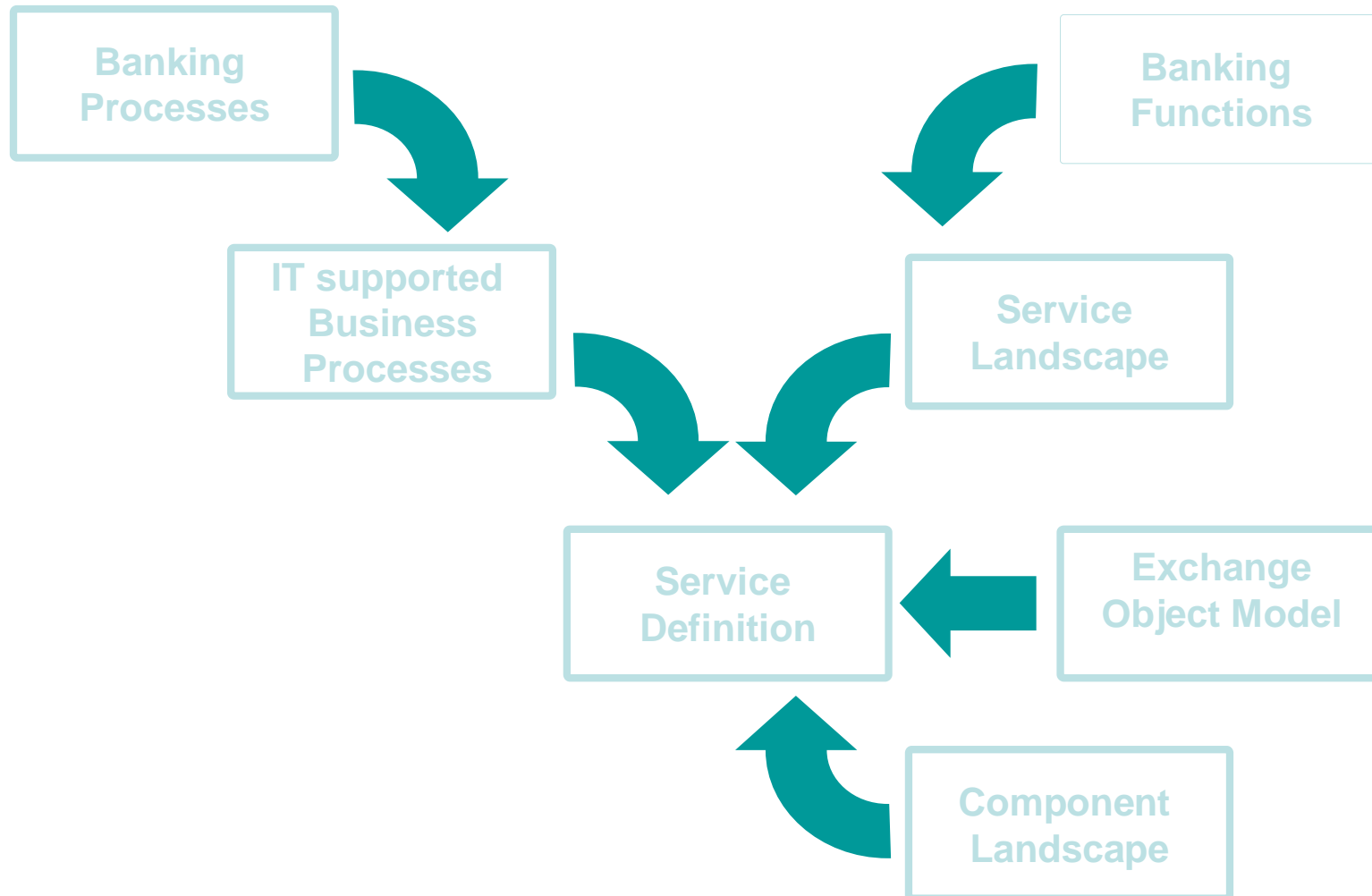
Business Area

Domain

Sub Domain

Service Interfaces

Service definition - Methodology: A combination of Bottom Up and Top Down



Service definition - Service Interfaces Defined during the Project



Business Area

Service Interfaces

Building Blocks – Content defined in IVN 1

Strategic Rationale

Meta Model

- Business process Definition Guidelines
- Service landscape principles
- ESA taxonomy & glossary
- Banking Definitions & glossary
- High level object model
- Service definition template
- Guideline for non semantic properties
- Service build guidelines

Business Functions / Business Architecture

- Business Process Models
- Executable business processes, Service Orchestration
- Service landscape
- Service definition

Processes, Organization and Management

- Service landscape definition process
- Service definition process
- Integration architecture
- Service support and coaching process
- SLA process
- Lifecycle management
- Project portfolio management
- Service versioning
- Project management
- Architecture management

Compliance & Security

Banking Software

- Service design
- Service Repository
- Banking applications
- UI
- Components / Banking Process Platform
- Legacy applications
- Middleware/Infrastructure

KPI / Measurement

- Service development progress
- Number of reused services
- Service run time
- Service SLA charges
- KPIs for economical values
- Further KPIs

Soft factors

- Skills
- Governance
- Sponsoring
- Culture
- Commitment

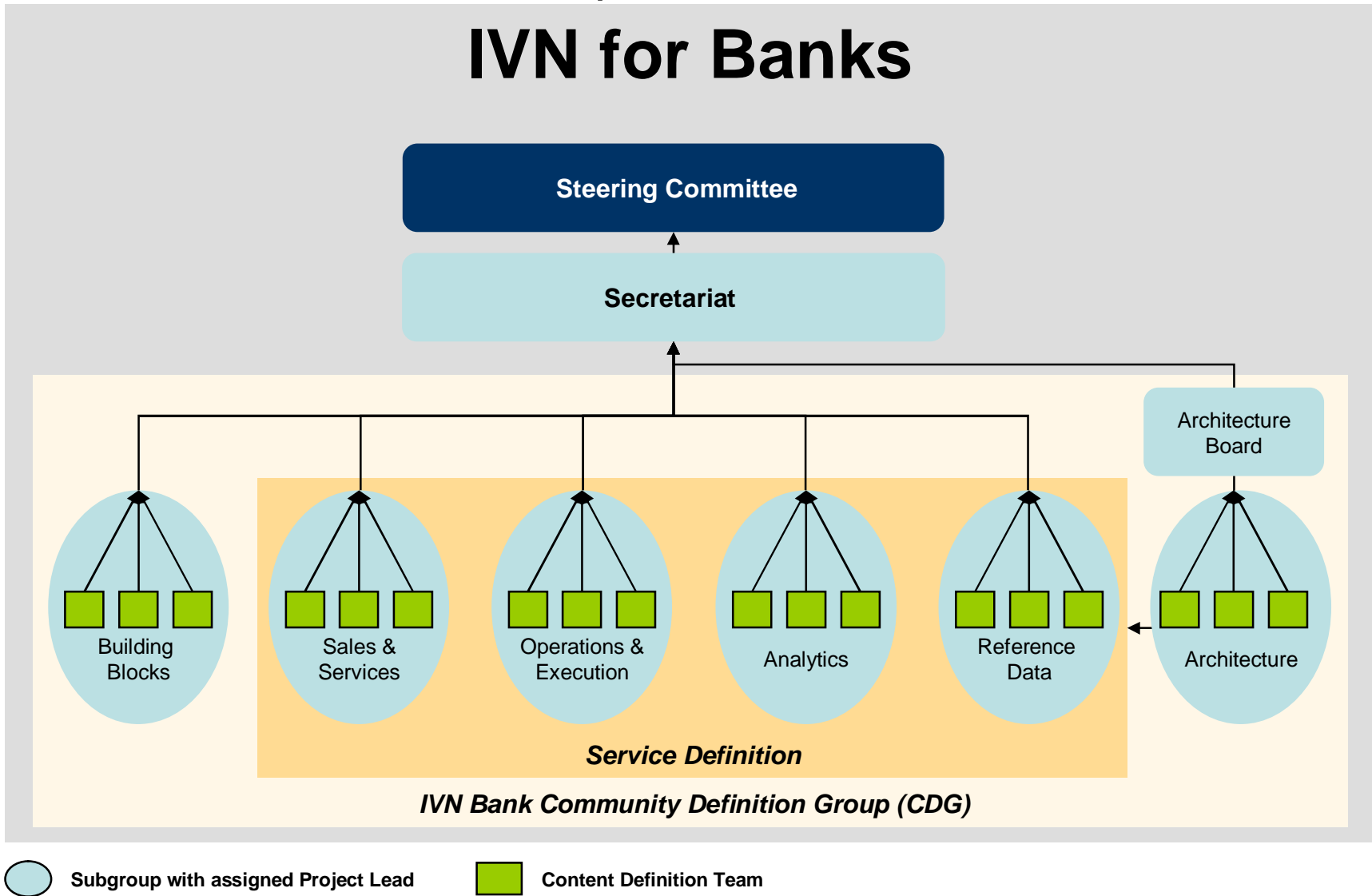
Tools

- Business process management tool
- Service repository tool

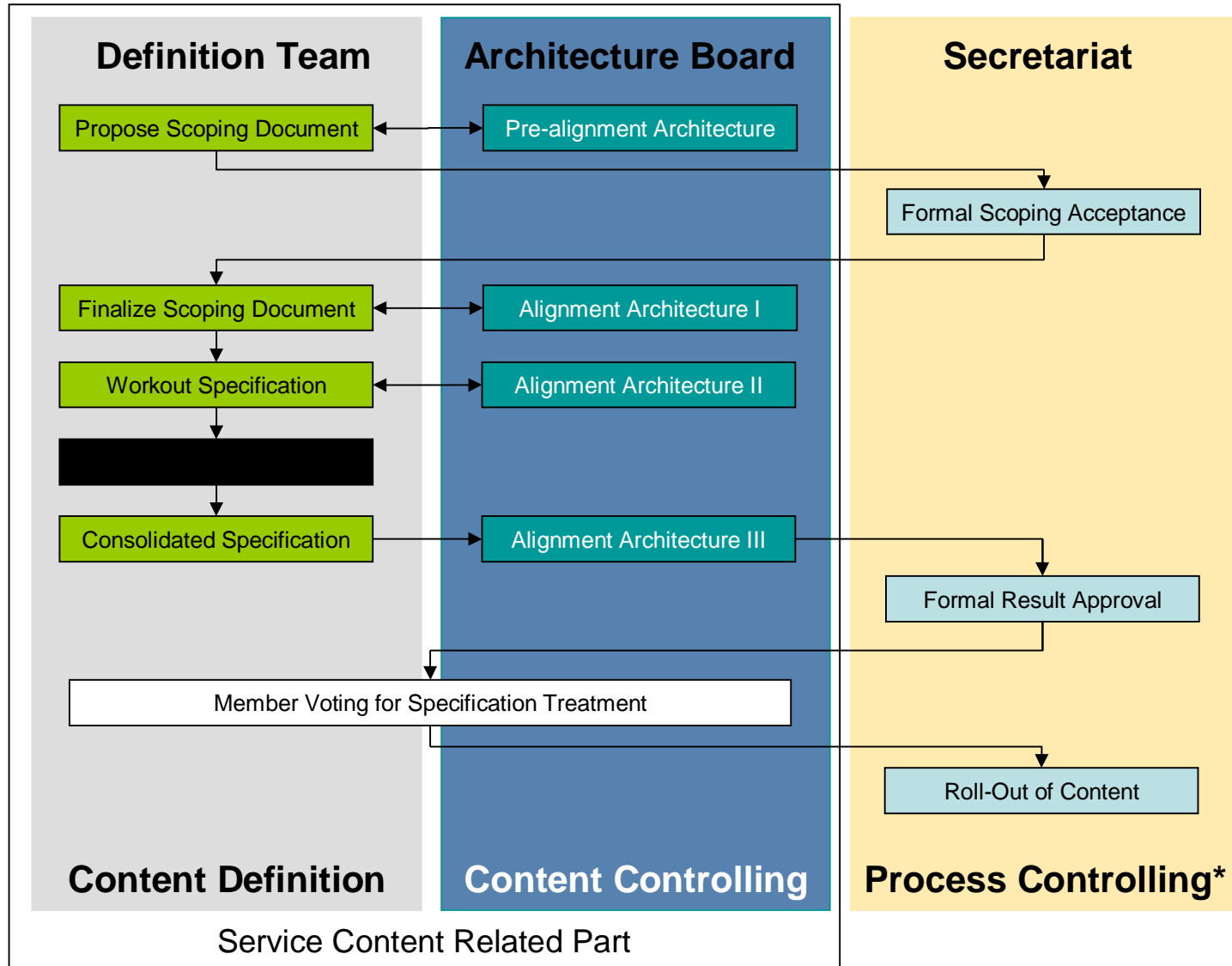
Implementation Roadmap

IVN 2 Structure – Setup for 2007

IVN for Banks



Service Definition Processes








* Clear Separation of content discussion and formal process!










** Only members of this CDG

Overview About Definition Teams





Building Blocks

Business Architecture 		Banking Software		Roadmap & Implementation 		Processes & Organization 		Processes & Organization 	
Topic	Service Modeling from Process View	Topic	Service Repository Legacy Interaction	Topic	High Level View on Transformation Plan	Topic	Development Process: Role, Process, Deliverables	Topic 	Architecture Management

Service Definition

Sales & Services		Sales & Services 		Sales & Services 					
Topic	Business Transaction Authorization	Topic	Offer Management	Topic	Customer Reporting				
Reference Data 		Reference Data		Reference Data 		Reference Data 		Reference Data 	
Topic	FS Product Reference Information	Topic	Financial Instruments & Market Information	Topic	Business Partner	Topic	Organization Structure	Topic	Static Information
Analytics		Analytics 		Analytics 		Analytics			
Topic	Credit Risk	Topic	IFRS (Accounting / legal Rep.)	Topic	Market Oriented Analytics	Topic	Market Risk		
Operations & Execution		Operations & Execution 		Operation & Execution		Operation & Execution			
Topic	Postings & Un- postable Exceptions	Topic	Billing	Topic	Loans Credit Decision	Topic	Loans Management		

Architecture

Architecture		Architecture 		Architecture 		Architecture 		Architecture 	
Topic	Service Landscape	Topic	Meta Model	Topic	Object Model	Topic	Methodology & Guidelines	Topic	Service Quality



Bank in lead / co lead



New Team (since last Update)

Example for Service Scoping Document

Release: 1.0
Author: Dieter Bühler,
Peter Weidl, Daniel Voser

Industry Value Network for Banks



Service Scoping Document

Subject: Relationship Reporting

History

Version	Status of Scoping	Last Change Date
1.0	Creation	24.01.2007
1.1	Update after meeting of Januar 31, 07	01.02.2007

Results of definition teams - status

Building Blocks

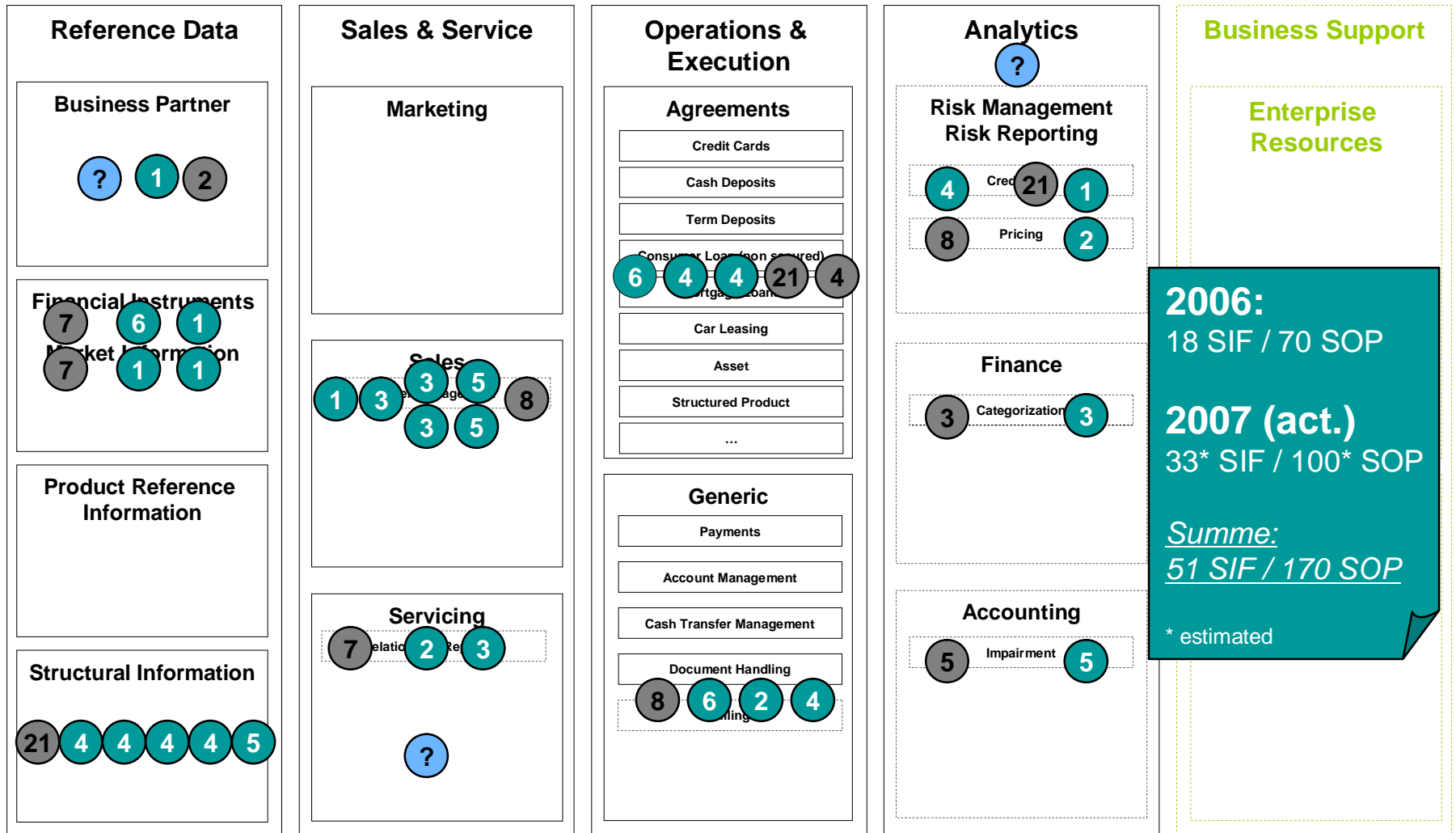
- Topics
 - ◆ Business architecture
 - ◆ Implementation road map
 - ◆ Architecture management
 - ◆ Service Repository
 - ◆ Service build process/Service life cycle process
- 3 teams in the specification mode
- 2 teams still in scoping phase

Results of definition teams - status

Architecture

- Service Landscape
 - ◆ Large Cross Alignment Meeting in Frankfurt
 - ◆ Important Decisions taken
 - ◆ New version End of April
- Meta Model
 - ◆ Several Meetings
 - ◆ Alignment and Proceeding for important topics
 - ◆ New version End of April
- Object Model
 - ◆ Guideline discussed
 - ◆ Input available
 - ◆ First version end of June
- Methodology and Guidelines
 - ◆ Several Meetings have happened
 - ◆ 2nd Version of Templates proposed and approved
 - ◆ 1st Version of Quality Criteria proposed
- Service Quality
 - ◆ Regular virtual quality meetings
 - ◆ 12 Teams submitted 13 scoping results (four in status accepted)
 - ◆ Containing 23 Service Interfaces / 97 Service Operations

Additional Services in Work in IVN Phase II



5 IVN II (scope done)
 ? IVN II (in work)
 5 IVN II Candidates (not consolidated)

Challenges derived from experience of IVN 1 and IVN 2

A sound ratio of members (banks and Service/Software providers)

A global footprint: more banks from US and APAC

A balanced European Coverage

Define the right Services

The right balance between strategic direction and self active and independent definition teams

Access to specific business know how (mainly Service Definition)

The optimal size and structure of the teams

A future proof organizational framework

Alignment with existing organizations

Conclusion



- **Innovation is alive and well in South Africa**
- **Massive or radical innovation is coming from non traditional banks**
- **Web 2.0 will spur the next level of innovation**
- **eSOA is one enabling technology**
- **The IVN brings synergy and standards to eSOA**