



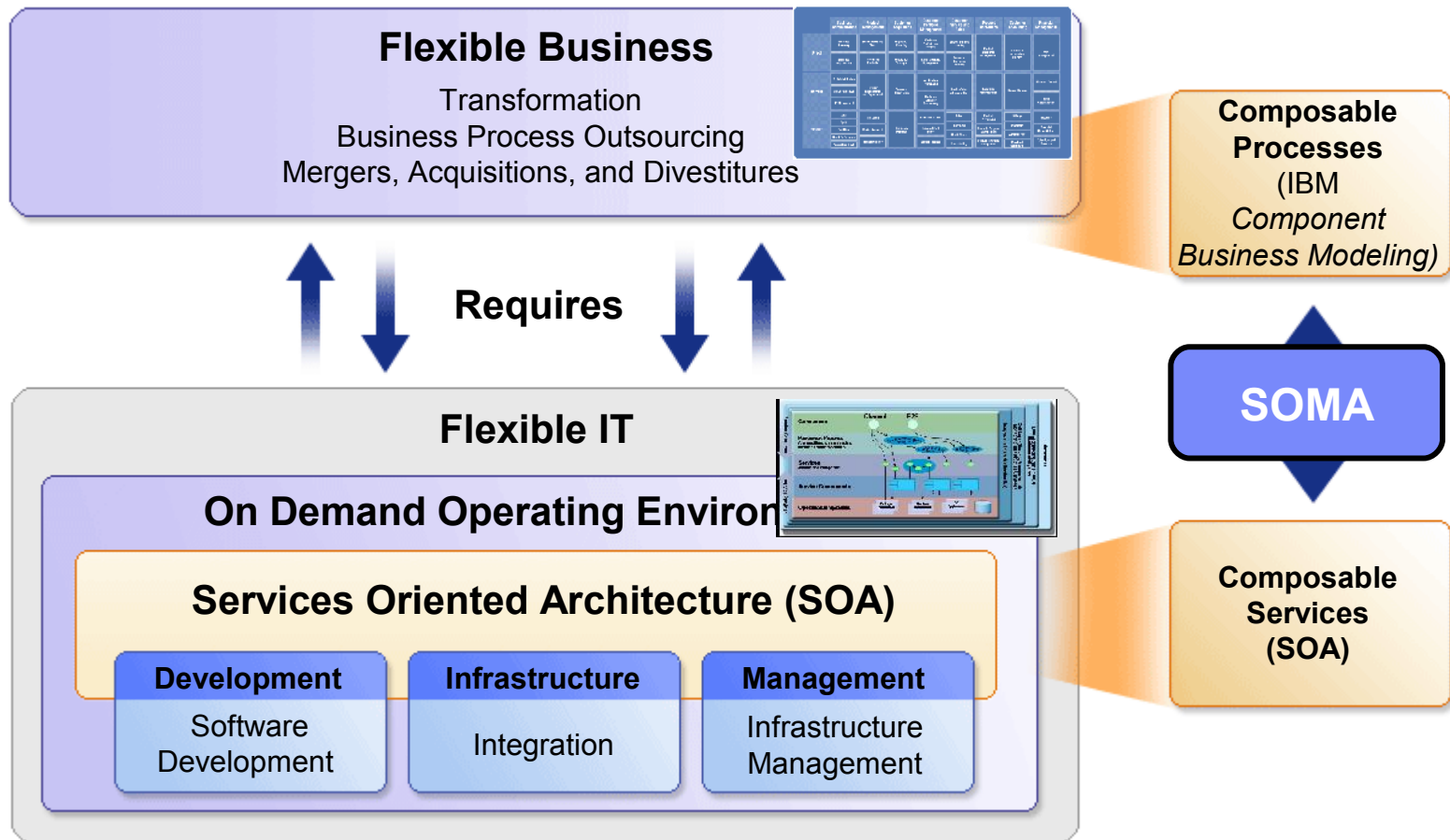
13/06 - Hôtel Hilton Suffren, Paris

From Business Priorities to Service Identification

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SOA on your terms and our expertise

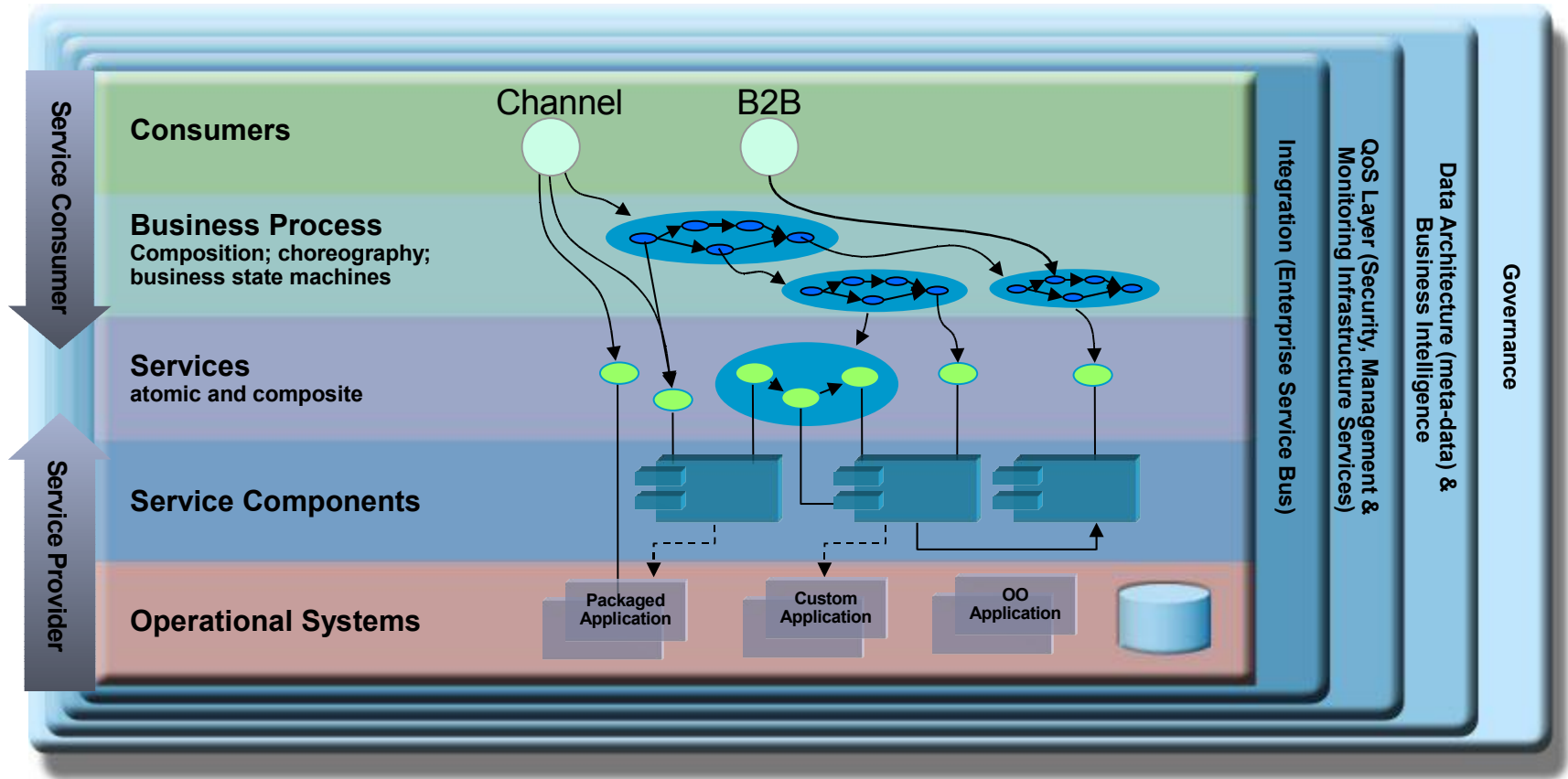
Flexible Business Requires Flexible IT



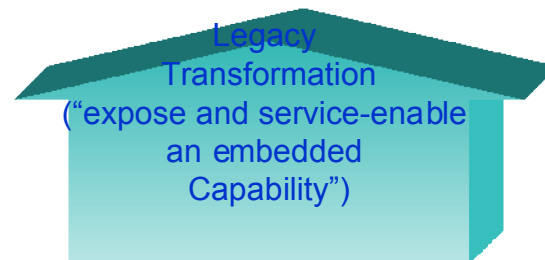
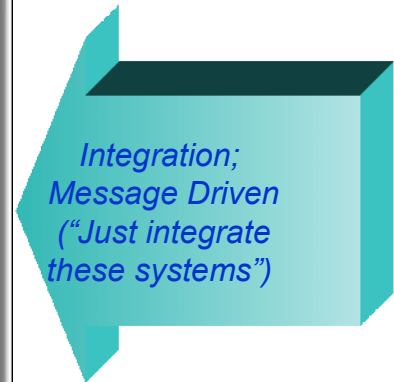
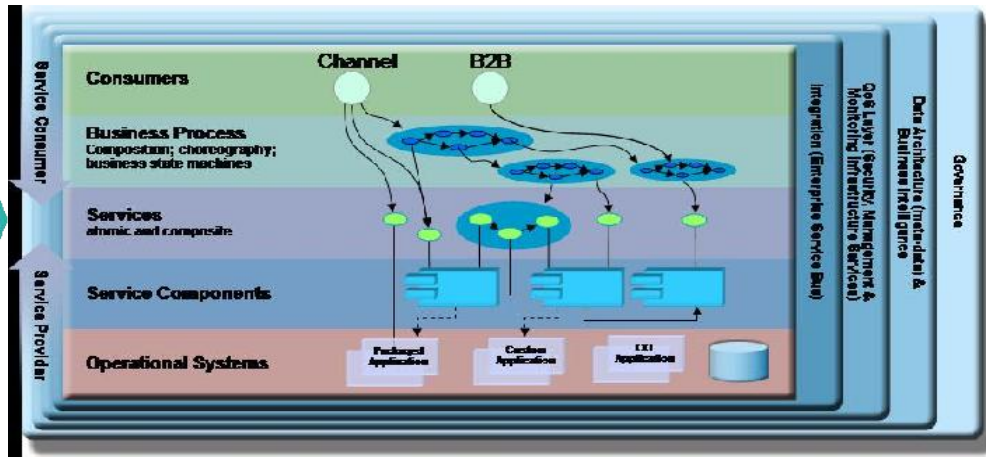
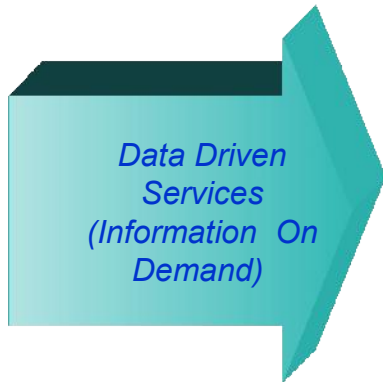
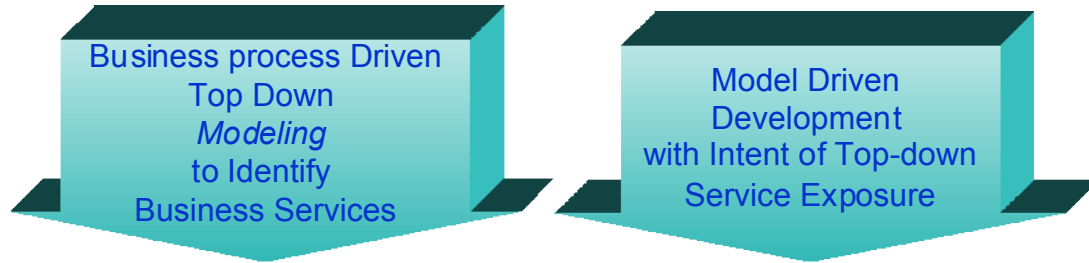
SOA Reference Architecture: Solution View

Modeling the Layers in the SOA Solution Stack

IBM SOA Community has created an abstraction of SOA Solution Stack based on “components”, “services” and “processes” depicting the **conceptual** view of the solution at runtime



Each approach to SOA relies on a slightly different path of architectural decisions

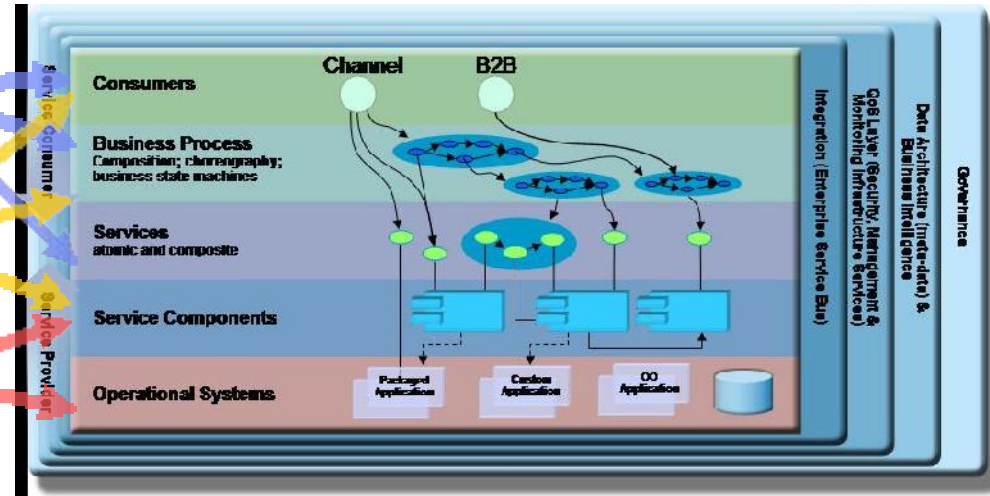
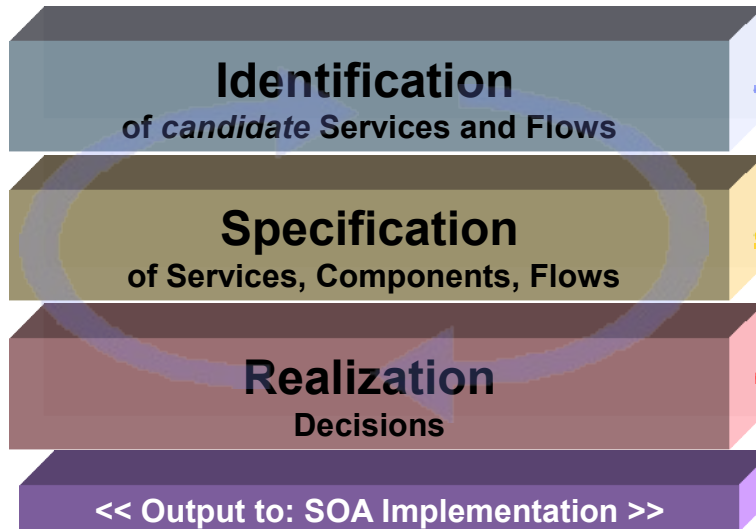


Whichever path we take, we need to identify, specify and realize services

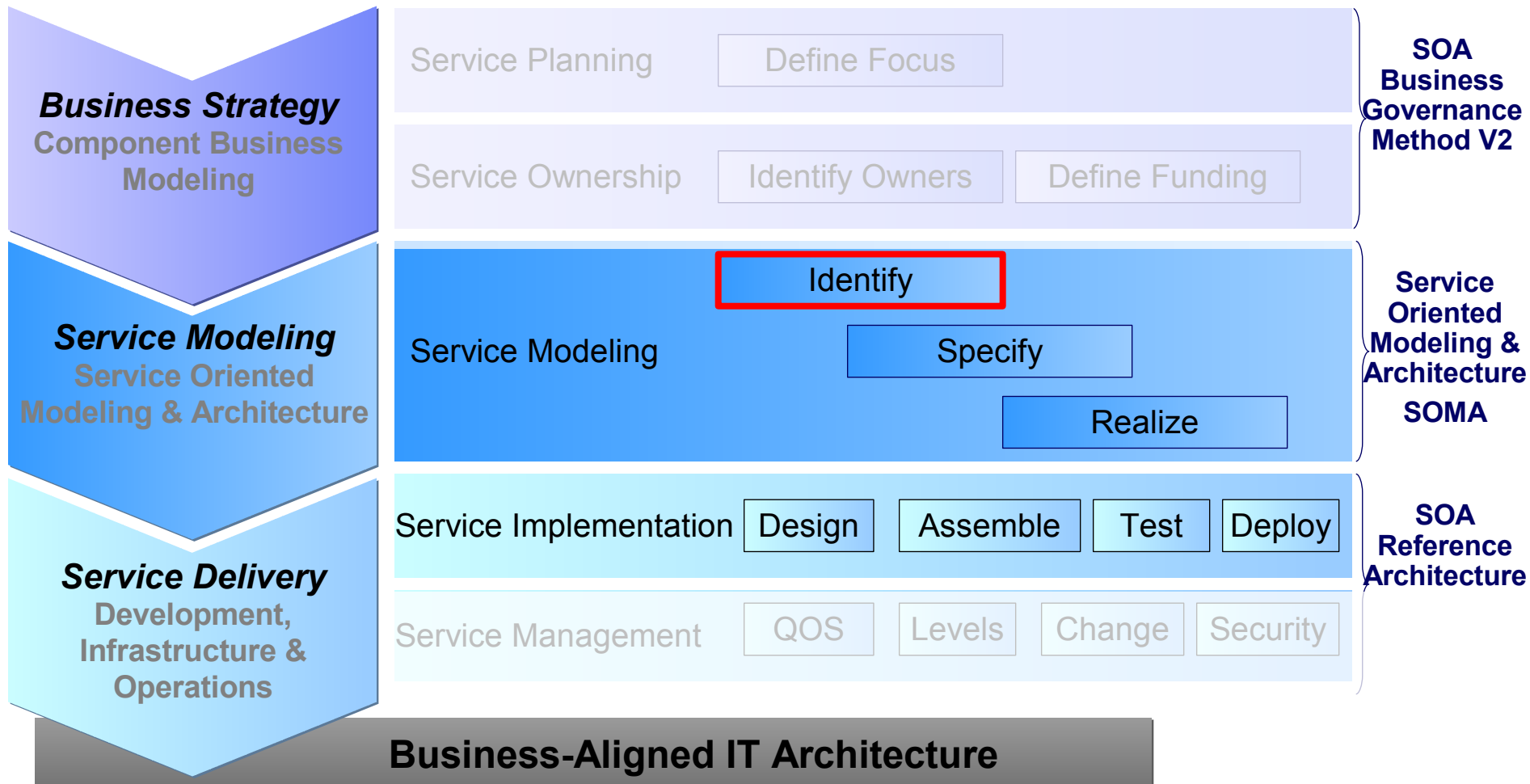
The SOMA Method:
Service-Oriented Modeling and Architecture

SOA reference model :
Layered solution view

<< Input from: Business Componentization/Analysis >>



Methods & Techniques address end-to-end service life cycle activities today's focus in from modeling to realization

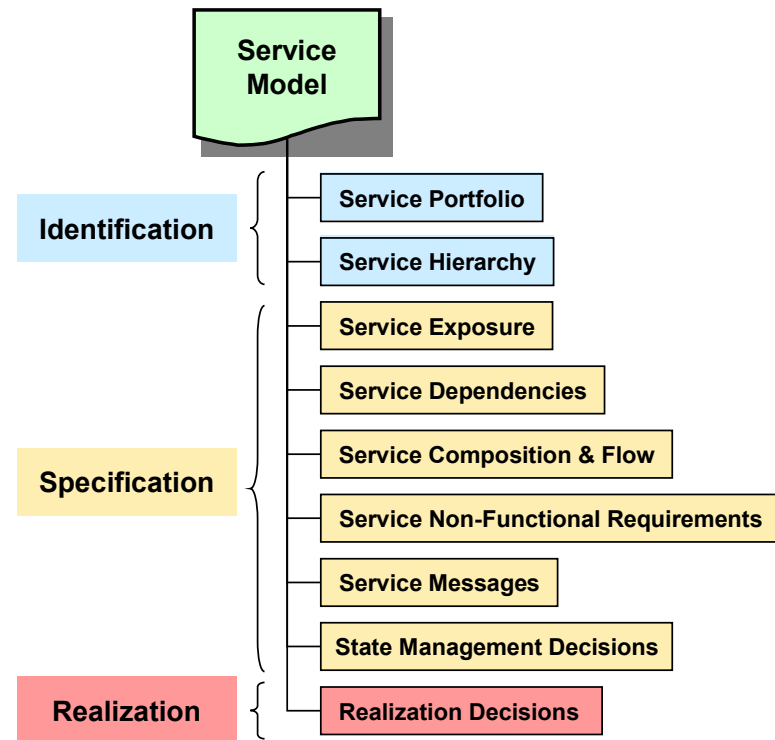


We need a prescriptive SOA method to identify, design and realize services → Service-oriented Modeling and Architecture (SOMA)

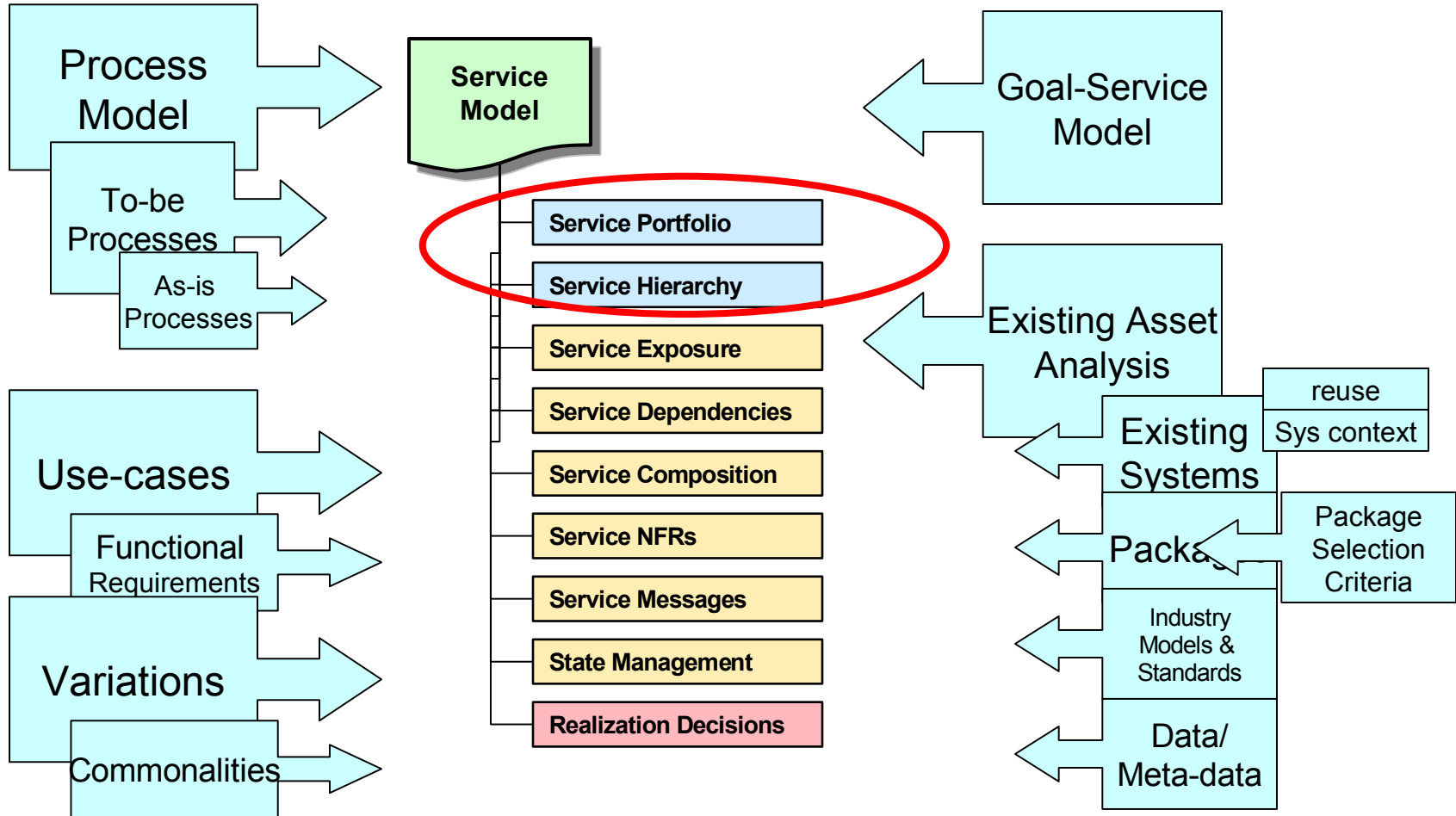
- SOMA is a **method** defining
 - a set of **activities** that a set of **roles** do to
 - produce artifacts (**workproducts**)
 - relating to the identification, specification and realization of services, components and flows (processes).
- SOMA is aimed at IT **enablement of target business processes**.
- Gaps in object-oriented analysis and design, for SOA, are filled with **new and innovative techniques** from SOMA.
- SOMA ensures **high-value, business driven SOA** bringing **continuity between the business intent and IT implementation**
- SOMA is initially **technology and product agnostic**, then helps map services to existing and newly defined technologies

Service Identification creates a number of artifacts; an important one is the Service Model

- Other steps on SOMA complete other aspects of the Service Model
- The determination of which *candidate* services should be included in the SOA based on business drivers and technological realities
- Later we will formalize this Service Portfolio through a Service Litmus Test

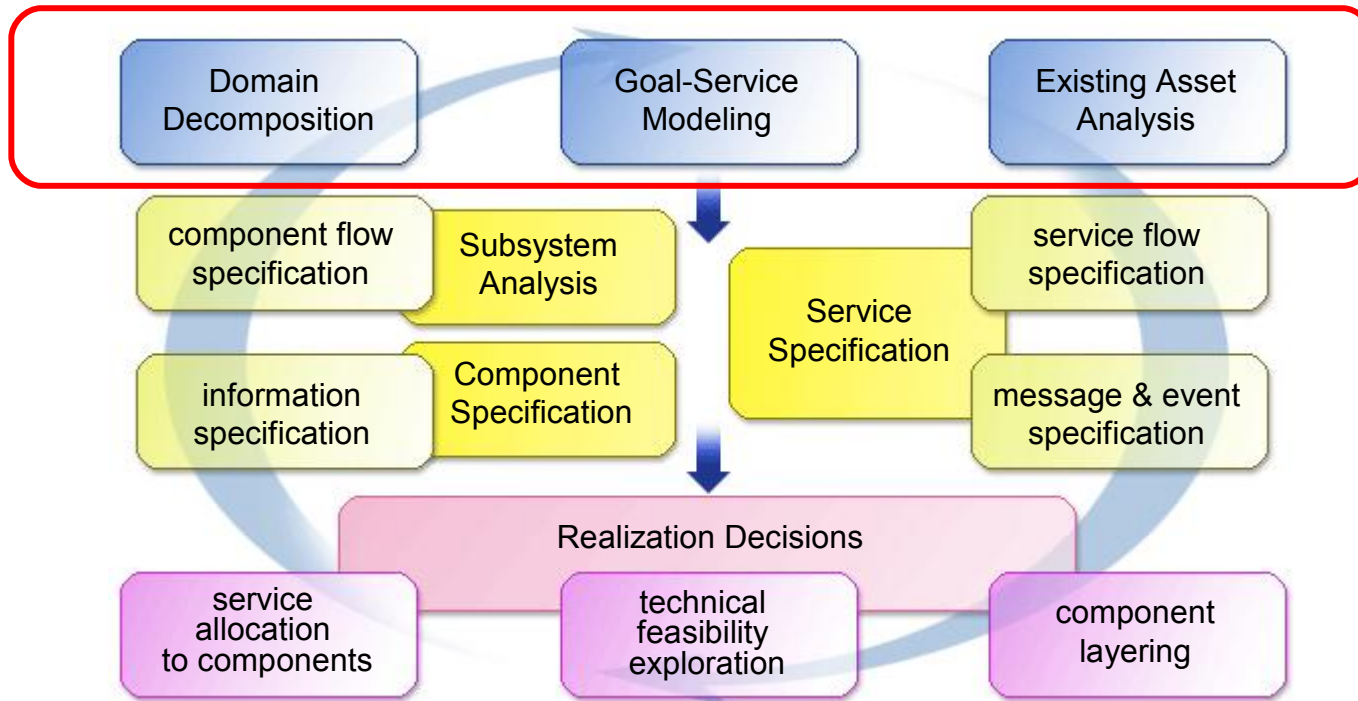
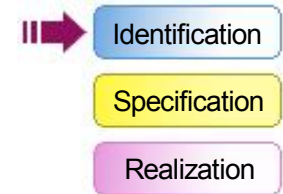


Consolidation of Various Sources of Business and Technical Capabilities Needed in One Place : Service Model



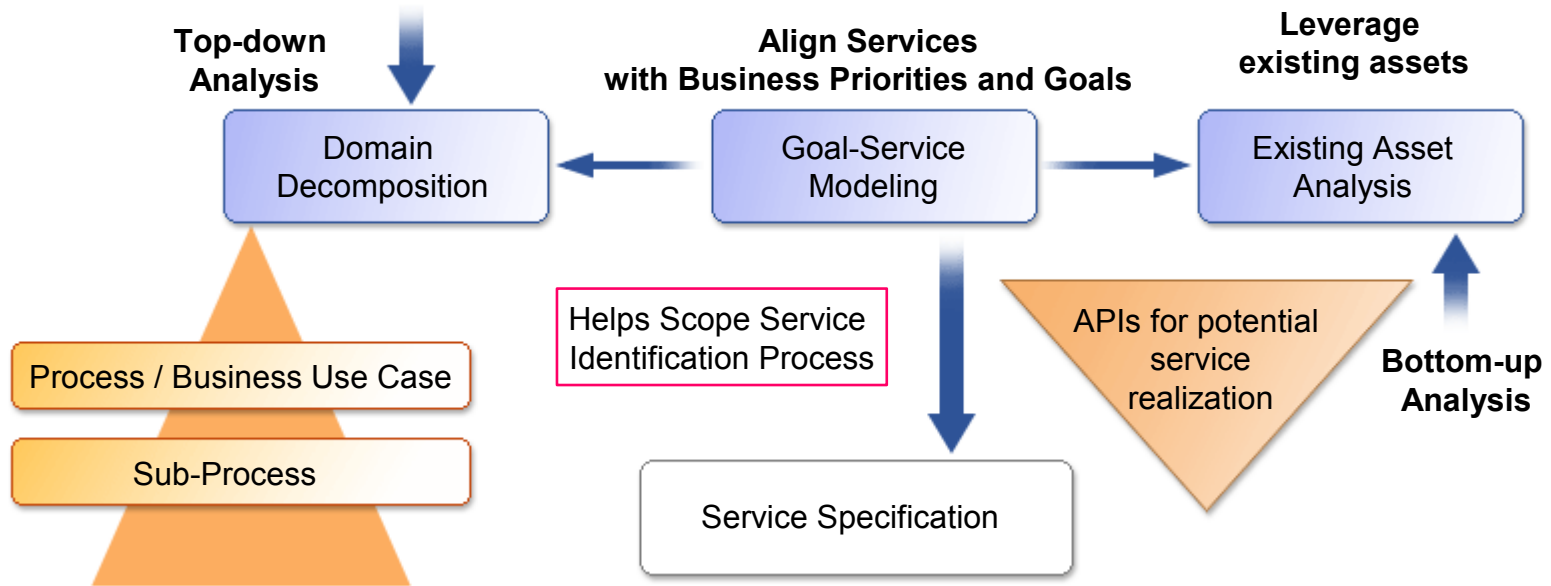
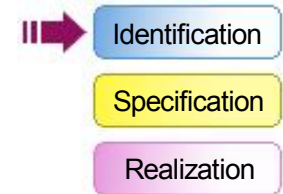
SOMA Service Identification is Business Driven. It is based on three major complementary techniques:

- Domain Decomposition (Top down Analysis)
- Existing Asset Analysis (Bottom-up Analysis)
- Goal-Service Modeling



Service Identification is based on three main complementary techniques

- Goal-Service Modeling
- Domain Decomposition (Top down Analysis)
 - Process decomposition
 - Variation-oriented Analysis (Processes, Structure (data/semantics) and Rules)
- Existing Asset Analysis (Bottom-up Analysis)



To illustrate, let's look at a "running example", a Rental Car Company

Rent-A-Car Case Study

- This case study is from the **car rental segment** of the Travel & Transportation Industry.

- The scope of this example covers **three business processes**
 - Reservation (Reserve Vehicle)
 - Vehicle Check-out (Check-out Vehicle)
 - Vehicle Check-in (Check-in Vehicle)

Rent Vehicle
High Level Business Process



- Input considerations:

- We assume that the functional areas:

Rentals & Reservations	<i>Execute Level Business Component.</i> Provides business services related to vehicle rental reservations. Provides support for both the reservations and rentals business processes.
Customer Service	<i>Execute Level Business Component.</i> Responsible for servicing the customer. Offers, among other things, services relating to maintenance of customer profile.
Promotions Management	<i>Control Level Business Component.</i> Responsible for the management of promotions across the board.
Fleet Management	<i>Execute Level Business Component.</i> Responsible for providing services around fleet management, fleet availability, and so on.

Rent-A-Car Business Priorities: Goals and Key Performance Indicators (KPIs)

Goals	KPI's
Increase the speed and agility in delivering new business services	Time to deliver a new business service = 2 weeks
Streamline processes to reduce operating costs	Operating cost reduction from July 2004 levels = Reduce by 20% after deployment of services platform
Increase revenue by 20% by the end of FY2005	Revenue increase in FY2005 over FY2004 = 20%

EXAMPLE
For illustration only

Goal: Business aspiration, usually high-level

KPI: Measurable Objectives

Goal-Service Modeling: 1st Identification Technique



Goal-Service Modeling

Goal-Service Modeling ensures that key services have not been missed. Business goals are decomposed into sub-goals and supporting services. Key performance indicators and associated metrics are identified to measure the attainment of sub-goals through the services identified. It also provides a mechanism for scoping.

- Identify Goals and Sub-goals

Identify Goals that are important to the business. Break goals into a set of supporting sub-goals in recursive fashion.
Rule of thumb: Typically, 3-4 levels of sub-goals will suffice.

Identify Services for Sub-goals

Once we have identified the sub-goals to the point at which we can identify services needed to fulfill them, we stop breaking down goals. If new services are identified, update the Service Model.

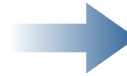
Identify KPIs and Metrics for Sub-goals and Services

For each one of the sub-goals, identify KPIs that will be used to determine metrics that can be measured for the attainment of the sub-goals through the supporting services.

Rent-A-Car Goal-Service Model:: Service Hierarchy

Goal-Service Model

- Increase Revenue by 20% by the End of FY2005
 - Introduce New Products
 - Introduce New Channels
 - Increase Revenue per Transaction
 - Up-sell Higher Class Vehicle
 - *Maintain Customer Profile*
 - *Determine Available Types of Up-sell Vehicles*
 - **Check Vehicle Availability**
 - Cross-sell Additional Options
 - *Purchase Options Individually*
 - *Purchase Option Packages*
 - Cross-sell Partner Services
 - *Reserve Hotel Rooms*
 - *Reserve Airline Tickets*
 - *Book Destination Attractions*
 - *Sell Navigation Equipment Post-rental*



Service Model::Service Hierarchy

Up-cross-sell

- 2.1 Understand Customer Profile
- 2.2 Determine Types of Up-sell Vehicles
- 2.4 Purchase Options Individually
- 2.5 Purchase Option Packages
- 2.6 Reserve Hotel Rooms
- 2.7 Reserve Airline Tickets
- 2.8 Book Destination Attractions
- 2.9 Sell Navigation Equipment Post-rental

Reservation

- 1.1.1.5 Check Vehicle Availability
(Partial List)

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Red Italics: Identified candidate service to be added to Service Model::Service Hierarchy

Bold Blue: Matches an existing service – no need to add

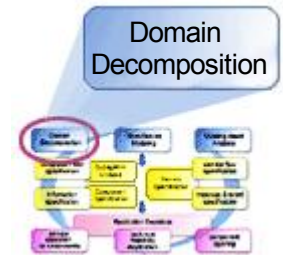


Goal-Service Model for Electronics Project; What are the business services you anticipate will fulfill the Goals...

3. Level of Goals	3. Level of KPIs	Services
Maximize Effectiveness of Specials, Program & Pilots	Increase PGM ROI	Collaborate with Licensee, Manage Reporting and Analytical Capabilities, Administer Program Information, View Campaigns and Manage Funds
Create New Market Positioning for Platforms	Increase Platform Market Share	Collaborate with Licensee, Manage Reporting and Analytical Capabilities, Administer Program Information
Create New Market Targeting	Increase Accuracy of Objectives	Manage Reporting and Analytical Capabilities
Set More Effective Marketing Objectives	Increase Accuracy of Objectives	Manage Reporting and Analytical Capabilities
Create Common Objectives for Electronics Company & Licensee Campaigns	Increase Market Share	Collaborate with Licensee, Manage Reporting and Analytical Capabilities, Publish Articles and Manage Websites/Newsletters
Align Electronics Company Campaigns to Licensee Campaigns	Increase Brand Recognition	Administer Customer Information, Collaborate with Licensee, View Campaigns and Funds, Manage Reporting and Analytical Capabilities, Publish Articles and Manage Websites/Newsletters
Improve Impact of Advertising	Improve Brand Penetration	Manage Reporting and Analytical Capabilities, Collaborate with Licensee
Improve Pgm Personalization & Flexibility	Improve PGM ROI	Administer Program Information, Collaborate with Licensee, Manage Reporting and Analytical Capabilities, Administer Customers,

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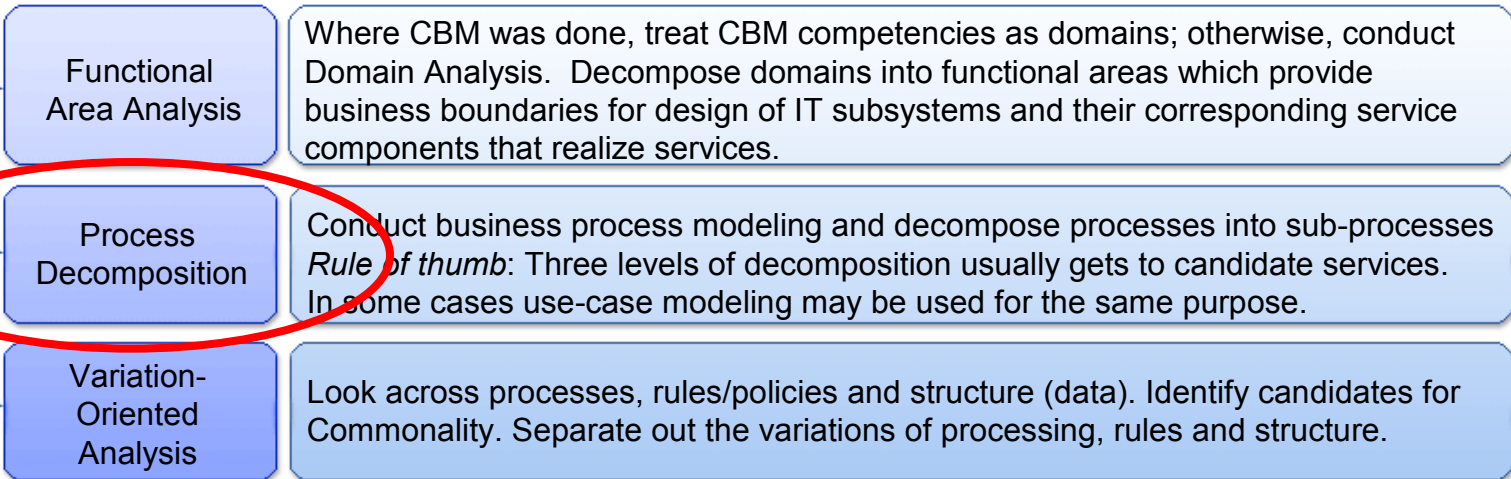
Process Decomposition: 2nd Identification Technique



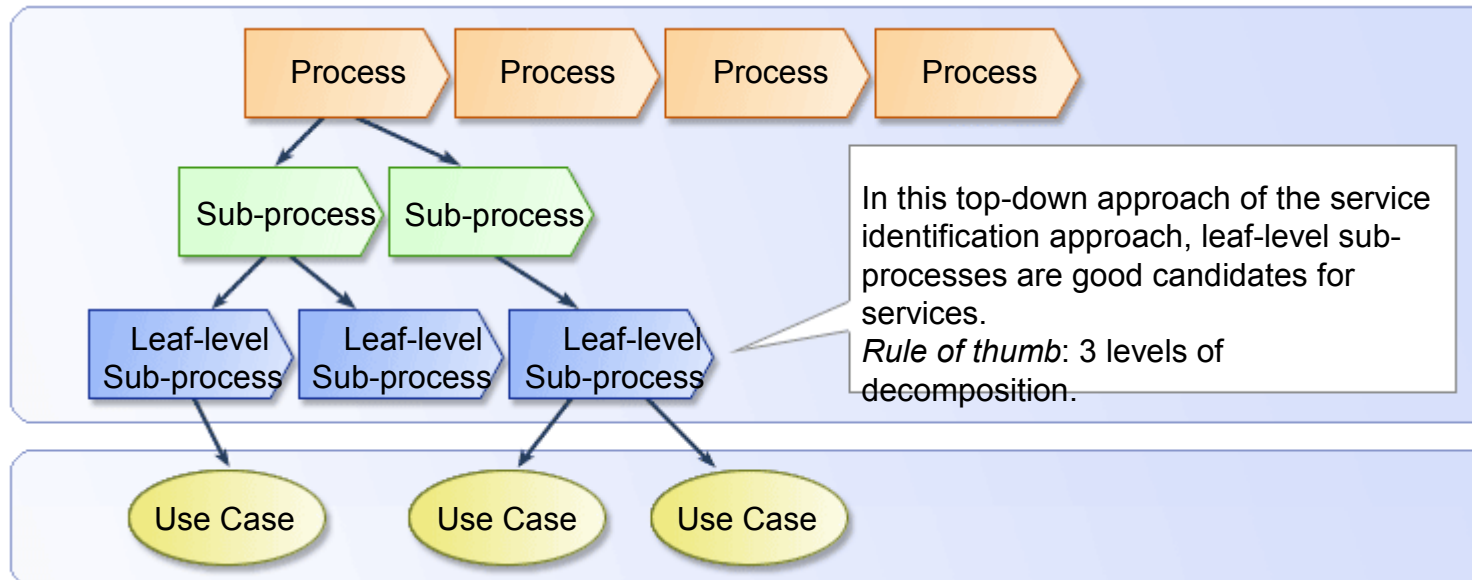
Domain Decomposition

A top-down business-driven decomposition to identify:

- Candidate services
- Functional areas that identify boundaries for subsystems (and later on, candidate service components to realize services)
- Business processes (service flows)
- Commonality and variations of business functionality



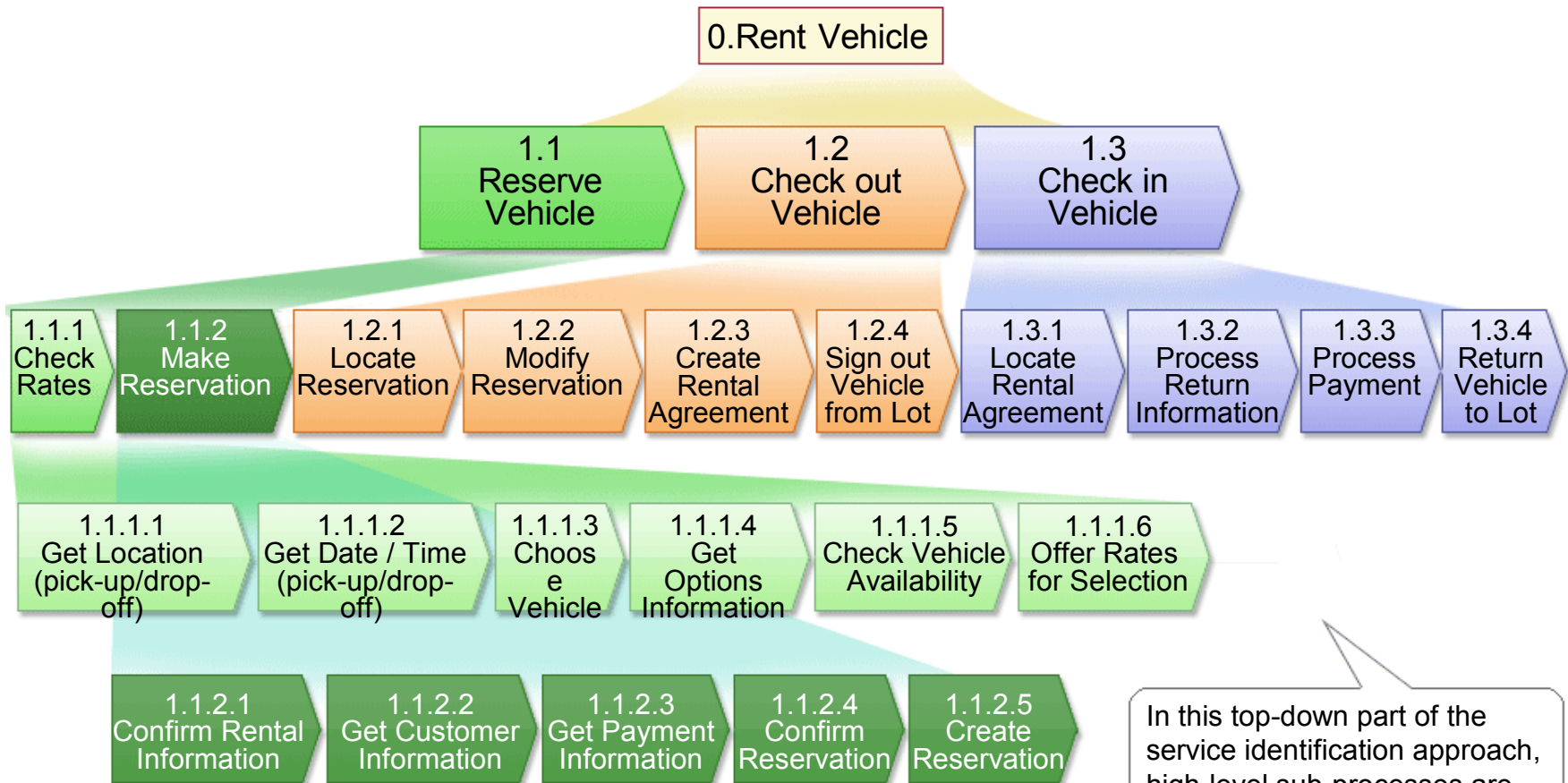
Process Decomposition Helps Identify Candidate Services that align with Business Processes



- Use the to-be process decomposition for this purpose
- A sub-process is a convenient construct used to denote further levels of refinement to a process into its constituent parts (sub-processes), recursively.
- Sub-processes are used to identify candidate services.
- The list of use cases provides the initial scope for system design (“business as usual”).

Rent-A-Car Process Decomposition

PowerPoint readable view !)



EXAMPLE
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In this top-down part of the service identification approach, high-level sub-processes are good candidates for business services. *Rule of thumb*: 3 levels of decomposition.

Question: Which should be exposed as services?

Rent-A-Car Service Model:: Service Portfolio (Initial)

- In the case study example, every “box” in the process decomposition is initially considered a “Candidate Service.”
- Service Portfolio
 - 0 Rent Vehicle
 - 1.1 Reserve Vehicle
 - 1.1.1 Check Rates
 - 1.1.2 Make Reservation
 - 1.1.1.1 Get Location (pick-up/drop-off)
 - 1.1.1.2 Get Date/Time (pick-up/drop-off)
 - 1.1.1.3 Choose Vehicle
 - 1.1.1.4 Get Options Information
 - 1.1.1.5 Check Vehicle Availability
 - 1.1.1.6 Offer Rates for Selection
 - 1.2 Check out Vehicle
 - 1.2.1 Locate Reservation
 - 1.2.2 Modify Reservation
 - 1.2.3 Create Rental Agreement
 - 1.2.4 Sign out Vehicle from Lot
 - 1.1.2.1 Confirm Rental Information
 - 1.1.2.2 Get Customer Information
 - 1.1.2.3 Get Payment Information
 - 1.1.2.4 Confirm Reservation
 - 1.1.2.5 Create Reservation
 - 1.3 Check in Vehicle
 - 1.3.1 Locate Rental Agreement
 - 1.3.2 Process Return Information
 - 1.3.3 Process Payment
 - 1.3.4 Return Vehicle to Lot



EXAMPLE
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Rent-A-Car Service Model:: Service Hierarchy

Functional Areas Rental, Reservation, and Payment Processing are also good candidates for subsystems.

Rental

- 1.2 Check out Vehicle
- 1.3 Check in Vehicle
- 1.2.3 Create Rental Agreement
- 1.2.4 Sign out Vehicle from Lot
- 1.3.1 Locate Rental Agreement
- 1.3.2 Process Return Information
- 1.3.4 Return Vehicle to Lot

Payment Processing

(Note: This is a new Functional Area that was identified by evaluating the services in the Service Portfolio.)

- 1.3.3 Process Payment

Reservation

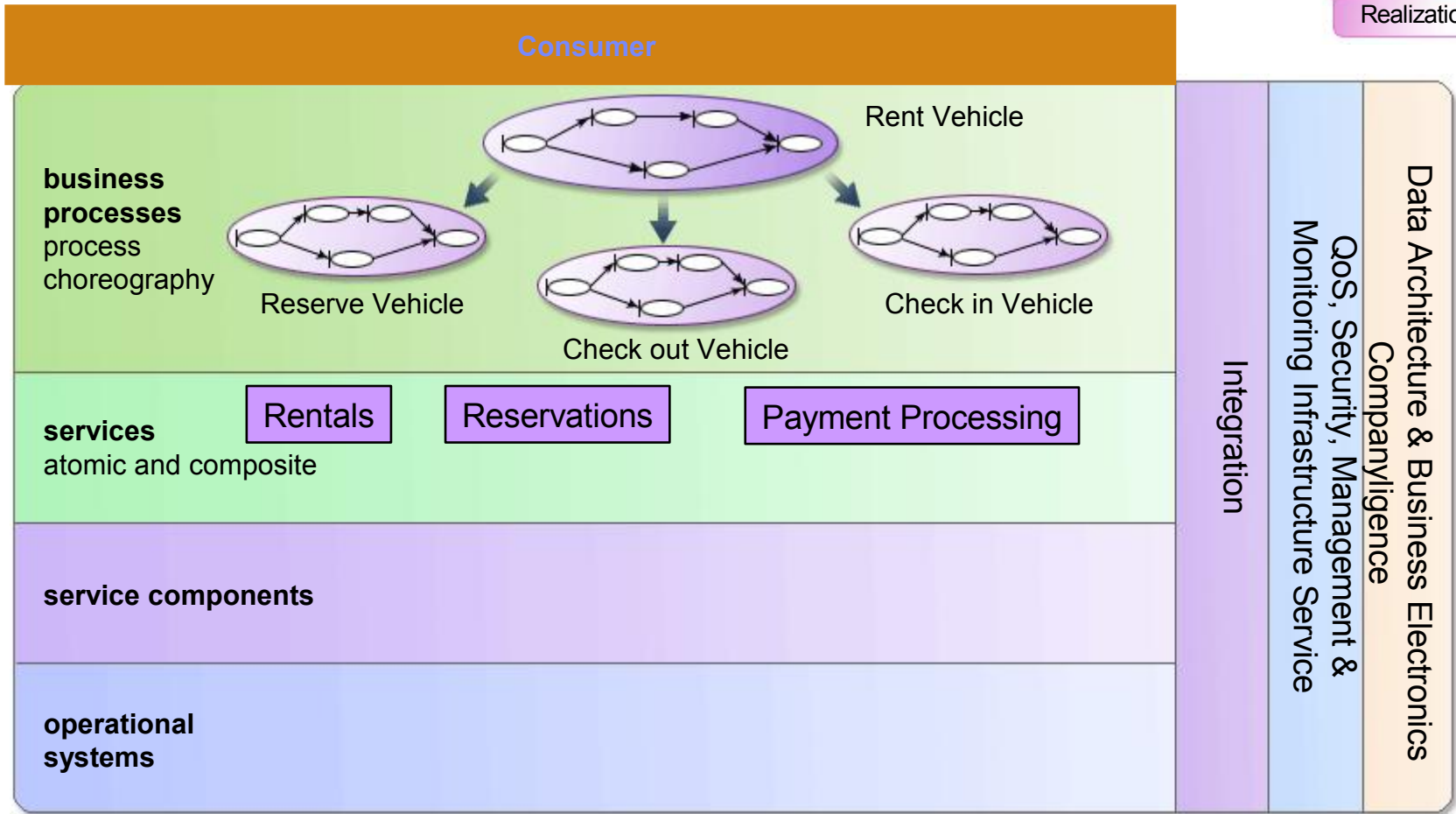
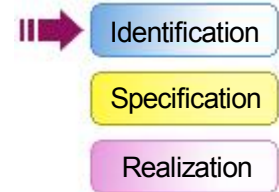
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- 1.1.1 Check Rates
- 1.1.2 Make Reservation
- 1.2.1 Locate Reservation
- 1.2.2 Modify Reservation
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- 1.1.1.3 Choose Vehicle
- 1.1.1.4 Get Options Information
- 1.1.1.5 Check Vehicle Availability
- 1.1.1.6 Offer Rates for Selection
- 1.1.2.1 Confirm Rental Information
- 1.1.2.2 Get Customer Information
- 1.1.2.3 Get Payment Information
- 1.1.2.4 Confirm Reservation
- 1.1.2.5 Create Reservation

Green Bold: Functional Area / Service Hierarchy Category

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Rent-A-Car Top-Down Service Identification



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Existing Asset Analysis: 3rd Identification Technique



Existing Asset Analysis

This bottom-up analysis examines assets such as existing custom, packaged applications, and industry models to determine what can be leveraged to realize service functionality. It is also designed to uncover any services that might have been missed through process decomposition and goal-service modeling.



Technical feasibility exploration of service realization decisions can start right after existing asset analysis.

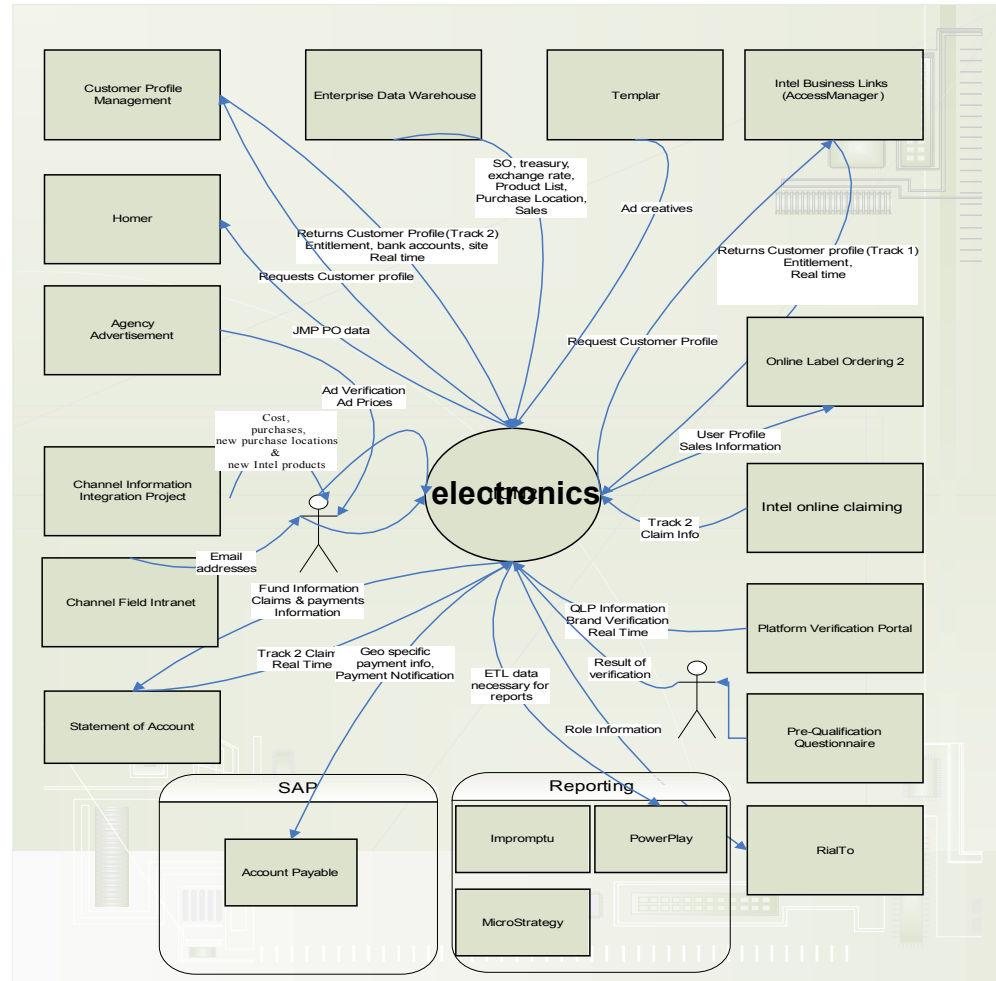
Service Realization Decisions

This is the process of mapping the services to components that will realize the functionality. Architectural and design decisions have to be made about how components will be implemented to realize the service functionality and ensuring that quality of service of the services through chosen technologies and systems can be delivered.



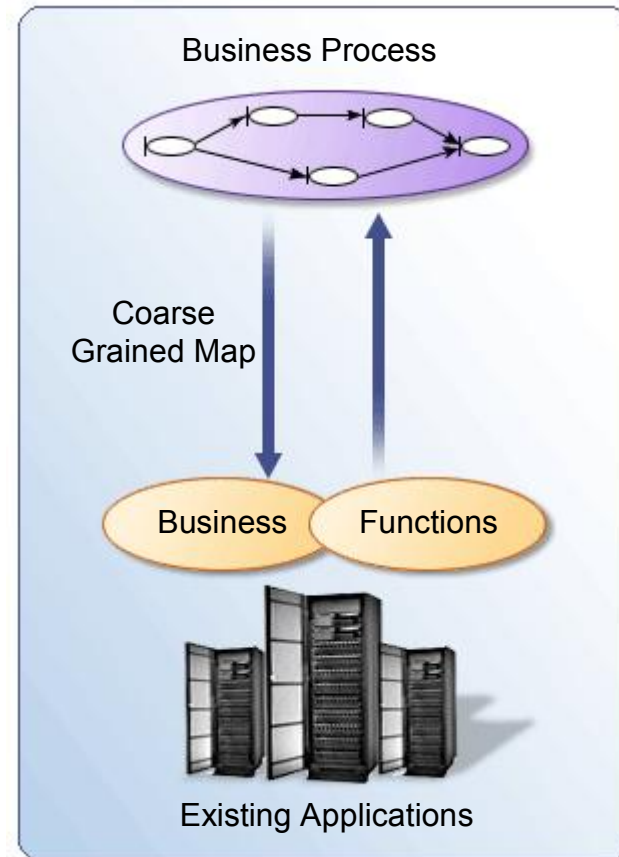
Technical Feasibility Exploration

System Context



Coarse-Grained Mapping of Candidate Services to Existing Applications

- Understand the business functions supported by each application
- Record attributes of existing applications in terms of technologies used, architectural styles, and so on
- Identify applications that perform common services
- Identify Gaps of Intended functionality with Implementation Software



What are the assets (systems, vendors, etc.) we can leverage to source or realize service functionality?

See Doc: [Feasibility of Reusing Existing Electronics Industry Project Assets](#)

- Account payable (AP) is a module within Financial and Controlling system. AP offers the following functionality:
 - Maintain supplier master details
 - Process invoices
 - Reconciles monthly statements
 - Calculate payments
 - Ledger Accounting
 - Maintaining bank accounts
- There are number of ways to access AP from the outside:
 - BAPI; mySAP has thousands of pre-built BAPI files, and they are service enabled.
 - iDOC. It is based on extracting data from SAP.
 - EDI
- Those AP's functionality that can be accessed via exposed BAPI's web services can be reused.

Rent-A-Car Existing Asset Analysis leading to New Services

- 3.1 Reservation
 - 3.1.1 Display Station Status
 - 3.1.2 Rate Shop
 - 3.1.3 Create/Display Reservation
 - 3.1.4 Display Rate Information
 - **3.1.5 Display Vehicle Availability (Related to 2.2)**
 - 3.1.6 Display Station Information
 - 3.1.7 Create Account Number
 - **3.1.8 Modify/Cancel Reservations**
 - 3.1.9 Verify Flight/Arrival Time
 - 3.1.10 Display Make Model Information
 - 3.1.11 Display Credit Cards Accepted at Location
 - 3.1.12 Display Manifest
- 3.2 Vehicle
 - 3.2.1 Vehicle Display
 - **3.2.2 Vehicle Availability (Related to 2.2)**
 - 3.2.3 Daily Status Report
 - **3.2.4 Vehicle Trace**
 - **3.2.5 Vehicle Status**
 - 3.2.6 Ready-line
- 3.3 Customer
 - 3.3.1 Display Customer Profile
- 3.4 Additional Pre-Payment
- 3.5 Rapid Movement
- 3.6. Check-out
 - **3.6.1 Locate Reservations (Related to 1.2.1)**
 - 3.6.2 Obtain Authorizations
 - 3.6.3 Locate Vehicles by Ready-line
 - **3.6.4 Up-selling (Related to 2.2)**
 - 3.6.5 Delay Check-out Rentals
 - 3.6.6 Driver's License Verification (if Applicable)
 - 3.6.7 Risk Capabilities
 - 3.6.8 Coupon Processing
 - 3.6.9 Miscellaneous/One Way Fee Processing
- 3.7. Check-in
 - **3.7.1 Display / Modify Rental Agreement**
 - **3.7.2 Void Rental Agreement**
 - 3.7.3 Vehicle Exchange
 - 3.7.4 Obtain Authorizations
 - 3.7.5 Real-time Check-in
 - 3.7.6 Delay Check-in
 - 3.7.7 Miscellaneous/One Way Fee Processing
 - 3.7.8 Cash Calculation
 - 3.7.9 Coupon Processing
 - 3.7.10 Customer Survey
 - 3.7.11 Record Vehicle Damage
 - 3.7.12 Rates Processing

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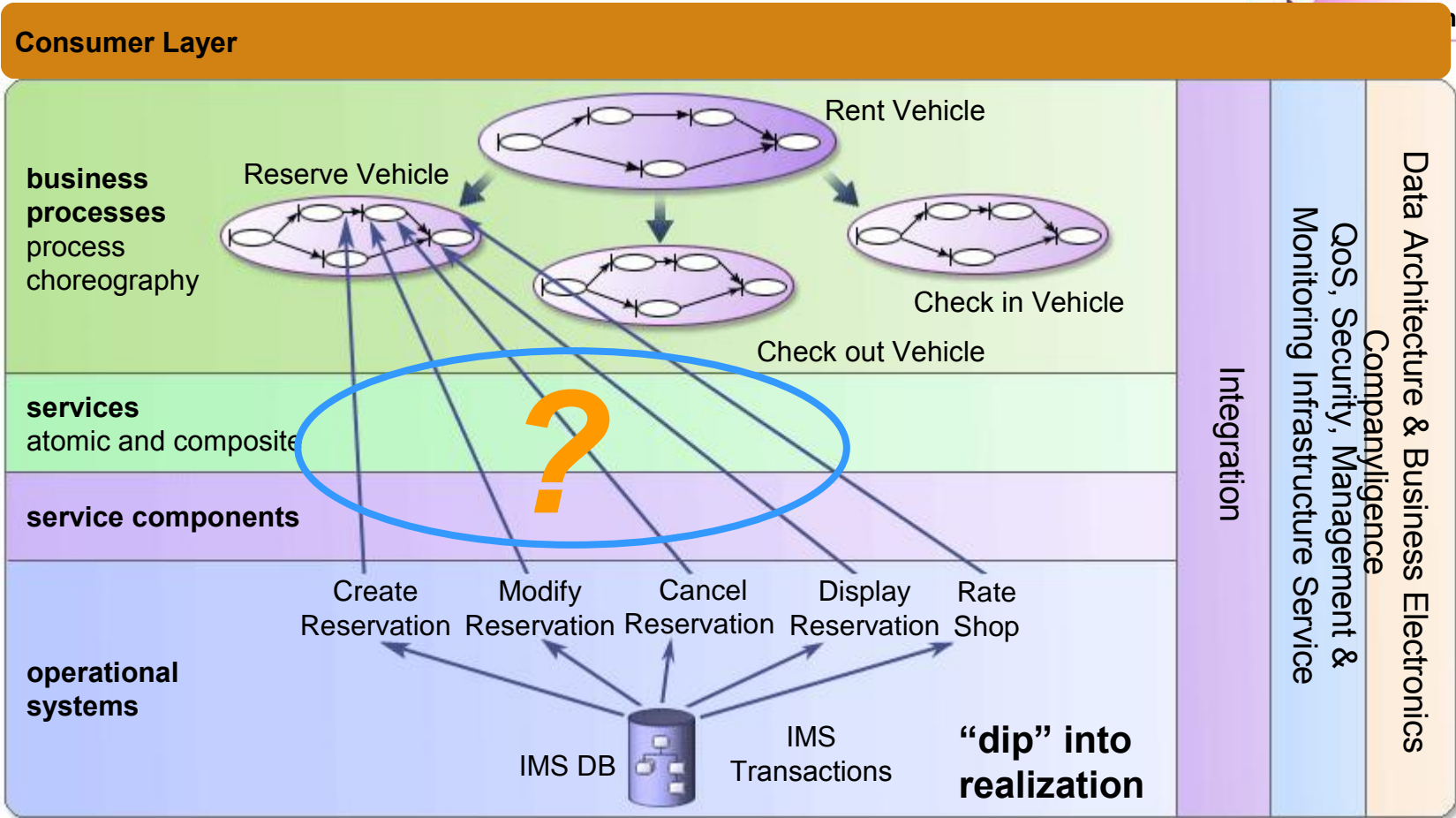
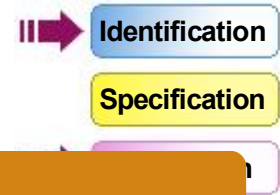
Red Bold Italics: New candidate service to be added to service portfolio.

Blue Bold: Already identified as a candidate service - likely to be of value during service realization.

Gray: Not relevant for this initiative. Identify these as quickly as possible to maximize focus on those that are relevant.



Rent-A-Car Service Identification



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Electronics Industry Service Model:: Service Hierarchy

Functional Area	Business Process	Candidate Service
Funds Management - 4	Manage Accruals	Get Purchase Locations Map New Purchase Locations Get Ingredients Add New Ingredients Get Unmapped Product Sales Map Product IDs Get Direct Units Reconcile Datawarehouse Get All Indirect Units Get All ASP's Run Accruals Commit Accruals
	View Campaigns and Manage Funds	View Account and Fund Balances View Expiring and Expired Funds Create Transfer View Transfer History View Purchase History Generate Marketing Funds Forecast Set-up Allocations Complete Claim Adjustments Extend Funds Complete Sales Entries View All Existing Campaigns View Calendar Create Roll-Up Visibility for Marketing Budgets/Accounts Conduct Phased Campaign Budgets Release Verify Financial Commitments By Associated Budget Import Cost Information From Third-Party Systems



Sample Partial Service Model for an Insurance Client

Functional Area	Business Process	Service	Service Description
Customer Acquisition and Management	Account Management	NotifyAgent	Notify an agent of RFP and RFP status changes and provide them with leads to groups awaiting renewal.
	Present Offer	AgentRequestForProposal	An agent requests a proposal to a new or renewing group. The agent completes an RFP (request for proposal) and submits the RFP via fax, e-mail, phone, or mail
		AgentRequestForQuote	An agent requests a quote to a new or renewing group. The agent completes an RFQ (request for quote) and submits the RFQ via fax, e-mail, phone, or mail
Enabling Member Care	Claims Processing	GetClaimsHistory	Obtain the history of a claim to identify third party injuries
		NotifyClaimant	Notify a claimant (a member or subscriber) of the resolution of their claim(s) (e.g. claim denied).
		ReturnClaim	Return claim to Clearinghouse
		SubmitClaim	Submit claims for payment and for pre-determination
		UpdateClaim	Update conditional eligibility with diagnosis in question
	Demographics and Eligibility Maintenance	AuthenticateParty	Authenticate (identify) a party using provided information
		AuthorizeParty	Determine if an authenticated party is authorized to receive the information they have requested
		GetMemberServiceDetails	Inquire on services providers make available to members. Examples include determine if a member is eligible for a service, and determine the member's cost for a service.
		NotifyGroup	Notify a group of changes made to their enrollment, accounts, benefits or eligibility at Regence. The notification is sent to the group's contact or liason using the groups's preferred method of communication, e.g. email or letter.
		NotifyGroupAdmin	Notify a group administrator of changes made to a group's enrollment, or eligibility at Regence.
		NotifyMember	Notify a member of changes made to their enrollment, account, benefits or eligibility at Regence. The notification is sent using the member's preferred method of communication, e.g. email or letter.
		NotifyParty	Deliver messages to customers, employees and business partners in a manner based on their preferences. Messages are maintained in a common and standard format. Available message delivery methods include email and letters;

Snippet

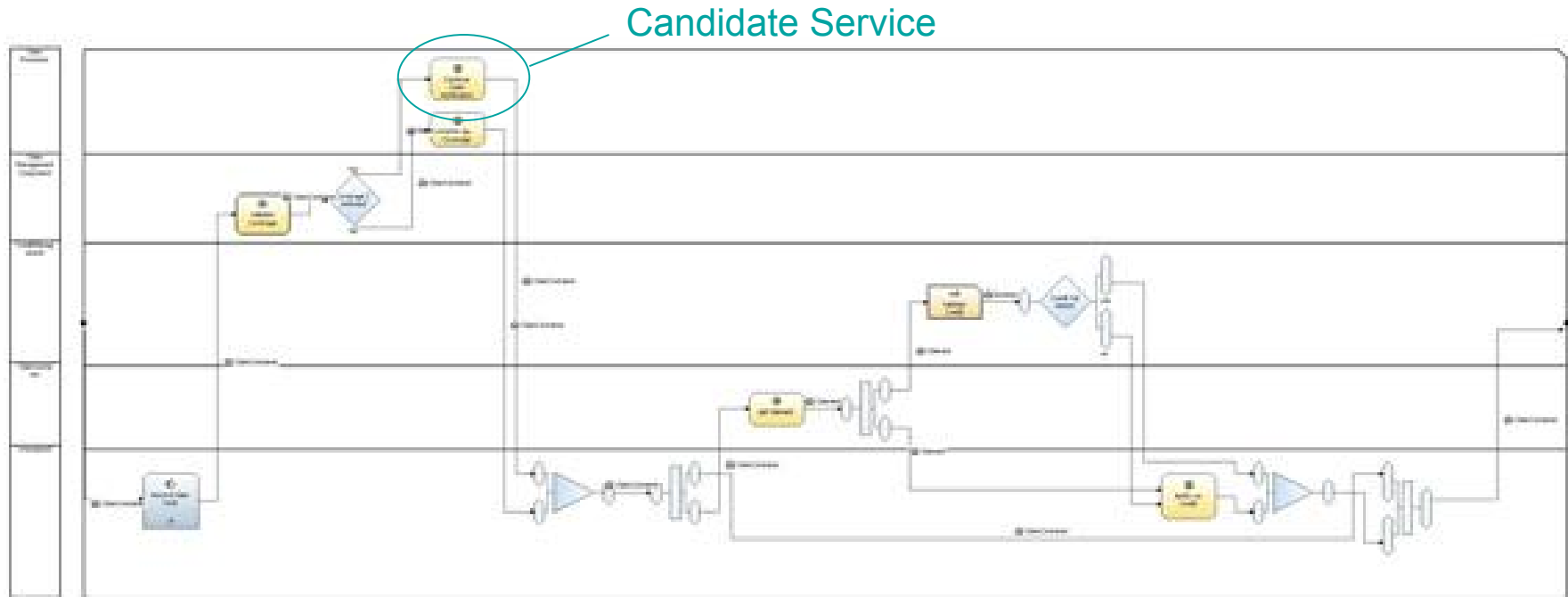
Summary

- SOMA Identification establishes **candidate services, processes (flows) and subsystem boundaries (that will contain service components)** required by an SOA.
- SOMA uses **three** complementary techniques to identify services: Domain Decomposition, Goal-Service Modeling, and Existing Asset Analysis.



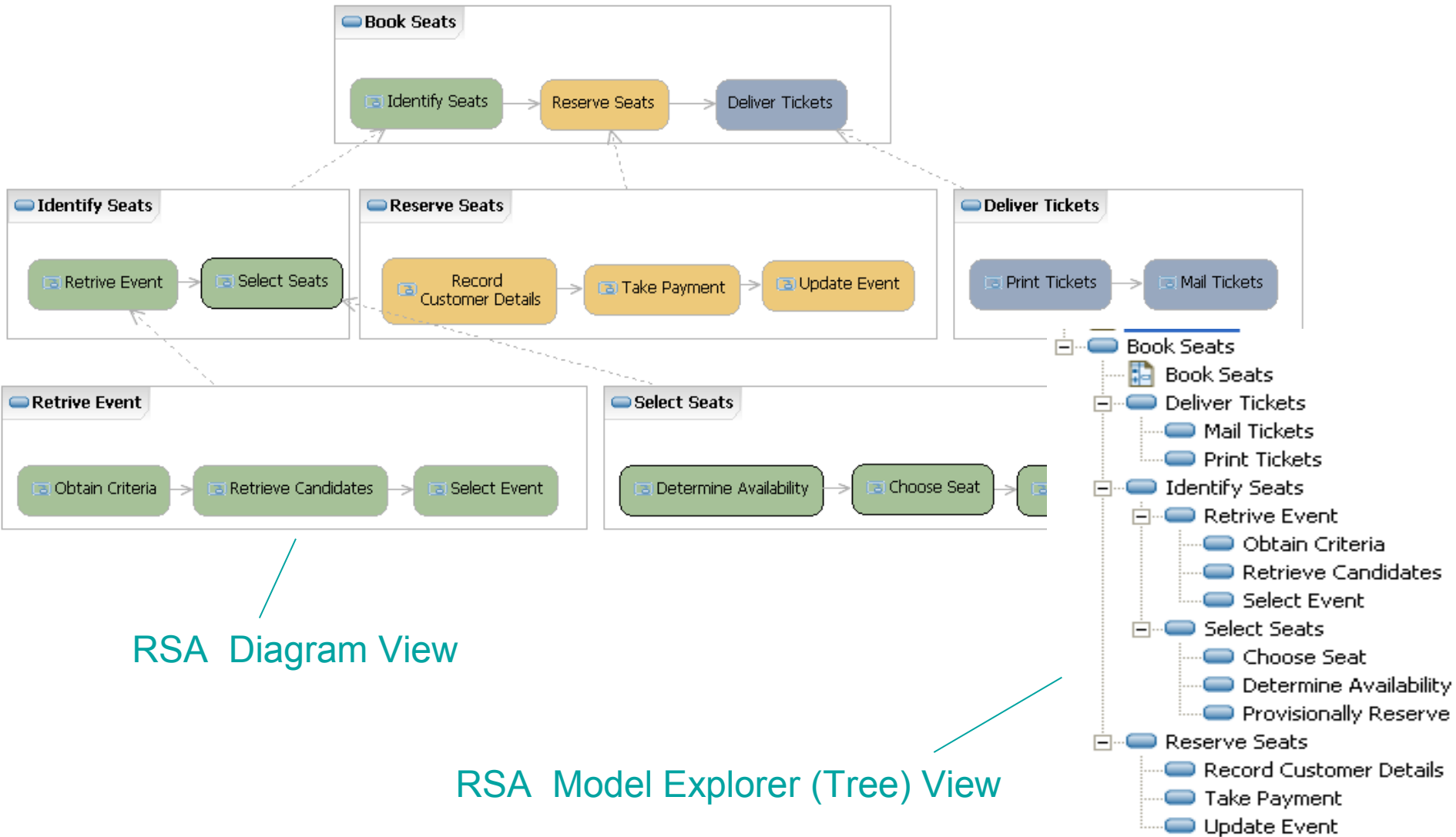
Thank
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Top-down : business process decomposition



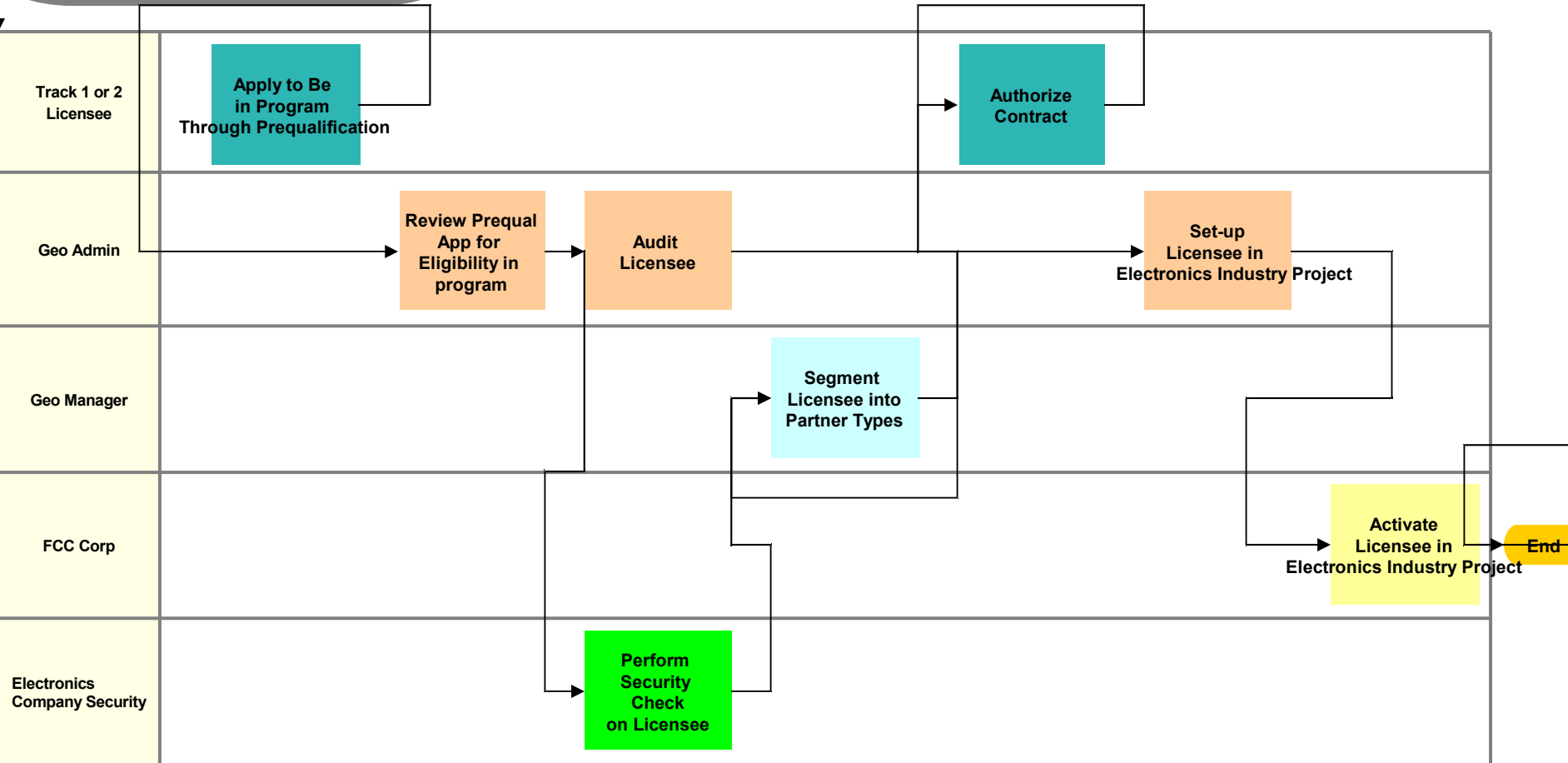
- Tasks within a business process (e.g. modeled with WebSphere Business Modeler or Rational Software Architect) are candidates for services

Process Decomposition in Rational Software Architect



1.1 Pre-Qualify and Enroll Licensee Process Flow: As-Is Processes

Licensee Contacts Electronics Company Out of Interest,
 Electronics Company Contacts Licensee for Partnership



3.2 Add Qualified Licensee Product,
 2.3 Set-up External Security and Entitlement
 4.1 Run Accruals,
 Design Creative

As-Is vs. To-Be Process Assessment: Pre-Qualify Licensee

As-Is Assessment of Pre-Qualify and Enroll Licensee			
Owner	Description	Pain Points	Improvements
Jane Doe	Licensee elects to join Program or Electronics Company nominates licensee for Program. Collect licensee information, gain Geo and FCC approvals, get licensee under contract (T's and C's), and set-up licensee in Electronics Industry Project.	<ul style="list-style-type: none"> - There is no immediate list of licensees that have been rejected through Prequalification. Consequently, Geo Admins must look into the Db for any checks. - Licensees do not observe popup message requiring submission of invoices, after Prequalification is submitted. Geo Admin is tracks and receives the invoices. - Language issues. - Security checks can often take days– it is a manual process for the Security role. 	<ul style="list-style-type: none"> - Provide view of licensees that have been rejected through the Pre-Qualifying Questionnaire. - Eliminate requirement to provide invoices since the Geo Admin must review the information in the Sales Out report anyway. - Offer language support at time of enrollment or localize instructions on filling out legal documents. - Automate security checking.
To-Be Assessment of Pre-Qualify Licensee			
What is the future state for the original Pre-Qualify and Enroll Licensee process?	<p>Different Partner Types licensees elect to join Program or Electronics Company nominates the licensee for Program. After the licensee completes a questionnaire through Prequalification and receives initial approval from the Geo Admin, Electronics Industry and a Web Crawler automatically conduct a pre-audit and security check. The Geo Admin then reviews all logos brought back by the Web Crawler. The Geo Manager finally segments the licensee into Track 1 or Track 2 based on existing information from the existing customer and product purchase databases.</p> <p>Improvements:</p> <ul style="list-style-type: none"> ▪ Utilize a Web Crawler to review customer websites and find Electronics Company logos – this eliminates the need for a Geo Admin to manually search through websites during the pre-audit. ▪ Link credit and security databases to target potential high risks. ▪ Populating fields for the Prequalification questionnaire with information from customer and product purchases databases will enable less customer data entry and greater accuracy of information. ▪ Simplify logic for segmenting licensees by utilizing information from customer and product purchases databases ▪ Checking the ID# against Electronics Industry, Program, CFI, and Security/Credit Databases will eliminate the extra steps of having the Security Team perform a security check for the Geo Admin, reviewing the Sales Out Report, and checking for duplicate ID#'s in the system. ▪ Perform initial check to assess level of risk and assign risk rating. This information should feed into the manage risk profile process. ▪ If reviewing of the Sales Out Report becomes automated, the licensee will not have to submit invoices to the Geo Admin, which reduces transmission and follow-up time. ▪ Localizing instructions on legal documents and offering language support at the time of enrollment will reduce licensee confusion and the amount of time for a Geo Admin to provide support and interpret incorrect information. ▪ Segment Licensee by service offering, GEO, Level of risks 		

There are different aspects/definitions of SOA based on your role...

“SOA is different things to different people ...”

- a set of services that a business wants to expose to their customers and partners, or other portions of the organization

Business

- an architectural style which decouples a service provider, consumer through contracts of the set of services using service descriptions and policies
- a set of architectural principles, patterns and criteria which address characteristics such as *modularity, encapsulation, loose coupling, separation of concerns, reuse, composability and single implementation*

Architecture

- a programming model complete with standards, tools and technologies such as Web Services

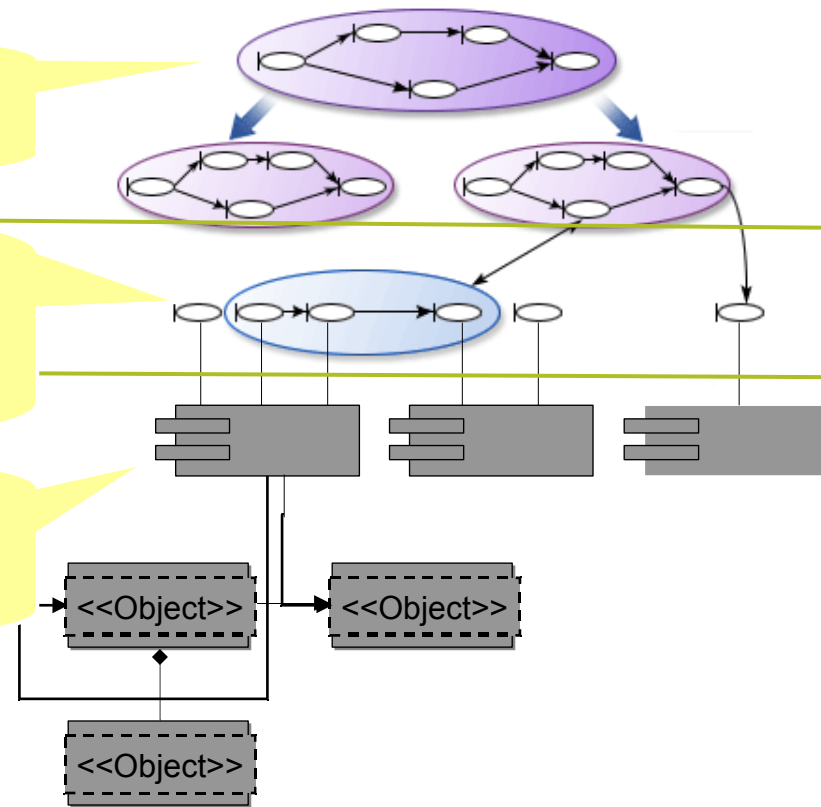
Implementation

SOA Modeling Constructs: An SOA requires the identification, specification and realization of the three fundamental building blocks of the service computing paradigm

Flows (processes) – represent the flows of activities required to complete a business process. They are compositions of services targeted to achieve business goals

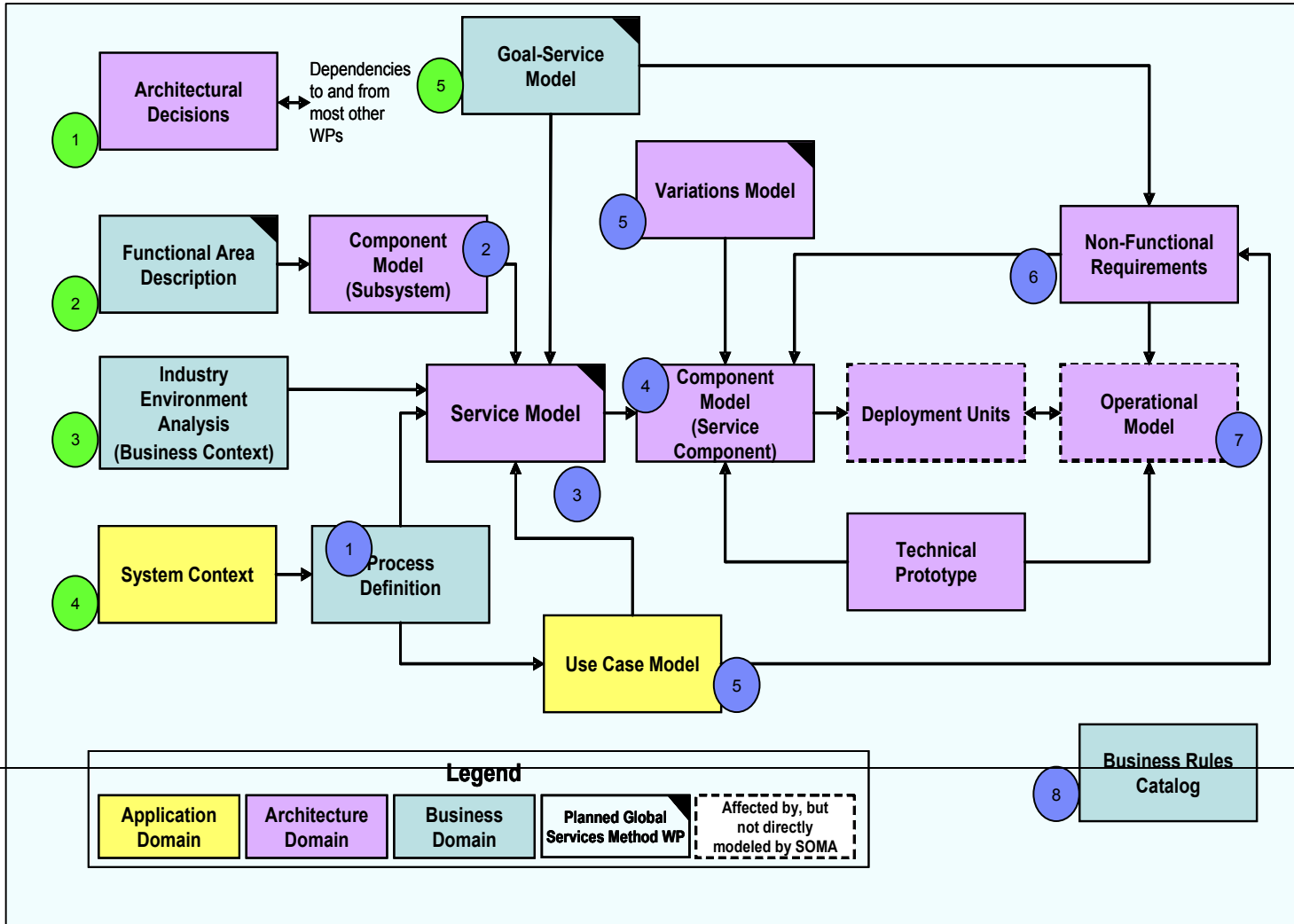
Services –the main structuring element required by a service consumer, provided by the service provider. Offers functionality and quality of service, both of which are externalized within service descriptions/policy and both of which can be applied a recursive or “fractal” manner.

Components – that realize not only the functionality of the services they expose but also ensure their quality of service (the QoS advertised by the Service provider implementing (“realizing”) the services



SOMA was created to specifically address modeling (analysis and design) of these three constructs.

SOMA work product Dependency Diagram and Deliverables



SOMA in RMC (Rational Method Composer)

Rational Unified Process®

Where Am I | Tree Sets

About SOMA | Model

Overview

Capability Pattern: Service-Oriented Modeling & Architecture (SOMA)

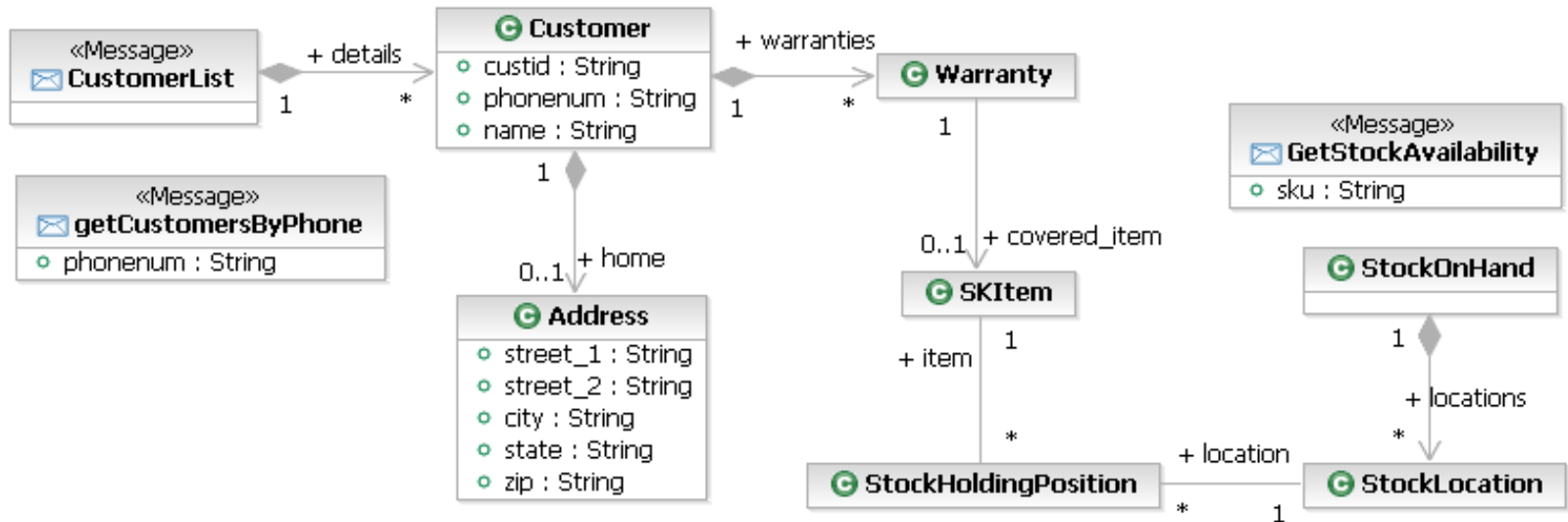
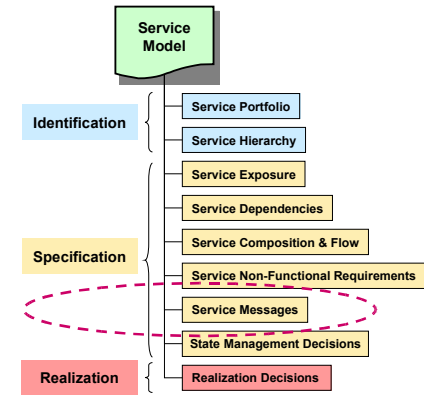
Description | Work Breakdown Structure | Team Allocation | Work Product Usage

Work Breakdown

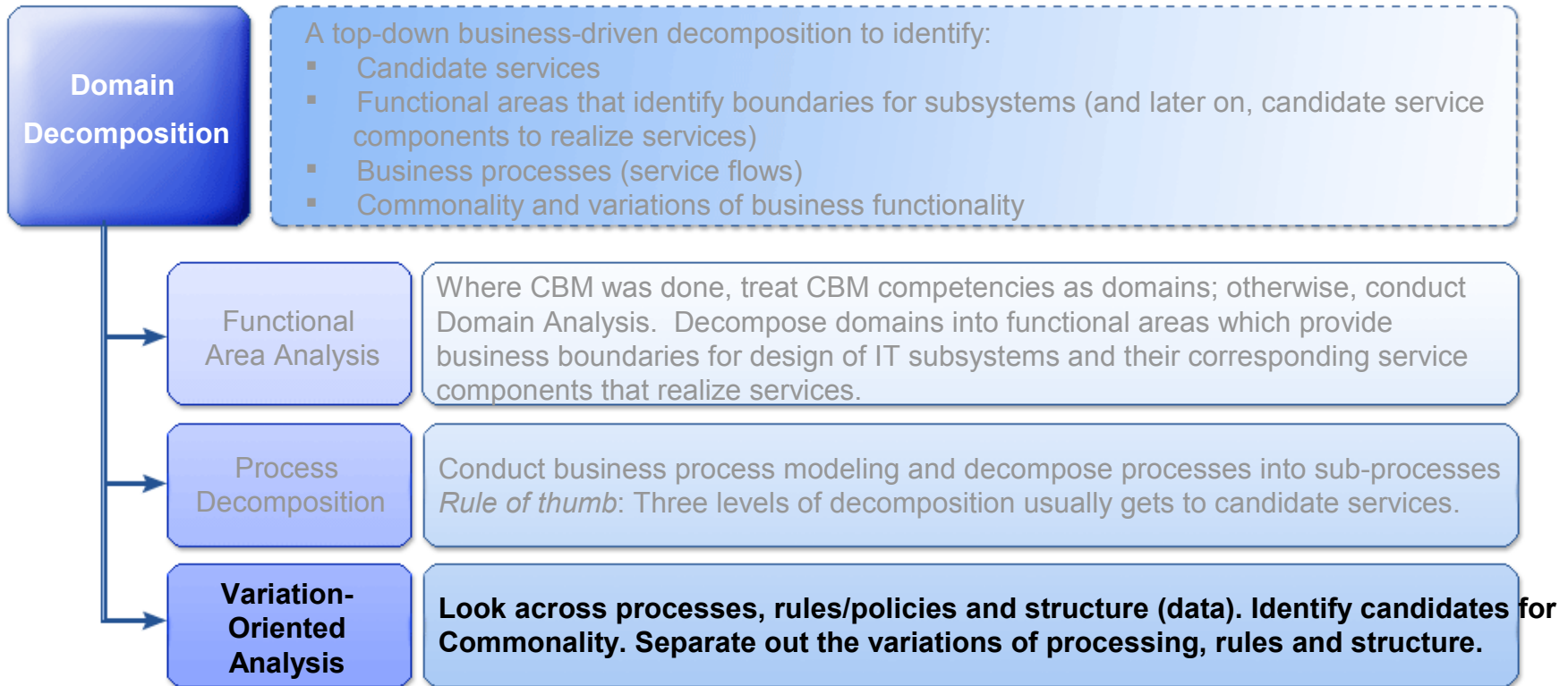
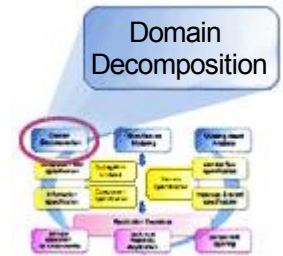
Index	Prefix	Breakdown Element	Steps	Predecessors	R
1		SOMA Identification			
2		Input Validation	••		
3		Goal-Service Modeling	•••		
4		Domain Decomposition			
5		Functional Area Analysis	••		
6		Process Decomposition	••••		
7		Variation-Oriented Analysis			
8		Existing Asset Analysis	••		
9		SOMA Specification			
10		Service Specification	••••• •••		
11		Subsystem Analysis	••••		
12		Component Specification	•••••		
13		SOMA Realization			
14		Service Allocation			
15		Component Allocation to Layers	•••		
16		Technical Feasibility Exploration			
17		Realization Decision Validation			

Message and Data Modeling

- A **message** is a container which identifies a subset of an information model or domain model which is passed into or out of a service invocation. A message is always passed by value and should have no defined behavior.
- `<<Message>>` is a stereotype of UML Class



Variation-Oriented Analysis

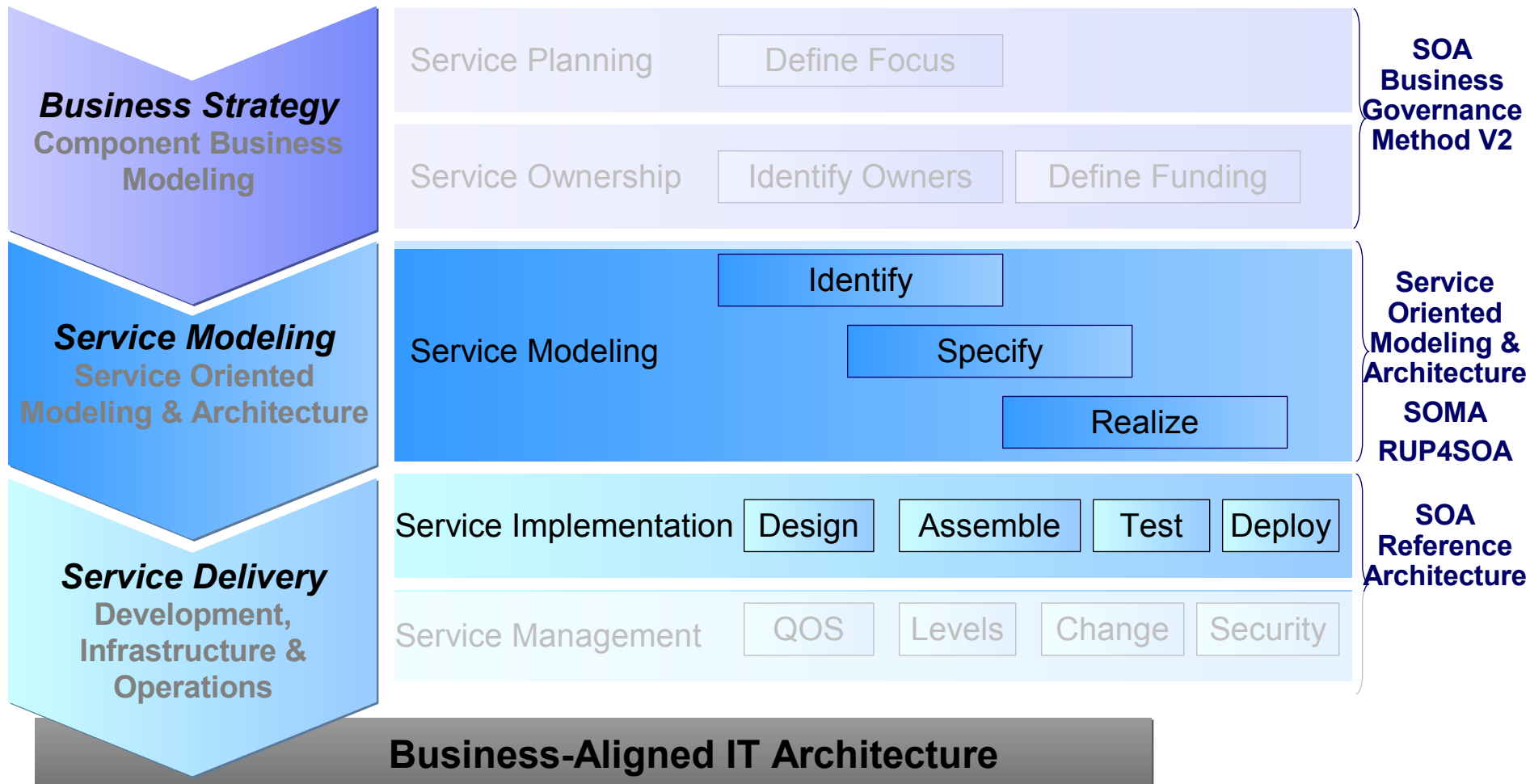


VOA in Electronics Industry (Sample)

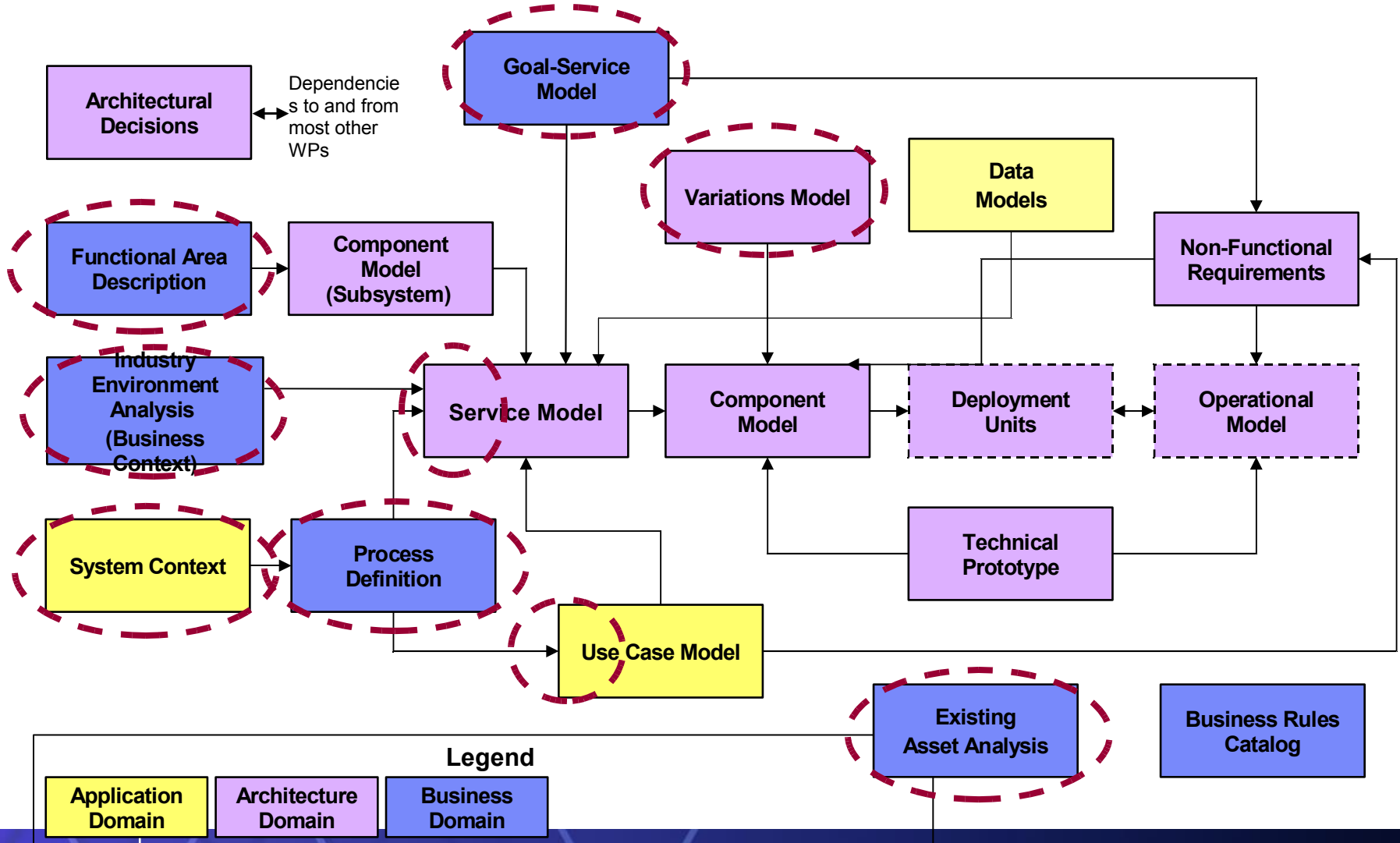
Functional Area: Enrollment

Variation	Commonality	To-Be Requirements
Credit Database & security check is manual		Link Credit database and security check to automate
		Receive documents from GEO admin but cannot put receive documents status in Electronics Industry Project without FCC Corp receive
Customer Name does not work to check across Databases (different entry) due to company name not matching		Utilize IPD Number as a primary key to check Electronics Industry Project, CFI, Chip, & Security, credit databases. This would automate the system to check with one IPD. *no documentation required from licensee required
States in Prequalification to licensee that enrollment will take 10 days and in actuality it takes ??		Change POP for during the Prequalification process needs to change time frame of enrollment
	Multiple IPD numbers	Reject Duplicate IPD application in automation
Rules behind to automate decision behind Track 1 & track 2 variation ?		

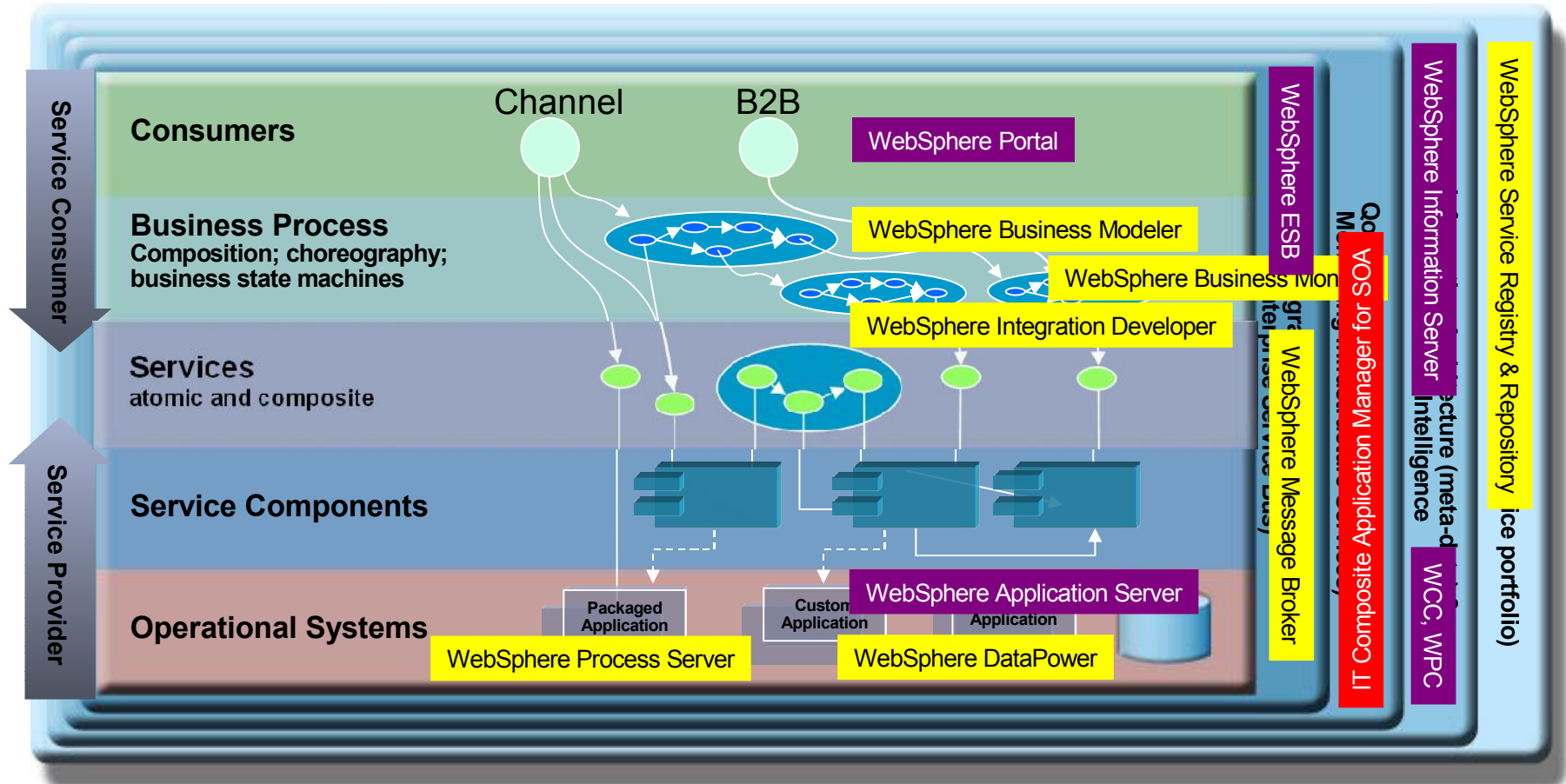
Methods & Techniques address end-to-end service life cycle activities today's focus in from modeling to realization



SOMA Work Product Dependency Diagram



The solution needs infrastructure layers and governance



Some of the products that will be discussed today

