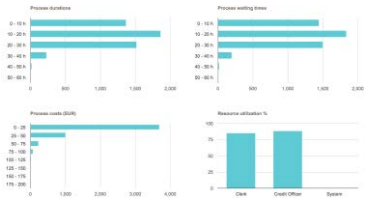
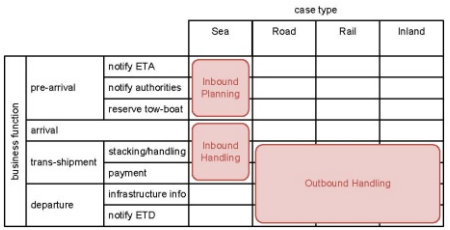
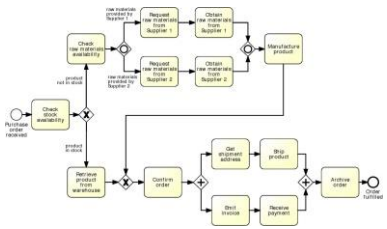
Business Process Management (3)

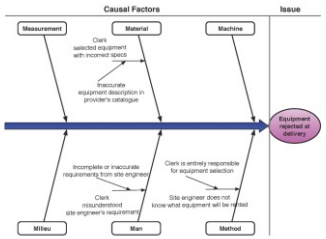
Slides adapted from: Dr. Marlon Dumas

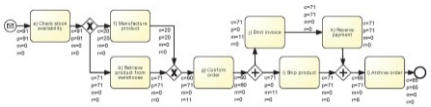
The BPM lifecycle











Process identification

Process architecture

Process discovery

As-is process model

Process analysis

Insights on weaknesses and their impact

Process redesign

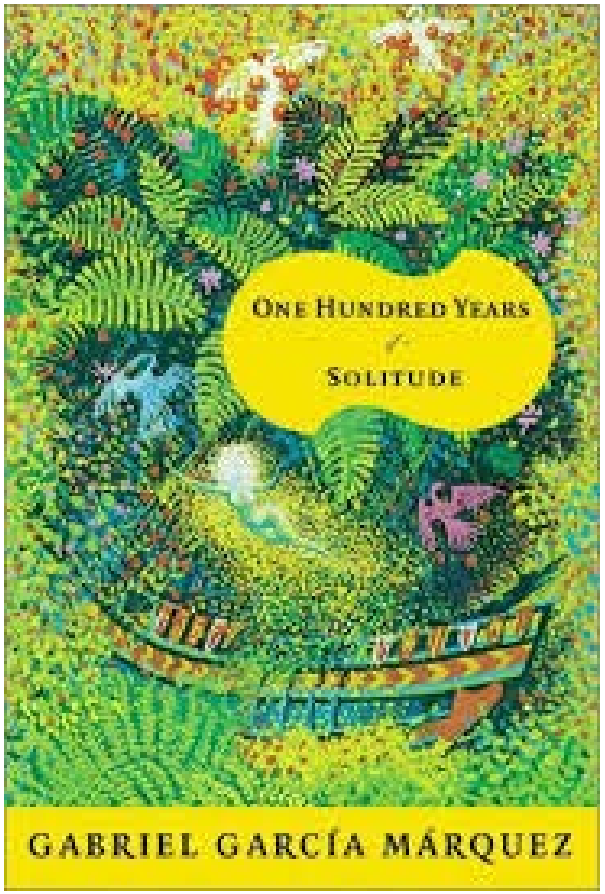
To-be process model

Process implementation

Executable process model

Process monitoring and controlling

Conformance and performance insights



Many years later, as he faced the firing squad, Colonel Aureliano Buendía was to remember that distant afternoon when his father took him to discover ice. At that time Macondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones, which were white and enormous, like prehistoric eggs. The world was so recent that many things lacked names, and in order to indicate them it was necessary to point to them with the finger.

Process identification

What?

1. Identify an organization's business processes
2. Prioritize their management based on certain criteria

Why?

1. Understand the organization
2. Maximize value of BPM projects

Process identification steps

1. Designation step
   - Enumerate main processes
   - Determine process scope

→ Process Architecture

2. Prioritization step (aka Process selection)

   Prioritize processes based on:
   - Importance
   - Health
   - Feasibility

→ Prioritized Process Portfolio

After Davenport (1993)

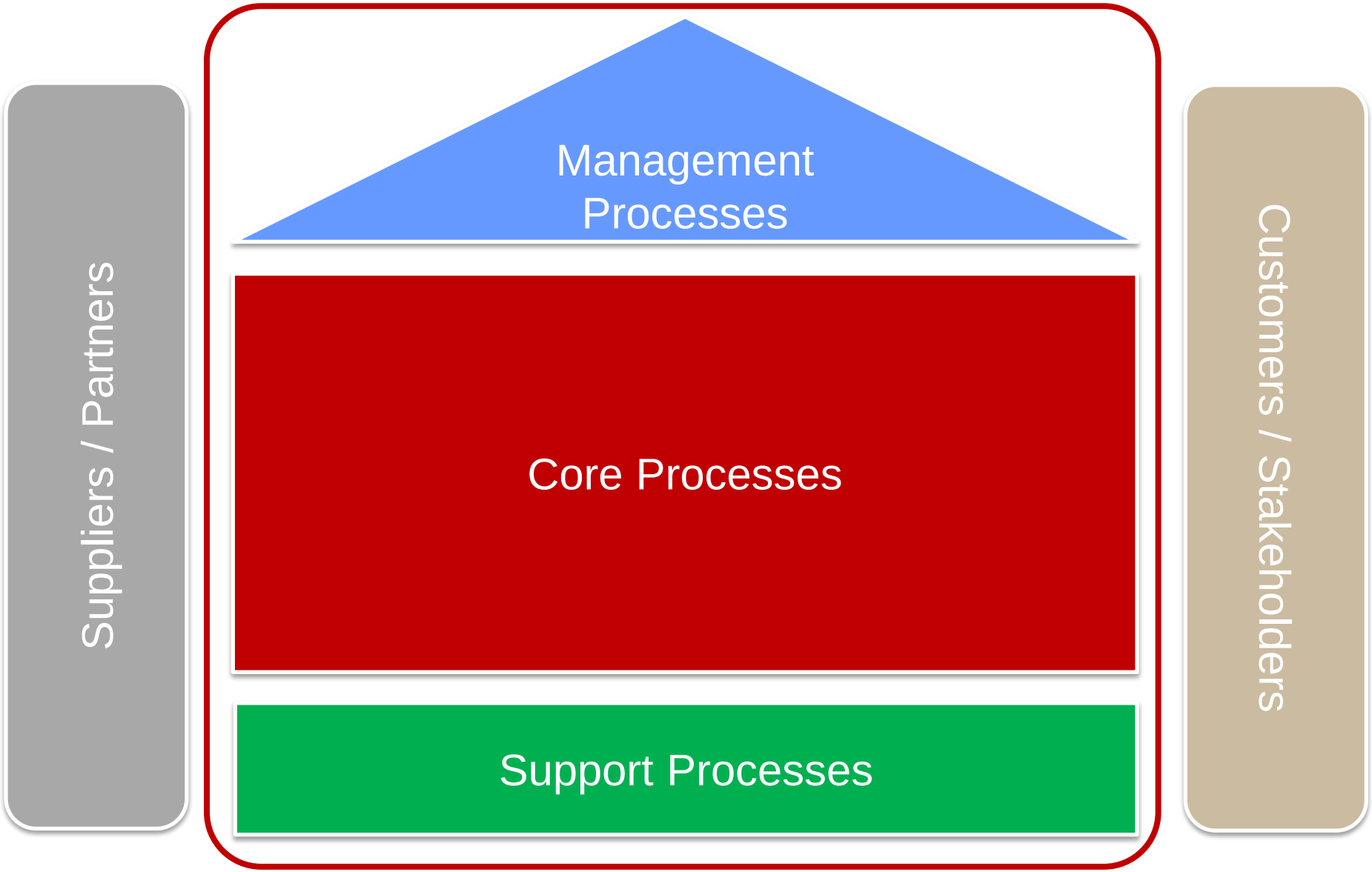
Process Enumeration

“Most businesses have just three core processes:

1. Sell stuff
2. Deliver stuff
3. Making sure you have stuff to sell and deliver”

Geary Rummler

Porter: Types of processes



After Michael Porter (1985)

Example: core, support and management processes

Wholesaler

Core processes

- Sales (lead-to-quote, quote-to-order, order-to-cash)
- Purchase-to-Pay (direct procurement, e.g. supplies replenishment)
- …

Support processes

- Purchase-to-pay (indirect procurement, e.g. parts replenishment, operational resources replenishment…)
- HR (policies update, recruitment, induction, probation…)
- …

Management processes

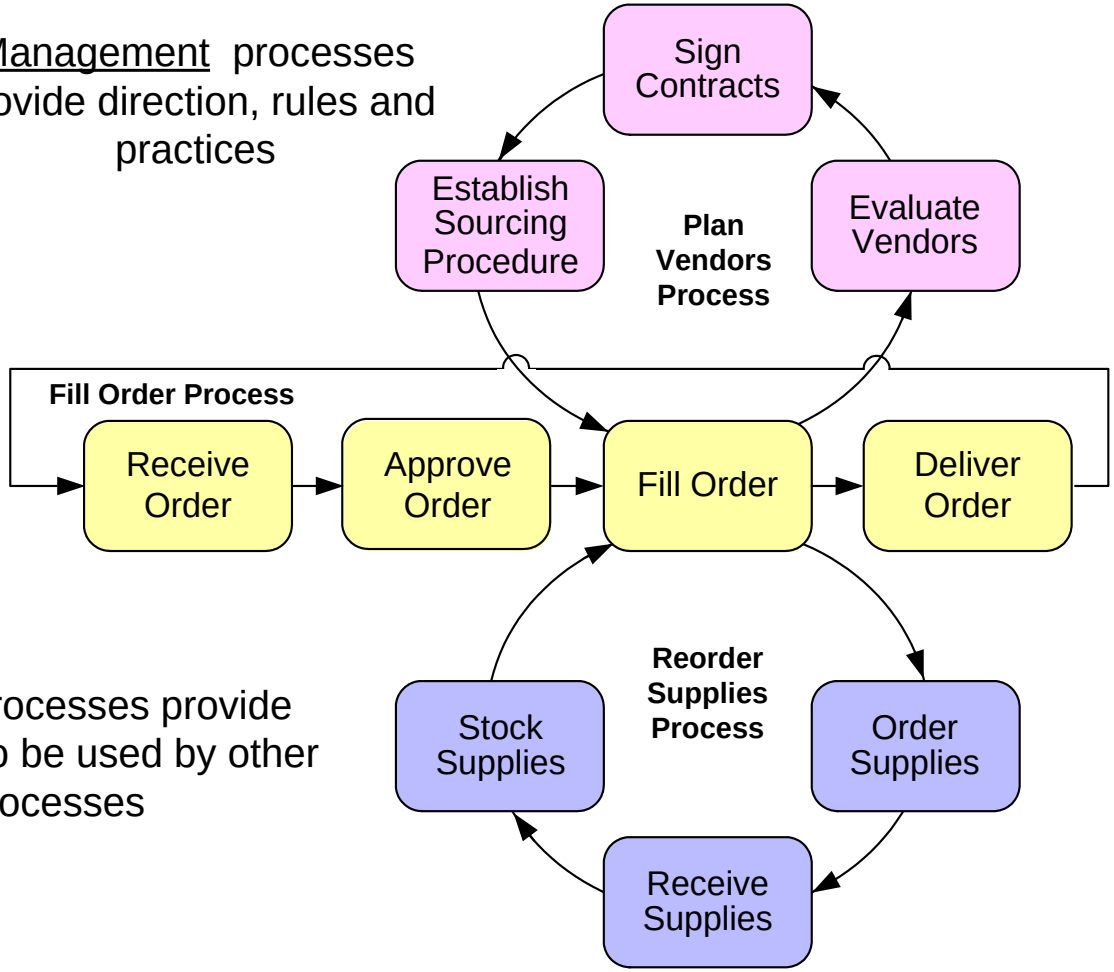
- Suppliers management (suppliers planning, suppliers acquisition…)
- Logistics management (logistics planning, logistics controlling…)
- …

Relations between core, support, mgt processes

Management processes provide direction, rules and practices

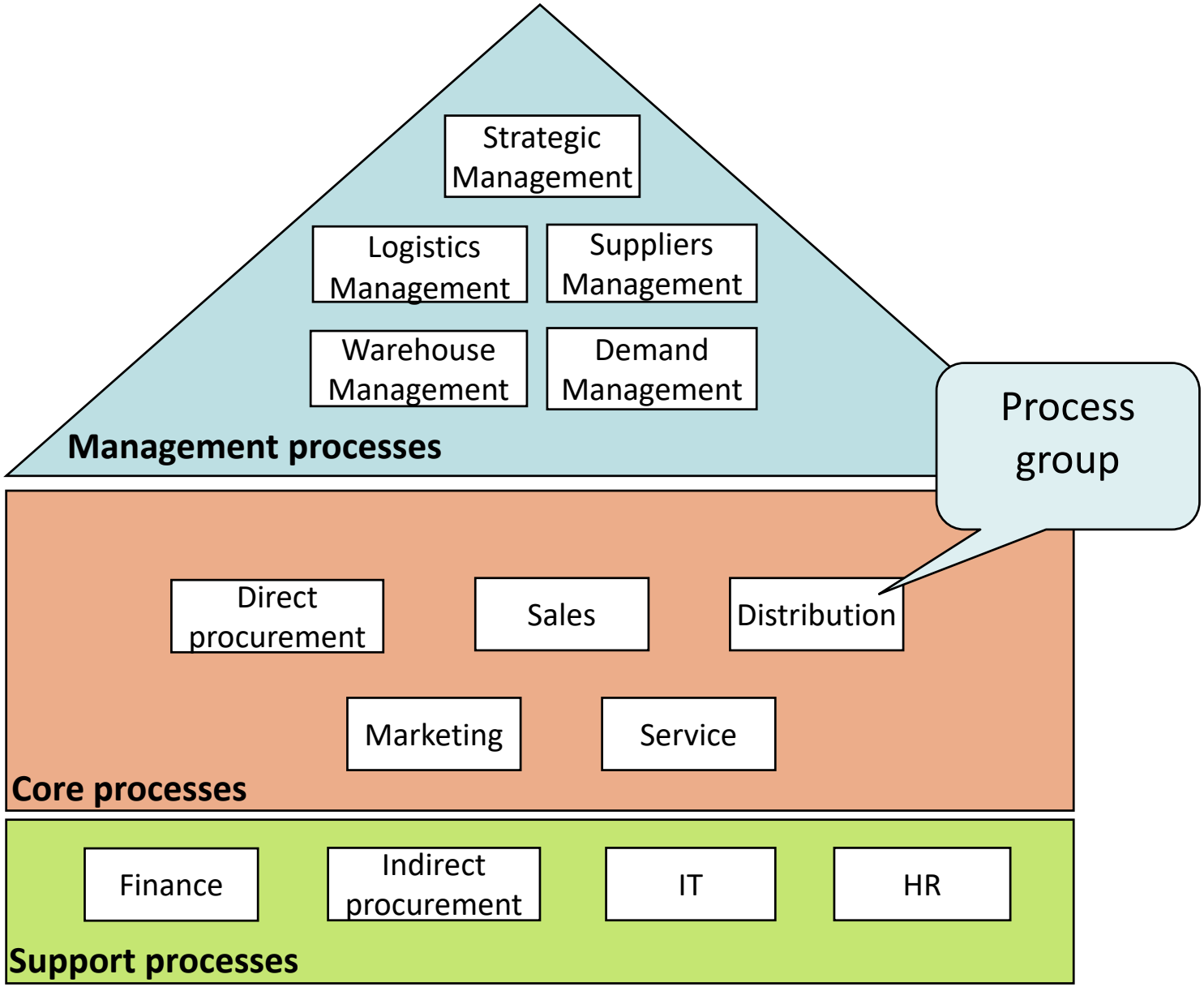
Core processes generate value as they are directly linked to external customers

Support processes provide resources to be used by other processes



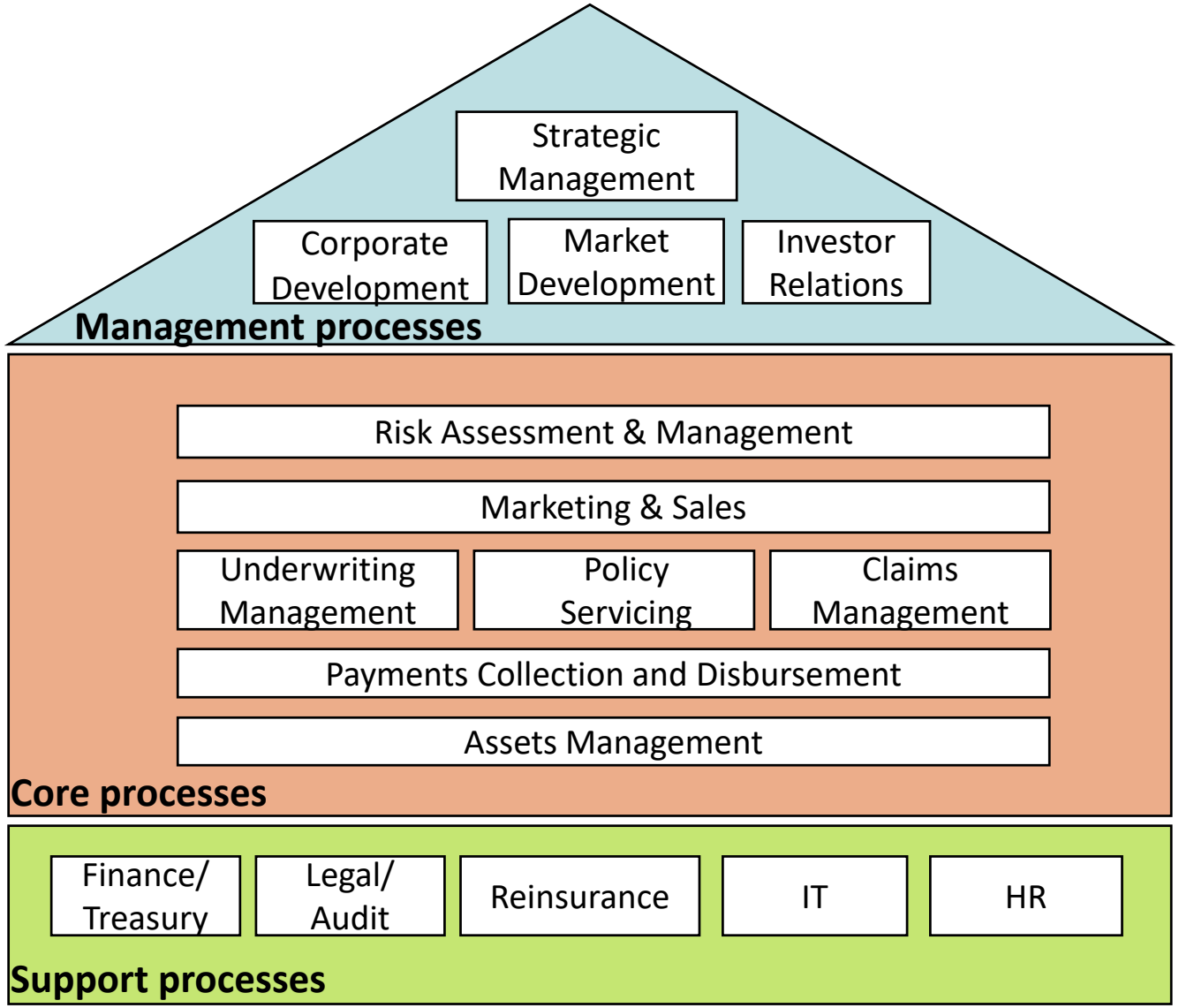
Example: process architecture

Wholesaler



Example: process architecture

Insurance company



Exercise: classify by process type

These groups of processes are typically performed at a university. Categorize each process group as core, support or management

Sport services

HR

Indirect procurement

Strategic Management

Teaching award courses

IP Management

Marketing

Course Management

Additional services mgt

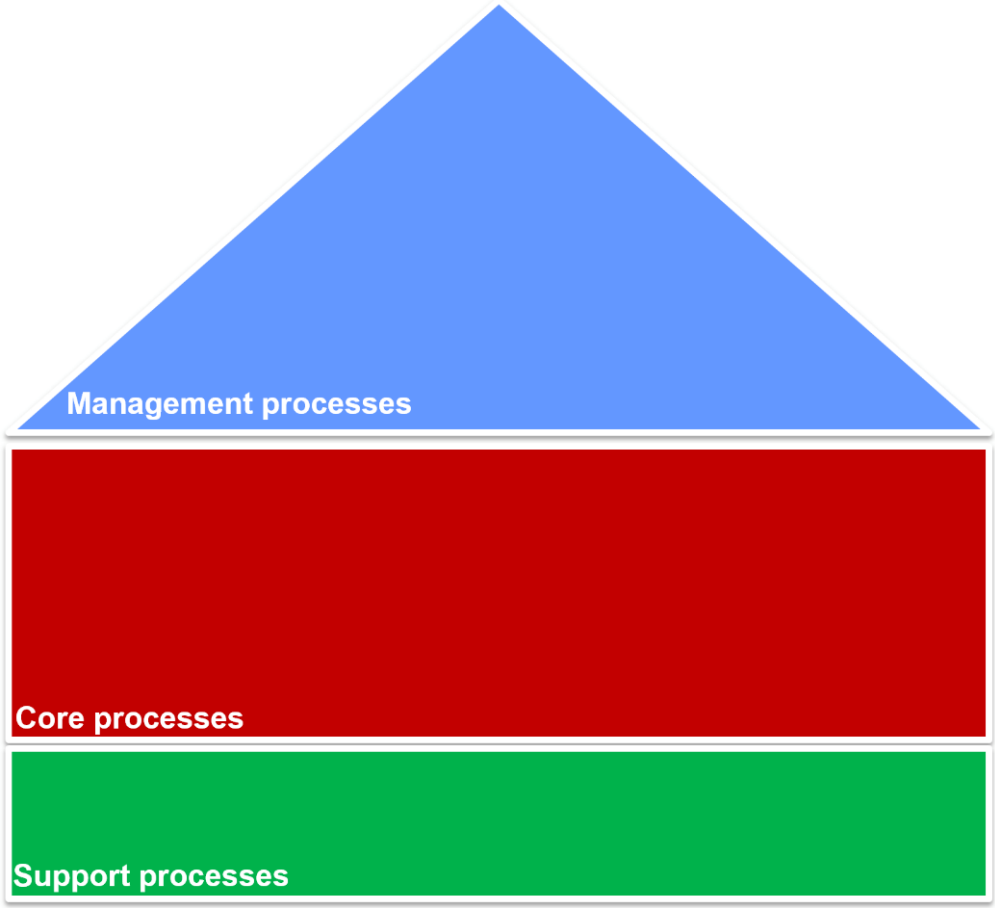
Language training

Admission

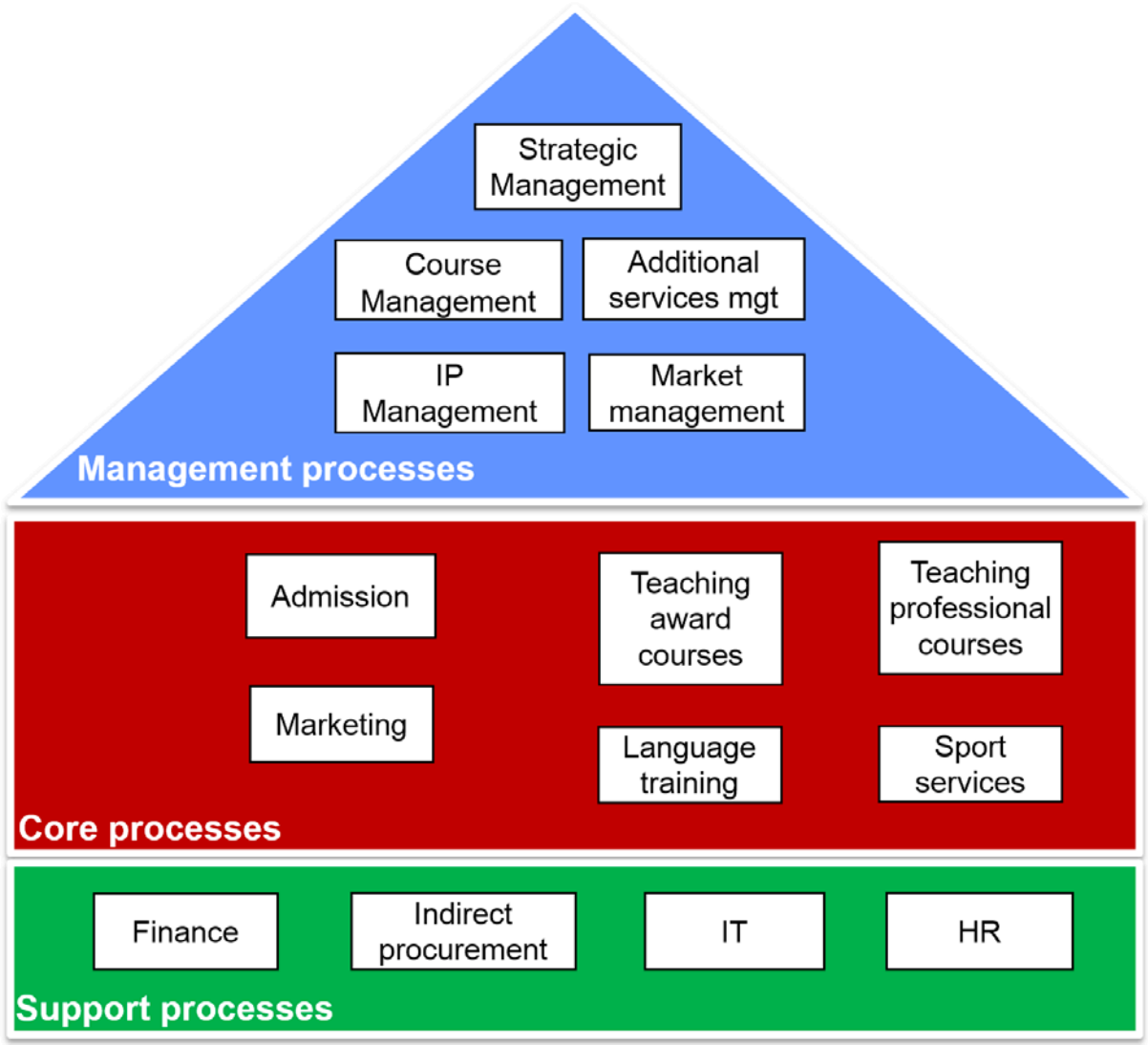
IT

Market management

Teaching professional courses



Solution: identify process types



Process scoping

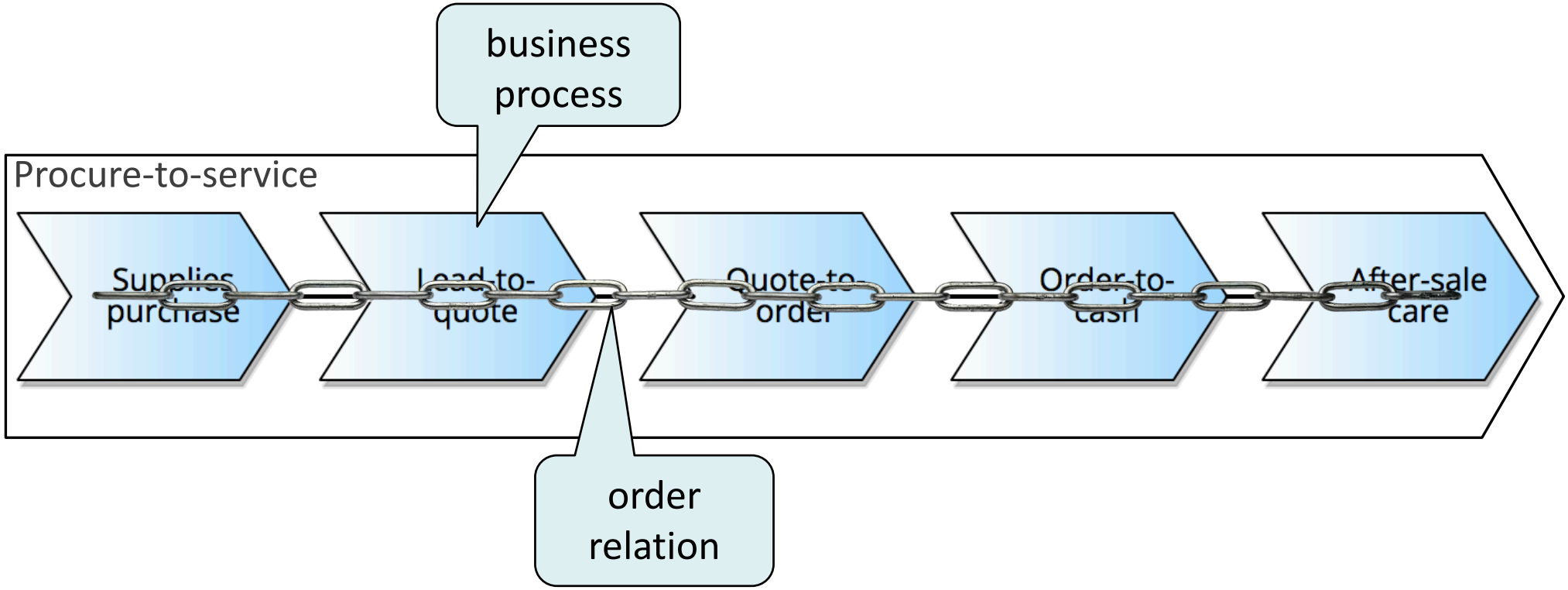
Processes are interdependent → insights into interrelations required

- Specialization: general – special product/service
- Horizontal: upstream – downstream processes and their value chains
- Vertical: main processes – sub-processes

Process architecture

Value chain modeling

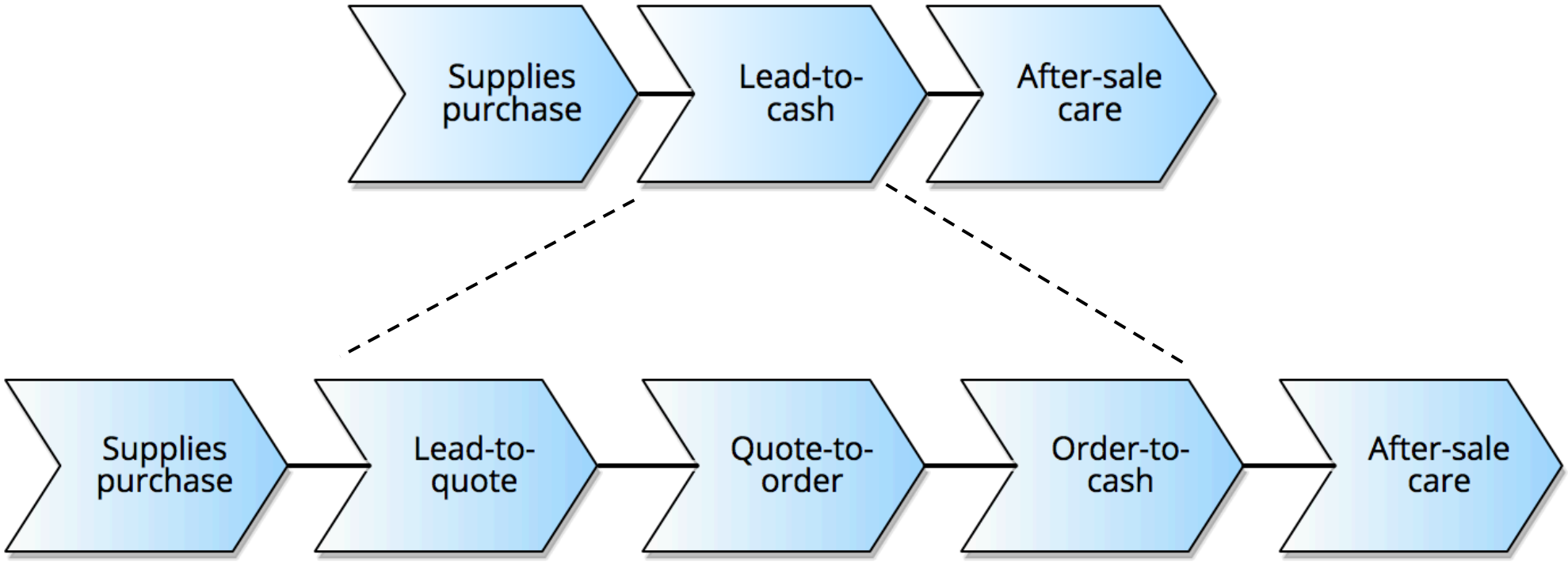
- Chain of *processes* an organization performs to deliver value to customers and stakeholders
- More generally, a mechanism to group high-level business processes according to an order relation (can be applied to core, support and management processes)



Example: value chain

Wholesaler

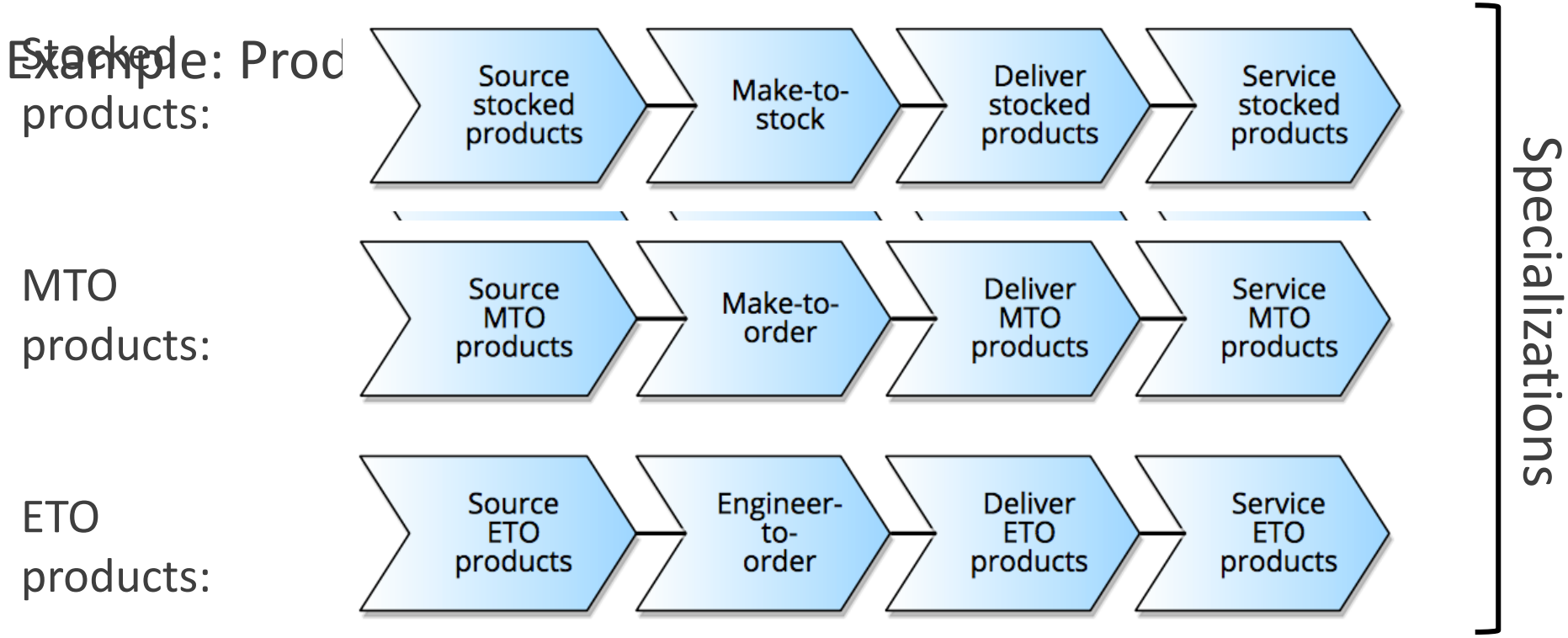
Core processes



Typical value chains for core processes

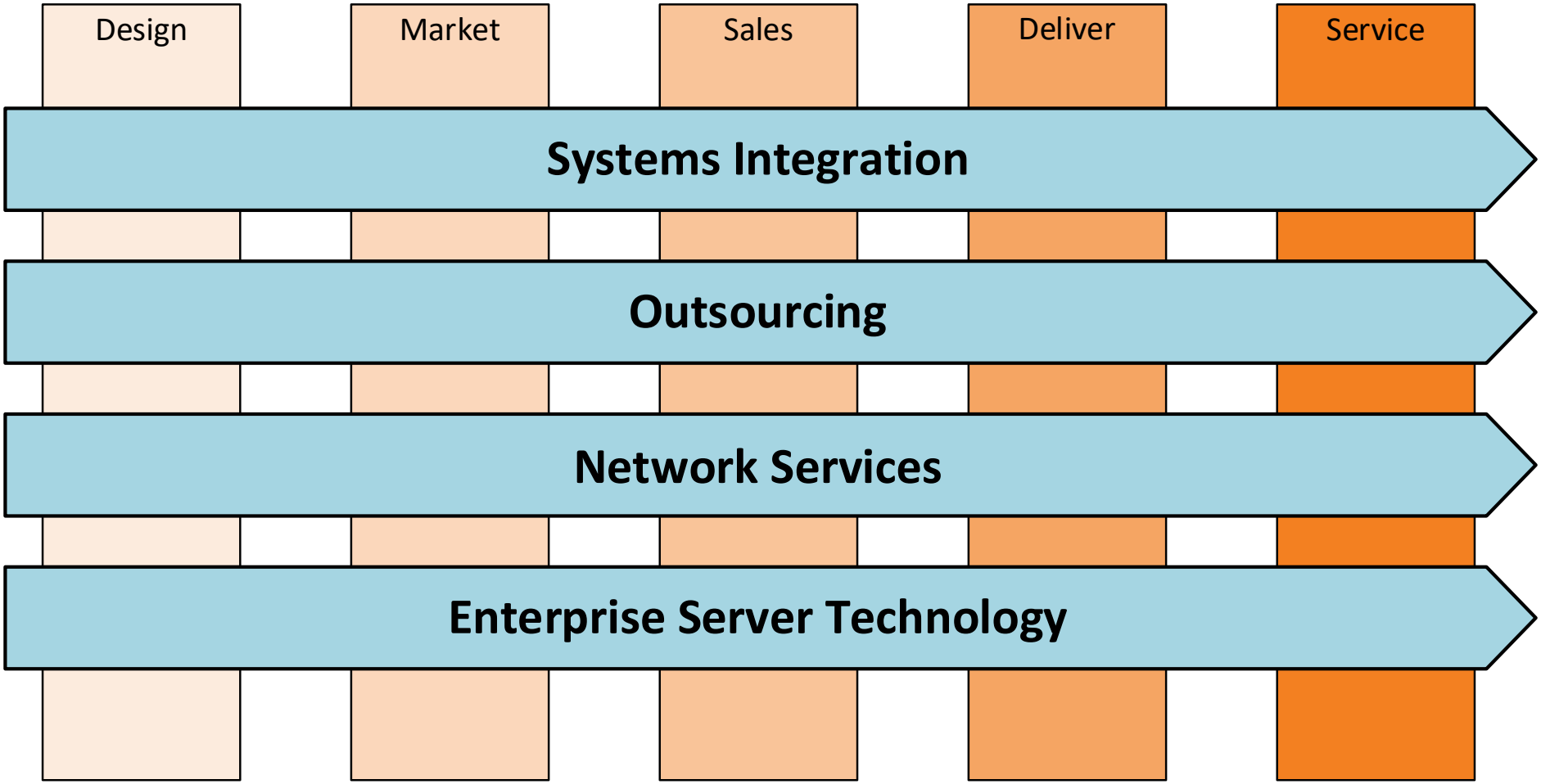
Think around three main steps:

- Imagine it (design new product/service)
- Build it (source, assemble, deliver product/service)
- Sell it (market, sell, service product/service)



Example: value chains for service provider

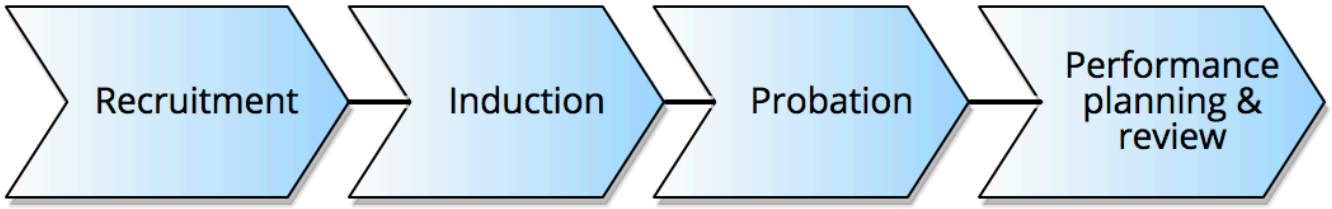
IT service provider



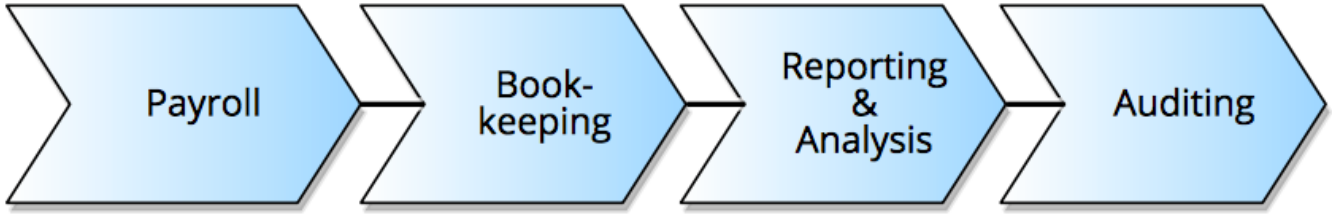
Example: value chain of non-core processes

Support processes

HR:



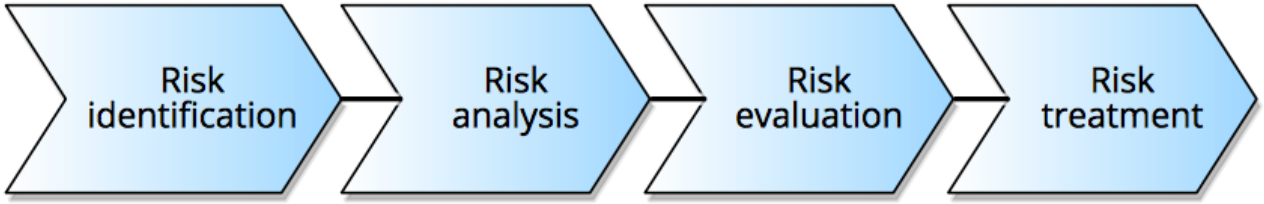
Accounting:



Management processes

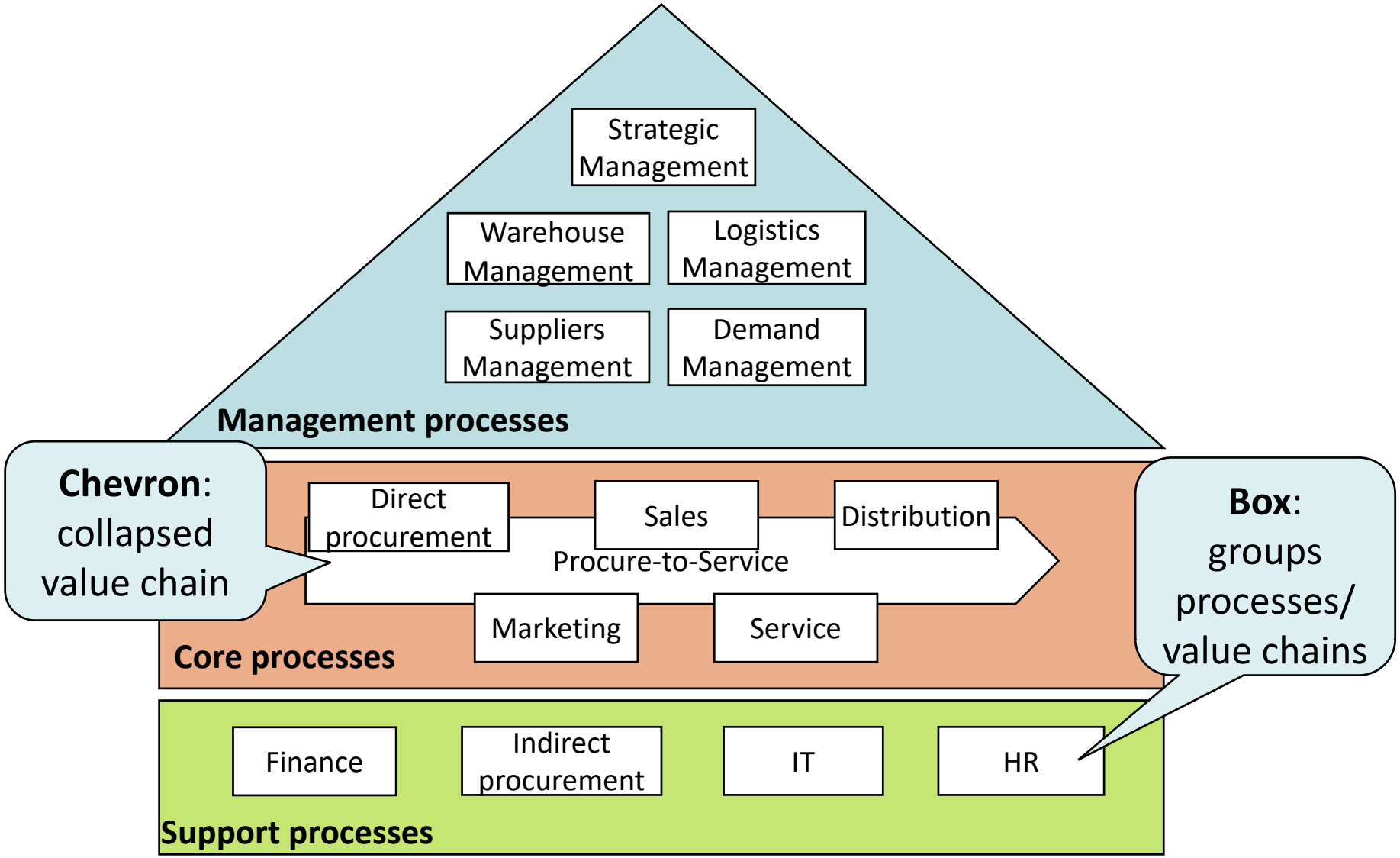
Suppliers management:

Risk management:



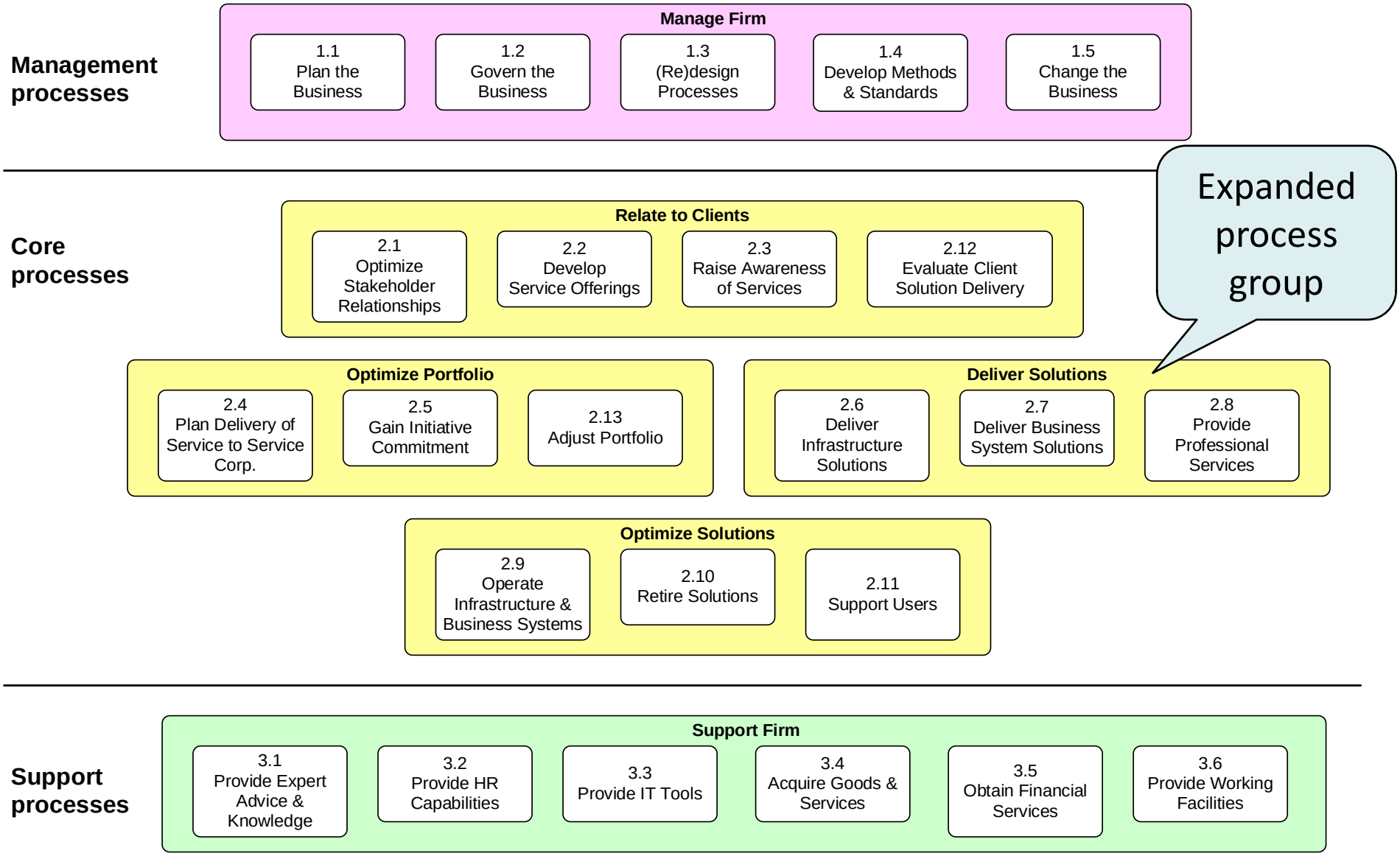
Example: process architecture & value chains

Wholesaler



Alternative: process architecture – groups

Consultancy Firm



Typical artifacts for vertical scoping

Value chains

Chains of processes. Stay at a high level. Rule of thumb: 3-7 processes

- *Procure-to-service, Risk management*

(Root/Main) Processes

Build up value chains and affect each other. They are abstract

- *Lead-to-quote, Quote-to-order, Order-to-cash*

Typical focus of Process enumeration

Subprocesses

Build up processes. They are detailed, involve multiple activities and can be layered on different levels of abstraction (i.e. sub-subprocesses)

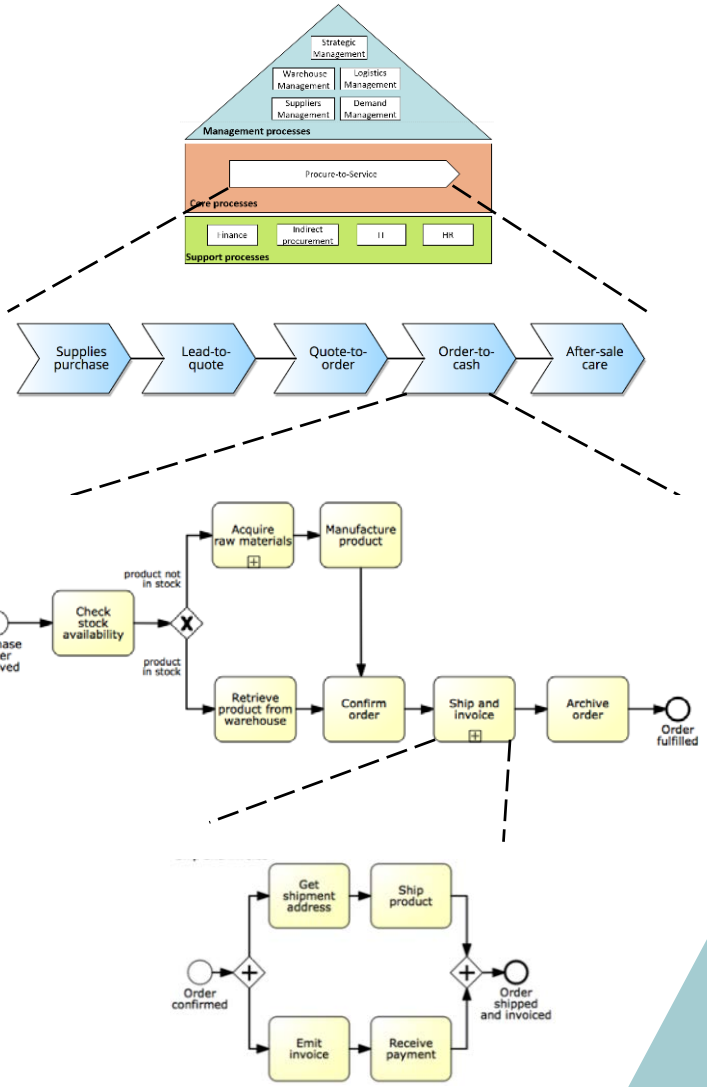
- *Order shipment, invoicing*

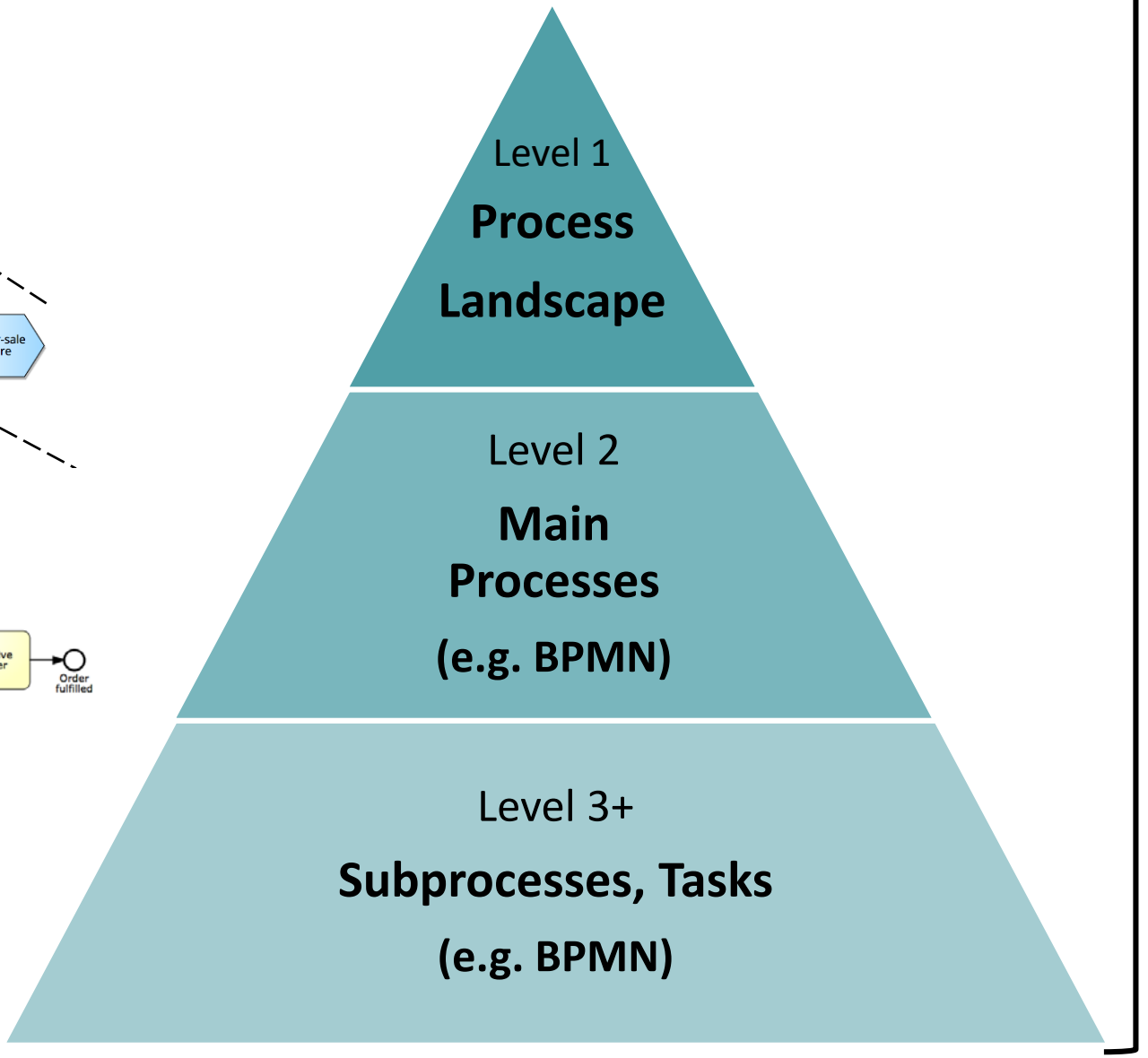
Process tasks

Build up processes and sub-processes. They are atomic and performed by human beings, IT systems or equipment

- *Approve invoice*

Process architecture: hierarchical view



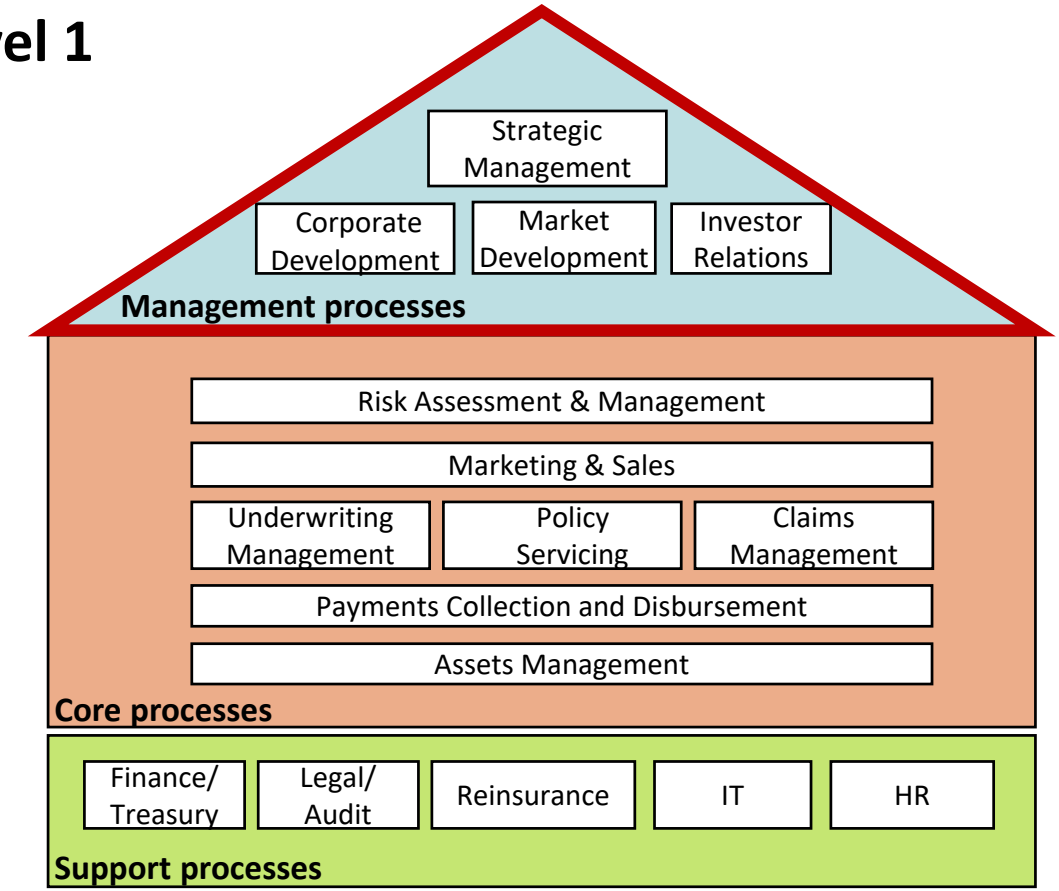


How many levels in the process architecture?

Example: hierarchical process architecture

Insurance company

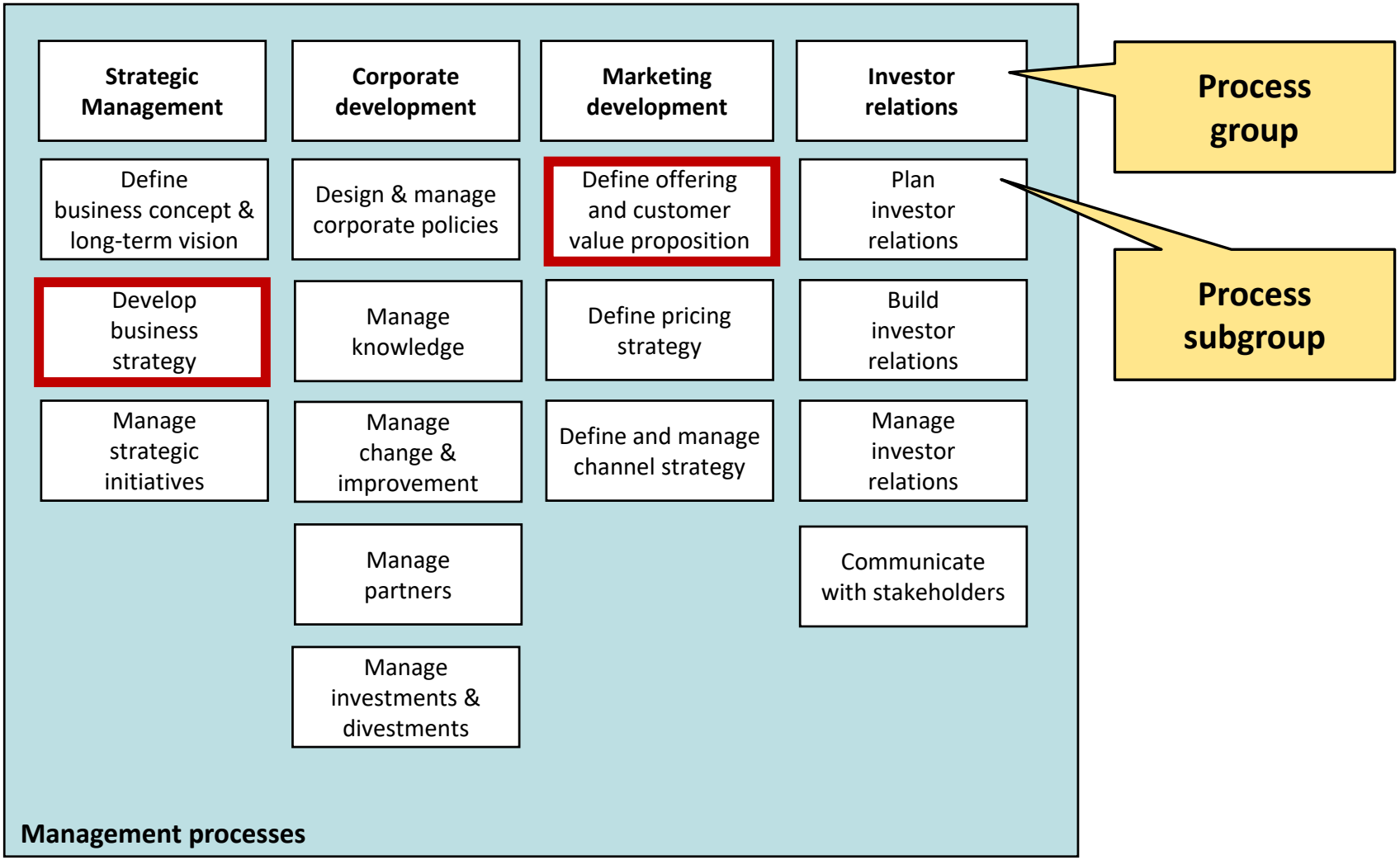
Level 1



Example: hierarchical process architecture

Insurance company

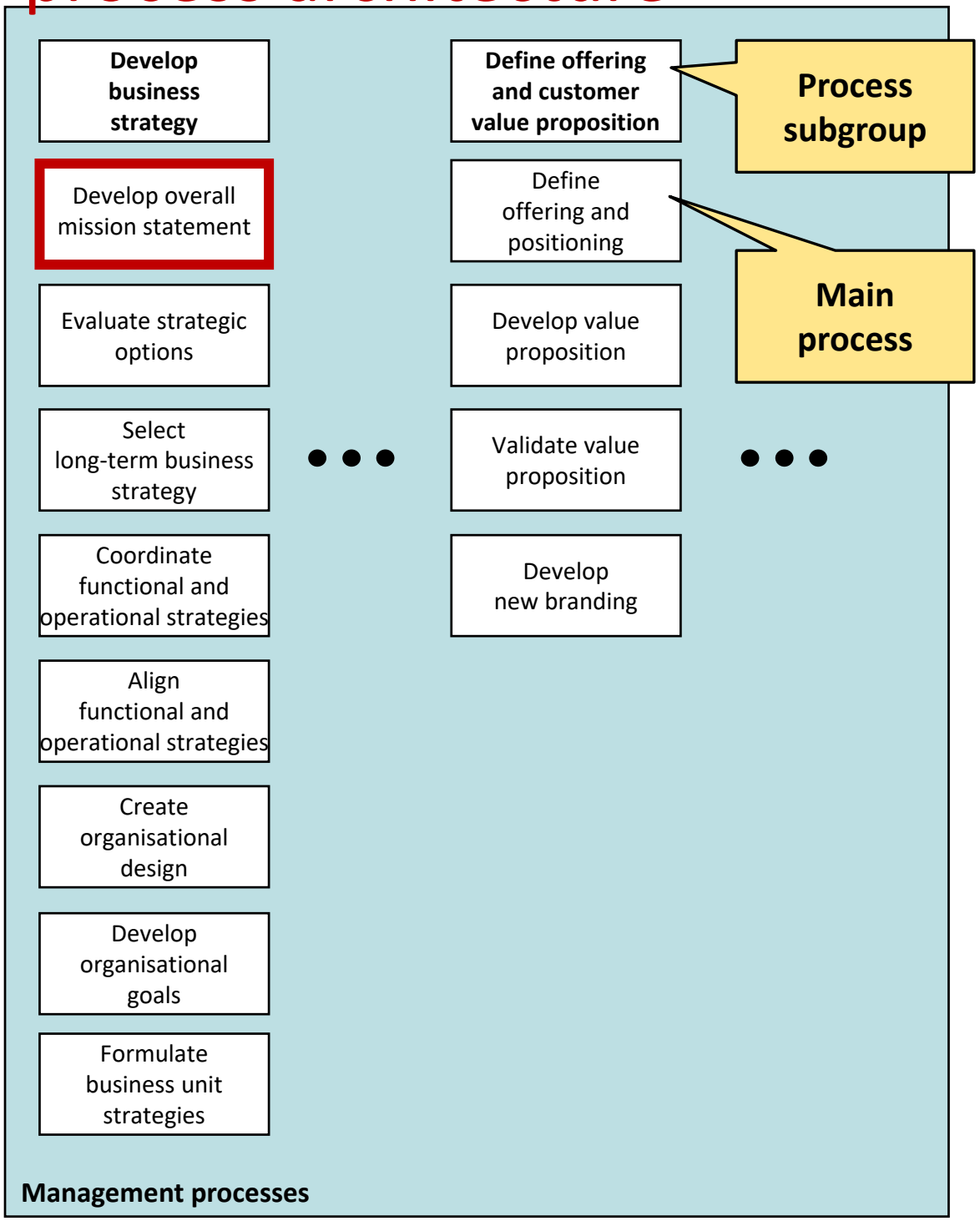
Level 2



Example: hierarchical process architecture

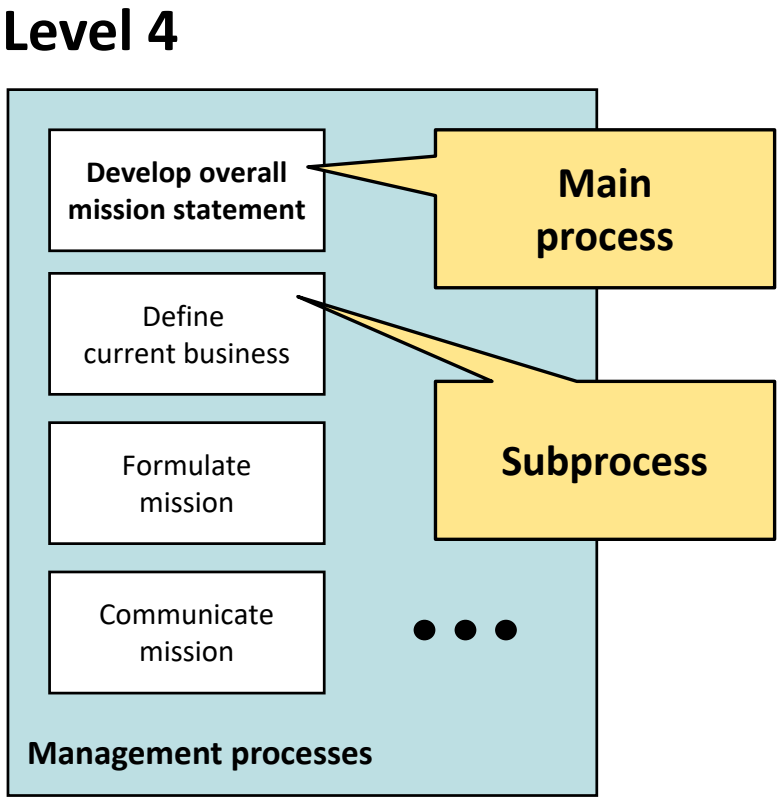
Insurance company

Level 3



Example: hierarchical process architecture

Insurance company



Designation via reference models

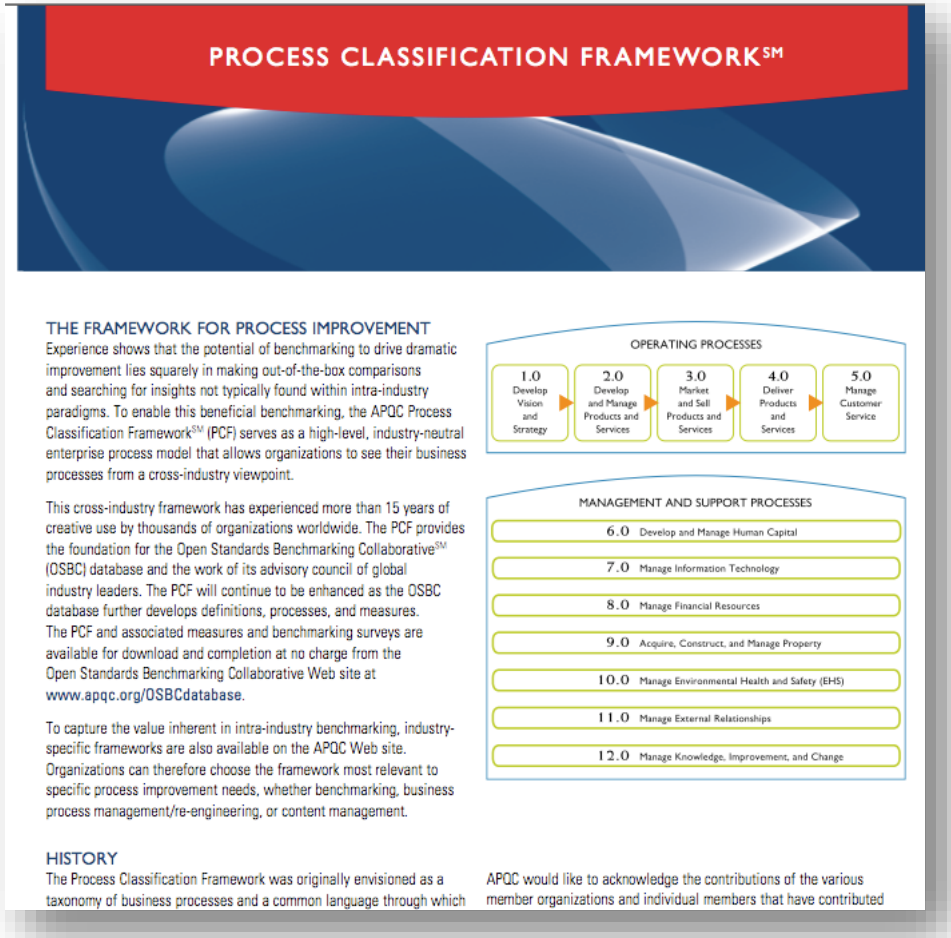
A reference model is used as a template to design the process architecture

Examples:

- Information Technology Infrastructure Library (ITIL)
- Supply Chain Operations Reference Model (SCOR)
- Process Classification Framework (PCF)
- Control Objectives for Information Technology (COBIT)
- Value Reference Model (VRM)
- Voluntary Interindustry Commerce Solutions (VICS)
- eTOM Business Process Framework
- Performance Framework

Example: APQC Process Classification Framework (PCF)

- Industry-neutral enterprise model
- Open standard for benchmarking
- Four levels
  - Categories
  - Process group
  - Process
  - Activity



PROCESS CLASSIFICATION FRAMEWORK℠

THE FRAMEWORK FOR PROCESS IMPROVEMENT

Experience shows that the potential of benchmarking to drive dramatic improvement lies squarely in making out-of-the-box comparisons and searching for insights not typically found within intra-industry paradigms. To enable this beneficial benchmarking, the APQC Process Classification Framework℠ (PCF) serves as a high-level, industry-neutral enterprise process model that allows organizations to see their business processes from a cross-industry viewpoint.

This cross-industry framework has experienced more than 15 years of creative use by thousands of organizations worldwide. The PCF provides the foundation for the Open Standards Benchmarking Collaborative℠ (OSBC) database and the work of its advisory council of global industry leaders. The PCF will continue to be enhanced as the OSBC database further develops definitions, processes, and measures. The PCF and associated measures and benchmarking surveys are available for download and completion at no charge from the Open Standards Benchmarking Collaborative Web site at www.apqc.org/OSBCdatabase.

To capture the value inherent in intra-industry benchmarking, industry-specific frameworks are also available on the APQC Web site. Organizations can therefore choose the framework most relevant to specific process improvement needs, whether benchmarking, business process management/re-engineering, or content management.

OPERATING PROCESSES

1.0 Develop Vision and Strategy
2.0 Develop and Manage Products and Services
3.0 Market and Sell Products and Services
4.0 Deliver Products and Services
5.0 Manage Customer Service

MANAGEMENT AND SUPPORT PROCESSES

6.0 Develop and Manage Human Capital
7.0 Manage Information Technology
8.0 Manage Financial Resources
9.0 Acquire, Construct, and Manage Property
10.0 Manage Environmental Health and Safety (EHS)
11.0 Manage External Relationships
12.0 Manage Knowledge, Improvement, and Change

HISTORY

The Process Classification Framework was originally envisioned as a taxonomy of business processes and a common language through which

APQC would like to acknowledge the contributions of the various member organizations and individual members that have contributed

APQC PCF Overview

Category

APQC Classification Framework

4.1.8.4 Identify performance trends (10273)
4.1.8.5 Analyze performance benchmark gaps (10274)
4.1.8.6 Prepare appropriate reports (10275)
4.1.8.7 Develop performance improvement plan (10276)
4.1.9 Develop quality standards and procedures (10368)
4.1.9.1 Establish quality targets (10371)
4.1.9.2 Develop standard testing procedures (10372)
4.1.9.3 Communicate quality specifications (10373)

4.2 Procure materials and services (10216) — Group

4.2.1 Develop sourcing strategies (10277)
4.2.1.1 Develop procurement plan (10281)
4.2.1.2 Clarify purchasing requirements (10282)
4.2.1.3 Develop inventory strategy (10283)

Activity

4.2.1.4 Match needs to supply capabilities (10284)
4.2.1.5 Analyze company's spend profile (10285)
4.2.1.6 Seek opportunities to improve efficiency and value (10286)
4.2.1.7 Collaborate with suppliers to identify sourcing opportunities (10287)

4.2.2 Select suppliers and develop/maintain contracts

Process

4.3.1.4 Release production orders and create lots (10309)
4.3.2 Produce product (10304)
4.3.2.1 Manage raw material inventory (10310)
4.3.2.2 Execute detailed line schedule (10311)
4.3.2.3 Rerun defective items (10313)
4.3.2.4 Assess production performance (10314)
4.3.3 Schedule and perform maintenance (10305)
4.3.3.1 Determine process for preventive (planned) maintenance (Preventive Maintenance Orders) (10315)
4.3.3.2 Determine process for requested (unplanned) maintenance (Work Order Cycle) (10316)
4.3.3.3 Execute maintenance (10317)
4.3.3.4 Calibrate test equipment (10318)
4.3.3.5 Report maintenance issues (10319)
4.3.4 Perform quality testing (10369)
4.3.4.1 Perform testing using the standard testing procedure (10374)
4.3.4.2 Record test results (10375)
4.3.5 Maintain production records and manage lot traceability (10370)
4.3.5.1 Determine lot numbering system (10376)

Prioritization (aka Process Selection)

1. **Importance**

   Which processes have greatest impact on the organization‘s strategic objectives?

2. **Health (or Dysfunction)**

   Which processes are in deepest trouble?

3. **Feasibility**

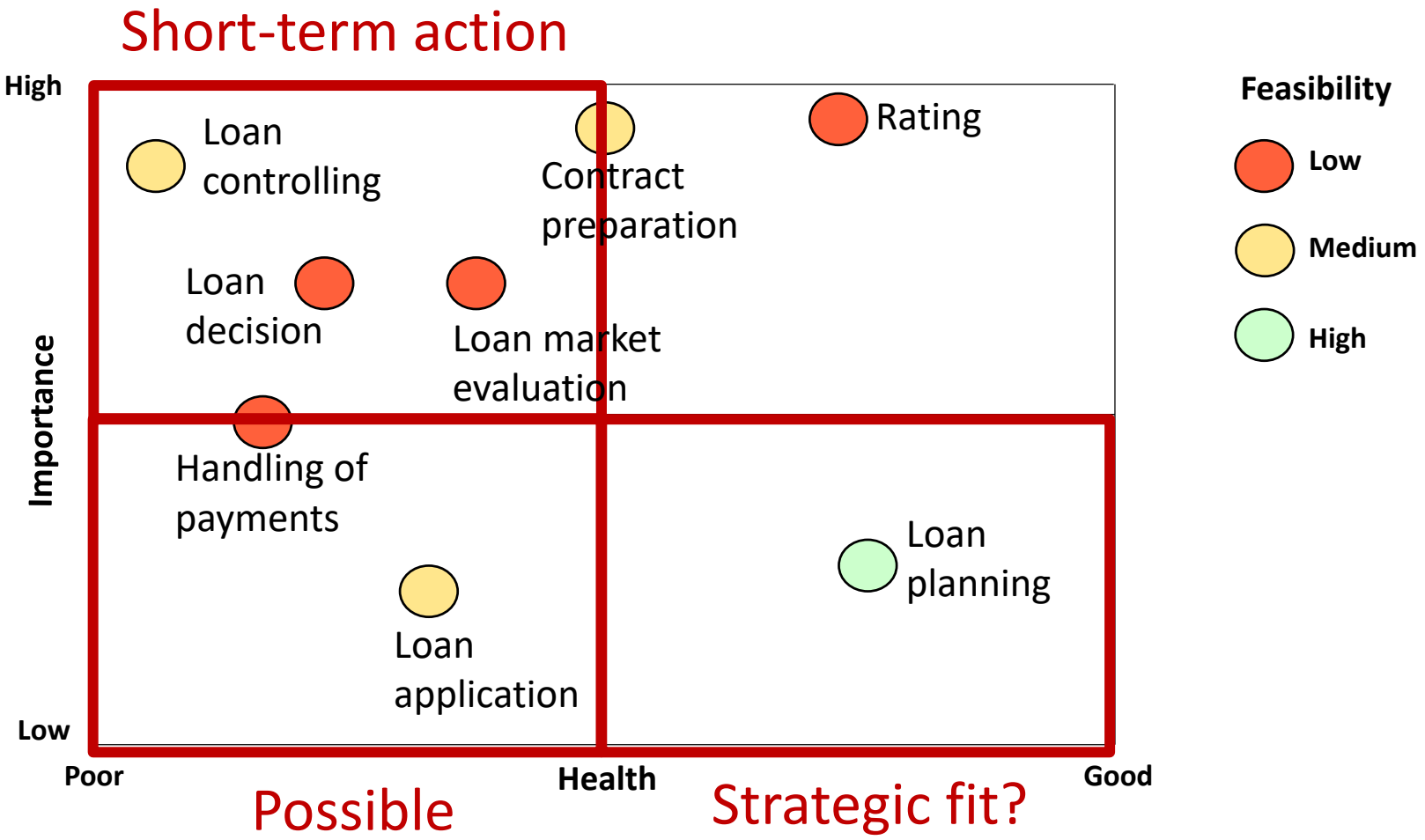
   Which processes are most susceptible to successful process management?

Prioritized process portfolio

Hammer, Champy (1993)

Example: prioritized process portfolio

Financial institution



Questions