

IS STRATEGIES IN FM

BASED ON FIVE PROCESS STUDIES

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IS STRATEGY

STRATEGY AND IS STRATEGY

Strategy: How objectives are achieved

Business strategy: How a business objective is achieved

- Business Objective: e.g. Keeping customers pleased
- Business Strategy: e.g. Speeding up a business process

IS Strategy: The use of Information Systems (IS) to support business strategy

- IS Strategy: e.g. Keeping data updated

CASES

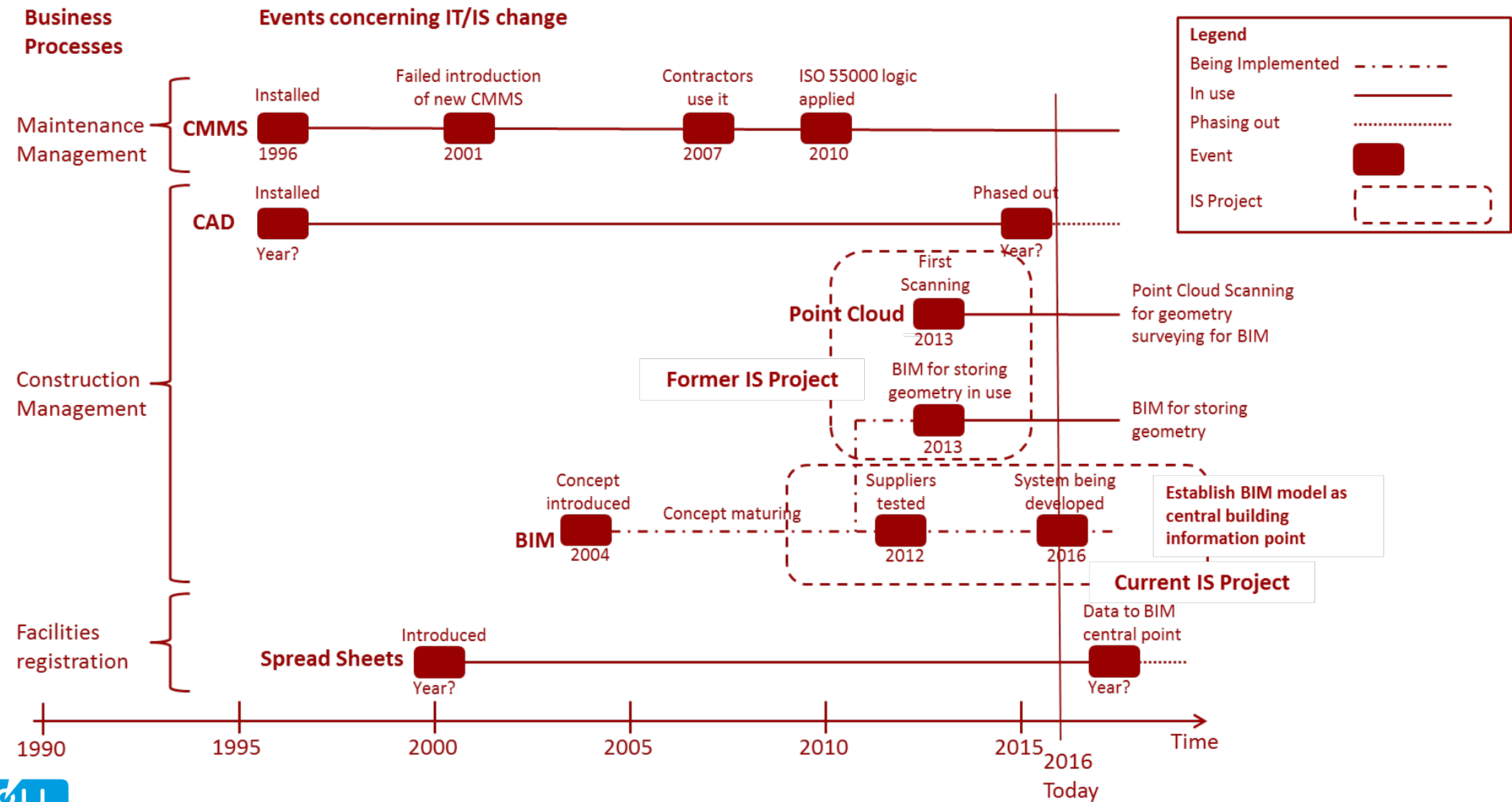
CASES



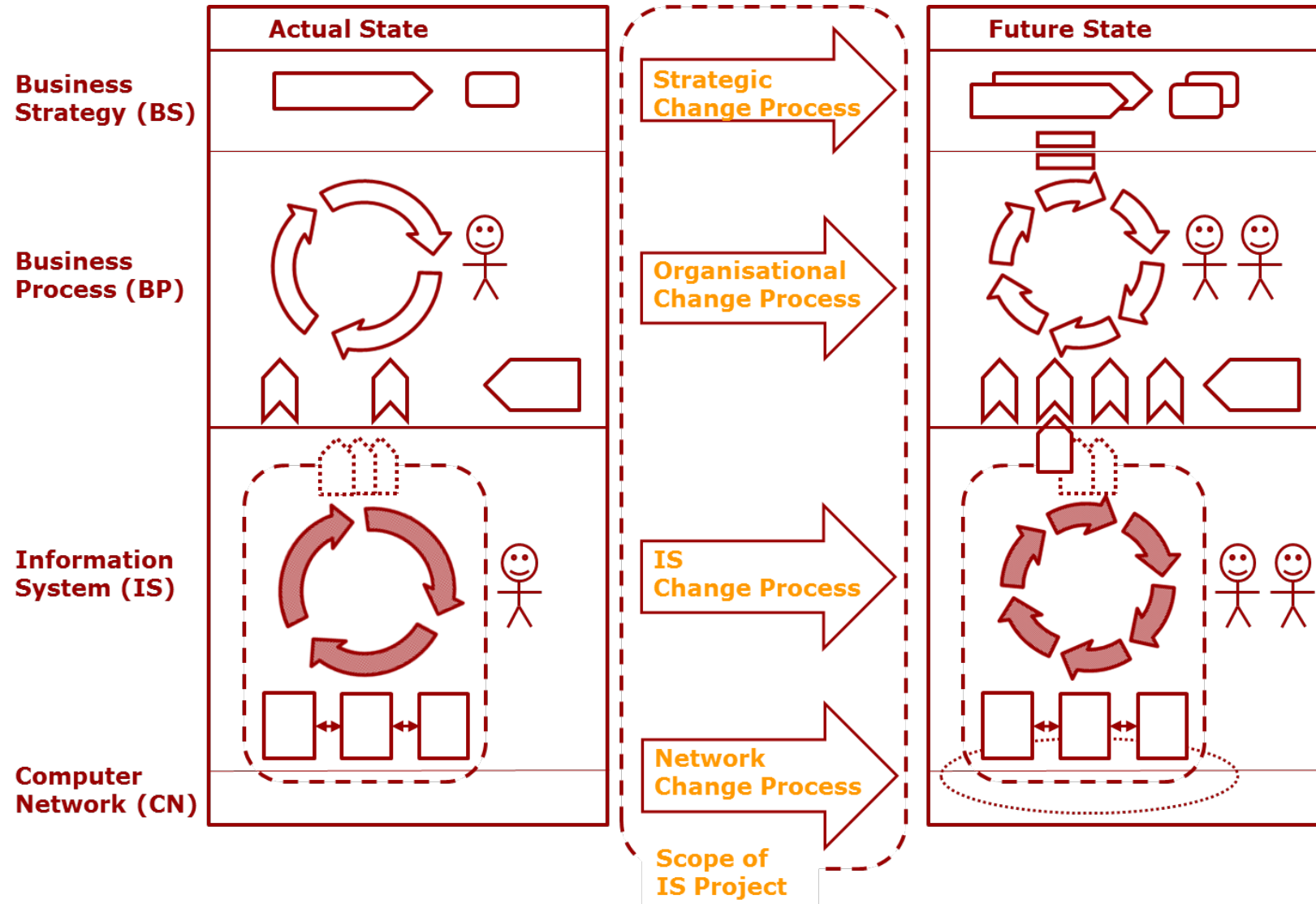
Case		A	B	C	D	E
Organ.	Ownership	Public	Private	Public	Private	Private
	Business Area	Public Services	Transport	Entertainment and Events	Real Estate Investment	Transport.
	Region	Denmark	Denmark	Australia	Sweden	Germany
	Employed	600	2200	750	350	6000
Facilities	Square Meters	2,200,000	700,000	55,000	2,500,000	2,300,000
FM Dept.	White Collar Employees	234	16	40	225	216
IS Project supports Mgmt. of	Information	●	●	●	●	●
	Workflow	●	-	-	-	●
	Construction.	-	-	●	-	-
	Maintenance.	●	-	-	-	●
	Way finding	-	-	●	-	-
	Building Auto.	-	-	-	●	-
Core IT in IS Project	Core IT in the IS:	Database, BIM, GIS	BIM, Database	BIM, Database, Laser scan, field location	Fibre Net, Sensors, Database	CAD, GIS, Workflow, Database
Case Appraisal	IS BP interaction	Medium	High	High	High	High
	BP and strategy alignment	Medium	High	High	High	Medium
	IS project feasibility	Low/Medium	Medium	Medium	High	High

METHODOLOGY

PROCESS RESEARCH

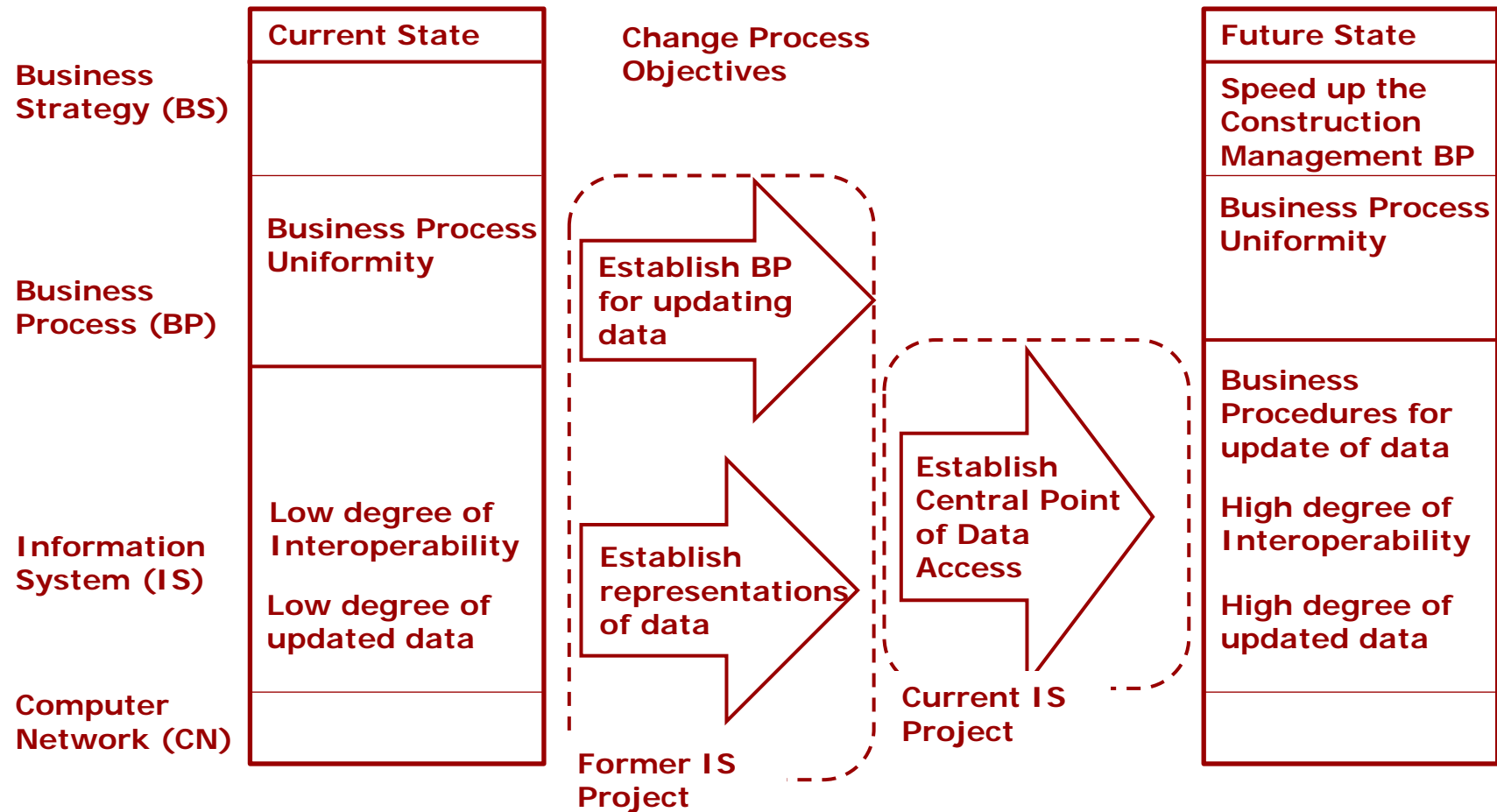


INFORMATION SYSTEM – BUSINESS PROCESS FRAMEWORK



ANALYSIS

ANALYSIS OF IS STRATEGIES IN CASE C



RESULTS

IS STRATEGIES IN THE CURRENT AND FUTURE STATE

Table 2: Observed Current State (●) and Future state (●) IS Strategies

Future IS strategies (use of IS to support business strategy) in each of the cases A-E.

Grey bullet (●) indicates current use of strategy. Black Bullet (●) indicates future use of strategy. Left column indicates to which IS-BP framework layer the strategy belongs.

Layer	Future state IS strategies	Cases				
		A	B	C	D	E
BP	Business Process Autonomy	●	●			
	Lac of standard procedures	●				
	Business Process Uniformity	●		●●	●●	
	Asset Business Process Uniformity		●			●●
BP/IS	Business Procedures for Data Update			●	●●	●●
IS	IS Autonomy	●				
	Low degree of Interoperability	●	●	●		
	Low degree of data update			●		
	High degree of Update of Data			●		
IS/CN	High degree of Interoperability	●	●	●	●●	●●

CHANGE PROCESS OBJECTIVES

Table 3: Observed Change Process Objectives.

Change objectives in current IS projects in each of the cases A-E. Bullet (●) indicates objective is included in the IS project. Left column indicates to which IS-BP framework layer the strategy belongs.

Layer	Change Process Objectives	Cases				
		A	B	C	D	E
BP	Implement BP Uniformity	●				
	Implement Asset BP Uniformity		●			
	Establish BP for update of data			●		
	Change in Business Procedures				●	
BP/IS	Constantly develop BP and IS to support BS					●
IS	Reduce the number of IS	●	●			
	Upgrade IS		●			●
	Establish Representations of data			●		
IS/CN	Establish Central Point of Data Access		●	●		
	Establish Central Facilities Monitoring and Control				●	

FUTURE STATE BUSINESS STRATEGIES “SUPPORTED” BY IS STRATEGIES

Table 4: Observed Future Business Strategies “supported” by IS strategies
Future business strategies “supported” by IS strategies in each of the cases A-E.
Bullet (●) indicates use of strategy.

Layer	Future state Business Strategies	Cases				
		A	B	C	D	E
BS	Business Information Uniformity (?)	●	●			
	Speed up BP Construction Management			●		
	Keep customers content				●	●
	Comply with regulations					●

CONCLUSIONS

IS STRATEGY IS INTENDED TO

IS strategy is intended to control and direct facilities managers

- to do things the same way (uniformity)
- to retrieve and store information from a single source of truth (interoperability)
- to keep information in this single source of truth updated (data reliability)

Thereby supporting the business strategy

MATURE INFORMATION SYSTEM STRATEGIES HAVE A

- high degree of uniformity
- High degree of interoperability
- High degree of data reliability

And can support more advanced and externally oriented business strategies

IMPLEMENTING MATURE IS STRATEGIES

Uniformity is achieved by

- requiring a uniform execution of each business process
- or requiring a uniform execution of each business process for each type of asset

Interoperability is implemented by

- reducing the number of IS
- establishing a central point of data access

Data reliability is achieved by

- requiring data updated according to standard procedures

THANK YOU

INTEROPERABILITY

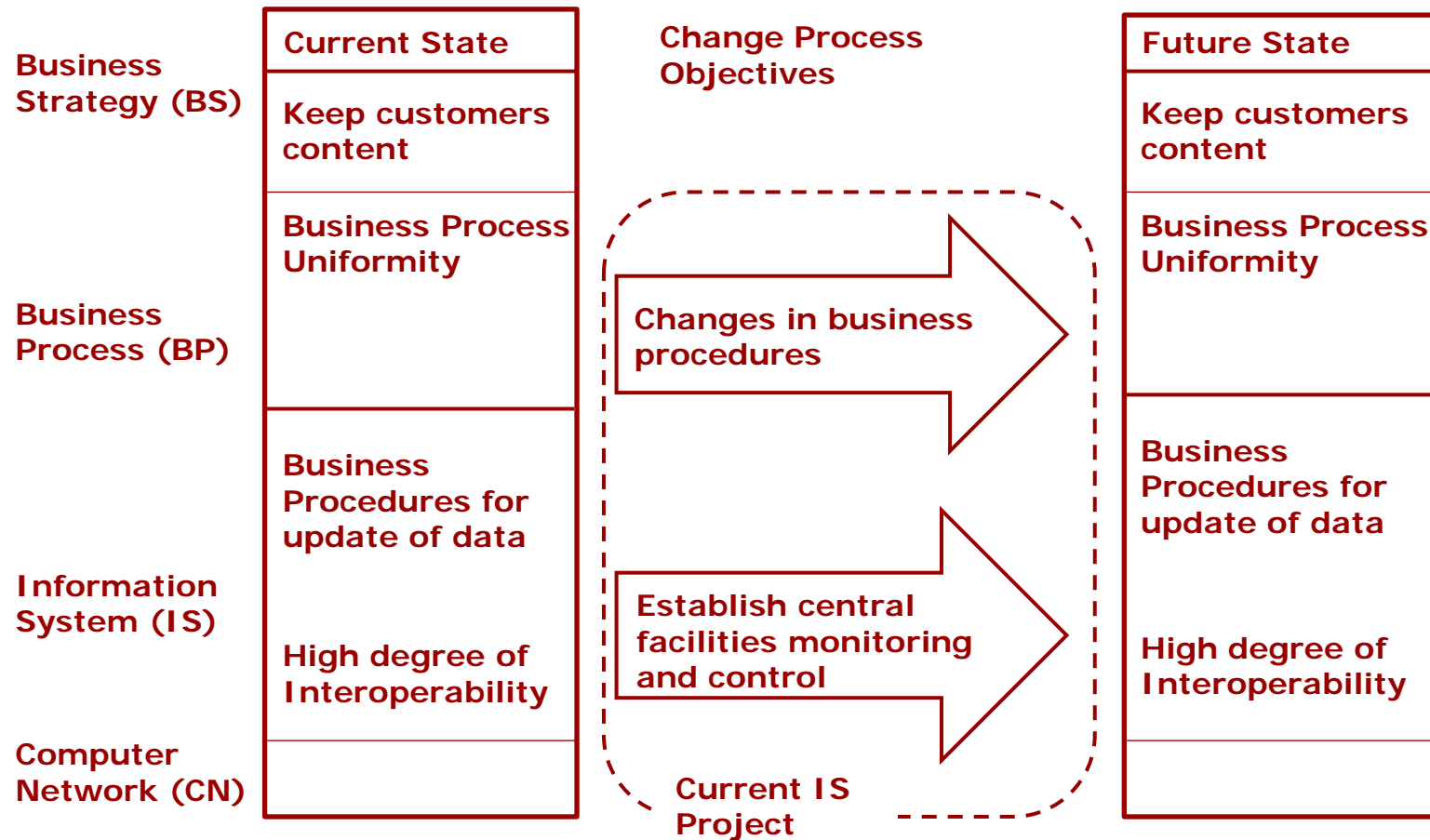
Interoperability is the ability to exchange data between applications, which smoothes workflows and sometimes facilitates their automation (Eastman et al. 2011)

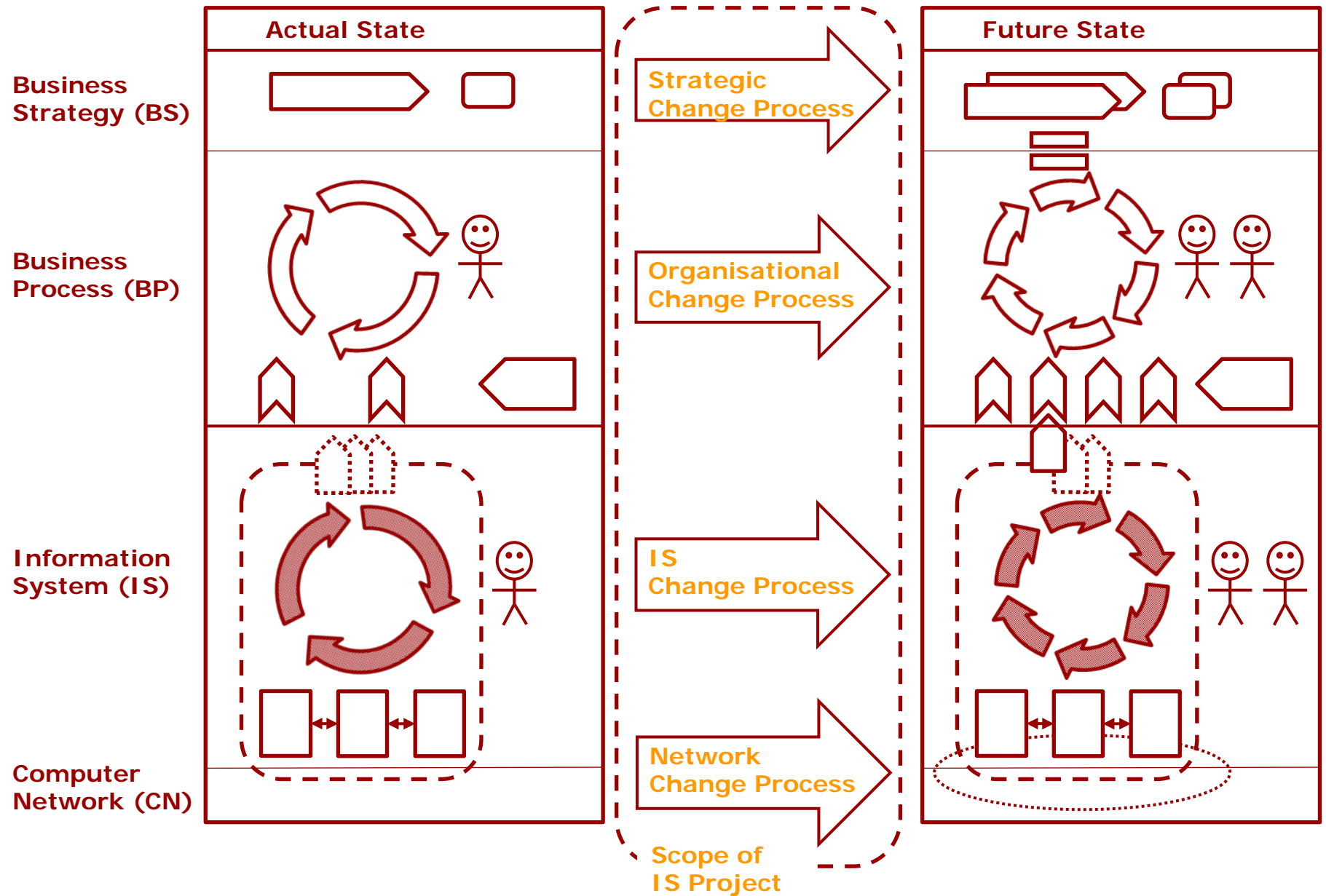
SOME STRATEGY TYPES

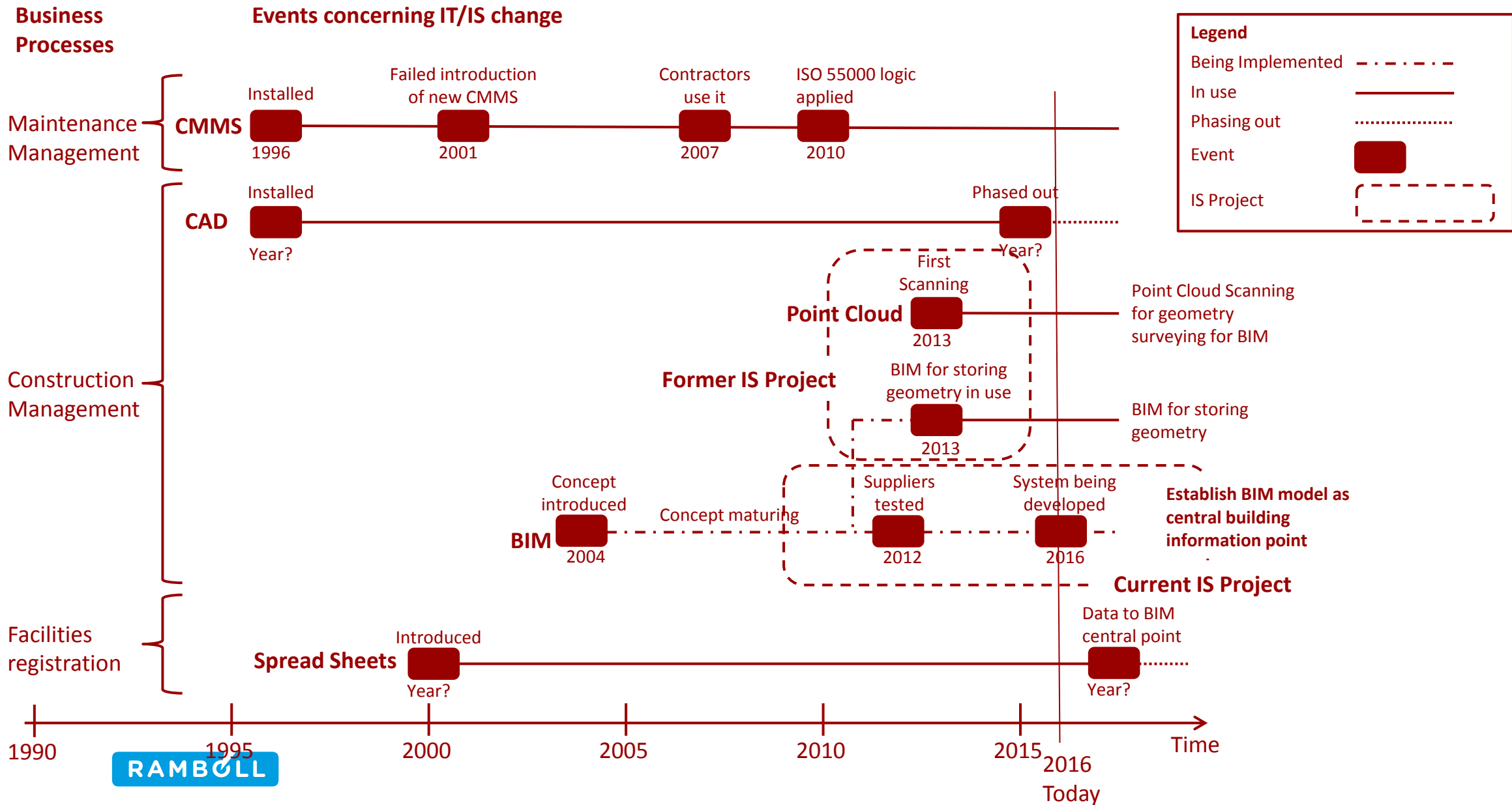
Table 1: Some of the strategy types found in the analysis of the five cases

Strategy type name	Strategy type explained
Business Process Autonomy	A FM business process can be executed in different ways. Each facilities manager decides autonomously how to do things.
IS Autonomy	Each FM business process can be supported by any IS. It is decided autonomously by each facilities manager.
Business Process Uniformity	A FM business process can only be executed in one way and only supported by a specific IS. There may be standard FM business procedures.
Asset Business Process Uniformity	A FM business procedure relates to a specific set of assets, can only be executed in one way, and only be supported by a specific IS. There may be standard FM business procedures.

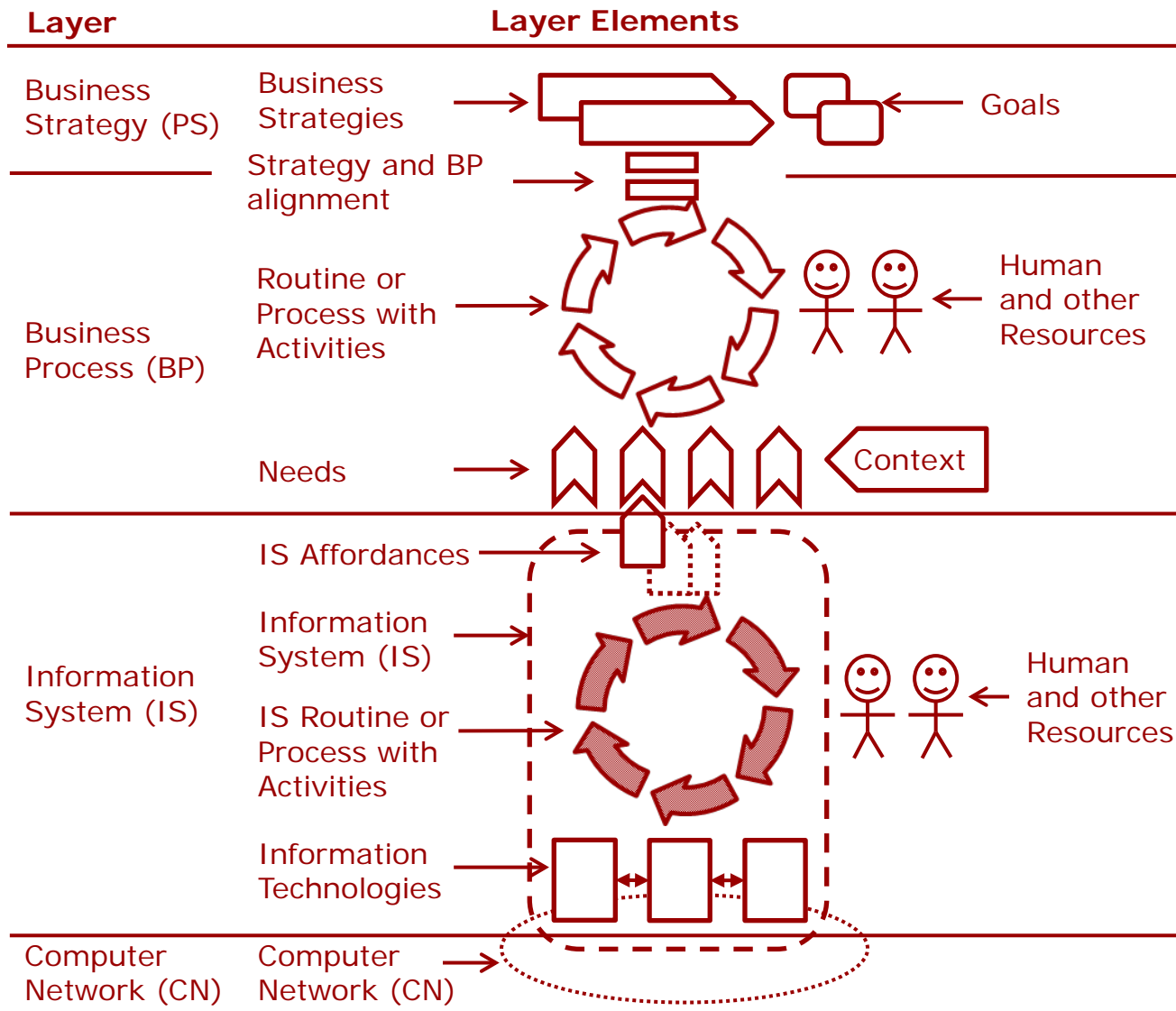
ANALYSIS OF IS STRATEGIES IN CASE D



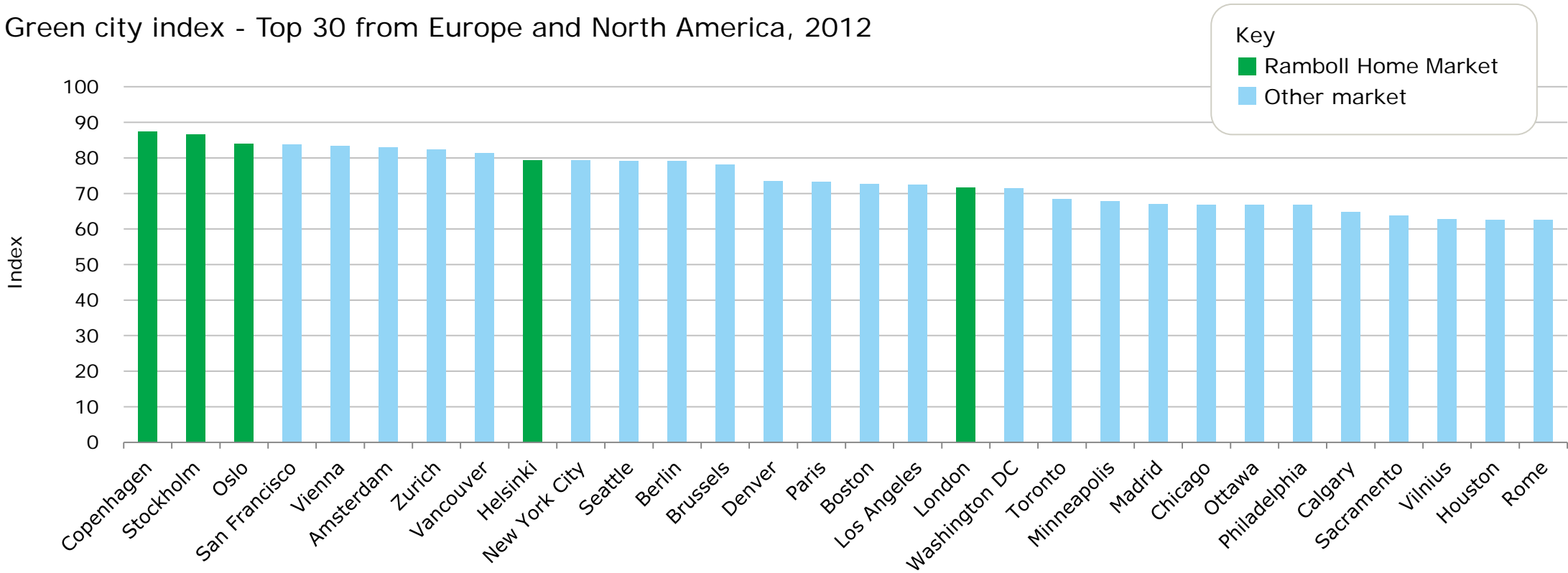




The Information System and Business Process Framework



Green city index - Top 30 from Europe and North America, 2012



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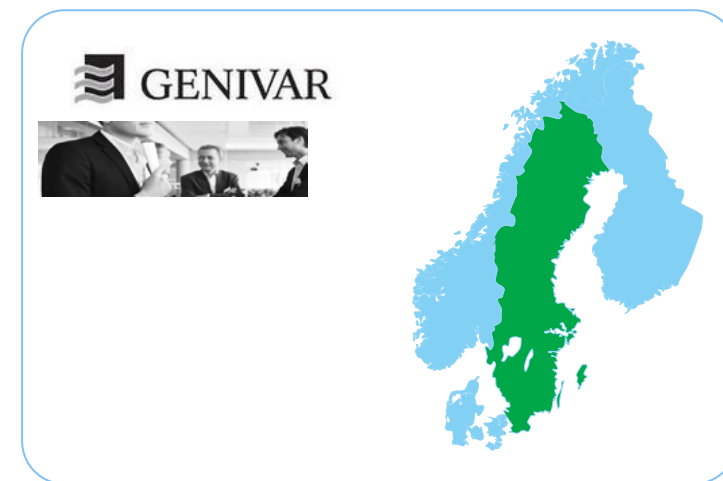
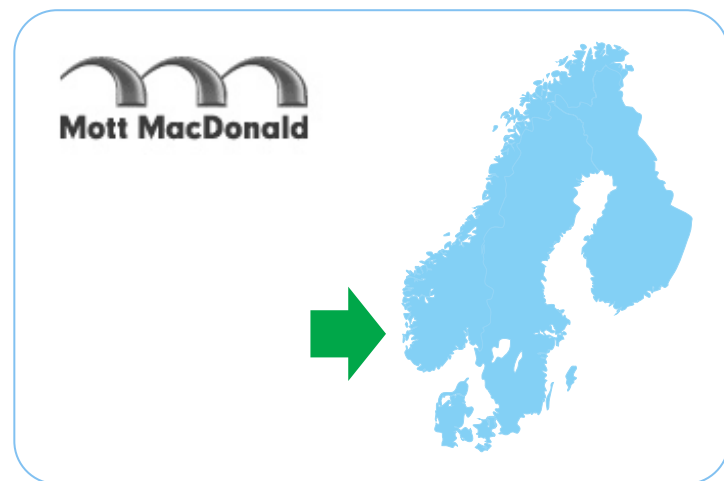
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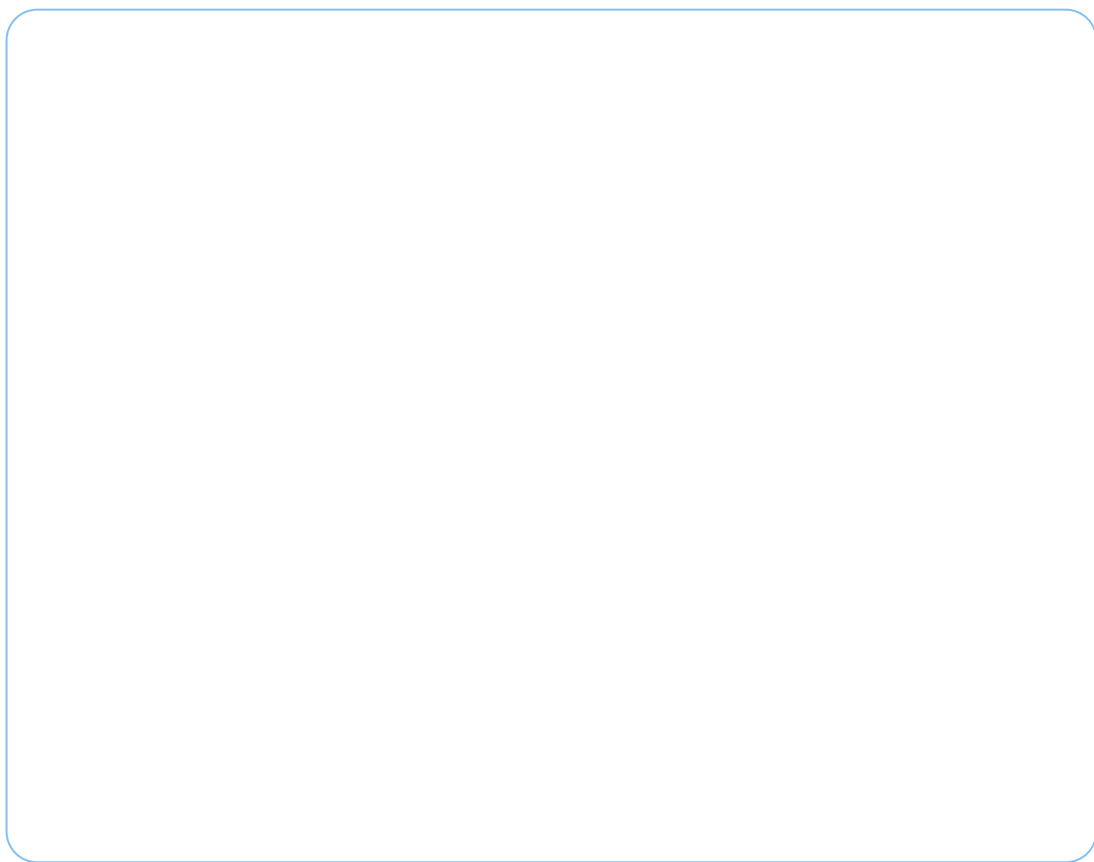


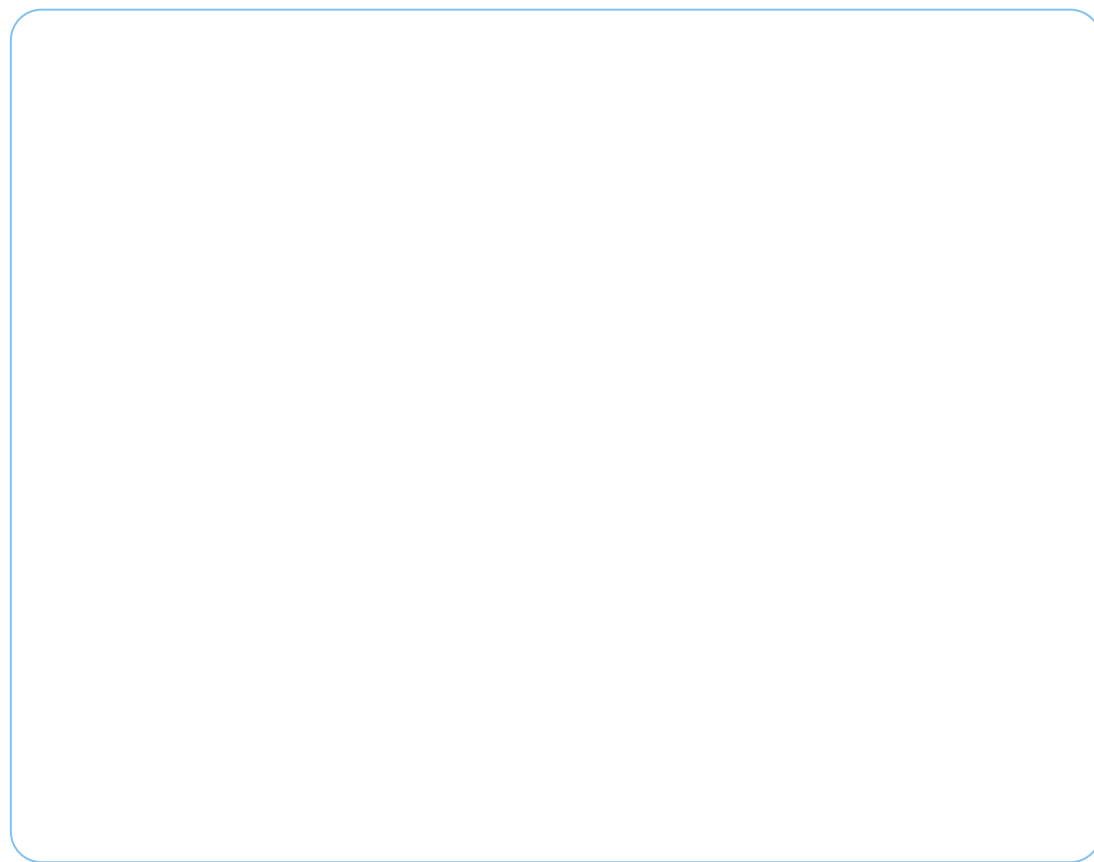
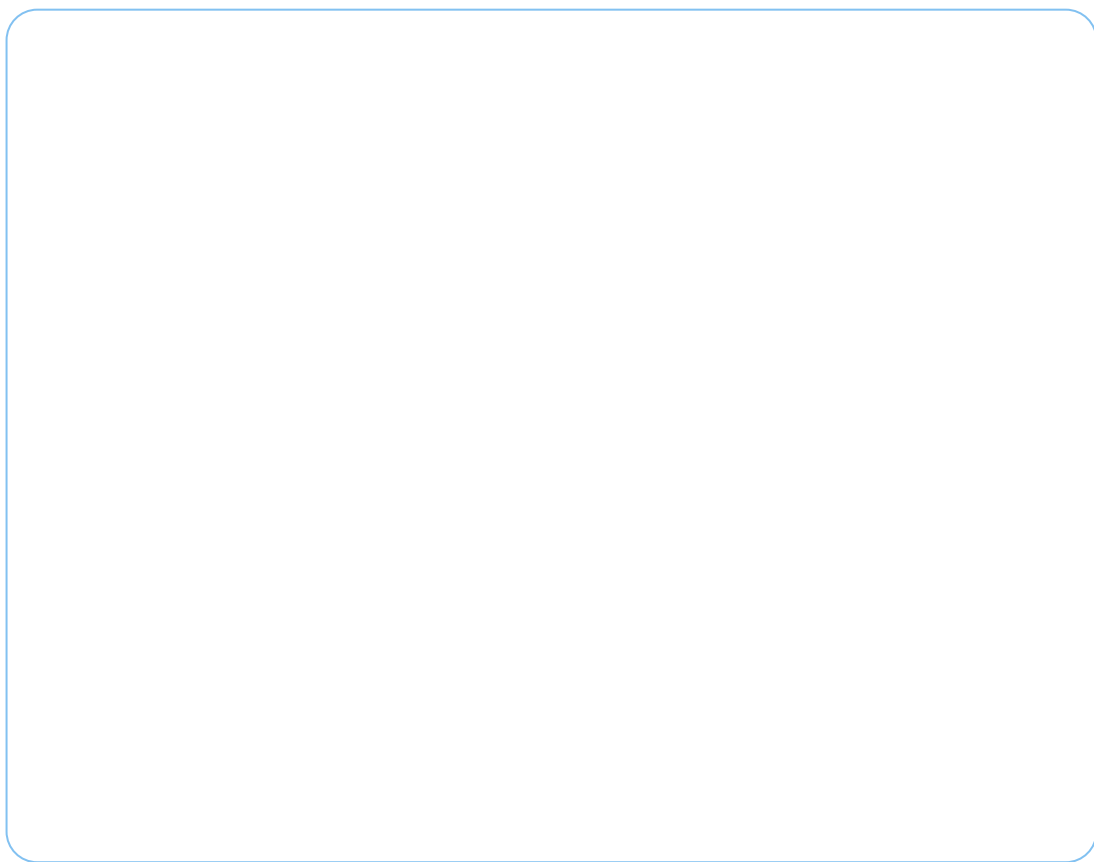
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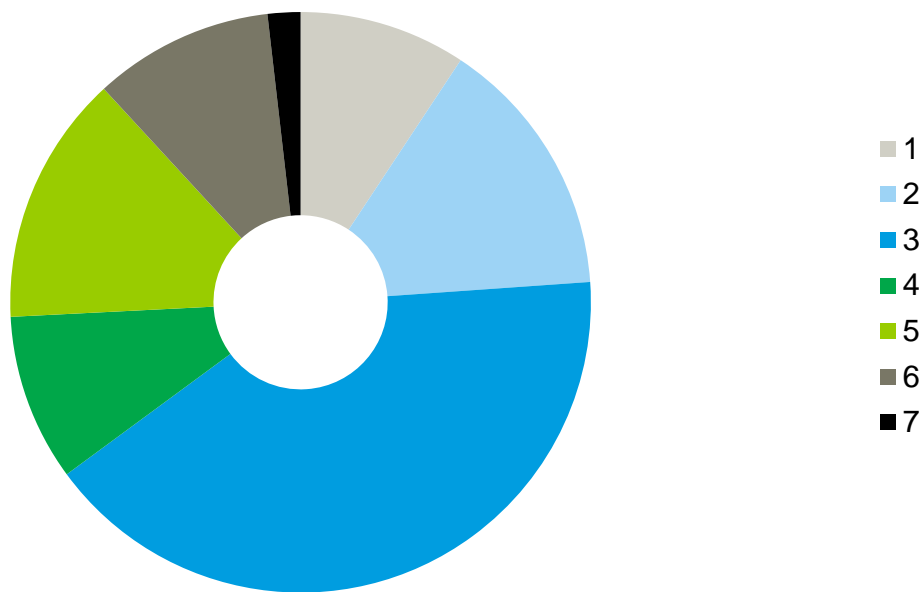
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