Information Management and Knowledge Management (IMKM)
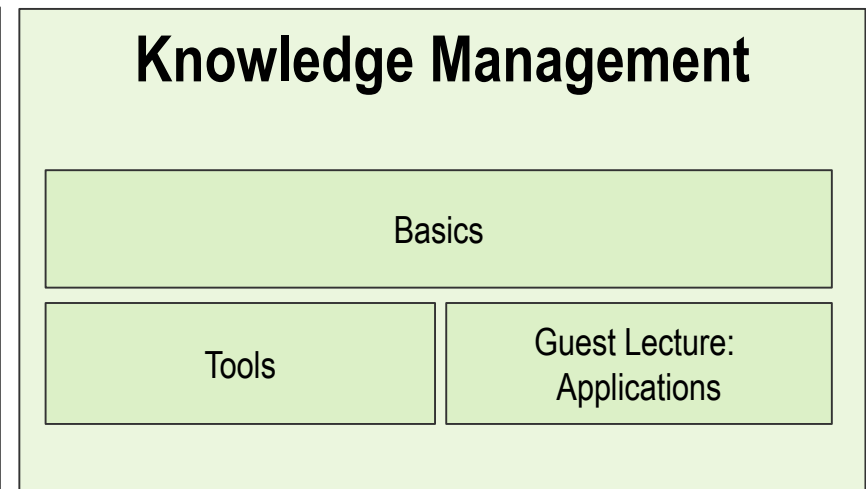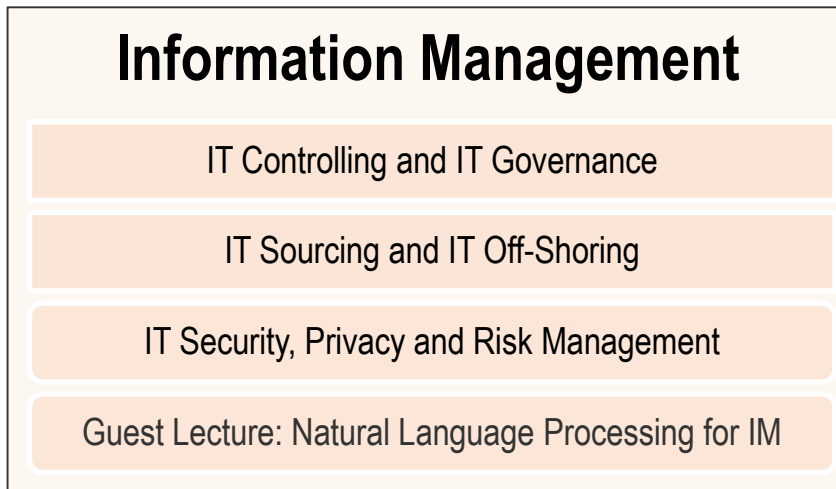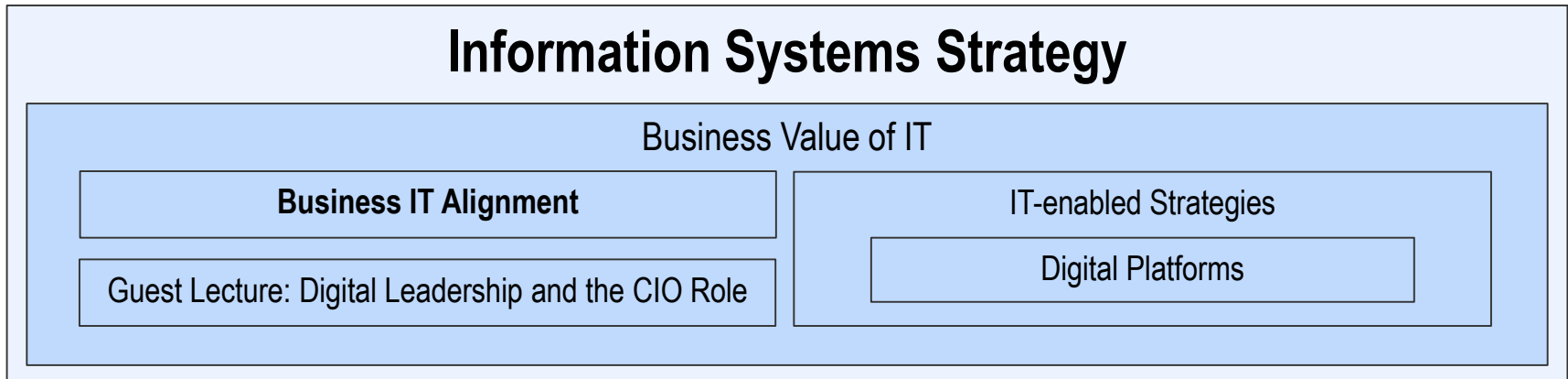
IM

Lecture 3
Strategy and Business IT Alignment

TUM

Chair for Information Systems

Lecture Schedule

Information Systems Strategy

Business Value of IT

Business IT Alignment	IT-enabled Strategies
Guest Lecture: Digital Leadership and the CIO Role	Digital Platforms

Information Management

- IT Controlling and IT Governance
- IT Sourcing and IT Off-Shoring
- IT Security, Privacy and Risk Management
- Guest Lecture: Natural Language Processing for IM

Knowledge Management

- Basics
- Tools
- Guest Lecture: Applications

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IMKM Lecture 3: Strategy and Business IT Alignment

Outline

1. Strategy
   1. Market-based View
   2. Resource-based View
2. Business-IT Alignment
   1. Corporate Strategy and Information Systems
   2. Strategic Alignment Model
   3. Multi-Business Organizations

Learning Objectives

- *You can differentiate different terms related to strategy.*
- *You understand and can apply the market-based and the resource-based view.*
- *You understand and can differentiate and discuss two strategic alignment models.*

Reminder: Strategy and Strategic Management

Strategy

– **Plan** of action to achieve a particular **goal**

– Long-term strategy: typically 3 – 5 years

– Short-term strategy: typically next 6 months

Strategic Management

"The process of

- *examining both present and future environments,*

- *formulating the organization's objectives, and*

- *making, implementing, and controlling decisions focused on achieving these objectives in the present and future environments."*

Smith/ Arnold/ Bizzell (1986, p.4)

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Reminder:
Strategy Hierarchy

A Large Company

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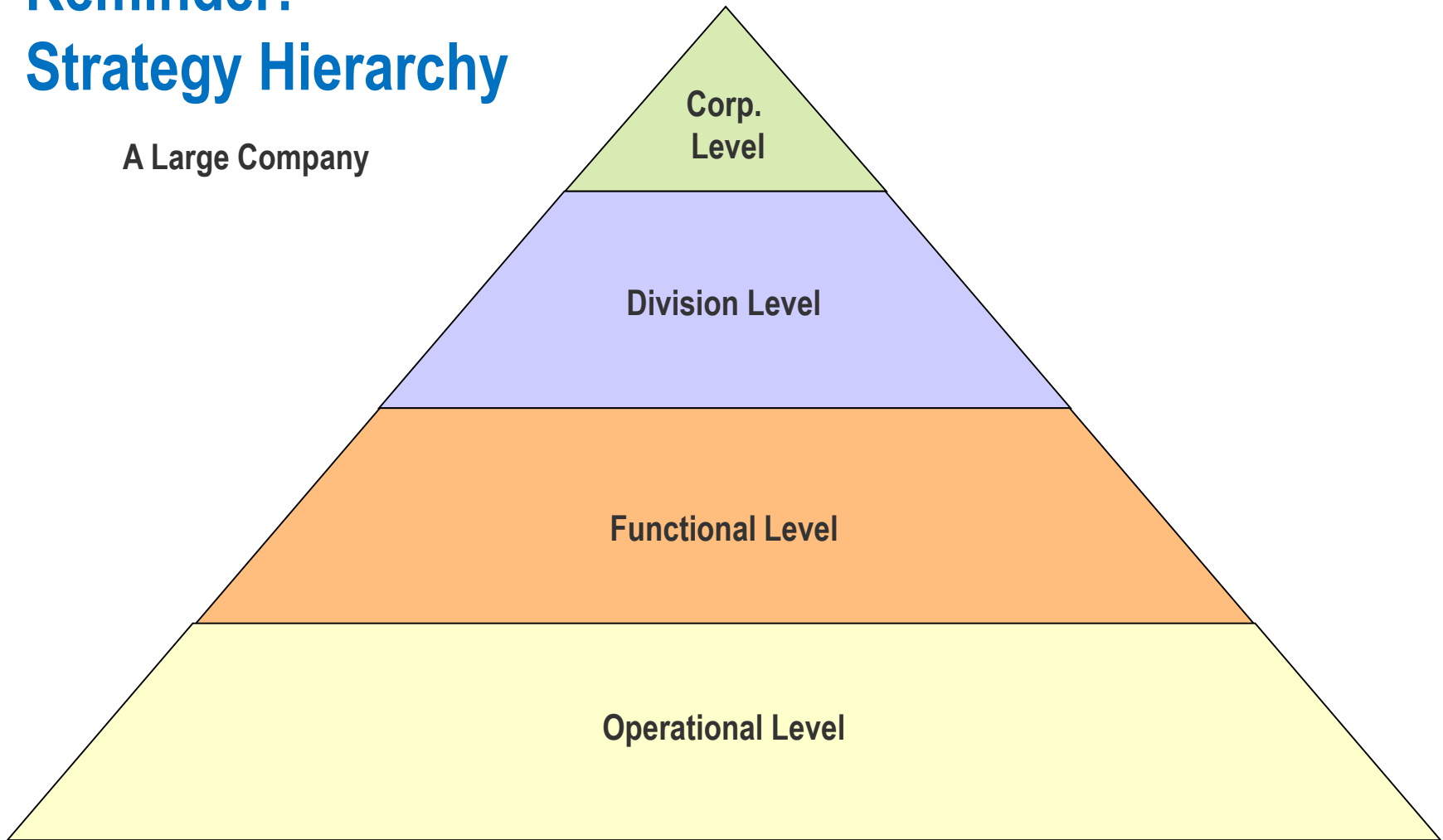
Reminder: Strategy Hierarchy

1. **Corporate strategy**
   - Concerned with deciding what type of business the organization should be in and how the overall group of activities should be formed and managed
   - 1) growth strategy, 2) stability strategy, 3) retrenchment strategy
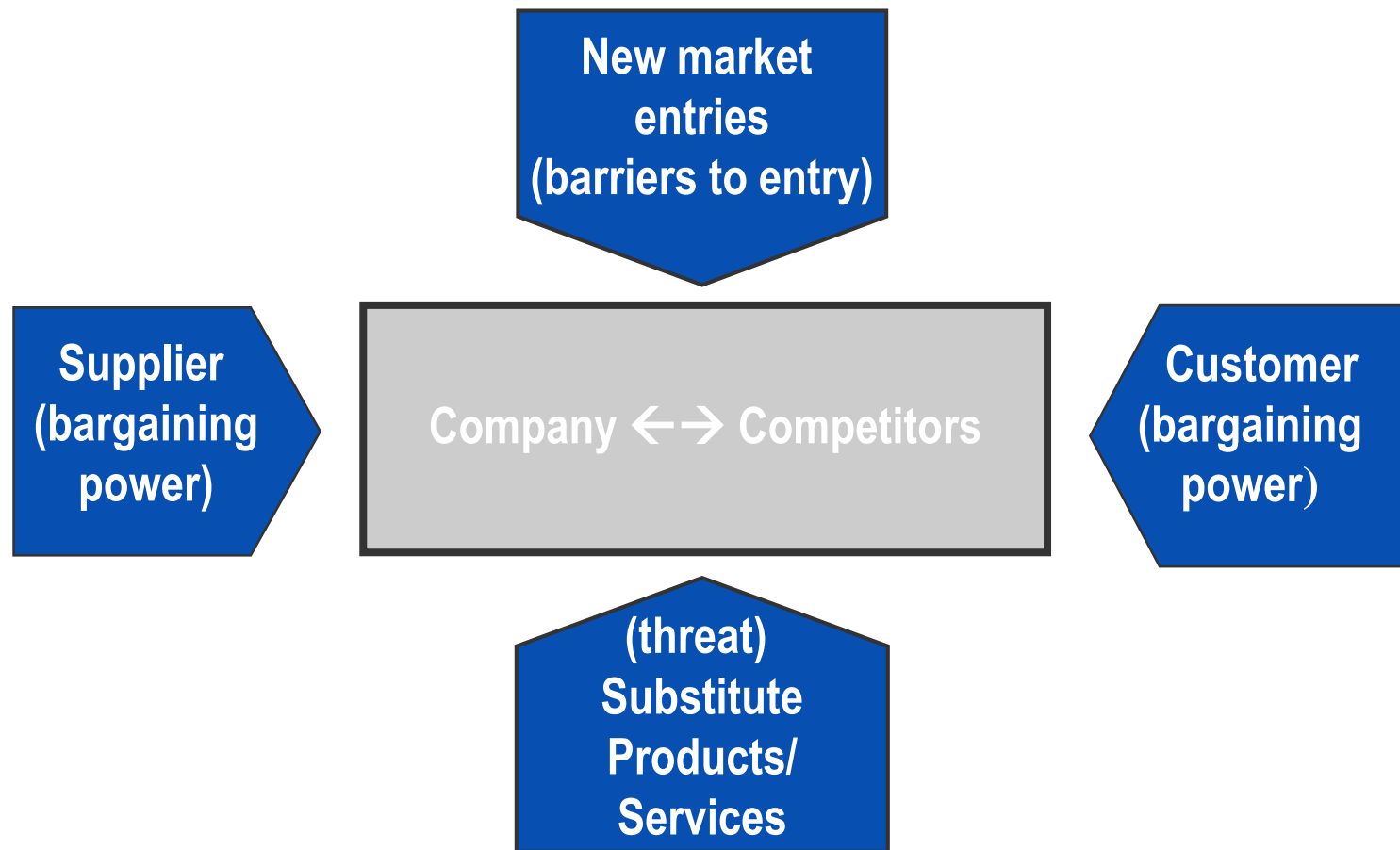   - Depends on SWOT analysis.

2. **Generic or business unit strategy**
   - Refers to the actions and approaches crafted by management to create successful performance in one particular line of business
   - 1) cost leadership, 2) differentiation, 3) focus, 4) mixed

3. **Functional strategy**
   - Concerned with managerial game plan for running a major functional activity or process within a business such as research and development unit, marketing unit, financial unit, production unit, HR development unit, etc.

Porter's Five Forces of the Market-based view (MBV)

New market entries (barriers to entry)

Supplier (bargaining power)

Company ←→ Competitors

Customer (bargaining power)

(threat) Substitute Products/ Services

Search for attractive markets and position yourself within competition

Adapted from Porter (1980), Krcmar (2015, 411)

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Porter's Five Forces: Basic idea

- Assumes that a company **searches** for an attractive market and **positions** itself in the market. It does so by
  - choosing a suitable **generic strategy** (see following slides)
  - influencing the direct market surroundings
- Starting point: the **objectives** that should be reached by positioning in the competitive field
- The organizational structure of a company should **follow** these targets („Structure follows strategy")
- Emphasizes the **role of external factors**, (e.g., attractiveness of an industry, competitive forces) for business success

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Generic Strategies according to Porter

Sources for competitive advantage

	Low Cost	Differentiation
Industry	**Cost Leadership**	**Differentiation**
Segment	**Focus on Niche**	

Scope of competition

Decide for one strategy and do not get stuck in the middle!

Adapted from Porter (1980)

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Generic Strategy: Cost Leadership

- Aim: striving to be the low-cost producer in an industry

- Especially effective if
  - the market is composed of many **price-sensitive** buyers
  - there are **few ways** to achieve product **differentiation**
  - buyers do **not care** much about **differences** from brand to brand
  - there are a **large number of buyers** with significant bargaining power

- Basic idea: gain market share and sales and ultimately drive competitors out of the market by
  - **underprice** competitors or
  - offer a better **cost-value** ratio (similar price, but better value)

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Generic Strategy: Differentiation

- Aim: produce products that are considered **unique**

- Consumers that are strongly attached to the **differentiation features** allows a firm
  - to charge **higher prices** for its products
  - to gain **customer loyalty** because

- Risk: the unique product **may not be valued highly enough** by customers to justify the higher price.

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Generic Strategy: Focus

- Aim: producing products and services that fulfill the needs of **small groups** of consumers

- Two types of focus strategies

    1. A **low-cost focus strategy** offers products or services to a small range (niche) of customers at the **lowest price** available on the market.

    2. A **best-value focus strategy** offers products to a small range of customers at the **best price-value** available on the market. This is sometimes called focused differentiation.

- Most effective if

    - the niche is profitable and **growing**

    - industry **leaders are uninterested** in the niche

    - the industry offers **several niches**

    - there is **little competition** in the niche segment

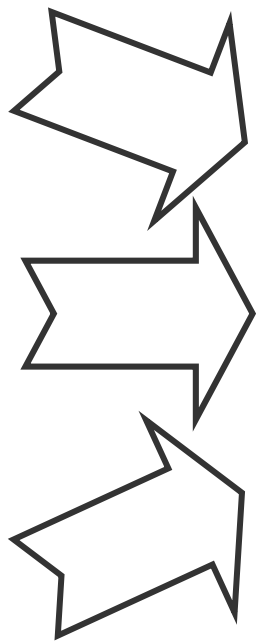# Generic Strategies according to Porter

Sources for competitive advantage

Decide for one strategy and do not get stuck in the middle!
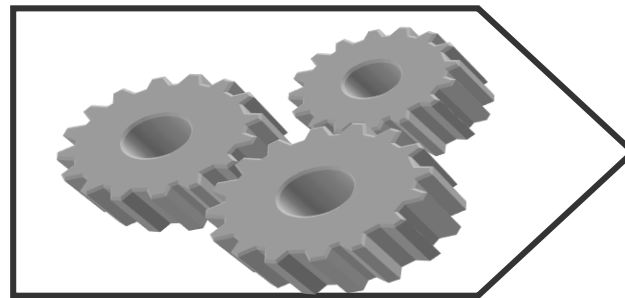
Adapted from Porter 1980

Resource-based view (RBV)

- Success & failure depends on companies' internal capabilities
  - Basic assumptions: Each company has certain **core competencies** and **resources** that are **responsible** for the company's success
  - Companies **differ** significantly in their **resources**
- Recommendations for core competency management
  - Determine **existence** of core competencies and analyze their **potential**
  - Keep tangible resources (market oriented production facilities) **up to date**
  - Develop intangible resources/ capabilities (organization culture and principles, skills, brands, …)
- Resources for competitive advantage should be **VRIN**
  - **V**aluable: they enable a firm to implement strategies that improve its efficiency and effectiveness.
  - **R**are: not available to other competitors.
  - **I**mperfectly imitable: not easily implemented by others.
  - **N**on-substitutable: not able to be replaced by some other non-rare resource.

Barney, J. (1991), Burr (2003)

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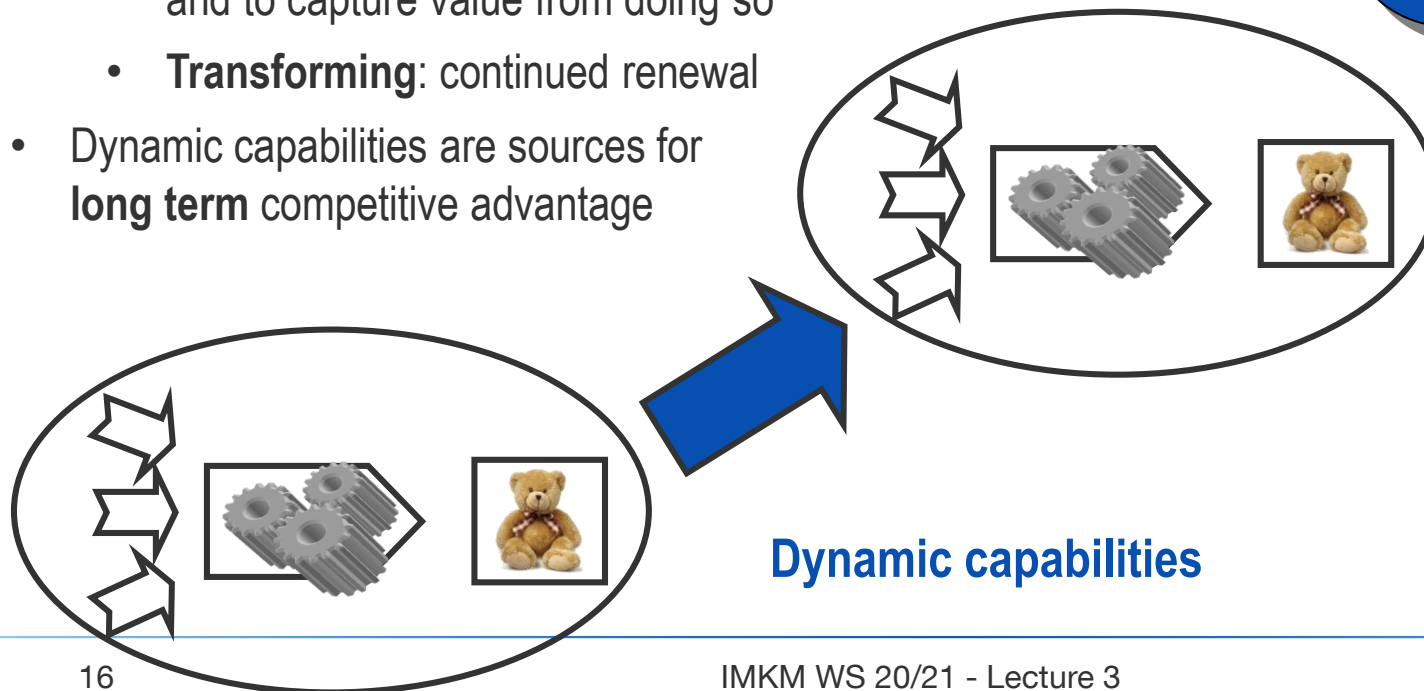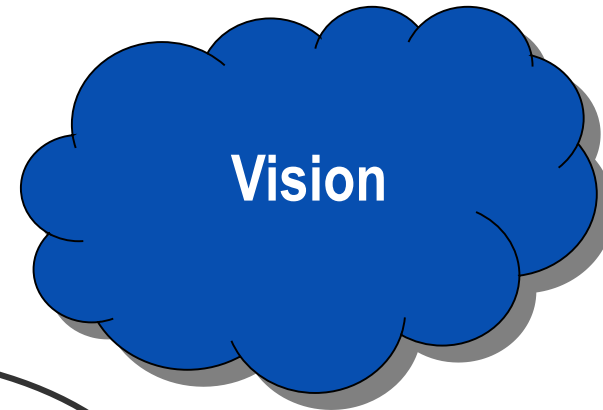# Relationship of Components

| Resources | Competencies | Product |

Core competencies = competencies that are most important for competition
Core competencies are the starting point for strategy development

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Dynamic capabilities

- Dynamic capabilities and vision relate to **change** in the organization

- Dynamic capabilities include three primary clusters of competences

    - **Sensing**: identification and assessment of an opportunity

    - **Seizing**: mobilization of resources to address an opportunity and to capture value from doing so

    - **Transforming**: continued renewal

- Dynamic capabilities are sources for **long term** competitive advantage

Vision

Dynamic capabilities

Teece, D. J. (2013)

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Components of RBV

Pyramid diagram from top to bottom:

Vision

Dynamic Capabilities

Capability to sense, seize, and transform and, thus, to adapt their resources and competencies to changing environments

Competencies

Capability of an organization to use their resources efficiently and effectively

Resources

Fixed Assets, Human capital, money, Reputation incl. brands, Management-Team, Technology and Patents, (organizational culture), Organizational structure

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Components of RBV

Pyramid diagram (top to bottom):

Vision

Dynamic Capabilities
Capability to sense, seize, and transform and, thus, to adapt their resources and competencies to changing environments

Competencies
Capability of an organization to use their resources efficiently and effectively

Resources
Fixed Assets, Human capital, money, Reputation incl. brands, Management-Team, Technology and Patents, (organizational culture), Organizational structure

Use the Zoom-Chat:
1. What is Information?
2. What is knowledge?
3. What is Information & Knowledge Management?
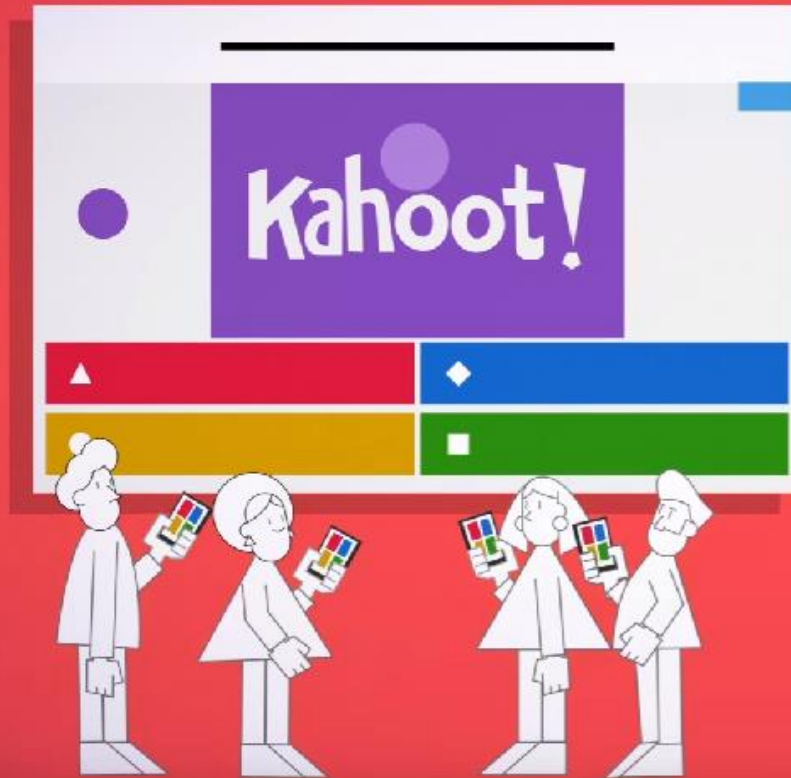
Market-based View and Resource-based View

What are **strengths** of the two views?

What are **weaknesses** of the two views?

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Quiz Time!

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IMKM Lecture 3: Strategy and Business IT Alignment

Outline

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Reminder: Basic Terms

- *IS Strategy:* Focuses on the system or business applications of IT and is primarily concerned with **aligning** them with business needs and using them to **derive strategic benefits**

What?

- *IT Strategy*: Concerned with the various **aspects of the technology** such as architecture, technical standards, security levels, risk attitudes, and technology policies

How?

- *IM Strategy:* Concerned with the **structures and roles for the management of IS and IT**, focuses on issues such as the relationship between specialist and users, management control, performance measurement processes, management responsibilities

Which way? Who does it? Where is it located?

Source: Earl 1989, p. 65

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Strategic Fit / Business IT Alignment

- **Strategic fit** among many activities is fundamental not only to competitive advantage but also to the sustainability of that advantage. It is harder for a rival to match an **array of interlocked activities** than it is merely to imitate a particular sales-force approach, match a process technology, or replicate a set of product features.

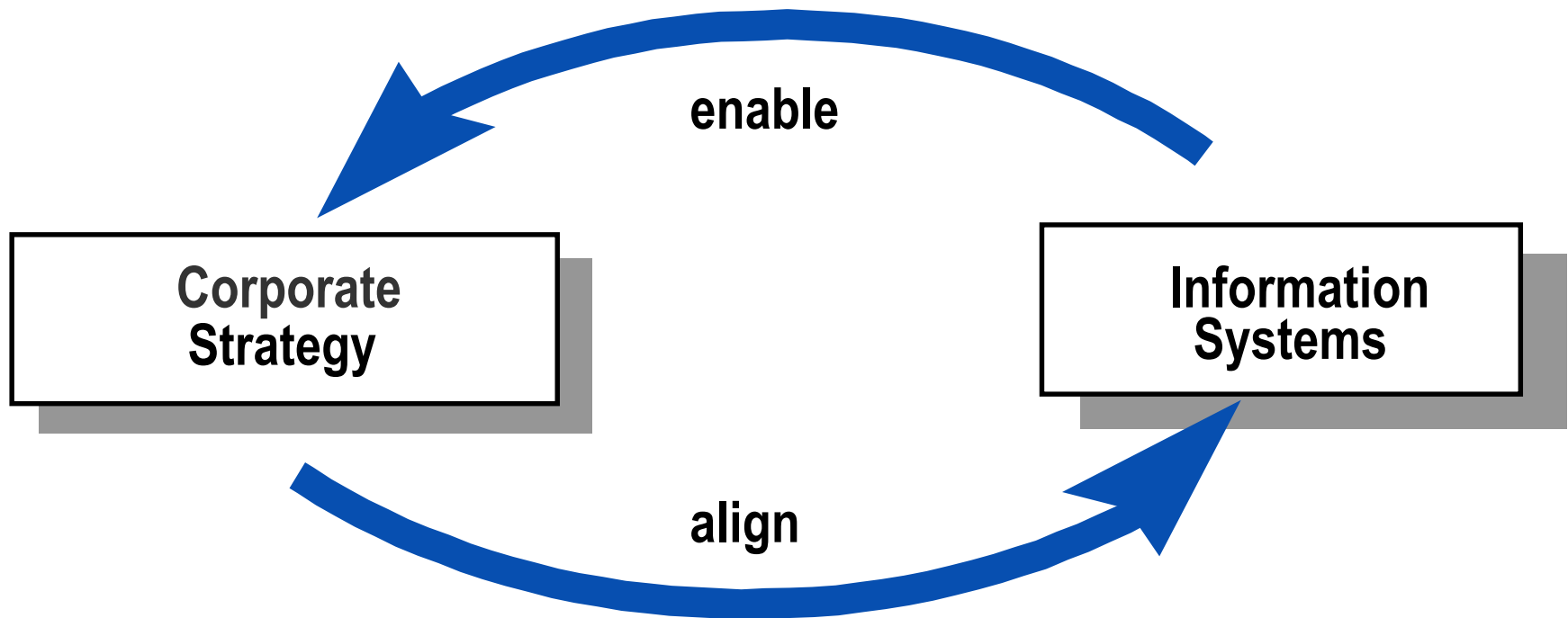*Porter (1996)*

- **Strategic alignment** is the extent to which the business mission, objectives, and plans are supported by the IS mission, objectives, and plans

Reich and Benbasat, 2000; Sambamurthy and Zmud, 1999

- **Alignment** is the **degree of fit** and **integration** among business strategy, IT strategy, business infrastructure, and IT infrastructure.
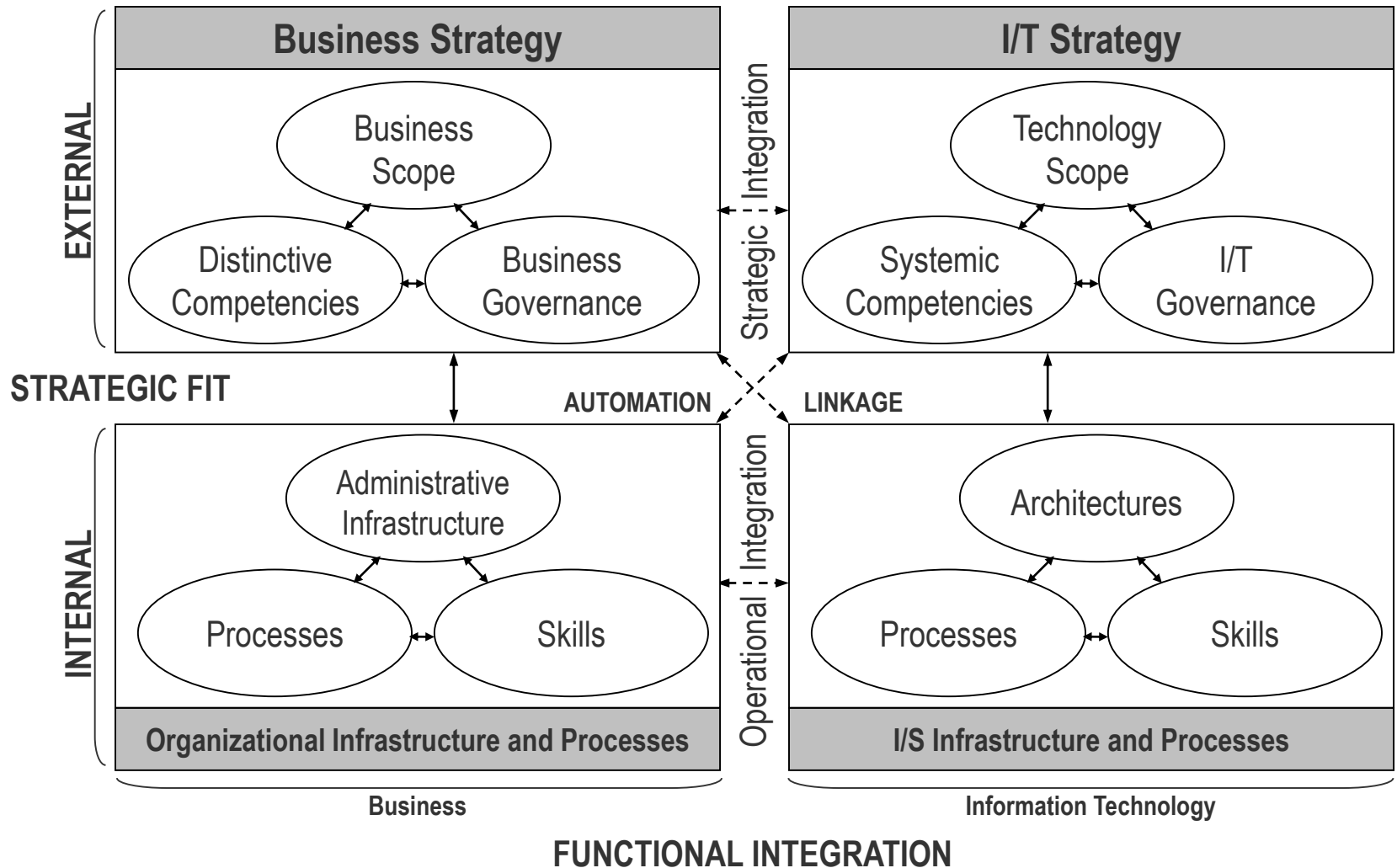
Henderson and Venkatraman (1993)

Relationship between Corporate Strategy and Information Systems

enable

Corporate Strategy

Information Systems

align

Krcmar (2015), p. 396

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Strategic Alignment Model

Business Strategy — EXTERNAL
- Business Scope
- Distinctive Competencies
- Business Governance

I/T Strategy — EXTERNAL
- Technology Scope
- Systemic Competencies
- I/T Governance

Strategic Integration

STRATEGIC FIT

AUTOMATION   LINKAGE

Organizational Infrastructure and Processes — INTERNAL
- Administrative Infrastructure
- Processes
- Skills

I/S Infrastructure and Processes — INTERNAL
- Architectures
- Processes
- Skills

Operational Integration

Business   Information Technology

FUNCTIONAL INTEGRATION

Henderson/Venkatraman (1999)

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IT Alignment in Multi-Business Organizations

SBU = strategic business unit
R# = alignment relationship

Reynolds & Yetton (2015)

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IT Alignment in Multi-Business Organizations

Functional Alignment (R1)
- Corporate strategy provides boundaries for Corporate IT Platform strategy
- Corporate IT Platform strategy needs to align with corporate strategy

Corporate IT Platform Strategy
Shared IT capabilities across the organisation

R1

Possible misalignment

R4

R5   R6

R3

Functional Alignment (R2)
- SBU IT portfolio needs to support the business strategy
- SBU strategy provides requirements for SBU IT portfolio

BUSINESS UNIT

SBU Strategy
Capabilities to compete in individual markets

R2

BUSINESS STRATEGY

FUNCTIONAL IT STRATEGY

Independence Between SBUs

FUNCTIONAL ALIGNMENT

ALIGNMENT

SBU = strategic business unit
R# = alignment relationship

Reynolds & Yetton (2015)

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IT Alignment in Multi-Business Organizations

Structural Alignment (R4)
- Corporate strategy provides boundaries for strategies of SBUs
- SBU strategy has high degrees of freedom within corporate strategy boundaries

Structural Alignment (R3)
- Corporate IT platform leverages synergies across shared IT services
- Independence between SBU IT Portfolios
  ➔ if something is relevant for more than one SBU, if moves to the corporate IT platform strategy and become a shared, corporate service

Reynolds & Yetton (2015)

SBU = strategic business unit
R# = alignment relationship

IT Alignment in Multi-Business Organizations

R6
- Corporate strategy **does not specify** IT capabilities for SBU IT portfolios
- SBU IT portfolios should **not** include IT capabilities to be **shared** across SBUs
  → **indicator for misalignment**

R5
- SBU strategies do **not define** the corporate IT platform strategy
- IT platform capabilities should **not** include IT capabilities to meet an **individual** SBU strategy requirement
  → **indicator for misalignment**

SBU = strategic business unit
R# = alignment relationship

Reynolds & Yetton (2015)

IT Alignment in Multi-Business Organizations
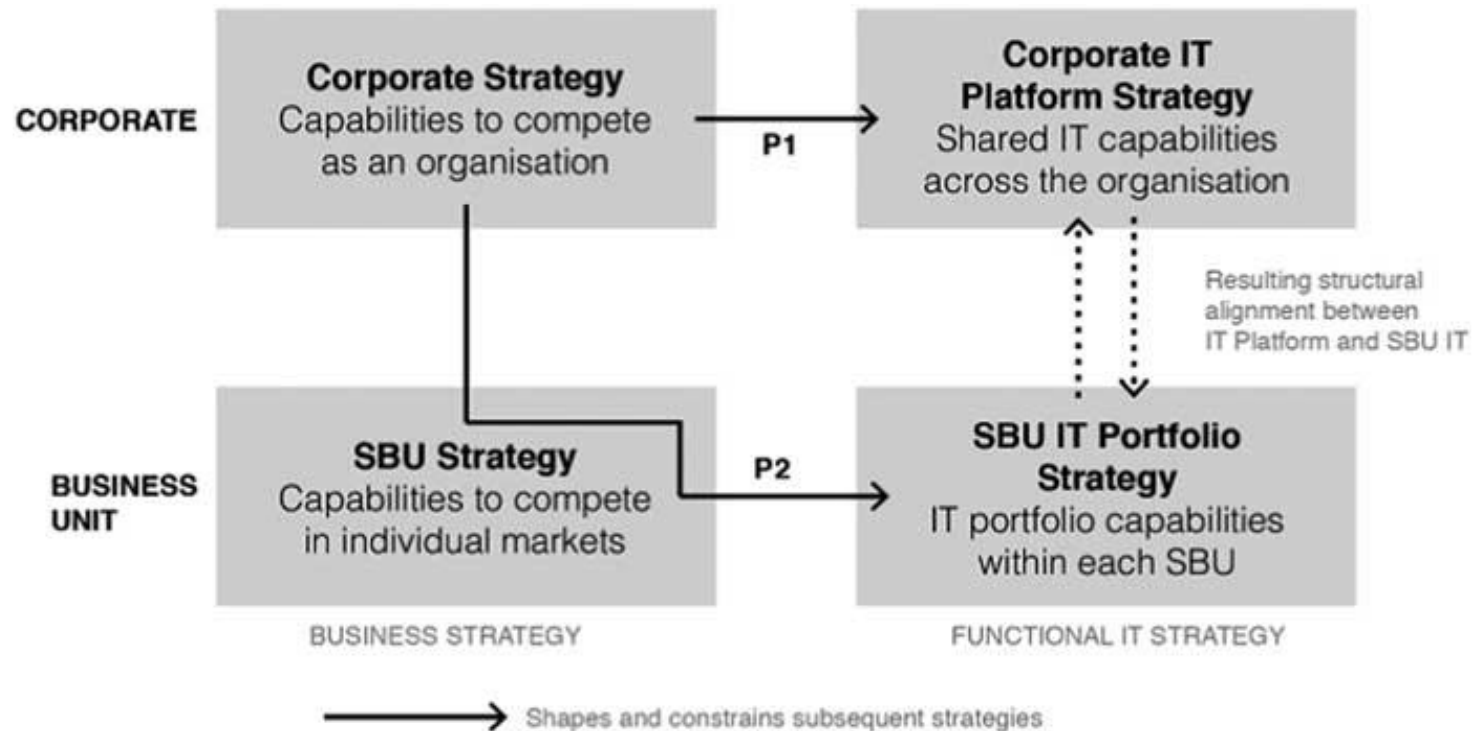
Two paths to temporal alignment in Multi-Business Organizations
- **Path 1 (P1)**: sequence of strategic choices to develop the shared IT platform capabilities.
- **Path 2 (P2)**: sequence of strategic choices to develop SBU IT application capabilities.

(typical top-down, business-led approach for alignment)
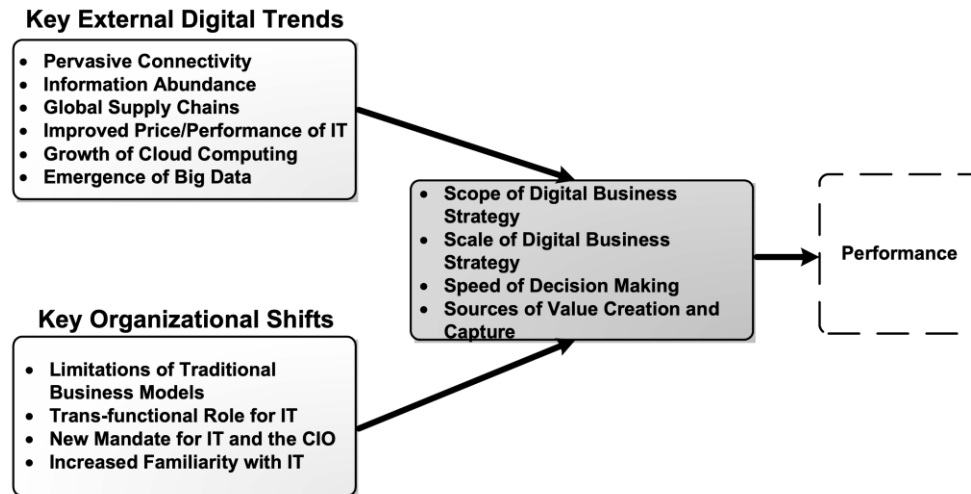
Reynolds & Yetton (2015)

Implications of Business IS Strategy Alignment
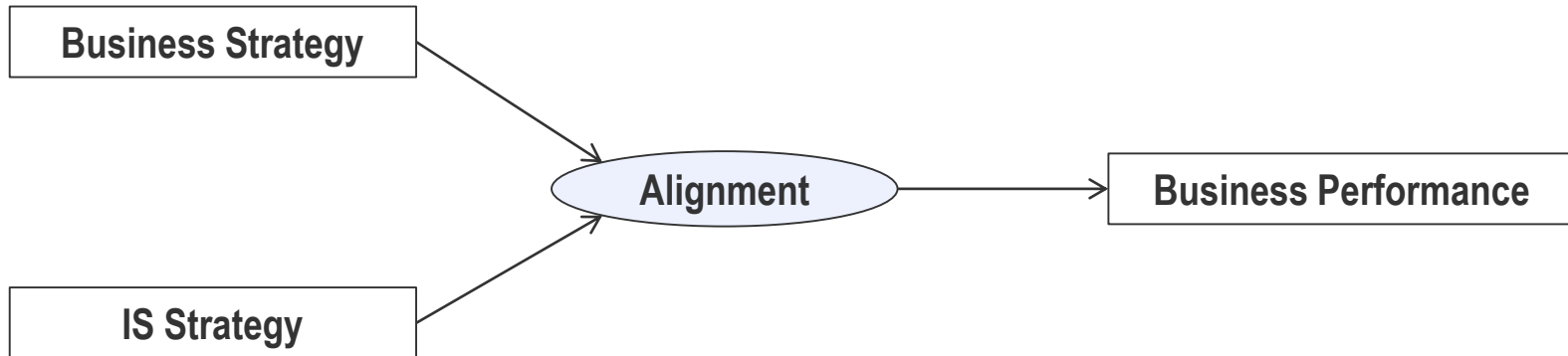
Meta-Analysis by Gerow et al. (2014, p. 1178)
*"Analyzing **30 years of alignment research**, we examined whether IT–business strategic alignment leads to higher firm performance.*
*We found the bulk of the extant evidence suggests **there is not much of an alignment paradox,** which suggests **alignment should lead to higher levels of performance**."*

Reminder: Digital Business Strategy

Key External Digital Trends
- Pervasive Connectivity
- Information Abundance
- Global Supply Chains
- Improved Price/Performance of IT
- Growth of Cloud Computing
- Emergence of Big Data

Key Organizational Shifts
- Limitations of Traditional Business Models
- Trans-functional Role for IT
- New Mandate for IT and the CIO
- Increased Familiarity with IT

- Scope of Digital Business Strategy
- Scale of Digital Business Strategy
- Speed of Decision Making
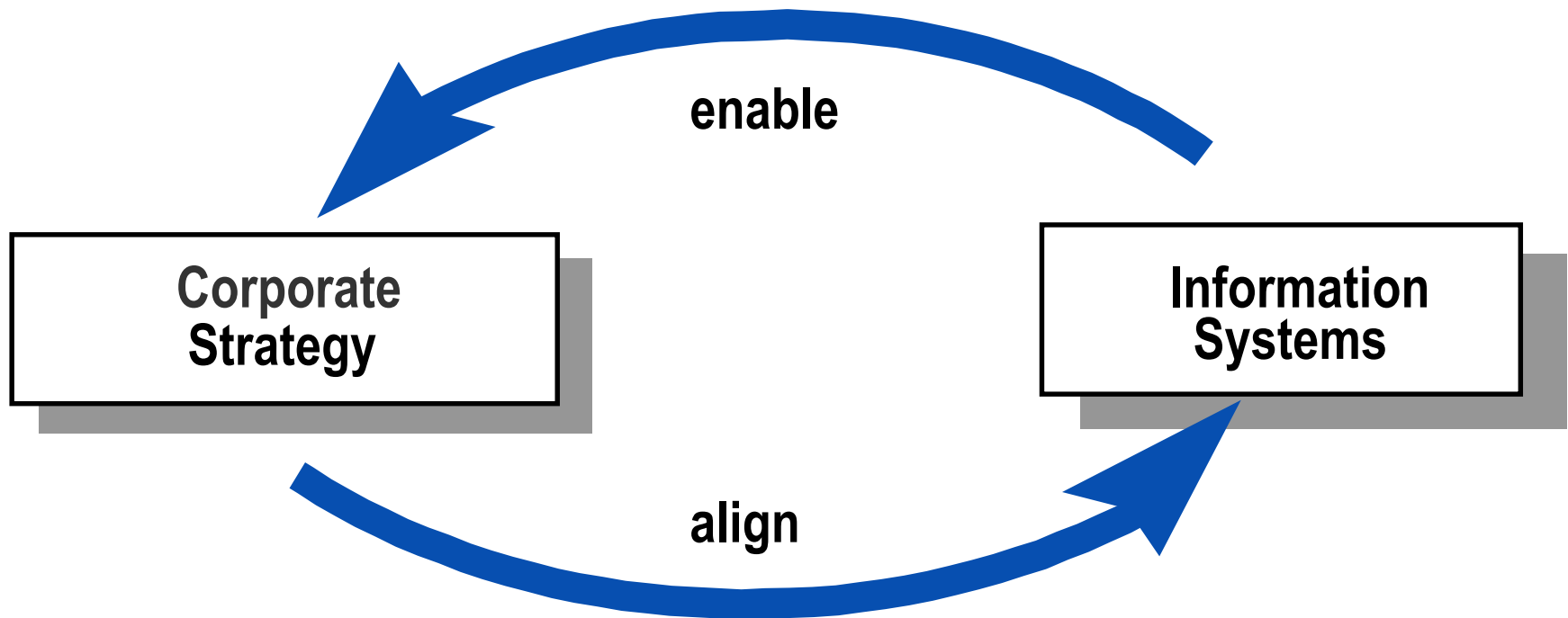- Sources of Value Creation and Capture

Performance

- Adapt business infrastructure to the new digital era
- Traditional business strategy reshaped by digital technology: modular, distributed, cross-functional
  - Embedded technology in products and services
  - Digital platforms
  - IT as a ubiquity
- From business-IT alignment to fusion of business and IT towards a digital business strategy
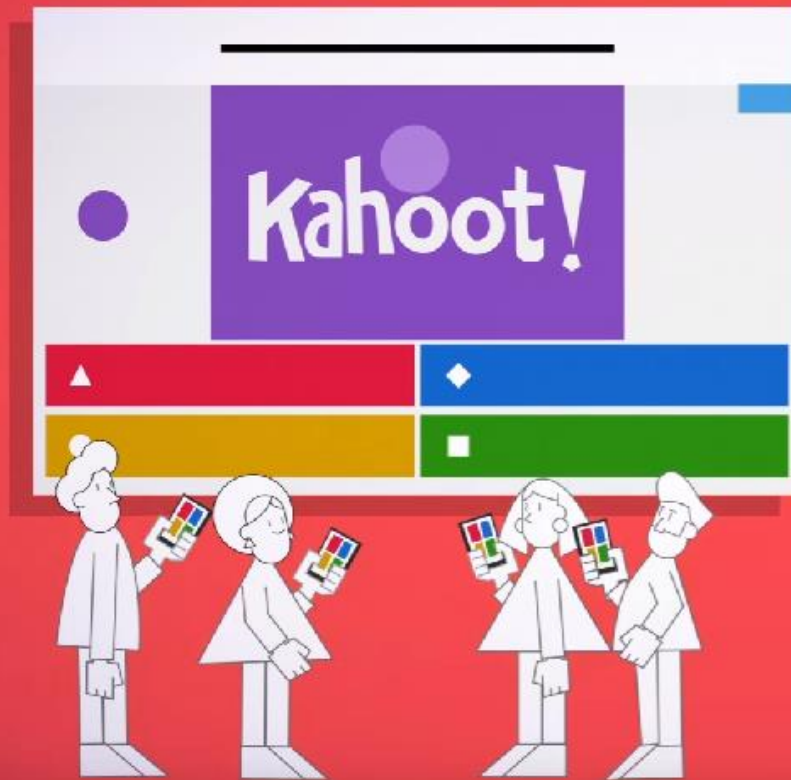
Bharadwaj et al. (2013)

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Summary

Krcmar (2015), p. 396

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Core Literature: Krcmar, Informationsmanagement (2015)

1. Einleitung (pp.1-8)
2. Begriffe und Definitionen (pp.11-26)
3. Modellierung (pp. 31-78)
4. Aufgabe des Informationsmanagements: Informationsmanagement (pp. 85-109)
5. Aufgabe des Informationsmanagements: Management der Informationswirtschaft (pp. 113-165)
6. Aufgabe des Informationsmanagements: Management der Informationssysteme (pp. 173-302)
7. Aufgabe des Informationsmanagements: Management der Informations- und Kommunikationstechnik (pp. 315-385)
8. Führungsaufgaben des Informationsmanagements (pp. 393-578)
   8.1 Unternehmensstrategie und Informationsmanagement (pp. 396-427)
9. Referenzmodelle des Informationsmanagements (pp. 601-630)
10. Einsatzfelder und Herausforderungen des Informationsmanagements (pp. 633-753)
11. Fallstudie „Rockhaus AG" (pp. 767-783)

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