

Firm Resources: Competitiveness & Growth (Mike Peng & Klaus Meyer, International Business)

PROF. DR. NORIFUMI KAWAI, MPIA (Pittsburgh)

Special Topics in Internationalization

Università degli Studi di Bergamo

Dipartimento di Scienze Aziendali

Bergamo, ITALY



- 1. Introduction**
2. Identifying Resources & Capabilities
3. Appraising Resources: The VRIO Framework
4. Applying Resource Analysis: Benchmarking
5. Implications for Practice

Opening Case: SAP



■ General Information

❖ How SAP Grew

- **When:** Founded by 5 former IBM engineers in Mannheim in June 1972
- **Where:** HQ located in Walldorf, Germany
- **Size:** 55,765 employees (2011)
- **Turnover:** 1 billion (1993) => 10.7 billion (2009)

❖ What SAP Sells

- **Enterprise Resource Planning (ERP)**
 - ✓ ... provides electronic information systems that integrate data from (1) **manufacturing efficiency**, (2) **inventories** & (3) **sales & customer feedback**.

✓ ERP software is like the **brain** of a company to gather information & convey it to decision-makers in **real time**.





■ Why SAP is Successful? (Part 1)

❖ Internationalization of R&D Operations

- 8 centers around the globe
- **Silicon Valley:** An ideas factory to stay in touch with the latest trends
- **India:** The development of specific components
- **Walldorf:** The hub for development & marketing activities

➔ ✓ The internationalization helped SAP to tap into **human capital** in the world.

❖ Organizational Flexibility

- **New generations** of technology
- **New ways** of organizing software & its delivery
- The **ERP** landscape toward software-based & web services-based activities
- Special emphasis on **speed of innovation**

➔ ✓ SAP is flexible in **adapting** their business model to **unpredictable, fast global software industry**.



■ Why SAP is Successful? (Part 2)

❖ Better Customer Services

- The **skills** of SAP's software engineers
- The **practical knowledge** of SAP's consultants
- SAP's network of **specialized business partners** helping to implement its software.

➔ ✓ Capabilities in **reliable customer support** enables SAP to retain the trust of its loyal customer base.

❖ Quality & Reliability of Engineering

- Producing **reliable, high quality software**.
- Capabilities in operation 'come alive' in the processes by which **SAP's employees & partners interact** to create an unique service.

➔ ✓ Attaching the importance to **quality** is a key to success.



■ SAP is Facing Problems?


❖ Americanization

- Some employees are unhappy about the **loss of traditional values** (*i.e.*, **commitment to quality & entrepreneurial spirits**).
- Speaking **English** in internal meetings.

❖ New Generation of Technology

- Not only **Oracle & Microsoft** but also new startups (*e.g.*, **Salesforce.com**) in the business software market, which requires the **constant transformation** of SAP's business model.



1. Introduction
-  2. **Identifying Resources & Capabilities**
3. Appraising Resources: The VRIO Framework
4. Applying Resource Analysis: Benchmarking
5. Implications for Practice

Identifying Resources & Capabilities



■ The Resource-Based View of the Firm

- ❖ ... attaches importance to the logic that a firm's competitive advantage lies in its **internal organization** (Barney, 1986).
- ❖ ... originated in **Penrose's** (1959) "*Theory of the Growth of the Firm*", offers crucial insights into corporate strategy.
- ❖ ... is that different internal resources in different firms shape their own capabilities that become **competitive advantages**.
- ❖ Collis & Montgomery (1995) develop five analytical indicators:
 - **Inimitability**: Is the resource hard to copy?
 - **Durability**: How quickly does the resource depreciate?
 - **Appropriability**: Who captures the value that the resource creates?
 - **Substitutability**: Can a unique resource be trumped by a different resource?
 - **Competitive superiority**: Whose resources are really better?

Identifying Resources & Capabilities



■ The Distinction Between Resources & Capabilities

RESOURCES



- > The **tangible & intangible assets** as well as **human resources** that a firm uses to choose & implement its strategies.
- > **Tangible assets:** Financial & physical assets.
- > **Intangible assets:** Technical & reputational assets.
- > **Human resources** (or human capital): Individual employees' skills, talents & knowledge through experiential learning & their capacity for collaboration & communication.

CAPABILITIES



- > ... are firm-specific abilities to use resources to achieve organizational objectives.
- > ... are harder to observe & more difficult to quantify.
- > No firm is likely to generate competitive advantage by relying on primary resources !
- > ... refer to abilities to connect different stages of **the value chain**.
- > **Five major function capabilities (Please see the next slide!)**

Identifying Resources & Capabilities



■ Examples of Functional Capabilities

1	Corporate Functions	<ul style="list-style-type: none">> Ability to attract & manage financial resources.....> Exxon Mobil> Strategic innovation> Google> Strategic management of multiple businesses.....> GE, P&G
2	Research & Development	<ul style="list-style-type: none">> Design capabilities.....> Samsung> Innovative new product development.....> Apple, Sony> Fast-cycle new product development.....> Zara, Canon
3	Operations	<ul style="list-style-type: none">> Flexibility & speed of response.....> Zara> Continuous quality improvement in manufacturing.....> Toyota> Efficiency in volume manufacturing.....> Hon Hai
4	Marketing	<ul style="list-style-type: none">> Brand management.....> P&G> Reputation for quality.....> BMW> Responsiveness to market trends.....> L'Oreal
5	Sales & Distribution	<ul style="list-style-type: none">> Efficiency of order processing & distribution.....> Dell, Amazon> Effective distribution management> Walmart> Quality & effectiveness of customer service.....> SAP



1. Introduction
2. Identifying Resources & Capabilities
- ▶ 3. **Appraising Resources: The VRIO Framework**
4. Applying Resource Analysis: Benchmarking
5. Implications for Practice

Appraising Resources: The VRIO Framework



■ How to Know How Useful a Firm's Resources are?

❖ The **VRIO framework** focuses on the value creation (**V**), rarity (**R**), inimitability (**I**) & organization (**O**) aspects of resources.

❖ Value creation

- The evolution of IBM: **Tabulating machines** (1930s) → **mainframes** (1960s & 1970s) → **PC** (1980s) → **software** (1990s)
- As competition for hardware was heating up, IBM's core capabilities in hardware not only added little value but also increasingly became core rigidities that stood in the way of the firm **moving into new areas**.
- As a result, IBM **sold its PC division to China's Lenovo** in 2004.

❖ Rarity

- Consider the case of **SAP software** (*i.e.*, ERP): Businesses have to compete on how to use the software most effectively.
- Indian IT company **Wipro**: 'IP (Intellectual Property) blocks' – developing & keeping the technology in-house.



■ How to Know How Useful a Firm's Resources are?

❖ Inimitability

- Value resources will disappear quickly if competitors can imitate them.
- It is relatively easy to imitate many *tangible* resources (e.g., plants)
- However, it is a lot more challenging and often imitate *intangible* capabilities (e.g., tacit knowledge, superior motivation & managerial talents).
- **QUESTION:** Why is it difficult to imitate? **ANSWER:** **Social complexity**
 - ✓ Resources & capabilities **are socially embedded in people & organizations.**



- ✓ Why do Italian fashion houses stay ahead in the world of fashion for decades?
- ✓ Is it the networks of small firms in Northern Italy?
- ✓ Is it the experience of designers growing up in a fashion-oriented culture? What about training?



✓ Developing **hard-to-imitate resources** leads firms to be competitive !



■ How to Know How Useful a Firm's Resources are?

❖ Organization

- Even value creating, rare & hard-to-imitate resources may not give a firm sustained competitive advantage if the firm is not **properly organized**.
- **Appropriability** refers to the ability of the firm to exploit or appropriate the values of resources & capabilities.
- **How to appropriate** the values for itself?
 - ✓ Company's formal reporting **structure**;
 - ✓ **Informal means** to **encourage employees**;
 - ✓ Budgeting & reporting activities to monitor each other through **monetary incentives**;
 - ✓ Both **formal & informal means** to make sure that **managers' decisions along with a firm's strategy**;
 - ✓ Effective **strategic planning process**



■ Lego's Secret

Identify Lego's core competency & evaluate the quality of their resources in an extension of the VRIO framework.

Appraising Resources: The VRIO Framework



■ Lego's Secret

Resources	Value Creation	Rarity	Inimitable (hard to copy)	Organization	Competitive Advantage
Product quality	Yes	Yes	Difficult to imitate	Yes, the shared norm "only the best is good enough" is shared within the organization.	Sustained competitive advantage
Manufacturing techniques	Yes	Yes	Difficult to imitate	Yes, the company has superior expertise into the precise manufacturing of tiny bricks.	Sustained competitive advantage
A unique system	Yes	Yes	Difficult to imitate	The company capitalizes on the compatibility of old bricks of the 1950s vintage & new bricks.	Sustained competitive advantage
Reputation & visibility	Yes	Yes	Can be imitated by competitors	The company develops the new vision "to inspire & develop the builders of tomorrow".	Sustained competitive advantage

Appraising Resources: The VRIO Framework



■ Lego's Secret

Resources	Value Creation	Rarity	Inimitable (hard to copy)	Organization	Competitive Advantage
Diversified business portfolio	Yes	No, as most of the competitors are also targeting those lines of business	Easy to copy	Diversification can be costly due to coordination & governance costs. It might cause a lot of distraction against the focus of the company.	Temporary competitive advantage
Marketing capabilities	Yes, firms are competing based on differentiation in the industry.	No, most of competitors may easily design & implement similar 4P marketing strategies.	Pricing strategies can be matched by competitors.	Yes, the firm is leveraging its own well-established logos.	Temporary competitive advantage
Leadership	Yes	Yes	Difficult to imitate	Yes, Knudstorp directs his attention to the importance of implementing a re-focus strategy & diversifying product lines rather than business streams.	Sustained competitive advantage

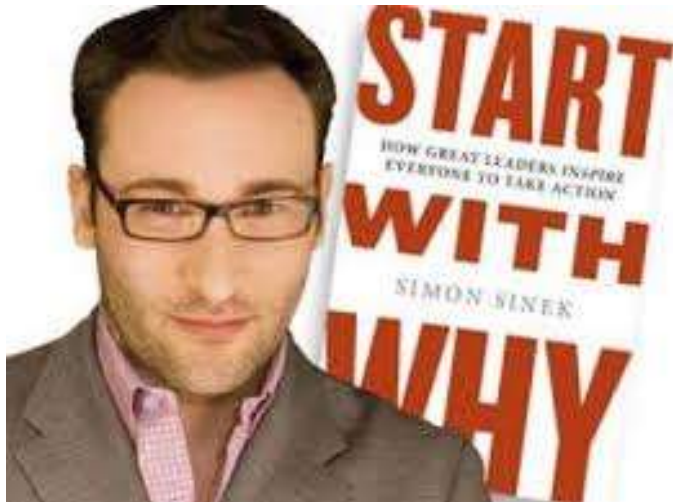
Appraising Resources: The VRIO Framework



■ How to Know How Useful a Firm's Resources are?

WHO

Simon O. Sinek (born October 9, 1973) is an author best known for popularizing the concept of "the golden circle" & to "Start With Why".



EARLY LIFE

Sinek was born in Wimbledon, England; at a young age he moved to Johannesburg, South Africa, then to London, then to Hong Kong, before settling in New Jersey. He earned a BA degree in cultural anthropology from **Brandeis University**; he attended **City University in London**.

Appraising Resources: The VRIO Framework



■ How to Know How Useful a Firm's Resources are?

https://www.youtube.com/watch?v=u4ZoJKF_VuA



1. Introduction
2. Identifying Resources & Capabilities
3. Appraising Resources: The VRIO Framework
- ▶ 4. **Applying Resource Analysis: Benchmarking**
5. Implications for Practice

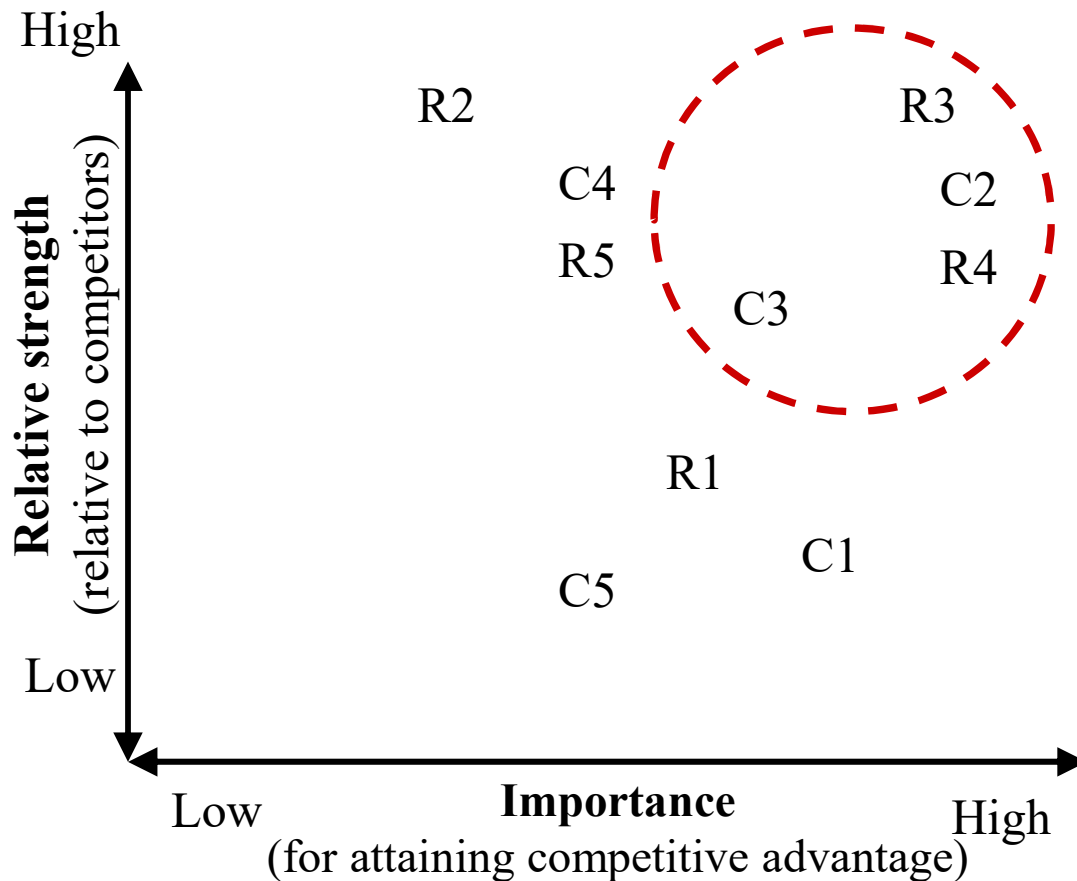
Applying Resource Analysis: Benchmarking



■ What is Benchmarking? →

✓ '... is a key tool for analyzing resources compared against competitors'.

Benchmarking 



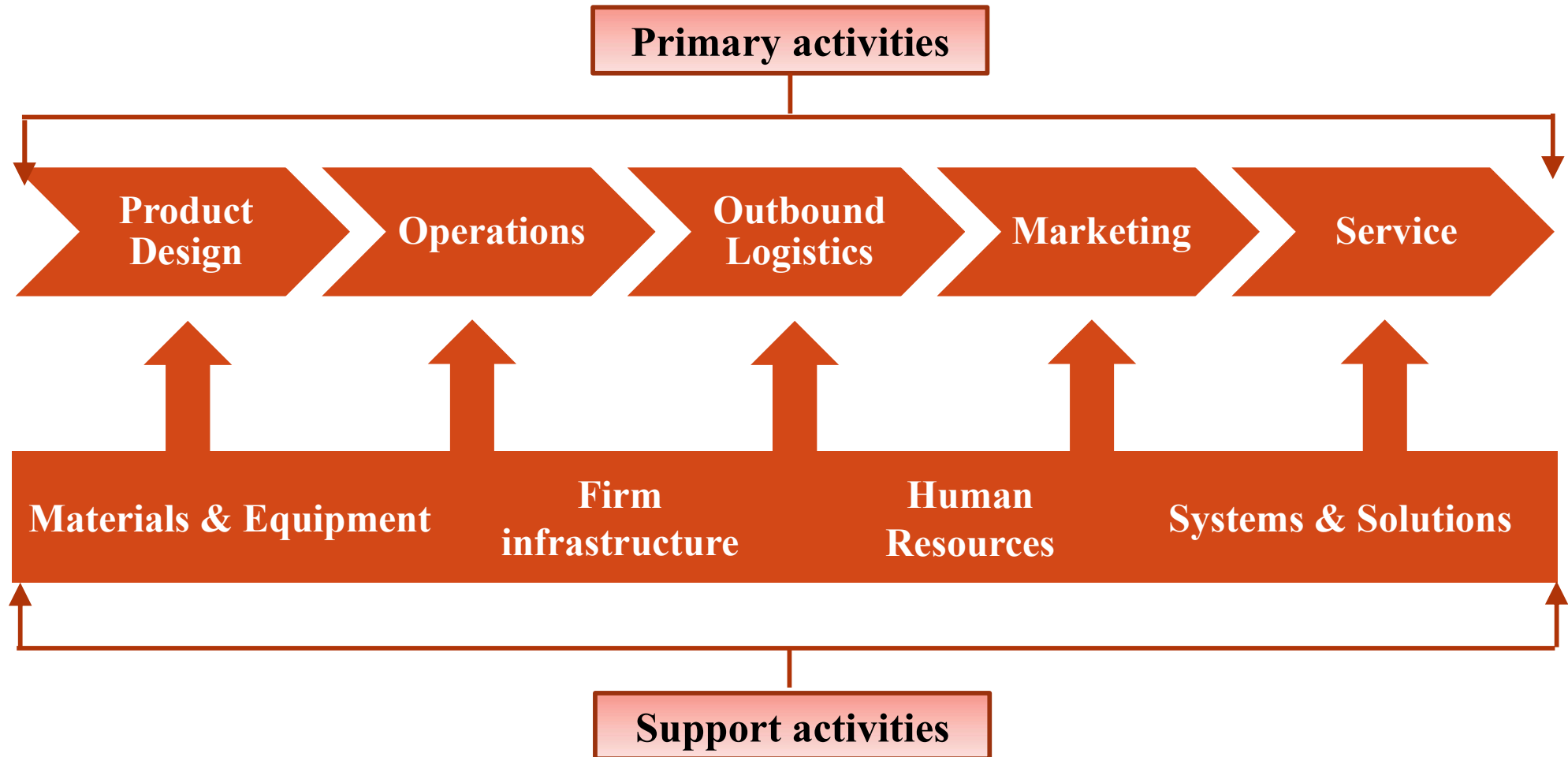
Comments

- > **Resources**
 - R1: Motivated workforce
 - R2: International board
 - R3: Network of partners & consultants**
 - R4: Loyal customers base**
 - R5: Reputation for reliability
- > **Capabilities**
 - C1: Speed of product development
 - C2: Ability to provide customer support**
 - C3: Ability to deliver reliable products**
 - C4: Ability to integrate different customer needs
 - C5: Entrepreneurial drive to develop new products

Applying Resource Analysis: Benchmarking



■ The Firm as Value Chain



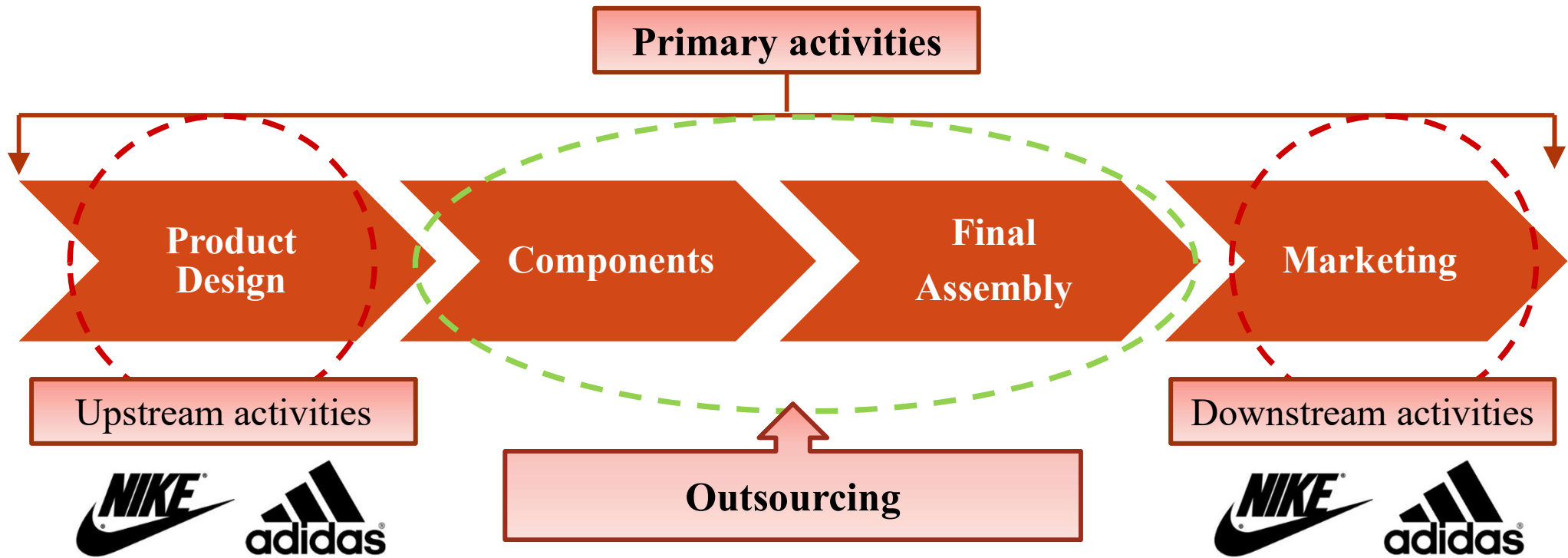
Applying Resource Analysis: Benchmarking



■ How to Overcome a Strategic Weakness?

❖ Application: Outsourcing

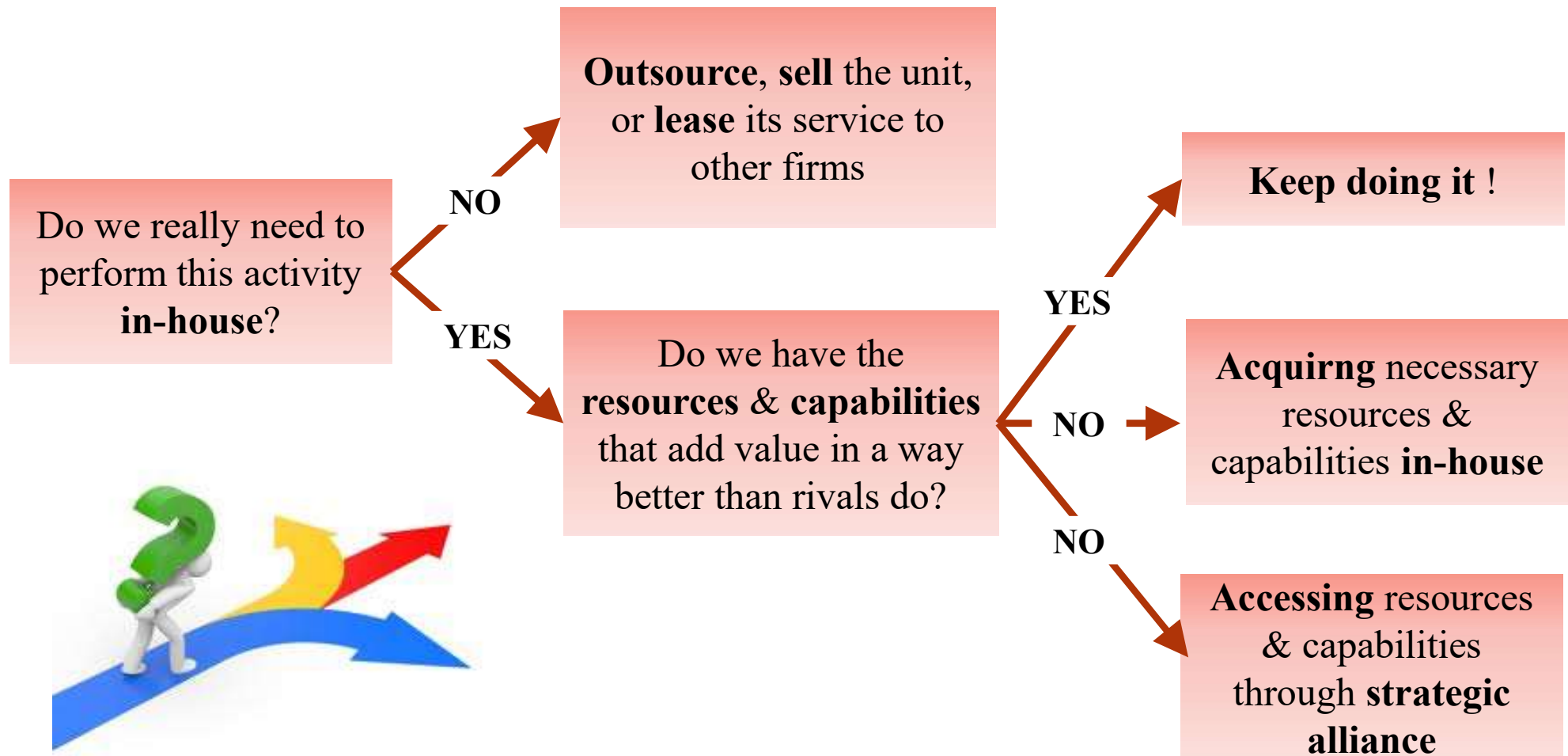
- ... is defined as shifting over an organizational activity to **an outside supplier** that will perform it on behalf of the focal firm.



Applying Resource Analysis: Benchmarking



■ A '2'-Stage Decision Model in Value Chain Analysis



Applying Resource Analysis: Benchmarking



■ Application: Offshoring

		Location of Activity	
		At home	Abroad
Mode of Activity	Internal	Domestic In-house	Captive Offshoring
	External	Domestic Outsourcing	Offshore Outsourcing

KEY WORDS

- > **Offshoring:** Moving an activity to a location abroad
- > **Offshore outsourcing:** Outsourcing to another firm doing the activity abroad
- > **Domestic outsourcing:** Outsourcing to a firm in the same country
- > **Captive offshoring:** Setting up subsidiaries abroad



■ Long-Term Consequences of Offshoring

❖ Offshore Outsourcing

- The offshoring of increasingly high-end services
- Digitalization of service work led Indian firms to get engaged in all sorts of **business process outsourcing**.
- Indian firms' revenues:

€3 billion (1998) => **€40 billion** (2009)

❖ Original Equipment Manufacturer (OEM)

- Offshoring service providers are gradually moving up the value chain.
- Many Asian firms which used to be **original equipment manufacturers** (OEMs) are becoming **original design manufacturers** (ODMs) by executing design blueprints provided by Western firms.



Applying Resource Analysis: Benchmarking



■ From OEM to ODM

OEM



ODM

FOXCONN



FLEXTRONICS

BenQ





1. Introduction
2. Identifying Resources & Capabilities
3. Appraising Resources: The VRIO Framework
4. Applying Resource Analysis: Benchmarking
5. **Implications for Practice**



Implications for Practice



■ Managers

- ❖ Need to understand their resources based on the **VRIO framework** to optimize their resource exploitation.
- ❖ Need continuously create **new resources**, in part by **benchmarking** against the best, & in part by developing entirely new capabilities that go beyond the competitors' state-of-art.

■ Students

- ❖ Are advised to be active, become informed, get involved & be prepared because it is not only **their** debates on globalization & offshoring; it is **yours** as well.
- ❖ Need to be serious about the advice of the resource-based view of the *individuals* (i.e., **personal capabilities** to **prepare career!**).

About Your Career

PROF. DR. NORIFUMI KAWAI, MPIA (Pittsburgh)

Special Topics in Internationalization

Università degli Studi di Bergamo

Dipartimento di Scienze Aziendali

Bergamo, ITALY



■ KPMG

<https://www.kpmgcareers.co.uk/undergraduates>

The End of Today's Lecture



ご清聴有難う御座いました。

Thank you so much!

Vielen Dank für Ihre Aufmerksamkeit!

Grazie mille !

【Contact Address】

ADDRESS: 208 in Via dei Caniana 2, 24127 Bergamo, ITALY

E-mail: norifumi.kawai@unibg.it