

Vertical Integration

Economies of Scale

- Economies of scale are cost advantages companies experience when production becomes efficient, as costs can be spread over a larger amount of goods.

11-1

1

Vertical Integration

Economies of Scale

An economics term that describes a competitive advantage that large entities have over smaller entities.

Manufacturing costs can fall 70% to 90% every time the business doubles its output.

Internal
The sheer size of the company allowing bulk purchases.

External
Receiving preferential treatment from government or other external sources.

Diseconomies of scale can result if a company becomes less efficient.

Large shipping companies can use ships that carry as many goods as 16 freight trains.

the balance

11-2

2

Vertical Integration

Economies of Scale

- Internal economies of scale happen when a company cuts costs internally, so they're unique to that particular firm
 - **Technical**: large-scale machines or production processes that increase productivity
 - **Purchasing**: discounts on cost due to purchasing in bulk
 - **Managerial**: employing specialists to oversee and improve different parts of the production process

11-3

3

Vertical Integration

Economies of Scale

- Internal economies of scale happen when a company cuts costs internally, so they're unique to that particular firm
 - **Risk-Bearing**: spreading risks out across multiple investors
 - **Financial**: higher creditworthiness, which increases access to capital and more favorable interest rates
 - **Marketing**: more advertising power spread out across a larger market, as well as a position in the market to negotiate

11-4

4

Vertical Integration

Economies of Scale

- External economies of scale are achieved because of external factors, or factors that affect an entire industry.
 - These occur when there is a highly-skilled labor pool, subsidies and/or tax reductions, and partnerships and joint ventures—anything that can cut down on costs to many companies in a specific industry.

11-5

5

Vertical Integration

Economies of Scope

- Economies of scope describe situations where producing two or more goods together results in a lower marginal cost than producing them separately.
 - Economies of scope can result from goods that are co-products or complements in production, goods that have complementary production processes, or goods that share inputs to production.

11-6

6

Vertical Integration

Economies of Scope

Four Types

Operational	<u>Economies of scale</u> relate to cost economies from increasing output of a single product .
Financial	
Anticompetitive	<u>Economies of scope</u> relate to cost economies from increasing the output of multiple products .
Managerialism	

11-7

7

Vertical Integration

Economies of Sequence

- The “**economies of sequence**” is defined as building segments in an efficient sequence. Prerequisite conditions on segments comprise those segments that contribute to a reduction in transport costs.

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↓

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graph LR
    P[PPP] --> S[Saw Mill]
    S --> PLY[plywood]
    PLY --> PF[Pulp factory]
    PF --> F[furniture]
    PF --> PP[Power Plant]
    
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11-8

8

Vertical Integration

Economies of Sequence

- Cost of the Value Chain in one firm is lower than that it multiple firms.
 - Lower transportation cost
 - Lower energy cost
 - Better labor utilization
 - Lower inventory

11-9

9

Vertical Integration

Why do firms exist? TCE

Ronald Coase & David Williamson

Transaction Cost Economist

Boundary of the firm.

- According to Ronald Coase's essay "The Nature of the Firm", people begin to organise their production in firms when the **transaction cost** of coordinating production through the market exchange, given imperfect information, is greater than within the firm.

11-10

10

Vertical Integration

Transaction Costs

- Williamson defines transaction costs as the costs of running an economic system of companies, and unlike production costs, decision-makers determine strategies of companies by measuring transaction costs and production costs. Transaction costs are the total costs of making a transaction, including the cost of planning, deciding, changing plans, resolving disputes, and after-sales.

11-11

11

Vertical Integration

Transaction Costs

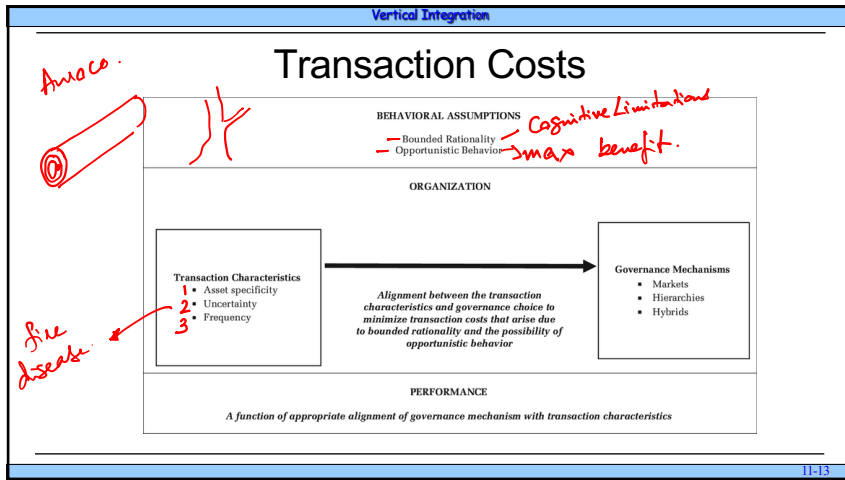
Transaction costs are directly linked to:

- Search & Information Cost (*find supplier*)
- Bargaining Cost (*Purchase*)
- Enforcement (*monitoring*)

Internalise (Employment cost)

11-12

12



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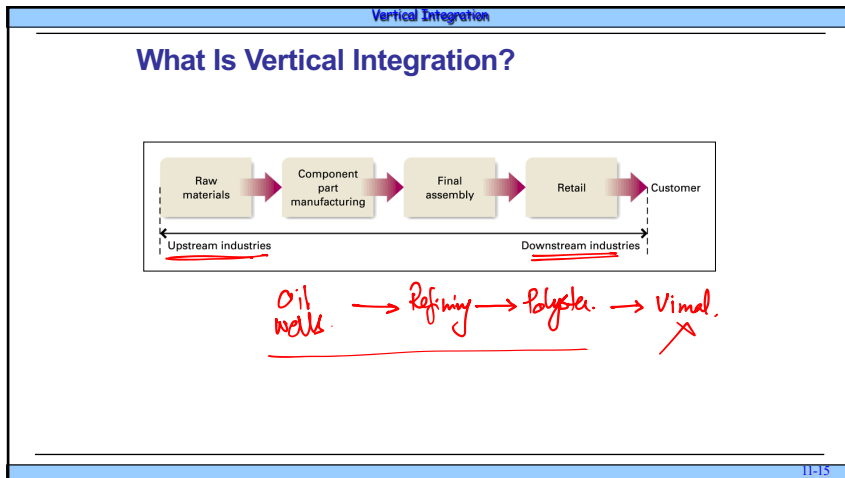
Vertical Integration

What Is Vertical Integration?

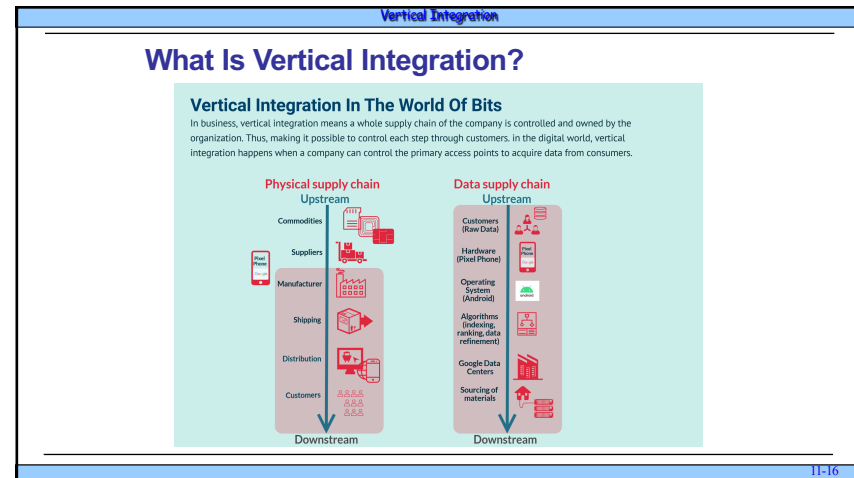
- Vertical integration is a special exponent of unrelated diversification
 - A firm is engaged in several stages of a given industry's value chain
- Existence – why do firms emerge?
- Boundaries – why is the boundary between firms and the market located exactly there as to size and output variety?

11-14

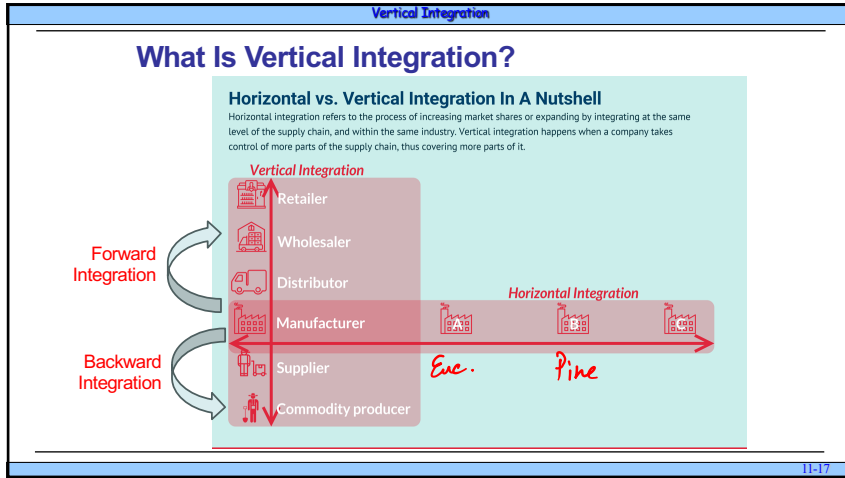
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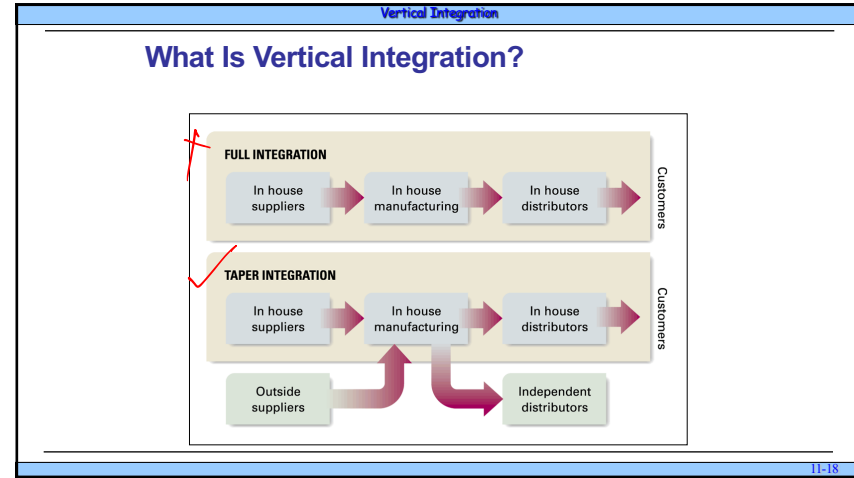
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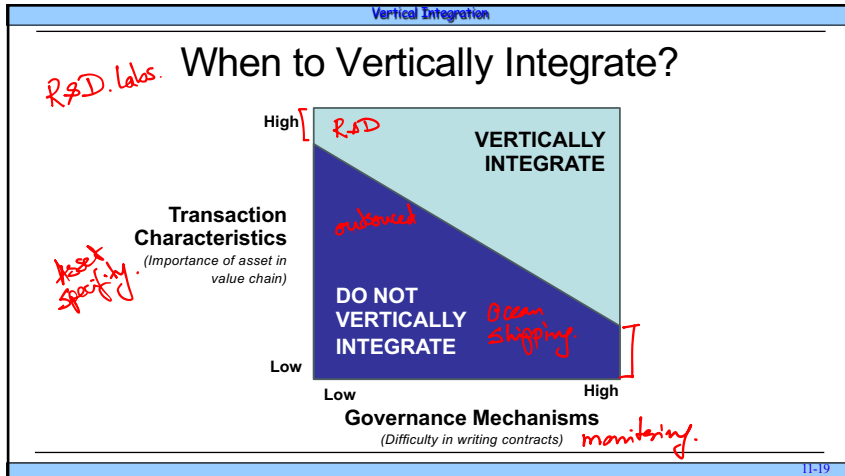
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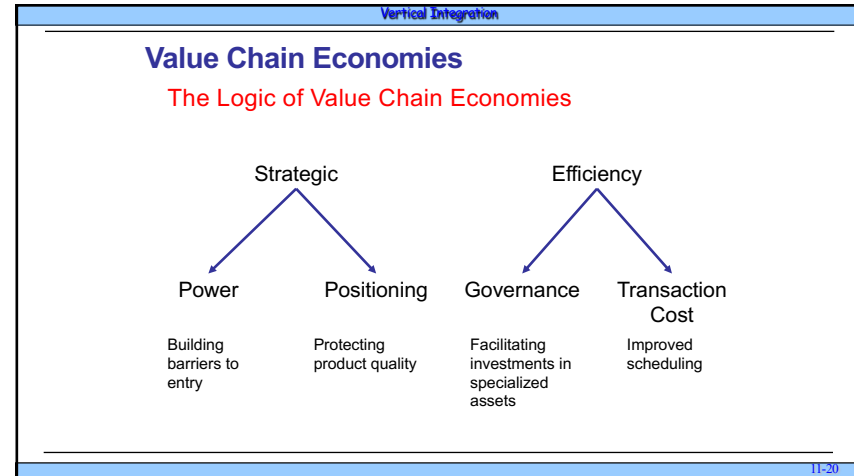
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18



19



20

Vertical Integration

Value Chain Economies

The Logic of Value Chain Economies

Environmental Uncertainty	←	Bounded Rationality
Opportunism	←	Small Numbers
Risk	←	Specific Assets

11-21

21

Vertical Integration

Value Chain Economies

The Logic of Value Chain Economies

- Value migration
- Differentiation
- Customers demand integrated solutions
- Synergies
- Emerging industries
 - Credibility
 - Compatibility/standards

11-22

22

Vertical Integration

Arguments Against Vertical Integration

- Cost disadvantages
 - Company-owned suppliers that have higher costs than external suppliers
- Rapid technological change
 - Tying a company to an obsolescent technology
- Demand unpredictability
 - Difficulty of achieving close coordination among vertically integrated activities
- Bureaucratic costs

23
11-23

23

Vertical Integration

Link to Firm Performance

Theory on TCE and the RBV

<p>advantages of vertical integration</p> <ul style="list-style-type: none"> • higher product quality • protection of proprietary products and technologies • higher customer satisfaction • lower transaction costs due to less dependency on external suppliers 	<p>disadvantages of vertical integration</p> <ul style="list-style-type: none"> • higher production, agency and coordination costs • reduced flexibility and market exit barriers • focus on non-core competencies
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11-24

24

Vertical Integration

Alternatives to Vertical Integration

- Short-term contracts and competitive bidding *bargaining ↓*
- Strategic alliances and long-term contracting *search cost ↓*
- Building long-term cooperative relationships *monitoring ↓*

COMPANY BOUNDARY BEFORE OUTSOURCING

COMPANY BOUNDARY AFTER OUTSOURCING

11-25

25

Vertical Integration

When is Vertical Integration More Attractive than Outsourcing?

How many firms are available to undertake the activities?	→ The fewer the companies the more attractive is VI
Is transaction-specific investment needed? <i>asset specificity</i>	→ If yes, VI more attractive
Does limited information permit cheating? <i>monitoring</i>	→ VI can limit opportunism
Are taxes or regulation imposed on transactions?	→ VI can avoid them

11-26

26

Vertical Integration

When is Vertical Integration More Attractive than Outsourcing?

Do the different stages have similar optimal scales of operation? <i>output₁ → input₂ → output₂ → input₃</i>	→ Greater the similarity, the more attractive is VI
Are the two stages strategically similar? <i>Related</i>	→ Greater the strategic similarity ---the more attractive is VI
How great the need for entrepreneurship & continual upgrading of capabilities? <i>Capex ↑</i>	→ Greater the need, the greater the disadvantages of VI
How uncertain is market demand? <i>cyclicality</i>	→ Greater the unpredictability ---the more costly is VI
Are risks compounded by linkages between vertical stages? <i>uncertainty</i>	→ VI increases risk.

11-27

27

Vertical Integration

Summary

Vertical Integration...

- makes sense when value chain economies can be created and captured
- may allow a firm to leverage capabilities
- may be a response to the threat of opportunism and uncertainty
- as a form of exchange *per se*, is not rare nor costly to imitate

11-28

28