



Savoir-faire  
LINUX

# Competing with Technology and Innovation

*Small Business Digitization Initiative (SBDI) - Day 2*

By Marc Lijour

March 21, 2017



*The registered trademark Linux® is used pursuant to a sublicense from LMI, the exclusive licensee of Linus Torvalds, owner of the mark on a world-wide basis.*

# Table of Contents

- 1 Introduction to Business Strategy
  - What is Strategy?
  - The External View (where to fish)
  - The Internal View (be the best)
  - Competitive Strategies

# Introduction to Business Strategy

## The origins of Strategy

- “The Art of War” from Sun Tzu (5-4<sup>th</sup> century BC)

# Introduction to Business Strategy

## The origins of Strategy

- “The Art of War” from Sun Tzu (5-4<sup>th</sup> century BC)
- Greek stratēgia (Office of General)

# Introduction to Business Strategy

## The origins of Strategy

- “The Art of War” from Sun Tzu (5-4<sup>th</sup> century BC)
- Greek stratēgia (Office of General)
- Business Strategy becomes popular after WWII and with the creation of Business Schools

# Introduction to Business Strategy

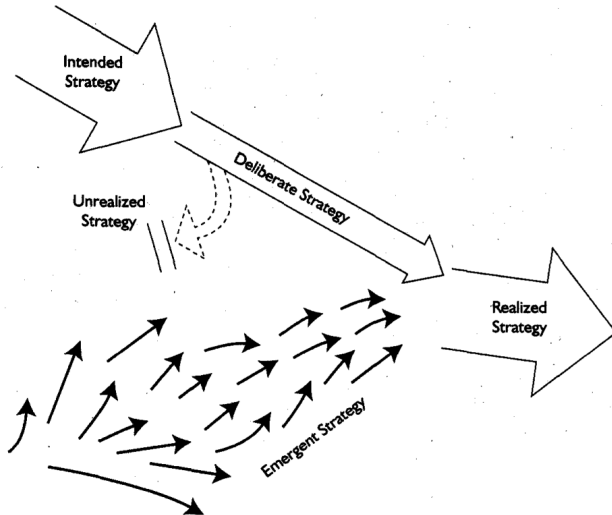
## The meaning of Strategy

### Caffeine Boost

Compare the strategy of Starbucks vs. Tim Hortons.

# Introduction to Business Strategy

Different ways to think about Strategy (Mintzberg, Ahlstrand, Ahlstrand, and Lampel, 2005)



# Introduction to Business Strategy

The 5 Ps of Strategy (Mintzberg et al., 2005)

- Strategy as a Plan (*looking ahead to the future*)



# Introduction to Business Strategy

The 5 Ps of Strategy (Mintzberg et al., 2005)

- Strategy as a Plan (*looking ahead to the future*)
- Strategy as a Pattern (*looking at where we've been going*)

# Introduction to Business Strategy

The 5 Ps of Strategy (Mintzberg et al., 2005)

- Strategy as a Plan (*looking ahead to the future*)
- Strategy as a Pattern (*looking at where we've been going*)
- Strategy as a Position (*placing products on specific markets*)

# Introduction to Business Strategy

The 5 Ps of Strategy (Mintzberg et al., 2005)

- Strategy as a Plan (*looking ahead to the future*)
- Strategy as a Pattern (*looking at where we've been going*)
- Strategy as a Position (*placing products on specific markets*)
- Strategy as a Perspective (*a somewhat personal way of doing things*)

# Introduction to Business Strategy

The 5 Ps of Strategy (Mintzberg et al., 2005)

- Strategy as a Plan (*looking ahead to the future*)
- Strategy as a Pattern (*looking at where we've been going*)
- Strategy as a Position (*placing products on specific markets*)
- Strategy as a Perspective (*a somewhat personal way of doing things*)
- Strategy as a Ploy (*acting as a mean to an end*)

# Introduction to Business Strategy

Technology, Innovation, and Strategy

## Opportunity

Technological Innovation creates new opportunities for strategic players.

# Introduction to Business Strategy

## Business Goals

### Discussion

What is the main purpose of a business?

# Introduction to Business Strategy

Two ways to create Value

- 1 Production
- 2 Commerce (*arbitrage*)

# Introduction to Business Strategy

## Most Profitable Industries –by Net Profit Margin (Haden, 2016)

- 1 Accounting, tax prep, bookkeeping, payroll services: 18.3%
- 2 Legal services: 17.4%
- 3 Lessors of real estate: 17.4%
- 4 Outpatient care centers: 15.9%
- 5 Offices of real estate agents and brokers: 14.8%
- 6 Offices of other health practitioners: 14.2%
- 7 Offices of dentists: 14.1%
- 8 Specialized design services: 12.8%
- 9 Automotive equipment rental and leasing: 12.5%
- 10 Activities related to real estate: 12.3%



# Introduction to Business Strategy

## Estimating Profit

### Discussion

Should we start an accounting business?

# Introduction to Business Strategy

## Estimating Profit

① Accounting Profit = Total Revenue - Total Cost

# Introduction to Business Strategy

## Estimating Profit

- 1 Accounting Profit = Total Revenue - Total Cost
- 2 Net Profit Margin = Accounting Profit / Total Revenue

# Introduction to Business Strategy

## Estimating Profit to make Strategic Investment Decisions

- Projects should not be funded which return is less than the return on capital

### Economic Value Added (EVA)

$$\mathbf{EVA} = \text{Accounting Profit} - \text{Cost of Capital} - \text{Taxes}$$

*EVA originated at Stern Stewart & Company (New York).*

# Introduction to Business Strategy

## Estimating Enterprise Value

$$V = \sum_t \frac{C_t}{(1 + r)^t} \quad (1)$$

- V: Value of the Business
- $C_t$ : Cash Flow at year t
- r: discount rate i.e. weighted average cost of capital (WACC)

# Introduction to Business Strategy

## Various ways to assess value

- Economic Profit (Milton Friedman: “the one and only one social responsibility of business [is] to increase its profits”)

# Introduction to Business Strategy

## Various ways to assess value

- Economic Profit (Milton Friedman: “the one and only one social responsibility of business [is] to increase its profits”)
- Triple Bottom Line (e.g. GRI Reporting) also looks at Social and Environmental value

# Introduction to Business Strategy

## Various ways to assess value

- Economic Profit (Milton Friedman: “the one and only one social responsibility of business [is] to increase its profits”)
- Triple Bottom Line (e.g. GRI Reporting) also looks at Social and Environmental value
- Companies with a good track record of providing shareholder value generally have a mission transcending pure economic profit



# Introduction to Business Strategy

## Values, Vision, and Mission Statements

- Values: what a business stands for (honesty, quality, innovation...), can be ethical

# Introduction to Business Strategy

## Values, Vision, and Mission Statements

- Values: what a business stands for (honesty, quality, innovation...), can be ethical
- Vision: what a company wishes to become

# Introduction to Business Strategy

## Values, Vision, and Mission Statements

- Values: what a business stands for (honesty, quality, innovation...), can be ethical
- Vision: what a company wishes to become
- Mission: more concrete, corporate purpose in the near future

# Introduction to Business Strategy

## Values, Vision, and Mission Statements

- Values: what a business stands for (honesty, quality, innovation...), can be ethical
- Vision: what a company wishes to become
- Mission: more concrete, corporate purpose in the near future
- Goals: general targets

# Introduction to Business Strategy

## Two ways of Achieving Profitability

- 1 Operate in an attractive industry
- 2 Establishing a competitive advantage over rivals (*better*)

How to find the best position to generate profit?

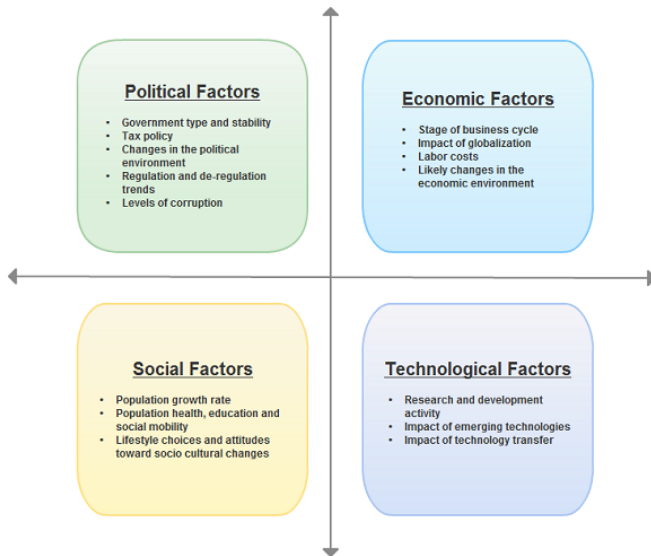
# The External View

## Intensity of Competition

- Minimum (near zero): Monopoly
- More competition: Oligopoly
- Perfect competition: a wide range of players, with limited barriers to enter or to exit

# The External View

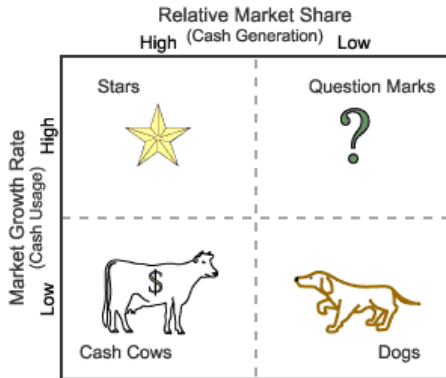
## PEST Analysis (Creately, 2012)





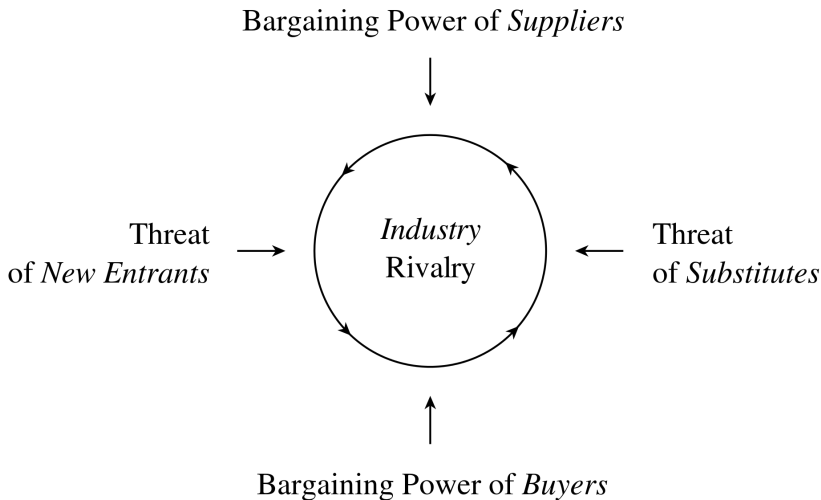
# The External View

BCG Matrix (Source: Management Study Guide)



# The External View

Porter 5 Forces (Art by Denis Fadeev [CC BY-SA 3.0], via Wikimedia Commons)



# The External View

A 6<sup>th</sup> force to Porter's model

## Bargaining Power of Complements

Complements have the power to generate network externalities and winner-take-all markets. Their bargaining power can influence an industry's competitive environment. The more differentiated and rare, the more power. The more commoditized and in excess capacity, the less power (e.g. IBM PC and Windows OS).

# The External View

Key Success Factors to gain Competitive Advantage

- Firms compete for a share of the industry pie:

# The External View

## Key Success Factors to gain Competitive Advantage

- Firms compete for a share of the industry pie:
  - What do customers want? (Demand side)

# The External View

## Key Success Factors to gain Competitive Advantage

- Firms compete for a share of the industry pie:
  - What do customers want? (Demand side)
  - What does the firm need to do to survive competition? (Competition on the Supply side)

# The External View

## Key Success Factors to gain Competitive Advantage

- Firms compete for a share of the industry pie:
  - What do customers want? (Demand side)
  - What does the firm need to do to survive competition? (Competition on the Supply side)
- Key Success Factors: derive from the above two

# The External View

## Examples of Key Success Factors to gain Competitive Advantage (Grant, 2006)

	What do Customers want?	How do Firms survive competition?	Key Success Factors
Steel	<ul style="list-style-type: none"> <li>Low price</li> <li>Product consistency</li> <li>Reliability of supply</li> <li>Specific technical specs</li> </ul>	<ul style="list-style-type: none"> <li>Commodity products, excess capacity, high fixed costs, exit barriers, and substitute competition mean intense price competition and cyclical profitability</li> <li>Cost efficiency and strong financial resources are essential</li> </ul>	<ul style="list-style-type: none"> <li>Conventional sources of cost efficiency include: large-scale plants, low-cost locations, rapid adjustment of capacity to output</li> <li>Alternatively, high technology, small scale plants can achieve low costs through flexibility and high productivity</li> <li>Differentiation through technical specifications and service quality</li> </ul>
Fashion clothing	<ul style="list-style-type: none"> <li>Wide variety of customer preferences relating to garment type, style, quality, colour</li> <li>Customers willing to pay price premium for brand, stylishness, exclusivity, and quality</li> <li>Mass market highly price sensitive</li> </ul>	<ul style="list-style-type: none"> <li>Low barriers to entry and exit, low seller concentration, and buying power of retail chains imply intense competition</li> <li>Differentiation can yield substantial price premium, but imitation is rapid</li> </ul>	<ul style="list-style-type: none"> <li>Need to combine effective differentiation with low costs</li> <li>Key differentiation variables are speed of response to changing high fashions, style, reputation, and quality</li> <li>Cost efficiency requires manufacture in low wage countries</li> </ul>



# The External View

Examples of Key Success Factors to gain Competitive Advantage (Grant, 2006)

What do Customers want?	How do Firms survive competition?	Key Success Factors
Supermarkets		
<ul style="list-style-type: none"><li>● Low prices</li><li>● Convenient location</li><li>● Wide range of products adapted to local preferences</li><li>● Fresh/quality produce; good service; ease of parking; pleasant ambiance</li></ul>	<ul style="list-style-type: none"><li>● Markets localized</li><li>● Intensity of price competition depends on number and proximity of competitors</li><li>● Bargaining power is a critical determinant of cost of bought-in goods</li></ul>	<ul style="list-style-type: none"><li>● Low-cost operation requires operational efficiency, scale-efficient stores, large aggregate purchases to maximize buying power, low wage costs</li><li>● Differentiation requires large stores (to allow wide product range), convenient location, easy parking</li></ul>

# The External View

## Exercise

### Industry Analysis

Analyse the industry that focuses on IT systems addressing the 8 business functions that we'll be studying in this course. Select the top 2 competitors and explain their strategy, as well as Odoo SA's (the editor of Odoo).

# How to build and maintain a competitive advantage?

# The Internal View

## Leveraging Internal Resources & Capabilities

- Select a strategy that leverages a firm's key strengths (e.g. Kodak)

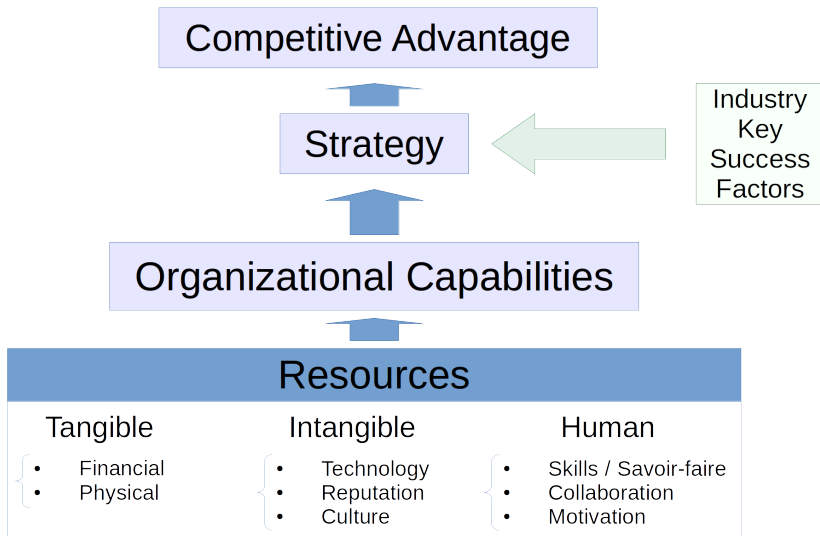
# The Internal View

## Leveraging Internal Resources & Capabilities

- Select a strategy that leverages a firm's key strengths (e.g. Kodak)
- Develop its resources & capabilities (e.g. WIPRO)

# The Internal View

Resources  $\neq$  Capabilities (Grant, 2006)



# The Internal View

Some Resources ( $\neq$  Capabilities) (Grant, 2006)

Tangible Resources	Characteristics	Key Indicators
Financial Resources	Firm's borrowing capacity and internal funds generation determining its capacity for investment	<ul style="list-style-type: none"><li>Debt/Equity ratio</li><li>Operating Cash Flow</li><li>Credit Rating</li></ul>
Physical Resources	<p>Constrain the firm's set of production possibilities and impact its cost position. Key characteristics include:</p> <ul style="list-style-type: none"><li>size, location, technical sophistication, and flexibility of plant and equipment</li><li>location and alternative uses for land and buildings</li><li>reserves of raw materials</li></ul>	<ul style="list-style-type: none"><li>Market values of fixed assets</li><li>Vintage of capital equipment</li><li>Scale of plants</li><li>Flexibility of fixed assets</li></ul>

# The Internal View

Some Resources ( $\neq$  Capabilities) (Grant, 2006)

Intangible Resources	Characteristics	Key Indicators
Technological Resources	<ul style="list-style-type: none"><li>● Intellectual property, patent portfolio, copyright, trade secrets</li><li>● Resources for innovation: research facilities, technical and scientific employees</li></ul>	<ul style="list-style-type: none"><li>● Number and significance of patents</li><li>● Revenue from licensing patents and copyright</li><li>● R&amp;D staff as a percentage of total employment</li><li>● Number and location of research facilities</li></ul>
Reputation	<ul style="list-style-type: none"><li>● Reputation with customers through the ownership of brands and trademarks; established relationships with customers; the reputation of the firm's products and services for quality and reliability</li><li>● The reputation of the company with suppliers, government, and the community</li></ul>	<ul style="list-style-type: none"><li>● Brand recognition</li><li>● Brand equity</li><li>● Percentage of repeat buying</li><li>● Objective measures of comparative product performance (e.g. J.D. Power ratings)</li><li>● Surveys of corporate reputation (e.g. <i>Fortune</i>)</li></ul>



Savoir-faire  
LINUX



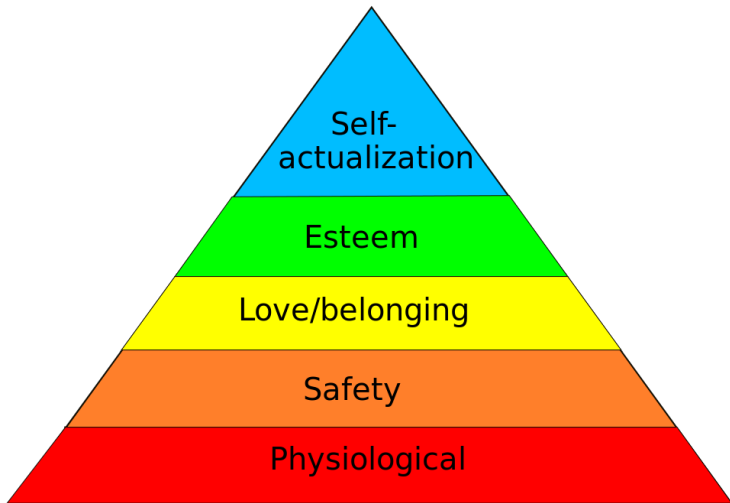
# The Internal View

Some Resources ( $\neq$  Capabilities) (Grant, 2006)

Human Resources	Characteristics	Key Indicators
	<ul style="list-style-type: none"><li>● The education, training and experiences of employees determine the skills available to the firm</li><li>● The adaptability of employees contributes to the strategic flexibility of the firm. The social and collaborative skills of employees determine the capacity of the firm to transform human resources into organizational capabilities.</li><li>● the commitment and loyalty of employees determine the capacity of the firm to attain and maintain competitive advantage</li></ul>	<ul style="list-style-type: none"><li>● Educational, technical, and professional qualifications of employees</li><li>● Compensation relative to industry</li><li>● Percentage of days lost through stoppages and industrial disputes</li><li>● Absentee rates</li><li>● Employee turnover rates</li></ul>

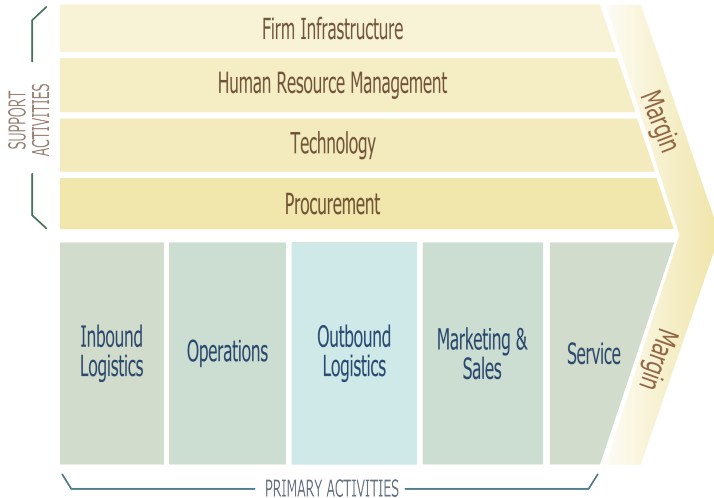
# The Internal View

Maslow's Hierarchy of Needs (Art by FireflySixtySeven [CC BY-SA 4.0], via Wikimedia Commons)



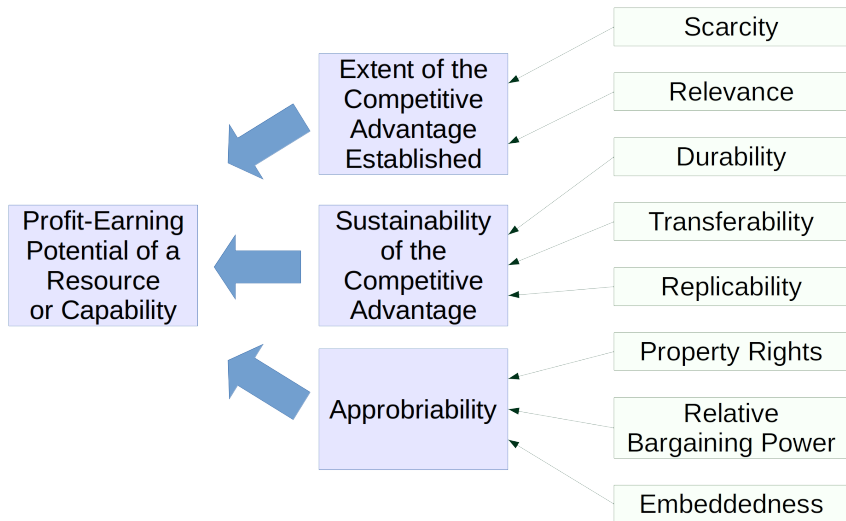
# The Internal View

Porter Value Chain Analysis (Art by Dinesh Pratap Singh [CC BY-SA 3.0], via Wikimedia Commons)



# The Internal View

## Rent-Earning Potential of Resources & Capabilities (Grant, 2006)



# The Internal View

## Practical Steps

- ➊ Identify key resources & capabilities
  - ➊ Start by identifying the key success factors (demand side)
  - ➋ Identify which resources and capabilities are mobilized in relations to these
  - ➌ Identify the capabilities in the company's value chain and which resources they draw from (supply side)
- ➋ Estimate resources & capabilities across two dimensions:
  - ➊ importance
  - ➋ strength
- ➌ Develop strategy implications
  - ➊ Exploit key strengths
  - ➋ Manage key weaknesses
  - ➌ Deal with superfluous strengths
- ➍ Build & Strengthen resources and capabilities

# The Internal View

## VW as an hypothetical Example –Part 1: Resources (Grant, 2006)

Resources	Importance	VW's Strength	Comments
R1. Finance	6	4	VW's capital investment exceeds operating cash flows. Deb/equity ratio is high compared to the industry
R2. Technology	7	5	Despite technical strengths, VW is not a leader in automotive technology
R3. Plant and equipment	8	8	Has invested heavily in upgrading plants
R4. Location	7	4	Plants in low cost, growth markets (China, Mexico), but German manufacturing base is very high cost
R5. Distribution (dealer-ship network)	8	5	Geographically extensive distribution with special strength in emerging markets. Historically weak in the US.

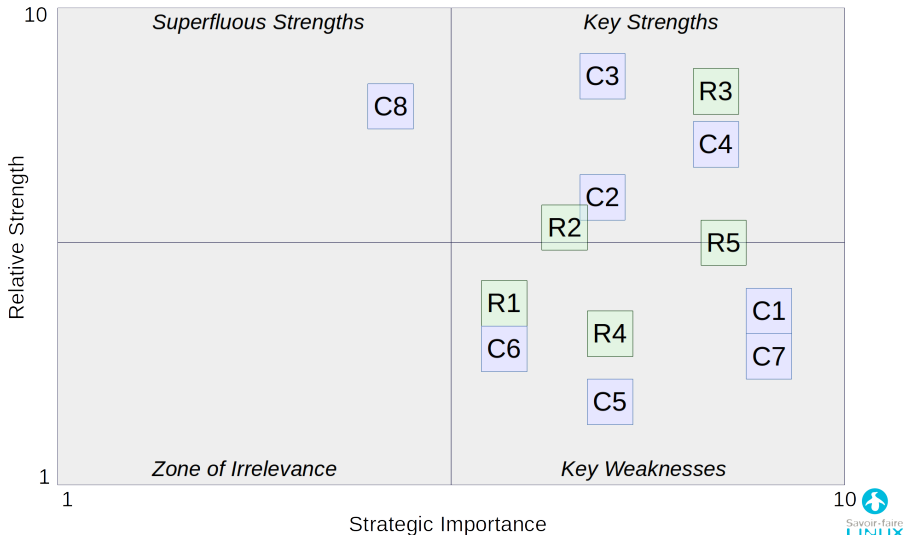
# The Internal View

## VW as an hypothetical Example –Part 2: Capabilities (Grant, 2006)

Capabilities	Importance	VW's Strength	Comments
C1. Product development	7	5	Traditionnally weak at VW. Major hits are few (e.g. Beetle in 1938, Golf in 1974). Despite recent up-grading, results are still low compared to Toyota.
C2. Purchasing	7	5	Traditionnaly weak –strengthened by senior hires from Opel and elsewhere.
C3. Engineering	7	9	The core technical strength of VW.
C4. Manufacturing	8	7	Problems of inflexibility, and indifferent quality largely resolved during the 90s.
C5. Financial management	6	3	Has traditionally lacked a strong financial orientation.
C6. R&D	6	4	A comparative strength of VW but becoming less important as technology shifts increasingly to suppliers.
C7. Marketing and sales	9	4	Despite traditional weakness in recognizing and meeting customer needs in different national markets, VW has increased its sensitivity to the market, improved brand management and managed its advertising and promotion with increasing dexterity.
C8. Government relations	4	8	Important in emerging markets.

# The Internal View

Sample Appraisal (Grant, 2006)

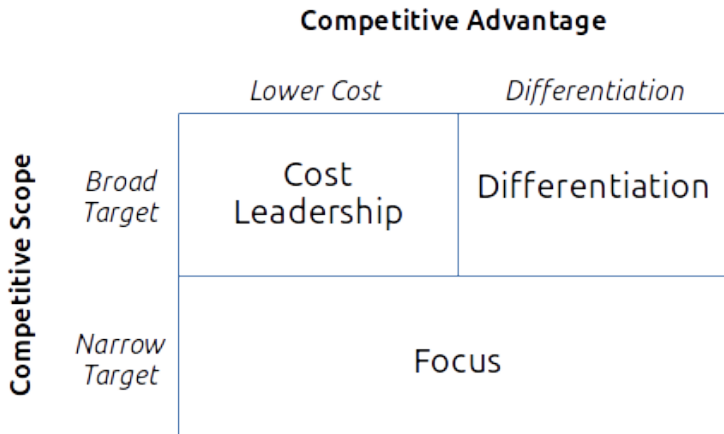




## How to play the game?

# Competitive Strategies

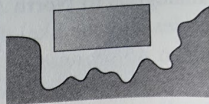
## Porter's Generic Strategies



# The Internal View

Strategy –the Big Picture (Mintzberg, Ahlstrand, and Lampel, 2008)

**Commodity strategy** targets a (perceived) mass market with a single, standardized product



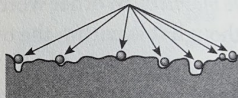
**Segmentation strategy** targets a (perceived) segment market with a range of products, geared to each of the different segments



**Niche strategy** targets a small isolated market segment with a sharply delineated product



**Customization strategy** (the ultimate in both niching and segmentation designs or tailors each specific product to one particular customer need, such as the architecturally designed home)



# Introduction to Strategy

## References

<http://valuebasedmanagement.net>

<http://www.real.gold.ac.uk/essayguide/index.html>

Grant, R. M. (2006). *Contemporary strategy analysis* (5th ed.). Malden, MA: Blackwell Publishing.

Haden, J. (2016, November). The 15 Most Profitable Industries to Start a Business (and the 15 Least Profitable).

<http://www.inc.com/jeff-haden/the-15-most-profitable-industries-to-start-a-business-and-the-15-least-profitabl.html>.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (2008). *Strategy bites back: it is far more, and less, than you ever imagined*. Prentice Hall Higher Education.

Mintzberg, H., Ahlstrand, B., Ahlstrand, B., & Lampel, J. (2005). *Strategy safari: a guided tour through the wilds of strategic mangament*. Free Press.