

Information Technology in Business and Society

- IT Disruption: Industry Analysis

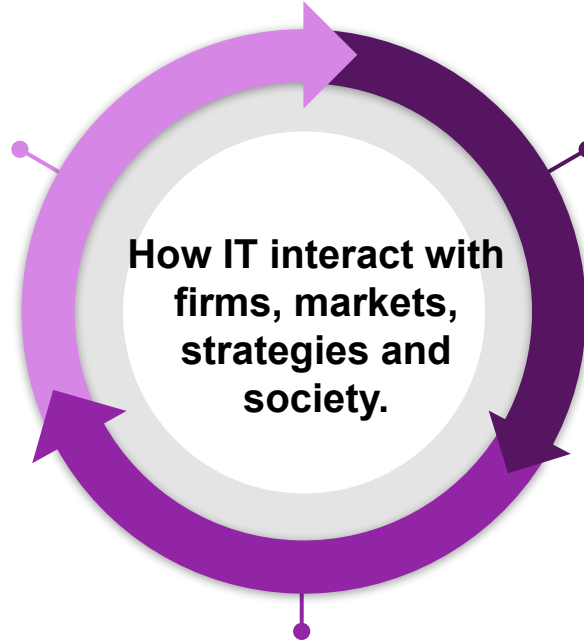
Pearl Yu



Information Technology

Module II: IT Disruption

- Emerging techs.
- How does IT changes the business and social world?



Introduction: Value of IT

- Conceptualizing IT's roles in organizations.

Module I: IT Management

- How to properly developing and managing IT projects or vendors?

Outline

- Apple & its competitors
- Five Forces
- Smart Phone or Auto?

Apple and its competitors



Apple and its competitors



Apple - iOS

- Apple's iOS mobile operating system, released with the first-generation iPhone on June 29, 2007



Apple



Apple - iOS vs Android

- What are the key differences?

Apple - centralized control over IOS and apps.

More in-app purchases.

High cost, high return, high vertical integration

High profitability.



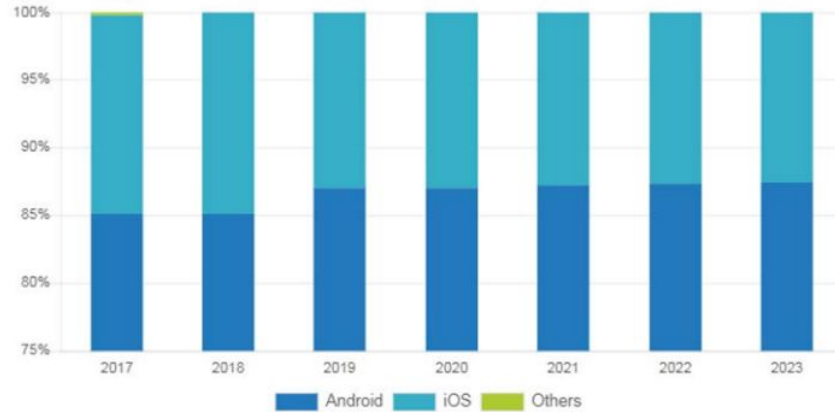
Google - open-source model. Source code is public.

More ads.

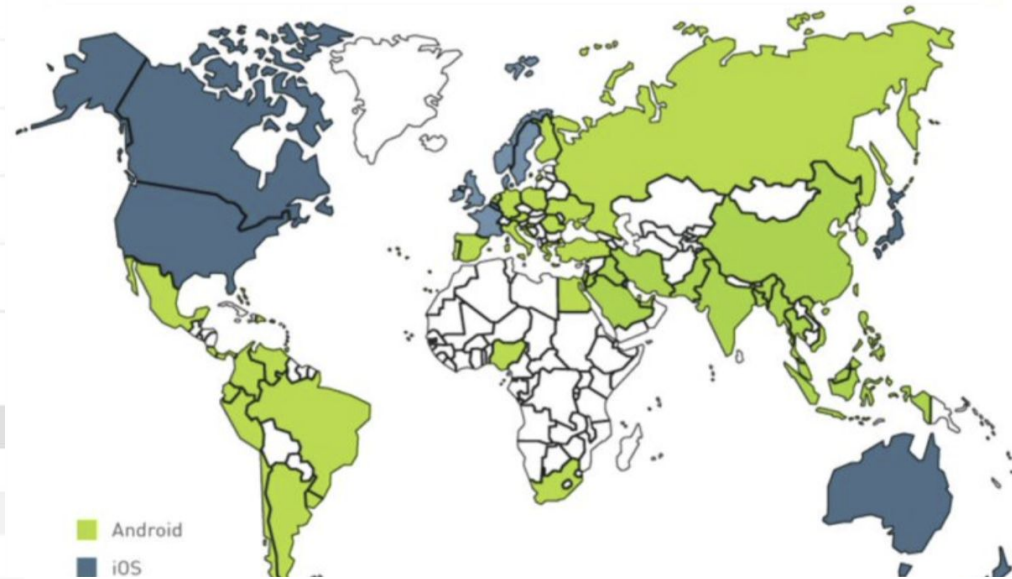
Low cost, low return, horizontal integration

High market share.

iOS vs Android - Global Market Share



Year	2017	2018	2019	2020	2021	2022	2023
Android	85.1%	85.1%	87.0%	87.0%	87.2%	87.3%	87.4%
iOS	14.7%	14.9%	13.0%	13.0%	12.8%	12.7%	12.6%
Others	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Apple vs. Android



Apple vs. Android



Apple vs. Android



Apple vs. Android

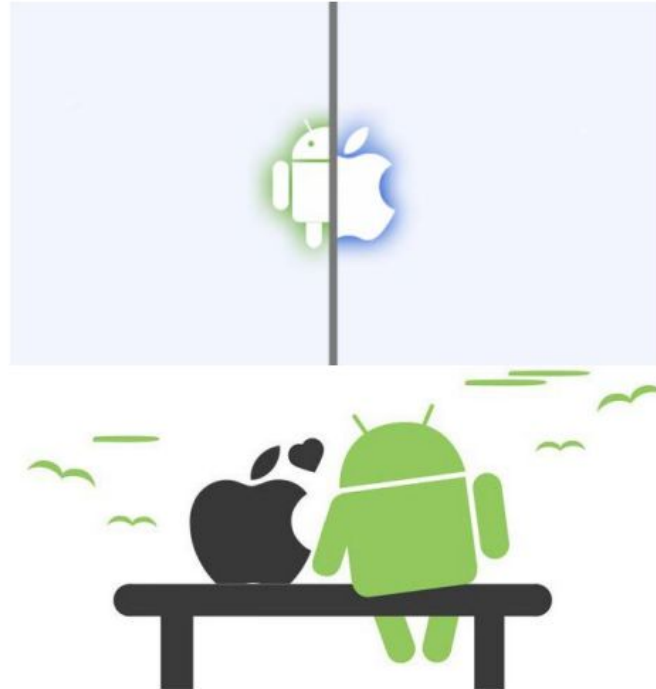


Apple vs. Android



Co-opetition Strategy

- A strategy of cooperating and competing simultaneously



Apple: What's Next

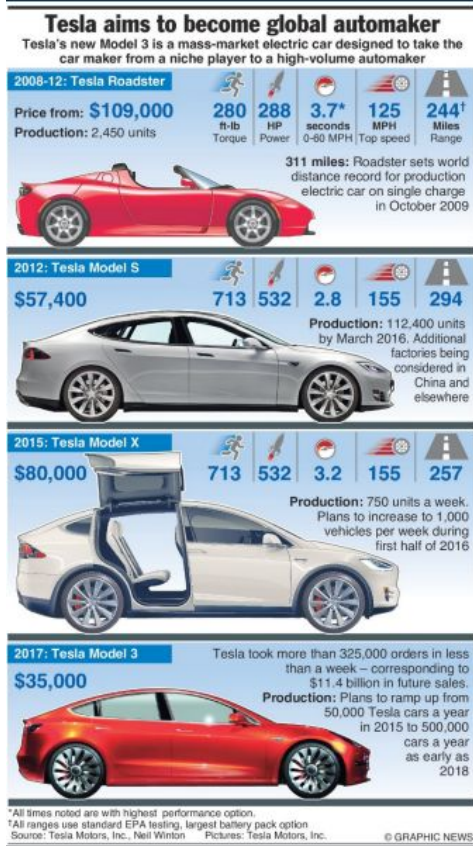
- Should Apple enter the auto industry?



Apple Car?



Apple Car - Tesla



- Founded in 2003 by Elon Musk, initially focusing on niche market
- 2010 Nasdaq IPO: the first automaker IPO after Ford (50+ years ago)
- Model S: The most popular luxury vehicle in North America
- Model 3 / Y: Targeting global mainstream

Car: Industry Rivalry - Incumbents

- Crowded market, high level of competition
- New entrants: NIO, Rivian, Lucid Motors...

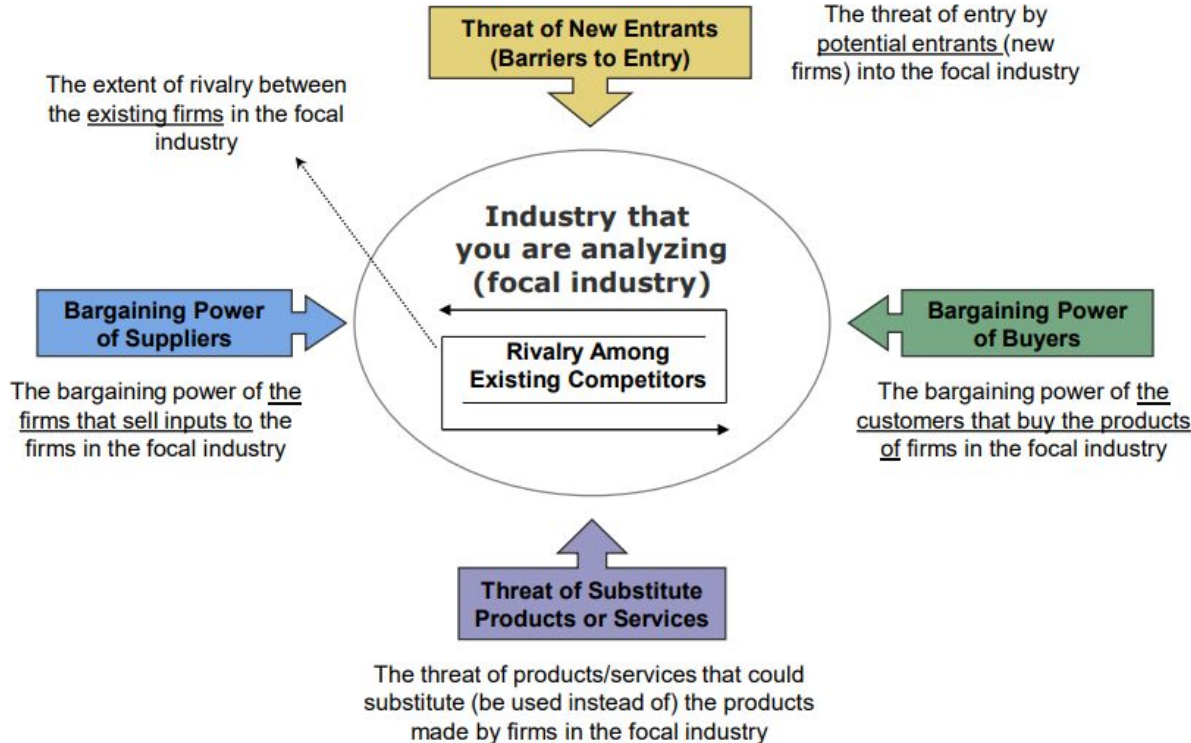


New Entrants: Google, Sony, Amazon...



Industry Analysis: Five Forces

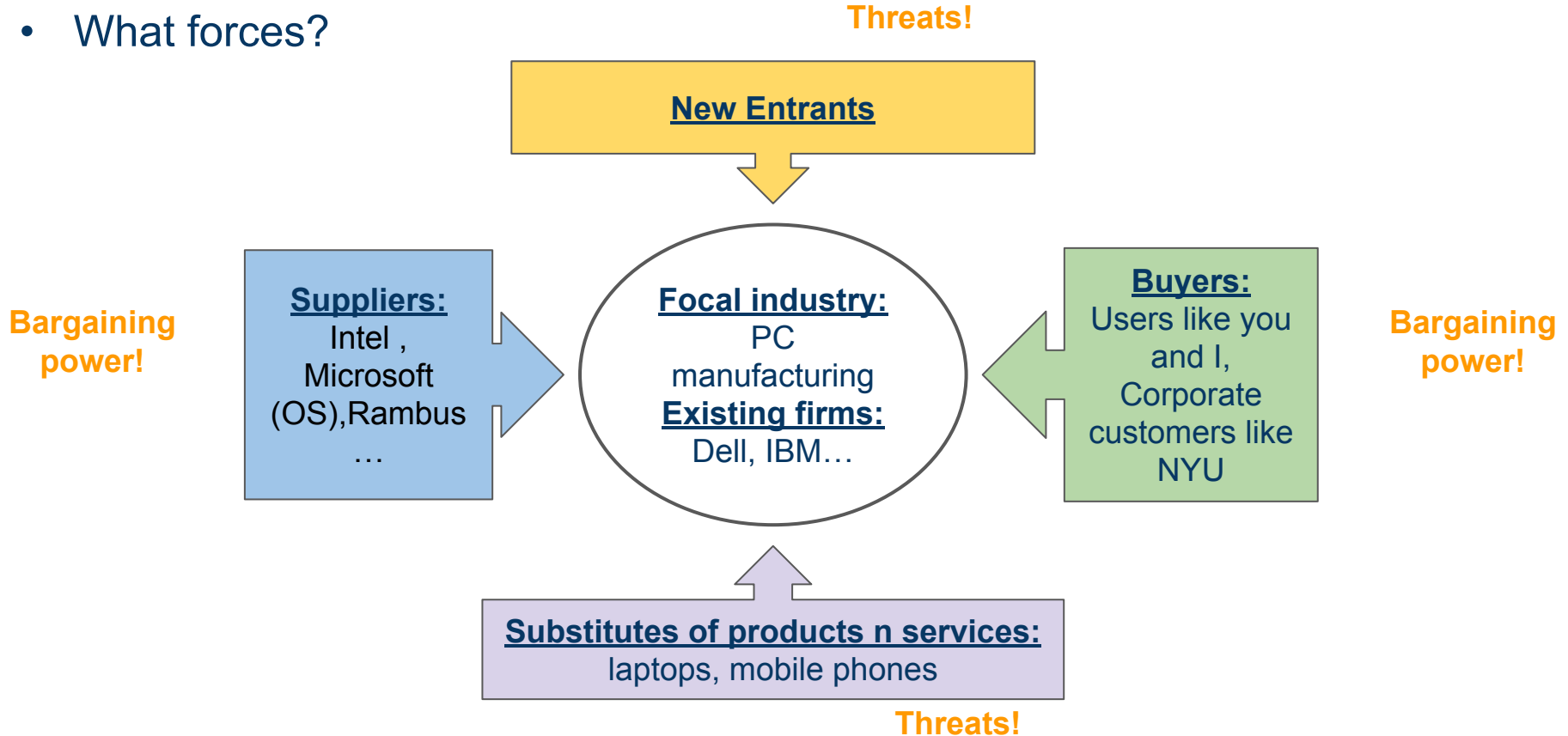
- How attractive an industry is?



- Competition is often looked too narrowly.
- Aside from direct competitors, you're fighting with a broader set of competitors.

Industry Analysis: Five Forces

- What forces?



Intra-Industry Rivalry

How does the force impact profits?
Assess the five forces.

Intra-industry rivalry decreases profits

- Price competition

Some factors that increase intra-industry rivalry

- Many firms in the industry
- Competing firms offer similar products, low differentiation



Intra-Industry Rivalry

- High industry rivalry example: F&B



- Low industry rivalry example: Telecom



Bargaining Power of Buyers

How does the force impact profits?
Assess the five forces.

When buyers have power, you can't raise prices.

Some factors that increase buyer power

- Buyers purchase in large volumes (Walmart as a buyer)
- Buyers can easily switch to a competitor (ZARA <-> H&M)
- Buyers know a lot about rivals' prices (tripadvisor -> profit margin of hotels)

Walmart
Save money. Live better.

ZARA

tripadvisor

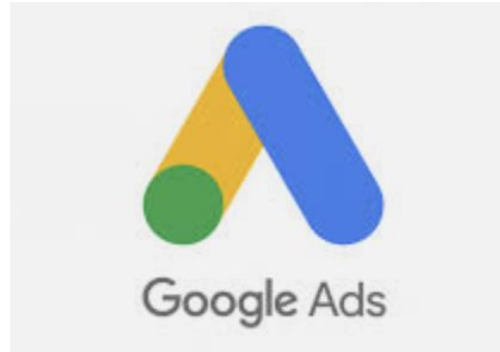


Bargaining Power of Buyers

- High buyer power industry example: Airline during COVID-19



- Low buyer power industry example: Google Ads



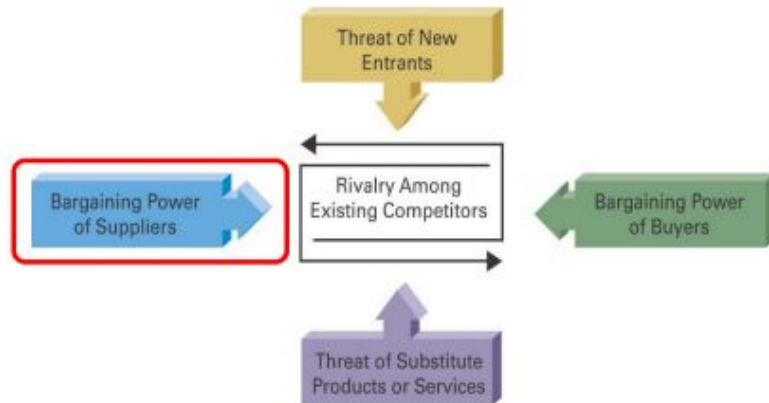
Bargaining Power of Suppliers

How does the force impact profits?
Assess the five forces.

When Suppliers have power, costs are higher

Some factors that increase bargaining power of suppliers

- There are a few large suppliers (chip manufacturers as suppliers: Intel, AMD...)
- If buyers find it difficult to switch from existing suppliers (Microsoft as supplier)



Bargaining Power of Suppliers

- High supplier power industry example: Aerospace manufacturing



- Low supplier power industry example: Supermarket



Threat of New Entrants

How does the force impact profits?
Assess the five forces.

If the threat of new entrants is high, firms must lower prices.

Some factors that decrease the threat of new entrants

- Economies of scale (large investments: Telecommunication, utilities!)
- Learning experience curves (skilled labor: pharma)
- Brand identity (soft drinks, Fashion)
- Government Policy



Threat of New Entrants

- High threat of new entrant example: online retail



- Low threat of new entrant example: shipbuilding



Threat of Substitutes

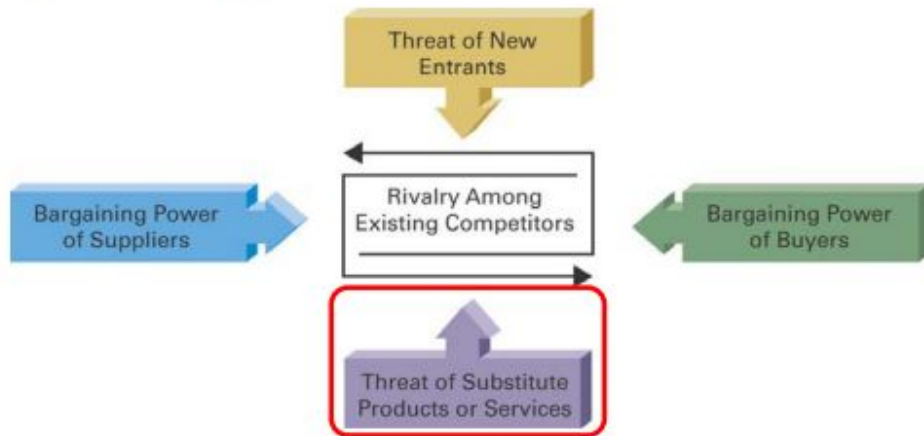
How does the force impact profits?
Assess the five forces.

If prices in an industry rise, consumers seek substitutes



Some factors that increase the threat of substitutes

- Alternative product has higher quality & better performance
- Alternative product is cheaper`
- Switching costs are low for the buyers



Threat of Substitutes

- High threat of substitutes example: movie theater



- Low threat of substitutes example: healthcare



Apple: Smartphone v.s. Auto

Smartphone



Auto



Apple's ecosystem is slightly more attractive. That is why Apple has a capacity and money to enter into the auto industry even though this industry is less attractive

Five Forces - How to use it?

- If you want to think about the **profitability of a certain industry**, it can be completely determined by a set of 5F.
 - E.g. How IT is affecting transportation? Think about **how IT affects these 5F**.

Porters argument is that based on the relation between these 5F, you can tell which industry will be profitable, and which will not.