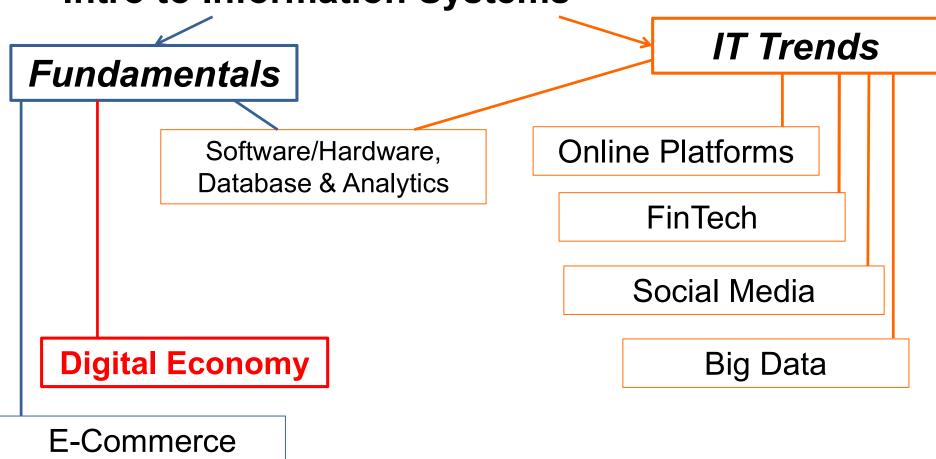
ISOM 2010: Digital Economy (2)

Yanzhen Chen

Hong Kong University of Science and Technology

Concept Map

Intro to Information Systems



Previous on Digital Economy (1)

Cost Structure of Information

- What's the "right" price of digital goods?
 - Set price where MC = MR?

– How do we compete with "Free"?

Business Models for "Free" Digital Products

Consumption of Information

Two prominent features:

- I. Experience good
- 2. Overload

Digital Economy

Last class: Fundamentals of IT

This class: IT and Business Strategy

Next class: Impacts of IT

Today

IT and...

- Industry Impacts
- Strategic Positioning
- Operational Effectiveness

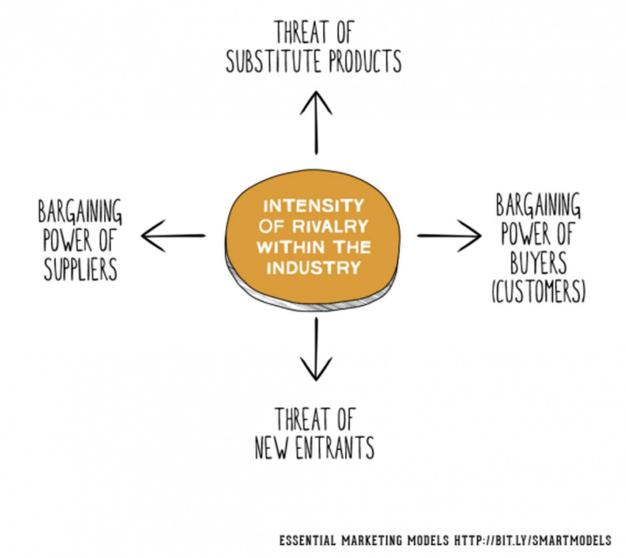
Digital Economy (2)

>> Impacts of IT on Industry

- Firms are not isolated
 - Part of a community/industry
 - What is the impact of a new IT on the industry?
 - Affect business performance

Affect survival

PORTER'S FIVE FORCES MODEL



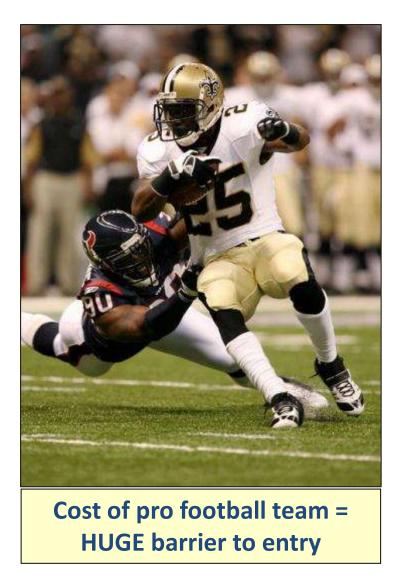
Porter's 5 Forces: New Entrants

Threat of new entrants

- Brand: Joe's Diner has trouble competing against
 McDonalds
- Regulation: Laws, Intellectual Property, etc.
- Distribution Channels: Control of your college bookstore provides an advantage against competitors
- Capital Intensity: How much \$\$ will it take to start a new business?
- Switching Costs
- Network Effects

Fighting New Entrants: Barriers to Entry

- Barriers to entry
 make it difficult
 for other firms to
 enter an industry and
 compete
- When barriers to entry stop your competitors, then sustainable profits are more likely



Fighting New Entrants: Switching Costs

 A cost that a consumer incurs when switching from one product to another is called a switching cost



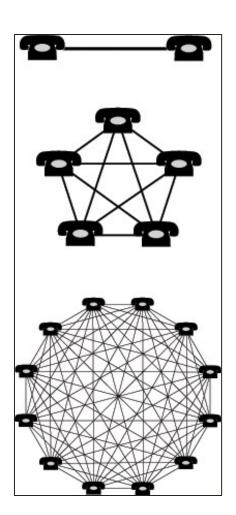
While Gmail is free to use and convenient, moving to another platform would require significant effort to import/export messages or lose this valuable e-mail history.

Fighting New Entrants: Switching Costs

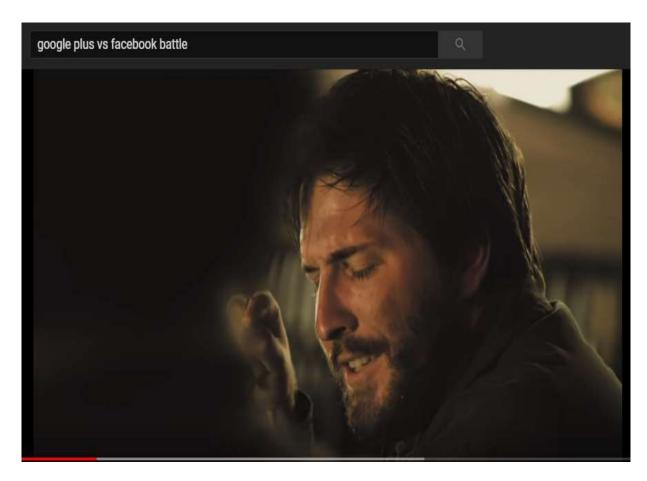
 Network effects exist if the value of a network increases with the number of users



Facebook would be of little value to you if your friends weren't part of it



Once Upon a Time....



https://www.youtube.com/watch?v=f9MtttXI2q8

Google Plus's Failure: Network Effect

- Google gives up on challenging Facebook
 with Google+ CNBC.com
- "Though many people use Google as a search engine and for email, those relationships were simply not sufficient to persuade them to shift from Facebook to Google+."

Porter's 5 Forces: Substitutes

- Threat of substitutes products in other industries
 - Switching costs
 - Price-performance trade-off of substitutes
 - Buyer inclination to switch

Porter's 5 Forces: Buyer power

- Buyer power
 - Price sensitivity
 - Product differentiation
 - Substitutes availability
 - Threat of backward integration

Buyer power: Threat of backward integration

Dell goes networking, acquires Force10

Summary: Dell said it will wrap Force10's networking gear into its data center portfolio, which features servers, storage and services.

By Larry Dignan for Between the Lines | July 20, 2011 -- 04:53 GMT (12:53 SGT)

Dell said Wednesday that it will acquire Force10 Networks as it aims to move into networking.

Terms of the deal weren't disclosed. In a statement

(http://www.businesswire.com/news/home/20110720005376/en/Dell-Announces-Intent-Acquire-Datacenter-Networking-Leader) , Dell said it will wrap Force10's networking gear into its data center portfolio, which features servers, storage and services.

Porter's 5 Forces: Supplier power

- Supplier power
 - Impact of inputs on costs or differentiation
 - Switching costs of firms in industry
 - Threat of forward integration

Porter's 5 Forces: Degree of rivalry

Degree of rivalry

Industry concentration

Value add

Brand identity

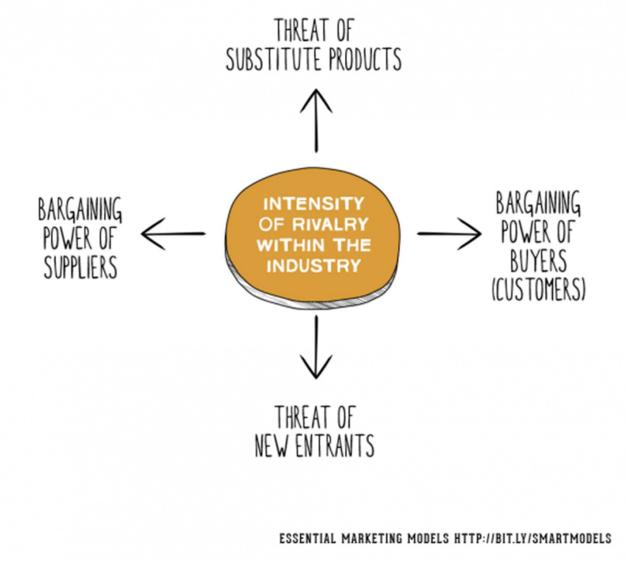
Examples of Porter's 5 Forces

Force	Example of Strong Force	Example of Weak Force
Bargaining power of customers	Toyota's purchase of auto paint	Your power over the procedures and policies of your university
Threat of substitutions	Frequent-traveler's choice of auto rental	Patients using the only drug effective for their type of cancer
Bargaining power of suppliers	Students purchasing gasoline	Grain farmers in a surplus year
Threat of new entrants	Corner latte stand	Professional football team
Rivalry	Used car dealers	Internal Revenue Service

Impacts of IT in Industry

- Disruptive technologies:
 - Digital cameras and film camera
 - Digital music and CDs
 - Internet and Entertainment (music, movies)

PORTER'S FIVE FORCES MODEL



South China Morning Post 南華早報

Hong Kong cabbies urge government to act as Uber, car-hailing apps 'drive down taxi business'

PUBLISHED: Tuesday, 07 July, 2015, 3:30pm UPDATED: Wednesday, 08 July, 2015, 3:00am News > Hong Kong > Economy > TRANSPORT

Lai Ying-kit yingkit.lai@scmp.com

Transport officials are under fire for failing to crack down on providers of unlicensed services

Taxi drivers and owners criticised transport authorities in the legislature yesterday for failing to curb the practice of private car drivers offering cheaper rides through car-hailing mobile apps.

The group of more than 30 industry representatives also crossed swords with the operator of one app, who in turn accused cabbies of being unable to meet the demands of passengers.

At the centre of

TECH . START-UPS . TAXI-HAILING APPS

More than 100 Hong Kong taxi drivers protest against Uber and other car-hailing apps

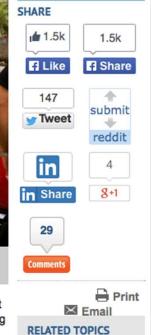
Zen Soo and Coco Feng

PUBLISHED: Monday, 06 July, 2015, 4:14pm UPDATED: Tuesday, 07 July, 2015, 3:00pm



More than 100 drivers staged a protests against Uber and other car-hailing apps on Monday.

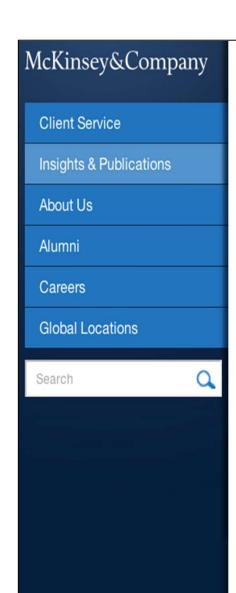
More than 100 taxis drove to the headquarters of the Hong Kong government in the city's Admiralty district on Monday morning to protest against car-hailing apps which they claim are costing them business.



Porter's 5 Forces: New Entrants

Threat of new entrants

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 McDonalds
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Report

Disruptive trends that will transform the auto industry

Technology-driven trends will revolutionize how industry players respond to changing consumer behavior, develop partnerships, and drive transformational change.

January 2016 | by Paul Gao, Hans-Werner Kaas, Detlev Mohr, and Dominik Wee

Today's economies are dramatically changing, triggered by development in emerging markets, the accelerated rise of new technologies, sustainability policies, and changing consumer preferences around ownership. Digitization, increasing automation, and new business models have revolutionized other industries, and automotive will be no exception. These forces are giving rise to four disruptive technology-driven trends in the automotive sector: diverse mobility, autonomous driving, electrification, and connectivity.



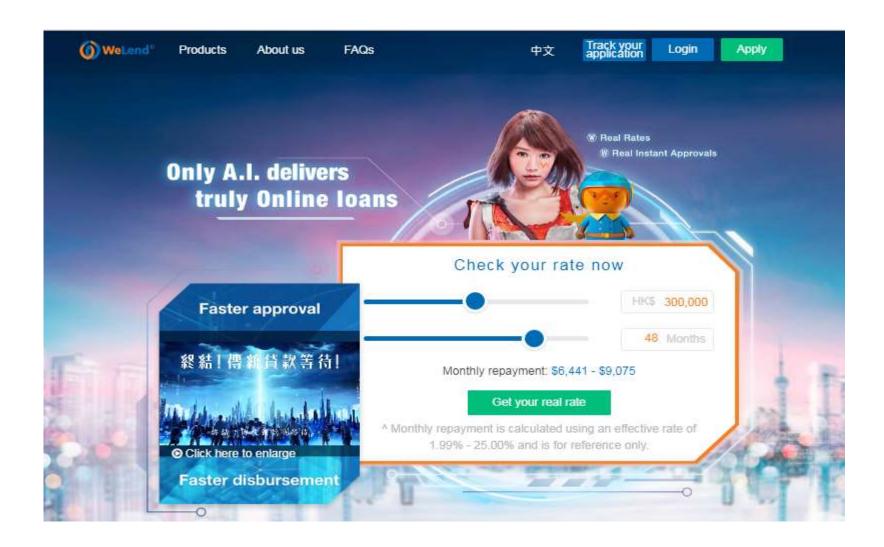


Discuss

How does the Internet affect consumer lending industry?

Hint: FinTech Companies are available in lending industry. For example, Hong Kong's leading online lending platform: WeLend.

Online Lending Platform



Recap of Porter's Five Forces

- Potential new entrants
- Threat of substitute products or services
- Rivalry among existing competitors
- Power of suppliers
- Power of buyers



Resources

- BCG (2014) "Asian Banks Must Rethink IT"

 (https://www.bcgperspectives.com/content/articles/information_technology_strategy_financial institutions asian banks rethink it/)
- McKinsey (2016) "Disruptive trends that will transform the auto

industry" (http://www.mckinsey.com/insights/high_tech_telecoms_internet/Disruptive_tr ends_that_will_transform_the_auto_industry?cid=other-eml-alt-mip-mck-oth-1601)

- Porter's Five Forces
 - http://www.quickmba.com/strategy/porter.shtml
 - http://www.mindtools.com/pages/article/newTMC_08.htm