Global Business Strategy (Chapter 5)

Dept of Technology Management for Innovation (TMI), Graduate School of Engineering
Professor Kazuyuki Motohashi
工学系研究科 技術経営戦略学専攻教授
元橋一之
http://www.mo.t.u-tokyo.ac.jp

Recap Mini Quiz

Q. How about prof. Dang's talk? Agree and/or Disagree?

His talks are …

- China : 2nd after # unicorns, but mostly internet+, mainly biz model innovation
- After covid, impact of zero covid, rely gov fund
- Imitation? Renren, Weibo, Jingdong, Didi…
  - Some administrative barrier, but with mode dedicated services, flexibility, business model innovation etc.
  - Some innovative feature, mobile payment, Tik Tok (Byte Dance)
  - Miniso (Selling Japan culture in China) – IPR issues
  - Mobike story : Design for low maintenance cost (CNY5000) vs oFo
- Shift to technological innovation/hardware
  - Requiring more knowhow, thick patents, long-term test and dev., Sino-US trade dispute
  - AI based hardware : face recognition, diagnostics : low privacy concern, (high skilled) human capital
  - Strong emphasis on univ/PRIs for semiconductors

Continued.

- Government support to entrepreneurship/innovation
  - Around 2015, 双創 (Double Creation)-創業(Entrepreneurship)&創新（Innovation)
  - Inefficiency in policy supports, social cost of regulation
- Administrative barriers/China competitiveness
  - Some deregulations : financial services, automobiles
  - Google vs Baidu (but not only by protection)
  - China overseas business : based on tech/marketing competency, fierce competition in domestic market, entrepreneurship opportunities by “arbitrage” strategy (51 talks), mainly SE Asia?
  - Political risk inside : double deduction policy for education (homework and off campus supplementary course)

Comments

- I think as for some hardware industry, especially for those traditional industries like mechanical engineering or electrical engineering, it requires lots of resources and capital to input, and most of the resources are owned but the country. So the state-owned companies are dominant in those industries, and state-owned companies may put less effort for making innovations. That's my thought about this topic.
- I think the pandemic has boosted the AI technology development in China as well. After the outbreak of the pandemic, due to the zero-covid policy, the need for robots has increased a lot in China. There are currently many robots in China: robots carrying the plates in restaurants, robots deliver packages, etc.

Comments-continued

- The part I personally a little bit disagree is that the reason why most foreign companies lose to local Chinese company. I don’t think it is due to the deficiency of localization according to Prof. Dang, instead, I think Chinese government plays an important role in it. It prevents foreign companies entering Chinese market by taxes, law restrictions and other methods, so that local entities could build a monopolized or oligopoly market, which will be easily controlled by Chinese government as well.
- I also agree that these shifts are evident on the fast-paced development of newer products and services in the technology industry. On the other hand, I slightly disagree that the Chinese government is providing huge and unfair financial support to sustain innovation and entrepreneurship. I consider that the Chinese government should heavily invest to help drive innovation since the new technologies will also benefit the people and industries in China. Government financial support will also help leverage the entrepreneurship models being developed in China and this will serve to lead the startups of new companies.

2nd Week's Exercise : China and India

- Given that you are working for Japanese firm then

Q1 : India: factory or market? Please provide at least one example in each Quadrant of factory or market matrix.

Q2:Pick up one industry of your favorite. Discuss attractiveness in India over China by CAGE framework? What kind of AAA strategy to be pursued?

CAGE Comparison
(India vs China from JP firm viewpoint)

	Cultural attractions	Administrative attractions	Geographic attractions	Economic attractions
China	Linguistic and ethnic homogeneity Language (similar) Similar food, life-style, religion	Easiness of doing business, less regulation	Closer Superior infrastructure (port, road etc)	Larger market Higher-income
India	Language (English)	Politically friendly Foreseeability in govt. decision (democracy) EPA (Economic Partnership Agreement)		Lower wage Specialized labor (such as software)
Fast Food	◎	◎	× (Local operation)	× (high income=high cost)
Car		◎	◎ (bulky)	◎

Then AAA

（Q) Compare your global business strategy of car and fast food business, when you come up with your plan of investing in India. Identify which A(s) of AAA framework would you stress for each business, and why?

（A） Car : Aggregate and Arbitrage

Fast food : Adaption and Arbitrage

There is no serious CAGE difference between Japan and India for car, while there is for fast food. Arbitrage wage difference is possible for both cases.

But,

- KFC product line is not so different from other countries (aggregation).
- Toyota, Honda, Nissan, all three companies developed new car in India (adaptation?) . Suzuki motors is very successful in India by aggregation strategy.
- Why do we see such difference in India strategy by firm?

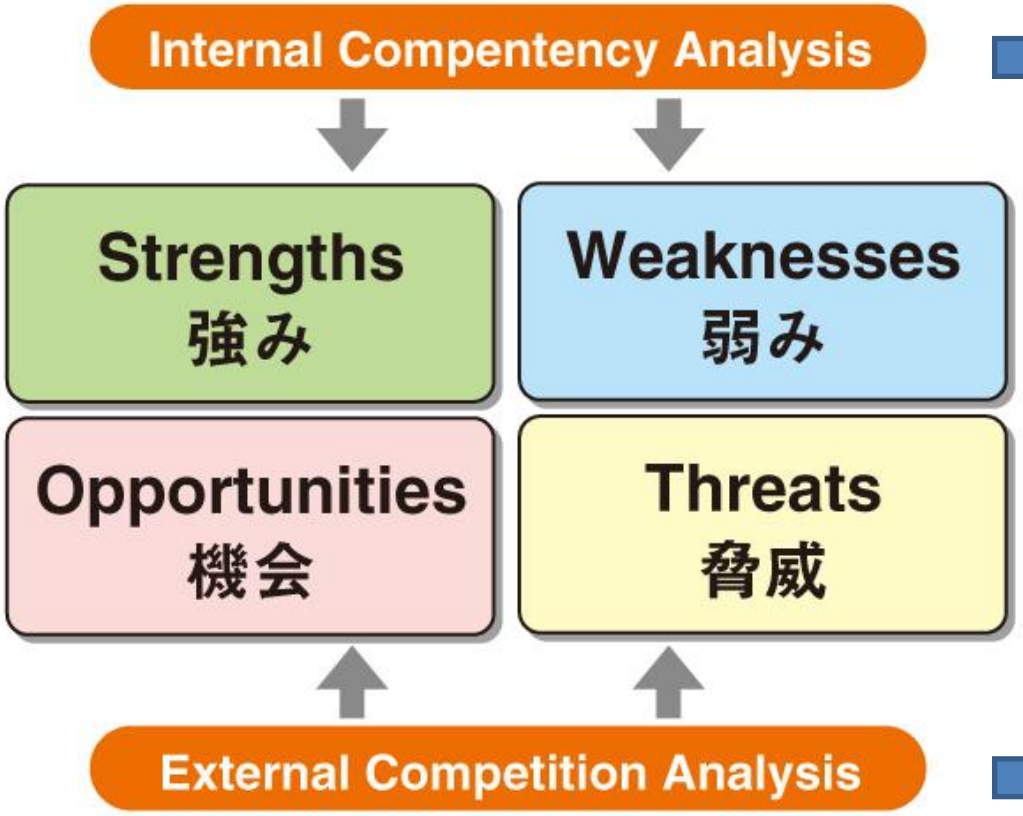
Topics to be covered

- Business (Technology Management) Strategy
- Product architecture and difficult to be caught-up business model
  - Complex Product System (CoPS)
  - Service (> Product) provision model
- Global Infrastructure business as an example of complex system
- Groupwork assignment : group formation and detail explanation

What is Strategy (戦略)?

- Long term direction of whole firm activity for improving firm value
  - Strategy : Originally military term, referring to Sunzi 孫子)
  - MOST
    - Mission: Principle, Creed (ex. “Sony is a frontier”)
    - Objective: Detail description of “mission”
    - Strategy：Materialization of mission, objectives into actions (ex. 3-5 years action plan in corporate management)
    - Tactics：Detail descriptions of corporation action
- 「知彼知己、百戦不殆」(Know yourself, like your enemy)
  - “External competitive environment” and “Internal competency analysis”
  - 3C：Competitor, Customer, Company

SWOT and business strategy theories

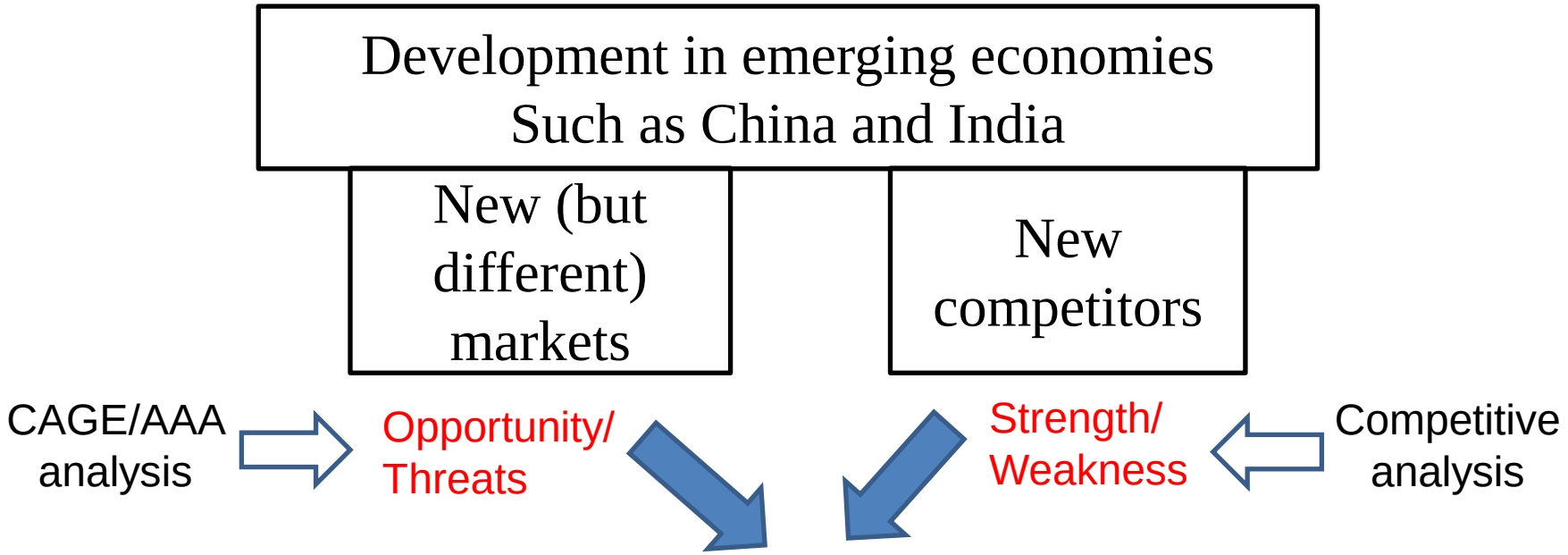


Capability Theory
Resource Based View
VRI+O framework

Positioning Theory
Porter's 5 force model

Reflections to CAGE-AAA framework

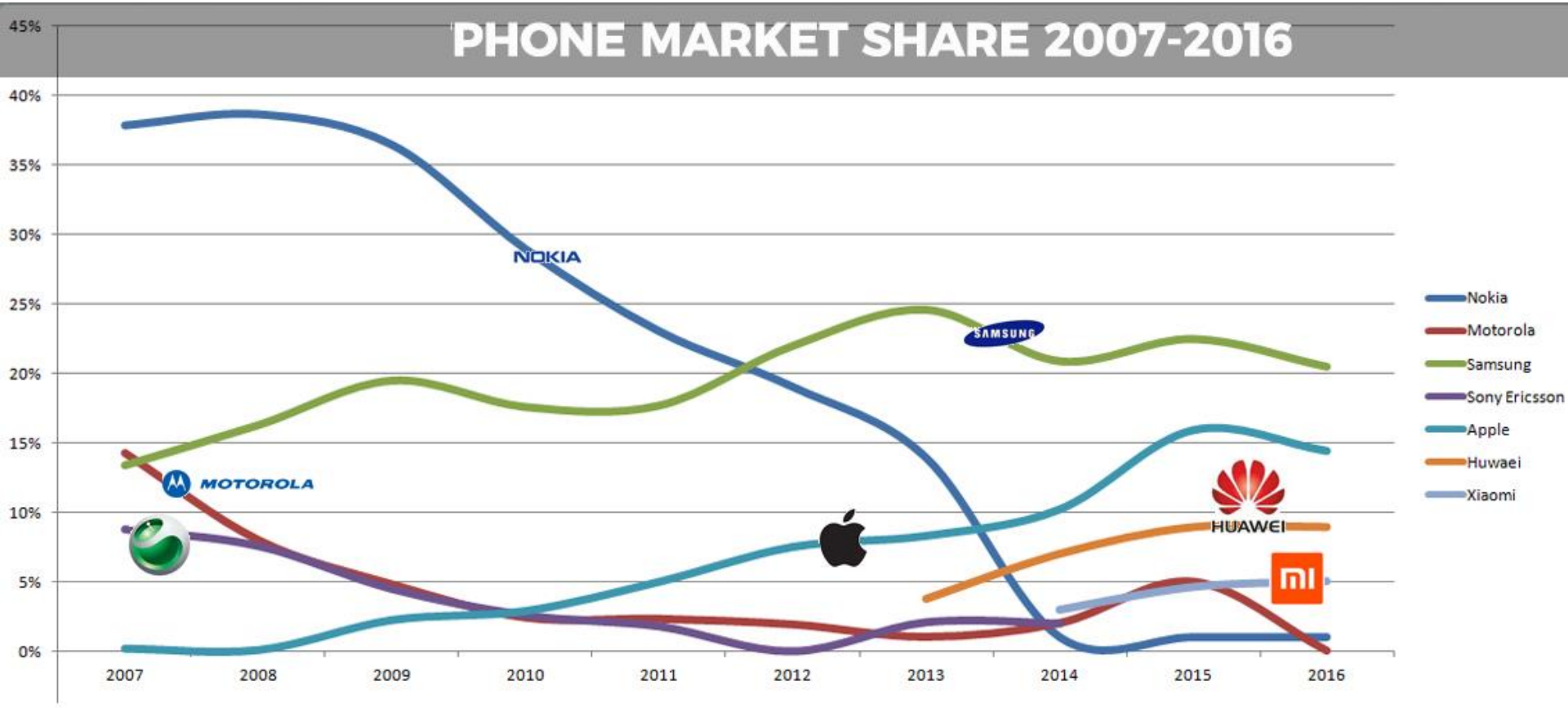
- Critical CAGE distances by industry (product characteristics) or by company (each companies internal strength or weakness) ?
  - C-distance (religion) is not serious for KFC
  - C/E-distance (small car preference, low income) in not serious for Suzuki
- In order to make “go” or “not go” (to India or elsewhere) decision,
  - What about your competitor? (as regards to your “relative” strength/weakness?, particularly in your local competitors (such as Tata Motors)
  - Prepared for changes!! -> Risk management is important



Issues for GB Strategy in Emerging Economy

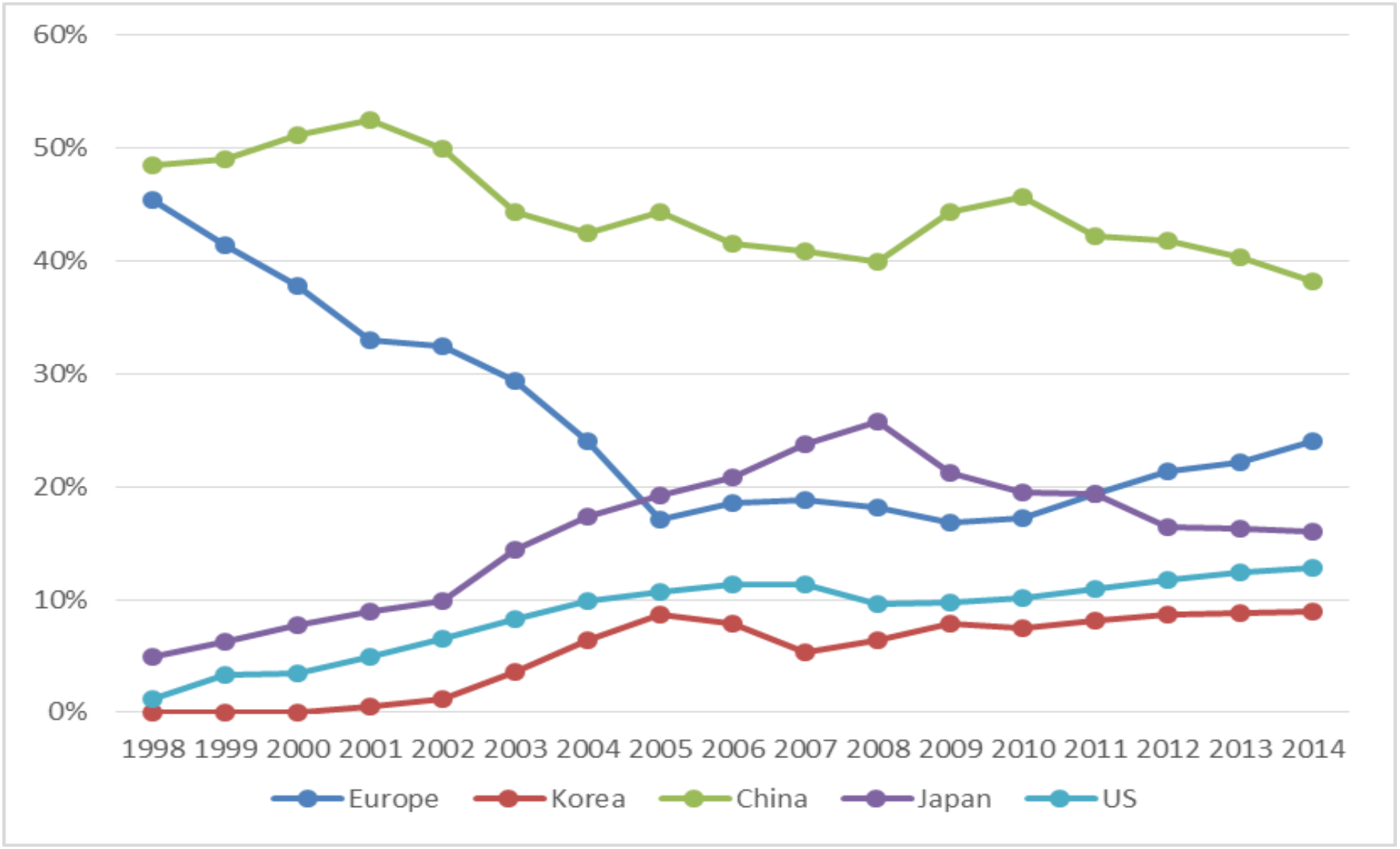
- Prevent technology catching-up by local competitors (CoPS, service provision>product offering) : Chap 5
- Local partnership for risk mitigation : Chap 7
- Segmentation of market (not-so-good market): Chap 9

Catching up of Chinese firms

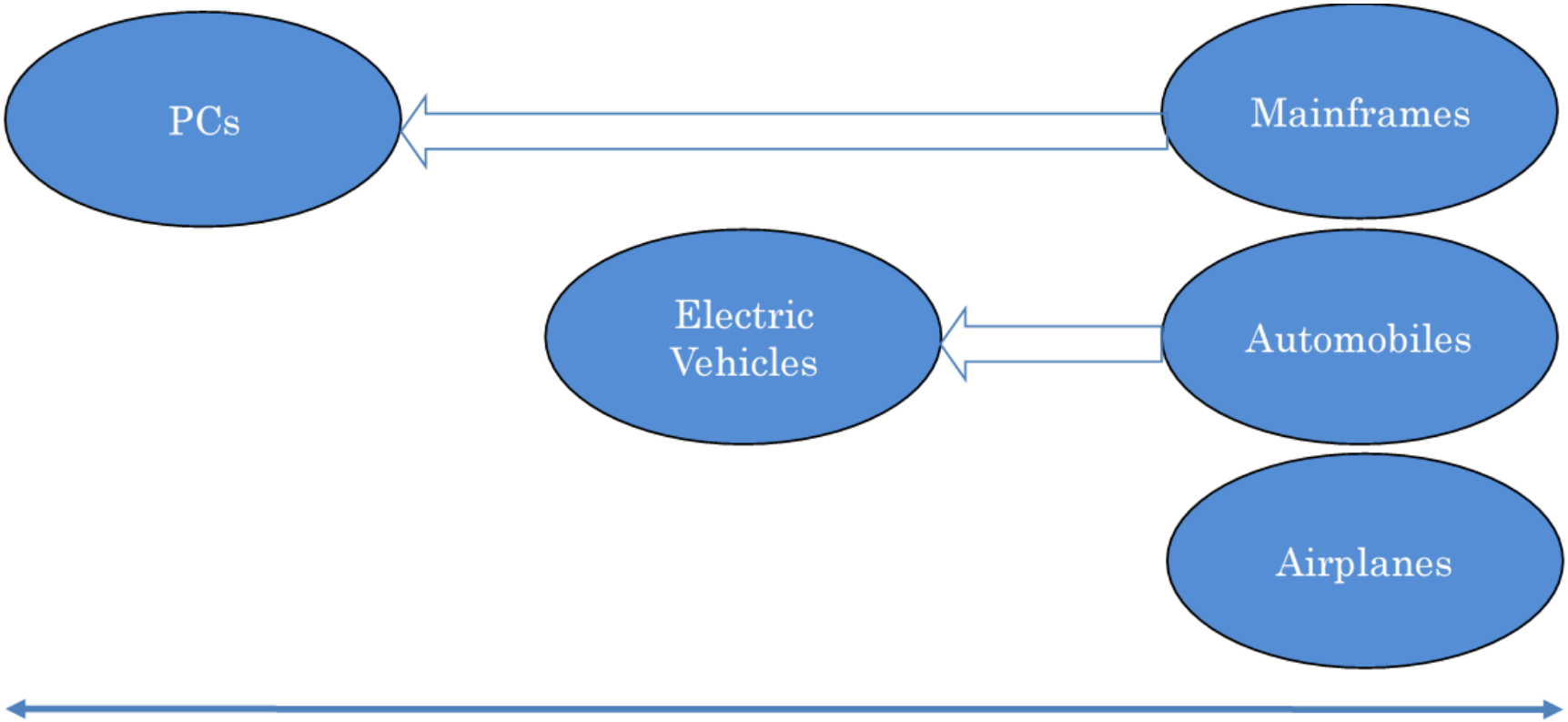


https://www.telephonesonline.co.uk/blog/mobile-market-shares/

Why domestic car is not so popular in China?

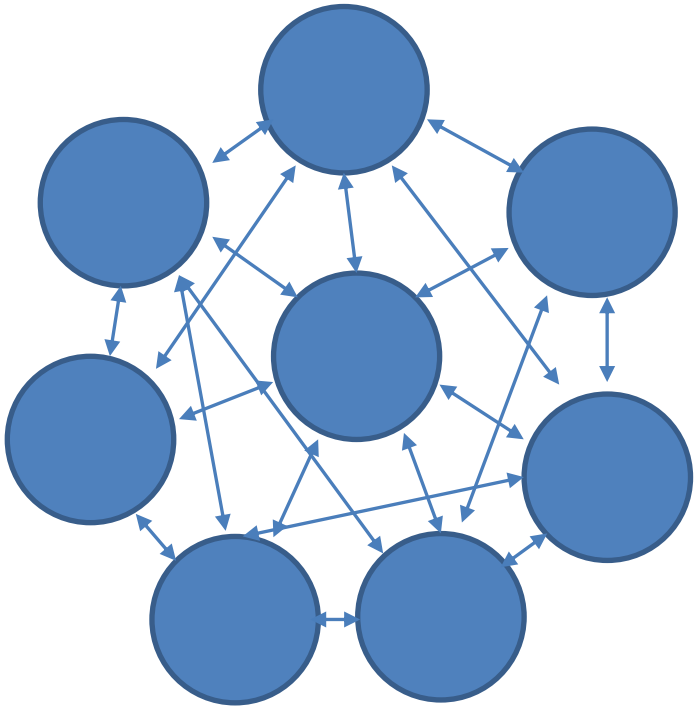


Product Architecture

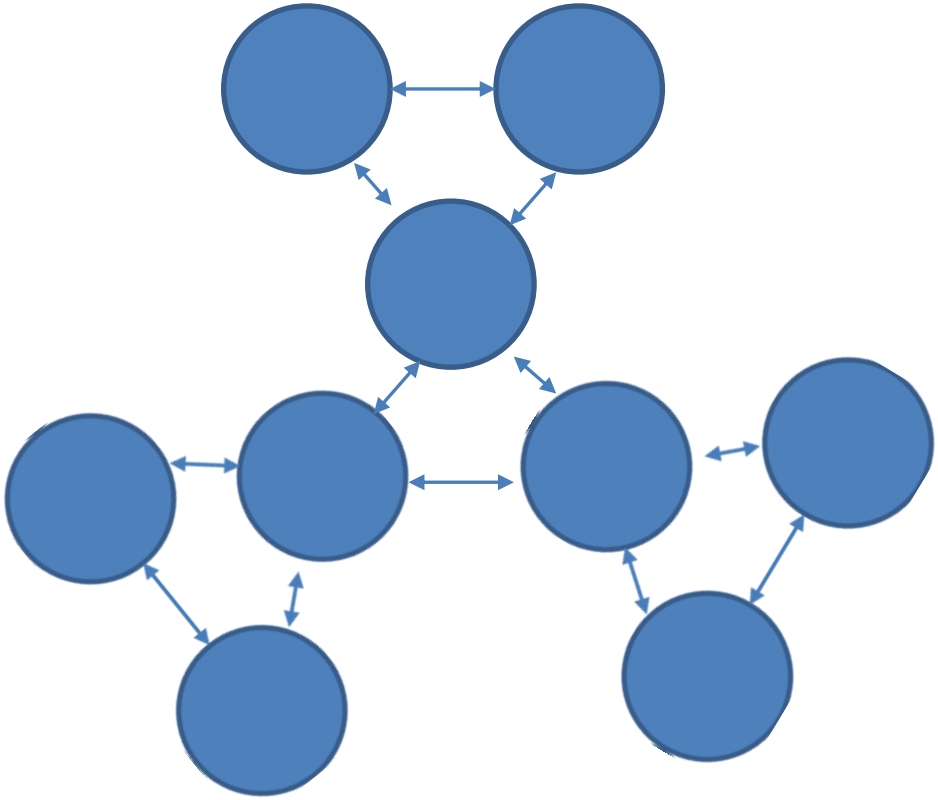


Modular	Product Architecture	Integral
Low	Functionality/quality/price	High
Fast	Innovation speed	Slow

Difference in product architecture

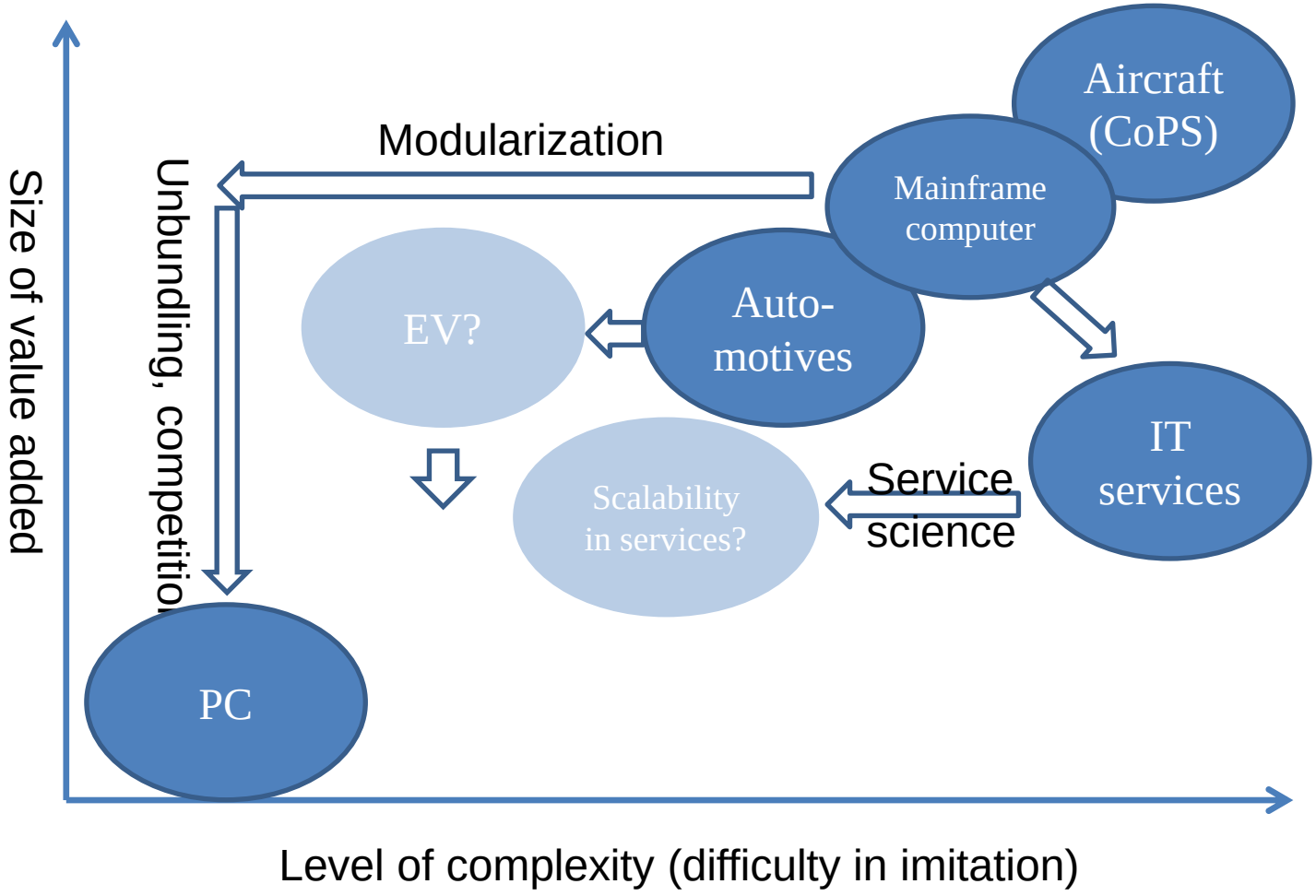


Integrated architecture

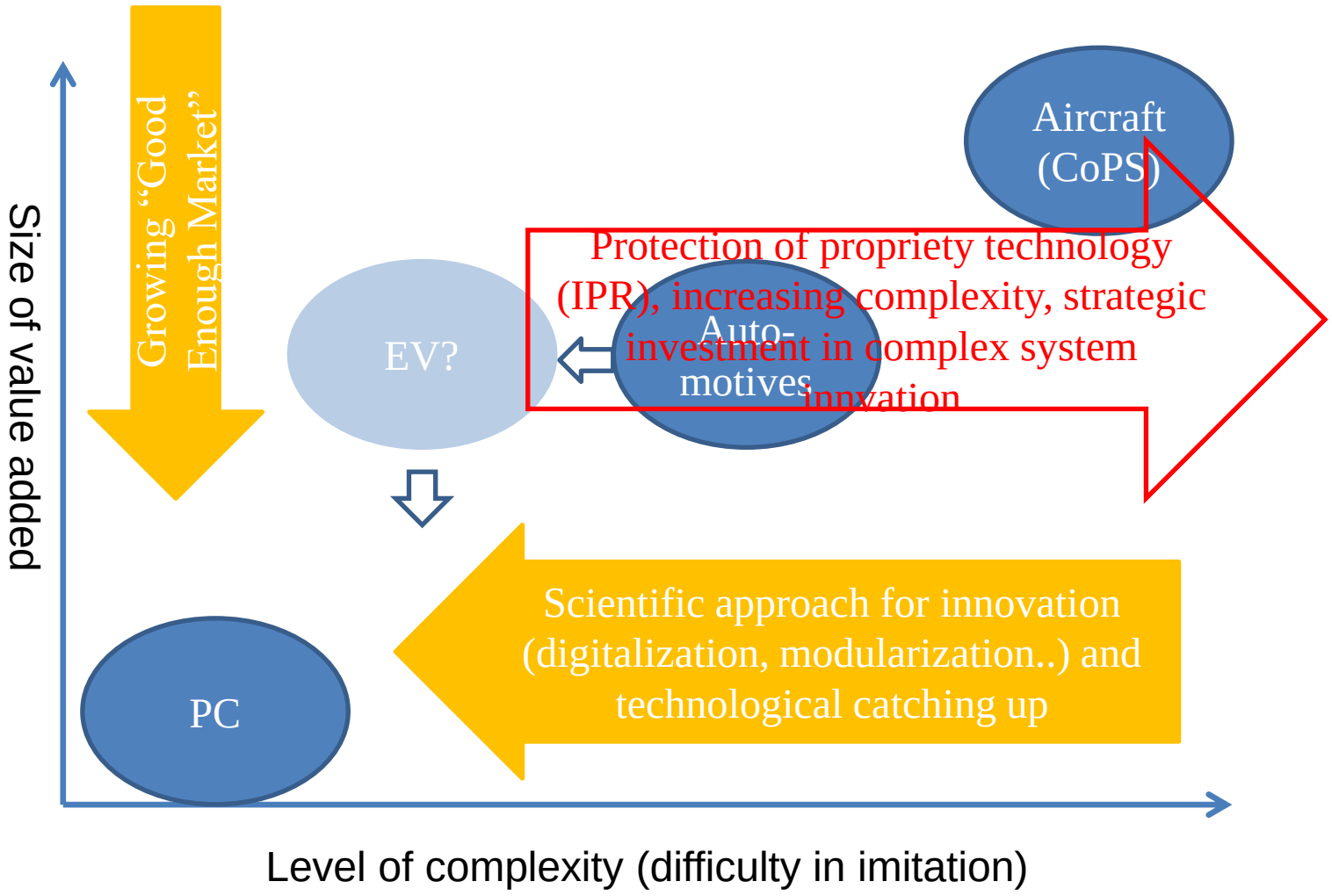


Modular architecture

Product architecture and value creation



Driving forces

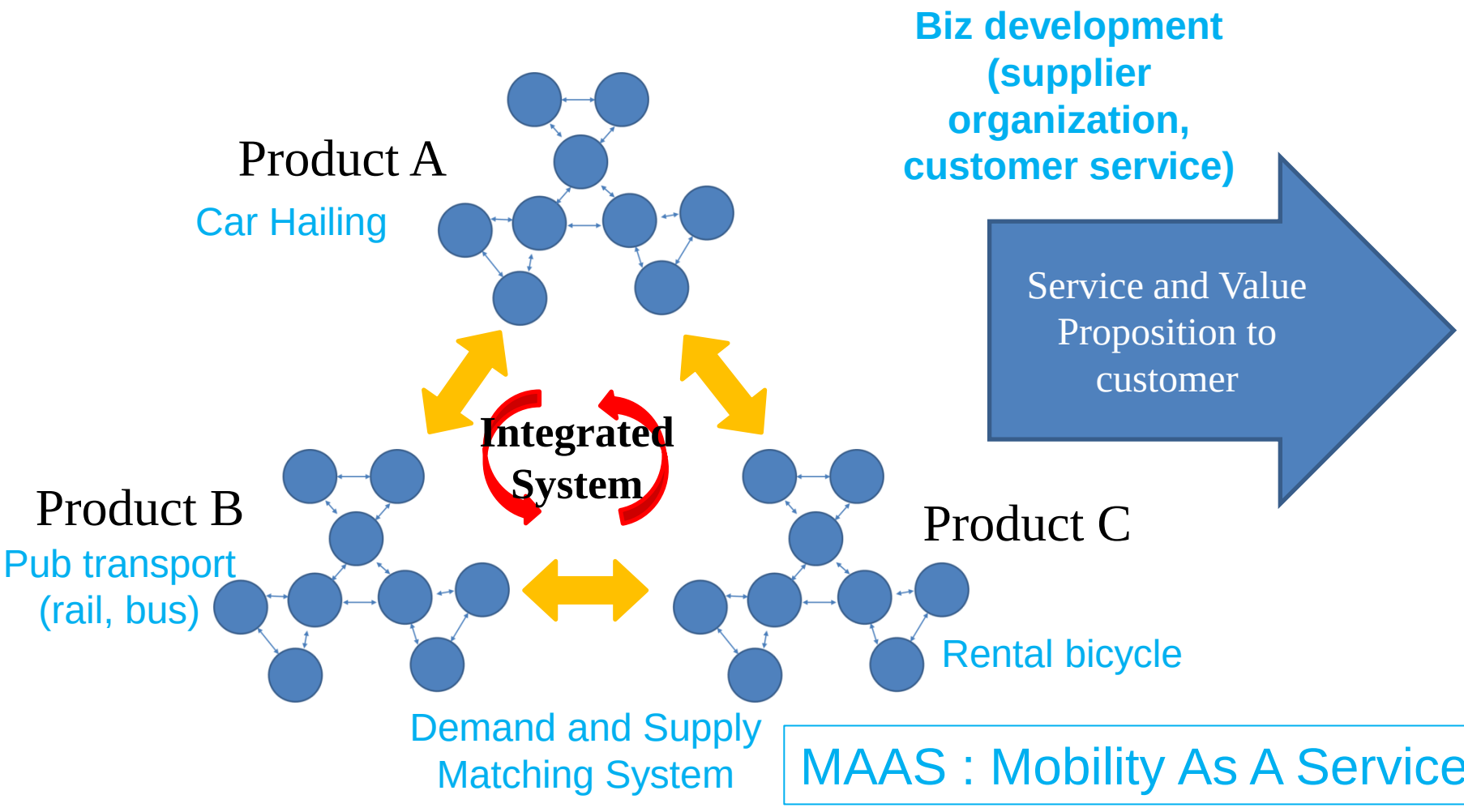


Service model (service dominant logic)

	Product-centric Model	Service-centric Model
Unit of market exchange	Products	Specialized knowledge and skills embodied in the services and products that customers gain
Product role	Key component of market exchange	Intermediary that creates customer value
Customer role	Receiver of product	Collaborator in services gained from products
Determiner of value	Corporations (value is attached to the product itself)	Customer (value determined by benefit gained by customer; corporations are nothing more than proposers of value)
Source of value added services	Surplus created from exchanges of tangible products and management resources	Surplus created by exchanges of specialized knowledge and skills from products and services

Vargo and Lusch (2004)

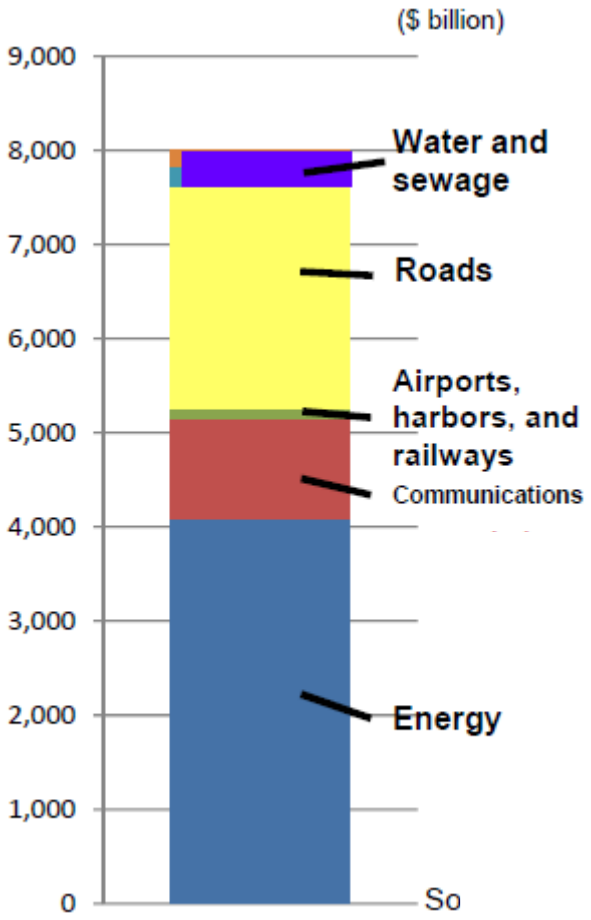
What is complex service system?



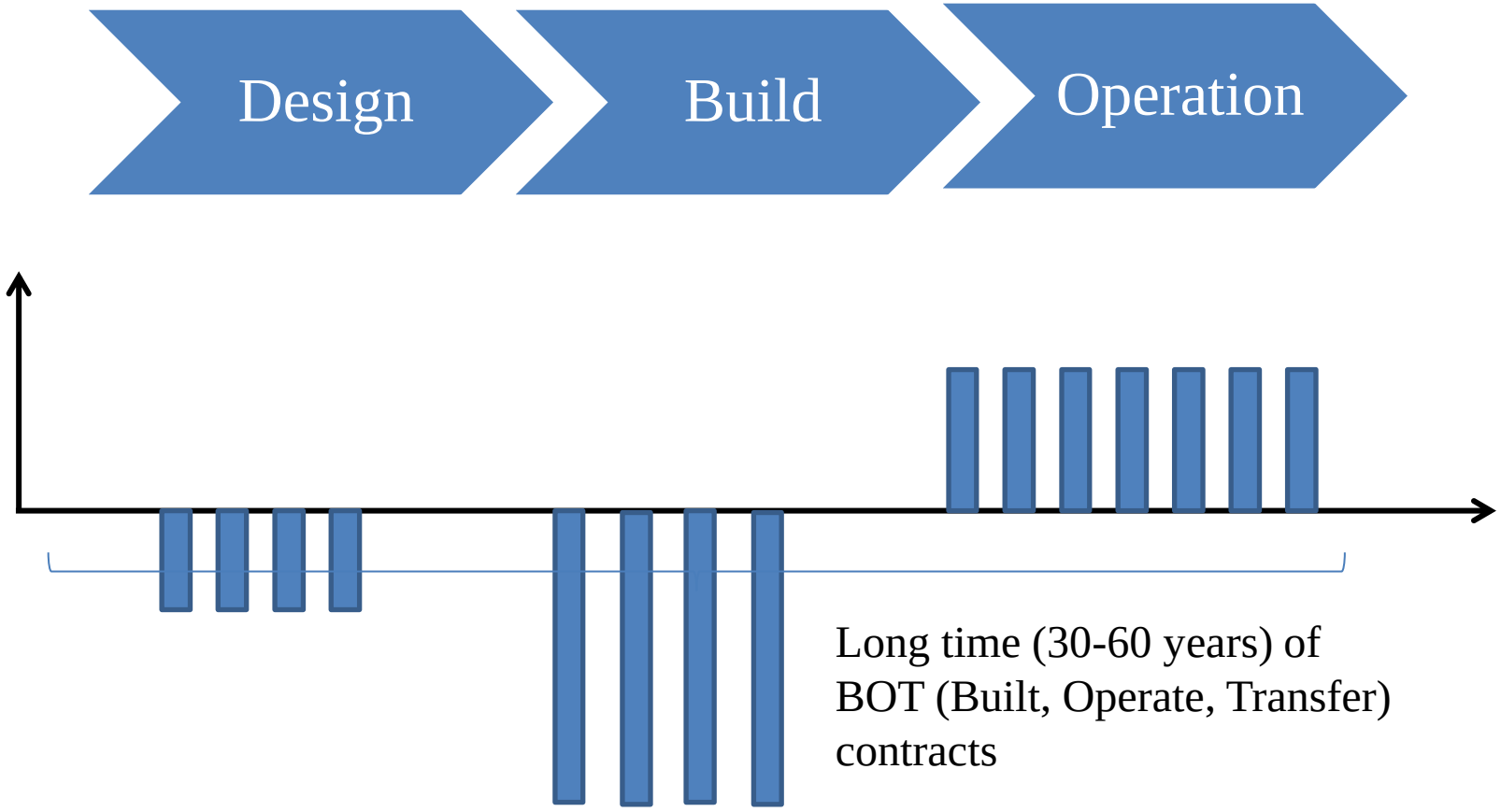
Management risk associated with service provisions (instead of product delivery)

Infrastructure business developments

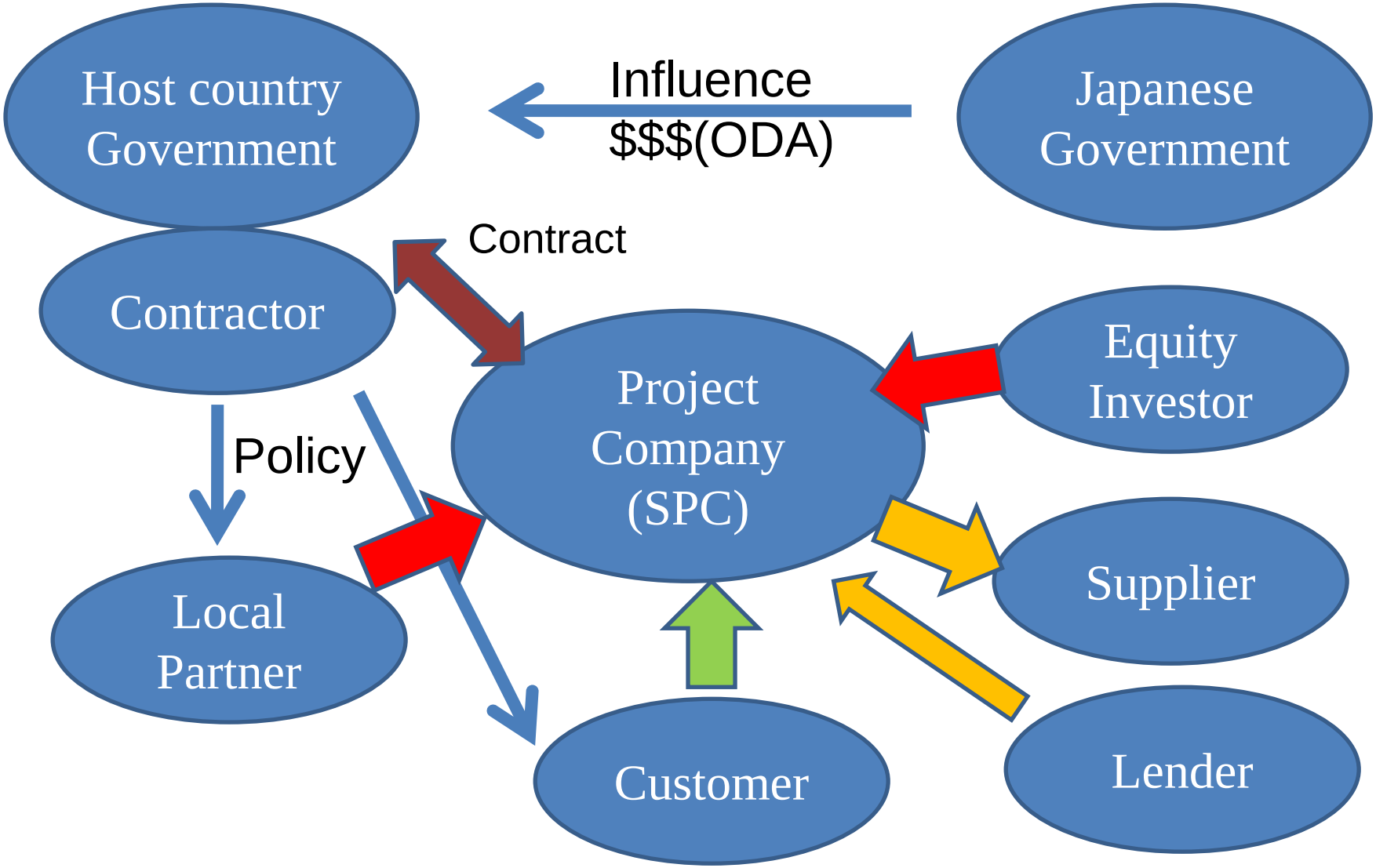
- Infrastructure development requirements (METI estimates 8,000 billion US$ in Asia).
- Public money cannot cover such amount, so that PPP (public private partnership) is needed -> business chances for multinationals corporations
- Analyzing infrastructure business is important
  - Risk analysis and simulation
  - Business modeling with relevant players



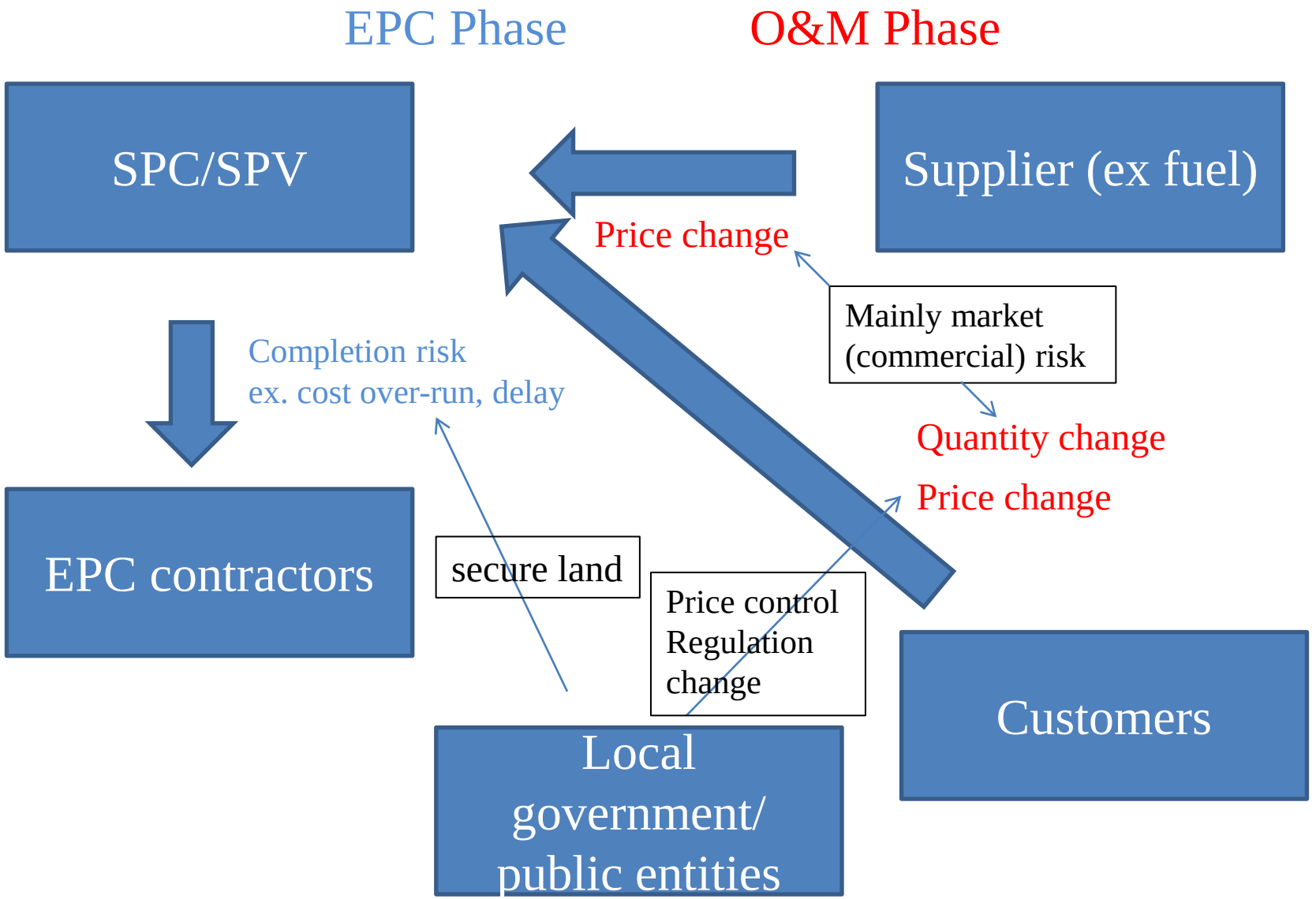
Typical cash-flow of infra-biz



Complex system of PPP project



Risk factors in infrastructure business

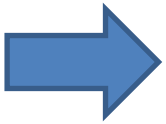


Risk factor identification

- Risk: Uncertainty which might be under control
- Types of global business risks
  - PEST（Politics, Economics, Society, Technology)
  - Global business: beyond PEST, risks inherited in institutional voids
- Management decision under uncertainty -> Project evaluation (NPV, Monte Carlo simulation, VaR, real option approach etc.)
- Investing in emerging economies : High-Risk ⇔ High-Return (preparing for ex-ante uncertainty, as well as treatment of ex-post unfavorable events is important -> Resilience Management

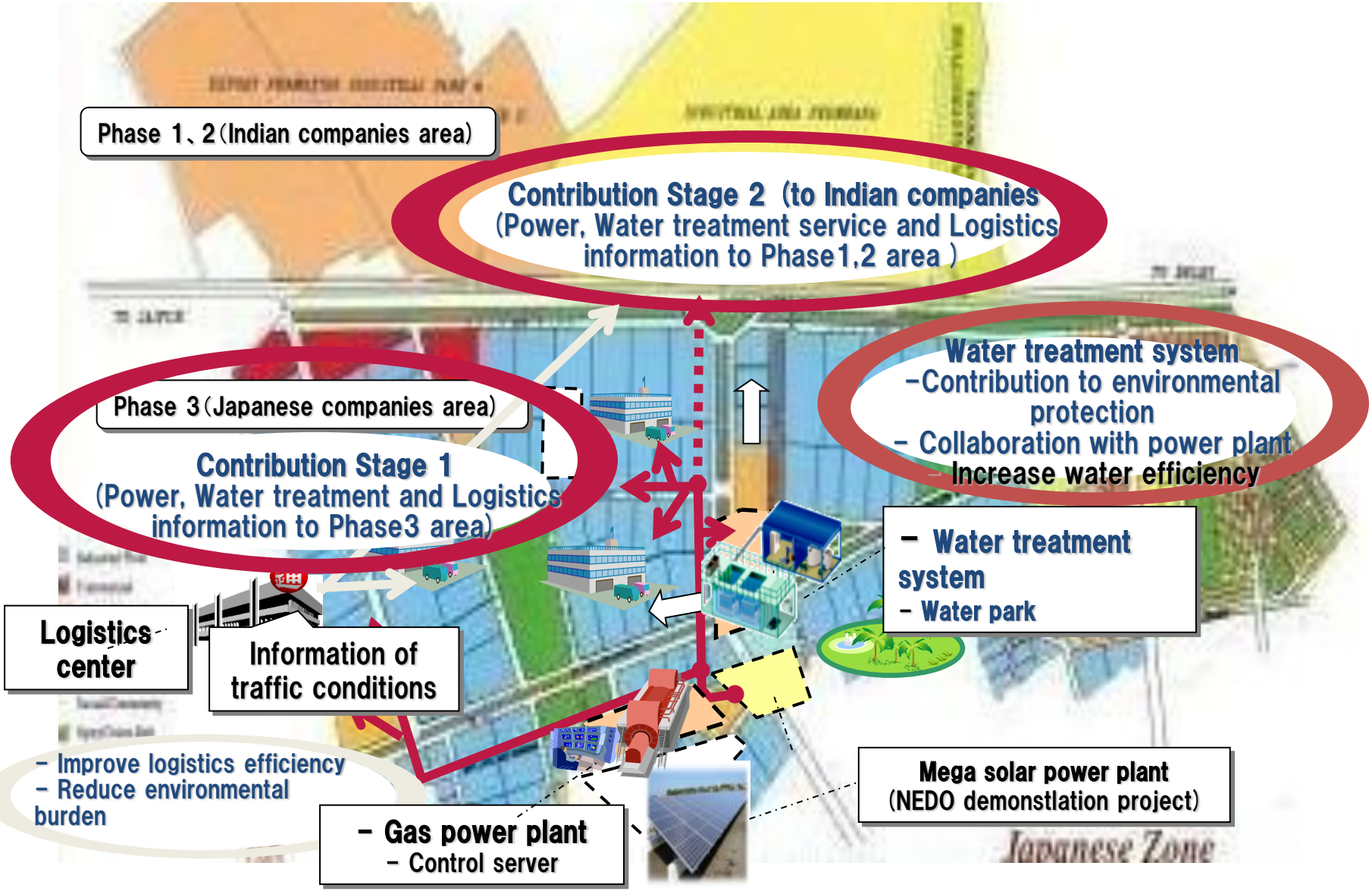
Hitachi NSEC experience

- Electricity demand increases: 34 companies (14 started its operation)
- However, some firms starts using Grid power for non critical demand (lightning, air conditioning etc.)
- Investment in shared company (shared energy) is new to factory (difficulty in convincing).
- Technical difficulty in diesel engine grid.

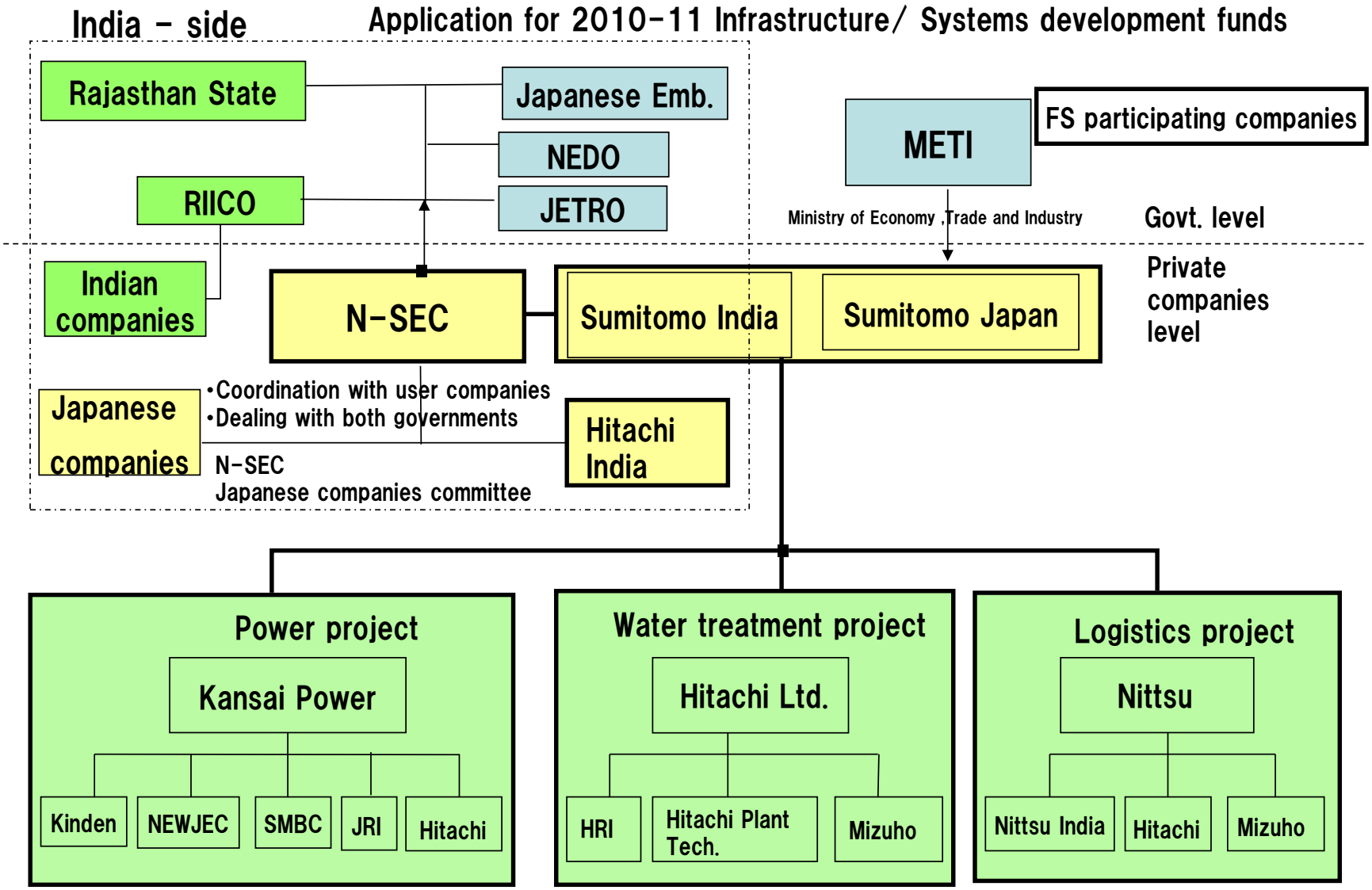


Stop decision at F/S stage, then what happened?

Neemrana Smart Factory Plan (1)



Neemrana Smart Factory Plan (2)



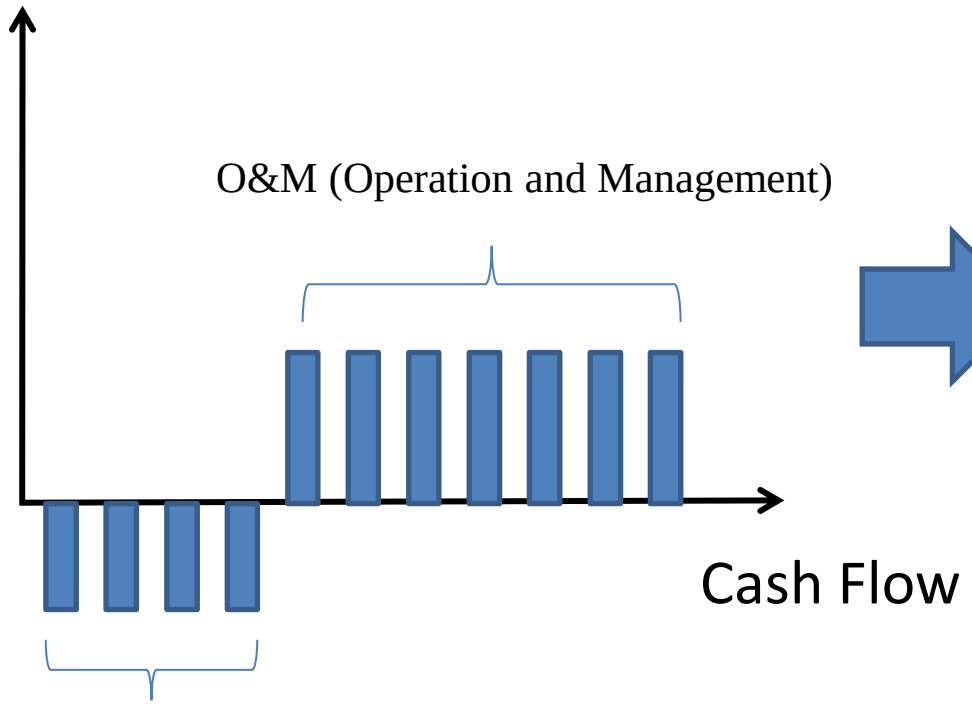
NEDO: New Energy and Industrial Technology Development Organization JETRO: Japan External Trade Organization
RIICO: Rajasthan State Industrial Development & Investment Corporation Ltd.

Business Plan Items for Group Works

- Executive Summary
- What is your company? (in case, you represent a particular company such as Hitachi)
- Management Team and Division of Labor
- What kind of global business?
  - Summary of your new business including information on the country or the region of your business to be introduced
  - Business model of your proposal
    - Who's your customer?
    - Market and competitor analysis
- Business execution planning (HOW)
  - Partnership with local players (with whom? why?)
  - Local operation
  - Marketing plan
- Business Plan Evaluation (such as NPV, IRR analysis)

15 min presentation in the last class of this course

NPV Project Evaluation



EPC (Engineering, Procurement and Construction)

$$NPV = \sum_{t=1}^{T} \frac{CF_t}{(1+r)^t}$$

$$IRR = r(NPV = 0)$$