

## Dyadic Analysis in Inter-Corporate Alliance :Merits and Risks

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## Agenda

- The purposes of this paper
- Pattern Classification in Inter-Corporate alliance
- Classification of Economic merits
- Merits and Risks in Inter-Corporate alliance
- Conclusion

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## The purposes of this paper

- The new four patterns of Inter-corporate alliances are presented and the relationship between their patterns and the concepts of economies makes clear.
- Merits and risks by the difference of alliance –patterns makes clear.
- The concepts of economies are examined in connection with Inter-corporate alliances.

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## Typical classifications of Inter-Corporate Alliance

- There is one of the typical classifications of Inter-corporate alliance focused on the vertical relationship and the horizontal relationship, in other words ,the vertical alliance and the horizontal alliance.
- The vertical alliance has defined a relationship to which successive stages in production and distribution are placed under the interaction of the firms.
- The horizontal alliance has defined a relationship of the same industrial firms.

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## Thinking tools for classification of inter-corporate alliance

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## Business Layer

- On the Inter-corporate alliance, the focused corporate is supposed to consists of two business-layers; application and infrastructure.
- Application is direct business for producing goods and services.
- Infrastructure is business to promote activities of applications.

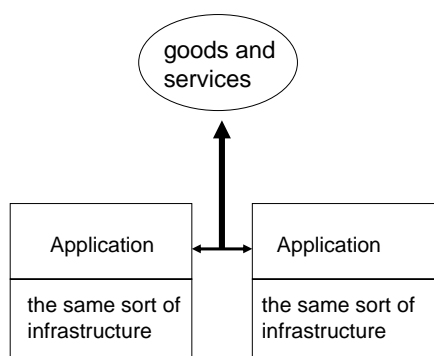
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## The four patterns of inter-corporate alliance

- The four patterns of inter-alliance are Horizontal alliance, Cross-industry alliance, Vertical alliance, and Infrastructure-application alliance.

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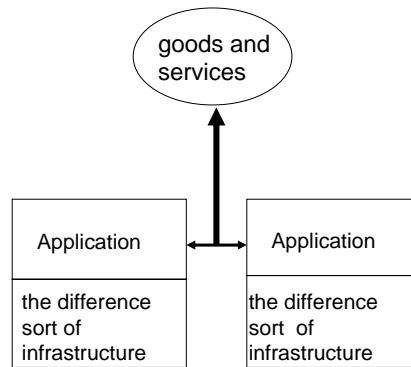
## Horizontal alliance



Horizontal alliance means the interactions of applications underlying the same infrastructures.

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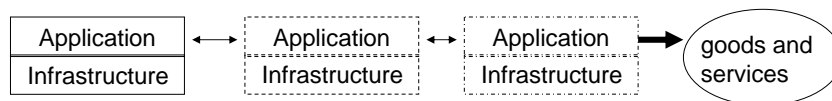
## Cross-industry alliance



Cross-industry alliance means the interactions of applications underlying the different infrastructures.

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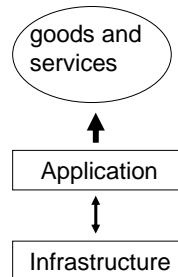
## Vertical alliance



Vertical alliance means supply-chain activity.

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## Infrastructure-application alliance



Infrastructure-application alliance means hierarchical activity between application-player and infrastructure-player.

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Fundamental thinking about the relationship between the economy concepts and the patterns of Inter-corporate alliance

- In this paper , the relationship between economy concepts and the patterns of Inter-corporate alliances is strong .
- The traditional economy concepts are examined; economies of scale and economies of scope.

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### Traditional definition:

economies of scale and economies of scope

- There are traditionally two concepts of economies: economies of scale and economies of scope.
- Traditional definition
  - Economies of scale have defined factors that cause the average cost of producing a commodity to fall as output of the commodity rise.
  - Economies of scope have defined factors that make it cheaper to produce a range of related products than to produce each of the individual products on their own.

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### Internal effects and External effects

- Internal effects mean influence and effect between one player and the other player that constitute alliance.
- External effects mean influence and effect between a customer and a player.

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## Explanation of two economy concepts in this paper

- Economies of scale is internal and external effects ( merits and risks) that increases activity -scale by alliance.
- Economies of scope is internal and external effects ( merits and risks) that cause combinations or connections of the different products, business and activities by dyadic corporate-alliance.

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## Economies of coupling and Network Externalities: Economies of coupling

- There are two pre-concepts in relation to economies of scope; Economies of coupling and Network Externalities
- Economies of coupling defines plural firms are coupling, and the connection of information and know-how of them cause synergistic effects (Miyazawa 1988)
- Miyazawa doesn't distinguish the vertical alliance from the cross-industry alliance that this paper does .

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### Economies of coupling and Network Externalities: Network Externalities

- The concept of Network Externalities is a part of external effects on economies of scope of the infrastructure-application alliance.
- The traditional definition : Network Externalities are the effects on a user of a product or service of others using the same or compatible products and services. The benefits of a user are increasing as increasing the number of other user.
- Network Externalities may effect on the small scale as a whole.
- For example, a small number of users can be increasing the benefits by accessing the infrastructure of the infrastructure - application alliance.

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## CASE-STUDY

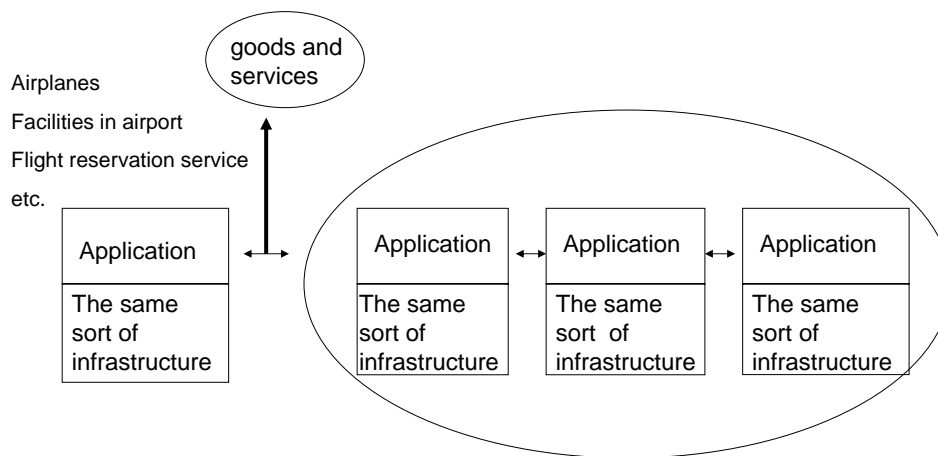
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## Four cases and the patterns of Inter-corporate alliances

- Horizontal alliance     Star Alliance
- Cross-industry alliance     (CVS Convenience Store) and Banks
- vertical alliance     KFCJ (Kentucky Fried Chicken Japan Ltd)
- Infrastructure-application alliance     Sony Bank

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### Star Alliance: Economies of scale on the horizontal alliance



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## STAR ALLIANCE

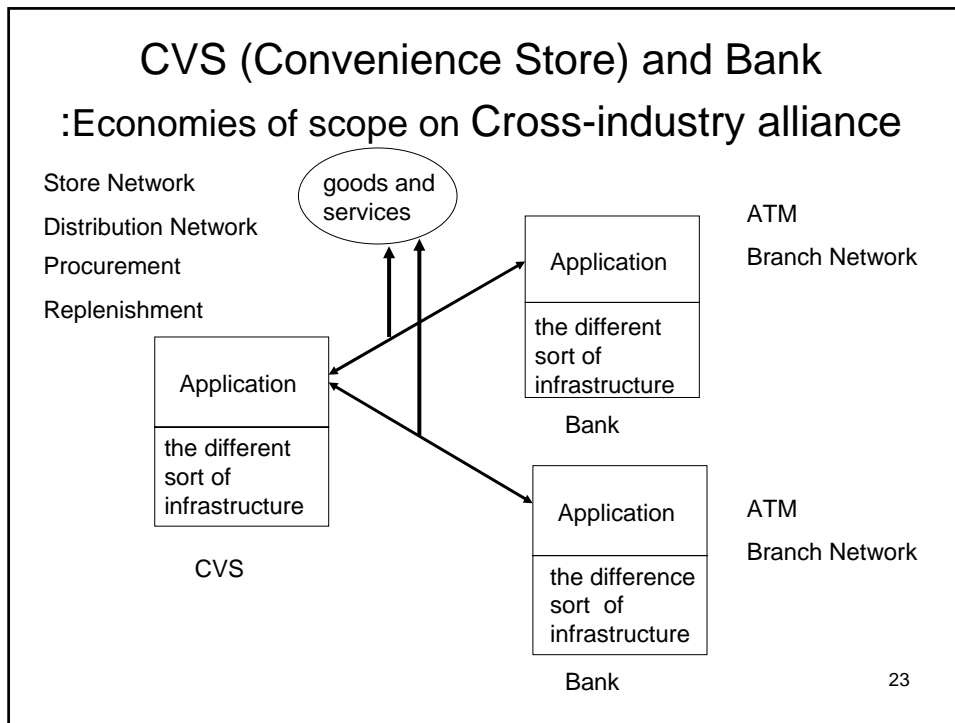
- A group of five world-class airlines got together, and Star Alliance established in 1997.
- Star Alliance provides customers with airline networks, lounge access, check-in services, ticketing and dozens of other services to improve the travel experience for customers and efficiencies for the carriers.
- By 2006 the alliance had grown to 17 members and three smaller, regional members with two other international carriers in China scheduled to join in 2007.
- Member Airlines: AIR Canada, Air New Zealand, ANA, Asiana Airlines, Austrian, bmi, LOT Polish Airlines, Lufthansa, Scandinavian Airlines, Singapore Airlines, South African Airways, Spanair, SWISS, TAP Portugal, THAI, United, US Airways, Regional Members

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## Merits and Risks of Star alliance

- **Internal merit**
  - The equipments that use in the airplane; many pieces of paper cup ,blankets are standardized and can be procured in the worldwide.
- **External merits**
  - The common mirage highly increases the attractions of the mirage system.
  - The flight schedule of another member is coordinated in the case of the cancellation.
- **Internal risk**
  - The critical mass of passengers is needed by the width of flight network.
- **External risk**
  - As Star Alliance is a big group of air flight companies , it makes flight choices of passengers less.

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## Convenience stores and Banks

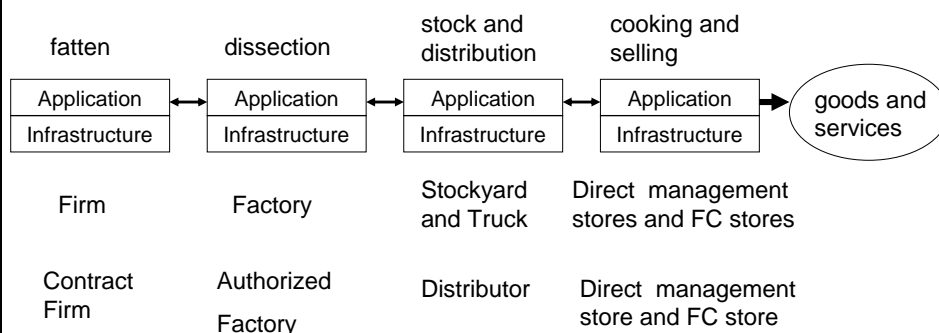
- As going on the Japanese financial big bang, the other industries adding the banking industry provide a wide of financial services.
- The Customers of Banks (Bank of Mitsubishi-Tokyo UFJ. etc.) withdraw their own account with ATM (automatic teller machine) located in the convenience stores (Lawson convenience stores etc) .

Merits and Risks of the alliance between Convenience stores and Banks

- **Internal merit**
  - The rate of operation both in the space of convenience store and banking information system is increasing.
  - Without the constraint of payable money ,the activity of customer s purchasing can be increasing.
- **External merit**
  - A customer withdraws his/her account in a convenience store and buys something more. The effect on one stop shopping becomes strong.
- **Internal risk**
  - The salesclerk of the convenience store need to both sale goods and services and manage enough and many sorts of money.
- **External risk**
  - The customer may confuse the brand image of convenience store (convenient) and bank (safety).

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Supply-chain of KFCJ (Kentucky Fried Chicken Japan Ltd)  
:Economies of scope on the vertical alliance



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## Kentucky Fried Chicken Japan Ltd.

- Kentucky Fried Chicken Japan Ltd. is a fast food franchiser and main food is fried chicken.
- Kentucky Fried Chicken Japan Ltd. has instituted and managed the supply –chain; Contract Firm-Authorized Factory-Distributor-Direct management stores and FC stores.

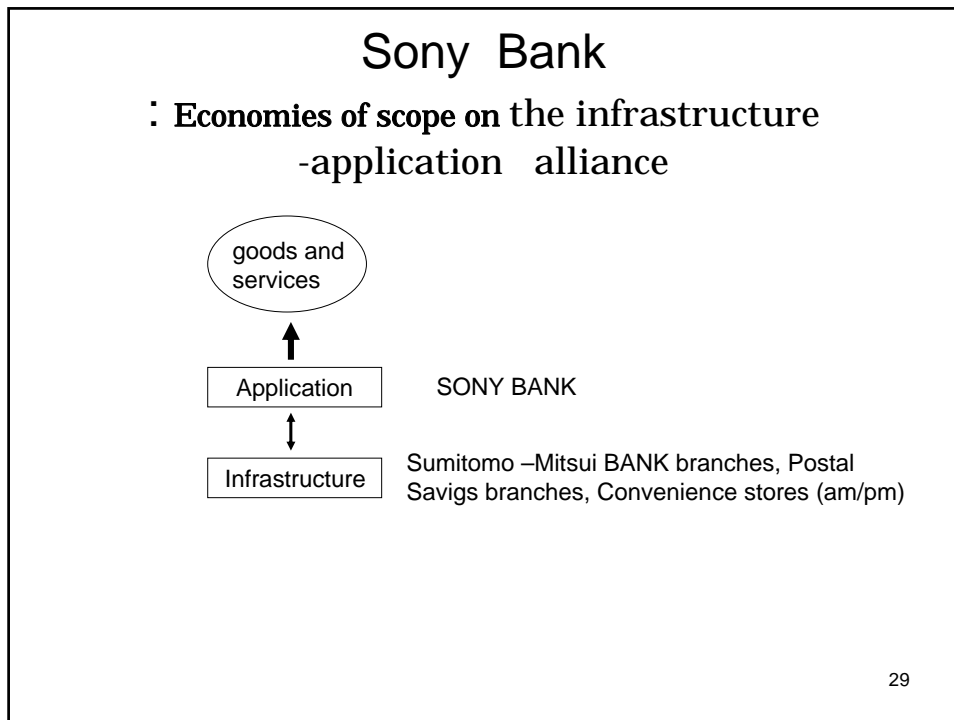
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### Merits and Risks of the vertical alliance

(Kentucky Fried Chicken Japan Ltd.)

- **Internal merit**
  - The supply chain to supply chicken stably makes the business activity smoothly and effectually.
  - The unification of information systems over the supply chain makes a prospect of the demand and supply more accurate.
- **External merit**
  - The franchiser can easily reply the references of the franchisees that confirm the additional supply.
- **Internal risk**
  - By the institution of the authorized factory ,the factory not to fulfill the standard can't be taken part in the supply chain.
  - As it is hard to take part in the supply chain newly for the reason of adding specific relational investment, the change of the members is very hard.
- **External risk**
  - As the products under the brand of KFCJ depend on the suppliers ,the suppliers effect on the brand image strongly.

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- ## Sony Bank
- Sony Bank is established in April 2, 2001.
  - Sony Bank is a member of Sony Financial Holdings that is Japan's first financial holding company to hold both insurance and banking business under one umbrella.
  - The shareholders of Sony Bank are Sony Financial Holdings Inc. (Number of shares owned 440,000 shares, 88%) and Sumitomo-Mitsui Banking Corporation (Number of shares owned 60,000 shares, 12%).
  - Sony Bank has no real branch.
    - The customers of Sony Bank withdraw their own account with ATM in the other banks (Sumitomo-Mitsui Banking Corporation branches and Postal savings branches, etc).
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### Merits and Risks of the infrastructure-application alliance on Sony Bank

- Internal merit
  - Sony Bank can make a banking business with the use of ATM in the Sumitomo –Mitsui BANK branches, Postal Savigs branches, Convenience stores (am/pm).
  - The ATM network limited the domain of Sony banking business.
- External merit
  - A customer who uses ATM in the Post office is served with other postal services.
- Internal risk
  - Sony Bank tend to research and development the banking services considering the application.
- External risk
  - The customers of Sony Bank are limited with the location of the applications.

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## Summary of Case Studies

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## Merits of economy concept

<b>Economy concept</b>	<b>Internal merit</b>	<b>External merit</b>
<b>Economies of scale on the horizontal alliance</b>	the average cost of producing a commodity to fall per unit and critical-mass	easy access to purchase and use
<b>Economies of scope on Cross-industry alliance</b>	complementation assimilation	increase of one stop shopping
<b>Economies of scope on the vertical alliance</b>	the constant supply , improvements across the supply chains and differentiation	easy proposal across the supply chains
<b>Economies of scope on the infrastructure-application alliance</b>	whole business formation, the limit of business domain	promoting users' convenience

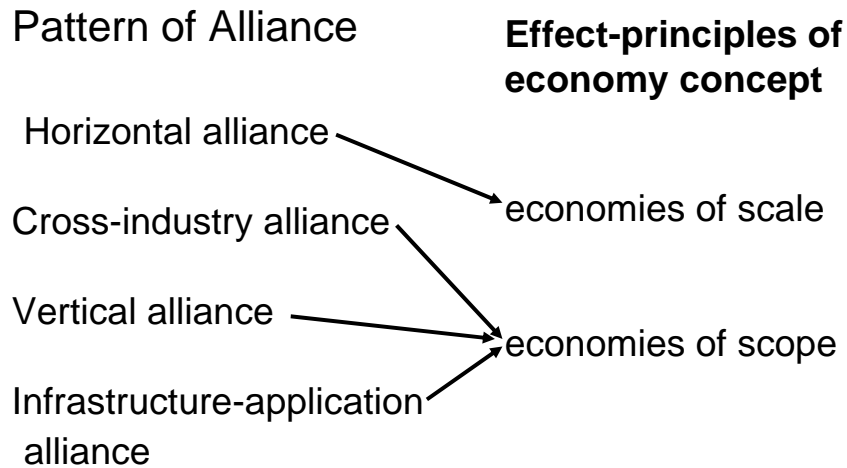
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## Risks of economy concept

<b>Economy concept</b>	<b>Internal risk</b>	<b>External risk</b>
<b>Economies of scale on the horizontal alliance</b>	making flexibility low on the rate of operation	a choice range reduce
<b>Economies of scope on Cross-industry alliance</b>	complexity of coordination and judgments with activities	brand image confuse by combination
<b>Economies of scope on the vertical alliance</b>	difficulty of changing membership	brand image limited by the alliance partner
<b>Economies of scope on the infrastructure-application alliance</b>	developing constrains underlying partner's standard	minority opposition without uses of government and infrastructure

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## The relationship between economy concept and alliance



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## Conclusion

- **Inter-corporate alliance can be classified into four patterns by its alliance-form.**
- **From the view points of Inter-corporate alliance, the concepts of economies are examined.**
- **The merits and the risks of four inter-corporate alliances are divided into internal and external effects, and four concepts of economies are proposed corresponding to four alliance-forms.**

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