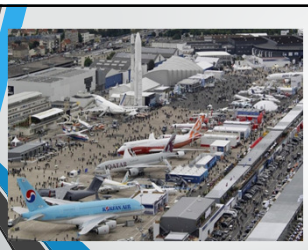

Industrial trade

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6th International Week - Keleti Faculty of Business and Management

The lecturer

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The lecture

- **PART 1 – Industrial Trade, the Basic**
  - Specificities
    - Market Behavior
      - Business Model
- **PART 2– Industrial Trade, strategy**
  - Differentiation Strategy
    - Trade Strategy

Industrial Trade, the basic - Specificities

- **You want to buy a Boeing, how to deal with ?**
  - Can you buy a Boeing ?
    - The B 2 B transaction in airline sector shows 6 specificities
      1. Industrial environment
      2. Dependance of traders in the Supply chain
      3. Very specific good
      4. Imperfect market structure
      5. Disruptive innovation
      6. Integrative and constructive negociation

Industrial Trade, the basic - Specificities

- **1 – Industrial Environment**
  - associating airliners (service activity) with aircraft manufacturers (secondary sector).
  - In "permanent contact", the aircraft sellers "perfectly knows all airliners operating the field ...".
  - The trade between aircraft manufacturers and airliners is oriented by their concern to make their business model profitable
    - to realize economies of scale in order to lower the cost of infrastructure for the aircraft manufacturer
    - to reduce the risk of cycling conditions for airliners.

Industrial Trade, the basic - Specificities

- **2 – Dependance of traders in a supply chain**
  - Industrial trades takes place in a sector in which the two economic actors are mutually dependant
  - In this context "everything matters", the aircraft manufacturer will integrate the "fleet plans" of airliners companies and downstream constraints along the supply chain to the final market
  - Airliners will integrate aircraft performance, aircraft delivery constraints along the assembly line, the constraints upstream of the supply chain
  - Proximity, time path of the transaction, and specific trade arrangements is featuring the industrial trade.

Industrial Trade, the basic - Specificities

- **3 – Very specific good**
  - Technical features, technological potential, economic criteria matter and are key elements of the negotiation "The idea is to pinpoint operational performance of the aircraft, its fuel consumption and performance over time path"
  - As a result, the decision process is longer and transactions more costly.

Industrial Trade, the basic - Specificities

- **4 – Imperfect market structure**
  - Industrial trade takes place in a particular context of an imperfect market structure with a small number of aircraft manufacturers and a very high number of airliners companies with various demands
  - The market is segmented, with some companies focusing on price (Ryanair), others on financial terms (leasing)
  - Consequently, the strategic dimension in the trade relationship is pregnant, the setting up of the contract (600 pages of contract) is a evidence of the complexity of the trade process.

Industrial Trade, the basic - Specificities

- **5 – Disruptive innovation**
  - Disruptive innovations deeply shift the supply chain
  - Competitive advantages resulting from innovations in the sector can shift market conditions then impacting the position of both airliners and aircraft manufacturers
  - One should distinguish the orders aimed at completing a fleet with well known and mastered technology, and the orders associated with new technological devices which require to analyze "... the economy associated with the new technology".

Industrial Trade, the basic - Specificities

- **6 – Integrative and constructive negociation**
  - The trade act is part of a complex dynamic of interactions
  - Exchanges may be dominated by cooperative or non-cooperative strategies (Ryanair)
  - Marketing is the operational tool (B 777 engine), which allows the integration of stakeholders in order to achieve a better cooperative trade or a successful coordination

Industrial Trade, Market behavior

- **The Demand**
- **The Supply**
- **The market structure**

Market behavior - The Demand

Behavior binding by a specific demand

- **The industrial demand lies in a sector where the end point is the consumer market (for a private good) or the public market (for a public good)**
- **If for consumer, demand of product lies to the usefulness of the product (a highly subjective notion), industrial demand lies to a need for a productive resources such as labor, capital, raw materials, intermediate goods or services in order to realize an output**
- **All request is specific and very informed; Technical press and documentation are scrutinized by purchasers (engineers and technicians)**
- **industrial demand is shaped by professionals through a selection process on every supplier with some assessment process of the seller and deep analysis of the value of the product**

Market behavior - The Demand

A decision process rational rather than emotional

- Through several steps
- Step 1 – Which one to buy?

- Suppose that in a market several goods meet the need and are differentiable by their characteristics, some are more efficient, others are easier to use.

- The decision-making process will be as follows: the company decides on a minimum level for every property that are looked for. Every property is then assessed by a score method, so that the choice process is based on a scoring method with minimum standards.

Market behavior - The Demand

Scoring Application

- Selection of a light business aircraft for the visit of remote sites by the administrators and customers, 8 people, flight from 60 to 90 minutes

Light Business aircraft CITY TO CITY, 8 PASSAGERS MAX, 60 to 90 minutes flights	PRICE	QUALITY = SPEED.COEFF1 + COMFORT.COEFF2
ADAM AIRCRAFT A 700	750 000 €	120
ECLIPSE 500	650 000 €	80

- ✓ If the "price" is the selection rule, ECLIPSE 500 is selected because it is the cheapest
- ✓ If "quality" is the selection rule, ADAM AIRCRAFT A 700 is selected.
- ✓ If a price / quality ratio is the selection rule, ADAM AIRCRAFT is selected [value: 120/750 = 0,16] against ECLIPSE [80/650 = 0,12]

Market behavior - The Supply

The supplier, a cost oriented behavior

- The willingness to supply on the market
  - The supply curb refers to the minimum price required by the supplier to produce and deliver a specified quantity to the market. This minimum price just meet the cost (profit included)
- Fixed cost, decreasing and increasing cost

- Profitability and break-even point

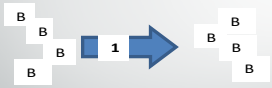
  - Since the supply relies on a cost function, the sustainability of a business depends on an amount of product sold
  - Given the fixed cost, there is a break-even point, the point (expressed in days) when the company has sold enough to be profitable. Any additional quantity sold is then profitable.

Market behavior - Market Structure, Market Power

The market configuration influences the power of the supplier, meaning its price power

Configurations B to B

competitive configuration *(1)*

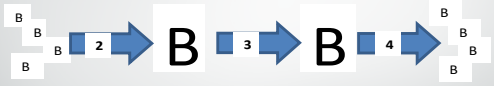


The competitive configuration is associated with a business model in which prices follow a downward pattern, consumer market price is fixed and company along the supply chain will adapt to this final price. This competitive structure is not very usual in industry.

Market behavior - Market Structure, Market power

The market configuration influences the power of the supplier, meaning its price power

Monopson (2) *Bilateral monopol (3)* *monopol (4)*



2: the monopsony structure refers to the existence of numerous suppliers facing a unique customer. This structure as "contractor / subcontractor", is frequent in the industrial environment. When the firm is a multinational in a dominant position the grid for financial profitability can harm partners business model.

3 : refers to a bilateral monopoly configuration where only one provider and one customer exist. The equilibrium in the market relies on the acknowledgment of a damage enforcement power from the other

4: the monopoly configuration. The market power is very large and only limited by the willingness to pay from purchasers.

Market behavior - Market Structure, Market power

The market configuration influences the power of the supplier, meaning its price power

Bilateral Duopol *(5)* ***Contested monopson (6)***

5 :bilateral duopoly meaning that two suppliers are facing two customers. The equilibrium is often unstable, as firms can enter in strategic games upon quantities or upon prices. Agreements are the logical solution from ruinous non-cooperative strategic game.

6 is a contested monopson, where the government has a monopson position. This is a frequent configuration in industrial sectors especially associated with the use of a heavy public infrastructures, like ports, airports, energy network, telecommunication network etc. This situation can lead suppliers to let the cost function drift, or even cheat on the real cost, to benefit from a monopoly rent. The free entry of suppliers makes it possible to put pressure on the supply price enforcing them to reveal the real cost

Industrial Trade - Business Model

Notion

- **The business model of a company is a synthetic representation, a sketchy way to track the origin of the added value, the role of every stakeholders. It allows to see how the company makes money and the role of every partner along the industrial chain to secure a sustainable development.**

Industrial Trade - Business Model

Canvas

- **In practice, we use a canvas like Alexander Osterwalder and Yves Pigneur's. The canvas is in the form of a table with 9 pieces:**

Key Partners	Key Activities	Supply	Customer relationship	Customers
	Key Resources		Network	
Cost		Income		

Business Model Exemples

Ford (1908) and traditional car manufacturing

Under Henry Ford and its famous Ford T from 1908, the business model highlights the following pillars:

- a simple car supply (model without any option and black), innovative (no disengagement, elevated car body, removable engine) and robust (customers who bring the notoriety are peasants).
- The activity is industrial and commercial. The car was sold for $ 825 when it was created in 1908, lower than other similar models, with a strong popularity and a strong American identity.
- As network, Ford uses massive advertising and creates an extensive distribution network, which largely contributes to Ford's market success.
- The key resources lies to the way labor is organized, the reduction of costs being a main target: specialization by performing basic tasks, standardization of tools and parts, optimal location selection to minimize transport costs.
- The model generates a huge revenue, not only by the volume of sales (28 million Ford T will be sold) but also by a cost killing behavior in production and marketing.
- Looking at customer relations, Ford is at the edge, it is the first vehicle where everything can be repaired unlike any other models.

Business Model Exemples

Renault (2015) and electric car

Car is no longer the first center of interest (ranking 17th in Japanese youth interest). For Generation Y, what matters is the availability of the car (through rental or sharing).

- Until now, industrial activity was led by "Kaisen" methods, a process designed to promote continuous incremental innovations, parsimonious. The Renault business model go towards breakthrough innovations, more radical like supplying its new electric car.
- This disruptive model requires a significant investment with very high fixed costs, particularly in research and development, while revenue is more hazardous and very dependent on government grants (direct grants to consumer, indirect grants with the development of electricity powered infrastructure).
- The key resources are dependent on partnerships : the Nissan-Renault Alliance has invested 4 billion euros and 2,000 people (1,000 at Renault, 1,000 at Nissan) on the electric car.
- The networks, the business has to adapt to the new modern kinds of communication, in particular network marketing and social networks: 15% of Renault's communication expenses are allocated to the Web.
- Regarding the key partners, and the customer relationship, the energy powered issue is decisive. Renault is working with the company "Better Place" that manage the service for the battery recharge. Current technology can't power a battery in five minutes, the time need for refueling in a gas station. Better Place then devised an automatic battery exchange service that can be performed in 2 minutes.

Business Model Exemples

Navy sector DCNS

One of the only industrial companies in the world to offer a complete range of navy vessels, from the patroller to the aircraft carrier, including submarines and a complete range of services - training and advice, operational maintenance (MCO), integrated logistical support, infrastructure.

- Regarding its activity, DCNS can supply anything relies with the ship and its combat system throughout its all life cycle from design engineering to maintenance in operational condition
- Customers are the French Navy, which provides 50% of the sector's income (€ 5 billion), but also international customers. Any markets in the world is reachable thanks to an exceptional French maritime space.
- Given the design and maintenance of the systems, long-term customer relations are at the heart of the model to provide continuous solutions to the needs of any national navy related with any kind of threats.
- Its key resources are based on the know-how of its employees and on the quality of the industrial platforms. The model is based on the technological superiority of the products, meaning that heavy investment in research and development should be involved.
- Networks and key partners are provided by the General Direction for weapons and the French Navy. Key partners provide infrastructures and protection to enable the company to develop in efficiency and safety. However, the model is risky, as relying on State orders. The strategy of diversification in renewable marine energies, hydro, floating wind etc. allows DCNS to consolidate its naval model.