Service Science and Relation to other disciplines

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On previous lesson

- Knowing information
  - Perfect, imperfect and asymmetric information
- Knowing the behaviour of the others and rules
  - Imperfect
  - Incomplete
- Searching and consequences
- Information about price and quality
- Auction models

Information gap

- Subjects on the opposite sides of the market have a different information about the subject of exchange
  - Seller has better information about the car
  - The insurance company must trust in its clients responsibility
- Information gap is the difference between two subjects on the market
  - Is positive – if the subject knows the information
  - Is negative – if the subject does not know the information

How to fit information gap?

- Filling the gap
    - By distribution of the information?
    - Removal of subject's disadvantage, based on nascence of particular information
- Subject must be willing to invest to filling of the gap
- The first condition is to identify the gap
- The filling is the function of time
- Questions
    - How will the subject fill the gap?
    - Can the gap be filled by itself?

Filling the information gap

- Absolute
  - The information are distributed from one side to the other
  - Example
    - Register of insured persons
      - To know a history of new client
    - Register of debtors
      - To eliminate to risky clients
- Subjects facing negative gaps can join even if they are competitors

Filling the information gap

- Relative
  - If there is no way how to get the information
  - Example
    - Bankrupt of travel agency
      - The client has no power nor possibility to find the information
    - Mandatory insurance of travel agency
      - The client does not need to take care about travel agency finance
    - Mandatory car insurance
  - Relative filling is the eliminating of the gap's influence

Service Science and Management

- Management is focused on
  - Negotiations
  - Finding source of the problem
  - Competencies of the people
 - Leadership
- The most important is synergy

Synergy in management

- To create synergy means
  - Understand mission of the company
  - Share the vision of the company
  - Learn the strategy of the company
- Any organization is example of service environment

Organization as service environment

- Internal services
  - Supporting main business of the company
    - IT services, Cleaning services, Backup office, Accounting
  - Representing relations between people
    - Cooperation on the project
    - Communication in the company
- External services
  - Services company buys or sells

Organization Service Environment
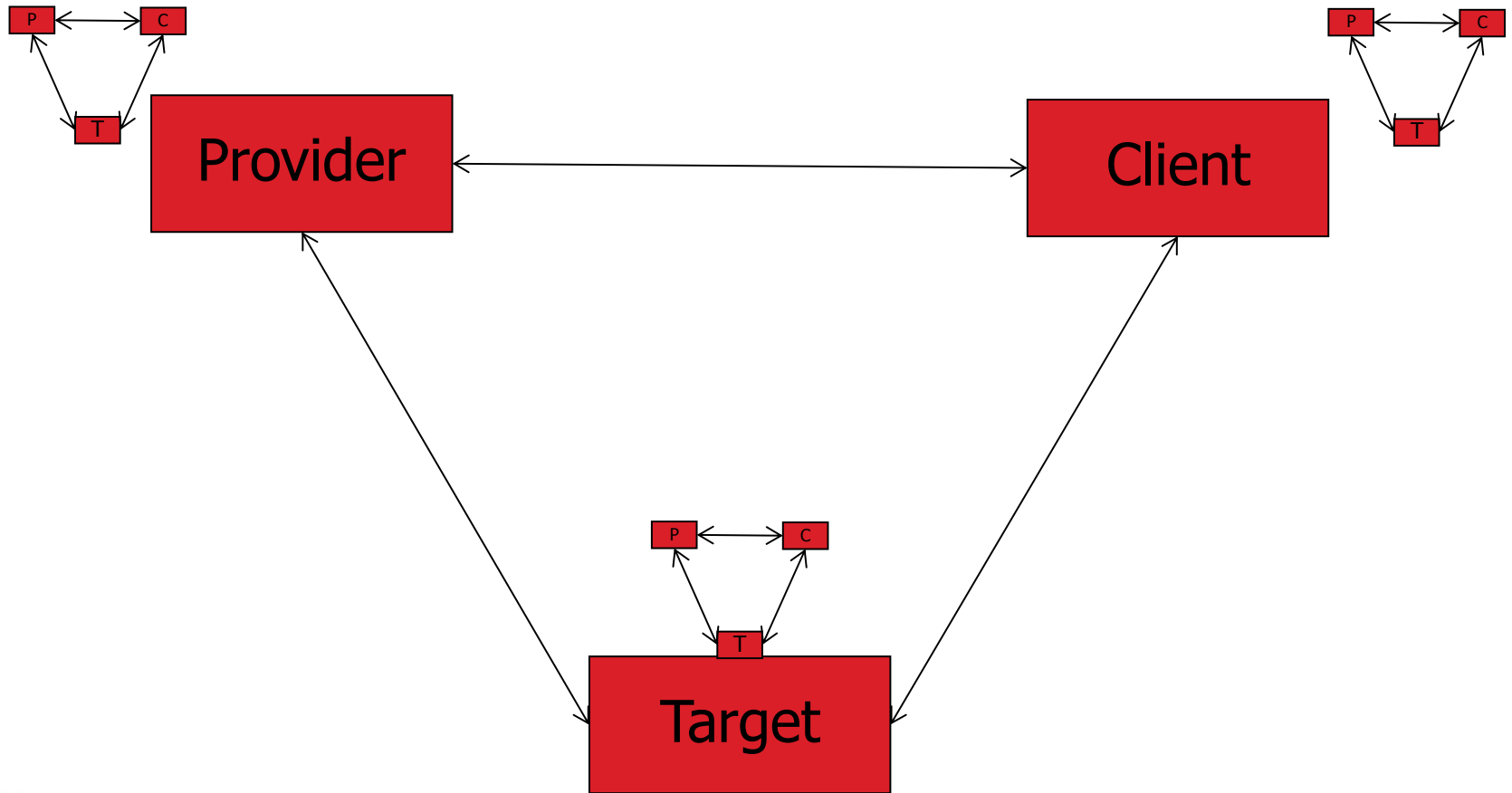
Management of Service company

- A lot of new methodologies inpired by services
- New business models
- Switch from Business model Canvas to Lean Canvas

Business model Canvas

The Business Model Canvas

Designed for:	Designed by:	Date:	Version:

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATERGORIES
Production
Problem Solving
Platform/Network

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPES OF RESOURCES
Physical
Intellectual (brand patents, copyrights, data)
Human
Financial

Value Propositions

What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones work best?
Which ones are most cost-efficient?
How are we integrating them with customer routines?

CHANNEL PHASES
1. Awareness
How do we raise awareness about our company's products and services?
2. Evaluation
How do we help customers evaluate our organization's Value Proposition?
3. Purchase
How do we allow customers to purchase specific products and services?
4. Delivery
How do we deliver a Value Proposition to customers?
5. After sales
How do we provide post-purchase customer support?

Customer Segments

For whom are we creating value?
Who are our most important customers?

Mass Market
Niche Market
Segmented
Diversified
Multi-sided Platform

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IS YOUR BUSINESS MORE
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenues?

TYPES	**FIXED PRICING**	**DYNAMIC PRICING**
Asset sale	*List Price*	*Negotiation (bargaining)*
Usage fee	*Product feature dependent*	*Yield Management*
Subscription Fees	*Customer segment*	*Real-time-Market*
Lending/Renting/Leasing	*dependent*	
Licensing	*Volume dependent*	
Brokerage fees		
Advertising		

Lean Canvas

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
List your top 1-3 problems.	Outline a possible solution for each problem.	Single, clear, compelling message that states why you are different and worth paying attention.	Something that cannot easily be bought or copied.	List your target customers and users.
	KEY METRICS		**CHANNELS**	
	List the key numbers that tell you how your business is doing.		List your path to customers (inbound or outbound).	
EXISTING ALTERNATIVES		**HIGH-LEVEL CONCEPT**		**EARLY ADOPTERS**
List how these problems are solved today.		List your X for Y analogy e.g. YouTube = Flickr for videos.		List the characteristics of your ideal customers.

COST STRUCTURE	REVENUE STREAMS
List your fixed and variable costs.	List your sources of revenue.

Service Science and Marketing

- Marketing is complex tool
  - how to promote your services
  - How to set up communication
- On some universities, service science is taken just like marketing tool
- Service Science is more complex
- It provoke the changes in understanding of marketing

Service Science and Marketing

- The main changes to marketing thinking
  - Always think about the customer
  - Build long time relationship
  - Involve the customer into value creation proces
- Switch from pushing relationship to synergy relationship
  - Relationship marketing
- It always help in the building customer loyalty

Service Science and Economics

- Economics of information
- Service dominant logic is specific approach to economics reality
- It does not change the basic economics principles
- It looks to them from other point of view
- Moral Hazard as the motivation of creating service systems

If the information gap is

- More state regulations
- The right to know must be protected
- Misuse of information in business
- Data privacy
- GDPR

- Support of innovations
- Pleatforms to build new ways of knowledge management
- Support of information sharing
- Responsibility in the praivate data usage

Dissadvantage

Advantage

Service Science and Soft Skills

- Key factor for multidisciplinarity approach
- To be able to set up a service systém you need communication skills
  - To understand the position of customer
  - To find the problém
  - To present correct solution
- Service Science is affecting many other disciplines
- Complete switch of the world understanding

Service Science and Soft Skills

▸ Soft skills are mostly connected with
  ◦ Communication
  ◦ Behavior
  ◦ Cognitive methods
  ◦ Adaptation
▸ In Service Science peaple also tend to call „Soft Skills" all knowledge thai is not dominat

Service Science and IT

- Gives meaning to IT
- Analyzing environment
  - Gives examples of data usage
  - Is inseparable part of the environment development
- Helps to develop IT supported services
- Parent – child relation
- Cooperative relation
- Relation to information

Parent – child relation

- ▶ SeS was developed on IT field
- We analyse knowledge and information intensive services (KIIS)
- Service Science means curricula, training, and research programs that are designed to teach individuals to apply scientific, engineering, and management disciplines that integrate elements of computer science, operation research, industrial engineering, business strategy, management sciences, and social and legal sciences, in order to encourage innovation in how organizations create value for customers and shareholders that could not be achieved through such disciplines working in isolation. (U.S. National Innovation Investment Act, 2007)

Cooperative relation

- The purpose of IT is to provide service
  - Usage of IT is a service
  - It has power to support other services more than others
- SeS helps to adapt the service for particular user
- SeS says how to retain the user
- SeS defines how the product's value is developed
- The development of IT tools must not be purposeless (without specific aim)
- The concrete IT experts need to have multidisciplinary knowledge

Relation to information

- Work of informatics specialists is about work with information
  - Do they know all semantics and consequences?
- SeS is the reaction to moral hazard problem on IT market
  - a tendency to take undue risks because the costs are not born by the party taking the risk
- Double moral hazard
  - If both subjects are mutually in the relationship that causes moral hazard problem

Conclusion

- Management and Service Scinece
- Marketing and Service Scinece
- Economics and Service Scivence
- IT and Service Science
- Understanding the musltidisciplinarity