Mobile Operator Business Game

MOB Process

S-38.3041
Operator Business
Spring-06

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Outline

- Introduction to Business Games
- The Mobile Operator Business Game - MOB
- The MOB Process
- Decision Making Windows in MOB
- Scenario Description
- The First Season
- Sessions Spring-06
- Q&A

Introduction to Business Games (1/2)

- The usage of active and problem-based learning has increased rapidly

- Naturally applied in business games: "learning by doing"

- Summarize different areas of business under one teaching event

- "The purpose of a teaching simulation is to convey experimental lessons transferable to the real world" (Lane 1995)

Introduction to Business Games (2/2)

- A business game cannot predict the future
- However, it can be used to:
  - analyze business constraints, dependencies and possible futures;
  - see what a possible future could look like;
  - help to gain better understanding of business and management;
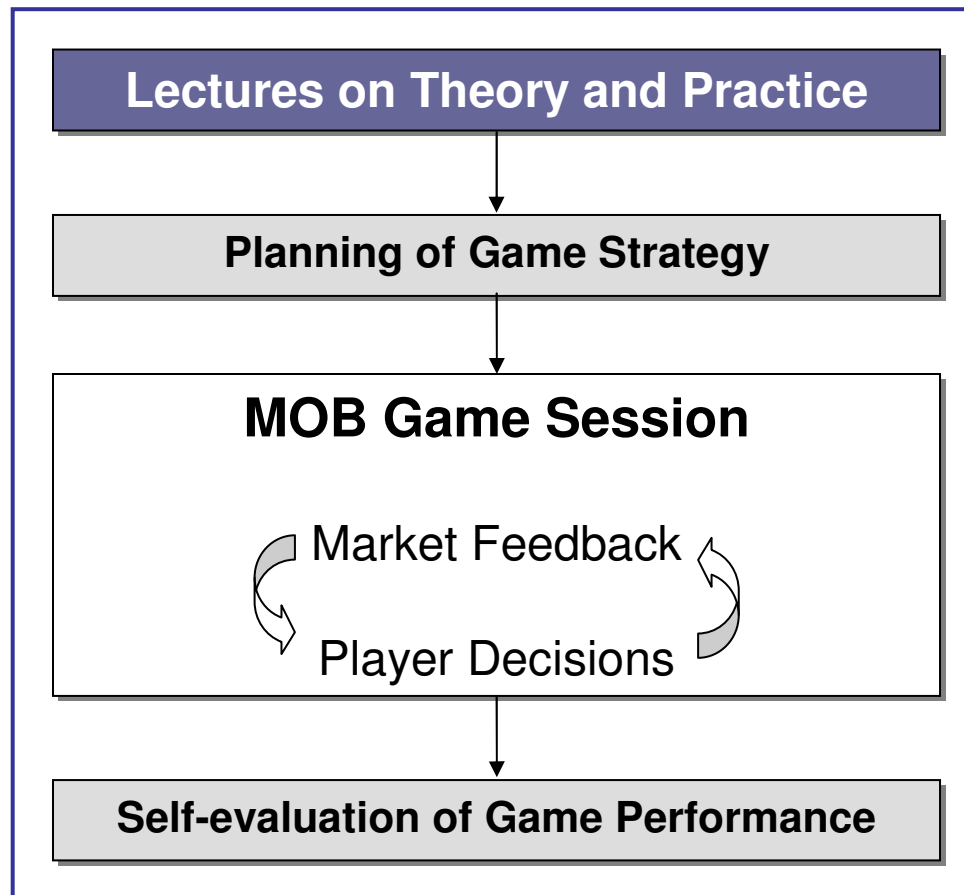 - improve teamwork;
  - be fun.

The Mobile Operator Business Game - MOB

- The purpose of the game is to introduce players to the mobile operator business and decisions related to that

- Focus will be on new mobile data services and technologies

- Modeled subgames:
    - Demand – supply balancing game;
    - Cellular radio game (WCDMA vs. EDGE vs. GPRS);
    - Multi radio game (cellular vs. WLAN);
    - Pricing game (usage based vs. flat rate vs. block pricing);
    - Charging game (prepaid vs. postpaid);
    - Messaging game (SMS vs. MMS);
    - Mobile content game (operator charging vs. bit pipe);
    - Handset game.

The MOB Process (1/5)

- Structure of MOB training process

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│  │   Lectures on Theory and Practice       │ │
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│                     ▼                         │
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│  │        Planning of Game Strategy        │ │
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│  ┌─────────────────────────────────────────┐ │
│  │           MOB Game Session              │ │
│  │                                         │ │
│  │            Market Feedback              │ │
│  │                                         │ │
│  │            Player Decisions             │ │
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│  │   Self-evaluation of Game Performance   │ │
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The MOB Process (2/5)

- Lectures:
  - Before the game sessions
  - Cover issues needed in the actual game sessions
  - One of these lectures (this lecture) gives an introduction to the actual business game
  - Explanations about the actual decision windows in MOB
  - Scenario description
  - First season

The MOB Process (3/5)

- Planning the Game Strategy:
  - Before attending to the game sessions
  - Made in teams
  - The main task of the preliminary exercise is to formulate an overall business strategy over how to succeed in the game
    - based on what has been learned in earlier studies and during the lectures
    - based on the knowledge of the real world
  - Documentation available for planning:
    - player instructions
    - scenario description
  - In previous years, because of thorough planning, the students were able to start making their own decisions fairly fast
    - Helps the students to get a good picture of what MOB is all about and to start playing without too much delay.

The MOB Process (4/5)

- ## The Game Session:
  - Each game session lasts roughly one working day including 5-7 decision rounds, or market seasons
  - During the game session, 4 teams (mobile operators) of 2-4 students sitting in the same computer classroom competes against each other in the same MOB market space
  - At the end of the session, the students will fill in a feedback questionnaire on individual basis
    - This gives us the opportunity to get to know how the participants experience this type of teaching
    - Also what their opinions about different aspects of the game are, such as ease of use, complexity, and substance scope, and also about opinions for further development etc.

The MOB Process (5/5)

- ## Self-evaluation:
  - – After the actual game session the student will write an individual final report
  - – The main task of the final report is to analyze how the students' team succeeded in the game
    - A secondary task will be to analyze how the teams' actions differed from that of the plans that the team had done in the preliminary exercise
  - – The final report adds to the learning experience and forces the students to think about what they have done
    - what was done wrong/right
    - what could have been done in a different way

Decision Making Windows (1/3)
Main Window

Helsinki University of Technology
Networking Laboratory

Decision Making Windows (2/3)
Offers for Consumers: Voice Services

Main	**Consumers**	Corporations	Content	Marketing	R&D
Maintenance	Purchasing	Handsets	HR	Finance & CFS	IS & BS

Voice	Data	Messaging

Offers for Consumers

Postpaid subscription

	Season 5	Season 4
Nr. of postpaid subs		778 466
Opening charge (€)	3,65	3,65
Monthly charge (€/month)	3,65	3,65
Calls (€/min) 07:00-17:00	0,16	0,16
Other	0,14	0,14
Average min/subs/year: 07:00-17:00		974,40
Average min/subs/month: 07:00-17:00		81,20
Average min/subs/year: other		705,60
Average min/subs/month: other		58,80
Total average min/subs/month		140,00
Estimated nr. of postpaid subs	700 000	700 000
Estimated average min/subs/month: 07:00-17:00	78,00	78,00
Estimated average min/subs/month: other	65,00	65,00
Revenues (k€)		232 363
Estimated revenues (k€)	211 932	211 932

Prepaid subscription

	Season 5	Season 4
Nr. of prepaid subs		63 670
Opening charge (€)	4,00	4,00
Calls (€/min) 07:00-17:00	0,18	0,18
Other	0,16	0,16
Average min/subs/year: 07:00-17:00		737,76
Average min/subs/month: 07:00-17:00		61,48
Average min/subs/year: other		534,24
Average min/subs/month: other		44,52
Total average min/subs/month		106,00
Estimated nr. of prepaid subs	40 000	40 000
Estimated average min/subs/month: 07:00-17:00	56,00	56,00
Estimated average min/subs/month: other	49,00	49,00
Revenues (k€)		16 954
Estimated revenues (k€)	8 602	8 602

Decision Making Windows (3/3)
Other Windows

- Consumers
  - Data
  - Messaging
- Corporations
- Mobile Content
- Marketing
- R&D
- Maintenance
- Purchasing
- Handsets
- Human Resources
- Financing and Cash Flow Statement (CFS)
- Balance Sheet (BS) and Income Statement (IS)
  - Budgeted and Previous Year Statements
- Check the player instruction document!

Scenario Description (1/3)

- ## General:
  - The country where the teams operate in is democratic and promotes the development of the information society in the country
  - The market development is based on actions made by the private companies which must follow the prevailing law of communications market and competition, e.g. cartels and price agreements are not allowed between companies
  - In the beginning:
    - the population of the country is 5200000
    - expected to grow with a estimated rate of 0,15 - 0,25 percent per year.
  - The economy in the country is steady and quite healthy and the inflation is currently on a reasonable level at 2 percent
    - according to market analysts, this situation will continue also in the long run
    - interest rates are currently at a low level, currently ranging between 3- 5 percent

Scenario Description (2/3)

- ## The Mobile Communications Market
  - All the mobile operator's are classified as SMP's
  - They are supervision by the country's Communications Regulatory Authority (CORA)
    - The most important tasks of CORA are to promote competition and to prevent anti-competitive behavior of SMP's.
  - The penetration rate of mobile voice subscriptions is currently 80,8 percent
    - However, the penetration rate is still expected to grow
    - Expected growth rate for next season is at 7 percent
    - Voice will remain as the cash cow also in the nearest future
  - Amount of consumer subscriptions approximately 70 percent
  - The consumers have traditionally been focused on postpaid subscriptions
    - According to research this will change
    - Currently 95 percent of the consumer subscriptions are postpaid

Scenario Description (3/3)

- ## The Mobile Communications Market cont'd
  - Cellular data is becoming more popular
  - In the beginning GPRS is the only packet based data technology in use
    - However, depending on the operators, EDGE and UMTS will emerge during the next few years
  - The number of cellular data users in the beginning of the game is low (approximately 30000)
    - 65 percent of these are consumers and 35 percent corporate users
    - Cellular data growth rate will heavily depend on the operators' actions, but according to some estimates it could be as large as 300 percent during the first few seasons
    - Same assumptions can be made for the WLAN technology
  - SMS has traditionally been a very important service for the operators
    - Some studies have been made which indicate that SMS will slightly grow for a few years to come, but MMS will gradually start replacing some of the SMS traffic

The First Season

- All the teams have the same starting position in the beginning of the game

- The history information is the same for all the teams

- This includes:
  - the numbers in the income statement
  - the numbers in the balance sheet
  - previous year investments
  - amount of subscribers etc.

- If someone e.g. were to make a SWOT analysis of the operators, the main differences between the players would be in the actual management teams and the strategy chosen by the management team

Sessions Spring-06

- April 20, 22, 24, 25, 27 and May 2 at 9:00-17:00

- A lunchbreak at approximately 12:00

- Each round lasts for 30-60 min.

- Between each round 10-15 min.

- Player instructions and preliminary report available at:
  http://www.netlab.hut.fi/opetus/s383041/k06/index.shtml
  shortly after this lecture

- The teams will be published shortly after this lecture

- Final report question paper will be made available after the first MOB session