

HANDBOOK FOR LECTURERS

**UNISIM**

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## 1. Purpose of the Document

This document is designed for **Instructors**.

It will help them to best explain the simulation game to the participants, to run the game properly and to evaluate it afterwards.

The document does not contain a detailed description of individual sections of the simulation game which are part of the Players' Guide, as the instructors are expected to be well acquainted with them. Therefore, this document does not explain what Unisim is but explains how to teach Unisim.

## 2. Simulation Game Operating Solution

### 2.1 Equipment for the players and instructor

The application is hosted on a remote server and both the players and instructor use a web-based game interface.

Therefore, the game can be played with any device that has a web browser and Internet connection, be it either a laptop or netbook, or (thanks to adaptive graphics) also tablet or smartphone.

Each team must have at least one such device. Multiple devices are an advantage as they make it possible to manage multiple tasks and roles at the same time (for example, one player does the product editing, another one goes through the reports and yet another one makes changes to sales channels ...).

Equipment for the instructors does not necessarily differ from that of the players – the best is to have a laptop and data projector for showing and explaining the game.



*Fig. 1: Devices to play Unisim*

## 2.2 Multiple game options

Multiple games of the same or different type can take place simultaneously. For example, one school class can play a game about the sale of electronics, while another can simultaneously play a game about tourism.

The number of parallel games is limited only by the server computing power.

## 2.3 Number of companies and players

The number of companies is not explicitly given in the simulation game. However, for maintaining the clarity of the game and obtaining appropriate feedback, the recommended number is three to six companies.

Note: The number of companies cannot be changed for a game that has already started.

The number of players in a team (a company) should be selected at instructor's recommendation. The game works best with one to five players.

## 2.4 Online gaming

The game is developed also for playing online. Individual teams or team members can therefore be in very different and remote locations – just connected to the Internet.

To support online gaming, the app also includes:

Widget (status window) on homepage which displays the logs, i.e. all the actions performed by individual team players. Thus, everyone can see what has been done so far by the team players even without having to be in the same room.

Widget on the homepage displays individual team players and provides information on their connection status.

# 3. Unisim Simulation Game Versions

Currently, the following simulation options are available:

### a. Consumer electronics market

The companies are consumer electronics retailers. They select an appropriate portfolio of products and their parameters, for example, telephones,



televisions or washing machines. Products are sold both through direct channels such as stores or e-shop, and in retail chain stores.

## **b. Tourism market**

The companies are travel agencies. They offer various types of tours. They optimise their parameters for target customers including accommodation, transport or ancillary services.

### **Game types – main differences:**

Unlike tour services, the sale of products (consumer electronics) requires warehouses and storage capacity, which is (in addition to financing) another limiting factor to the quantity of products offered.

Consumer electronics products are also branded. Therefore, it is necessary to distinguish this product parameter from your own company brand (called “brand” in the simulation).

## **4. Preparing for the Simulation Game**

### **4.1 Dividing the players and getting prepared for games**

It is convenient to divide the players into companies for the time saving reasons (if possible) before the beginning of the simulation. However, the players can move between the companies also after the game has been created (while it is impossible to add/remove companies in a game that has already been created).

The best way to do this is to create two games – one “warm-up” and one “real” game.

**To create a game, it is a good idea to use an excel file** for the instructor to list the players’ email addresses and company names. It is a matter of wink to start the game then, and there is no need to re-enter the data if you play more games with the same players.

Procedure:

- When creating a game (see below), the instructor downloads a sample file: unisim\_example.xlsx soubor.
- The instructor fills in the players’ email addresses and company names in the excel file.
- The instructor saves the file as .csv.

- The instructor chooses the prepared .csv file using “Choose File” option.
- By choosing the “Import” option, the companies are automatically created and players added.

## 4.2 Background materials and preparation in advance

Before the game starts, the players should receive background materials. It helps them to become familiar with Unisim and to shorten the instructor’s introductory briefing:

- a. Instructions for players
- b. Presentation of the knowledge areas the players should understand to play Unisim
- c. Access to a trial version

For these purposes, the instructor creates a separate game, adds participants and runs the game. Invitations to the game are automatically sent out to the participants. It is advisable to set a long duration of a round so that the round can run until the game with the instructor starts (e.g. two days). This trial game will be used by the instructor for the trial game round when explaining the game.

# 5. Explaining the Simulation Game

## 5.1 Introduction into the application – how to operate it

Before getting into details, let us describe the application and how to operate it:

- The general principle of the simulation game (possibility to use the CLD diagram)
- Homepage layout and information
- Individual sections of the game, accessing them and their basic functionalities (including the Market Parameters section with the current game setup)
- How to operate the game, entering the data, purchasing, etc.

## 5.2 Explaining the process in the course of a round

The best is if the players go through individual tasks together with the instructor. The players get to know the company through financial statements first, and then each business, following the instructor’s example, creates a product, sales channels and communication, and develops human resources.

### 1. Getting to know the company and using funding

Task	Section	Report
Get to know the company's assets and financial statements	Finances – financial statements	Balance sheet/Profit and loss statement/CF statement
Learn about the company's costs: Head office and employees Financial costs (liabilities and equity)	Reports Market parameters	Head office
Financing usage: Loan and equity	Finances – company's financing	

### 2. Creating a product

Task	Section	Report
Get to know the market: size, segments, demand	Reports	Market overview
Select a product type and target segment	Reports	Market overview
Identify the required product parameters	Reports	- Product parameters weights and evaluation - Brands/Destinations
Determine the importance of product parameters for the target segment	Reports	Product parameters weights and evaluation
Enter the product: Name, number of pieces and price	Products	

### 3. Creating sales channels

Task	Section	Report
Get to know the sales channels: Types, costs, efficiency	Reports	Sales channel types
Develop a mix of sales channels	Sales channels	

#### 4. Marketing communication

Task	Section	Report
Get to know the means of communication: Media types, costs, efficiency	Reports	Media
Company communication: Develop a communication mix	Communication	
Product communication: Develop a communication mix	Communication	

#### 5. Developing human resources

Task	Section	Report
Find out about the human resources status (HR): HR index	Reports	Company efficiency
HR development support: Wage adjustments, training	Human resources	

After having completed these five tasks together with the instructor, it is advisable to let the companies complete the trial round by themselves and/or it is possible to run yet another “warm-up” round before the “real” game.

#### 5.3 Evaluation after the end of the round

To evaluate their results and benchmark themselves against the competition after the end of a round, the players can use the chart and table available to them in the Players' Guide. However, the role of the instructor is to explain this chart to the players and to highlight the most important aspects of the company results.

## 6. Debrief Report



Unlike the players, the instructor can use a special “Debrief Report”. The purpose of this report is to enable the instructor to quickly find the main issues/determinants in the company results. So, it is not only about how the company is doing, but WHY.

This information can be acquired by calculation from the simulation even without this report – the players can therefore obtain it by their own efforts. However, it would be too time-consuming for the instructor.

### Report description

Parameter	Definition	Purpose
Sales success rate	% sold of the total number of products offered. Total number for the company.	It allows you to see whether or not it is a problem to sell the offered products. If yes, it is necessary to address the product attractiveness and efficiency of the sales channels.
Product attractiveness	Maximum attractiveness achieved; information about the relevant PDS, information about the product standing by attractiveness in this PDS (benchmarked against all other companies).	The information shows whether the attractiveness is sufficient for a successful sale, or whether it is the reason for failure. The instructor is alerted of less than minimum attractiveness.
Sales channel coverage	Overall average % of channel efficiency (sum for all channels, average across all segments and products).	It shows if coverage can be a limiting factor for the sale of products.
Product margins	Markup rate in % is calculated as product margin/costs (separately for each product).	It indicates whether the markup is not above the “usual level” (the instructor gets notified) or whether it is not too low, as the case may be. Usual level is defined in the section Market parameters.
Product offer	% of the market demand (number of pieces marketed /demand) ...separately for each product type)	A quick indication of which part of the demand the company addresses with its supply.
Potential profit	The actual realised profit (loss) increased by the margin from the products offered but not sold.	The potential profit shows whether the supply is at all sufficient to cover the costs or whether it is not, even if all sales were successful.
Cost of sales	What is the cost of sales percentage of the total sales of products? Calculation: total cost of channels (indirect and direct)/product sales	It allows for a very good evaluation of distribution channels efficiency (including warehouses).
Business communication	The achieved efficiency in % (average across all segments).	The parameter shows reach in the given round, i.e. unlike the brand

efficiency – reach		value, it is not influenced by the past.
Business communication efficiency – cost efficiency	Total cost of communication of the company / achieved efficiency in % ...i.e. cost per 1% of efficiency.	It allows to evaluate and compare the communication mix efficiency across the companies (but only across all segments).
Product communication efficiency – reach	The achieved efficiency in % (average across all segments).	The parameter shows reach in the given round, i.e. unlike the Product Popularity value it is not influenced by the past.
Product communication efficiency – reach	Total cost of company communication / achieved efficiency in % ...i.e. cost per 1% of efficiency.	It allows to evaluate and compare the communication mix efficiency across the companies (but only across all segments).
Cost of capital	Total cost of capital in EUR = WACC*capital. Capital = Balance sheet lines: 13 - 23	It shows the extent to which the cost of capital burdens the company (reduces EVA).
Training – education index	The value ranges from 0 through to 100%. The company achieves the maximum value if it makes use of all training for all employees.	It shows how education contributes to the formation of HR index (there is no such information in any other part of simulation).
Training – cost effectiveness	Calculation: cost of training / education index (i.e. cost in EUR per 1 %)	It shows training mix efficiency.

## 7. How to Administer and Manage the Game

### 7.1 Administration

The instructor has access to administration. This right is provided by the super-administrator. The instructor thus becomes an administrator and at the same time can also be a player and member of one of the companies.

Logging into admin is done by typing the standard address [app.unisim.eu](http://app.unisim.eu) and entering the access data (email and password).

The administrator can, in particular:

- Create a new game
- Manage the ongoing game

## 7.2 Creating and starting a new game

Once logged into Unisim, the administrator selects a game type from those available in the list and selects "New Game". Then, a new game is created in several steps (see Figure 3).

**Step 1** – Choosing basic game parameters: game name, winning criterion (EVA/ROE/sales), round duration and game mode (see manual and auto modes).

**Step 2** – The administrator adds companies and assigns players to each company (their email addresses) – either individually, or using an excel file.

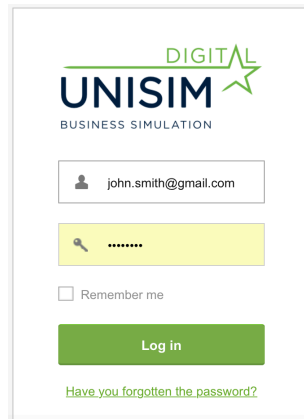
**Step 3** – Summary and confirmation that a new game has been created.

Fig. 2: Creating a new game

Once the game is created, the participants receive an email with invitations to the game. The email invitation contains login data – i.e. email, generated password and a link to a one-time login (by clicking on the link, a player enters the game without having to enter the login data). Once logged into Unisim, the players can change their password by clicking on their name in the upper right-hand corner of the screen.

Once the game has been created, it is always necessary to wait until each participant receives an email with login data. This is true for the first-time Unisim players. Otherwise, use your existing login data (email and password). **The participants (players and administrator) are registered into the game by entering their login data at [app.unisim.eu](http://app.unisim.eu).**





*Fig. 3: Logging into the game*

There are two possibilities of how to start the game:

- The administrator manually starts the first game.
- A specific date and time of the game start is selected in the auto mode.

### **7.3 Editing the game**

During the game, the administrator:

Edits the game: they can change the round duration, add or remove players from individual companies.

Ends the round – they can end the round even before the pre-set round time has lapsed.

Ends the game – the game can be terminated manually even before the pre-set number of rounds is reached or the winning criterion is met.

Once the game is over, it is not possible to continue. A final report is generated and the participants can view this one as well as other reports after the game has finished.

Additionally, the administrator has access to all existing reports in the given game.



Game name	Enter game	View reports	Termination mode	Value	Current round	Number of players	Round time	Game setting	Start	Terminate round	Terminate game	Repeat calculations	Delete	Created
Cestovní kancelář 2.1 - soutěžící	-		Počet kol	5	Finished	4	00:00:00							8. 3. 2018 09:30
Travel agency demo game			Manual	-	1	2	00:23:24							15. 7. 2016 10:55
Game for Tuesday - April 26, 2016			Manual	-	8	52	00:30:00							25. 4. 2016 16:40
Game for Monday - April 25, 2016	-		Manual	-	5	52	00:30:00							24. 4. 2016 19:48

Fig. 4: Administration of ongoing games

## 7.4 Manual or automatic mode

Mode is selected by the game administrator.

In the manual mode, the administrator starts the game as well as each new round of the game. The round ends with the lapse of pre-set time, but the administrator can add time during the round, or to terminate the round earlier.

In the automatic mode, the game may be started by the administrator, or it is possible to set a fixed date and time of the game. Unlike in the manual mode, the game continues to run smoothly (after one round has ended, another round immediately follows) until the selected number of rounds has been reached or the target criterion met.

The auto mode is therefore particularly suited to a game without instructor and to online gaming.

## 7.5 Termination of the round and game

After the lapse of time (or after its early termination by the administrator), the calculation is done.

**Important:** The administrator can select "Repeat Calculation". This option allows them to manage a situation where for any technical reason (such as internet or server failure) the calculation of the round gets stuck and it does not finish = a circle indicating the round calculation in the "Terminate the Round" column is still in progress. If calculation is in progress, the round recalculation icon is displayed.

**Caution:** It is necessary to wait for at least three minutes to find out whether the calculation has really got stuck. If recalculation is activated without having got stuck before, there would be two calculations taking place and therefore one round of the game would be skipped.

### **The game ends:**

- By choosing the "Terminate Game" option - selected by the administrator. In the manual mode, this is the only option how to terminate the game. In the automatic mode, this is how you can terminate the game early.
- By meeting the pre-set requirement in the automatic mode of the game. The requirement can include the number of rounds, or achieving the target value of the selected indicator, for example EVA.

## **8. Game Strategy and Accompanying Tasks**

The purpose of the game tasks is to move the players towards the company's strategic management, to practise their ability to correctly formulate their goals and strategy and last but not least to evaluate their market presence and ability to present their results.

### **1. Setting the company goals**

Goals can be quantified with respect to target parameters and/or they can be defined verbally. There may be one or more goals having a logical hierarchy. When setting the goals, it is advisable to use the SMART method.

### **2. Company strategy definition**

To define the overall strategy of the company it is appropriate to use the Porter Generic Strategies (see Annex).

The overall strategy should be followed by strategies in individual areas:

- Marketing strategy – target segments, product types and their USP, differentiation from the competition and competitors' strategies, communication support
- Sales strategy – channel mix selection (which sales channels the company wants to use and why)
- Financial strategy – profitability optimisation, financial leverage and capital structure

The Unisim platform is also suitable for practising **BCG matrix**. For details, see Annex.

### **3. Definition of annual tactical plans of a company**

Companies define their goals for the next round of the game. These should build on their long-term strategy.

Then, at the start of each new round, they can put down their evaluation of the previous round.

Assigning this task will help the instructor to evaluate how the company was doing in that particular round.

### **4. Evaluating the achievement of the company goals (after the end of the game)**

The companies are assigned to:

- Evaluate goals – success rate and/or appropriateness of their choice
- Evaluate strategy – its effectiveness, whether it was applied or modified/changed and for what reasons
- Evaluate strengths and weaknesses of the company.

### **5. Presentation for an investor**

Presentation of the company, using inputs from the previous section.

The purpose is to demonstrate the ability to formulate and present (“sell”) one’s own results

**We wish you pleasant moments with the managerial game of UNISIM 😊**

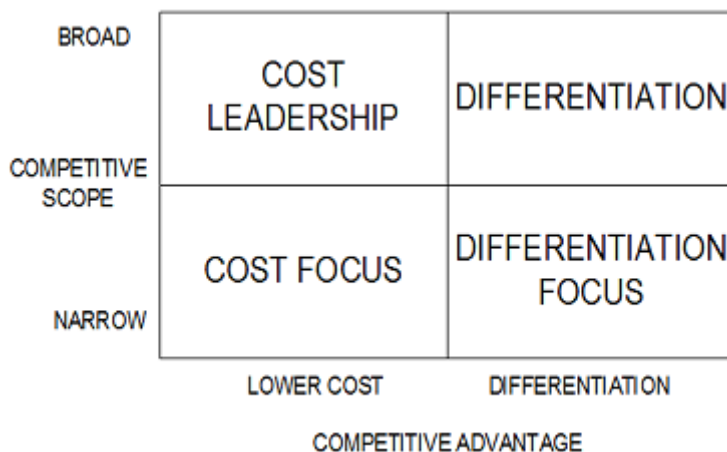
**CIS team**



## Annex 1: Game Strategy

### 1.1 Porter Generic Strategies

Porter Generic Strategies are a good guide for simulation participants in defining their overall corporate strategy. Unisim can show that even entirely different strategies can be successful. However, it is always important to have a clearly defined and well thought-out strategy.



#### Application of Porter Strategies in Unisim:

- Focus on differentiation means to prepare products with best parameters for a given segment and, in addition, to distinguish oneself by an excellent brand and/or highly perceived quality of products.
- Focus on low cost means limiting investments in areas that are not relevant for the given segment (value seekers) – some product parameters, limited investment in brand building or employees. Thus, the economy of the company can work well even at relatively low prices and margins.
- Focus on the entire market (broad scope) means to create a product that is versatile enough to satisfy various segments. Or, creating more segment-targeted products – this is an approach that will have a better chance for success, especially in later stages of the game, when the market is more competitive because the product that precisely matches the segment needs has a higher attractiveness.
- Focus on a specific segment (narrow scope) means to concentrate on creating a product precisely targeted to this segment. This can also be an effective strategy, especially in the early stages of the game, because a broad portfolio of products requires demanding support such as communication.



### Winning strategies:

- Cost leadership and differentiation can be winning strategies within Unisim. It is, however, efficient to have a single strategy for the whole company/whole portfolio, not a separate strategy for each product. For example, it would not be efficient to invest a lot of money in building a brand for only some products. Ideally, I choose between a low cost strategy (I do not invest in branding, HR) or differentiation, either through branding or through perceived quality. I seek for the return on investment into brand/quality through relatively high prices/margins.
- At the beginning of the game, I can choose a narrow scope – a narrowly targeted product, as well as a broad scope – a cross-over product. But during the game, if I want to achieve a broad scope that is efficient from the perspective of the entire company, I have to replace the cross-over product with several narrowly targeted products.

### By contrast, "losing" strategies are:

- A separate strategy for each product – it would be very costly and therefore inefficient.
- An effort to achieve a broad scope with only one product (or a narrow portfolio, as the case may be), especially at more advanced stages of market development.
- Keeping a narrow scope for all markets – profit is possible, but the company will hardly reach the highest EVA value.

## 1.2 BCG Matrix

The Unisim simulation game can be used as a case study to practise the Boston matrix. For the Boston matrix, it is important to see the dynamics – development of product positioning over time. Therefore, it is advisable to repeat the BCG matrix formation after individual rounds.

In Unisim, individual industries/markets are represented by product types.

Depending on the simulation version, for example, types of tour packages (holiday stays/discovery tours/adventure travels) or types of consumer electronics (televisions/washing machines/telephones) will be displayed on the matrix.

However, according to the client's imagination, it is possible to define other market levels and divide the above markets into sub-groups – for example, the market of holiday stays in Europe and to exotic destinations; smart TV market versus common TV market etc.

*Note: In order to substantially accelerate the work, it is possible to prepare and use an excel template for the below procedure.*

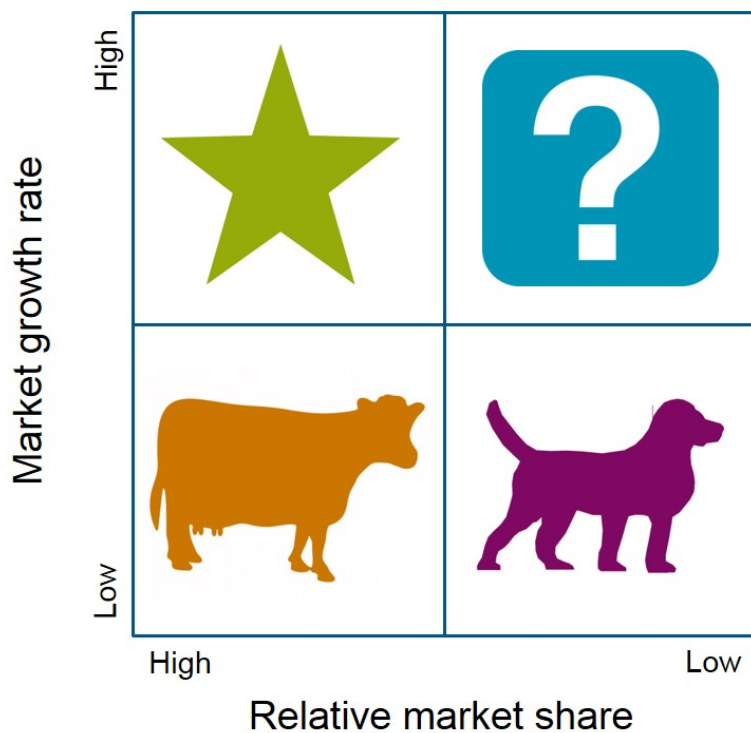
**BCG matrix formation:**

Sales (in EUR) for individual product types are to be found in the **Product Overview** report.

Take the number of sold products and multiply it by the price.

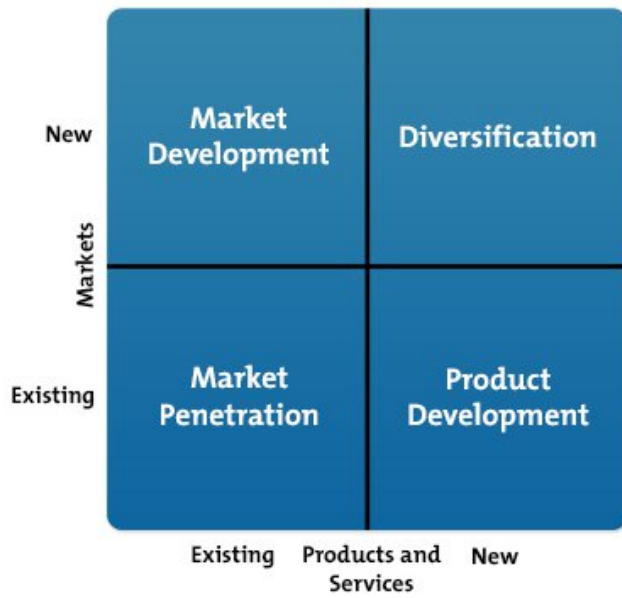
Product grouping is easy, as "Type" is shown for each of them in the report. If needed, there are also other parameters, for example TV-set diagonal line (if the client wants to analyse also more detailed markets).

In order to determine the growth rate of the market, it will of course be necessary to use this report for multiple years (rounds).



## 1.3 Ansoff's Matrix

Ansoff's Matrix is well suited for a game supervised by an instructor, allowing to impose restrictive conditions and use them to demonstrate individual market and product development strategies. This allows for greater focus of players on selected product/market, mainly at the beginning of the game.



### An example of how to define the procedure / limitation according to Ansoff's Matrix:

- Market penetration = the players are allowed to create only one product of a given type (such as a holiday stay). It is also possible to impose regional limitations (for example, to sell only in the North region)
- Product development = the players may add a new product, but only with regional limitations.
- Market development = a possibility to add regions, but only with the given product.
- Diversification = a possibility to offer a new product type in all regions.

Note: If regional limitations are imposed, it is necessary to use either warehouses in permitted regions (in the version of the warehouse simulation), or to prohibit e-shop sales channel, which operates regardless of the region.

Note: Within Unisim, it is possible to go from Market Penetration through Market Development to Diversification, or from Market Penetration through Product Development to Diversification.