

## APPLYING A CASE STUDY APPROACH TO IMPROVE THE LEARNING OUTCOMES IN LOGISTICS EDUCATION

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Amongst the modern education technologies, that are meant to increase the level of practical knowledge and skills of the specialists, an important place goes to the case method.

Case method – is an education technique that uses the real business-situation description.

The main task of the practical case is to make a detailed and clear reflection of a life's situation that the higher education establishment graduate will encounter next year.

Analysis of the business situations during the work with the case teaches the students the following:

- comprehend the details, described in the situation,
- analyze information and arguments,
- work with assumptions and conclusions,
- evaluate alternatives,
- make decisions,
- to listen and to learn the collocutors,
- acquire team work skills.

The success of the business case depends on the 3 criteria:

- the necessary amount of primary data and statistical data;
- participation of the top-manger during the development of the case;
- existence of the real business situation, that allows to use different analysis methods during the search for the answer.

**Keywords:** Logistics Case Study, Educational Process, Decision Making Skills

Overall global logistics processes have led to a growing demand for employees with a higher education able to apply theoretical knowledge and practical skills to solving real problems under conditions of uncertainty.

In other words, in today's rapidly changing world economy, it is highly demanded from a young logistics professional to possess critical thinking skills, which would help to evaluate business situations from various perspectives. Ability to evaluate circumstances provided from different angles requires certain skills and experience. Moreover, in many cases capability to work on real-life cases would require a solid working and life experience combined with creative approach to decision-making.

It should be noted, that the content and structure of study plans, textbooks, methodological materials – are not always sufficient to prepare a graduate to think strategically, to be able to use analytical assessment and independently apply decision-making skills. And more – the teaching methods used often do not provide a ground for individual contribution to the analysis, ability to defend one's opinion, develop and propose an unordinary solution to the problem.

Among the modern learning techniques directed at development of skills in the field of logistics, the case study method plays an important role being an active learning tool that through discussion, analysis of available information, critical thinking and sometimes creative approach provides a student with a ground to apply decision-making techniques. All these skills, which are necessary for a successful international career connected with logistics, can be developed through the extensive use of a case study methodology in the studying process; but this method should be smoothly used together with other more traditional teaching methods. It is important to mention, that many business schools in their course descriptions state what time should be devoted to the analysis of case studies – and usually this is about 35–40% of the studying time [3]. As for courses in logistics, about ¼ of the semester can be assigned to examination of case studies.

Therefore the case study method should be used in a synergy with other learning methodologies and techniques, including traditional ones, which are intended to provide a student with a necessary theoretical background. It is important though to determine the right proportion of studying time devoted to each educational method.

During already for more than a century (since the founding of the school in 1908) the world-known Harvard Business School has been explicitly using the so-called “classical” case study method and has succeeded in applying it. Moreover, each year the School is delivering more than 600 cases of the highest quality; each case is being written upon the completion of a deep and multidimensional research of

the company: information is gathered on managerial decisions, financial activities, internal and external factors, other operational results; and after a deep analysis the case study is being written [3]. The main aim of this methodology is bringing a real business experience into a classroom [2].

At this stage it is important to get a clear understanding of the concept of a case study method; although different schools may interpret it variously, depending on the needs of the given studying programme, course, business direction.

The Business Dictionary gives the following definition to a term ‘case study’:

*Documented study of a specific real-life situation or imagined scenario, used as a training tool in business schools and firms. Students or trainees are required to analyse the prescribed cases and present their interpretations or solutions, supported by the line of reasoning employed and assumptions made.*

Therefore, a case study is a description of an actual business situation involving a decision to be made or a problem to be solved or even to be simply observed. The main task of the case study is to reflect in detail the possible situation which the student may face in his career in future.

Currently there are two case study schools: Harvard (American) – when a case study assumes having only one correct decision, – and Manchester (European) – with multiple possible alternatives. It should be noted, that American case studies usually are easy-to-read, contain about 20–25 pages, whereas European cases are twice shorter and less narrative [1]. It should be noted that there are certain institutions, for example *European Case Clearing House (ECCH)*, which collect case studies and have a right to distribute those. Also there are various libraries of case studies, which may also be available for HE institutions.

An important and challenging element of this methodology is that finding a solution or evaluating it, is not solely on a teacher or a lecturer [2]. Moreover, there may be multiple “right” decisions; therefore, debates and discussions are a vital part of this methodology, which usually follow after a presentation of the case, the results and findings of a student or a group of students.

Another interesting aspect is that the teacher may play various roles during those discussions: starting with a role of an observer and evaluator and continuing with a role of a consultant and leader of the discussion. In any case, the teacher should be a well prepared professional in the sphere of logistics to be able to evaluate different alternatives the student is ready to offer as a possible solution to a business situation. There are certain skills the teacher should possess and these are the following:

- good theoretical knowledge of the subject;
- good understanding of a described situation;
- be a good listener and possess an ability to ask good questions;
- being adaptive and flexible.

Naturally, both the teacher and the student should have a possibility to start working on simple case studies in order to proceed with time to complex ones.

This is also an important experience to gain from other HE institutions: there should be a phased introduction of a methodology to students: starting with simplest case studies in the first year of bachelor studies followed by more complex business situations as a student proceeds in his education.

A phased introduction is vital also considering that classical teaching methodologies usually imply having a concrete question, one formula or a solution algorithm and typically only one correct answer. It is completely different with case study method, when a student should employ critical thinking, apply various managerial techniques and have a clear understanding that there is no single algorithm for analysing all case studies. The previous experience of studying under other methodologies – when a student is provided with all the information – does not allow a student to concentrate on a task and apply critical thinking.

Depending on the purpose of a case analysis, the teacher or instructor may prepare a so-called case-study protocol, which may contain the overview of the study project (objectives, issues, readings, literature and research), general recommendations, and certain procedures on how to follow up with an analysis, case study questions [4]. The protocol should also contain recommendations on timing, quantity and content limitations.

It is imperative to have a clear understanding of what skills can be developed if applying case study method. Most importantly, the use of a case study method in education allows reducing the gap between the theoretical knowledge obtained and real up-to-date logistics situations, as well as contributes to developing of the following skills:

- to evaluate the overall situation as well as to analyse the company’s strategy;
- to select and process key information needed for decision making;
- to evaluate the company’s weaknesses and strengths;
- to think strategically and apply critical thinking;
- to evaluate alternatives;
- to apply decision-making techniques;
- to develop interpersonal skills through both a team work and completing individual tasks;
- to listen, understand and evaluate opinions of others (team work);
- to consider uncertainty and to master planning.

In order to develop all these skills and receive the necessary learning outcome, the lecturer should follow the certain stages which may include the following steps:

- 1) general theoretical concepts should be explained during the lectures;
- 2) serving as a smooth transition to a case method, a general review of a problem can be provided;
- 3) explanation of the working procedures and providing a case-study protocol;
- 4) each student should independently get acquainted with a case (it may take from 3 to 8 hours) and conduct analysis (in accordance with a case-study protocol);
- 5) students should be grouped for a teamwork and discussion (may take up to 30–60 minutes if in class or given certain time if it is a part of a homework) with the purpose to agree on findings and preparation of a presentation;
- 6) a presentation of findings and alternatives (10 to 15 minutes);
- 7) discussion and debates;
- 8) statements of results.

Clearly, steps 1–3, 7–8 should be led by the lecturer/teacher, whereas steps 4–6 must be conducted by students.

Moreover, case study provided for analysis should be very well structured, the students have to receive clear instructions on the expected results (understanding a core problem!), the decision making process (criteria, for instance) and evaluation system (should a teacher solely decide or a group can evaluate).

In general it is agreed, that the success of a case-study depends on three main criteria:

- a sufficient volume of a primary and statistical data;
- participation in development of a case study of both top-management of a company and an educational institution;
- an exciting real-life logistics situation, which allows to use different methods of analysis when working on solutions;
- an important note to be made is that the priority in the classroom should be given to case studies developed by the HE institution itself (or at a least case should be developed locally, in the country where the student studies), as should provide a possibility to analyse the familiar market conditions.

With the purpose to promote the case study method it is proposed:

- to establish a virtual logistics situations case-club, where students can receive practical experience in mastering logistics tasks;
- to establish contacts with various case-clubs existing in various HE institutions;
- to join a library of case studies;
- to work out methodological recommendations on writing case studies;
- to work on development of own library of case studies;
- to plan short-term internships of lecturers to leading EU and national companies with a purpose to develop a case study;
- to use a case-study technology in logistics distance learning.

Generally the case study technology could help to students to take creativity experience in the field of logistics and to lecturers to go one-two steps in the R&D field of logistics expert systems.

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## Grigorjeva, I., Gromovs, G., Kuzņecovs, V., Vigovska, A. IZPĒTES PIEEJAS PIELIETOŠANA MĀCĪBU REZULTĀTU UZLABOŠANAI LOĢISTIKAS IZGLĪTĪBĀ

Starp mūsdienu izglītības tehnoloģijām, kuru mērķis ir paaugstināt praktisko zināšanu līmeni un speciālistu prasmes, liela nozīme ir keisa metodei.

Keisa metode – apmācību tehnika, kuru izmanto kā reāla biznesa situāciju aprakstīšanas metodi.

Praktiskā keisa galvenais mērķis ir, lai detalizēti un skaidri attēlotu dzīves situāciju, ar kuru saskarsies augstākās izglītības iestādes absolvents.

Konkrētu biznesa situāciju analīze iemāca studentu strādāt ar keisa metodi:

- saprast aprakstītās situācijas detaļas;
- analizēt informāciju un argumentus;
- darbs ar pieņēmumiem un secinājumiem;

- novērtēt alternatīvu;
- pieņemt lēmumus;
- klausīties un saprast sarunas biedru;
- iegūst prasmes grupu darbā.

Biznesa–keisa panākumi ir atkarīgi no trim kritērijiem:

- pietiekams primāro un statistisko datu apjoms;
- kompānijas vadošā menedžera piedalīšanās keisa rakstīšanas procesā;
- reālu biznesa situāciju esamība, kas ļauj pielietot dažādas analīzes metodes risinājuma meklēšanā.

**Atslēgvārdi:** loģistikas izpēte, izglītošanas process, lēmumu pieņemšanas iemaņas

## **Григорьева И., Громов, Г., Кузнецов, В., Видовская, А. ПРИМЕНЕНИЕ МЕТОДА КЕЙСОВ ДЛЯ УЛУЧШЕНИЯ РЕЗУЛЬТАТОВ ОБУЧЕНИЯ В ЛОГИСТИЧЕСКОМ ОБРАЗОВАНИИ**

Среди современных образовательных технологий, призванных повысить уровень практических знаний и умений специалистов, важное место принадлежит методу кейсов.

Метод кейсов – это техника обучения, использующая описание реальных бизнес-ситуаций.

Основная задача практического кейса заключается в том, чтобы детально отразить жизненную ситуацию профессионального общения, в которой может оказаться молодой специалист.

Анализ конкретных бизнес-ситуаций при работе над кейсами учит студентов:

- осмысливать детали, описанные в ситуации,
- анализировать информацию и аргументы,
- работать с предположениями и заключениями,
- оценивать альтернативы,
- принимать решения,
- слушать и понимать собеседников,
- приобретать навыки групповой работы.

Успешность бизнес-кейса зависит от трех факторов:

- достаточного объема первичных и статистических данных;
- возможности участия топ-менеджера компании в процессе написания кейса;
- наличия реальной бизнес-ситуации, позволяющей применить разнообразные методы анализа при поиске решения.

**Ключевые слова:** изучение кейса по логистике, образовательный процесс, навыки принятия решений