

## Main Benefits of Using Case Study Approach in Project Management Education



### Architecture

**KEYWORDS :** case study, education, project management, project manager

Ikbal Erbas

Akdeniz University Faculty of Architecture, Department of Architecture, Antalya, Turkey

### ABSTRACT

*Case study approach has been used in different fields of educational programmes since a long time ago. Today the case study method is one of the important educational tools that is used in project management education. This study aims to define main benefits of the using case study method in project management education. For this purpose in the scope of the study the case study method flow process is determined and main benefits of the process are defined by using flow process of the method. It is found out that main benefits are directly related with simulated atmosphere created by using case studies and related with carrying out the flow process of the case study method properly.*

### INTRODUCTION

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. Project management accomplished through the use of the processes such as: initiating, planning, executing, controlling, and closing [1]. The necessity of self-development of project manager in different areas causes lecturers to use different educational techniques in project management education. Today case method of instruction and learning has been recognized as an important pedagogy in teaching management [2] as a response to this need. Despite the unpredictability of the case study method's process, it plays a dominant role in management education since it not only imparts knowledge but also helps to facilitate the development of other relevant attitudes, competencies, and skills as well [2].

This study aims to define main benefits of the using case study method in project management education. For this purpose in the scope of the study the case study method flow process is determined and main benefits of the process are defined by using flow process of the method.

### MAIN PHASES OF USING CASE STUDY METHOD

The case method of instruction focuses on the construction of knowledge through the application of general ideas to the specifics of the case, their synthesis, and thus, the development of judgmental skills [2]. According to Barnes et al. [3] and also cited in Prat [4] "A case is a partial, historical, clinical study of a situation which has confronted a practicing administrator or managerial group. Presented in narrative form to encourage student involvement, it provides data — substantive and process — essential to an analysis of a specific situation, for the framing of alternative action programs, and for their implementation recognizing the complexity and ambiguity of the practical world." Bonoma [5], Grant [6] and Jerrard [7] define the case study method as an approach that implements active learning strategies for students based on a description of a situation or context in which a problem or set of issues arises.

The case method has been found particularly useful in subject areas, such as strategic management, where the relevant concepts and variables are abstract, difficult to define and measure, people-oriented, and the assumptions of the decision-maker have to be tested with incomplete information, and where the wrong assumptions and behaviour can have serious and long-term consequences. Decision-making under such conditions is not only an art, going beyond the application of scientific or quantitative tools, but also a personal synthesis of the situation [2]. Formal case study structure requires researchers to determine a problem, make initial hypotheses, conduct research in gathering information and making observations, revise hypotheses and theory, and tell a story [8]. The most important issue

to be successful in using case study approach is to conduct the case study flow process accomplishedly. Definition of the flow process could be summarized in five phases.

**Phase.1. Submission of the case study:** The lecturer gives every student a case and questions about the case in a written format. This is the first time for students to be faced with real word situations. It is possible to reflect the real world of business and employment relations by designing case study-based assessment that encourages students to consider the changing environment and the implications of their decisions with regard to other parties in the case study scenario [7]. Unlike case histories the final outcome regarding the case is usually not presented, rather it is an open-ended approach. This phase provides a description of specific circumstances that confront an individual [9] in real life.

**Phase.2. Identification of the problems by the students:** The students have to read that through thoroughly, identify the problems and prepare their response to the case beforehand [10]. The students should use theory and knowledge, obtained in course work, to solve the problem or situation [9].

**Phase.3. Introducing the case and giving information by the lecturer:** The lecturer gives students a technical note with some questions he wants to highlight. Because of complication of the cases it may not be really possible to participate in the case discussion without having read the case before [10]. The lecturer also should present in class tools required to solve the case by describing relevant concepts and theory of the case study [9]. He also should make a short introduction to the case and give some background information [10].

**Phase.4. Answering questions and solving case study as a group by the students:** The class is divided into groups. The size of the group depends on the number of students in the class. Usually there are 4-6 students in one group. At first the students have to answer the questions the lecturer has given them and they have to reach agreement between themselves. This stage can also be viewed as an exercise for practising the skills involved in team-work [10]. By analysing and discussing a variety of selected cases set up as a sequence of cases, with supportive readings, it is expected that the serious student will develop his or her own pattern of thinking, analysis, and judgment that would be useful in practice and allow him or her to take up the leadership of organizations [2]. The students are expected to accept responsibility for their decisions and their consequences during group working and discussions.

**Phase.5. Presentation and discussion of proposed solutions by the groups:** The groups have to put down the answers on paper in written form and they have to prepare to make a

presentation in front of the others and be ready to discuss the subject with all participants. It is important to highlight the real problems and be ready to analyse all the aspects of the situation [10]. Problems provide an atmosphere of learning through example whereby the student actively participates in the educational process [9]. The purpose of class discussion is to help the participants to think through the questions that they should ask themselves while analysing the case for writing a report [2].

When it is needed students may turn back to upper phases for feedback. Work flow process of the case study method is shown in Figure.1.

#### Work Flow

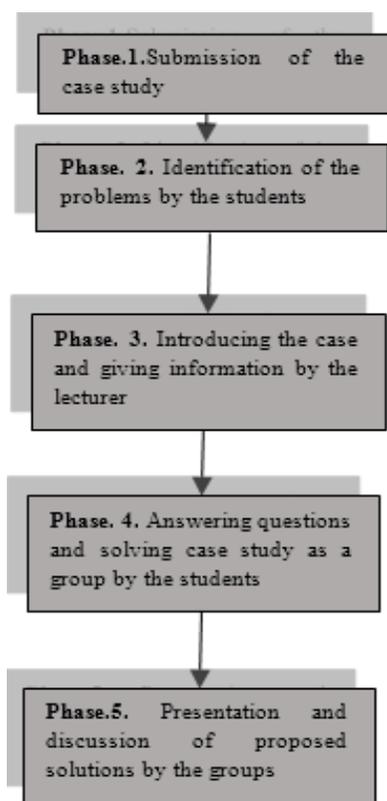


Figure 1: Flow process of the case study method

#### BENEFITS OF THE USING CASE STUDY METHOD IN PROJECT MANAGEMENT EDUCATION

The case method demands that the participant locate himself or herself at a particular locus in space and at a particular point in time to think through a problem involving decision-making in an organization in the context of a business situation. The method enables the learning of how to formulate the problem in a manner appropriate for quantitative techniques and to learn the proper interpretation and use of the results in the context of the situational factors of the case. As the process of case discussion involves questioning and convincing the class, participants also learn communication skills [2]. It is possible to benefit from case studies in many areas. For a systematic evaluation benefits of the using case study method are summarized according to work flow process in five phases below.

**Phase.1:** Submission of the case by the lecturer provides students to be faced with real world situations. The students have to be prepared and ready to contribute to an active discussion, to find connections between different issues and take actions as well as foresee the consequences. It is important that the stu-

dents have some general knowledge, some specific knowledge and also the necessary skills for using that knowledge [10]. The case-based teaching and learning allows participants to consider multiple solutions for a single problem or dilemma, promotes a tolerance for ambiguity and intricacy, builds students' confidences in the analysis of complex problems, and compels students to visualize themselves in a real-life scenario [11]. Facing with real world situations during their education life is an important benefit for the students in terms of preparing them for their career as a project manager.

**Phase.2:** Many case studies require resource investigation and encourage students to utilise a number of different sources. This phase promotes students to gather related information and to analyse these information for using in case study process. These are other important benefits for the students because students learn how to combine different information regarding to the case. Identification of the problems by the students at the beginning of the process will help students to use their previous knowledge. This phase also promotes retention of knowledge due to students have opportunity to use their knowledge learned from previous lectures.

**Phase.3:** The case study approach is a motivational tool that raises the level of the students' interest by offering problems they may encounter in the "real" world [9], and also it is beneficial because it promotes interaction between learners and teachers. Interaction with instructors and participants point to the impact of the developments on the effectiveness of the method.

**Phase.4:** This phase enables group working and the students are expected to work as a group which will develop communication between participants. This phase also develops the student's analytical and problem-solving abilities by encouraging them to perform analysis, and look for different perspectives [12]. Defined real world situations will be integrated with the theoretical principles learned in lectures by the students. The use of case studies has the potential to encourage students to use their critical thinking skills to solve engineering problems and understand other related issues such as plausibility, cost and ethics, to appraise content, to understand the process and its limitations, to have a more positive attitude toward learning engineering concepts, and to be able to ask more critical questions when faced with a technical crisis. Unlike problems normally assigned to students at the end of a lesson, cases do not set the problem out in clear steps; nor do they lead to a single correct answer. This forces the students to think beyond the obvious and seek out other resources/sources of information to help them understand the issues involved [11]. This phase provides students to evaluate the case from multiple perspectives. On the other hand students have to learn coping with effective use of given time for solving case. This provides students experience in time management.

**Phase.5:** The case method helps develop the students' abilities to articulate a point of view, defend it, and inform their own views with the opinions of others. These discussions are an important component of case method learning, and of success in the "real world" [10]. The case studies help in engaging students in exploratory discussions and find a "best possible solution" rather than "right/ wrong" solutions [12]. In this phase students will be encouraged to be active for defending their solutions with a presentation. This will make learning process to be more student-based process for the participants. Beside these phase will provide students presentation experience which most of the students afraid of from during their education life.

Defined benefits are summarized in Figure.2. Although most of the benefits are valid for multiple phases, they are shown in the phase where maximum benefit is provided in Figure 2.

## Work Flow

## Benefits

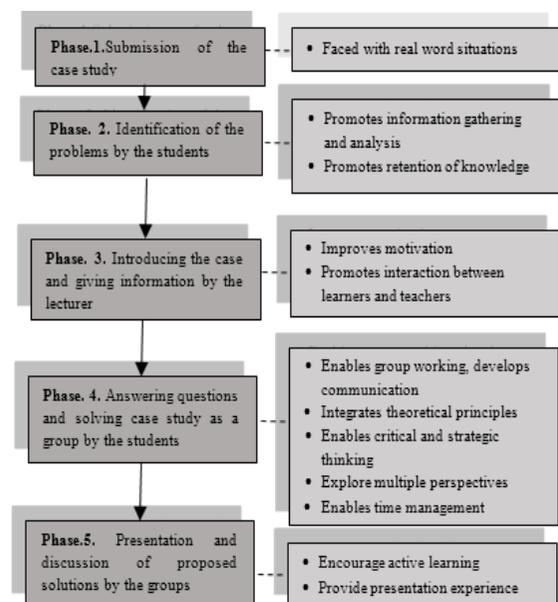


Figure 2: Main benefits of the case study method

## CONCLUSIONS

Effectiveness of the using case study in different fields of education has been debated since a long time ago. When the main benefits of the method is analyzed by using flow process of the method, it is found out that main benefits are related with simulated atmosphere created by submission of the case. In this simulated atmosphere putting themselves into project manager's shoes encourages students actively participate to learning process and this provides student based learning. As a whole case study process becomes a driving force for students to explore their boundaries as a project manager candidate. Due to the case study method requires students working as a group, students could have a chance to see their tendency for being a group member. Also they could have an opportunity to test their critical thinking and problem solving abilities. On the other hand they could improve their inadequate skills during the process.

Benefits that will be provided from the method are directly related with carrying out the flow process of the case study method properly also. Although method is based on student based learning, the lecturer has important responsibilities as a key participant during the flow process. For accomplishing the objectives of the case study method it is very critical for the lecturer to select the right case to the right situation in the first phase of the process. The lecturer should have sufficient experience and knowledge to conduct discussions. He or she should ensure overlapping of the course content with the case and should keep the interest of the students alive during the process. This is the only way participants could benefit from the process as a whole.

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