

**University of Debrecen  
Faculty of Economics and Business  
Council of Student Research Societies**

**THE SUBSTANTIVE AND FORMAL  
REQUIREMENTS OF TDK ABSTRACTS**

Title in English  
(enter)

When preparing the abstract, it is necessary to follow the form shown here. Please use Microsoft Word program (preferably not older than version 97 and not 2007 either), with 12-point Times New Roman font, fully justified paragraphed, without end-of-line hyphenation, with simple line spacing, and with 2.5 cm margins on all sides. The maximum length of the abstract should be 2500 characters (including spaces), not more than 1 page. Each paragraph should start at the beginning of the line, without indentation. Please do not use any other formatting in the abstract, such as indentation or highlighting of the title of any part of the text.

In terms of its content, the abstract should comply with the general requirements of abstracts in case of academic works. It should address the basic question of the research project, the objectives, the methodology used, as well as the findings and conclusions. The abstract must not include figures or tables. Further, due to the preservation of anonymity, neither the name of the author nor the consultant should appear in the abstract.

We would like to emphasise that the name of the Word document containing the 1-page abstract should be the following: XDXCBQ\_sum.doc, where the example XDXCBQ is the student's NEPTUN code, followed by an underscore character and the letters "sum" as the abbreviation for summary. The abstract thus saved must be uploaded to the Faculty's TDT system according to the document titled "Information for students on the process of registration and application for the Faculty's Student Research Society Conference and the process of submitting the papers" (<http://gvktdk.agr.unideb.hu/>). Application for the next TDK conference and the uploading of the abstract is possible until the announced application deadline.

In addition, the abstract submitted should also be included in the completed TDK paper, without any change in content or form, after the "Cover page" and before the "Table of contents", without a page number.

An example for the abstract in terms of content and form is shown on the following page.

## Complex economic analysis of milking robot, as a technological improvement

Appearance of milking robot can be considered the latest technological change in dairy-farms of the world, which is considered as “an innovation comparable in its scale to the replacement of horses with tractors in crop production.”

In view of the fact that in Hungary no milking robot investment has been realized yet, in my opinion, a complex economic analysis of the development is inevitable, which would help and underpin the correct decision on such an investment. The general objective of this study is to estimate the short and long-term economic conditions of this modernization in a complex way through the example of a specific enterprise. My hypothesis is that the investment would ensure more efficient milk production, as a result of which return on the investment could be safely expected within ten years.

I have assigned concrete tasks to the achievement of my general objective. After completing the secondary and primary data collection, I have drawn up a calculation model in accordance with the sample provided by animal husbandry planning sheets, with the help of which I have examined the current economic situation of the dairy farm. As a next step, I have considered the physical indicators of efficiency changing as a result of the investment, and accordingly I have examined the cost and income ratios of milk production after the investment. In addition to analysing the short-term economic situation of production, I have also carried out a long-term economic analysis of the development, for which I carried out dynamic investment efficiency calculations (NPV, IRR, PI, DPP). In the course of a sensitivity analysis, I also took into account the results of pessimistic and optimistic versions, in addition to the realistic scenario.

In spite of the fact that the analysed technological development indicates improvement in several physical indicators of efficiency (such as specific yield, specific forage consumption, labour cost and animal welfare), according to the financial figures, the milking robot technology would be an investment involving significant risks and yielding no result on the investment within a foreseeable time for the dairy analysed farm, and it is therefore is not worth being implemented under the existing conditions. On the basis of the result obtained the second part of the hypothesis that the investment will surely have been refunded within ten years must be refused.