

The Development and Use of Electronic Multilingual Terminological Dictionary

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Abstract: This is an action research to develop an Electronic Multilingual Terminological Dictionary (EMTD) for the use at National University of Food Technologies. This paper also deals with describing advantages of the EMTD as well as usage of the one which both defines terms and displays them together with the English, German, Ukrainian and Russian equivalents. This research, however, does not compare the effect of using a manual to an electronic dictionary but rather more on the benefit of using an electronic dictionary with user friendly features.

Introduction

Teaching the English and German languages at the National University of Food Technologies (NUFT), Ukraine is specified by studying economic and technical literature that contains many terms. In practice, traditional lexicography cannot provide the increasing need in terminological dictionaries, thus, computerization of composing dictionaries significantly reduces time-frames for their compiling and facilitates scientists search for a specific linguistic material. Moreover, automatic links remove as a problem overloading the dictionary and time spent on working with it. This research deals with describing advantages of an electronic terminological dictionary and using the one which not only defines terms but also displays them together with the English, German, Ukrainian and Russian equivalents.

Reading depends upon the knowledge of a student on the definition of words, i.e. mastery of vocabulary. Thus, students with a wider range of vocabulary have a better understanding of the language rules and techniques

The research attempts to answer the following questions:

- What are the features of a user-friendly electronic dictionary?
- How suitable is the E-dictionary for the use?
- Is the E-dictionary reliable and easy to use?

This research does not compare the effect of using a manual to an electronic dictionary but rather more on the benefit of using an electronic dictionary with user friendly features.

Methodology

The biggest problem in the development of the EMTD is unity and uniformity of the information and the accuracy of such information.

The terminology includes a set of terms and their definitions. Working on the principle that a good definition should distinguish by identifying and identify by distinguishing, there was reached an agreement on the following rules to be observed in the methodology of defining:

- a definition may neither contain nor cause any contradiction of logic;
- the term defined may not appear in the definition either openly or implicitly;
- the predicate of a definition should not be negative;
- a term should not be either overdefined (more characteristics in the definition than the term) nor underdefined;
- a term should be elegantly defined in the simplest possible language;
- a definition should be concise.

Accuracy was kept by verifying the EMTD with the analysis results of the words by the computer, using a large-scale textbase.

Research Design. This is an action research to create an electronic dictionary database for the EMTD using Java. The evaluation program is carried out by two groups of evaluators consisting of experienced teachers and computer experts. The computer experts will look at the suitability of Java and the user friendly features, while the experienced teachers will look from the aspect of suitability and the application of the EMTD to the curriculum.

Sample Evaluator. This research involved two sample evaluators to answer the research questions. The first group consists of three experienced teachers with five years experienced in teaching English and German. The second group consists of three computer experts in database and programming.

Results and Discussion

Electronic Multilingual Terminological Dictionary offers users the following options: quick search / full view; four-languages search (Ukrainian-Russian-English-German) [Fig.1]; A/Z search; subject search: General terms, Evaluation, Output, Cost-Accounting Output, Cost-Centre Accounting, Bookkeeping, Types of Balance Sheets, Liquidity, Financing, Investment [Fig.2].

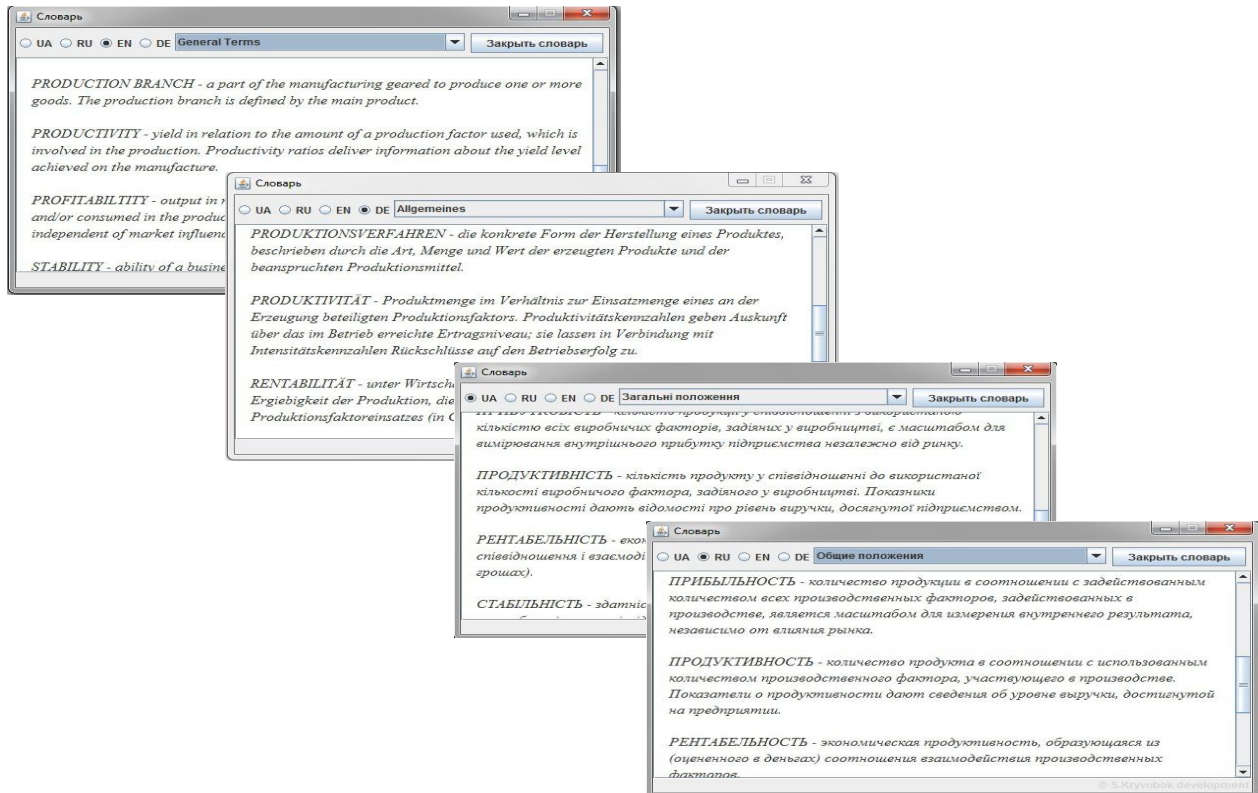


Figure 1. Four-languages search(Ukrainian-Russian-English-German)

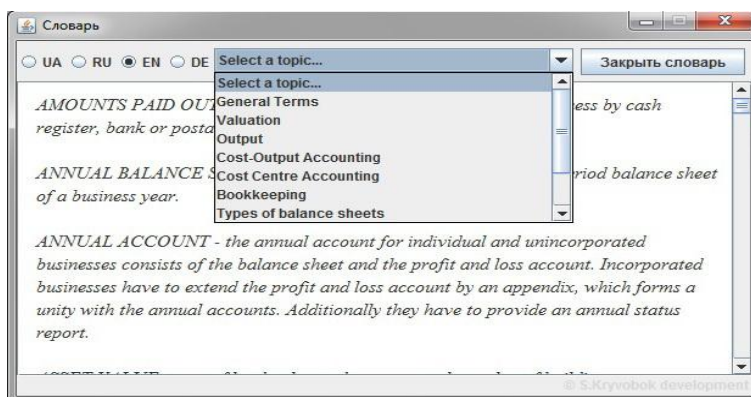


Figure 2. Subject Search

Testing of usage of the EMTD shows that:

- Use of menu, search method and control by the end user are simple;
- The EMTD has consistent screen arrangement and appropriate font;
- No technical errors were diagnosed;
- The EMTD is time-saving;
- Techniques are clear, accurate and simple to follow;

Staff of the Department of Foreign Languages for Business and International Communication state that the content of the EMTD is suitable to be used within the curriculum in several aspects:

- Accuracy;
- Systematically arranged data;
- Complete data;
- Appropriate language expression;
- Significance to education needs.

Educational Value was assessed in several aspects:

- Encouraging students' interest to utilize the dictionary;
- Increasing the student's motivation;
- Ability to develop students' reading skills;

In order to assess the effectiveness of the EMTD, it was decided to evaluate the following criteria of the quality of knowledge: depth, flexibility and comprehension of specialty terms.

References:

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