

ON DETERMINING THE RELATIVE IMPORTANCE OF WORD PROCESSOR FUNCTIONS AND DEFICIENCIES

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An initial group of participants identified features, functions, and problems encountered in two commonly used word-processing programs (MS Word and Corel WP). A second group of users assessed the relative importance of correcting existing problems and adding or enhancing existing features and functions. Problems and needed features were identified and believed to be important enough to warrant the attention of software designers.

INTRODUCTION

A common and important use of the modern computer has been the production of word-processed documents. Word processors have evolved from having to manually add printer-instruction codes in the text to simple menu driven features to massive amounts of functions, of which only a fraction are employed by users. Word processors have probably matured to near asymptotic levels. Updates may be more based on refinements of existing features rather than the introduction of new ones. Many of these refinements may be based on usability issues. The present research addresses some of the usability issues that could help make word processors better fit to serve the wants and needs of users.

Specifically, this study sought to determine features and functions that are important to persons using computer-based word processing programs. We focused on identifying problems that exist within two commonly used word processing programs and measured how important it is to users to have such problems rectified.

METHOD

Eighteen college-educated and highly-experienced-in-word-processing volunteers participated. All of the participants reported spending an average of three and a half hours per day engaged in word processing tasks as part of their employment, having used Windows-based word-processing programs for at least six years, and being highly familiar with basic functions in Windows. All participants were familiar with both Microsoft (MS) Word and Corel WordPerfect (WP) and purposely selected because of knowledge of both packages.

A three-section questionnaire was developed that was based primarily on user input obtained from a preliminary study that asked another group of participants to list problems encountered with and suggestions for improving word processors. The first section contained general word-processing questions. The second section asked six general information questions, such as "On an average work day, how many hours do you do word processing?" The third section contained six questions specific to MS Word and Corel WP. A nine-point perceived-importance scale (0=not important to 8=extremely important) was used.

RESULTS

Results showed that participants gave a mean scale rating of 4 or above for eight of the 22 rated items. Table 1 presents examples of questions with mean ratings and standard deviations.

Table 1. Example items perceived high in importance (means and SDs)

Question	Mean Rating (SD)
1. How important is it to you that you be able to translate or import files between different computer programs without losing formatting?	7.5 (.84)
2. How important is it to you that the word processor you use be compatible with MS products, such as Excel or PowerPoint?	7.0 (1.67)
3. How important is it to you that certain features, such as auto-numbering and outlining, be easily turned off or overridden?	6.8 (.98)
4. How important is it to you that icons in the toolbars be easily understood?	6.3 (1.03)
5. How important is it to you that a word processor has a closer tie-in with e-mail?	4.7 (2.80)

DISCUSSION

The present research attempted to identify possible problems and word-processor functions and deficiencies and to evaluate their relative importance in having them rectified. It showed that highly experienced word-processor users had strong beliefs about some existing problems and needed features of current software products, in particular MS Word and Corel WP.

In a fairly straightforward way, we were able to construct a questionnaire by interviewing current users and then test the generated items using experienced users. Our study revealed some problem areas and needed features that software developers should consider. Taking the advice of users and correcting existing problems and incorporating desired features would not only benefit the users themselves, but companies as well, who might realize increased sales, decreased time devoted to customer support, and increased customer satisfaction.