

Wasting Human and Computer Resources

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Abstract : The legends about “user-friendly” and “easy-to-use” birotical tools (computer-related office tools) have been spreading and misleading end-users. This approach has led us to the extremely high number of incorrect documents, causing serious financial losses in the creating, modifying, and retrieving processes. Our research proved that there are at least two sources of this underachievement: (1) The lack of the definition of the correctly edited, formatted documents. Consequently, end-users do not know whether their methods and results are correct or not. They are not aware of their ignorance. They are so ignorant that their ignorance does not allow them to realize their lack of knowledge. (2) The end-users’ problem-solving methods. We have found that in non-traditional programming environments end-users apply, almost exclusively, surface approach metacognitive methods to carry out their computer related activities, which are proved less effective than deep approach methods. Based on these findings we have developed deep approach methods which are based on and adapted from traditional programming languages. In this study, we focus on the most popular type of birotical documents, the text-based documents. We have provided the definition of the correctly edited text, and based on this definition, adapted the debugging method known in programming. According to the method, before the realization of text editing, a thorough debugging of already existing texts and the categorization of errors are carried out. With this method in advance to real text editing users learn the requirements of text-based documents and also of the correctly formatted text. The method has been proved much more effective than the previously applied surface approach methods. The advantages of the method are that the real text handling requires much less human and computer sources than clicking aimlessly in the GUI (Graphical User Interface), and the data retrieval is much more effective than from error-prone documents.

Keywords : deep approach metacognitive methods, error-prone birotical documents, financial losses, human and computer resources

Conference Title : ICIEEA 2015 : International Conference on Informatics, Environment, Energy and Applications

Conference Location : Paris, France

Conference Dates : February 23-24, 2015