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**TITLE OF DIPLOMA THESIS:** The impact of multitasking in delivering construction projects

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**ABSTRACT**

Nowadays the term multitasking is commonly used in professional environments for describing a situation, where two or more tasks are handled simultaneously. Multitasking is applied either instinctively, or deliberately as a method for increasing time efficiency or enhancing the quality of provided services. In the frame of this thesis, fundamental functionalities of the human brain are introduced. The way of handling more than one task at the same time, the availability and allocation of resources as well as the efficiency improvement through practicing are some of the points addressed here. Moreover, the parameters affecting the adoption of multitasking are analyzed, with emphasis on technical projects. These parameters are classified into three groups according to their corresponding relationship with; the individual, the task and the organisational structure. The modeling and evaluation of multitasking is a topic where no deep knowledge is available. First, the fields on which the impact of multitasking could be measured and evaluated are grouped according to the same criteria as the abovementioned adoption factors. Regarding our approach, prior works are investigated and bibliographic results from diverse scientific areas are synthesized and concretized for the case of technical projects. Tasks are organized not according to their content, but to the method of operation. The observed results are verified through a questionnaire, which is given to a statistically valid number of projects managers in the construction branch. In this way, novel results on generation and effects of multitasking are observed. Finally, suggestions on organizing and handling multiple tasks according to the method of operation are done, in order to improve the effectiveness of multitasking.

**KEYWORDS**

Multitasking, Human resources in construction projects, Dual-task performance, Construction projects