

# Master Thesis

## Word cloud visualization of Evaluation Structures

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### Abstract

An evaluation structure is a type of cognitive structure and can be drawn as a network diagram. The network diagram consists of edges and labeled vertices. The label is a sentence and shows personal cognition. Personal cognition analysis is important in various situations. Recently, some systems to make evaluation structures are developed and it is easy to make an evaluation structures on a large scale. On the other hand, the evaluation structures on a large scale make visibility of the evaluation structures lower and personal cognition analysis more inefficient. To make the personal cognition analysis more efficient, we introduce a text visualization technique for the evaluation structure data that reflects the frequency at which a word develops in evaluation criteria and the relationship of the distance between words. We extract words by performing a morpheme analysis of vertex labels and visualize the words by using a Word cloud. Placement of the words in the Word cloud shows a relation between the words in the evaluation structure. Visualization of the relation between words supports to the analysis of the evaluation structure. To show the effectiveness of our proposed method, we conducted a comparative experiment and presented a case study.