Human-in-the-Loop Situational Understanding using Subjective Bayesian Networks: Experimental Results

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Summary

Results of a focus group on various mockups of conversational interfaces for situational understanding with subjective Bayesian networks.

Results suggest that conversational interfaces are a positive way to interact with complex decision making systems such as drawing inferences using Bayesian Networks.

Explaining a network
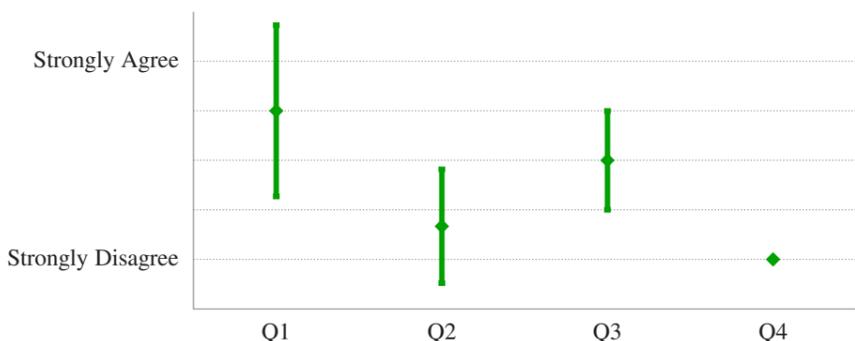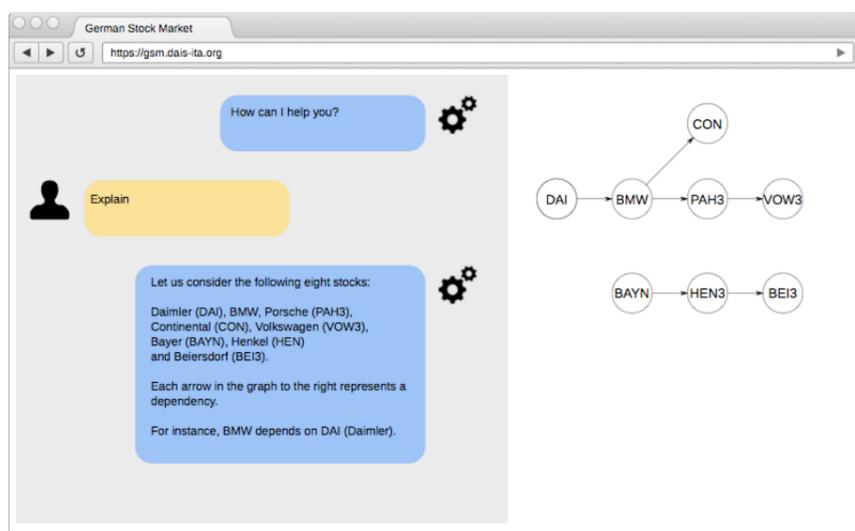
Results of the evaluation for the explain command: average and standard deviation of the aggregated received answers. Collected data are not normally distributed.
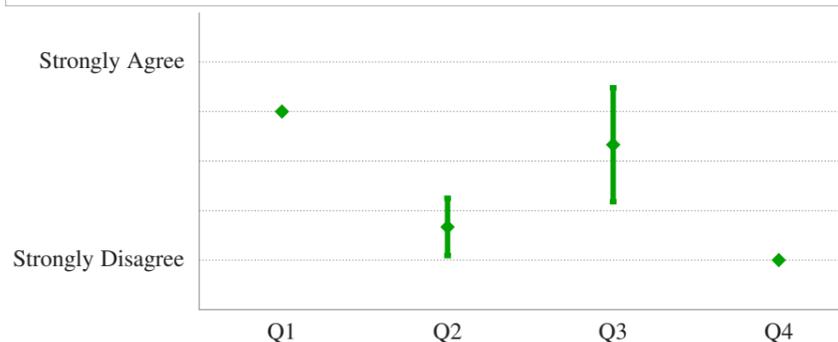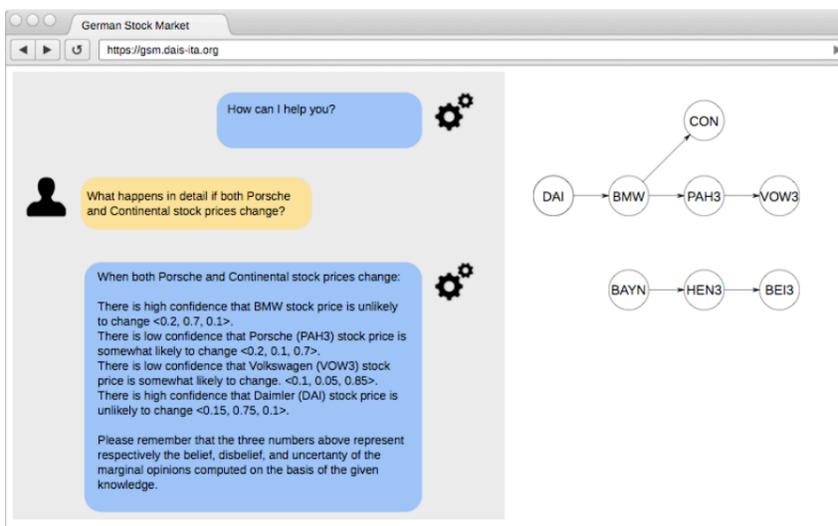
Q1: I think that I would like to use this command frequently.
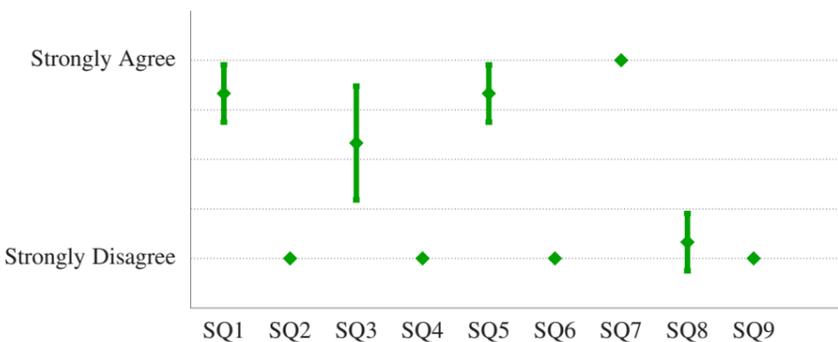Q2: I found the answer unnecessarily complex.
Q3: I thought that the interaction was quite natural.
Q4: I think that I would need the support of a technical person to be able to understand this interaction

What-if Scenario

Overall evaluation

SQ1: I think that I would like to use the conversational interface frequently.
SQ2: I found the application unnecessarily complex.
SQ3: I thought that the interaction was quite natural.
SQ4: I think that I would need the support of a technical person.
SQ5: I found the various commands well integrated.
SQ6: I thought there was too much inconsistency in the application.
SQ7: I would imagine that motivated users would learn to use the application very quickly.
SQ8: I found the commands very cumbersome.
SQ9: I think I would need to learn a lot of things before I could get going with the application.