Semantic Enhanced Argumentation Based Group Decision Making for Complex Problems

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Appendix A: Questionnaire Used in the Experiment

Questionnaire used in the experiment for evaluating a group argumentation based decision making prototype system

No.: _____ Date: ________________

Time: _____

This is a questionnaire is designed for evaluating a group argumentation based decision making prototype system, which is a part of my PhD research. A task driven experiment has been designed, during the experiment the participants will be asked to use a developed group argumentation based decision making software system to carry out group discussion around the task, the discussion will be recorded and analysed by the system. Based on the group discussion, the system will identify the different aspects of the task and evaluate the candidate solution proposed by group members to give an advisable conclusion. The experiment will last 45 min, which include 30 min computer supported group discussion and 15 min decision making process demo.

The questionnaire is divided into 3 parts, namely pre-session, mid-session and post-session. You should complete these three parts respectively before experiment, during experiment and after experiment. Your answers are very important to the evaluation of our system and to the future research.

Thank you for your assistance

Task for group discussion in the experiment:

“Please identify possible actions to efficiently increase the research reputation of the School of Engineering & Computing in Glasgow Caledonian University”.

Part 1 (Pre-Session Question):

The questions listed below are about your impressions of the system and assigned task. I am asking these questions in order to determine if you feel comfortable with using the system after training session and have some initial idea and background about assigned task.

Q.1. How confident are you to properly use the system after training session?

- [ ] Strongly Confident
- [ ] Somewhat Confident
- [ ] Neutral
- [ ] Somewhat Unconfident
- [ ] Strongly Unconfident

Q.2. How confident are you to have background knowledge about task?
Q.3. Based on the above task, please specify possible facts (max 10 facts) you think which will affect the research reputation of our school. (In order of importance)

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10.

Part 2 (Mid-Session Question):

The questions listed below are about user experience to use this software system to achieve task during the experiment. I am asking these questions in order to determine if the system is easy to use and provide sufficient support to organise discussion information and stimulate user further thinking.

Q.4. The system is easy and enjoyable to use?

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

Q.5. The presentation of discussion information is easily to be navigated?

☐ Agree strongly
☐ Agree
☐ Neutral
☐ Disagree
☐ Disagree strongly

Q.6. It is easy to find others’ argument toward your own position.

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

Q.7. The classification of utterance can be easily understood and used.
Q.8. The semantic link between utterances can be easily understood and used?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Q.9. Are the factors of the decision task identified by system relevant to the context? (Those factors will be shown in the voting stage.)

- All relevant
- Mostly relevant
- Neutral
- Mostly irrelevant
- All irrelevant

Q.10. System can stimulate you to further thinking to generate ideas?

- Agree strongly
- Agree
- Neutral
- Disagree
- Disagree strongly

Q.11. The decision making process is easy to be understood?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Part 3 (Post-Session Question):

The questions listed below are about user evaluation to the advisable solution the system provides towards the assigned task. I am asking these questions in order to determine if the system can decompose the task and give user alternative solution routes in different level.

Q.12. What you have achieved is clear.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
Q.13. It is easy to find solution toward the task.

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree

Q.14. The solution with detail sub-solution give you clear solution route to solve problem.

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☑ Strongly Disagree

Q.15. It is easy to find out what new subtask still need to be done after one round decision making experiment.

☐ Strongly Agree
☐ Agree
☐ Neutral
☐ Disagree
☐ Strongly Disagree
References


