ROLES OF NOTES IN CO-LOCATED COLLABORATIVE VISUALIZATION

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Problem

- How to best support record-keeping in co-located collaborative visualization?
Objective: Studying users’ behavior while collaboratively visualizing and analyzing business data using large displays

Apparatus: wall and tabletop display

Participants: 27 (9 groups of 3)

Tasks:
- Task 1: 6 focused questions.
- Task 2: a business case.
Software: Polestar on demand
Note Content

- High level category:
  - Findings (e.g. observations, decisions)
  - Cues (e.g. to-do list)

- Lower level category:
  - Numbers (e.g. data value)
  - Drawing (e.g. flag, chart)
  - Text (e.g. question, reminder)
  - Symbols (e.g. %, $)
Note’s Scope

Group note

<table>
<thead>
<tr>
<th>State</th>
<th>Approximate Population (millions)</th>
</tr>
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<tbody>
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Remember that you represent one state. You should try to obtain as much of the budget as you reasonably can for your state, while still cooperating to ensure the success of the company as a whole.

Personal note

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Note Usage

- Further analysis
- Facilitate problem solving
- Create reports/presentation
- Validate
- Reminder
Possible solutions

- Integrating notes with the visual representation.
- Adding speech to text annotation feature.
- Different mechanism for personal and group notes.
- Integrating group notes into a history mechanism.
- Support personal notes with paper, digital paper, wireless pens.
Discussion

- How can we best support note taking?
- Should it be integrated into a history mechanism or should be a separate component?
- Should history mechanism be automated or user controlled?
- How can we support both individual and group notes?
- How to use personal notes if needed?