Identifying Features and Functions of a Work-Management App for Supporting People with Early-Onset Dementia/Mild Cognitive Impairment
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Introduction
The prevalence of early-onset dementia (EOD) and mild cognitive impairment (MCI) is rising rapidly worldwide [1]. Many people are employed in a paid occupation when diagnosed with MCI/EOD [2,3]. MCI/EOD can affect memory, problem-solving, and communication; all abilities that are crucial for task management. There are limited user-friendly technologies to provide workplace support for this population [4,5].

Objectives
This research aims to develop a user-centered digital application for work-management tailored to the requirements of people with MCI/EOD.

Research question: “What features and functions would support people with MCI/EOD at work?”

Methods
1. Semi-structured interviews and participatory workshops with people with Mild cognitive impairment/dementia and their support persons;
2. Thematic analysis of transcribed interviews in NVivo V.12 Pro.

Results
9 Participants
Aged 46-65
7 current/recent employees with MCI/EOD, 2 support persons

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<th>Themes</th>
<th>Examples of findings</th>
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<td>Work-related challenges</td>
<td>1) Forgetting the starting point of a task; 2) Multi-tasking; 3) Task re-ordering; 4) Missing tasks.</td>
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<td>Effective self-initiated strategies</td>
<td>1) Delegating tasks to trusted individuals; 2) Working from home for better focus and organization; 3) Creating task lists and cheat sheets.</td>
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<td>Technology features that impacted usability</td>
<td>1) Minimal need for navigation; 2) Versatility and portability; 3) Learnability.</td>
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Discussion
1. Management of workplace tasks is crucial and difficult for the people with MCI/EOD in our study.
2. People with MCI/EOD want solutions that reduce stigma and foster inclusion. This finding supports developing technology that is usable by everyone in the workplace.
3. The identified challenges and self-initiated strategies (Table1) gives insights as to what and how to focus the design. Examples of features and functions derived from this:
   - Mitigate task-related challenges: note-taking and list-making features.
   - Tracking progress through tasks: setting labels for accomplished vs. remaining tasks.
   - Managing team tasks/delegating tasks: task-sharing features.
4. More participants are needed to increase the robustness and generalizability of results.

Conclusion
To our knowledge, this is the first research that has included people with MCI/EOD in designing an app to support work-task management.

Future work
Develop more design-led inquiries as usable and non-usable features are identified.

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References