Qualitative Study: AI Integration in SMEs

Research Question and Objective

Main Research Question: How does integrating third-party AI tools in small and medium-sized enterprises (SMEs) affect employees' job performance and satisfaction?
Objectives:

- Explore AI's impact on overall operations in SMEs.
- Investigate the relationship between AI use and job satisfaction.
- Understand AI's role in shaping employees' sense of job security.
- Gather perspectives from creative professionals on how AI impacts their work.

Study Context

Through interviews with employees across various roles, this study gathers insights into the impact of AI on different aspects of their work lives. Here are some key themes and insights that emerged.

Operational Efficiency – AI as a Double-Edged Sword

All interviewees acknowledged AI's potential to boost operational efficiency, especially for repetitive tasks. Tools like ChatGPT and Cursor were commonly used to streamline mundane work, but they were also noted to require precise prompts, which could be tedious and time-consuming.

Ideas:

- He stated that AI tools like Cursor make life easier for tasks he already knows how to do, like suggesting code or automating repetitive work. But it's still clunky sometimes. — Senior Frontend Engineer.
- He stated that for writing emails or drafting ideas, AI has been a time saver. But for complex tasks, he still finds himself going back to Stack Overflow. — Senior Frontend Engineer.

Job Satisfaction – Mixed Feelings on AI's Impact

AI's effect on job satisfaction was mixed. Some employees gave a positive view of how it helped with tedious tasks, such as documentation and helping human resources create job posts, but it didn't drastically enhance job satisfaction. Some felt pressured by management to use AI without adequate training, which could create stress.

Ideas:
- She stated that AI it's great for emails or simple coding problems, but AI hasn't necessarily made her job more satisfying or easier as it can only automate a small portion of her responsibilities. The main feeling was that AI-powered tools were just another tool she could use. — Senior Product Manager.
- He stated that management pushes Devs to use AI, but it sometimes feels like management is just trying to get more tasks done with fewer people and doesn't fully understand how the tools are used on their day-to-day. — Senior Frontend Engineer.

Job Security – AI as a Complement, Not a Threat
Most employees, especially those in senior roles, viewed AI as a complement to their skills rather than a replacement. They were confident that AI couldn't replicate the nuance and expertise needed for complex problem-solving or creative tasks.

Ideas:
- She stated that In product design, she is not worried. AI might assist, but it can't replace the strategic thinking required. — Senior Product Designer.
- He stated that people in management positions believe they can replace people with AI but he does not agree. — Senior Frontend Engineer.
- He stated that Junior roles will be the ones more impacted by AI integration in companies as fewer junior positions are available. — Senior Frontend Engineer.

Creativity – AI as a Tool for Inspiration, Not a Replacement
In creative fields, employees saw AI as an aid for brainstorming and generating initial ideas, but it wasn't seen as a replacement for the creative process. AI could inspire, but creative decision-making remained firmly with the human team.

Ideas:

- She stated that sometimes uses ChatGPT to come up with alternative names/brainstorm, but the real work still comes from the team. — Senior Product Designer.
- She stated that AI can give her ideas, but it won't come up with a creative vision. — Senior Product Manager.

Ethical Concerns and Rising Expectations

Some employees raised ethical questions about AI use, particularly about privacy and transparency. They also noted a rise in workplace expectations, where AI was used to drive productivity but often meant employees had to accomplish more with the same or fewer human resources.

- He stated that management thinks AI will solve everything, but it's just making Devs do more. There's this expectation to be faster and more efficient, and that adds stress. — Frontend Engineer.
- She stated that she was in charge of designing a tool that would provide users of the platform with the possibility of creating avatars in their image. During this stage, she tried to implement safeguards so the tool could be safe. — Senior Product Designer.
- He stated that her company used AI-generated avatars on their platform, he stated but it felt a bit creepy. He doesn't know where the data goes, and that's concerning. — Frontend Engineer.
- She expressed concern as some tools developed by her company were able to clone users' likeability and voice. For her she believed the company took all the legal steps to make the app secure — Senior Product Manager.

Continuous Learning Curve

AI tools often come with a steep learning curve, and the constant need to adapt to new updates or features makes some employees feel overwhelmed. Many felt they were testing these tools rather than benefiting from them due to a lack of adequate training.

Ideas:

- She explained that in her view AI came fast, and there's a constant bombardment of new tools and features. It feels like she has to keep learning or risks falling behind. — Product Manager.

- He expressed frustration, as the AI tools are still buggy, and he spends more time trying to make them work than using them. — Frontend Engineer.

AI Skills and Career Growth

Employees felt that AI skills were valuable, especially for career development at junior and mid-levels. However, for senior roles, AI skills were seen as complementary rather than essential.

Ideas:
- For juniors, AI can be a great help and give them an edge early in their career. But for senior roles, AI doesn't replace the depth of knowledge needed. — Senior Frontend Engineer.
- Management favours those who adapt to AI because it shows efficiency, but results matter more than the tools used. — Product Manager.

Summary

This study underscores AI's potential to assist in various job functions but reveals mixed reactions regarding job satisfaction, skill development, creativity, and ethical concerns. AI's impact on team dynamics, workload expectations, and data security issues means it has not yet fully earned employee trust as a reliable, supportive tool.