MIX203 - Design for Media Production

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Department of Information Science and Media Studies

Enhancing Workflow Productivity and Collaboration in the Media Industry with

AI

Candidates:

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1. Introduction

This fieldwork was conducted during the fall semester of 2024 at a major Norwegian media organization. The organization, which is a leading entity in the Norwegian media industry, operates across multiple platforms, including television, digital media, and online streaming. With a large team spread across different departments, the organization employs close to a thousand staff members.

During our fieldwork, we focused on challenges related to Computer Supported Cooperative Work (CSCW) within the organization. CSCW is the study of people collaborating together using computer-based tools (George, p.509, 2003). We focused on creating a CSCW tool using artificial intelligence (AI). The task at hand was to investigate and identify challenges faced by employees, particularly those working with technology, and to explore how communication and collaboration can be improved through the design of a user-friendly prototype.

This study will explore the processes of idea generation, design, and evaluation of this prototype, reflecting how it aligns with the challenges identified during fieldwork and how it could potentially improve the work efficiency and collaboration across the organization.

2. Fieldwork Execution

In the section, the methods used in the fieldwork are described and the rationale behind their selection is briefly discussed. Following this, the study's execution and documentation process are outlined. We'll then highlight challenges encountered and the solutions implemented. Finally, reflections on what could be done differently in future studies are briefly presented.

2.1 Methods

During the fieldwork, qualitative studies were conducted using semi-structured interviews and observations. Semi-structured interviews typically start with an interview guide but allow flexibility to adapt questions based on the flow of the conversation (Nordbø, p. 82, 2017) (Appendix 10.1). This approach enhances the comfort of the interview subject but can

complicate subsequent analysis (Adams and Cox, 2008). To complement the interviews, several days were spent onsite observing the daily operations of employees. Observation is commonly used in the early stages of a design process to gain insight into the tasks employees perform during their workday (Nordbø, p. 89, 2017). This method proved valuable in identifying unspoken challenges and uncovering opportunities for improvement.

2.2 Study Execution and Documentation

The fieldwork was carried out over a four-week period, starting with preparatory interviews to define the study's scope. These initial interviews were followed by initial observation sessions in various departments, with a particular focus on those working on editorial artificial intelligence (EAI).

Semi-structured interviews were conducted with key personnel, including the leader of the EAI-team and the head of a relevant department, to gather targeted insights (appendix, 10.2.1 & 10.2.4). The leader of the EAI-team provided a strategic overview of the organization's many AI initiatives, from both a technical and operational perspective. The leader of the department provided an overview of the organization's communication practices, and challenges. Observation sessions further illuminated how communication occurred across teams and platforms, such as Slack and Email. This approach was instrumental in identifying patterns, bottlenecks, and challenges that might not emerge explicitly in the semi-structured interviews. Findings from these observations were documented in the field notes (appendix, 10.2.2. & 10.2.3).

The collected data was analysed using thematic analysis (see Appendix 10.3). Key themes, such as information overload, AI, and communication inefficiencies, were identified and systematically categorized. While these themes are briefly outlined in this section, they are explored in greater detail in later sections.

2.3 Challenges and Solutions

Some departments were inaccessible due to confidentiality concerns, limiting the scope of our observations. Ensuring confidentiality is a standard practice in qualitative research, as noted by the University of Virginia (UVA, n.d). Since the project relied on interviews and observations, a critical aspect of the fieldwork involved implementing measures to protect

and anonymize collected data. This included removing identifiable details from transcripts, ensuring that finding could be used without compromising sensitive organizational information.

Observing communication practices in real-time was complicated by employees frequently switching between tools and platforms, making it difficult to map workflows comprehensively. This was mitigated by conducting follow-up interviews to clarify ambiguities and validate observations.

A potential challenge was the risk of bias during the semi-structured interviews and observations. Bias is often perceived as something negative, but it's only when we are not aware of it that it can become a problem (Evans, 2017). It is also important to be aware of the risk that humans often tend to act differently than usual, just because they are aware of the project (Hall, 2013). To minimize bias, field notes were regularly reviewed and cross-checked with team members, and efforts were made to maintain a neutral stance during the fieldwork.

2.4 Future recommendations

While the study successfully identified key issues and informed the development of a prototype, several areas for improvement were noted. Allocating more time for fieldwork onsite, would allow for broader sampling of data. Incorporating quantitative surveys alongside semi-structured interviews and observations could provide useful insights. Involving end-users during the prototyping phase would also ensure useful insight considering usability. This approach could enhance the depth and applicability of findings, ultimately delivering greater value to the organization.

3. Qualitative analysis

In this section, the qualitative data analysis process is described. Firstly, an analysis of the semi-structured interviews is presented. Following this, we'll go through the findings from the observations conducted. Additionally, specific challenges in media production and collaboration are identified within the thematic and observational findings. Finally, the limitations of the analysis and data are discussed.

3.1 Analysis of Semi-structured interviews

Several semi-structured interviews were conducted, and a thematic analysis approach was employed to identify patterns and themes in the data. To facilitate organization, the data was compiled into a FigJam file, where individual points were recorded on digital post-it notes (see Appendix 10.3). A thematic analysis is a widely used analytical technique that aims to identify, analyze, and report patterns in the data (Braun and Clarke, 2006). The process started with initial coding, focusing on identifying keywords or emphasized keywords. The post-it notes data were then categorised into three broad categories: *Communication, collaboration* and *AI*. These categories were further divided into seven more specific themes: *Experiences, Communication for Collaboration, Information overload, Slack, AI, Innovation* and *Workshop*.

Within each theme, direct quotes from participants were used to capture key insights and illustrate challenges. All qualitative data collected during both the semi-structured interviews and the observations were translated from Norwegian to English (see chapter 10 of the appendix).

Communication for Collaboration:

"Projects can arise that are somewhat or completely the same. It happened that two different teams had been working on exactly the same thing for several weeks. Then we have lost an enormous amount of money."

Information overload:

"I have a feeling of never being on top - never being able to have control over everything I should."

«A lot of information disappears in Slack and Mail."

Artificial Intelligence:

"AI's potential can be to cut costs and remove the boring stuff, so people can focus on the most important and fun - which is their work."

"We have a hardworking AI team and we put a lot of money into that area because we want to expand there and be capable of expansion." The analysis reveals the media company's primary challenges: information overload, poor communication, and organizational inefficiencies, which results in time wasted, messages missed, and reduced productivity. For instance, a leader of a department described receiving hundreds of emails daily, often resorting to deleting them to cope, leading to stress and missed deadlines. These issues highlighted a need for streamlined processes and tools.

Additionally, the leader of the EAI-team expressed significant interest in utilizing AI to address these challenges, given its potential to optimize workflows and reduce mundane tasks. Communication and production were identified as linked issues, with ineffective communication undermining both teamwork and productivity. The most pressing concerns lay in *information overload* and *communication for collaboration*, as the former often tend to make the latter worse. Attempts to address these issues included initiatives like speed dating to strengthen relationships across departments. While efforts like this showed some success, they also added to already tight schedules, underscoring the need for more sustainable solutions.

3.2 Findings from observations

Observing and conversing with UX designers in the media corporation revealed several key insights (see Appendix 10.2.2). The UX team highly values collaboration with developers and other departments, often using workshops at the beginning of projects to encourage idea exchange. One UX designer noted that WCAG alignment was of high importance to not only the UX teams, but also the developers. But, despite commitment to accessibility, user testing on diverse groups, especially those with disabilities, remains a challenge. Additionally, there is some dissatisfaction with workshop setups, suggesting better approaches could be more effective.

Observations on Customer Service-representatives reveals that they highly appreciate their freedom at work. The application Slack is well-regarded but is being criticized for having too many channels and overwhelming information flow. Employees rely on various tools and websites for tasks, but the lack of a centralized system creates inefficiencies. The observed employees were experienced and handled problems effectively and appreciated the tools they had.

3.3 Limitations of the Analysis and Data

The relatively small numbers of interviews conducted limits the representativeness of the findings, making it difficult to draw conclusions that apply outside of the organization. Each interview is different from each other, and therefore it may also be difficult to compare the data collected across different interviews (Portigal, 2013). Furthermore, the limited availability of staff restricted diversity of perspectives, potentially narrowing the scope of insights into the organization's challenges. As a result, conclusions may lack depth and breadth necessary to fully understand or address these challenges.

4. Prototype and Design

With the challenges faced by the company identified, a Google Design Sprint methodology was used to develop a prototype addressing the needs of the target audience. Brainstorming sessions were held to refine ideas and ensure alignment with user requirements.

4.1 Design Process

4.1.1 Idea Generation

Initially, brainstorming sessions were conducted, during which team members contributed ideas that could serve as the foundation for the prototype.



Figure 1: Initial ideas.

Following this, the "How Might We..." method was applied, an exercise that reframes our problems as opportunities (Sørbø, 2024). Each team member contributed a question, which led to the decision that the prototype should focus on reducing notifications and saving time to improve productivity.



Figure 2: How might we.

4.1.2 Personas

Personas played a significant role in identifying the target users for the prototype. Creating personas can develop a deeper understanding of a target audience (The Interaction Design Foundation, 2024). Four personas were created to represent the diverse range of workers who could benefit from the prototype: a manager, an assistant, an experienced worker, and a novice worker.



Figure 3: *Four representative fictional personas.*

- Kenny, a leader, overwhelmed by his tasks and the additional responsibility of resolving team issues.
- Téé Ve-To, an assistant interested in technology.
- Chad Chadsen, an experienced worker overwhelmed by notifications.
- Sandra Sandrasen, a novice worker struggling with her calendar, missing important meetings.

4.1.3 Storyboard

Storyboard was created to illustrate how an imaginary user would interact with the prototype. A storyboard helps visualize how a user might progress through a task (Sharp et al., p. 426, 2019).

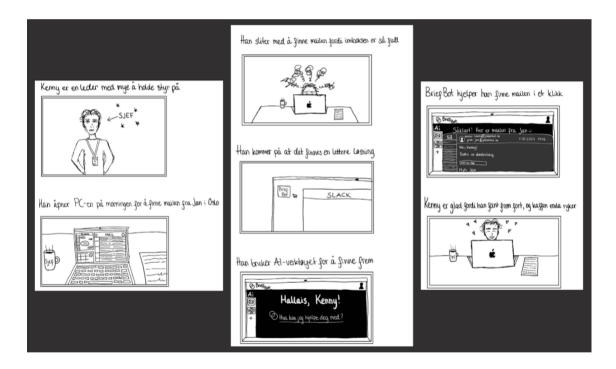


Figure 4: *Storyboard - Kenny finding BriefBot.*

Kenny struggles with managing tasks due to a high volume of emails. He tries to find an important email, but the search is complicated. Fortunately, Kenny uses an AI-powered tool that allows him to find the email quickly with just one click, saving time.

4.1.4. Paper wireframes

Initial low-fidelity wireframes helped us gain the same vision going forward, deciding on the information content and key features e. Wireframes are a safe way of showing unfinished ideas (Carlsen et al., 2013).

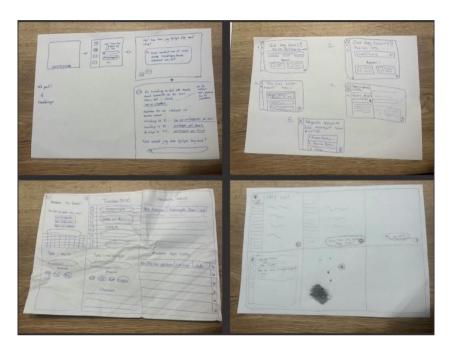


Figure 5: Handmade wireframes.

The design sprint progressed from understanding the company's challenges to developing a useful solution, fully realized in a Figma-prototype, which will now be discussed.

4.2 Prototype

BriefBot is an AI-powered tool, designed to streamline work and communication by automating tasks. It addresses challenges such as information overload, poor email management, and ineffective communication, while being intuitive and compatible with existing workplace applications. Prioritizing usability, it should be efficient, effective, and easy to learn (Bratteteig, 2021, p. 19). Ultimately, BriefBot helps both workers and leaders save time and increase productivity by prioritizing.

4.2.1 Functionalities

The home screen is fully customizable, and the registration process is designed to be comprehensive, ensuring the AI gains a deep understanding of the job role. This foundation allows the AI to deliver personalized morning briefs tailored to the employee's specific needs. The AI not only learns during the registration process but continues to evolve by interacting with the employee, adapting its priorities to effectively

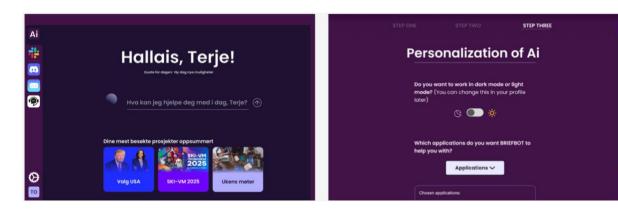


Figure 6: Home page and customizable interface.

4.2.1.1 Automated Calendar

Users have access to a dynamic calendar that updates automatically based on their schedules, ensuring no meetings or deadlines are missed despite information overload.



Figure 7: Automated calendar.

4.2.1.2 Morning Reports

The tool generates AI-powered morning reports summarizing tasks and deadlines, helping users stay organized and productive.

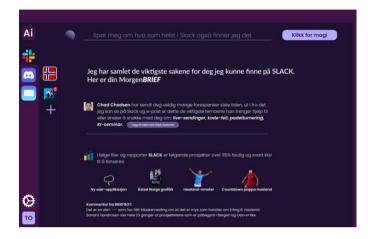


Figure 8: Morning report.

4.2.1.3 Application Compatibility

The tool seamlessly integrates with popular workplace platforms like Slack, Mail, and other communication tools, ensuring a unified user experience. Figure 9 illustrates this where users can select the applications to include.

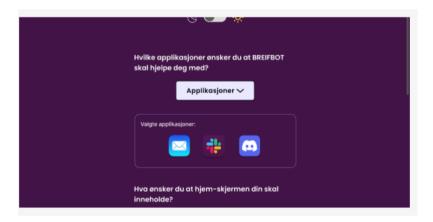


Figure 9: *Screenshot showing how to add applications to BriefBot.*

4.2.1.4 Email & Slack

With AI, the user can summarize long emails and Slack chats for quick comprehension, translate emails, and automatically categorize emails based on importance:

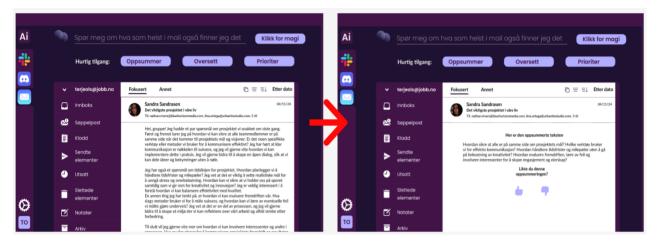


Figure 10: Functionality - Email summary.



Figure 11: Functionality - Email translation.

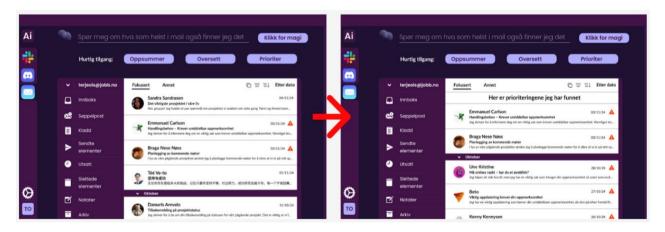


Figure 12: Functionality - Email prioritization.

4.2.1.5 Accessibility

BriefBot is designed with accessibility in mind, adhering to many Web Content Accessibility Guidelines (WCAG) and universal usability standards, with ongoing improvements aimed at achieving full compliance (W3C, 2023). Accessibility options, accessible via the gear-shaped

settings button, include adjustable font sizes for better readability, voice commands for hands-free interaction, and a text-to-speech reader to assist users who prefer auditory content. The interface also features a colorblind mode to address color vision deficiencies and a dyslexic mode to enhance text readability for users with dyslexia. Additionally, users can switch between light and dark modes to suit their visual preferences.

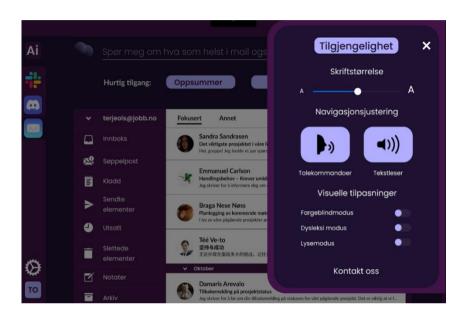


Figure 13: Accessibility menu.

Accessibility is a key part of interaction design. BriefBot was designed with the idea that most people should be able to use the application, regardless of their functional abilities (Nordbø, 2023, p. 74).

4.2.2 Relation to Identified Problems in the Fieldwork

To reduce information overload, BriefBot summarizes emails and Slack conversations, easing cognitive load and preventing critical messages from getting lost or deleted. The AI can also be used across the different applications so the time searching for certain messages can be reduced. This aligns with participants' citations such as "A lot of information disappears in Slack and Mail." It also tackles poor communication when collaborating by consolidating chats and email, addressing issues like duplicated efforts, as noted: "Projects can arise that are somewhat or completely the same." Additionally, BriefBot uses AI to prioritize important messages, mitigating the feeling of being overwhelmed, describing it as follows: "I have a feeling of never being on top - never being able to have control over everything I should."

Features such as automated reports and calendar integration enhance task management and organization. This makes sure the AI driven CSCW tool "BriefBot" tackles challenges we discovered in the fieldwork.

4.2.3 Scenarios Beyond the Identified Problems

Beyond addressing identified challenges, BriefBot offers additional benefits. It supports remote work by integrating various applications and improves efficiency through AI-powered summarizing. The tool also promotes work-life balance by automating tasks, enabling users to focus on priorities and reduce stress. Overall, BriefBot enhances productivity, organization, and communication, providing a versatile and user-friendly solution.

5. Prototype Evaluation

In this section, the quantitative method of the new application will be described. Following this is the analysis of the usability testing. Additionally, the main findings will be presented and briefly explained. Lastly, there will be some reflections about the challenges met during the quantitative user-testing.

5.1 Quantitative Evaluation

To evaluate the usability of the prototype, user-testing was conducted via Maze, which is a tool for conducting rapid user testing to collect qualitative and quantitative insights (Maze, n.d). The user-testing provided both quantitative and qualitative data, such as time spent and feedback after each task. While qualitative data gives more in-depth feedback, the quantitative feedback can help testing whether a theory is correct or not (Bratteteig, pp. 216-217, 2021).

In typical usability studies, quantitative data, such as task completion time and error rates, can help determine the efficiency and effectiveness of the prototype. This type of data can also reveal significant differences in how users interact with different tasks. In larger studies, an Analysis of Variance (ANOVA), also known as an F-test, is commonly used to assess these differences (Grønmo, p. 352, 2016). However, since only 10 participants completed the usability test, the sample size was too small to conduct a robust ANOVA. As a result, a descriptive statistical analysis was chosen to analyze the data in this case. This approach allows for an overview of the patterns observed in the data, providing meaningful insights.

5.2 Usability testing

The usability study focused solely on understanding how users interacted with the prototype and whether it met its intended goals. Participants were given the following tasks:

- 1. Make an account on BriefBot.
- 2. Check your meetings this week.
- 3. Translate an email.
- 4. Summarize an email.

Ten participants completed these tasks, presumably within their work environment, providing a snapshot of how the prototype might perform in a real-world context.

5.3 Main findings

The study provided the following insights into the prototype's usability:

- **Task Completion Time:** Time taken by users to complete each predefined task varied, reflecting different task complexity and user familiarity.
- User Satisfaction: After completing each task, participants provided feedback through Likert scale surveys, which captured satisfaction levels after task-completion (Nordbø, p. 205, 2016).

In the Diagrams below, CT is an abbreviation for Central Tendency, while SD is an abbreviation for Standard Deviation. Central Tendency is the most typical number, while Standard Deviation tells us how spread out the values are (Frøslie, 2024). Log Transformed time; in this case the natural logarithm of each number is used so that the distribution of data looks more normal in the diagram. The Diagrams below illustrate key trends:

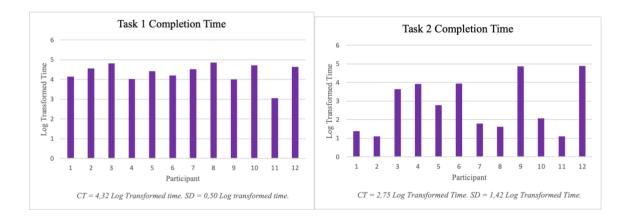


Diagram 1 & 2: *Task completion Time for Maze Task 1 & 2.*

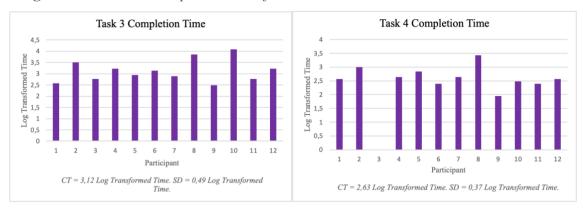


Diagram 3 & 4: Task completion Time for Maze Task 3 & 4.

The diagrams above illustrate that participants used the longest time completing task 1. The standard deviation of 0,5 in Diagram 1 indicates more consistent performance than that of Diagram 2, where the standard deviation is 1,42. This means that the variability in completion time amongst the participants is larger in task 2 than task 1.

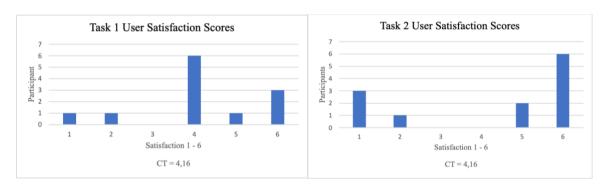


Diagram 5 & 6: User Satisfaction Scores for Maze task 1 & 2.

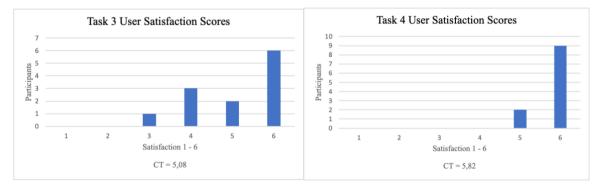


Diagram 7 & 8: User Satisfaction Scores for Maze task 3 & 4.

The tendencies of the Likert scale suggests that most participants leaned more towards satisfaction than dissatisfaction on every task.

5.4 Challenges

Several challenges emerged during the usability-testing. Some users experienced difficulty understanding certain features during the first task, which may have slowed their completion times and affected their satisfaction levels. This issue may suggest the need for clearer instructions or a more intuitive user interface (UI). The usability testing was also conducted through Maze, which while effective, demands some hands-on experience from the surveyor. With only 10 participants, the results provide an initial understanding of the prototype's usability but may not generalize well to larger groups. A larger sample size would be beneficial for a more robust analysis.

6. Discussion and Future Work

This study highlights persistent challenges in fast-paced industries like media, where information overload and fragmented communication complicates productivity. In sectors such as digital media, individuals are overwhelmed with a stream of data (Renjith, R. 2017), often exceeding their cognitive load. Employees spend excessive time managing multiple tools and sifting through irrelevant data, limiting their focus on important tasks. These challenges are widespread in fast-paced environments, where employees frequently encounter multitasking and fragmented communication.

Existing tools, such as email filters or AI solutions like ChatGPT, address some of these issues by automating routine tasks, such as order monitoring and billing, this allows employees to focus on more complicated duties (Raj, R., et. al. 2023). However, these tools often lack a personalized, targeted approach. BriefBot stands out by using AI to prioritize and condense information into actionable insights, reducing unnecessary distractions and ensuring users focus on critical tasks. This represents a significant improvement for high-pressure environments, enhancing efficiency and reducing cognitive load. Looking ahead, BriefBot holds significant potential for further development, particularly in its ability to integrate with various tools and adapt to diverse workplace environments.

6.1 Value to End-Users and Impact on Society

A key advantage of BriefBot is its ability to significantly time spent on non-essential tasks such as managing emails, tracking updates, prioritizing across platforms, and coordinating

meeting schedules. By streamlining these processes, users can focus more on critical responsibilities, leading to enhanced efficiency, reduced stress, and smoother workflow. On a larger scale, widespread adoption of such a tool could address workplace challenges like burnout, reducing digital clutter and promoting a healthier work-life balance (Roopa, 2022).

From an industry perspective, BriefBot has the potential to become a model for integrating AI into everyday workflows. As over 50% of businesses plan to adopt AI to boost productivity, BriefBot could serve as a blueprint for future AI tools, emphasizing user-friendliness and seamless integration into existing work environments (World Economic Forum, 2023, p. 46).

6.2 Speculation on Future Research and Implementation

Looking towards the future, there are several opportunities for improving and expanding BriefBot, especially given that it is built on cutting-edge technologies like AI. One area to explore is its ability to integrate with more workplace tools. While the prototype works well with email and Slack, there are many other tools used across different workplaces. Adding support for these tools would make BriefBot even more useful than it already is. The goal is to create a unified experience.

In terms of future research, it would be valuable to explore how the work environment impact BriefBot's effectiveness. For example, while BriefBot is designed to assist fast-paced companies, how would it perform in a traditional company where notification overload and multitasking are not the primary challenges? Conducting studies in such environments could provide insight into BriefBot's impact in diverse contexts.

Finally, and on a practical level, scaling up BriefBot for larger teams will require further testing. It is essential to track how the tool affects productivity and employee well-being over time, especially if implemented across entire companies. Conducting studies in different companies that use BriefBot as their personal assistant could provide valuable insights into how the tool can be refined and adapted to address potential issues and enable broader use. In conclusion, and speculating, BriefBot's future appears promising, with potential for greater integration and effectiveness. Its continued evolution could play a key role in improving work efficiency and reducing burnout.

7. Individual contributions

Candidate 106: Contributions included assisting in the design sprint and developing key features of the prototype, particularly focusing on email functionality and accessibility. The goal was to make the tool easy and accessible to all users.

Candidate 109: Connected with the organization and maintained communication throughout the fieldwork. Conducting interviews and observations. Designing immense parts of the prototype in Figma, including most animations. Doing Quantitative analysis, while contributing considerably to the rest of the study.

Candidate 111: Contributions included transcribing some of the interviews and developing the interview guide. As well as creating the design system, actively contributed to designing the prototype during the design sprint. Built the Maze with Candidate 135.

Candidate 124: Contributed during the fieldwork interviews and observations as well as the design sprints developments. Helped design various parts of the prototype, and made sure the prototype followed our design system.

Candidate 135: Contributed to decoding the interviews from the fieldwork. Designed in Figma in the design sprint and development of the prototype. Made the thematic analysis and created the Maze.

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Figure 13: Accessibility menu.

9.2 Diagrams

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Diagram 3 & 4: Task completion Time for Maze Task 3 & 4.

Diagram 5 & 6: User Satisfaction Scores for Maze task 1 & 2.

Diagram 7 & 8: User Satisfaction Scores for Maze task 3 & 4.

10. Appendix

10.1 Semi-Structured Interview Guide

Translated from Norwegian to English.

Icebreaker:

- Can you tell me a bit about yourself and what you do at XXX? How long have you been working there?
- · What sparked your interest in working at XXX?

General Questions:

- What is your perception of AI and its potential to improve XXX?
- Do you think AI can be used to streamline workflows and enhance communication between different departments at XXX?
- Do you foresee any challenges with integrating AI into established work environments? Do you think it's "necessary"?

Specific Questions:

 How do you think AI could contribute to idea generation and creativity within your team?

Challenges:

- What challenges does XXX face when it comes to collaboration and coordination between different departments?
- How do you think AI can be used to improve the production process for news and entertainment programs?

Ethics:

- What ethical challenges do you foresee with using AI in a collaborative environment?
- How can XXX ensure that the use of AI does not lead to discrimination?

Conclusion:

• Is there anything else you'd like to share about your experience with AI tools at XXX?

10.2 Raw Data

10.2.1 Interview with developer

Translated from Norwegian to English.

Icebreaker:

 Can you tell me a bit about yourself and what you do at XXX? How long have you been working there?

"I've worked for 4 years at XXX but have a total of 17 years of experience in the 'media cluster.' I previously worked at XXX, a company that originated from XXX. I've also done a lot of consulting. XXX has also had XXX, a company that worked with streaming—essentially XXX's streaming platform. I've also worked at XXX."

"I studied at NITH (Norwegian School of Information Technology, now Westerdals), where I earned a degree in Information Technology."

"I'm a developer, but I like to call myself a UX-er who can code. I've worked extensively with UX throughout my career."

"Before joining XXX, I was contracted out to the insurance industry, and I was also contracted to XXX before officially starting here."

"MCB (Media City Bergen) is actually a massive international media cluster, and I don't think people in Bergen or even Norway fully grasp the kind of products being developed here."

What sparked your interest in working at XXX?

General Questions:

· What is your perception of AI and its potential to improve XXX?

"All media companies are struggling because advertising revenues are declining."

"The potential of AI could be to reduce costs and eliminate the boring tasks so people can focus on what really matters."

"We hope to use AI to streamline work processes, but at the same time avoid it coming at the expense of people's jobs."

 Do you think AI can be used to streamline workflows and enhance communication between different departments at XXX?

"At XXX, we use Slack as our workplace communication platform. The application itself works really well, but I think the way we use it is what creates chaos. On Slack, you can create different 'channels' for different topics. Since we are a large media house with many employees, it's easy for things to get chaotic and messy within Slack. This makes it time-consuming to find the information you're looking for. Channels can also be closed, which has caused some frustration."

"We could use AI to process lengthy emails and generate helpful responses. This offers a lot of possibilities and could save us significant time. However, it might result in people no longer communicating via email and instead relying solely on AI tools to read and respond to

other AI-generated emails. This would lead to a loss of interpersonal communication that personal emails provide. Another challenge could be that the AI isn't accurate enough, potentially filtering out the part of the email that was actually important."

 Do you foresee any challenges with integrating AI into established work environments? Do you think it's "necessary"?

"A major challenge with AI in general, and its use in journalism, is that people often believe AI is smarter than it actually is. AI is only based on statistics and mathematics, providing the most probable answer. This can be misleading."

Several developers we spoke with about using AI in development noted that, while AI has clear practical applications, it brings a significant challenge—AI acts as if it's smarter than the developer. For instance, when a developer (one of them started coding in 1985) 'talked' to AI, it would often suggest changes to the developer's code, but the suggestions frequently contained obvious flaws or errors.

Specific Questions:

 How do you think Al could contribute to idea generation and creativity within your team?

"This summer, some interns actually created a TikTok robot that uses AI to generate TikTok clips."

"Al can obviously generate ideas, but originality is lost since Al is based on probability, not creativity."

Challenges:

 What challenges does XXX face when it comes to collaboration and coordination between different departments?

"Internal communication isn't always easy, which often leads to silos—where different teams end up duplicating the same work."

"XXX is a fairly large company, which naturally makes communication between departments more complicated. But as you can see, we have an open office layout, so in theory, you can just walk over and talk to whoever you need to—provided they're in the office."

"We've organized speed-dating sessions between different departments, but attendance has been somewhat low."

"This is something XXX is working on extensively, but it's naturally easier to communicate when people know each other better."

 How do you think AI can be used to improve the production process for news and entertainment programs? XXX shows us an Al tool:

"XXX has very few of its own clips for international and sports stories, as these are owned by rights holders. This means we have to purchase the rights to use the clips. We're continuously working on implementing AI tools that can improve and simplify the clipping process."

"XXX wants to personalize news to a greater extent, but to do this, we need more clips, something Al can assist with."

Ethics:

• What ethical challenges do you foresee with using AI in a collaborative environment?

"A major ethical issue we'll face in the future is the use of AI to create <u>deepfakes</u> and fake news. - XXX shows us another AI tool they're working on. You can easily imagine how this could be used in propaganda and warfare."

"We ensure that <u>deepfake</u> Al isn't misused at XXX by programming 'safeguards' that make the Al journalist 'skirt around the topic' rather than answering inappropriate questions directly."

How can XXX ensure that the use of AI does not lead to discrimination?

"My experience so far is that AI won't replace the need for people."

"Al is evolving incredibly quickly, and in my experience, the tools are getting better and better, offering tremendous potential for positive use. Comparing fall 2024 to fall 2022, the efficiency of our work has skyrocketed. Tasks that used to take me 1.5 weeks two years ago now take me about 1.5 hours."

Conclusion:

• Is there anything else you'd like to share about your experience with Al tools at XXX?

10.2.2 Conversations with UX-designers

Translated from Norwegian to English.

Notes from conversation with UX Designer:

Many years of experience.

Really likes Figma.

UX works in teams with developers and colleagues from other departments. They typically collaborate in workshops at the beginning of projects. The advantage of working in teams at MCB is the easy accessibility of colleagues and the ability to test solutions because many people work at XXX.

"I feel like there's a narrative, especially maybe in the training of UX designers, that they have an overarching responsibility for WCAG, but I often find myself being corrected on this by developers, and vice versa. I think universal design is something that many people in a company consider. However, it's still challenging to test different prototypes on, for example, visually impaired or deaf individuals. Fortunately, as mentioned earlier, XXX is a large company with a diverse range of people, some with disabilities and others with age

XXX was listening attentively when the UX designer mentioned that they weren't a big fan of workshops. They explained that it was mostly because of the setup of the workshops, and that there are many other ways to solve things.

Notes from conversation with UX Designer in the customer service department:

We often have workshops at the start or end of projects to summarize or integrate new solutions to problems. Customer service is somewhat the part of XXX that is closest to the customers and can most easily gauge the effectiveness of different solutions.

"We have a lot of applications to work with, but the ones we have work well, in my opinion." Comment from the customer service department: Generally, the system works fine, but from an objective standpoint, it can seem somewhat tiring and rigid to navigate through the many applications they use.

10.2.3 Observations and Conversations, Customer Service Department

Translated from Norwegian to English.

XXX (Customer Service):

"There's a lot of freedom. The learning method is based on the experience gained from talking to customers. It's always difficult in the beginning."

"They really admire Slack. It's hard for them to find any issues with it. 'I don't know what we would do without it,' XXX said. He compared Slack to Discord, noting that Discord isn't as difficult to use."

"They use different websites and answer customer calls through a website (not an app in itself). Although they use many different websites to assist customers, it seems they don't keep the websites open all the time. Instead, they search for them on Google when needed. Maybe it would be helpful to have a single website containing all the necessary links?"

YYY:

"Uses many different applications; a dedicated app to select daily tasks (chat, email, phone), another app to add payment methods for customers. Slack is used frequently and contains an immense amount of information, a separate app to see how it looks for the customer they're talking to, another app to track program launches, and an app to check subscriptions. He has worked there part-time for 3 years and is quite experienced, with few issues solving customer problems."

"The number of channels on Slack makes it difficult to find information. Previously, they had a communication channel for the day that was created at the start of the day and closed at the end of the day."

10.2.4 Conversation with Leader of department at the corporation.

Translated from Norwegian to English.

Notes from conversation with leader of department in the firm.

XXX has been working at XXX for some years and is the Head of a relevant department. XXX has a background in graphic design and comes from the advertising industry, having worked as an art director and creative leader on brand identity projects for big Norwegian food companies. His shift into the media industry occurred later in his career.

He leads a team of many UX designers at XXX. He mentions that this number should ideally be higher, considering the size of XXX.

Regarding AI, XXX is optimistic about its potential to improve various aspects of XXX, particularly in communication and workflow. However, he notes that the transition is challenging in a large organization like XXX, and that the use of AI has not yet fully taken hold in all areas.

Key Observations on Al and Communication

- XXX's communication relies heavily on Slack, which XXX has used for many years.
 Despite its widespread usage, he notes it can be difficult to find specific information, especially when messages are sent to multiple people.
- He proposes using a language model integrated with Slack that could help find past messages and conversations more efficiently, improving productivity and reducing time spent searching.
- Ethical concerns around AI also arise, particularly in ensuring confidentiality and
 preventing the mismanagement of sensitive data. XXX emphasizes the importance of
 balancing AI usage with privacy and security, especially when dealing with
 confidential team meetings.

Product Design and Team Collaboration

- XXX mentions that XXX has recently shifted from UX designers to product designers.
 The new focus is on product designers having business awareness and
 understanding the broader context before receiving assignments. This approach
 aims to improve collaboration between business and design teams.
- A major challenge within XXX is the siloing of teams. He recalls instances where two
 different teams unknowingly worked on the same project for weeks, wasting both
 time and resources.
- He believes Al could help improve cross-department collaboration by centralizing knowledge and facilitating more transparent communication across teams.
- XXX also mentions the importance of creating good foundations for projects, as a well-laid foundation leads to faster and more effective execution.

UX and AI in Practice

 XXX discusses how UX design is evolving with the rise of AI, and how AI can sometimes undermine the "personality" in design by leaning toward predictable outcomes. While design thinking helps generate solutions quickly, XXX argues that it often results in common, obvious answers, which may not foster innovation.

- Despite this, he believes in using AI in support roles, where it aids in organizing data, generating insights, and enhancing creative processes without replacing human judgment.
- He also highlights that while AI is not yet used for critical decision-making at XXX, it
 has been beneficial in tasks like data cleaning and organizing.

Communication Challenges and Potential Solutions

- Communication within XXX is a common pain point, particularly with information overload. XXX notes that important information is often lost in Slack and email threads, and it's challenging to find the right balance in notifications.
- He suggests that Al could help by personalizing communication, ensuring that employees receive only the most relevant information based on their roles and ongoing projects, reducing information overload.
- He also mentions a system called Padoo, which helps manage project status, but emphasizes that it's more suited for leadership to gain an overview rather than daily operational use.

Al and Collaboration Tools

- XXX reflects on tools like Slack and Padoo as key elements in XXX's workflow.
 However, the current challenge is that not all teams are connected in a way that maximizes the potential of these tools. Al could help bridge these gaps by streamlining communication and ensuring everyone has the information they need.
- He also mentions that there is no central system to track ongoing projects and collaborations, which sometimes leads to duplication of efforts and inefficiencies.

Final Thoughts and Challenges

- XXX expresses a desire for better integration between communication tools (Slack, Padoo) and AI to help employees filter and prioritize information effectively.
- A recurring challenge within the organization is the disconnect between teams, which
 could be mitigated with Al-driven systems that facilitate better communication,
 transparency, and knowledge sharing across departments.

Overall, XXX is very positive about the potential of AI but acknowledges the complexity of implementing it effectively across a large organization like XXX. The key to success lies in finding the right balance between AI assistance and human creativity and judgment.

10.3 Thematic Analysis

To visit the Thematic Analysis, see the Zip file.

10.4 Clickable prototype in Figma

To visit the clickable prototype, click the provided link:

BriefBot Prototype

10.5 Prototype PDF

To visit the PDF prototype, see the Zip file.

10.6 Link to Maze

To visit the user test, click the provided link:

BriefBot User testing

10.7 Exported Maze results and report

To watch the results and the report from the User test, click the provided link:

BriefBot User test results and report Maze

10.8 Quantitative Data Analysis

To watch the Quantitative Data Analysis in Excel, see the Zip file.