Bachelor Computer Science & Economics

Guidelines for implementing Generative AI within a Social Service Organization

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BACHELOR THESIS

Abstract

Background: Organizations are increasingly implementing artificial intelligence (AI) to enhance various processes within their operations. When implemented successfully, AI can offer substantial benefits, such as cost reduction and competitive advantage. However, the AI implementation process is considerably more complex than that of traditional IT systems and introduces unique challenges for organizations. As a result, many organizations face difficulties integrating AI into their workflows, leading to significantly lower success rates compared to traditional IT implementations. These implementation failures often result in a substantial waste of resources, including time, money and organizational effort.

Aim: This study aims to develop practical guidelines to support generative AI (GenAI) implementation within a non-profit social service organization. In doing so, it seeks to minimize the waste of resources and help the organization realize the full potential of its internally developed GenAI tools. To achieve this, the study addresses the following research question: *How to design a guide to optimize GenAI implementation within a non-profit social service organization?*

Methodology: This research utilized a Design Science Research (DSR) methodology integrated with a single case study. Data were collected from multiple sources, including semi-structured interviews with five employees involved in the GenAI implementation process, analysis of three internal GenAI-related documents, observation of four GenAI-focused meetings, and a literature review of existing AI implementation guidelines. The collected data were systematically analyzed to inform the development of the implementation guide. This analysis revealed overarching themes across all data sources. Based on these themes and guided by relevant design principles, a set of 15 initial guidelines was developed. This preliminary guide was then evaluated and refined using feedback from three stakeholders who had also participated in the earlier interviews.

Results: The final version of the guide comprises 17 distinct guidelines, organized across four main themes: Leadership & Management, Employee Adoption, Multidisciplinary Teams, and Laws & Regulations, designed to support the implementation of GenAI within the non-profit social service organization.

Conclusion: This research concludes that successful GenAI implementation within a non-profit social service organization depends on the integrated consideration of four interdependent themes: Leadership & Management, Employee Adoption, Multidisciplinary Teams, and Laws & Regulations. A key insight is the need for clearly defined ownership to ensure actionable outcomes an effective GenAI implementation process.

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Contents

Chapter 1

Introduction

In recent years, Artificial Intelligence (AI) technologies have been implemented across diverse industries, including banking [67], healthcare [63], the public sector [50] and various other sectors. Organizations increasingly recognize AI's potential to enhance operational efficiency, productivity, data-driven decision making, and user experience, among other benefits [46], positioning AI as a critical driver of organizational innovation and growth [81]. As a result, organizations that successfully implement AI can create substantial value and gain a competitive advantage. To gain this advantage, many organizations are making significant investments and integrating AI into their digital strategy with high expectations to leverage the advantages [65].

1.1 Problem statement

Despite the rapid growth in AI implementation, many organizations continue to face significant challenges in efficiently implementing AI effectively. A large number of AI projects fail, by either never making it into production or failing to meet their objectives [9, 84]. This high failure rate can be attributed to the fact that AI implementation differs from that of traditional IT systems. It requires a unique combination of specialized skills, technological infrastructure, organizational change, and leadership capable of supporting employee transitions [59, 84]. Therefore, applying traditional IT implementation methods may not produce the desired outcomes in the context of AI.

Moreover, AI implementation projects are often lengthy and complex, lasting between 18 to 36 months, and in some cases extending up to five years [25]. This prolonged duration, combined with significant investment, introduces considerable risk of wasted resources, including time, money, and human effort [46]. Therefore, addressing the unique challenges of AI implementation is crucial for mitigating risks, optimizing the use of resources and deriving a return on investment.

1.2 Research Question

While AI implementation has stimulated academic research, there is still a lack of empirical research on GenAI implementation in the public sector [53]. This study aims to address this gap by developing a practical, empirically grounded guide for GenAI implementation within a non-profit social service organization, leading to the following Research Question:

How to design a guide to optimize GenAI implementation within a non-profit social service organization?

1.3 Overview of the thesis

In this chapter, we introduced the thesis; Chapter 2 discusses existing literature; Chapter 3 describes the methodology utilized in this research; Chapter 4 provides an overview of the collected data; Chapter 5 includes the design and development of the artifact; Chapter 6 includes the evaluation of the guide; Chapter 7 outlines the discussion; and Chapter 8 provides the conclusion from this research.

Chapter 2

Literature review

This chapter provides an overview of existing literature on AI and Generative AI (GenAI) implementation in organizations. Subsection 2.1 discusses how AI, and particularly GenAI, is applied within organizations. Section 2.2 identifies key challenges associated with AI implementation. This is followed by a comparison between It frameworks and GenAI frameworks in Section 2.3. Lastly Section 2.4 outlines relevant implementation guidelines from existing literature.

2.1 Generative AI in organizations

Artificial intelligence (AI) is generally described as the ability of machines to perform human-like tasks, such as perceiving, learning, reasoning and decision-making [84]. This technology presents significant potential for organizations by enhancing operational efficiency, enabling the development of new or improved products and services, and supporting data-driven decision making [21,65]. These capabilities can ultimately contribute to superior value creation and provide a competitive advantage [69]. Consequently, organizations across various industries are increasingly investing in AI [81]. This rapid acceleration of AI is largely fueled by the rise of Generative AI (GenAI), which is regarded as one of the most transformative forces businesses face today [33,42]. GenAI leverages deep learning techniques and generative models to create original content, including text, images, audio, music and videos [62]. Unlike traditional AI models, which primarily focus on prediction, GenAI is capable of mimicking human creativity, and thereby automating tasks that were previously performed by humans. This automation can enhance efficiency, boost productivity and provide inspiration for novel ideas [23,32]. Moreover, the collaborative interaction between humans and GenAI can stimulate innovation in design, problem solving and creativity [72]. To capitalize on this potential and remain competitive, organizations must actively engage with emerging (Gen)AI technologies, invest strategically and develop robust organizational frameworks to support their integration [31].

2.2 Challenges with GenAI implementation

While AI, including GenAI, holds potential benefits for organizations, these benefits can only be realized through a successful implementation [31]. However, many organizations encounter difficulties in effectively integrating AI within their operations, frequently failing to meet expected outcomes [31,89]. Consequently, the advantages that AI can offer remain largely unrealized [85]. Empirical studies show that up to 85% of AI projects fail, either by never making it into production or failing to meet their objectives [9,84]. This failure rate is significantly higher than that of traditional IT systems [15].

One of the key challenges of AI implementation lies in the significant transformations of core business operations and organizational capabilities that is demanded [2]. This requires not only technological adjustments but also establishing the right organizational environment [31,65]. Such transformations typically involve allocation of routines, practices and processes across the organization, as well as the reshaping of existing roles and the establishing new ones [27]. Consequently, employees must develop the necessary skills to effectively collaborate with AI, while organizations need to recruit or train AI specialists to manage these systems [88]. However, the availability of skilled personnel is limited, com-

plicating effective implementation [2, 48]. Simultaneously, advancements in AI technology increase the concern among employees regarding job replacement, amplifying resistance to its implementation in the organization [35, 88, 89].

Beyond these organizational challenges, there are also challenges in its technical complexity. The effectiveness of AI systems is highly dependent on the availability of high-quality data, which must also be accessible and suitable for analysis [18]. Inadequate data quality or limited accessibility remains a critical barrier that can delay or even prevent successful AI implementation [84]. In addition to the technical constraints, AI generated content can contain biases, inaccuracies or hallucinations, which may lead to serious consequences, such as the reinforcement of discrimination and social inequities [13]. Moreover, many AI systems function as black boxes, making their decision-making process opaque and difficult to trace, which increases the risk of misuse [89]. These ethical concerns must be addressed early in the development and deployment of AI tools [30].

Finally, organizations face legal challenges. To mitigate the potential risks associated with AI tools, the European Commission proposed the EU AI Act, a comprehensive regulatory framework governing how AI should be used. Under this act, organizations are required to categorize their AI systems, generate mandatory documentation, and ensure compliance with evolving regulations [55].

2.3   Comparing IT and GenAI frameworks

Given these unique challenges and other complexities associated with AI implementation, the field still lacks a comprehensive framework [21]. In contrast, the implementation of traditional IT systems has been researched, resulting in multiple well-established frameworks [80]. While IT frameworks have been applied in AI implementation studies, scholars emphasize that AI is fundamentally different from previous technologies [31, 80]. This indicates that adaptation, extension or a combination of frameworks is needed for a successful GenAI implementation [48].

2.3.1   IT implementation

IT systems play a significant role in modern organizations by enhancing operational efficiency and contributing to revenue generation, customer base expansion and the reduction of operational costs [73]. As a result, implementing IT has become a necessity for organizations to remain competitive in the current market [75]. However, IT implementation is not as simply the deployment of a new technology, rather it requires an organization-wide transformation [75]. Such transformations include change in routines, introducing new business processes, and change in employees' job responsibilities [75]. From early on, organizations have encountered various challenges during IT implementation, where failures have often been attributed not only to technological shortcomings, but also to behavioral problems and organizational characteristics [53]. These challenges have resulted in a distinct stream of research focused on understanding and improving IT implementation processes [39].

Over the years, several broadly adopted theoretical models have been developed to explain different types of technology adoption and implementation [53]. These include the technology acceptance model (TAM) [17], Unified Theory of Acceptance and Use of Technology (UTAUT) [82], the Diffusion of Innovation (DOI) theory [68], the Technology-Organization-Environment (TOE) framework [79] and the six-stage model of IT implementation developed by Cooper and Zmud [14]. Each of these models provides a distinctive perspective and approach to how technology is implemented within organizations. TAM, UTAUT and DOI focus on the social dimensions of the implementation. TAM and UTAUT emphasize individual user acceptance, focusing on the perceived usefulness and ease of use as critical drivers [26, 44]. DOI offers a broader lens by examining how new innovations spread through social systems over time, focusing on communication and the decision-making process that influences the adoption of an innovation [51]. In contrast, the TOE shifts the attention to the organizational level, highlighting three interrelated dimensions: Technology, Organizational and Environmental, that influence the implementation process [9, 48]. Finally, the six-stage model adds another perspective by outlining the effects of various implementation factors across different phases of the innovation process, rather than within a single phase [60].

2.3.2 Common Implementation Factors

Although these frameworks were originally developed for IT systems, they provide valuable insights into critical factors and perspectives that should be considered in the context of AI implementation. When, in fact, an AI component is integrated into an IT system, the process is typically referred to as AI implementation [84]. Like IT systems, AI can enhance and redesign business processes to improve operational performance [21].

Due to this overlap, several studies on AI implementation have adapted existing IT frameworks, including the Technology-Organization-Environment (TOE) framework [48] and the Technology Acceptance Model (TAM) [41]. These studies found that certain implementation guidelines are relevant to both AI and IT. For example, at the technology level, overlapping guidelines include re-engineering of existing processes and ensuring compatibility between the technology and the IT-landscape [48], [21]. At the organizational level, shared guidelines include strong top management support, bottom-up commitment and leveraging on intrinsic motivation to innovate [48].

2.3.3 AI implementation

However, not all implementation guidelines apply for both AI and IT systems. Multiple studies have identified AI-specific implementation factors that are not addressed by traditional IT frameworks [9, 48], indicating that AI implementation presents distinct challenges for organizations, making the process more complex than IT system implementation [21, 84]. These challenges stem largely from the inherent complexity and evolving nature of AI technologies. Unlike IT systems, AI can mimic human behavior, learn from data, and autonomously adapt or modify its functioning over time [71]. These capabilities introduce concerns related to transparency, accountability, legitimacy, ethics and security, thereby increasing the difficulty for organizations to implement AI systems [71].

In addition, GenAI, remains a nascent technology for which no comprehensive framework currently exists [21]. Consequently, many organizations rely on a trial-and-error strategies in their attempt to develop effective implementation approaches [2]. However, this often results to inconsistent outcomes or failed implementation efforts [2, 21]. These limitations underscore the urgent need for novel, targeted approaches to support effective AI implementation in an organizational context [31].

2.4 GenAI guidelines in literature

To provide a comprehensive overview of existing AI implementation guidelines, this study, primarily draws from two systematic literature reviews: Wirtz et al. [89] and Lee et al, [46].
The study by Lee et al. [46] focuses on the implementation of AI within an organizational context, structured according to the Input-Process-Output (IPO) framework. In contrast, the study by Wirtz et al. [89] addresses AI governance by linking various AI-related risks to corresponding guidelines.
Together, these studies reviewed a total of 77 papers and identified 112 distinct AI implementation guidelines. For the purpose of this research, the dataset was refined to include only those guidelines relevant to an organizational setting. Guidelines specific to governments were excluded to maintain alignment with the scope of this study.
The resulting guidelines were categorized into three domains: Technology, Social & Ethical and Organizational, as shown in Table 2.1.

1. The Organizational AI implementation Guidelines aim to enhance organizational strategies and processes to effectively navigate the AI implementation process. The subcategories are Employee adoption (12), Strategy & Market (12), Change management (8), Operations & Processes (6) and Teams & Culture (4). In total, 42 AI implementation guidelines were identified within this category.

2. The Technological AI Implementation Guidelines focus on the technical aspects of design and development of responsible AI. This domain is further divided into the following subcategories: Supervising & Monitoring (8), Data Governance (6), Design & Development (5), Transparency (4), and Other (3). In total, 26 AI implementation guidelines were identified within this category.

3. The Social & Ethical AI Implementation Guidelines primarily focus on the social and ethical aspects of AI, aiming to prevent harmful or unethical use. This category is divided into two subcategories: Act accordingly to values and norms(10) and Design / Establish values and norms (6). In total, 16 AI implementation guidelines were identified within this category.

Overall, a total of 84 relevant AI implementation guidelines were identified in this study, with the Organizational category being the largest (42), followed by Technology (26) and Social & Ethical (16). These guidelines provide a foundation for understanding the factors that influence AI implementation in an organizational context and will reinforce the development of the final implementation guide.

Organizational Guidelines
Employee Adoption
Invest in building staff capabilities, create sources of meaning outside of work, emphasize employee roles and value, and monitor their engagement [5, 10, 24, 37, 49, 56, 76, 91, 92]
Involve staff in the implementation of AI and have an opportunity to give suggestions [5, 10, 24, 37, 49, 56, 76, 91, 92]
Offer training, guidelines, incentives, buy-in program, and rewards to staff [5, 10, 24, 37, 49, 56, 76, 91, 92]
Divide labor between AI and humans, such as involving humans in the process and social/emotional tasks [5, 6, 29, 38, 54, 56, 83, 90]
Do not think of AI as replacing staff [5, 6, 29, 38, 54, 56, 83, 90]
Retrain existing staff and revise career-development programs to include AI [16, 36, 45, 70, 83, 92]
Let AI complement human capabilities instead of replacing them [87]
Support education and ability to find solutions [78]
Find and train suitable experts [16, 36, 45, 70, 83, 92]
Reintegrate employees in case of job loss [91]
Provide information [7]
Invest in employees [87]
Strategy & Market
Develop strategies based on the current strategic strength, interactions with external collaborators, and balance investment and value depending on the organization's situation [24, 36, 38, 47, 70, 92]
Advance AI implementation using strategy [24, 36, 38, 47, 70, 92]
Innovate and improve over time [5, 24, 37, 40, 70, 76]
Foresee and monitor competitors' reactions, and outperform them by use of better hardware or data [43, 70, 78, 92]
Ensure services such as personalization and develop customer feedback policies [49, 56, 90, 92]
Develop strategies for servicing AI systems in case customer groups are excluded [49, 56, 90, 92]
Acknowledge and prepare for the transition customers will go through [49, 56, 90, 92]
Conduct comprehensive market research [43, 70, 92]
Budget as much for integration and adoption as for technology [24]
Define AI agenda (targets, application, employment) [87]
Support public participation [7]
Wait for market responses (e.g., competition) [78]
Change Management
Expect that workers will resist change [5, 10, 24, 37, 49, 56, 76, 91, 92]
Gain leaders' and managers' support [10, 16, 24, 43, 56, 66, 74, 91]
Involve leaders and managers in managing change, aligning AI strategy with business strategy [10, 16, 24, 43, 56, 66, 74, 91]
Understand and be aware of the inferences, consequences, impacts, and opportunities of AI adoption [16, 47, 70, 92]
Assess the risk and destruction on product/process and value after using AI [12, 45, 56, 57]

Acknowledge the transition [91]

Minimise disruptions [91]

Manage expectations at different levels [70]

Operations & Processes

Use a real-option approach [12, 45, 56, 57]

Implement review processes and internal control bodies in private companies [19]

Integrate AI with organizational workflow, practices, strategies, and tactics [56]

Ensure and support transparency within business processes [64]

Support self-regulation and best practices [78]

Implement AI to eliminate routine tasks [87]

Teams & Culture

Include data scientists, subject matter experts, or employ experts with market/product/customer experience [16, 36, 45, 70, 83, 92]

Create or shift the culture toward collaboration, data-driven, agile, experimental, cognitive, etc. [10, 24, 37, 77, 83, 92]

Integrate people from different specialties, disciplines, functions, and levels into teams [10, 11, 36, 74, 77, 93]

Assign ownership to someone from the relevant business to guide the project [24, 93]

Technology related guidelines

Supervising & Monitoring

Review and evaluate the technology [5, 24, 37, 40, 70, 76]

Avoid online/unsupervised learning if the need for explanation is a priority [4, 70, 77]

Supervise the AI tool's learning [4, 70, 77]

Develop techniques for ensuring compliance with design, performance, and liability standards [19]

Maintain effectiveness and reduce negative outcomes of algorithms [19]

Develop security mechanisms to prevent autonomous decision-making [87]

Ensure constant monitoring of algorithm outcomes [19]

Apply auditing techniques [19]

Data Governance

Ensure that the data is correct, accessible, sizeable enough, usable, understandable, and maintainable [3, 37, 45, 74]

Establish processes to evaluate data quality and bias, control, store, and share data properly [3, 37, 45, 74]

Use blockchains in training, testing, and misuse protection [20]

Promote technical assurances for data mining and analytic [19]

Provide data governance [28]

Define audit and privacy standards [20]

Design & Development

Apply common design practices such as user-friendliness and clear architecture [4, 6, 22, 36, 45, 49, 74, 92]

Develop clear and realistic use cases and understand them before the deployment [5, 6, 36, 66, 70, 77, 92]

Limit the area of use and employ rigorous trial [5, 6, 36, 66, 70, 77, 92]

Avoid gimmicky, low-value, or ambitious applications [5, 6, 36, 66, 70, 77, 92]

Develop AI through iterative refinements [24, 93]

Transparency
Consider transparency and explainability, mechanisms for contending with unpredictable, unexpected, or biased data [4, 6, 22, 36, 45, 49, 74, 92]
Foster accountability and transparency [19, 28]
Secure transparency of data acquisition and processing and controllable algorithms [87]
Explain AI decision-making process [20]
Other
Verify lawfulness and ethical use of data (big data ethics) [19]
Support AI knowledge acquisition [87]
Set standards [28]
Social & Ethical Related Guidelines
Act accordingly to values and norms
Use ethical criteria and principles (human rights) [28]
Foster human and environmental values (e.g., fairness and equity) [20]
Let social norms evolve (patience) [78]
SITL approach (society-in-the-loop) to include/implement social values [61]
Increase fairness and minimise social inequalities [91]
Encourage self-worth [91]
Acknowledge ethical governance [86]
Raise awareness by providing ethics and AI training [86]
Ensure transparency regarding ethical governance [86]
Pursue ethically responsible innovation [86]
Design / Establish values and norms
Develop a practice to ensure privacy, trust, transparency, bias elimination, embracing regulation and oversight [6, 43, 45, 52, 56, 74, 76, 83, 91, 92]
Define ethical boundaries for AI development [20]
Establish social norms [28]
Ensure freedom of speech and expression [78]
Provide ethical code [86]
Define ethical standards [87]

Table 2.1: Overview of AI implementation guidelines from existing literature

Chapter 3

Methodology

This chapter outlines the methodology adopted to address the research question: *How to design a guide to optimize GenAI implementation within a non-profit social service organization?* To answer this question, the study employed a Design Science Research (DSR) methodology, which is well suited for developing a context-specific guide tailored to the organization's real-world challenges.

This chapter starts with the organizational context of this research, as presented in Section 3.1, followed by the DSR methodology, as outlined in Section 3.2. This study draws on a literature review and qualitative data, including semi-structured interviews, document analysis, and observations to gain a comprehensive understanding of the current implementation process and shape the design of the guide. The data collection methods are outlined in Section 3.3 and the analysis methods are outlined in Section 3.4.

3.1 Research Context

This research was conducted within a non-profit social service organization in the Netherlands. With over seven thousand paid and unpaid staff, the organization provides professional support to vulnerable populations. Recently, they began developing several GenAI tools to assist frontline employees in their daily work. These GenAI tools enable speech-to-text transcription and automatic summarization and highlighting of key points from conversations or meetings. The primary objective of the GenAI tools is to reduce administrative burdens by taking over time-consuming tasks, such as summarizing conversations. To guide the implementation process, the organization established a dedicated Innovation Team, responsible for overseeing the design and deployment of the developed GenAI tools.

At the start of this study, the organization was in the early phases of implementation. Several small teams of employees were participating in pilot programs to test the tool. These pilots were designed to gather user feedback, evaluate the tool's effectiveness and determine whether the tools should be rolled out across the entire organization. In addition to the tools that are currently being tested, the organization has several other GenAI concepts in the pipeline, awaiting development and piloting. Given this early staged implementation context and future outlook, the organization presents a highly relevant setting for designing guidelines to optimize GenAI implementation.

3.2 Design Science Research (DSR)

To conduct this research, a Design Science Research (DSR) methodology was employed. DSR is a problem-solving paradigm that focuses on designing new artifacts to address real-world problems, unlike explanatory research paradigms, which seek to understand and describe reality [34, 58]. This makes the approach well-suited for the development and evaluation of an artifact intended to support the organization in implementing Generative AI tools and in addressing the practical challenges associated with the process.

To guide the Design Science Research methodology, Peffers et al. proposed a structured process consisting of six steps: (1) problem identification and motivation, (2) definition of the objectives for a solution, (3)

design and development, (4) demonstration, (5) evaluation, and (6) communication [58], as illustrated in Figure 3.1.

The DSR method does not always follow a sequential order or begin at the first step. Depending on the context of the research, Peffers et al. identified four distinct entry points where a DSR project can start: (1) problem-centered initiation, which begins by identifying the problem, (2) objective-centered solution, which begins with defining the desired objective of a solution, (3) design & development-centered initiation, where research directly begins with the construction of the artifact, and (4) client-context initiated, which starts directly with the demonstration of an existing artifact.
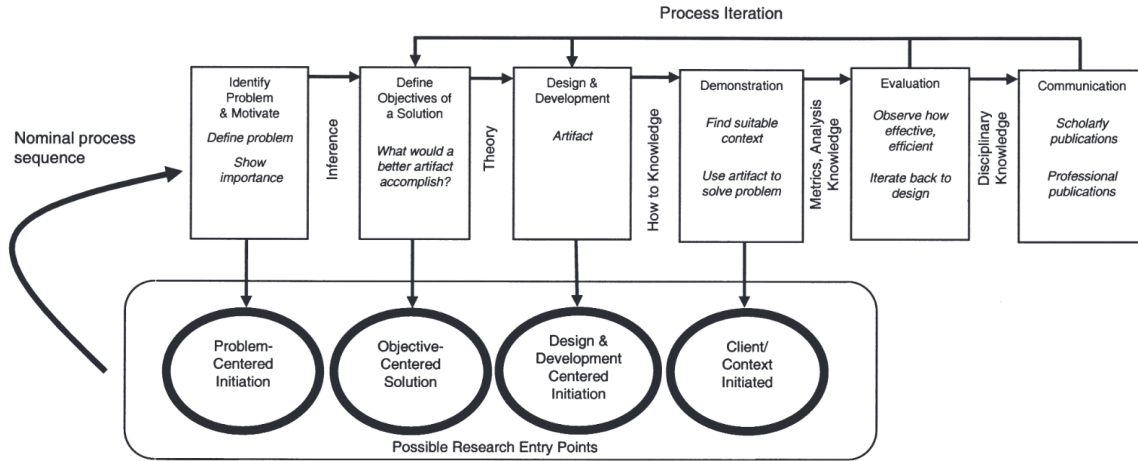

Figure 3.1: DSR methodology as defined by Peffers et al (2007)

1. Problem Identification and Motivation

This research started with the first entry point, problem-centered initiation, indicating that the process starts by identifying a relevant problem within the organization. In this study, the organization had initiated the development of various GenAI systems without prior experience in GenAI implementation or access to empirically validated GenAI implementation frameworks relevant to their context. Given the generally high failure rate of the GenAI implementation projects, this underscores the urgent need for clear, context specific guidelines to support effective implementation of GenAI within the organization. Moreover, the absence of clear implementation guidelines may lead to irresponsible use of GenAI tools by employees, unintended consequences for clients and potentially resulting in legal or financial penalties.

2. Definition of the objectives for a solution

In the second phase, clear objectives for the artifact were identified, grounded in what is realistically achievable and feasible. The primary goal of this study was to develop actionable, context-specific guidelines that enhance the effectiveness of GenAI implementation and reduce the risk associated with implementation failure.

3. Design and development

The third phase involves the creation of the artifact: a guide for GenAI implementation within the organization. The guide was developed based on the findings from the qualitative data collected through interviews, document analysis and observations, and was further supported by the insights from the literature review. By synthesizing these sources, key themes and best practices were identified and translated into a set of practical guidelines.

4. Demonstration and 5. Evaluation

The demonstration and evaluation phases were combined in this study. These phases involve presenting the developed artifact to relevant stakeholders in order to assess its ability to address the identified problem effectively. In this case, the artifact was demonstrated to three employees involved in the GenAI implementation process. During these sessions, they were asked to give feedback on the relevance

and completeness of the artifact. This feedback was then used to refine the guidelines and to create the final guide.

6. Communication

The sixth and final step is to communicate the contributions of the artifact, highlighting its utility and importance to a relevant audience. In this study, the developed guidelines will be shared with the manager of the Innovation Team, who will be responsible for presenting them to other key stakeholders within the organization.

3.3 Data Collection Methods

As a first step in data collection, we conducted a literature review to identify existing guidelines documented in previous research. In addition, we examined the current approach to GenAI implementation within the organization by using multiple empirical data collection methods including interviews, document analysis and observations. These insights derived from these methods will be used to inform the design of the artifact by grounding it in both theory and organizational practice, to enhance the relevance and usability of these guidelines within the context of the non-profit social service organization.

3.3.1 Literature Review

To identify existing guidelines for the implementation of Generative AI, we conducted a literature review. To ensure a comprehensive overview, we relied on two key systematic literature reviews by Wirtz et al. [89] and Lee et al. [46]. These studies were selected due to their broad coverage of AI implementation guidelines across diverse sectors. Collectively, they identified 112 different guidelines relevant to AI implementation.

3.3.2 Interviews

To gain an understanding of the organization's current approach to GenAI implementation, five semi-structured interviews were conducted. The participants were selected based on their direct involvement within the AI implementation process, ensuring that each participant represented a different role within the organization. This diversity of roles allowed for a more comprehensive perspective on the practices and challenges within the AI-implementation process.

During the interviews, only open-ended questions were used to encourage participants to give detailed responses. The interview guide was structured around three main components: (1) an introduction to the participants role and responsibilities, (2) the innovation funnel as the currently used methodology for GenAI implementation, and (3) the AI implementation guidelines they currently follow. To support the discussion, participants were asked about specific categories of AI guidelines, which helped them to reflect on specific areas of the implementation process.

All interviews were conducted online. With participants´ consent audio was recorded via phone and simultaneously transcribed using the GenAI tool that the organization has been developing.

The interview guide is presented in Appendix A.

3.3.3 Document Analysis

To further explore the organization's current approach to GenAI implementation, a document analysis was conducted. Three internal documents were selected for review based on recommendations from the interview participants who were directly involved in the AI implementation process. These participants identified the documents that they considered most relevant and representative of current organizational practices, in areas including privacy and security, AI policy and strategic orientation. All documents were created within the past year and updated over time to ensure relevance to the ongoing implementation process of GenAI tools. The selected documents included:

1. Data Protection Impact Assessment (DPIA); regulations for the responsible use of AI involving personal data.
2. AI policy, the policy that provides a general framework for the use of AI within the organization.

3. AI within [the organization], Strategy plan outlining how AI can improve efficiency within the organization

3.3.4 Observations

To gain deeper insight into how the organization facilitates the employee adoption of new GenAI tools, observational research was conducted. The purpose of the observations was to assess the organization's approach to employee adoption and to evaluate whether the guidelines mentioned in participants and internal AI-related documents were reflected in practice or if notable gaps were present.

Four internal meetings were observed in which Generative AI tools were introduced to employees for the first time , offering them an opportunity to test the tools and provide feedback. Of the four meetings, two were in-person, and two were online pilot kick-off meetings. The in-person sessions involved small groups of five to seven employees, who had approximately 45 minutes to explore the tool. The purpose of these meetings was to observe the initial reactions, assess the tool's usability and employees' willingness to incorporate the tool into their daily workflow. The two online meetings were held in slightly larger groups and focused on a different GenAI tool. In these sessions, employees were introduced to the tool and encouraged to use it throughout the multi-week pilot phase. These sessions aimed to provide an efficient setup to support employees in incorporating the tool into their daily work routines.

At the beginning of each session, participants were informed that observation notes would be taken for research purposes, and consent was obtained. Notes were taken on a laptop and included verbal statements made by the presenter and participants as well as relevant non-verbal communication observed during the sessions. Throughout the meetings, the researcher adopted a non-participants observer role to minimize interference.

3.4 Data Analysis

After the data had been collected, it was analyzed to identify patterns, themes and insights related to GenAI implementation within the organization. The following subsections provide a detailed description of how each data source was analyzed. The findings from this analysis serve as a foundation for the development of the implementation guide.

3.4.1 Literature review

The guidelines identified in the two literature reviews were first consolidated into a single comprehensive list containing 112 guidelines. We then applied inductive coding to the list, in which similar or thematically related guidelines were grouped into common categories. Next, guidelines that were irrelevant to the organizational context, such as those specifically aimed at governmental implementation, were excluded from the final selection, reducing the list to 84 guidelines. The resulting list comprised three categories, each consisting of multiple subcategories as shown in Section 2.4. This list served as a reference point for the design of the final artifact.

3.4.2 Interviews

After the transcripts were created by the internal GenAI tool from the organization, we analyzed them first through open coding to extract relevant insights from each individual interview. This was followed by axial coding, during which we reviewed and grouped the codes according to the corresponding interview questions. Finally, the resulting codes from each group were ranked from most to least frequently mentioned. This process enabled the consolidation of different perspectives within each theme across the participants. The results are presented in Section 4.1.

3.4.3 Document Analysis

For the document analysis, we thoroughly reviewed three different AI-related documents to ensure all relevant information was captured. A primarily inductive approach was adopted to identify and extract themes related to AI implementation, including risks, measures, requirements, principles, considerations and strategies. The results are presented in Section 4.2.

3.4.4 Observations

During the observations, the focus was on employees' responses to the newly introduced GenAI tools, including their concerns, questions, and feedback, as well as the presentation strategies used by the facilitators. The data from all four meetings were anonymized prior to analysis. An inductive approach was employed, using open coding, aiming to identify recurring patterns, questions, and references to previously identified guidelines. The results of the observations are presented in Section 4.3.

3.4.5 Consolidation of Data

After completing the analysis, the findings derived from interviews, document analysis, observations and literature review were systematically consolidated. Subsequently, key themes and patterns were identified across all data sources to obtain a comprehensive understanding of the GenAI implementation process within the organization. These findings revealed the critical aspects as well as gaps in the GenAI implementation process, which served as the foundational basis for the development of the artifact.

Chapter 4

Results

This chapter presents the results of the data collection. Three qualitative methods were used: (1) semi-structured interviews with five employees involved in the GenAI implementation process, as outlined in Section 4.1; (2) document analysis of three internal organizational documents related to GenAI processes and guidelines, as outlined in Section 4.2; and (3) observations of four meetings piloting GenAI tools, as outlined in Section 4.3. These results provided insights into the current state of GenAI implementation within the organization and formed the foundation for the design and development of the GenAI implementation guide.

4.1 GenAI guidelines in interviews

4.1.1 Description of interviews

We conducted online interviews with five individuals holding diverse roles within the GenAI implementation process to ensure a more comprehensive perspective. All interview questions focused on the current GenAI implementation process within the organization, including the success factors, obstacles, areas for improvement, and currently used guidelines. The complete list of interview questions is provided in Appendix A.

The interviews lasted between 36 and 54 minutes, with an average duration of just over 45 minutes. They were conducted over a period of one and a half weeks. Table 4.1 provides an overview of interviews, specifying the role of the participant, and the length and date of each interview. All interviews were conducted in Dutch, the native language of the participants.

ID	Role	Length	Date
1	Project manager	54 mins	7 May
2	AI Strategist	54 mins	9 May
3	Business analyst	39 mins	9 May
4	Manager	43 mins	12 May
5	Developer	36 mins	16 May

Table 4.1: Overview of interview participants, including their roles, interview durations, and dates

Each interview began with questions about the participant's role in the GenAI implementation process and their current workflow. This was followed by questions regarding key success factors, encountered obstacles and areas for improvement. Subsequently, participants were asked about any implementation guidelines they are currently using, followed by sub-questions targeting specific categories of guidelines.

4.1.2 Success factors

The participants identified seven different success factors for GenAI implementation within their company. The most frequently mentioned success factor was the 'commitment from the business side', cited

by four out of five participants.
participant 4 emphasized: "*The involvement of the business. I think that's the most important thing*".
Similarly, participant 5 mentioned: *"I personally believe that AI should emerge from the bottom up. The organization itself needs to show interest in it, ideally starting within specific teams or regions."*

Two other factors that were mentioned by multiple participants were the importance of 'a skilled team' and 'visionary leadership'. The remaining success factors were each mentioned by only one participant.

An overview of the mentioned success factors and their frequency is presented in Table 4.2.

ID	Success factors	Frequency
SF1	Commitment from the business side	4
SF2	A skilled team	2
SF3	Visionary leadership	2
SF4	Courage of the organization	1
SF5	A clear business case	1
SF6	Monitoring and evaluation of AI systems	1
SF7	Integrated and established AI policies	1

Table 4.2: Success factors for GenAI implementation and their frequency across interviews

4.1.3   Obstacles

The participants identified 7 different obstacles for GenAI implementation within their company. Only two of these obstacles were mentioned by more than one employee.

The most frequently cited obstacle is the lack of commitment from the business side, which interestingly is the inverse of the most mentioned success factor. Again, four out of five employees highlighted the importance of the engagement of the business side of the organization.
For instance, participant 2 mentioned *"Well, the fact that it [GenAI implementation] is not really working, I think, comes down to the organization's ability to adopt. Everyone is very enthusiastic, but the dedication, the commitment to actually spend time on it is challenging. People quickly fall back into their daily routines."* The consistent emphasis on business commitment, mentioned four times both as success factor and as obstacles, demonstrate its significance for a successful GenAI implementation.

The other guideline that was mentioned by more than one participants was the 'lack of commitment and courage from management' cited by two out of five participants.

An overview of the mentioned obstacles and their frequency is presented Table 4.3.

ID	Obstacles hindering AI implementation process	Frequency
O1	Lack of commitment from the business	4
O2	Lack of commitment and courage for management	2
O3	Underestimating communication	1
O4	Lack of a dedicated AI team	1
O5	Missing employee perspective	1
O6	Hallucinations of AI models	1
O7	AI taking over many tasks of employees at once	1

Table 4.3: Obstacles for GenAI implementation and their frequency across interviews

4.1.4 Areas for improvement

The participants identified 7 different areas for improvement within the GenAI implementation process. The only area of improvement that was mentioned by two different participants was the need to think beyond existing processes. The other areas were only mentioned once.

Each of these areas for improvement can also be found within the literature, except for one: the need for more Generation Z employees on the work floor. As participant 1 stated: *"I think in digital transformation in general, we have too many veterans-people. So people who were actually already retired but then return to take on roles like digital transformation directs. Honestly, I believe what we really need is a newer generation. If we want to make digital transformation truly successful"*.

An overview of the mentioned areas for improvement and their frequency is presented in Table 4.4.

ID	Areas for improvement	Frequency
AfI1	Think beyond existing processes	2
AfI2	More time for concept development	1
AfI3	More Generation Z employees involved	1
AfI4	More vision from management	1
AfI5	Better trainings for employees	1
AfI6	Quickly respond to those changes	1

Table 4.4: Areas for improvement for GenAI implementation and their frequency across interviews

4.1.5 Explicitly mentioned guidelines

After the interview questions about their perspective on the AI implementation process, participants were asked to identify any guidelines currently used within their organization. Collectively, they mentioned 16 different guidelines

Among these, the most frequently cited guideline is 'Compliance with the EU AI Act', which was mentioned by all five participants. This Act aims to establish a robust framework for AI governance, ensuring ethical and responsible use [1]. Organizations are required to classify their AI system based on their intended application and potential impact, in order to determine the appropriate level of regulation needed for each system [55].
The participants were all well aware of the EU AI Act and its implications for the organization. For instance, participant 1 stated: *"Then we refer to the AI Act and thoroughly check whether all those aspects are properly safeguarded"*, indicating a proactive approach to comply with the Act.

Two additional guidelines were mentioned by the majority of participants (three out of five): (1) Establish an ethics committee, and (2) training employees in understanding AI's strengths and limitations.
The first guidelines highlights the importance of establishing a committee to develop ethical values and norms, as participant 1 stated: *"A three-member ethics committee has been appointed. Which is really working specifically on this area of interest."*. And participant 5: *I think an important role also is that the Ethics Committee is going to provide guidelines for that.*
These responses reflect the participants awareness of potential ethical implications of GenAI implementation and emphasized the need for a dedicated committee to establish clear norms and governance frameworks.

The second guideline emphasizes the importance of educating employees about the capabilities and limitations of AI, as participant 2 stated: *"But one is aware of that there needs to be training, that people need to have knowledge of what is AI and how do you use it."*.

The remaining 13 guidelines were only mentioned by one or two participants each.

An overview of the mentioned guidelines and their frequency is presented Table 4.5.

ID	Guideline	Frequency
G1	Comply with the AI Act	5
G2	Establish ethics committee	3
G3	Train employees in understanding AI's strengths and limits	3
G4	Pay attention to responsible AI	2
G5	Conduct a DPIA	2
G6	Define data retention policies	2
G7	Assessment against privacy and security guidelines	2
G8	Introduce the AI tool with hands-on on-boarding sessions to promote immediate use	2
G9	Establish data processing agreements with third-parties	1
G10	Check the extent of AI hallucination	1
G11	Monitor AI systems	1
G12	Use only approved applications; report any unlisted tools to the knowledge center	1
G13	Support the business objective	1
G14	Ensure leadership drives the AI vision and sets a clear strategic direction	1
G15	Lead in the application of AI, not in building technology prematurely	1
G16	Engage external legal advisors to ensure compliance with evolving laws	1

Table 4.5: Guidelines for GenAI implementation and their frequency across interviews

4.1.6 Current AI implementation process

In response to the question "Can you explain the current GenAI implementation process?", all partici-
pants described the organization's use of the Innovation Funnel framework to introduce new innovations.
Although this framework is not specifically designed for the implementation process of GenAI, it is also
applied to GenAI tools. The innovation funnel guides the development and implementation of new ideas
through six stages, grouped into three categories: Exploring, Experimenting, and Excel, as shown in
Figure 4.1.
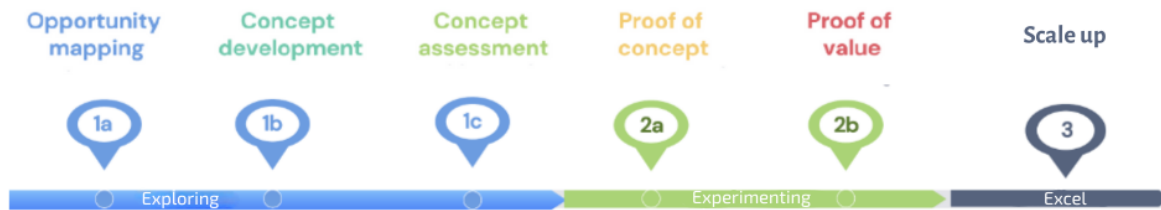
Figure 4.1: Innovation Funnel

The process begins with Opportunity Mapping, which identifies the potential, urgency, and interest of
each innovation is identified. This is followed by the Concept Development, which involves generating
ideas to improve existing processes and estimating the associated cost and potential impact. The third
stage, Concept Assessment, evaluates feasibility and allocates the project budget.

In the Experimenting phase, the Proof of Concept validates technological feasibility. Next Proof of Value
is conducted via user pilots to demonstrate the added value of the innovation, including evaluation and
comparison to goals outlined in the business case.

If previous stages were successful, the project enters the Excel phase, which includes the Scale-up. In
this final phase, the final solution is finalized based on previous feedback from the users in the pilots and
budget and prioritization decision for broader implementation.

Each step of this process highlights critical factors and offers practical recommendations and actions that should be considered at each stage. Based on this implementation process, a set of currently used guidelines can therefore be identified to support effective AI implementation. These are presented in Table 4.6.

ID	Guideline	During phase
GL1	Define opportunities for AI solutions within the organization	Opportunity Mapping
GL2	Define Clear Business Case	Concept Development
GL3	Involve experts from various domains to ensure a well-informed foundation before creating the tool	Concept development
GL4	Determine compliance with privacy and security	Concept Assessment
GL5	Identify potential ethical risks and unintended consequences	Concept Assessment
GL6	Work Agile	Proof of Concept & Proof of Value
GL7	Start with pilots	Proof of Value
GL8	Involve staff during the pilots of the tool	Proof of Value
GL9	Explain AI's possibilities and limitations to staff and train staff in use of AI	Proof of Value
GL10	Expect resistance from staff	Proof of Value
GL11	Invite constructive input, including feedback and objections from users of the AI tool	Proof of Value
GL12	Monitor AI use from pilot group	Proof of Value
GL13	Gain leaderships support and ownership of the tool	Scale-up

Table 4.6: Currently applied guidelines for GenAI implementation, organized by phase

4.1.7 Interview Conclusion

The five participants, each holding distinct roles within the GenAI implementation process, highlighted several recurring themes. Ownership, from both management and the business side was consistently emphasized as both a key success factor and, when absent, an obstacle to effective implementation. Adaptability also frequently emerged, reflecting the organizations need to think beyond current processes and stay responsive to AI developments. Furthermore, the participants demonstrated a strong awareness of the EU AI Act and the importance of complying with evolving AI regulations.

4.2 Document analysis

4.2.1 Description of Document Analysis

For a comprehensive overview of the documented guidelines, three internal AI-related documents were analyzed. These documents were selected based on their direct relevance to GenAI and recommended by the participants.

The documents are presented in Table 4.7. Each document has a distinct focus, complementing the perspective on AI implementation within the organization. Document 1 addresses the responsible use of AI in relation to processing personal data and risk mitigation, contributing primarily to the ethical and legal principles. Document 2 outlines internal policies to promote a safe, ethical, and responsible use of AI. Document 3 gives a strategic perspective, emphasizing how the organization can leverage AI to improve efficiency and reduce employees' administrative burden.

Document ID	Title	Summary	Date created
1	Data Protection Imact Assessment (DPIA)	Regulations for the responsible use of AI involving personal data	25-10-2024
2	AI policy	The policy that provides a general framework for the use of AI within the organization	18-03-2025
3	AI within [the organization]	Strategy plan outlining how AI can improve efficiency within the organization	7-11-2024

Table 4.7: Overview of internal AI-related documents analyzed, including their focus and date of creation

4.2.2 DPIA: Data Protection Impact Assessment

The first document analysed was the Data Protection Impact Assessment (DPIA). A DPIA is a systematic assessment that organizations are required to perform before deploying new high-risk technologies, aimed at identifying and minimizing threats to individuals' rights and freedoms [8]. Therefore, in context of the new AI tools, the organization established the DPIA to identify potential risks associated with the processing of personal data. Based on these identified risks, the organization implemented mitigation measures to reduce them to an acceptable level.

The document is organized into three main sections: (1) a description of processing of data, an assessment of the data processing, (2) and an assessment of the data processing, and (3) an evaluation of the associated risks, including mitigation measures.
In total, the DPIA identified 15 different risks; 2 classified as very high-risk, 8 as high risk, 3 as medium risk and 3 as low risk, as outlined in 4.8.
Many of the risks (7) were related to the processing of personal data or unauthorized retention, underscoring the importance of legal and ethical considerations to mitigate these risks. Moreover, insufficient information provision or monitoring were also mentioned both 3 times, highlighting the need to ensure employees understand both capabilities and limitations of AI, as well as monitoring and validating AI outputs.

Overlapping category	Number	Category
(too much) Personal data used or processed without right permission or unauthorized retention	7	2 very high risk, 4 high risk, 1 low risk
Insufficient information provision or transparency	3	2 high risk, 1 middle risk
Insufficient monitoring, human control and ability to measure accuracy	3	1 high risk, 2 middle risk
No place for users to ask questions or raise concerns	1	1 low
AI being used by unauthorized users	1	1 low risks

Table 4.8: Identified risks, their frequency, and associated risk levels

Based on these risks, measured at proposed that should bring the privacy risk to acceptable level. These measures are outlined in Table 4.9.

ID	Measure
M1	Ensure that third parties process as little sensitive and personal data as possible
M2	Ensure that as little (sensitive) personal data as possible is processed with the AI tool and no special personal data at all
M3	Provide information about privacy, what the AI tools does and what they say yes to, including a privacy statement
M4	Periodic proactive checking of log files
M5	Use pilots to check accuracy of the AI-system
M6	Identify during pilot whether there is a need for certain functionalities
M7	Make it clear where employees can go with questions and concerns about the AI-system

Table 4.9: Proposed measures to mitigate risks

4.2.3 AI policy

To fully leverage the advantages that AI can offer while safeguarding privacy, the organization has established an AI policy. The primary goal of this policy is to provide guidelines for the use, development, and deployment of AI systems in the organization, ensuring their AI systems are used in a safe, ethical, and responsible manner. However, the document is currently in the conceptual stage and has not yet been finalized, indicating that revisions are still possible.

The document is structured as follows. Beginning with an introduction outlining the purpose of the policy, its legal context, the responsibilities of users and the importance of AI literacy. This is followed by seven key requirements that all AI systems within the organization must meet, reflecting the organization's commitment to ethical responsible and reliable AI systems. The next section describes the procedures to be followed before developing or procuring an AI-system. The final chapter provides user guidelines, specifying rules employees must adhere to when using AI tools for work/related purposes.

The organization commits to using only AI systems that are ethical responsible and reliable. To support this, the policy outlines a set of requirements that every AI system must meet in order to be approved for use. These requirements are presented in Table 4.10.

ID	Requirements for AI systems
RQ1	Human control and supervision
RQ2	Technical robustness
RQ3	Privacy and data governance
RQ4	Transparency
RQ5	Diversity, non-discrimination and equity
RQ6	Social and environmental well-being
RQ7	Accountability

Table 4.10: Requirements for AI systems

In addition to regulations governing AI-systems, the organization has also established a set of basic principles for employees to follow when using AI for work related purposes.
These basic principles are outlined in Table 4.11.

ID	Basic principles for employees
BP1	Submit an application to use AI to the AI 'kennispunt', before using or developing
BP2	Ensure to check AI output
BP3	Never input personal, sensitive, or confidential data into AI tools that are not managed or approved by the organization
BP4	With public AI tools, disable history or information sharing features if possible to protect data privacy.
BP5	Individuals using AI tools must have sufficient understanding of AI
BP6	If you are contracting an IT service provider to support AI use, include a dedicated AI annex, to ensure compliance with all legal obligations
BP7	Always review and adapt AI-generated content before publishing
BP8	Be aware that AI use consumes significant energy and can impact the environment. Therefore, do not use it without good reason.

Table 4.11: Basic principles for GenAI usage for employees

In addition to the regulations governing AI-systems and basic principles for employees, the policy also includes a number of organizational guidelines and measures aimed at ensuring lawful and responsible AI use. These are presented in Table 4.12.

ID	Relevant guidelines and measures
RGM1	'Kennispunt' established with appropriate AI expertise to be involved before procuring, developing or commissioning an AI systems
RGM2	Compliance with the AI-act, which means that every AI-systems must be assessed for permissibility and assigned to a risk category
RGM3	Ensure the organization can demonstrate compliance with relevant laws and regulations

Table 4.12: Other relevant measures and guidelines found in AI policy

4.2.4 AI within [the organization]

This document emphasizes the broader organizational implications of AI. It was developed to identify potential benefits of AI for the organization, outline associated risks, and establish a strategic plan.

The document is structured as follows: it begins with an introduction, followed by a section outlining the organizational processes where AI could potentially be applied. This continues by practical examples of AI use cases within the organization, suggested implementation approaches and a proposed road map. The document then addresses key organizational considerations regarding AI and concludes with a chapter on how AI will be embedded within the organization.

In response to the ongoing social debate surrounding AI, the organization explicitly outlines each key considerations within several key aspects of AI implementation. These aspects are: Ethical and social impact, privacy and security, environmental en sustainability, technological related ethical considerations, expenses and revenues.

The specific considerations within each category are presented in Table 4.13.

Category	Considerations
Ethical and social impact	How can AI contribute to the quality of social care and human relationships stay intact
	How to respect human dignity
	how to protect employment

Privacy and security	Ownership, who owns the data and how consent is obtained from clients
	Whether the LLMs should be made for the organization, allowing, data ownership, security and compliance (storage region) to be fine-tuned.
	EU AI Act requires risk analysis for high-impact AI systems
Environmental en sustainability	By making deliberate design choices during the development of the architecture, it is possible to reduce energy consumption
Technological related ethical considerations	AI models are not completely predictable, but can be analyzed to look at:
	- effectiveness of the model
	- robustness of the model
	- transparency of the model
	- data governance
	- thee extent to which new experiences can be incorporated into the model
	etc
Expenses and revenues	Hours that employees can invest in clients will increase
	Hours spend on technology will increase

Table 4.13: Considerations of the organization concerning AI

In addition to these considerations, the document proposes several strategic responses to actively address them. These strategies are listed in Table 4.14

ID	Strategies
S1	Forming a team of experts to think about the social and ethical implications
S2	Giving trainings for employees
S3	Conduct a DPIA
S4	Conduct research on how AI impacts business operations

Table 4.14: Strategies for AI implementation

4.2.5 Document Analysis Conclusion

Three internal documents were analyzed, each focusing on different aspect of AI implementation. Despite their different scope, several themes emerged across all three documents.

First, a clear commitment to responsible AI development was emphasized. Common themes such as monitoring AI to ensure privacy, security, and technological robustness was recurring topic. The strategy document outlined all relevant considerations, including for privacy & security and technology implications. The DPIA highlighted data-processing risks and the measures taken to mitigate them, while the AI policy complements these by specifying how AI systems must be responsibly developed.

Another recurring theme was the employee adoption. The strategy document noted the key ethical and social considerations for AI development, the DPIA identified risks stemming from insufficient information provision and transparency for employees using AI tools, and the AI polity supplemented this by providing guidance on ensuring responsible AI usage by all employees.

4.3 GenAI guidelines in Observations

Four AI-related meetings were attended, consisting of kickoff sessions for two different AI tools, with two meetings held for each tool. The sessions involved groups of 5 to 12 employees from the organization, along with 2 to 4 members of the innovation team, guiding the pilots.

Meetings 1 and 2 were held in person with groups of support workers. These employees currently use an app that maintains an online dossier of the participants they assist. After each visit, they are required to complete a new report, which is then added to the dossier. In a sandbox environment of this app, a new AI functionality has been added, designed to create SMART-goals for the client and enable speech-based reporting. The employees could try this tool during the meeting, allowing them to provide feedback and assess whether the tool could support them in their daily work.

Meetings 3 and 4 were conducted online with groups of child protection workers, who currently document their client interactions through typing their reports. During these sessions, the new AI tool for speech-based reporting was introduced. Participants were guided through the setup process, to ensure all participants could begin using it during client conversations over the next few weeks as part of the pilot. The aim of this meeting was to familiarize the participants with the tool and provide assistance with the setup.

Table 4.15 provides an overview of the observations.

Meeting No	Date	Length	Amount of participants	Setting	Participant group
1	6 March	1,5 hours	5	In-person	Support worker
2	10 March	2 hours	7	In-person	Support worker
3	16 April	1 hour	± 10	Online	Child protection workers
4	24 April	1 hour	± 12	Online	Child protection workers

Table 4.15: Overview of observations,including participants, setting, and meeting details

Each meeting began with brief introductions from all participants, followed by the facilitator providing an overview AI and explaining the capabilities of the new tool. The tool was then demonstrated, after which employees had the opportunity to test it themselves. During the session, participants were encouraged to ask questions and share their thoughts and feedback on the new tool.

Overall, the AI tools were very well received by the employees. During the meetings, most participants were actively involved and asked many questioned or shared their thoughts. The majority responded enthusiastically and reported a positive first experience when trying the new tool. They made comments such as:

"It's good that we are working on this, and even though there is some resistance, we just have to start doing this."

and

"I've tested them both [on phone and computer] now and it works great! I just wanted to say that."

On the other hand, some employees expressed critical views on the output and raised concerns, which at times lad to group discussions about specific topics. They made comments such as:

"It's a nice SMART-goal, but it does get complex quickly."

This provided a well-balanced view of the response to the introduced AI tools, from employees responding enthusiastically right away, while others were more skeptical or hesitant.

4.3.1 Questions from employees

Most of the questions raised during the sessions were related to the functionality of the AI-tool. These included questions such as:

"When you get a call, does the tool stop recording?"

and

"Do you need an active connection to the Internet?"

Other questions about the functionality of the AI tool focused on the challenges encountered while trying the tool for the first time during the session, as well as the potential challenges or use cases when working with clients. These questions addressed topics such as the languages the tool supports, the different kinds of conversation it can facilitate, its integration with other applications, the placement of certain buttons, and whether the output can be modified.

Additional questions raised other important aspects related to the use of AI within the organization. In two different sessions, participants discussed whether client approval was needed, especially in situations where clients might ask critical questions. The participants emphasized the need for support to ensure that introducing the tool would not harm their relationship with their clients.

Privacy was another concern raised in two different meetings. Participants asked about data storage duration and whether members of the innovation team would be able to access their recorded conversations.

Lastly, during Meeting 1, employees discussed concerns about job security and the potential for AI to take over some of their tasks and roles. One of the employees asked whether anyone could perform their job with the assistance of this specific AI tool, as it might reduce their reliance on personal experience and skills.

4.3.2 Risk and concerns mentioned by employees

During the meetings, only three risks were mentioned by employees regarding the use of AI within the organization.

1. One employee pointed out the importance of reading and verifying the output of the AI-tool before using it in reports. Another employee added that there might be a risk that some employees might not carefully read the output thoroughly, a concern that other employees agreed with.

2. Another concern involved the difficulty that older employees might face in learning to use the tool effectively, due to lower levels of digital proficiency.

3. One employee highlighted the need for the organization to continue developing AI tools, as otherwise the organization might fall behind in innovation

4.3.3 Other observations

Although there were two different setups for the meetings, all four shared some similarities. In each session, there was a clear explanation of what AI is, providing realistic expectations regarding the new tool. During the demonstrations, presenters clearly showed how the tool functions, highlighting interface features, button locations and correct usage.

After the demonstration, the participants were given the opportunity to engage with the tool for themselves. Whenever employees encountered difficulties, assistance was provided until they successfully navigated the issue. This hands-on approach contributed to the participants' ability to understand and effectively use the AI tool. Finally, employees were encouraged to actively participate by asking questions and sharing their thoughts, giving them the opportunity to provide feedback or raise any concern they have.

4.3.4 Observations Conclusion

Four GenAI-related meetings were observed in which newly developed GenAI tools were introduced to employees. Several key insights emerged from these sessions.

First, during the sessions the presenters started by explaining AI's capabilities and limitations to give employees a better understanding of how the tools can be applied. During the sessions, a high volume of questions emerged regarding how to use the tool, indicating that many employees struggled to begin using the tool without guidance. Additionally, the presenters gave space for employees to ask questions, express concerns or resistance, which allowed the presenters to address uncertainties.

Chapter 5

Design

This chapter presents the rationale for how the empirical findings and literature review were used to develop the final artifact. It begins by outlining the Design Principles in Section 5.1. Subsequently, the chapter presents how each data source (interviews, documents, observations, literature) contributed to the formulation of the guidelines included in the guide, outlined in Section 5.2.

5.1 Design Objective and Principles

GenAI implementation requires specific organizational, ethical, and technical considerations, and this study aims to develop a set of guidelines to support the implementation of GenAI tools within a non-profit social service organization. The organization is currently in the pilot phase of several internally developed GenAI tools and is actively exploring additional GenAI applications for future use.

To optimize the implementation process and reduce the risk of failure, the guidelines are designed to support both management and operational teams involved in effectively navigating and facilitating GenAI implementation. These guidelines are grounded in empirical findings from qualitative research and are further supplemented by insights from the literature review.

The formulation of the guidelines draws on identified areas for improvement, which represent critical intervention points. Additional input, such as identified obstacles, success factors, existing practices, and current internal guidelines were also taken into account.

5.1.1 Design principles

To ensure the artifact is relevant and usable in the context of the organization, we established the following design principles:

- Relevance: the guidelines should be relevant to the GenAI implementation process within the social service organization.
- Clarity and usability: the guidelines should be understandable and practical applicable across the organization.
- Conciseness: the number of guidelines should be manageable, avoiding excessive detail while maintaining comprehensiveness.
- Terminological precision: the guidelines should avoid ambiguity and overly technical language.
- Inclusiveness: the guidelines should support both management and operational teams involved in the GenAI implementation process.

These guiding principles provide the foundation for developing a set of guidelines for GenAI implementation tailored to the organization.

5.2   Findings Informing the Guidelines

To develop a set of context-specific GenAI implementation guidelines, empirical findings were synthesized and organized into five thematic categories: Leadership & Management, Employee Adoption, Multidisciplinary Team, Laws & Regulations, and Monitoring GenAI systems. Within each theme, insights from interviews, document analysis, observations and literature were compared to identify recurring patterns, gaps and other areas that informed the content of the guidelines.

5.2.1   Interdependency of guidelines

All participants referenced guidelines across all themes, suggesting that effective GenAI implementation cannot rely on isolated interventions. As participant 4 observed *'I think too much of it is often left to IT. But AI really concerns the entire organization, and all aspects within it. Every function within the organization.'* This highlights the importance of organization-wide engagement, in which each theme must be addressed. When one theme is insufficiently integrated, it can compromise the effectiveness of the broader implementation effort.

5.2.2   Leadership & Management

Leadership emerged as a critical theme in the GenAI implementation process, recurring in interviews and document analysis. However, it did not play a visible role during the observed sessions.

Interviews All five participants expressed the importance of management within the GenAI implementation process. They highlighted four different important aspects of leadership: Visionary leadership, Commitment & Actionability, Organizational Alignment, and the establishment of an ethics committee, as seen in Table 5.1.

- Visionary leadership was mentioned repeatedly. Participants emphasized the importance of leaders who drive GenAI innovation, articulate long-term vision, and think beyond existing processes. While this was seen as a success factor, this was also identified as an area for improvement.

- Commitment & Actionability were frequently discussed as both a success factor and an area for improvement. This involves the capacity of management to respond effectively to changes, taking responsibility, and being willing to make bold decisions and take risks.

- Organizational Alignment indicates the importance of GenAI vision being aligned with the business objectives within the organization.

- Establishing an Ethics Committee has also been mentioned by multiple participants. This committee should be responsible for addressing key considerations related to the social and ethical implications of AI.

Key aspects	Mentioned at
Visionary leadership	Success Factors (SF3), Area's for improvement (AfI4, AfI1), Guidelines (G14), Current process (GL1, G15)
Commitment & Actionability	Success factors (SF4), obstacles (O2) and areas for improvement (AfI6)
Organizational Alignment	Success factors (SF5), guidelines (G13)
Establish ethics committee	Guidelines (G2)

Table 5.1: Leadership & management aspects identified within interviews

Document analysis Similarly, the internal documents underscored the important role of leadership and management within GenAI integration. Document 3 highlighted several key considerations that require careful consideration and decision-making in order to formulate an GenAI vision and demonstrate organizational commitment. These considerations for management include the ethical and societal impact of AI, privacy and security risks, environmental and sustainability responsibilities, technology-related ethical concerns, and financial implications caused by changes in role and job function due to GenAI integration.

Moreover, the document emphasized the importance of assessing how GenAI will affect the organization's operations, aligning well with the interview findings regarding the need to ensure alignment between GenAI initiatives and broader business objectives.

Additionally, the document proposed the establishment of a dedicated team to address social and ethical implications of GenAI within the organization. This corresponds with insights from the interviews, in which several participants emphasized the importance of forming an ethics committee to support responsible GenAI implementation.

Observations During the observations, leadership and management were not mentioned nor played a visible role.

Literature review The four key aspects identified in the interviews were also reflected in the literature.

The reviewed studies showed the necessity of involving managers and leaders in the AI implementation process. For instance, one guideline explicitly stated: *'gain leaders' and managers' support'*, while others highlight the importance of a clear strategy as reflected in: *'Advance AI implementation using strategy'* and *'define AI agenda'*.

Although the literature did not explicitly state that management must consider key themes such as ethics, privacy, environment, technology and financial implications, each of these themes is recognized individually topics requiring attention in the implementation process.

Both the empirical findings and the literature emphasize that leadership serves as the driving force behind successful GenAI implementation and must ensure continuous innovation. Moreover, both sources stress the importance of GenAI initiatives being aligned with existing organizational workflow, practices and strategies.

Finally, although the concept of an ethics committee was not explicitly referenced in the literature, several guidelines addressed the responsibility such a committee would assume, for example *'define ethical boundaries for AI development'*, implicitly supporting the establishment of the ethics committee.

Guidelines

Both empirical findings and the literature review highlight the critical role of leadership and management in GenAI implementation. It is portrayed as the driving force behind a successful implementation process.

Both visionary leadership and commitment & actionability were identified as success factors and areas for improvement, revealing a gap between the expectations and current practices. This suggests the need for a more proactive and engaged leadership approach. A clear GenAI vision was repeatedly emphasized across data sources. Moreover, leaders are expected to take ownership of strategic direction, facilitate ongoing innovation, and respond effectively to AI-related developments. Lastly, leadership holds the responsibility for establishing an ethics committee to oversee all ethical, social and legal implications of GenAI implementation.

Based on these recurring themes, supported by empirical evidence, literature review and the design principles, five guidelines were developed under the theme of Leadership & Management:

1. Leadership should proactively address critical themes related to ethics, privacy and security, environment, technology and financial implications

2. Leadership should articulate and actively drive a clear GenAI vision and strategy across all relevant levels of the organization, ensuring alignment with existing workflows and overall business objectives

3. Leadership should be responsive to change and take proactive action to seize GenAI opportunities and address challenges

4. Leadership should foster a culture of adaptability, ongoing innovation, and improvement

5. Establish an ethics committee to oversee and address social, legal and ethical implications of GenAI implementation within the organization

5.2.3 Employee adoption

Employee adoption emerged as another recurring theme across the qualitative research, appearing in the interviews, document analysis and observations.

Interviews All participants emphasized the importance of actively involving employees throughout the GenAI implementation process. Four key aspects were highlighted: Employee commitment, Employee training, Communication and Governance, as shown in Table 5.2.

- Employee commitment was the most frequently mentioned aspect within both the success factors, and obstacles when it is not adequately addressed. To ensure commitment from employees, it is crucial to involve them early in the process, gradually introduce them to the new GenAI tools and provide opportunities to use the GenAI tools during the pilot phase.

- Employee training & Capability building was another frequently mentioned aspect of employee adoption. This includes equipping employees with a clear understanding of AI's strengths and limitations, as well as providing practical training on how to use the tools effectively. Such training supports employees to develop both technical skills and ethical awareness, which are essential for responsible GenAI use.

- Communication with employees is the third aspect. This involves ensuring transparency on how GenAI tools may affect roles and responsibilities once integrated into the workflow. Additionally, employees should be encouraged and given space to voice concerns, ask questions and provide feedback. Such two-way communication is essential for building trust and facilitating effective adoption of the tool.

- Governance is the final aspect of employee adoption. It involves providing clear and accessible guidelines to ensure that only approved GenAI tools are used within the organization. A centralized body, such as a GenAI knowledge center, should be established where employees can request authorization for non-approved tools. This approach helps to mitigate the risk of unregulated or irresponsible AI use.

Key aspects	Mentioned at
Employee commitment	Success factors (SF1), Obstacles (O1), Current process (GL7, GL8, GL10, GL12)
Training & Capability building	Areas for improvement (AfI5), Guidelines (G3, G4, G8), current process (GL9)
Communication	Obstacles (O3, O7, O5), Current process (GL11)
Governance	Guidelines (G12)

Table 5.2: Employee adoption aspects identified within interviews

Document analysis Insights gained from the AI-related documents were aligned with the interview findings. Document 2 outlined several basic principles for employee interaction with GenAI tools, including essential practices such as verifying AI-generated outputs and avoiding the input of sensitive or personal data. Moreover, in Document 1, they emphasized risks associated with insufficient information provision and lack of transparency. These principles and risks further highlight the importance of comprehensive training and clear communication, an issue also emphasized by participants.

Additionally, the need for an AI-knowledge center was highlighted in Document 3. This center would consist of staff with relevant AI expertise and would be involved early in the development or procurement phases of GenAI systems. Additionally, it would serve as a central point where employees can ask questions or raise concerns regarding AI. By providing support and guidance, the knowledge center will support the employee adoption of new GenAI tools and promote responsible AI use. This aligns closely with the interview insights highlighting the need for effective AI governance and an AI knowledge center.

Observations During the observations of pilot sessions, it became evident how some of the practices discussed in interviews and described in internal documents were applied in practice. Each pilot session typically began by giving a general explanation of what GenAI is, followed by a practical demonstration of the tool's functionality. Employees were then given the opportunity to test the tool themselves, with

support available when needed. One employee expressed concern that older colleagues, like herself, might find it difficult to adopt the tool, highlighting the need for training within the implementation process.

Furthermore, employees were encouraged to ask questions, raise concerns and provide feedback. While many questions were related to the technical functionality, some participants also raised questions about privacy, and concerns about job loss were discussed. These observations reinforced the importance of employee training and effective communication, as emphasized in both the interview and document analysis.

Literature review Many guidelines from the literature relate to employee adoption of GenAI tools. These guidelines emphasize the importance of providing training, ensuring responsible use of AI, and robust governance structures. For instance, this is reflected in the guideline: *'offer training, guidelines, incentives, buy-in programs and rewards to staff'*.

In addition, the literature emphasizes the need for employee engagement throughout the implementation process. This is reflected in guidelines such as *'involve staff in implementation of AI and have an opportunity to give suggestions'* and *'assign ownership to someone from the relevant business who can map out roles and guide a project from start to finish'*.

Notably, while the interviews and internal documents repeatedly highlighted the importance of clear communication for successful AI implementation. Yet this aspect was underrepresented in the literature. Only one guideline explicitly mentioned this concern: *'provide information'*. This suggests that communication may be insufficiently addressed in existing literature.

Guidelines

Both the empirical findings and the literature review underscore the critical role of employee adoption in the successful implementation of GenAI tools.

Employee commitment emerged as the most frequently mentioned factor in the interviews, identified both as a success factor, and when lacking as a significant obstacle. This theme was consistently reinforced across the document analysis, observations and literature review. Commitment can be achieved through employee training, clear two-way communication, and the involvement of employees from the business side who can bridge the gap between the innovation team and end-users. Moreover, providing a centralized body, such as an AI knowledge center, where employees can seek guidance or raise concerns, was also a recurring aspect.

Based on these recurring themes, supported by empirical evidence, literature review and design principles, four guidelines were developed under the theme of Employee Adoption:

1. Provide training on GenAI's capabilities, limitations, ethical implications, and provide usage guidelines

2. Involve employees early in the GenAI process through two-way communication that encourages questions, concerns and feedback

3. Involve the business side to connect with relevant teams

4. Define and assign ownership for each GenAI implementation

5. Provide ongoing support through dedicated structures such as a GenAI knowledge center

5.2.4   Multidisciplinary Team

The Multidisciplinary Team emerged as another critical theme in the GenAI implementation process, primarily based on the interview findings. It was neither mentioned in the analyzed documents nor did it play a visible role during the observed sessions.

Interviews Two aspects of a multidisciplinary team to facilitate GenAI implementation were emphasized in the interviews: Skilled and multidisciplinary team, and an Agile and flexible work approach, as shown in Table 5.3.

- A skilled and Multidisciplinary Team was consistently described as a critical factor for successful GenAI implementation. It was cited both as a success factor and an obstacle when absent. Additionally, it was reflected in current practices, where employees from various disciplines are collaborating during the implementation process. Given that GenAI affects multiple domains, involving experts from different fields is essential to ensure well-informed decision making.

- Agile and Flexible Work Approach was mentioned by multiple participants as an area for improvement. This includes the organizational ability to quickly respond to AI-related developments and the use of agile methodologies within project teams. This was mentioned four times as an area for improvement, with several participants emphasizing the need to move away from a rigid mindset and explore new ways of approaching this new technology. In line with this, one employee even suggested involving younger employees, such as Generation Z, who may bring fresh perspectives, question established workflows and identify new opportunities. These insights underscore the importance of establishing guidelines to support agile workflow within the multidisciplinary team.

Key aspects	Mentioned at
killed and Multidisciplinary Team	Success factors (SF2) , Obstacles (O4), Current Process (GL3)
Agile and Flexible Work Approach	Area for improvement (AfI1, AfI2, AfI3, AfI6), Current Process (GL6)

Table 5.3: Multidisciplinary team aspects identified within interviews

Document analysis There was no mention of forming a multidisciplinary team or establishing a specific workflow in any of the analyzed documents.

Observations During the observations, forming a multidisciplinary team was not mentioned nor did it play a visible role.

Literature review The literature highlights the importance of forming multidisciplinary teams for successful GenAI implementation. For instance, this is reflected in the guideline: *'Integrate people from disparate specialties, disciplines, functions, and levels to work as a team'*. Agile working methods were also mentioned within the literature review, in the guideline: *'develop AI through iterative refinements'*.

Guidelines

Both the interview findings and literature review highlight the importance of establishing a multidisciplinary team for successful GenAI implementation. This is due to the fact that AI systems impact multiple domains within an organization, making a holistic approach necessary. This requires the involvement of experts from diverse areas such as Business, IT, HR, and Legal, to ensure well-informed decision making. Additionally, the team should adopt an agile working methodology to remain flexible and responsive to both internal and external AI-related developments.

Based on the interviews, literature review and design principles, two guidelines were developed under the theme of Multidisciplinary Team:

1. Form a multidisciplinary team that brings together experts from different domains to ensure diverse perspectives and relevant expertise are represented

2. Apply agile methodologies to support iterative development of the GenAI tools

5.2.5   Laws & Regulations

Another recurring theme found within the document analysis, is the laws & regulations. These were highlighted in both interviews, document analysis and observations.

Interviews All participants emphasized the importance of complying with AI-related regulations. Four key aspects were identified: Integrated and established AI policies, compliance with the legal framework, privacy and security assessment, ethical considerations, as shown in Table 5.4.

- Integrated and well-defined AI policies were repeatedly mentioned during the interviews, underscoring the importance of having well-defined structures in place before deploying AI systems within the organization.

- Compliance with the legal framework, specifically the EU AI Act, is the only guideline mentioned by all five participants. The EU AI Act requires organizations to classify their AI systems based on risk levels and implement appropriate measures. All participants demonstrated awareness of this law and emphasized the importance of compliance. Several other participants mentioned involving legal advisors to ensure that the organization stays aligned with the evolving legal requirements.

- Privacy and security assessments were another frequently mentioned aspect. These assessments involve conducting Data Protection Impact Assessments (DPIA), evaluating compliance with privacy and security guidelines and drafting data processing agreements with third parties.

- Ethical considerations were acknowledged as critical aspects for GenAI implementation as well. Participants stressed the importance of assessing and mitigating potential ethical and social risks, which aligns with the previously mentioned guideline of establishing an ethics committee.

Key aspects	Mentioned at
Integrated and established GenAI policies	Success Factor (SF7)
Compliance with legal framework	Guidelines, Current Process (G1, G16)
Privacy and security assessments	Guidelines (G5, G6, G7, G9), Current Process (GL4)
Ethical considerations	Current guidelines (GL5)

Table 5.4: Laws & regulations aspects identified within interviews

Document analysis Across multiple internal documents, the importance of anticipating and mitigating ethical, social, privacy, and security risks are strongly emphasized. In Document 1, a total of 15 different risks have been classified, accompanied by corresponding measures. These measures include, for example, limiting the amount of personal data processed by third parties, which was also mentioned by one of the participants. Other measures include training employees in the responsible use of GenAI and supervising the GenAI tool, aligning with the previously established guidelines.

Moreover, Document 2 emphasized the necessity for the organization to ensure and demonstrate compliance with the EU AI Act, underscoring the importance of adhering to relevant legal frameworks. This aligns with the findings from the interviews, where the importance of complying with laws and regulations was mentioned by all five participants.

Observations During one of the pilot meetings, an employee raised a question regarding the handling of data that is processed by the GenAI tool. This indicates that employees are concerned as well about personal data privacy. This observation aligns with findings from both the interviews and document analysis, as well as with previous guidelines of transparent communication.

Literature review The aspects identified in the qualitative research were also reflected in the literature review. Guidelines such as *'Develop techniques for ensuring compliance with design, performance, and liability standards'* and *'Define audit and privacy standards'*, underscore the importance of integrated and well-established AI policies. Similarly, *'Verify lawfulness and ethical use of data'*, highlights the necessity of compliance with legal frameworks, reinforcing the results of the qualitative research.

The guideline *'Develop a practice to ensure privacy, trust, transparency, bias elimination, embracing regulation and oversight'* directly aligns with the privacy and security assessments mentioned during the interviews.

Finally, ethical considerations are emphasized in multiple guidelines in the literature review, including *'Define ethical boundaries for AI development'* and *'Acknowledge ethical governance'*.

All these aspects identified through qualitative research, and reinforced by the literature review, emphasize the importance of integrated laws and policies, particularity in areas such as legal compliance, privacy and security, and ethical governance.

Guidelines

Both the empirical findings and the literature review highlight the importance of compliance with laws and regulations. All five participants mentioned the necessity of aligning with the EU AI Act, which is also stated within Document 2. This highlights the importance of ensuring adherence to evolving legal frameworks. In addition, regularly conducting privacy and security assessments, such as Data Protection Impact Assessments (DPIA) emerged as a recurring aspect across data sources. Establishing clear internal policies tailored to the development and deployment of GenAI tools was emphasized as well.

The ethical considerations that were mentioned within this chapter have already been addressed within the previous defined guideline under the leadership and management theme: 'Establish an ethics committee to oversee and address social, legal and ethical implications of GenAI implementation within the organization'. To avoid redundancy, these ethical elements will not be repeated in a separate guideline here.

Based on these recurring themes, supported by empirical evidence, literature review and the design principles, three guidelines were developed under the theme of Laws & Regulations :

1. Establish GenAI specific policies prior to deployment

2. Ensure legal compliance and stay aligned with evolving regulations (e.g. EU AI Act)

3. Conduct regular privacy and security assessments

5.2.6   Supervising GenAI tools

The last recurring theme found within the document analysis, is the supervision of GenAI tools. These were highlighted in both the interviews, document analysis and observations.

Interviews There was one aspect of supervising GenAI tools highlighted in the interviews: monitoring and evaluating GenAI tools, as shown in Table 5.5.

- Monitoring and evaluating GenAI systems were mentioned multiple times during the interviews, indicating a strong awareness among the participants that GenAI outputs may not always be accurate or reliable. This means that GenAI tools must be observed and assessed based on their performance in practice, by tracking metrics such as accuracy and latency and identifying potential issues such as bias or hallucinations in the AI's output.

Key aspects	Mentioned at
Monitor and evaluate GenAI systems	Success factors (SF6), Guidelines (G10, G11), Obstacles (O6)

Table 5.5: Supervising GenAI tools aspects identified within interviews

Document analysis Multiple risks mentioned in the documents focus on the lack of sufficient monitoring and human oversight of GenAI outputs. These risks are addressed through different measures such as periodic proactive log file checks, and using pilots to evaluate the accuracy of the GenAI tools. These measures reinforce the findings from the interviews, which emphasized the importance of monitoring and evaluating GenAI systems to identify and mitigate potential errors or unreliable outputs.

Observations During the meetings, the presenters addressed both the opportunities and risks associated with AI, explicitly discussing issues such as bias and hallucinations. Employees were informed of the importance of critically evaluating the AI-generated output before using it. This aligns with the insights from the interviews and document analysis, where monitoring the output of GenAI was consistently emphasized.

Literature review Numerous guidelines in the literature reinforce the need for continuous monitoring and evaluation of GenAI systems. For instance, guidelines such as *'Ensure constant monitoring of algorithm outcomes'* and *'Review and evaluate the technology'*. These guidelines align with the findings from the qualitative research.

Guidelines

Based on the design principles and the recurring patterns identified within the findings for the theme of supervising GenAI tools, one guideline was developed:

1. Regularly monitor GenAI systems output to detect and address biases, errors and unintended outputs

5.3 Full guide

The complete set of guidelines, synthesized from multiple data sources, is presented in Table 5.6. It comprises 16 distinct guidelines categorized under five overarching themes.

This guide forms the foundation of the final artifact, aimed at supporting effective GenAI implementation within a non-profit social service organization.

Full Guide	
Theme	**Guidelines**
Leadership & Management	1. Leadership should proactively address critical themes related to ethics, privacy and security, environment, technology and financial implications
	2. Leadership should articulate and actively drive a clear GenAI vision and strategy across all relevant levels of the organization, ensuring alignment with existing workflows and overall business objectives
	3. Leadership should be responsive to change and take proactive action to seize GenAI opportunities and address challenges
	4. Leadership should foster a culture of adaptability, ongoing innovation, and improvement
	5. Establish an ethics committee to oversee and address social and ethical implications of GenAI implementation within the organization
Employee adoption	1. Provide training for employees on AI's capabilities, limitations, ethical implications, and provide usage guidelines
	2. Involve employees early in the GenAI process through two-way communication that encourages questions, concerns and feedback
	3. Involve the business side to connect with relevant teams
	4. Define and assign ownership for each GenAI implementation
	5. Provide ongoing support through an GenAI knowledge center and training
Multidisciplinary Team	1. Form a multidisciplinary team that brings together experts from different domains, including business, IT and legal, HR, ethics to ensure diverse perspectives and relevant expertise are represented
	2. Apply agile methodologies to support iterative implementation of the GenAI tools
Laws & Regulations	1. Establish product-specific GenAI policies prior to implementation
	2. Ensure legal compliance and stay aligned with evolving regulations (e.g. EU AI Act)
	3. Conduct regular privacy and security assessments
Supervising GenAI tools	1. Regularly monitor GenAI systems output to detect and address biases, errors and unintended outputs

Table 5.6: Synthesized guidelines for GenAI implementation, organized by theme

Chapter 6

Evaluation

To ensure practical relevance and applicability, the proposed guidelines were evaluated with the Project Manager, AI Strategist and a Manager in the organization. This chapter contains the methodology of the evaluation, as outlined in Section 6.1, and the qualitative evaluation as outlined in Section 6.2, which led to the final guide, is presented in Section 6.3.

6.1 Evaluation Approach

To assess the usefulness and relevance of the artifact, we conducted expert reviews with three key stakeholders within the organization, who were previously involved in this research, as shown in Section 4.1. This includes the Project manager (ID 1), the AI strategist (ID 2) and the manager (ID 4). All three of them play a central role within the GenAI implementation within the organization. Of the five initially interviewed stakeholders, these individuals were the most directly involved within the full GenAI implementation process within the organization.

The aim of the interview was to both validate and gain constructive feedback on the first version of the artifact as outlined in Section 5.3. The interviews were conducted using semi-structured formats, consisting of open-ended questions. The interviews were divided into two parts:

1. The first part was a general discussion about the importance of AI implementation guidelines within the organization. This included questions about who benefits from the guidelines, who should use them, and what would happen when there will be no guidelines established. These questions were intended to gain a better understanding of the importance and integration of the guidelines.

2. The second part consisted of a walkthrough of the artifact: the guidelines. The guide was presented to the participants and theme after theme was walked through and for each theme the same questions were asked about the relevance, applicability and possible improvements of the guidelines. These questions were intended to gain a reflection on how effective the guidelines are and possible improvements that could be done to make them better.

The interviews were conducted online and lasted approximately one hour. Audio was recorded with both a phone as well as with the internally developed AI tool, which produced a transcript. The language of the interviews was Dutch, as this was the native language of the participants. The evaluation guide can be seen in Appendix B.

The data was analyzed using coding and the results of the evaluations were used to refine the artifact.

6.2 Stakeholder Reflection on the Guidelines

To refine the guide and improve usability, the initial guide was evaluated by three stakeholders. At the start of each evaluation interview, participants were asked to reflect on the importance of GenAI implementation guidelines within the organization. All three participants emphasized that such guidelines would benefit all employees, including end-users of the tool, IT staff, management, and indirectly even the clients. Given that the organization is a social service organization, they handle a lot of sensitive personal data, the participants stressed the necessity for clearly defined guidelines, for leadership to promote responsible GenAI use within the organization, as well as supporting employees by enhancing clarity and transparency.

The absence of GenAI implementation guidelines was perceived to pose significant risks, including irresponsible AI use, which could negatively impact client well-being, potential legal consequences, financial losses resulting from inefficient or misinformed investments, and reputational damage. These concerns highlight the necessity of establishing clear and structured guidelines for GenAI implementation within the organization.

Below, the feedback from the stakeholders is presented, along with the corresponding revisions made to the guidelines. The discussion is structured thematically, following the organization of the first version of the guide, as presented in Section 5.3. One overarching suggestion was to include more contextual information within each theme, to enhance clarity and ensure better understanding of the guidelines. This recommendation was implemented across all thematic sections for the final guide.

6.2.1 Leadership & Management

The participants confirmed the relevance of all five guidelines within this theme. They specifically highlighted 2, 3, and 4 as most important, though the order of priority varied slightly among them. Nonetheless, all agreed that guideline 1 and 5 remain relevant and should be retained in the final guide. Participant 2 mentioned the importance of clearly stating that leadership holds responsibility for GenAI implementation, noting that their responsibility may otherwise remain ambiguous. This underscores the importance of this theme.

As for the refinements, participant 2 suggested a revision to the second guideline, arguing that the phrase 'across all relevant levels of the organization' is not as relevant. Instead the focus should remain on the alignment with AI vision with the broader business objectives.

In addition, participants 1 and 2 noted that the current set of guidelines does not sufficiently address the importance for leadership to take calculated risks. As a result, this element was incorporated into the third guideline. Other minor clarifications were made to improve the overall clarity of the guidelines.

Both revisions are shown in Table 6.1.

Guideline ID	Initial Guideline	Revised Guideline
2	Leadership should articulate and actively drive a clear GenAI vision and strategy across all relevant levels of the organization, ensuring alignment with existing workflows and overall business objectives	Leadership should articulate and actively drive a clear GenAI vision and strategy, ensuring that AI initiatives are aligned with the overall business objectives
3	Leadership should be responsive to change and take proactive action to seize GenAI opportunities and address challenges	Leadership should be responsive to ongoing GenAI trends by taking risks and proactive action to seize AI opportunities

Table 6.1: Revised leadership & management guidelines based on participant feedback

In addition, participant 1 noted the absence of a guideline addressing how leadership should utilize and develop a vision for the financial and time gains resulting from GenAI implementation. The participant emphasized the importance of this aspect, stating that these gains are the primary outcomes of GenAI implementation within the organization. If not properly managed, these benefits risk being overlooked,

leading to suboptimal realization of GenAI's potential. In response, a sixth guideline was added to the final guide:

Leadership should develop a clear vision for how to reinvest or allocate time and financial gains resulting from GenAI implementation.

Moreover, participant 2 and 4 expressed differing views on whether ethics should be addressed as a distinct section within the implementation guide. Participant 2 argued that it is important to have an ethics section as well, while participant 4 argued that a separate section was unnecessary, as ethical considerations are already embedded within the Leadership & Management theme, specifically through the recommendation to establish and ethics committee. This committee would take responsibility for ethical and social implications. Ultimately, this perspective was adopted in the final guide.

The revised set of guidelines for the theme Leadership & Management, organized by the relevance as indicated by the participants, is presented in Section 6.3.

6.2.2 Employee Adoption

From the feedback interviews, it became clear that the guideline for employee adoption did need some revision. Especially guideline three was mentioned by all three as unclear, not good formulated or redundant. Participant 4, would skip this guideline altogether, while the other participants (1 and 2) did see the reason behind the guideline, but would formulate it quite differently. They found that guideline three and four reflected the same underlying vision, ensuring that GenAI tools are not introduced as a technology-driven initiative from IT, but rather emerge from functional needs by the organization. To achieve this, participant 2 emphasized that it is important that business stakeholders become part of the innovation team and a co-owners of the tools. When business units see the added value of the GenAI tool, the adoption of the GenAI tool in their daily workflow becomes significantly more likely. This reasoning led to the revision and consolidation of guidelines three and four into a single guideline.

Participant 2 emphasized the importance of active participation of end-users and suggested incorporating this aspect into guideline 3. As a result, this guideline was added to the revised guideline.

Moreover, participants 2 and 4 questioned the effectiveness of establishing a centralized AI knowledge center, given the organization's regional structure. They suggested that end-users would be better supported through locally embedded resources, or as participant 1 said, an AI knowledge *network*, instead of a single body. This feedback led to a revision of guideline 5 to reflect a more localized approach to support the end-users.

All revision are shown in Table 6.2.

Guideline ID	Initial Guideline	Revised Guideline
3 + 4	Involve the business side to connect with relevant teams + Define and assign ownership for each GenAI implementation	Integrate business stakeholders in the innovation team and assign them co-ownership of GenAI tools
2	Involve employees early in the GenAI process through two-way communication that encourages questions, concerns and feedback	Involve end-users early in the AI process through active participation and two-way communication that encourages questions, concerns and feedback
5	Provide ongoing support through an GenAI knowledge center and training	Provide ongoing support through locally accessible guidance on the use of GenAI tools

Table 6.2: Revised employee adoption guidelines based on participant feedback

The revised set of guidelines for the theme Employee Adoption, organized by the relevance as indicated by the participants, is presented in Section 6.3.

6.2.3 Multidisciplinary team

During the discussion on the multidisciplinary team guidelines, participant 1 emphasized the importance of including line management in the team. Line managers possess detailed knowledge of employees' operational workflow, and their involvement is essential when roles and responsibilities may be subject to change due to GenAI. Based on this insight, the first guideline was revised to include line management as part of the multidisciplinary team. The revision is shown in Table 6.3.

Guideline ID	Initial Guideline	Revised Guideline
1	Form a multidisciplinary team that brings together experts from different domains, including business, IT and legal, HR, ethics to ensure diverse perspectives and relevant expertise are represented	Establish a multidisciplinary team composed of representatives from all relevant domains, including business, IT, legal, HR, ethics and line management, to ensure diverse perspectives and relevant expertise are represented

Table 6.3: Revised multidisciplinary team guidelines based on participant feedback

Additionally, the same participant stressed the importance of clearly defined responsibilities and deliverables within the team during the design, development and implementation of GenAI tools. Without concrete outputs, there is a risk that discussions remain abstract and fail to produce actionable outcomes. A clearly defined action plan is essential to ensure that the team takes ownership of critical components necessary for GenAI implementation such as updating AI policies and organizing employee training. This insight led to the development of an additional guideline:

Ensure responsibilities and deliverables are clearly defined during design, development and implementation of GenAI tools, within the multidisciplinary team

The revised set of guidelines for the theme Multidisciplinary Team, organized by the relevance as indicated by the participants, is presented in Section 6.3.

6.2.4 Laws & Regulations - Supervising AI tools

All participants agreed that the proposed guidelines were relevant to the organization. They emphasized that responsible AI development, deployment and use require compliance to relevant laws and regulations. In particular, they stressed the importance of conducting assessments on a recurring basis, given the evolving regulatory laws such as the EU AI Act.

However, participants also suggested revising the first guideline. Participant 1 expressed concern that requiring formal policy for each AI tool might hinder innovation. Instead the focus should be on a structured set of considerations that should be reviewed prior to the implementation, in order to identify potential risk, unintended consequences, or legal obligations that may need to be addressed for that specific tool. Based on this insights, the first guideline was revised, as shown in Table 6.4.

Guideline ID	Initial Guideline	Revised Guideline
1	Establish product-specific GenAI policies prior to implementation	Take into account all product specific considerations of an AI tool before implementation

Table 6.4: Revised laws & regulations guidelines based on participant feedback

Additionally, participants 2 and 4 also proposed that a guideline originally placed under the theme 'Supervising AI tools', should be included within this theme. They mentioned that the organization must actively monitor and supervise AI systems to ensure compliance. Therefore, this guideline was relocated to the Laws & Regulations theme for the final artifact.

The revised set of guidelines for the theme Employee adoption, organized by the relevance as indicated by the participants, is presented in Section 6.3.

6.3   Final Guide

The feedback from the stakeholders was incorporated and led to more actionable and context-specific guidelines. The guidelines have been ordered according to their insights on relevance. The final version, as presented below, is more closely aligned with the organization's context for GenAI implementation.

GenAI implementation guide

Leadership & Management *play a vital role in successful GenAI implementation within the organization. Leaders are responsible for setting and communicating a clear vision and strategy to provide direction and clarity for employees across departments. In order to foster innovation, leadership should be responsive to emerging GenAI trends and be willing to take calculated risks. In addition, they are expected to model a culture of adaptability, continuous learning and improvements, to embed these values into the organization and support a smooth GenAI adoption process. Given ethical, privacy and security, environmental, technological and financial implications associated with AI, leadership must also take responsibility for identifying and addressing these concerns. In particular, ethical considerations should be addressed through the establishment of an ethics committee.*

1. Leadership should articulate and actively drive a clear GenAI vision and strategy, ensuring that AI initiatives are aligned with the overall business objectives

2. Leadership should be responsive to ongoing GenAI trends by taking risks and proactive action to seize AI opportunities

3. Leadership should foster a culture of adaptability, continual learning, and improvement

4. Leadership should proactively address critical themes related to ethics, privacy and security, environment, technology and financial implications

5. Establish an ethics committee to oversee and address social and ethical implications of GenAI implementation within the organization

6. Leadership should develop a clear vision for how to reinvest or allocate time and financial gains resulting from GenAI implementation

Employee Adoption *plays a critical role in the successful implementation of GenAI within the organization, as employees are the primary users of these tools. Therefore indicating that the tool must be aligned with the employees' needs in order to provide meaningful support. Thus to facilitate effective adoption, it is essential to involve business stakeholders who can identify practical challenges to ensure the GenAI tools addressing functional needs, making implementation business-driven rather than technology-led. Additionally, involving end-users early in the process, through active participation and two-way communication, enhances engagement, provides clarity and creates a place for feedback. Furthermore, employees require training to understand AI's capabilities and limitations, enabling them to use AI responsibly. Finally, once the tool is deployed, ongoing support should be provided through locally accessible personnel, ensuring employees can easily receive help.*

1. Integrate business stakeholders in the innovation team and assign them co-ownership of GenAI tools

2. Involve end-users early in the AI process through active participation and two-way communication that encourages questions, concerns and feedback

3. Provide training on AI's capabilities, limitations, ethical implications, and provide usage guidelines

4. Provide ongoing support through locally accessible guidance on the use of GenAI tools

Multidisciplinary team, *play an important role within GenAI implementation within the organization. Since AI impacts a wide range of domains, including privacy, security, ethics and employees responsibilities, its integration requires collaboration among staff from diverse expertise and functions. This cross-functional collaboration ensures informed decision making and alignment with organizational needs and objectives. Moreover, clearly defined responsibilities throughout the design, development and implementation process are essential to ensure accountability and drive meaningful progress. Finally, adopting agile working methods enhances the team's effectively adapt to evolving GenAI capabilities and needs of end-users.*

1. Establish a multidisciplinary team composed of representatives from all relevant domains, including business, IT, legal, HR, ethics and line management, to ensure diverse perspectives and relevant expertise are represented.

2. Ensure responsibilities and deliverables are clearly defined during design, development and implementation of GenAI tools, within the multidisciplinary team

3. Apply agile methodologies to support iterative implementation of the AI tools

Laws & Regulations *plays a critical role for GenAI implementation. The organization must adhere to evolving AI-related regulations to mitigate risk and prevent negative consequences. To ensure compliance and promote responsible AI development, deployment and use, organizations must evaluate each AI tool individually, identifying potential risks, unintended consequences, and legal obligations prior to implementation. Additionally, regular monitoring of system outputs is essential to detect and address potential biases or hallucinations. Finally, ongoing privacy and security assessments are necessary to safeguard sensitive personal data processed through GenAI systems.*

1. Ensure legal compliance and stay aligned with evolving regulations (e.g. EU AI Act)

2. Take into account all product specific considerations of an AI tool before implementation

3. Conduct regular privacy and security assessments

4. Regularly monitor AI systems output to detect and address biases, errors and unintended outputs

Chapter 7

Discussion

This study aimed to develop a practical guide to support the implementation of Generative AI tools within a non-profit social service organization. The organization is currently in the process of implementing the first GenAI tools and have more innovation ideas for the future. This guide was designed based on interviews with five key stakeholders, document analysis of AI-related documents, observations, and supported by literature review. To ensure contextual alignment, the first version of the guide was evaluated through expert feedback with three initial stakeholders.

This chapter discusses the key findings in light of existing literature, outlines theoretical and practical implications, reflects on the research methodology and highlights the study's limitations.

7.1 Interdependence of GenAI Implementation Themes

The findings of this research highlight the interdependent themes essential for successful GenAI implementation: Leadership & Management, Employee Adoption, Multidisciplinary Team, and Laws & Regulations. These themes cannot be treated in isolation, but form a cohesive guide that supports the implementation process. This aligns with the research from Lee et al [46] and Haefner et al. [31], both emphasizing that successful AI implementation within organizations requires alignment of organizational, technical and employee factors.

The empirical data indicate that strong leadership is fundamental, without a clear AI vision and strategic direction, GenAI initiatives risk stalling before they are implemented. Similarly, inadequate leadership undermines employee adoption, as leadership plays a critical role in fostering a culture of adaptability, addressing critical themes and articulating a clear vision. These elements are essential for creating a safe environment in which employees feel supported to adopt the GenAI tool. This is necessary, because even well-developed tools may fail to deliver impact when there is no employee adoption, resulting in significant waste of resources.

Equally critical is the role of legal oversight. Particularly, in a social service organization that handles sensitive personal data of many clients, a lack of compliance or accountability mechanisms could compromise client trust and adherence to legal frameworks. The evolving landscape of GenAI further underscores the need for continuous assessments to ensure legal compliance and ongoing relevance.

Lastly, the complexity of GenAI implementation requires the expertise of a multidisciplinary team, involving experts from different domains. This shows that GenAI implementation is not an isolated IT initiative, and indicating that the organization requires an organization-wide engagement to ensure effective and sustainable AI implementation. This suggests that neglecting one domain can undermine the effectiveness of the others.

7.2 Theoretical Contribution

This study contributes to the literature on GenAI implementation by developing a context-specific guide for a non-profit social service organization. The resulting artifact aligns closely with the guidelines identified in the systematic reviews by Wirtz et al. [89] and Lee et al, [46]. Many of the themes found

within the literature review are reflected within the artifact, such as leadership, employee adoption, regulatory compliance, and cross-functional collaboration. This suggests that the empirical findings in this study reinforce the existing AI implementation guidelines.

However, this study also introduces distinct contributions in terms of emphasis. A central difference is the explicit assignment of responsibility within the implementation process to leadership. While prior research states what should be done, it rarely articulates who should do it. For example, a guideline identified by Lee et al. [46] recommends: *'Develop strategies based on the current strategic strength, interactions with external collaborators, and balance investment and value depending on the organization's situation'*, where it is stated as an organization-wide tasks.

In contrast, this study's empirical findings emphasized the importance of ownership and accountability, particularly in relation to leadership. One of the developed guidelines, for instance states: *'Leadership should articulate and actively drive a clear GenAI vision and strategy, ensuring that AI initiatives are aligned with the overall business objectives'*. Stakeholders noted that the absence of clearly defined responsibilities introduces the risk of implementation efforts remaining abstract or lack follow-through. This insight underscores the need for clear assigned ownership, and as a result, the artifact assigns leadership responsibilities.

In addition, while the literature presents an extensive set of guidelines, this study prioritizes conciseness and usability, ensuring that guidelines are practical within the organization. This required the selection of certain themes, which led to the consolidated the ethical guidelines into one recommendation of establishing an ethics committee.

7.3 Practical Implications

The developed guidelines offer guidance for organizations to implement GenAI tools in a responsible and effective manner. Particularly in a non-profit organization, where resource constraints demand that implementation efforts are both efficient and effective. This guide offers concrete steps for leadership and the innovation team to take proactive actions and ensure legal, ethical, technical and organizational dimensions of GenAI implementation are addressed. In doing so, it aims not only to increase the likelihood of successful GenAI implementation, but also to mitigate the risks associated with the process.

Although the artifact was developed within the context of a single case study, its structure and the themes make it relevant for broader application. Many organizations face similar implementation challenges, such as evolving AI regulations and handling sensitive personal data. Core principles embedded in this guide, may be transferable across domains. However, contextual adaptation might be necessary to ensure relevance and effectiveness.

7.4 Methodology Reflections

The Design Science Research (DSR) methodology guided the development of the final artifact by addressing the identified organizational problem. In this study, the organization had initiated the development of various GenAI systems without prior experience in GenAI implementation or access to empirically validated GenAI implementation frameworks tailored to their context. Through the iterative nature of DSR approach, the artifact was refined based on stakeholder feedback, thereby enhancing the relevance and usability within the organization.

7.5 Limitations

Several limitation must be acknowledged regarding this research. First, the empirical data were collected through interviews with only five participants, all of whom are part of the implementation process. As such, other perspectives, those from HR or clients, may be underrepresented. This could limit the comprehensiveness of the findings.

Second, although the guide is grounded in qualitative data and evaluated by stakeholders, it has not yet been tested in real-world deployment. This indicates that its effectiveness in practice and impact over the long-term remains to be demonstrated through actual deployment of the guidelines.

Finally, this study was conducted within the context of one single case study. While the developed guidelines could be more broadly applicable, organizational context is important. Therefore, additional guidelines may be necessary to ensure relevance, while existing guidelines may require adaptation or prove less applicable in different organizational settings. This limits the generalizability of the artifact.

Chapter 8

Conclusion

8.1 Answers to the research questions

Given the complex implementation of GenAI and the high failure rate, the objective of this study was to design a practical implementation guide that could facilitate effective GenAI implementation within a non-profit social service organization. To develop this guide, we employed a Design Science Research (DSR) methodology, combining empirical evidence with insights from two literature reviews. Primary data collection involved five interviews with stakeholders, three key internal documents related to AI, and observational data from four AI-related meetings. Based on this data and supported by relevant academic frameworks, a first version of the implementation guide was developed. Subsequently, this guide was refined with input from three key stakeholders through evaluation sessions.

Thus this research concludes that four main themes, Leadership & Management, Employee Adoption, Multidisciplinary Teams, and Laws & Regulations, should be interdependently addressed to ensure successful GenAI implementation. With key insight that clear ownership must be established to ensure actionable outcomes.

Each theme includes between three and six actionable guidelines designed to mitigate risks and enhance GenAI implementation efficiency. Importantly, these themes are interdependent, as effective implementation requires simultaneous attention to all four areas. Furthermore, this study highlights the importance of clear ownership and accountability, ensuring that implementation efforts are actionable and not limited to abstract discussions.

8.2 Contributions

This study makes both practical and theoretical contributions. Practically, it provides an actionable set of guidelines to support GenAI implementation within a non-profit social service organization. The artifact helps organizations navigate the complex implementation process, mitigate associated risks and increase likelihood of successful implementation.

Theoretically, the study reinforces key insights from existing literature while introducing new findings. Particularly, the emphasis on ownership and accountability at the leadership level. While previous studies often outline what should be done, this study contributes by clearly stating leadership's responsibilities.

8.3 Future work

While the artifact was evaluated by key stakeholders, it has not yet been fully integrated into operational workflows. Future research could explore the practical application of this guide, evaluating its effectiveness and identifying areas for improvement. Moreover, the current study's sample was limited to five key stakeholders, future work should incorporate additional perspectives, such as Human Resources (HR) or from clients. Finally, the single case study design inherently limits generalizability, thus future research could compare studies about GenAI implementation across different sectors to gain insight into the generalizability of the guidelines.

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Appendix A

Interview Guide Stakeholders

Mijn naam is Sanne en ik studeer Informatica & Economie hier aan de Universiteit Leiden. Voor mijn scriptie onderzoek ik naar richtlijnen voor AI implementaties binnen organisaties.

Je deelname aan dit interview is vrijwillig en je mag op ieder moment aangeven als je ermee zou willen stoppen of als je een vraag liever niet zou beantwoorden. Daarnaast mag je tot 1 maand na dit interview aangeven als je liever toch niet hebt dat ik jouw antwoorden gebruik voor mijn onderzoek.

Dit interview zal ongeveer 1 uur duren. Om alles goed te kunnen analyseren wil ik je vragen of ik dit gesprek zou mogen opnemen, zodat ik later eventueel dingen zou kunnen teruglusteren. De opname wordt alleen door mij gebruikt en alles wat wij hier bespreken wordt geanonimiseerd. De data van dit interview wordt verwerkt volgens de richtlijnen van Universiteit Leiden. Ben je akkoord met de opname?

Introductie
1. Wat is jou rol binnen de organisatie?
2. Wat is jou rol binnen AI projecten?
3. Heb je buiten de projecten nog een andere rol op het gebied van AI binnen de organisatie?

Innovatie Funnel
4. Kan je stap voor stap uitleggen hoe jullie AI-implementatie proces verloopt?
5. Ik heb begrepen dat jullie de Innovatie Funnel gebruiken als implementatie guideline. Klopt dit? Zo ja, kun je uitleggen in hoeverre de Innovatie Funnel volledig wordt gebruikt bij AI-implementaties?
6. Welke teams zijn betrokken bij de Innovatie Funnel?
7. In hoeverre verschillen AI projecten met andere IT projecten die door de Funnel gaan?
8. Wat voor soort meetings heb jij die gaan over AI-implementatie?
9. Wat zie jij als succesfactoren voor een AI-implementatie binnen deze organisatie?
10. Waar loopt AI implementatie op mis binnen de organisatie?
11. Waar liggen volgens jou nog verbeterkansen in het implementatieproces?

Richtlijnen
12. Welke richtlijnen zijn er voor de implementatie van AI?
13. Zijn er op het gebied van technologie nog andere richtlijnen die nog niet genoemd zijn?
    a. Zijn er op het gebied van data en technologie nog andere AI implemenatatie richtlijnen die nog niet genoemd zijn?
    b. Zijn er op het gebied van sociaal/mens gericht nog andere andere AI implemenatatie richtlijnen die nog niet genoemd zijn?
    c. Zijn er op het gebied van ethiek nog andere andere AI implemenatatie richtlijnen die nog niet genoemd zijn?
    d. Zijn er op het gebied van regelgeving nog andere andere AI implemenatatie richtlijnen die nog niet genoemd zijn?
    e. Zijn er op het gebied van organisatie nog andere andere AI implemenatatie richtlijnen die nog niet genoemd zijn?

14. In hoe verre worden de richtlijnen gevolgd?
15. Hoe worden de richtlijnen gedocumenteerd en bijgewerkt?

16. Hoe wordt er over de richtlijnen gecommuniceerd?
17. Is er nog iets belangrijks dat we niet hebben besproken over AI en richtlijnen binnen jullie organisatie?

Appendix B

Evaluation Guide

Dankjewel dat je opnieuw mee wilt doen aan dit onderzoek.

Zoals je weet ben ik bezig met het maken van een praktische gids met guidelinse om het GenAI implementatie process binnen Leger des Heils te ondersteunen. Deze gids is gebaseerd op literatuuronderzoek, interviews, documentanalyse en observaties

Vandaag wil ik graag jouw feedback op deze versie van de gids. Het doel van dit gesprek is om te evalueren in hoeverre de gids bruikbaaren en volledig is.

Dit interview zal ongeveer 1 uur duren. Om alles goed te kunnen analyseren wil ik je vragen of ik dit gesprek zou mogen opnemen, zodat ik later eventueel dingen zou kunnen terugluisteren. De opname wordt alleen door mij gebruikt en alles wat wij hier bespreken wordt geanonimiseerd. De data van dit interview wordt verwerkt volgens de richtlijnen van Universiteit Leiden. Ben je akkoord met de opname?

Deel 1
Ik heb het interview opgedeeld in twee delen. Allereerst wil ik het met je hebben over het algemene belang van AI-implementatie richtlijnen binnen de organisatie.

1. Wie binnen LdH heeft er het meeste baat bij duidelijke AI implementatie richtlijnen, en op welke manier?
2. Wie zouden deze richtlijnen volgens jou actief moeten gebruiken?
3. Wat denk je dat de gevolgen zijn als er geen GenAI implementatie richtlijnen worden opgesteld?
4. Kun je een voorbeeld geven van een richtlijn die volgens jou wel impact heeft gehad binnen de organisatie?
5. Zijn er ook voorbeelden van richtlijnen die niet goed zijn geïmplementeerd? Waarom denk je dat dat zo was?
6. Hoe denk jij dat richtlijnen het beste gecommuniceerd kunnen worden binnen de organisatie?

Deel 2
Dankjewel, dan wil ik graag nu doorgaan naar het tweede deel. Ik heb een aantal richtlijnen opgesteld waar ik graag jou feedback voor zou willen ontvangen. De richtlijnen zijn opgedeeld uit een aantal thema's, we zullen ze per thema doorlopen aan de hand van een aantal vragen.

Vragen per thema:

1. Zijn deze richtlijnen relevant voor de organisatie? Waarom denk je van wel/niet?
2. Hoe makkelijk zijn deze richtlijnen te implementeren binnen de organisatie?
3. Zijn er richtlijnen waarvan je de scope of formulering zou aanpassen?
4. Zijn er richtlijnen die volgens jou ontbreken binnen dit thema?
5. Welk effect verwacht je van deze richtlijnen?
6. Als je alle richtlijnen op dit thema een prioriteit moest geven, hoe zou dat rijtje zijn?
7. Zie je risico's of ongewenste consequenties bij deze richtlijnen?