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Exploring AI in the VCSE Sector: *Challenges, Opportunities, and Support Mechanisms*

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Abstract.
As AI becomes common in enhancing working life, VCSE (Voluntary, Community, and Social Enterprise) organisations are adopting it to meet growing demand for their services. With limited resources, these organisations view AI as a way to enhance efficiency and scale their impact. However, for AI to truly support the sector's mission, it must be adopted thoughtfully and responsibly. This research aims to develop a practical toolkit that helps VCSEs navigate AI responsibly. Through surveys, interviews, and workshops, the toolkit will be co-designed to address the sector's evolving needs, using real-world scenarios to guide them through the practical and ethical challenges of AI adoption. By exploring the challenges and opportunities of VCSEs using AI, this research aims to support organisations in integrating AI into their work in an effective way that is aligned with their values, helping navigate the complexities of responsible AI use.

Context & Motivation

Adopting AI is challenging for organisations of all sizes, especially for those in the Voluntary, Community, and Social Enterprise (VCSE) Sector. VCSE organisations often lack financial and technical resources, expertise, and in frastructure to integrate AI technologies effectively. According to Nahrkhalaji et al. (2018)

non-profit organisations face significant barriers to digital innovation due to limited funding, time and staffing resources. Many organisations in the sector hesitate to try new technologies and instead stick to proven, stable technology, suggesting hesitation in adopting AI due to a lack of strategy and oversight (Huang and Karthikeyan, 2015). Consequently, potential AI adoption becomes a resource-intensive challenge for already stretched VCSE organisations.

The availability of low-cost and free generative AI tools presents a promising solution to alleviate some operational burdens. Globally, VCSE and non-profit organisations are increasingly using AI tools to enhance operations, though challenges in training and responsible usage persist. In Canada, generative AI is improving community outreach, but effective use requires better training (Cassidy and Chen, 2025). Similarly, in Switzerland, research shows rapid AI adoption in philanthropy, with organisations facing hurdles technically, as well as in training and ethics, which smaller organisations struggle to navigate (Schöbi, 2024).

However, whilst some generative AI tools offer a cost-effective alternative without significant capital investment, they also introduce ethical challenges that cannot be ignored. Concerns around privacy, bias, transparency, and accountability remain pressing issues, especially for organisations with limited resources to address them. Fine and Kanter (2020) argue that VCSE organisations, such as non-profits, when adopting AI must embrace innovation but also address the moral dilemmas it presents, like safeguarding against discrimination and ensuring transparency. Responsible adoption of AI requires technical skill and ethical commitment, posing challenges for small organisations to balance innovation and ethical considerations whilst carrying out their day-to-day operations.

The evolving landscape requires organisations to repeatedly assess their position; while academia has limits, it can provide accessible frameworks, such as toolkits, to help them evaluate and adapt to emerging technologies. These toolkits can examine the decisions of algorithmic systems, address ethical concerns, and outline essential values and principles for the AI lifecycle. They present an alternative and engaging way for participants to be involved, discuss and debate different considerations that should be made when using or implementing an AI system. The "Nordic Perspectives on Algorithmic Systems: A Card Box" toolkit helps users rethink their automated lives by fostering discussions on algorithmic decision-making, social impacts, and ethical implications through various scenarios and perspectives (Ferreira et al., 2024). However, there is a notable gap in resources tailored for the VCSE sector. Many existing toolkits focus on general AI ethics, corporate settings, or policymaking but do not address the unique challenges and needs of charities, community organisations, and volunteer-led initiatives. Developing a dedicated VCSE toolkit can provide a structured way to navigate AI adoption, assess risks, and integrate ethical considerations into their use of AI. By focusing on real-world scenarios in the sector, a toolkit could offer practical guidance, promote informed decision-making, and support responsible AI use in organisations that lack the resource or technical expertise to do so independently.

Problem Statement & Research Questions

While there has been significant research on AI adoption in larger organisations, less attention has been paid to exploring how small VCSE organisations can harness and navigate the potential of using AI in their work. Smaller VCSE organisations are often resource-constrained, with limited financial support, technical expertise, and infrastructure to use AI technologies effectively. As a result, they miss out on the potential benefits that AI, particularly Generative AI, can offer. Generative AI tools have the potential to significantly alleviate the workloads of these organisations, allowing them to focus on their missions of social justice, community support, and philanthropy (Efthymiou et al., 2023). Yet, these organisations also face the challenge of addressing ethical concerns such as privacy, data security, and bias — issues that become complex when resources are limited. This is significant given that VCSEs often aim to address social injustices, which can occasionally be exacerbated by the misuse of AI. My doctoral thesis aims to address the gaps in research by exploring how small VCSE organisations in the Northeast (NE) of the UK can be supported in adopting AI responsibly. It will investigate the perceptions, challenges, and opportunities for AI adoption in this sector, as well as design and examine the effectiveness of a toolkit that can help to harness generative AI to enhance their work.

The overall research question I aim to address is:
How can the VCSE sector in the North East be supported in adopting AI within their work?
This will be explored by addressing the following sub-research questions:

1. What are the perceptions of use of AI in relation to the work sector across the UK?

2. How are charities and the VCSE sector understanding, adopting, and navigating the opportunities and risks of AI?

3. How can we design and evaluate a toolkit to effectively support VSCEs in critically assessing and drafting policy in relation to and responsibly using AI tools

Methodological Approach

0.0.1 Research Design

This research adopts a mixed-methods approach that combines surveys, workshops, case studies and the development of a toolkit. Grounded in participatory action research (PAR) and co-design, it ensures continuous stakeholder engagement, keeping the participatory element central. This iterative process captures both a broad understanding of AI adoption across the sector and

deeper insight into specific challenges and opportunities, ensuring the research remains responsive to real-world needs.

0.0.2 Data Collection & Participants

This research involves VCSE organisations, which are exploring AI tools to enhance workflows but often lack the resources and expertise to implement AI efficiently and responsibly. Understanding their motivations, barriers, and experiences is crucial for developing support systems. Participants have been identified via industry networks, existing partnerships, professional associations and social media outreach. The participants aim to reflect the diversity of the VCSE sector in the NE to ensure a comprehensive understanding of this AI landscape.

0.0.3 Methods & Analysis

This research employs a structured yet adaptable approach to ensure meaningful engagement with VCSEs. Rooted in value-sensitive design (Friedman, 1996) and participatory methods (Baum et al., 2006), it prioritises stakeholder voices throughout the process. Insights gained through surveys, interviews, and workshops will inform the toolkit, which will be iteratively refined based on real-world feedback. Additionally, the workshops play a crucial role in ensuring the toolkit is relevant, practical, and aligned with the needs of the VCSE sector. The inclusion of interviews and case studies provide deeper insight into the pressures and real-world considerations of AI adoption, ensuring the toolkit is both actionable and impactful.

Phase 1: Exploration ***(Surveys & Interviews)***

Purpose:

- Establish a baseline understanding of AI adoption, attitudes, and barriers within VCSEs.
- Identify sector-specific concerns and expectations.
- Conduct interviews with VCSE staff to understand pressures around AI adoption.

Analysis Plan:

- Quantitative: Likert scale responses analysed using descriptive statistics.
- Qualitative: Open-ended responses and interview transcripts, thematically coded to extract key concerns and expectations.

Phase 2: Insight Gathering ***(Workshops & Case Studies)***

Purpose:

- Gather insights into the challenges and opportunities VCSEs face in engaging with AI.

- Explore specific needs and expectations for an AI toolkit.
- Encourage discussions on ethical and responsible AI implementation.
- Develop case studies based on detailed participant experiences with AI adoption.

Analysis Plan:

- Thematic analysis of workshop discussions to extract key insights.
- Mapping of participant concerns and recommendations.
- Case study development based on interview and workshop findings to illustrate real-world applications and barriers.

Phase 3: Toolkit Development & Evaluation

Phase 3.1: Toolkit Design & Prototype:

- Insights from surveys, interviews, and workshops will shape the AI support toolkit.

Phase 3.2: Pilot Testing:

- The toolkit will be tested in real-world settings with selected VCSE participants.
- Participants will integrate the toolkit into their workflows and provide structured feedback.

Phase 3.3: Evaluation:

- Pre- / Post-Surveys: Assess changes in AI awareness, confidence, and ethical considerations.
- Interviews & Case Studies: Examine the toolkit's long-term usability and effectiveness.

Work Done to Date

This research began with an initial study exploring perceptions of AI in the workplace, using a custom-built platform to present speculative scenarios to a representative sample of the United Kingdom (UK). The findings demonstrated that AI's role in the workplace is influenced by employer-to-employee relationships, the physical environment in which work is carried out, and existing levels of trust and privacy.

A pilot survey was carried out with 18 responses from Northeast VCSE organizations that assessed current AI adoption, attitudes, and challenges. While some organizations were familiar with AI, most lacked formal policies and skills for effective use, highlighting the need for clear guidance. Ethical and data privacy concerns existed, but didn't hinder AI experimentation. Resource constraints

influenced tool selection, with many relying on free or low-cost AI options due to budget limitations. While tools like ChatGPT and Canva were commonly used for content creation, there was a desire for AI to aid in data analysis, funding applications, and productivity, indicating a gap between current and desired use. This was a pilot preempting a larger survey targeting more VCSE organizations in the Northeast. Early engagement with organisations in the northeast has been integral in shaping the research direction. These conversations have helped to refine the focus of the upcoming workshops and case studies, emphasising the sector's ongoing challenges.

Next Steps & Ongoing Work

The next phase involves refining the pilot survey based on initial responses, leading to a comprehensive survey of VCSE organisations in the Northeast distributed via Prolific. This survey will capture a larger sample, providing further insights into AI adoption across the sector. Interviews will be conducted with CEOs and senior management from VCSE organizations, alongside the survey. These discussions will explore the pressures and strategic considerations influencing AI adoption, offering insights into how VCSE leadership is responding to the challenges and opportunities of AI tools.

A dedicated workshop will bring together VCSE organisation members to create a collaborative space for discussing individual AI experiences and collectively envisioning effective support mechanisms for the toolkits' development. The toolkit development will continue, with emphasis on prototyping and iterative testing to enhance its usability and effectiveness. This will ensure the toolkit addresses the specific needs of VCSE organisations. Throughout this phase, collaboration will remain central, with partnerships providing crucial real-world feedback to align the research and toolkit development with practical challenges faced by these organisations.

Expected Contributions

This research aims to make both theoretical and practical contributions to the field. Theoretically, it will expand our understanding of AI adoption and usage in VCSE organisations in the NE, addressing a gap in literature. On the practical contributions, it will deliver and evaluate a toolkit designed to help VCSE organisations experiment, investigate and implement AI tools effectively and responsibly, providing tangible support for the sector.

Conclusion

This research aims to equip VCSE organisations with the tools and knowledge needed to adopt AI responsibly, ensuring it aligns with their values and the communities they serve. By developing a practical toolkit, this work will provide meaningful support mechanisms for AI use in the sector.

As a second-year PhD researcher at Northumbria University's Department of Computer and Information Sciences, I am conducting my research under the supervision of Dr Andrew Dow and Dr Marta Cecchinato. My RDF-funded doctoral program began in October 2023, with completion expected in 2026. Currently in the data collection phase, I am seeking to participate in my first ECSCW Doctoral Colloquium. The timing of ECSCW 2025 aligns with my research progression, and as an aspiring academic, I welcome the opportunity to receive valuable feedback and connect with the ECSCW research community.

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