

INFORMATION STUDIES DAYS 2024



# Navigating diverse information environments on environmental sustainability: information practices of decision-makers in Finnish high-tech companies

**Ihuoma Sabrina Nwonye**

University of Oulu

[sabrina.nwonye@oulu.fi](mailto:sabrina.nwonye@oulu.fi)

<https://orcid.org/0009-0007-6911-0311>

Keywords: decision-making, information, practice, sustainability, workplace

Pysyvä osoite: <https://doi.org/10.23978/inf.148605>

## Introduction

Climate change has become a global imperative, compelling nations and industries to take immediate action to reduce greenhouse gas (GHG) emissions (IPCC, 2023). Finland, known for its technology leadership, has set ambitious carbon reduction targets outlined in the Climate Act (423/2022). Within this context, high-tech companies are under increasing pressure to comply with stringent environmental regulations and guidelines. However, there is a notable gap in understanding how decision-makers in these companies navigate the vast amounts of environmental sustainability information available to them. This study seeks to address this gap by examining the information practices of decision-makers in Finnish high-tech companies, mainly focusing on how they seek, gather, manage, and utilise sustainability-related information.

## Research Objectives and Questions

My PhD research investigates the relationship between information practices and environmental sustainability decision-making within Finnish high-tech enterprises. The following research questions guide the study:

1. What information sources are decision-makers using when acquiring information on environmental sustainability?
2. What information practices do decision-makers have in accessing and using this information?
3. How is the information on environmental sustainability managed and shared within these organisations?
4. What barriers do decision-makers face in accessing and utilising environmental sustainability information?

## Theoretical Framework

The theoretical foundation of my PhD study is built upon the concepts of Workplace Information Practices (Widén et al., 2013; Lloyd, 2013), Knowledge Management (Uribe-Tirado & Munoz, 2012), and Environmental Literacies (Roth, 1992; Hollweg et al., 2011; Ardoin et al., 2023). The multidimensional and multilevel approach to workplace information practices

emphasises the importance of examining information behaviour at various levels, including individual, team, and organisational. Furthermore, the study integrates knowledge management principles, focusing on creating, organising, and sharing sustainability knowledge. Environmental literacies, such as carbon, ecological, and environmental literacy, are essential for understanding and addressing environmental issues within the decision-making processes of high-tech companies.

## **Methods**

This research employs a qualitative approach, utilising both interviews and document analysis. Two semi-structured interviews are being conducted with employees from six to eight high-tech companies, complemented by an analysis of these companies' sustainability reports over the past five years. The data collected is analysed using thematic and comparative analysis techniques to identify patterns, practices, and barriers related to information use and management in environmental sustainability.

## **Themes Explored in Interviews and Expected Contributions**

The interviews explore several themes: information seeking, sources, use, management, sharing, and barriers. The study will contribute to understanding how information practices shape environmental sustainability efforts within the high-tech sector and to academic discourse on the role of information practices in achieving sustainability goals.

## **Work Plan and Progress**

The research is currently in the data collection phase, with interviews beginning in February 2024. The analysis of sustainability reports started in June and will end in September 2024, followed by the writing of the first research article by the end of the year. The following phases of interview data analysis, article writing, and dissemination are scheduled. 2025 will involve analysing interview data, writing the second article, and disseminating preliminary

findings. In 2026, I will write the third article. 2027, I will finalise and defend my PhD dissertation and share the findings with stakeholders.

## References

- Ardoin, N. M., Bowers, A. W., & Wheaton, M. (2023). Leveraging collective action and environmental literacy to address complex sustainability challenges. *Ambio*, 52, 30–44. <https://doi.org/10.1007/s13280-022-01764-6>
- Hollweg, K. S., Taylor, J. R., Bybee, R. W., Marcinkowski, T. J., McBeth, W. C., & Zoido, P. (2011). *Developing a framework for assessing environmental literacy*. North American Association for Environmental Education. <https://cdn.naaee.org/sites/default/files/inline-files/devframewkassessenvlitonlineed.pdf>
- IPCC. (2023). Sections. In H. Lee & J. Romero (Eds.), *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 35–115). IPCC. <https://doi.org/10.59327/IPCC/AR6-9789291691647>
- Lloyd, A. (2013). Building information resilient workers: the critical ground of workplace information literacy. What have we learnt? In *Worldwide Commonalities and Challenges in Information Literacy Research and Practice. ECIL 2013, Istanbul, Turkey, October 22-25* (pp. 219–228). Springer.
- Roth, C. E. (1992). *Environmental literacy: Its roots, evolution, and directions in the 1990s*. ERIC/SMEAC.
- Siljander, R., Cederlöf, M., & Skoglund, K. (Eds.) (2022). Annual Climate Report 2022 [Publications of the Ministry of the Environment 2023:15]. Ministry of the Environment. <https://urn.fi/URN:ISBN:978-952-361-390-4>
- Widén, G., Steinerová, J., & Voisey, P. (2014). Conceptual modelling of workplace information practices: a literature review. In Proceedings of ISIC: the Information Behaviour Conference, Leeds, 2-5 September 2014: Part 1, (paper isico8). <http://InformationR.net/ir/19-4/isic/isico8.html>
- Uribe-Tirado, A., & Munoz, W. (2012). Information literacy competency standards for higher education and their correlation with the cycle of knowledge generation. *Liber Quarterly*, 22(3), 213–239. <https://doi.org/10.18352/lq.8167>