Towards Age-Friendly Work Environments: Experiences of Older Knowledge Workers

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Demographic change and ageing workforce in Europe

The future workforce will increasingly be made up of ageing knowledge workers

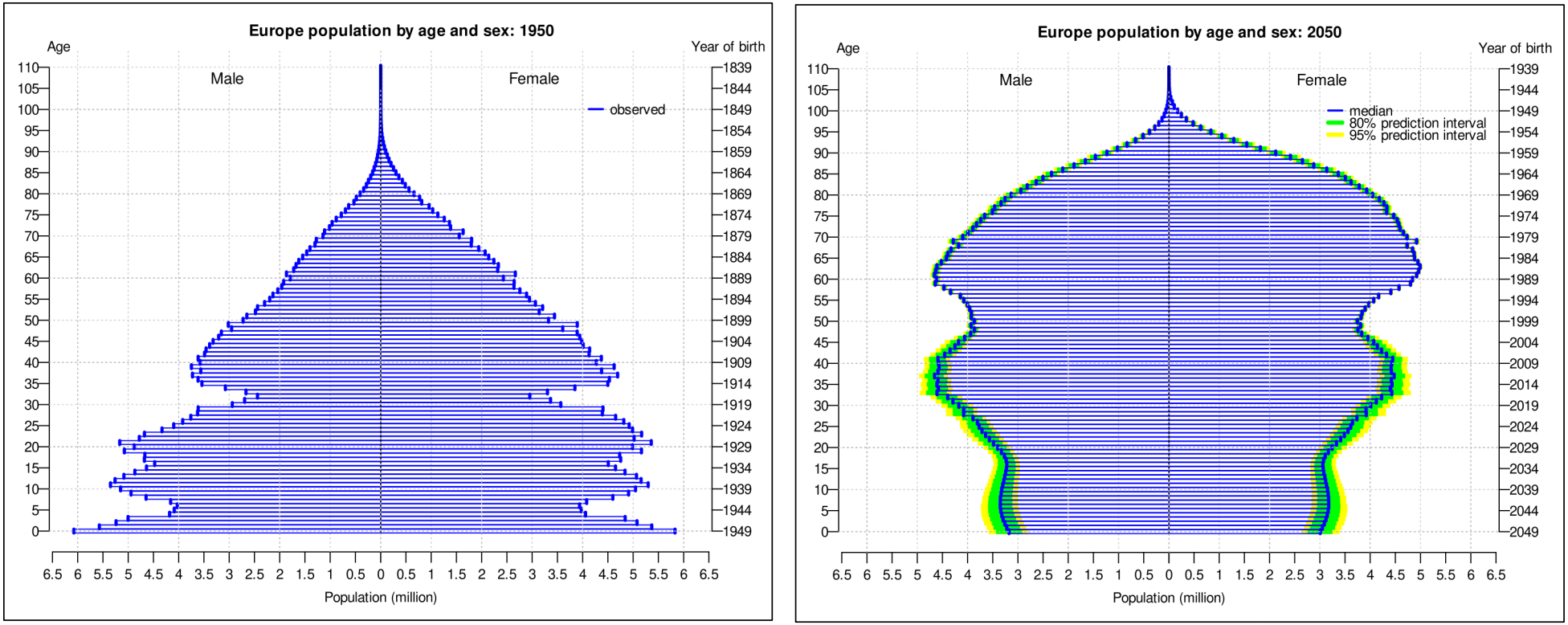


Figure 1. Growth of ageing population in Europe by age and sex 1950 and 2050 (United Nations 2024)

Background and purpose

- **Age-friendly work environments** and more flexible working are important for older employees and sustainable careers (Myerson et al. 2010; Afacan 2015; Gonzalez & Morer 2016; Haynes et al. 2017; Previtali et al. 2026)
- At the same time, rapid **digitalization and hybrid work** requires rethinking work practices, workplace design and management (Morgan 2017; Vartiainen & Vanharanta 2024)
- However, **experiences of older employees** and their workplace needs remain unexplored
- The purpose of this research is to understand:
  - How older employees experience their work environments
  - What kind of factors support their hybrid work environment

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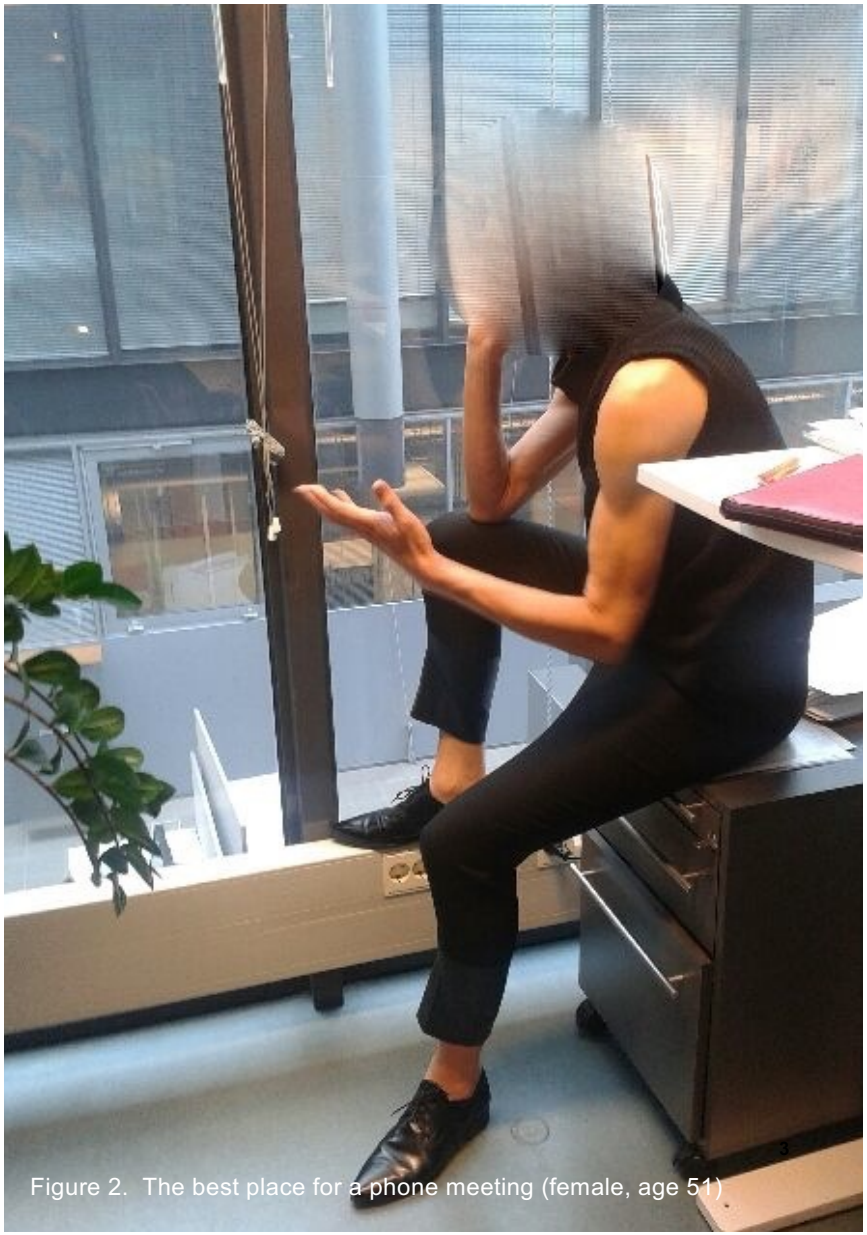
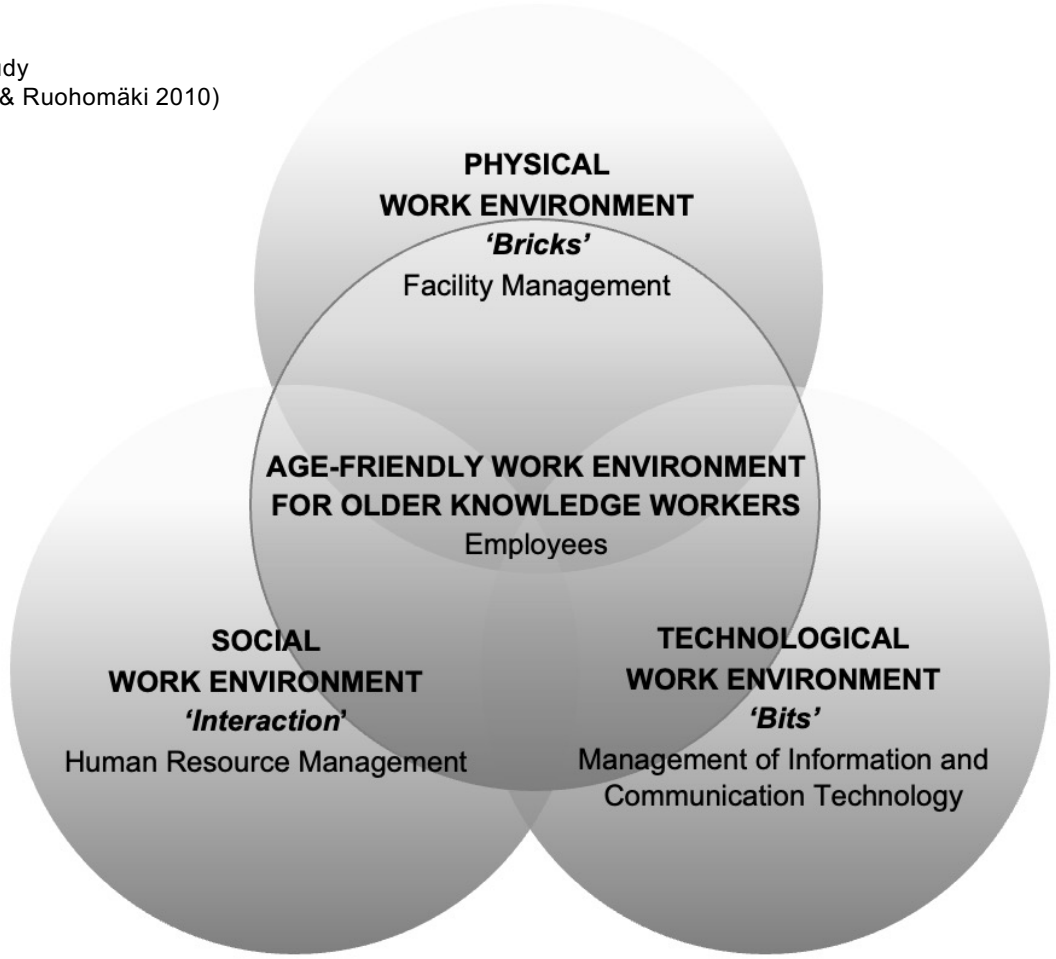


Figure 2. The best place for a phone meeting (female, age 51)

Framework: physical, social and technological work environments with a focus on employees' experiences

Figure 3. Theoretical framework of the study
(Fruchter 2001; Fruchter, Bosch-Sijtsema & Ruohomäki 2010)



Materials and Methods

- **Qualitative research approach** and a **multiple case study** design in collaboration with four knowledge-based organisations in Finland
- Data was collected by a visual research method called **probes** including workshops and interviews with **employees over 50 years of age (N = 77).** Probes are “an approach of *user-centred design* for understanding human phenomena and exploring design opportunities” (Mattelmäki 2008)
- Employees self-documented their daily work related to their physical, social and technological work environments with photos and text
- They produced a total of 642 photos, 208 emails, 36 text and multimedia messages, 34 WhatsApp messages, 2 videos and 16 unstructured interviews
- Viewpoints of **top management and experts (N = 29)** were collected with **semi-structured interviews** with CEOs, FM, HR, ICT and occupational health care



Figure 4. Examples of probe material

Findings: Physical work environment

- The main workplaces of the employees were the office (open-plan or activity-based) and their home
- Main concern were related to **physical and cognitive ergonomics**
- Greater emphasis on cognitive ergonomics is needed e.g. through
  - better visual design and management
  - clear office etiquette and good layout design
  - noise-cancelling headphones and withdrawal rooms
  - dedicated project rooms where materials can remain visible
  - small team spaces and ad-hoc meeting rooms

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Figure 5. Remote work at home (female, age 53)

Examples from the physical work environment

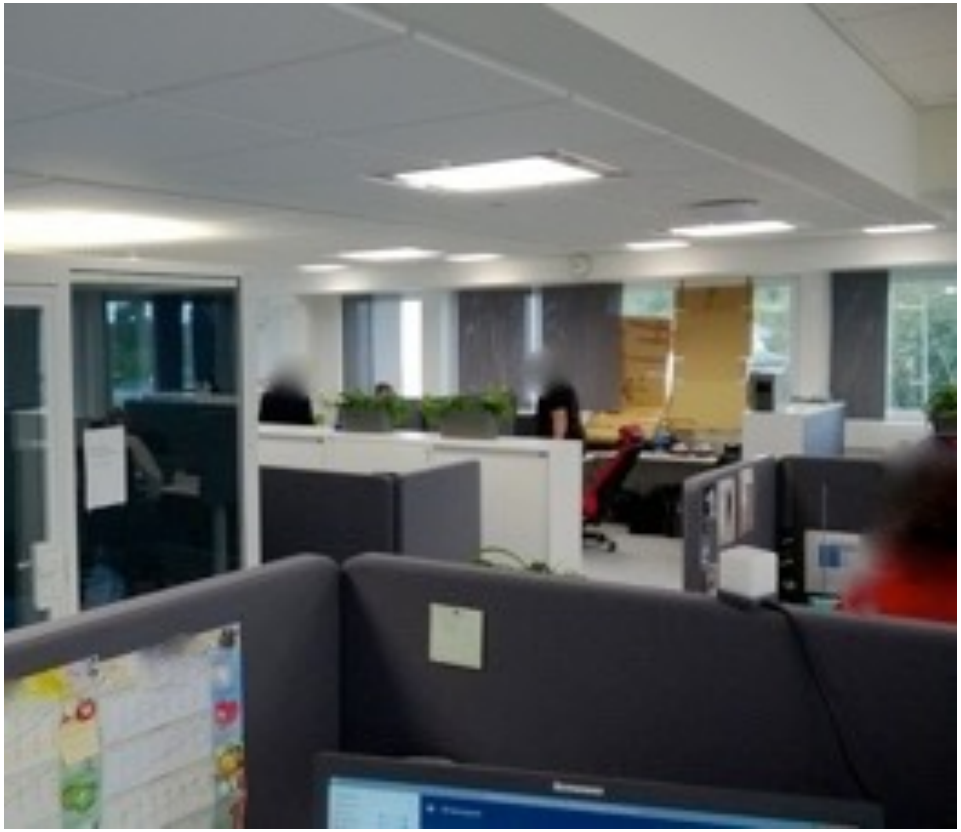


Figure 6. Terrible fuss around the activity-based office (female, age 61)

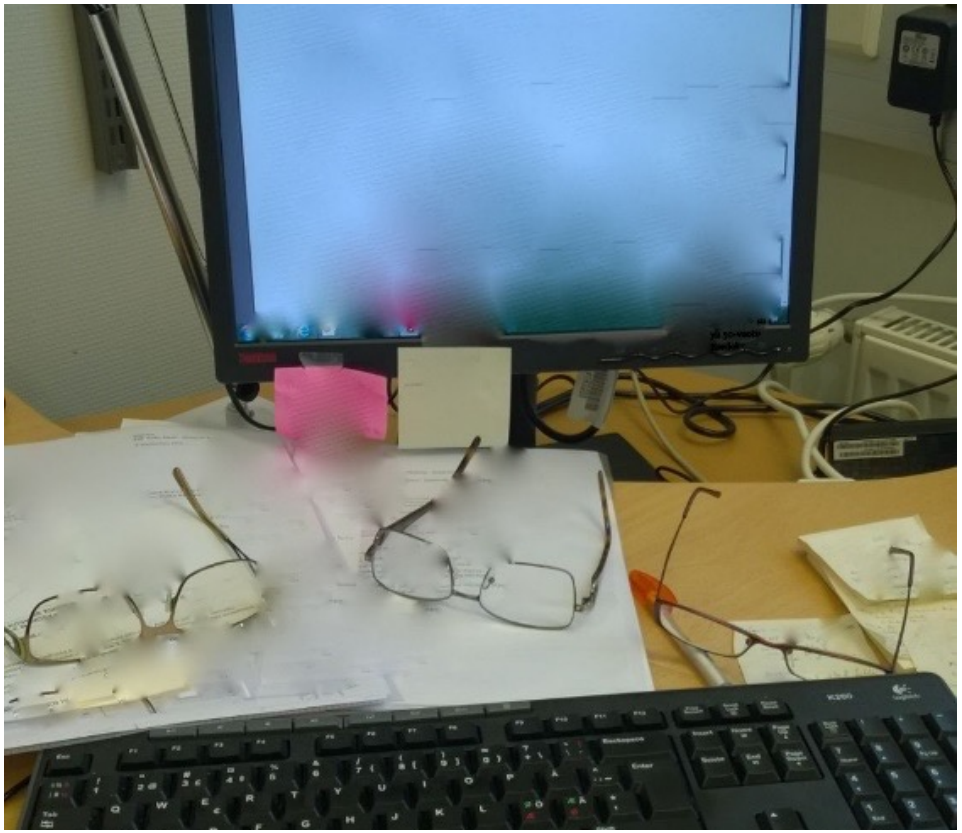


Figure 7. Three pairs of glasses needed for different situations (female, age 56)

Findings: Social work environment

- Employees did not know their colleagues and their expertise, feelings of **isolation and lack of belonging** were common
- Interaction and collaboration-supporting events were important to create stronger **social coherence, transfer of know-how, expertise and tacit knowledge** by the means of
  - common spaces and centralized coffee points
  - informal encounters and shared breaks
  - visibility of expertise
  - strong mentoring programmes
- **Leadership, job design and continuous learning** were significant factors e.g. constantly changing work tasks, uncertainty, fragmentation, constant availability, self-management, time management
  - Flexibility is needed for caregiving of own elderly parents

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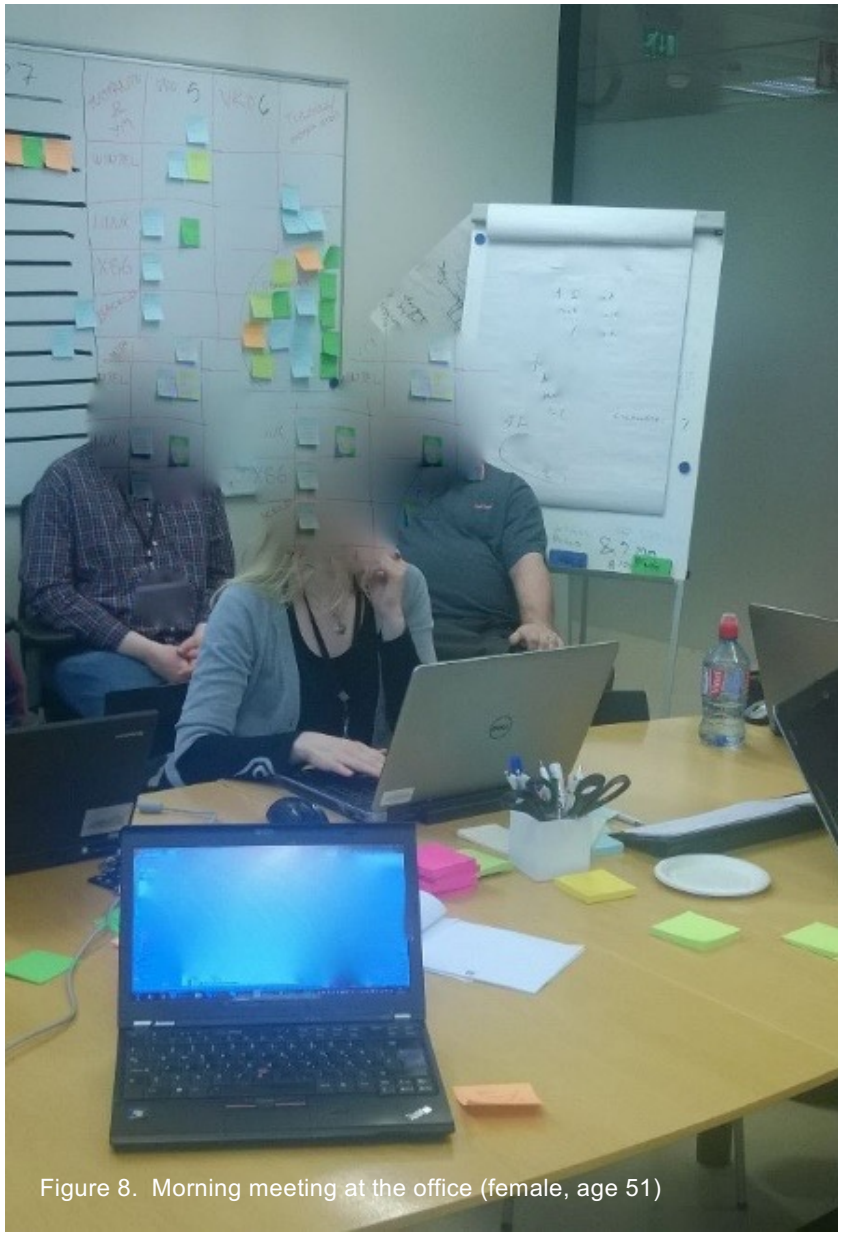


Figure 8. Morning meeting at the office (female, age 51)

Examples from the social work environment

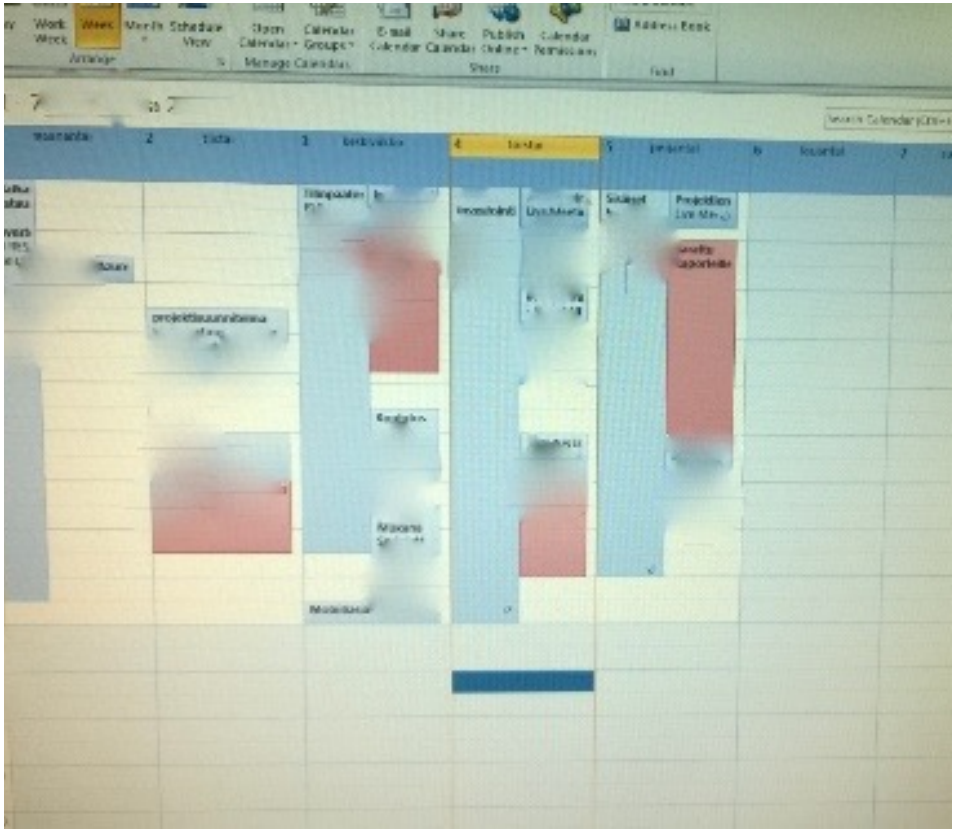


Figure 9. Too many meetings in a day (female, age 57)



Figure 10. Energy drinks needed (male, age 52)

Findings: Technological work environment

- Employees emphasised that **devices must be suitable for older workers** such as lightweight laptops, dual screens, high-quality headphones, speakerphones, mobile phones and tablets
- **Clear guidelines** for digital communication and email practices
- Guidelines for effective **virtual meetings**
- **Face-to-face meetings** for the first time to support smoother digital communication later

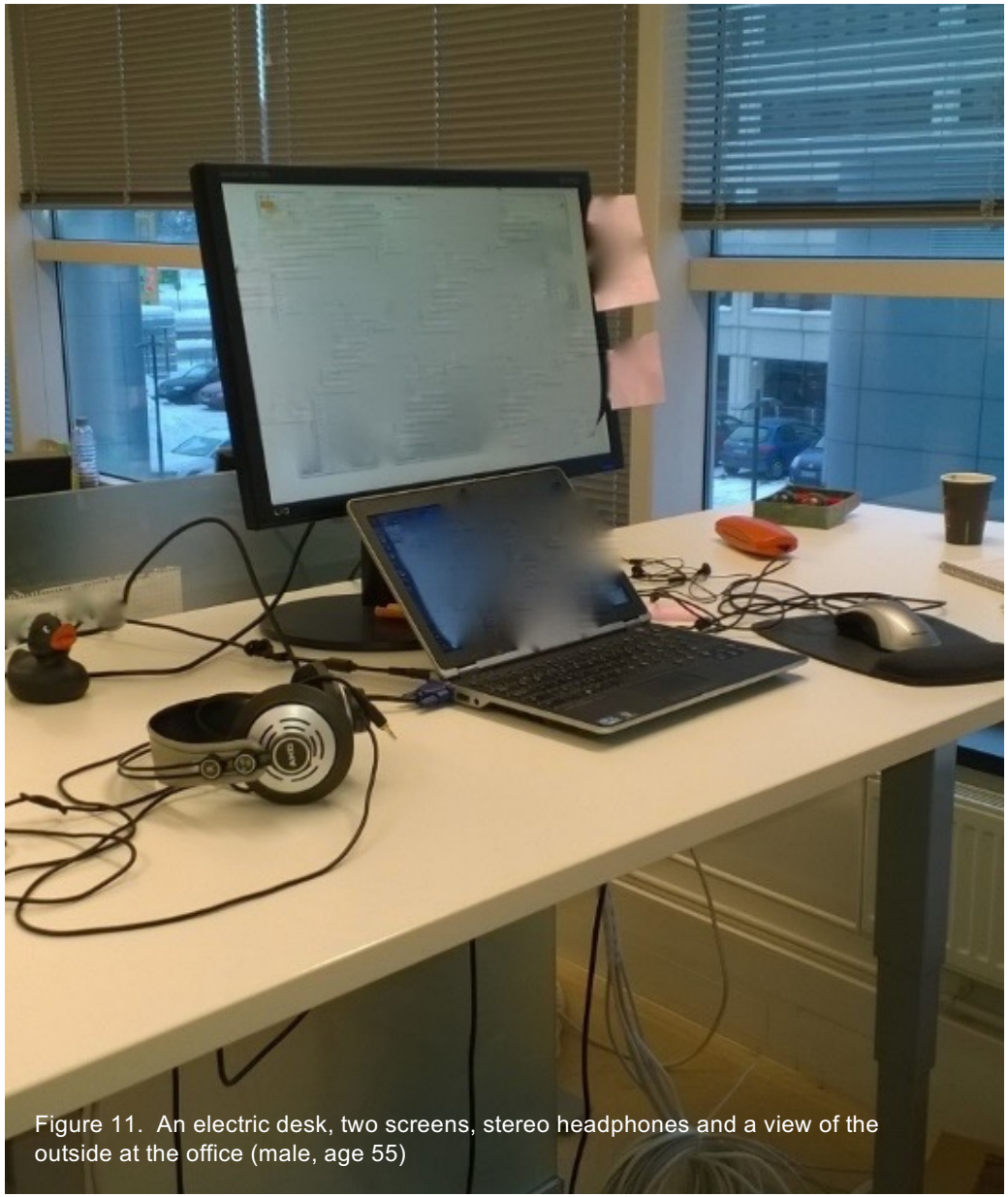


Figure 11. An electric desk, two screens, stereo headphones and a view of the outside at the office (male, age 55)

Examples from the technological work environment



Figure 12. Online fatigue and need for a break (female, age 55)

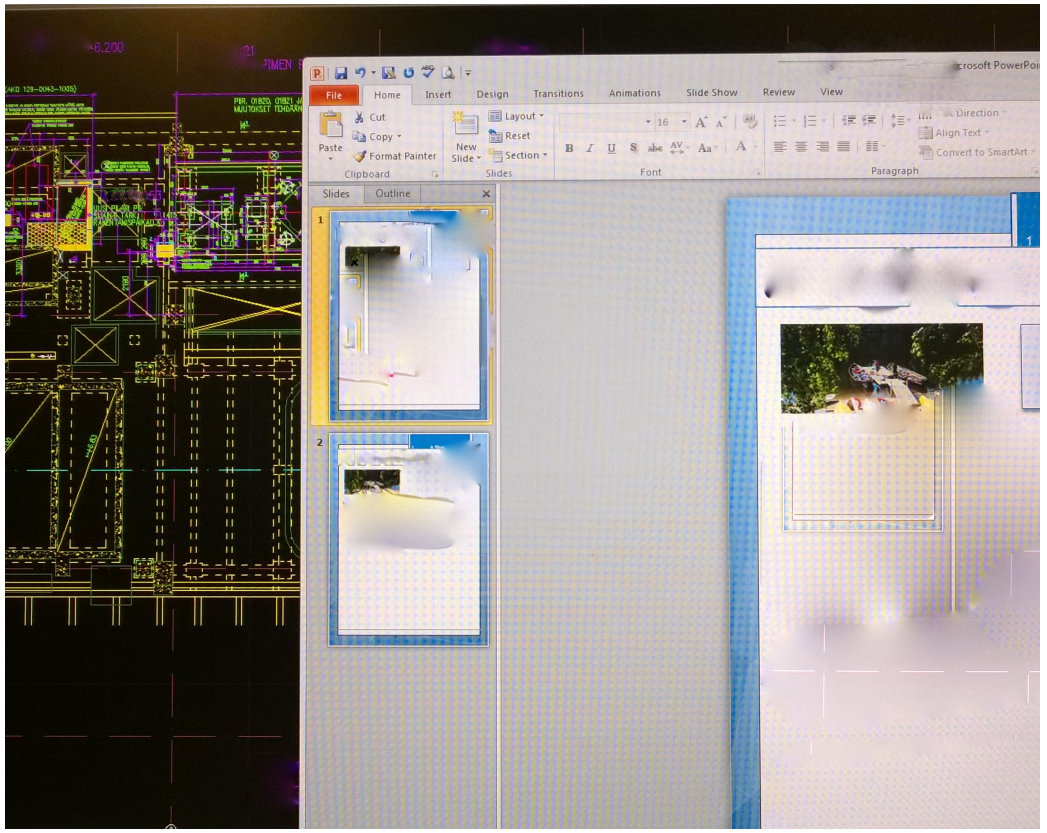


Figure 13. Various programmes (female, age 62)



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Conclusions

- This study gives voice to employees over 50 years of age and provides unique visual insights into their hybrid work environment experiences
- The findings emphasise the need:
  - to redesign and renovate offices as arenas for social interaction, collaboration and learning
  - to human interaction to avoid isolation and online fatigue
  - for advanced digital environments and cognitive ergonomics to support hybrid and flexible working practices
- These findings highlight the importance of an integrated workplace design and management involving representatives from FM, HR and ICT as well as employees

References and more information

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Thank You!

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