

Reskilling for the AI Era: Adaptation Mechanisms and AI Literacy for Academic Library staff at the Czech National Library of Technology

Background and Objectives

- The National Library of Technology (NTK) is a public and academic library located on a STEM campus, but providing services to students and researchers from all disciplines. Information specialists play a key role in this, acting as important intermediaries who are in direct contact with patrons and guide them in matters related to research, information practices, and new technologies such as AI.
- As artificial intelligence becomes increasingly embedded in information systems and scholarly workflows, **this poster examines the perceptions of AI among information specialists at NTK, as well as their day-to-day use of AI and the adaptation mechanisms.**

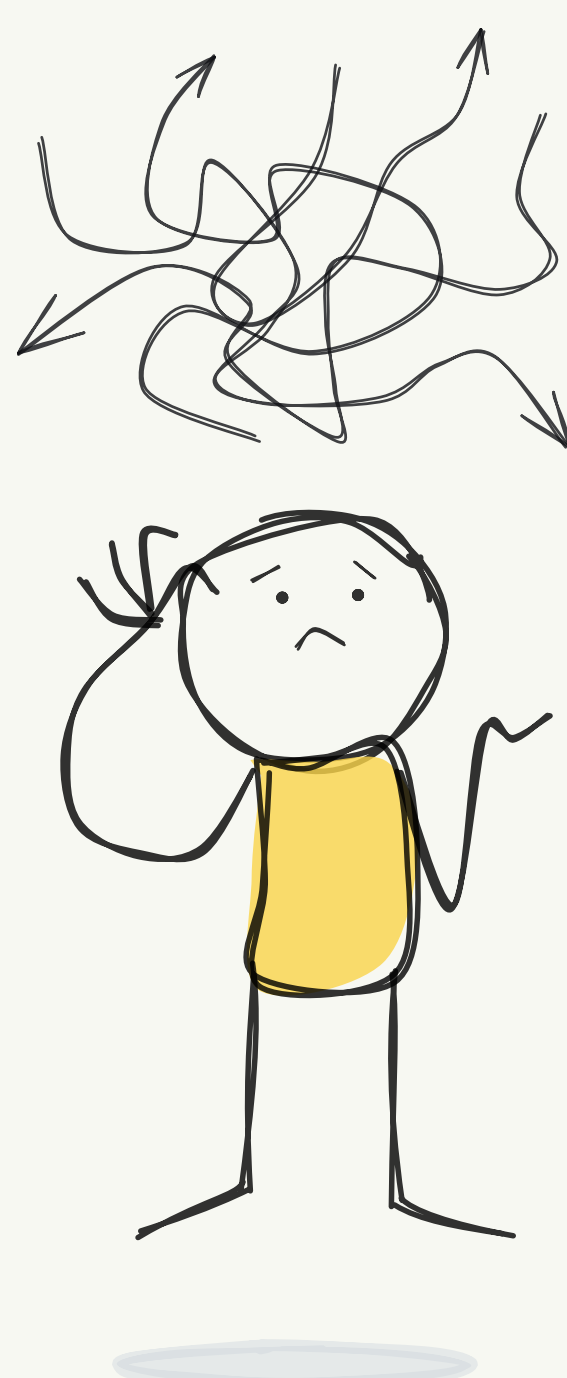
Only as good as the best among us

- Proactive AI users act as AI champions.
- AI champions are typically doctoral candidates or recent Ph.D. graduates working in the library, but who still have links to academia.
- AI champions contribute to knowledge spillover:**
 - Internal: employee training and support, AI working group
 - External: creation of educational materials, workshops, and webinars for patrons
- AI champions set the knowledge frontier in AI at NTK.



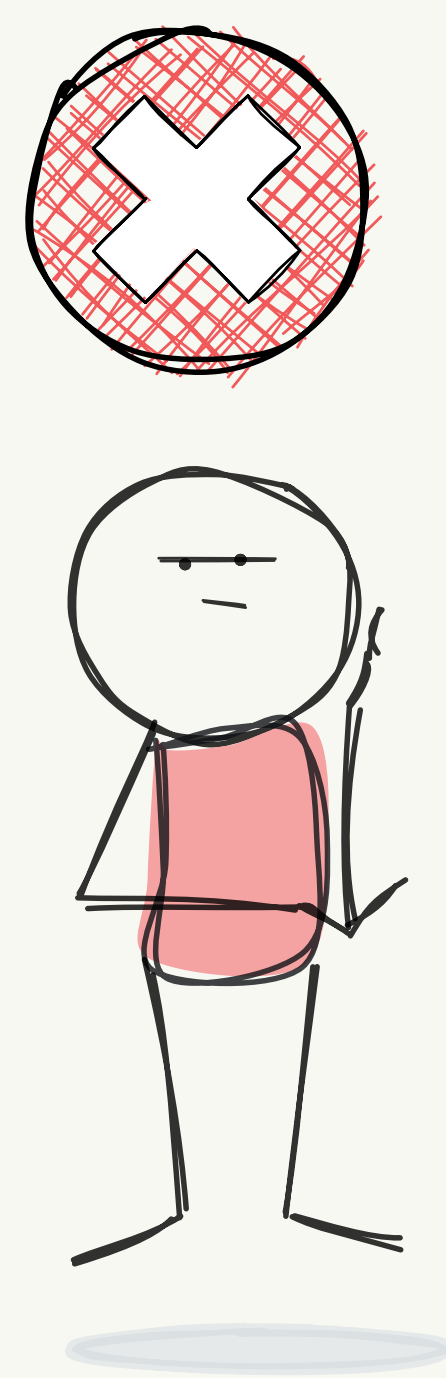
AI champion

- Proactive
- Invested in AI
- Regular education
- AI for work-related tasks
- Important for AI literacy of others



Ambivalent

- Hesitant
- Information overload
- Trial-error
- Occasional user
- Need for AI guidance



Resistant

- Conservative
- Emphasis on the human agency
- Afraid of the future
- Avoidant
- Limited use of AI

Methods

- Semi-structured interviews** with information specialists at the National Library of Technology in Prague.
- 12 interviews (⅓ of department employees).
- Interviewees varied in length of service (from few months to 10 years) and experience with AI.
- Interviews were transcribed verbatim and analysed using inductive coding in Atlas.ti.

What drives us X What holds us back

I think **we are quite disadvantaged** in this respect. And that's where **we can often find ourselves a step or several steps behind** patrons. If they are used to working with the more advanced version, **it's difficult for us** to say anything about it **when we don't have the experience ourselves.**

If I didn't work here, I probably still wouldn't have it [AI awareness].

Individual barriers

- AI hallucinations and data security
- Fear of the future with AI
- Inertia toward process innovation
- Insufficient technical knowledge
- Lack of time for education
- Societal impact of AI

I'm a bit **conservative**; when I start something, I stick with it.

Motivations

- AI skills perceived as essential
- Commitment to providing quality services
- Peer influence
- Technological curiosity
- Work efficiency

[AI skills] will be something that is not considered an advantage, but **rather a matter of course.**

Structural barriers

- Abundance of AI tools
- High financial costs
- Lack of AI support
- Occasional and fragmented knowledge sharing
- Paywall glass ceiling
- Rapid AI development

Conclusions & future steps

- The process of reskilling in the field of artificial intelligence remains limited among information specialists at NTK.
- Although the **information specialists** are aware of the role of the library in the context of AI, they **often lack the necessary skills and support to fulfill the library's mission.**
- A minimum baseline of AI knowledge should be set to reduce skill disparity.
- Incorporate AI training into the onboarding process.
- Provide regular, systematic training that is tailored to the actual needs of the information specialists.
- In order to keep up with rapid changes and continue to be a source of relevant information, the library should ensure that its employees have access to paid versions and trials of AI tools.

Figure 1
Spectrum of AI adoption and skill levels among information specialists