

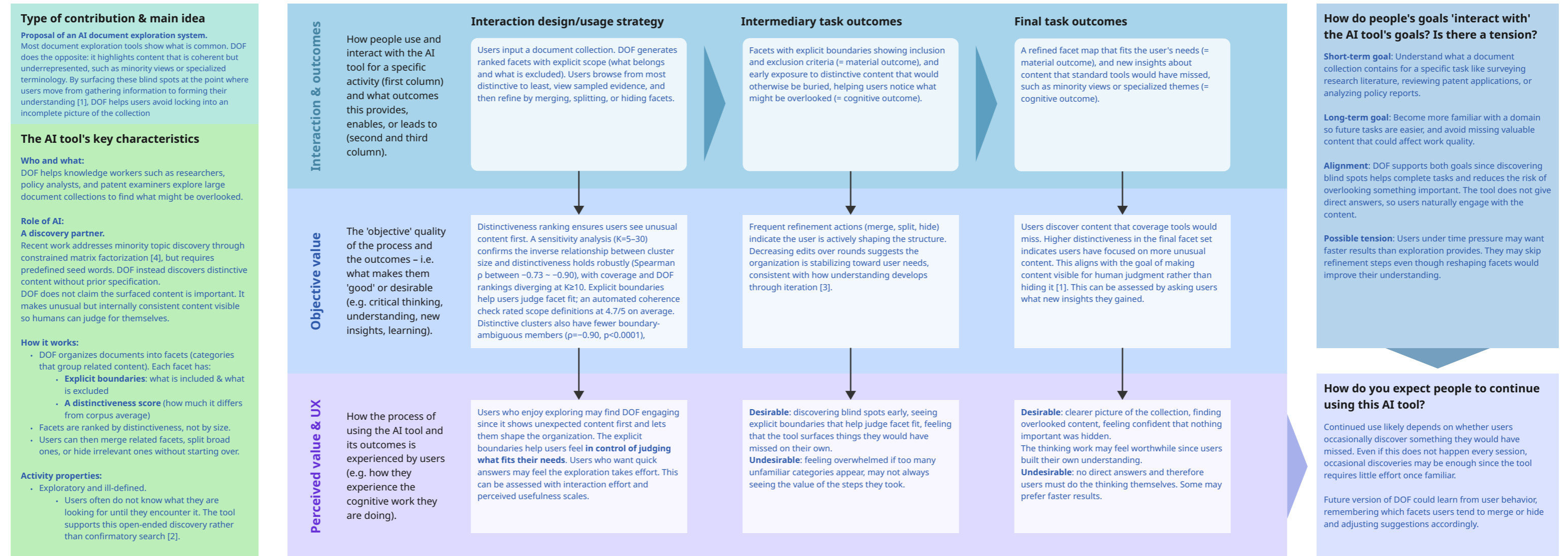
Discovery-Oriented Faceting: From Coverage to Blind-Spot Discovery

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Main theme(s): design strategy

Target domain(s): sensemaking, data analysis, knowledge work

Cognitive 'target(s)': sensemaking, discovery, critical thinking



What you would like to discuss

- How might discovery tools like DOF connect with Q&A or other tools in a workflow?
- How can HITL systems balance efficiency pressure with meaningful human engagement, especially when others want quick answers but sensemaking requires iteration?

What would you like to take away from the workshop?

Ideas for making human involvement feel rewarding rather than burdensome.
 Finding researchers exploring how discovery tools can earn user trust in professional workflows.

Key references (e.g. of main theories, empirical evidence, measurement methods etc.)

[1] Pirolli, Peter and Card, Stuart. 2005. The Sensemaking Process and Leverage Points for Analyst Technology as Identified through Cognitive Task Analysis. In Proceedings of International Conference on Intelligence Analysis.
 [2] Tankelevitch, Lev, Glassman, Elena L., He, Jessica, Kazemitabaar, Majeed, Kittur, Aniket, Lee, Mina, Palani, Srishti, Sarkar, Advait, Ramos, Gonzalo, Rogers, Yvonne and Subramonyam, Hari. 2025. Tools for Thought: Research and Design for Understanding, Protecting, and Augmenting Human Cognition with Generative AI. In Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25). ACM. <https://doi.org/10.1145/3706599.3706745>
 [3] Wang, Sitong and Menon, Samia and Li, Dingzeyu and Ma, Xiaojuan and Zemel, Richard and Chilton, Lydia B. 2025. Schemex: Interactive Structural Abstraction from Examples with Contrastive Refinement.
 [4] Ebrahimi, Seyedeh Fatemeh and Peltonen, Jaakko. 2025. Constrained Non-negative Matrix Factorization for Guided Topic Modeling of Minority Topics. In Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP). Association for Computational Linguistics.

How to proceed with this work/idea?

Consider ways to make refinement actions feel immediately rewarding, so users see the value of their input as they go.
 Furthermore, explore how systems might learn from user refinements to improve over time, and how DOF could serve as a discovery layer feeding into downstream tools like summarization or comparison.