Accessible Visualization: A Call to Action

This document summarizes key points identified from a group discussion held in the AccessViz Workshop, 2024.

V1: Challenges & Actions

Research on accessible visualizations can be inherently challenging due to limited understanding of individuals with disabilities, gaps between lived experiences and research perspectives, and constrained resources.

Action #1: As a research community, we must prioritize long-term, longitudinal engagement with people with disabilities, integrate participatory design methods throughout the research process, and remain flexible, adaptable, and responsive to individual differences.

Tensions between research and practice arise as research prioritizes generalizability, while accessibility values diversity, individuality, and intersectionality. By focusing predominantly on adults, research often overlooks the real-world needs of disabled individuals, missing opportunities to address barriers that emerge early in life.

Action #2: As a research community, we must rethink how we group individuals (e.g., blind and low vision), introduce earlier educational interventions, and expand tailored, granular educational offerings to support learners of all life stages—children, university students, and adults—while addressing the diverse needs of individuals with various types of disabilities. Additionally, we should leverage visualization as a critical tool to address personal data needs, ensuring that it is accessible, inclusive, and responsive to the unique experiences and requirements of disabled individuals.

V2: Action Bullet Points

- 1. **Rethink Grouping of Individuals**: Reevaluate how individuals are grouped (e.g., blind and low vision) to better reflect diverse needs and experiences.
- 2. Introduce Earlier Educational Interventions: Start accessibility education early to address barriers from childhood and build a strong foundation for future learning and engagement.
- 3. **Expand Tailored Educational Offerings**: Develop granular, inclusive educational programs that cater to children, university students, and adults with various types of disabilities.
- 4. Leverage Visualization for Personal Data Needs: Harness visualization as a tool to address personal data needs, ensuring designs are accessible, inclusive, and responsive to diverse lived experiences.
- 5. **Foster Longitudinal Engagement**: Emphasize long-term collaboration with disabled communities, integrating participatory design to align research goals with real-world needs.
- 6. **Bridge Research and Practice**: Address the tensions between generalizability in research and the accessibility values of diversity, individuality, and intersectionality.

- 7. **Address Real-Life Barriers**: Focus on proactive interventions to mitigate real-world challenges and ensure equitable access and opportunities for individuals with disabilities.
- 8. **Promote Flexibility and Adaptability**: Design systems and processes that are flexible, adaptable, and responsive to the unique and evolving needs of individuals with disabilities.