

Removing barriers:

Leveraging AI to build more
inclusive products and services

Resource pack

AI + Accessibility

Inclusive design principles for generative AI

<https://www.nexerdigital.com/news-and-thoughts/ai-for-all-public-sector>

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Involve real users

Focus on user needs and context

Remove barriers (Empower and Inspire)

Provide control

Design with transparency

Maintain quality and accuracy

Ethical and responsible use

Support different interaction preferences

Compliance with accessibility standards

Access needs Personas

Liam

Business Analyst



Liam is a skilled business analyst with expertise in analysing data and creating accessible digital solutions.

Liam has an **auditory impairment** and uses lip reading and captioning for communication.

Barriers / Difficulties

- Cannot watch video without subtitles / closed captioning.
- Cannot participate in remote or hybrid meetings without captioning or transcriptions.
- Cognitive load from note taking can lead to missed information and burnout.
- Challenges in following different perspectives discussed in meetings.
- Difficulty in recognising who said what during meetings.

How Copilot can help Liam

- **Real-time captioning and transcriptions enabled**
- **Recaps of meetings using transcriptions**
Provides text versions of his meetings and use Copilot for analysis
- **Catch up and gain insights from videos**
Helps isolate key information from long recordings
- **Meeting summaries and note generation assistance**
Helps them catch up without needing to read/write extensive meeting minutes
- **Attribute contributions to specific speakers**
Helps them recognise each individual contributor and follow discussions more effectively

Emily
UX designer



Emily has been working as a UX designer for over ten years. She is passionate about creating inclusive designs that cater to all users.

Emily has a **visual impairment** and relies on screen readers and magnification tools to interact with digital content.

Barriers / Difficulties

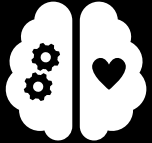
- Cannot see small text
- Difficult to consume long or complex content
- Team collaboration – digital whiteboards on occasions are not accessible
- File sharing and version control – challenging to navigate to easily find relevant information
- Difficulty using mouse to target small areas

How Copilot can help Emily

- **Summarise emails**
Helps them quickly grasp the content of her emails without extensive reading and navigating
- **Create draft emails**
Helps dictate and draft emails more efficiently
- **Search for and locate files**
Provides easier access to enterprise search
- **Recap of meetings**
Helps catch up without needing to read through extensive meeting minutes and transcriptions
- **Generate meeting notes**
Helps with her meeting facilitation and note generation and distribution

Kevin

Software developer



Kevin is a skilled front-end developer who is detail-oriented and focuses on coding accessible and efficient web applications.

Kevin has a **cognitive impairment** that affects his ability to process complex information quickly.

Barriers / Difficulties

- Time consuming to filter large amounts of information
- Difficult to assess credibility of multiple sources of data
- Struggles with ideation and creating ideas from scratch
- Finds detailed technical documents hard to absorb
- Needs explanations to improve clarity and flow of content

How Copilot can help Kevin

- **Copilot enterprise search**
Helps find internal resources he needs without being overwhelmed by unnecessary information
- **Integrated web content search**
Helps gather information and resources from multiple external sources
- **Generate ideas from a blank canvas**
Helps ideate and brainstorm solutions when starting new projects or features
- **Summarising complex documents**
Helps understand and process detailed technical documents
- **Ask Copilot questions about content**
Quickly get clarification on complex code or project requirements

Sofia

Project Manager



Sofia has extensive experience managing digital transformation projects ensuring they are delivered on time and within budget.

Sofia has a **sensorimotor impairment** and uses voice recognition software and adaptive keyboards for her work.

Barriers / Difficulties

- Struggles with traditional input methods, often requiring hands-free workarounds
- Extensive note taking places a strain on motor skills
- Maintaining and reviewing historical records of activities requires sustained physical effort
- Managing daily tasks, to-do lists, and next steps can be physically draining
- Producing detailed project planning and reporting documents can be exhausting

How Copilot can help Sofia

- **Voice enabled prompting**
- **Copilot assistance during meetings**
Provides a single platform for multi-channel information retrieval
- **Recap of historical meetings**
Helps track project progress by providing summaries of past meetings
- **End of day summary and advisory actions**
Helps with organisation by summarising daily activities and next steps
- **Quick and easy drafting of documents and presentations**
Helps generate quick first drafts for her to build upon

Maya

Content designer



Maya is a talented content designer who brings creativity and innovation to the team.

Maya is **neurodiverse** and experiences **sensory sensitivities** and needs structured environments.

Barriers / Difficulties

- Struggles with managing sensory overload
- Difficulty starting from a blank slate
- Lack of structure and consistency can cause confusion and frustration
- Challenges with focus and prioritisation
- Overwhelm from unstructured information

How Copilot can help Maya

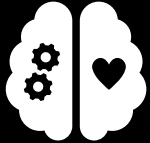
- **Simplify workshop content management**
Helps group content based on themes to focus on key information without feeling overwhelmed by clutter
- **Summarise MS Whiteboard sessions**
Helps turn detailed discussions into concise points to help focus on essential takeaways
- **Generate initial ideas in MS Loop**
Helps ideate and brainstorm solutions when starting new projects or features from scratch
- **Create MS Forms with a single prompt**
Helps draft structured forms to avoid the overwhelming task of starting from a blank slate
- **Prioritising emails**
Helps focus on important tasks amongst an unorganised inbox

Thomas

Service Designer

Thomas is a service designer who excels at crafting user-centred service experiences by aligning customer needs with business objectives across all touchpoints.

Thomas has **Generalised Anxiety Disorder** that can affect his concentration and stress levels when managing deadlines, multiple tasks or preparing for presentations.



Barriers / Difficulties

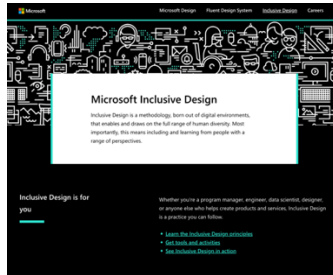
- Cognitive fatigue through information overload
- Struggles to begin tasks for fear of making mistakes
- Fear of miscommunication
- Anxiety induced memory loss
- Strain from switching between multiple apps and tools to find information or complete tasks
- Difficulty prioritising tasks due to anxiety over making wrong decisions

How Copilot can help Thomas

- **Highlight critical points in emails, documents and meeting notes**
Reduces anxiety by simplifying complex information ensuring no key details are missed
- **Generate draft content, presentations and emails**
Helps start tasks with confidence, saving time and reducing risk of errors
- **Support with communication responses and tone**
Reduces anxiety about crafting perfect messages or causing misunderstandings
- **Centralised information retrieval**
Quickly locate files, emails or specific documents without needing to remember where they were saved
- **Contextual assistance**
Helps pick up where they left off easing the fear of forgetting important points

Resources

Useful resources



Microsoft inclusive design



Designing generative AI to work for people with disabilities



UK National AI strategy



AI and a new era for disability services



Opportunities for AI in Accessibility



Council using AI to help people with learning disabilities

THANK YOU

Any questions?

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