

Accessibility and Inclusion Principles for Banking Services





Acknowledgement of Country

The Australian Banking Association (ABA) acknowledges Aboriginal and Torres Strait Islander peoples as the traditional custodians of our land – Australia. The ABA's office is located on the lands of the Gadigal people of the Eora Nation who are the traditional custodians of our local area.

In a rapidly changing and increasingly digital world, banks are working hard to ensure that every person has access to good banking services.

Anna Bligh AC,
Chief Executive Officer
Australian Banking Association

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01

Introduction

1.1 Purpose of the Principles



The Accessibility and Inclusion Principles for Banking Services (the Principles) promote equitable access, usability, and inclusivity for customers with disability and their carers to banking services.

The Principles are the foundation for designing, developing, and delivering banking services that are inclusive and accessible to everyone. By adhering to the Principles, banks ensure that their digital and physical offerings are designed to accommodate customers with disability and their carers. The Principles also acknowledge intersectionality by recognising that a person's experience of disability is influenced by other parts of their identity such as gender, sexual orientation, geographic location, social class and cultural background, which can expose them to a higher risk of discrimination and marginalisation.

The key purpose of the Principles is as follows:

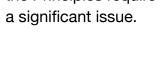
- Equitable access: to give everyone, including people with disabilities and their carers, the same opportunities to access and benefit from banking services.
- 2. **Inclusive design:** to foster inclusive design practices that take into account the needs of different user groups.
- 3. **User experience:** to ensure that banking services are intuitive, efficient and can be used by all customers.

1.2 Review of the Principles



The Australian Banking Association (ABA) will review the Principles every three years to make sure they still meet relevant accessibility standards and to keep up with industry changes.

The ABA will consider completing a review earlier than three years where it receives significant feedback from members or community stakeholders that the Principles require updating to address a significant issue.





02

Accessibility and inclusion in financial services

Banking services are important for everyday life. Technology has made banking more efficient and convenient but has also made it more important for banks to continue to adapt to make sure all their customers, including those with disability and their carers, can access and conduct their banking safely and securely.

According to the Australian Bureau of Statistics, nearly 20 per cent of Australians have disability, and the number of people with disabilities grows as we get older.¹ It is estimated that 80 per cent of disabilities are nonvisible, so people who live with them may experience challenges that bank employees are not aware of.²

Customers may not disclose their disability for a range of reasons. For example, they might be unaware the bank can offer assistance or fear discrimination. By considering accessibility, banks can create a setting where everyone feels welcome and respected, no matter who they are.

Accessibility is good for everyone, not just people with disabilities. Anybody can experience exclusion when interacting with a product or service due to their situational differences. For example, a new parent with a child on their arm might require similar assistance to an individual that has one arm or another with a temporary arm injury. When banks create their services with accessibility in mind, they open the possibility to benefit more customers than they might have originally imagined.

¹ Australian Bureau of Statistics, Disability, Ageing and Carers, Australia: Summary of Findings, Retrieved from:

Disability, Ageing and Carers, Australia: Summary of Findings, 2018 | Australian Bureau of Statistics (abs.gov.au)

[accessed on 18 August 2023].

² Hidden Disabilities. (2023). Invisible disabilities. Retrieved from: <u>Hidden disabilities (hdsunflower.com)</u> [accessed on 15 September 2023].

2.1 The legal framework for accessibility



United Nations Convention on the Rights of Persons with Disabilities

Australia has signed the <u>United Nations</u>
<u>Convention on the Rights of Persons</u>
<u>with Disabilities</u> (CRPD) which plays a
vital role in promoting equal rights, nondiscrimination and full inclusion of people
with disability internationally.

The CRPD is based on the human rights model of disability, which protects the inherent dignity of the human being and recognises disability as a part of human diversity. This builds on the social model of disability, which highlights that disability is created from barriers in the social, physical, and digital environment.

The CRPD recognises the importance of ensuring accessibility and equal participation in financial activities for people with disability. This is articulated in Article 9 (Accessibility), and applies to Article 3 (General Principles), Article 19 (Living independently and being included in the community), Article 21 (Freedom of expression and opinion, and access to information), and Article 22 (Respect for privacy).

Disability Discrimination Act 1992

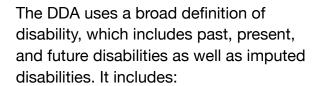
The Disability Discrimination Act 1992 (DDA) outlaws discrimination against a person on the grounds of disability. There are two types of discrimination:

- Direct discrimination happens
 when a person, or a group of people,
 is treated less favourably than others
 because of their background or
 certain personal characteristics. For
 example, a customer that is refused
 access to banking services based
 solely on their disability.
- Indirect discrimination occurs when there is an unreasonable rule or policy that is the same for everyone but has an unfair impact on people who share a particular attribute. For example, a building that only has an entrance through stairs would indirectly discriminate against a person with limited mobility.

The purpose of the DDA is to eliminate discrimination against people with disability, and to promote recognition and acceptance that people with disability have the same fundamental rights as the rest of the community.

Relevant sections of the DDA include:

- Section 23, which makes it unlawful to refuse access to premises.
- Section 24, which makes it unlawful to discriminate against customers with disability in the provision of goods, services, and facilities.
- Section 30, which covers the circumstances under which information about a person's disability may, and may not, be requested.
- Part 2, Division 1, which relates to employment opportunities for people with disability.



- physical disability affects a person's mobility or dexterity.
- intellectual disability affects a person's ability to learn.
- psychosocial disability affects a person's thinking processes.
- sensory disability affects a person's ability to hear or see.
- neurological disability affects the brain and central nervous system.
- learning disability affects acquisition, organisation, retention and understanding of information.
- physical disfigurement affects a person's physical appearance.
- immunological disability the presence of organisms causing disease in the body.

The DDA also protects people who have an assistance animal or disability aid, as well as associates of people with disability, including family members, carers, and support workers. Along with the DDA, there is equivalent state legislation in eight Australian jurisdictions.



The Australian Human Rights Commission (AHRC)

The Australian Human Rights Commission is Australia's national human rights institution. The AHRC has a statutory role to promote and protect human rights under the Australian Human Rights Commission Act 1986 (Cth) (AHRC Act). The AHRC has a range of duties, functions, and powers with respect to human rights, including undertaking research and inquiries, intervening in court proceedings, examining enactments, and conducting educational programs and public awareness campaigns.

Under the AHRC Act, the AHRC can investigate and conciliate complaints of alleged discrimination based on personal attributes protected under anti-discrimination law (disability, age, race and sex). Banks should provide accessible information to customers to inform them of their right to make a complaint with the AHRC.

Under Section 64 of the DDA, organisations are encouraged to develop action plans, and may also provide their action plan to the AHRC to be published on the national Disability Action Plan Register.

Other relevant acts and legal instruments

- <u>Disability (Access to Premises –</u>
 <u>Buildings) Standards 2010</u> – ensures
 buildings provide the right levels of access for people with disability.
- National Disability Insurance
 Scheme Act 2013 (Commonwealth)
 – governs the National Disability
 Insurance Scheme and National
 Disability Insurance Agency.
- Privacy Act 1988 (Commonwealth)

 protects privacy and promotes
 responsible handling of personal
 information when seeking to
 provide accessible services.

Other relevant policies and guidelines

- Australia's Disability Strategy 2021-2031.
- Banks should also refer to any relevant Australian Standards (see Appendix 1).

2.2 Force of document



These Principles do not have the force of law. Adoption of the Principles does not guarantee fulfilment of legal responsibilities under the DDA, nor does it remove from any bank their obligation to comply with relevant legislation. However, a bank adopting the Principles may have greater confidence in the accessibility of their products and services for customers with disability and their carers.

The Principles are intended to operate as a guide for each bank to consider, subject to their own individual circumstances and needs, and to illustrate good industry practice. It is up to each member bank to independently decide whether they will adopt any of the practices set out.

The Principles may also be included in a bank's Disability Action Plan as part of its commitment to improve accessibility and inclusion for its customers and demonstrate leadership across the industry.

Banks are encouraged to conduct an independent review of their practices every two to three years. For example, this could be fulfilled through a review of their performance against their Disability Action Plans. It could also be fulfilled by banks participating in external, industry recognised benchmarks, such as the Australian Human Rights Commission's Access and Inclusion Health Check or the Australian Network on Disability's Access & Inclusion Index.



03

ABA Accessibility Principles

Banking services need to be accessible so that people with disabilities and their carers can have equitable access to services and products. Inclusive and accessible banking services extend beyond just physical branches to digital and telephonic offerings, including websites, mobile apps, phone lines and artificial intelligence (AI) chatbots. By building accessibility and inclusion into product and service design, customers with disabilities and their carers should be able to access and manage their finances easily and with confidence.

The following sections provide concrete suggestions and examples for banks to consider when designing, developing, and delivering banking services that are inclusive and accessible to everyone.



3.1 Banking services in general

- Follow an inclusive design process to enhance accessibility of banking services to all customers and bank employees through:
 - a) Undertaking user research and testing.
 - b) Consulting with experts in the disability sector, including peak representative organisations.
 - c) Utilising accessible and inclusive feedback and participation mechanisms.
- Promote the employment, retention and career development of people with disability in banking services, through:
 - a) Embedding accessibility and inclusion into policies and practices throughout the employment cycle.
 - b) Providing workplace adjustments to allow employees to perform their roles efficiently.
 - c) Incorporating the unique perspectives and experiences of candidates and employees with disability into the development of inclusive banking services and customer experiences.



- Embed accessibility across wider service design so that customers can navigate between channels in a consistent way, through:
 - a) Providing access to alternate options to interact with banking services, including for customers who have low digital literacy or limited access to digital solutions.
 - b) Accommodating various input methods and accessibility requirements of customers.
 - c) Interacting with various assistive devices and technologies.
- 4. Promote non-discrimination in the provision of banking services.³
- 5. Provide information about the functionality of the service and its accessibility, including key product or service information, through:
 - a) Providing information in multiple formats.
 - b) Providing alternatives to non-text content, including provision of alternative text for images, and closed captions or transcripts provided for videos and audio files.

- 6. Provide customer-facing employees with regular disability awareness training and digital service developers with accessible design training.
- Meet accessible design guidelines and follow inclusive design principles for new technology. The Australian Government has adopted accessible procurement through AS EN 301 549.
- 8. Follow a privacy by design process to embed privacy processes for all customers, in order to ensure the responsible collection and handling of their personal information.
- Develop communication standards for documents, SMS, email, or other notification services that may be outside the channels of mobile, web or telephone banking.
 - Example: the ISO standard for universal accessibility of PDF documents is PDF/UA.
- 10. Comply with the <u>National Construction</u> Code for the installation of devices.
- Take into consideration the potential accessibility impacts when withdrawing a digital or telephonic banking service.

³ Information about direct and indirect discrimination is contained at page 5 of this document.

Useful resources

- Australian Human Rights
 Commission (2021) <u>Access</u>
 and Inclusion Health Check
- Australian Human Rights
 Commission (2023) <u>Safeguarding</u>
 the Right to Privacy
- Centre for Inclusive Design
 (2019) <u>The Benefits of</u>
 Designing for Everyone Report
- Office of the Australian Information Commissioner – <u>Australian</u> <u>Privacy Principles Guidelines</u>

Microsoft (2023) – <u>Designing</u>



Embedding accessibility and inclusion benefits everyone, it enhances banking across
Australia for everyone.

Focus Group participant, March 2023



3.2 Websites used for banking services

It is important for banks to have websites that are accessible so that all users, including those with disabilities and their carers, can access banking services. By building accessibility into website design, customers who use different devices, browsers, or assistive technologies can use the website and interact with its material in a meaningful way.

- Make websites and web content accessible in a consistent way for users' perception, operation and understanding. This could be achieved by:
 - a) Designing websites using responsive design techniques to adjust the layout, formatting and organisation of content based on a customer's device or screen size.
 - b) Using plain English, inclusive language and be free from jargon.



- c) Formatting text so that it is legible by using an appropriate font size, and considering how websites can support change of font size to meet customer preferences.
- d) Providing descriptive alternative text for images, icons, and other non-text content. This enables users who rely on screen readers or have images disabled to understand the purpose and meaning of visual elements on the website.
- e) Providing captions or transcripts for multimedia content, such as videos or audio files.
- f) Reviewing colour contrast between text and background elements to improve readability and accessibility. Using colour combinations that meet the Web Content Accessibility Guidelines (WCAG) contrast ratios.
- g) Designing interfaces and interactive elements in ways that accommodate various input methods and accessibility requirements of customers. For example, customers who navigate websites using keyboard navigation and shortcut keys.

- h) Designing website functions to work effectively and consistently across different web browsers and devices.
- i) Providing clear and consistent navigation menus and controls throughout the website. This includes utilising proper heading structures, logical tab order, and providing visible focus indicators to help users understand their location within the website and easily navigate through content.
- j) Testing website compatibility with assistive technologies and regularly checking ongoing compatibility when updates to websites are made.
- k) Labelling form fields to provide clear instructions and offer validation and error messages that are perceivable and understandable. This helps users complete forms accurately and efficiently.

- Conforming to the WCAG 2.1 to a minimum of Level AA.⁴
- m) Regularly monitor and test websites for accessibility, considering user feedback. Provide information about the functionality of the website and its accessibility in a dedicated section, including methods for customers to provide feedback.
- Establish minimum accessibility criteria to be signed off before deployment of websites and updates.
- 3. Resolve accessibility barriers on websites (including those identified by customers) as soon as possible, providing customers with alternative means to access banking services and updates on progress of resolution.

Useful resources

Australian Human Rights
 Commission (2021) – <u>Human Rights</u>
 and Technology Report 2021

⁴ Noting that WCAG 2.2 was released in October 2023. Banks should implement changes to web content to conform to WCAG 2.2 guidelines as soon as practicable..

3.3 Mobile device-based banking services

Customers now use mobile apps more than ever to handle their money, make transactions, and access banking services. By considering accessibility in app design, people with disabilities can choose the banking channel that best fits their needs and preferences without undue limitations.

- 1. Make apps accessible in a consistent way for users' perception, operation and understanding, through:
 - a) Using plain English, inclusive language and being free from jargon.
 - Formatting text so that it is legible by using an appropriate font size, and considering how apps can support change of font size to meet customer preferences.
 - c) Providing descriptive alternative text for images, icons, and other non-text content. This enables users to understand the purpose and meaning of visual elements on the app when using screen readers, and where images fail to load.



- d) Providing captions or transcripts for multimedia content, such as videos or audio files.
- e) Reviewing colour contrast between text and background elements to improve readability and accessibility. Use colour combinations that meet the WCAG contrast ratios.
- f) Designing interfaces and interactive elements in ways that accommodate various input methods and accessibility requirements of customers.
- g) Providing clear and consistent navigation menus and controls throughout the app. This includes utilising headers to clearly structure and group content.
- Testing app compatibility with assistive technologies and regularly checking compatibility when updating apps.
- i) Labelling form fields to provide clear instructions and offer validation and error messages that are perceivable and understandable. This helps users complete forms accurately and efficiently.

- j) Conforming to the WCAG 2.1 to a minimum of Level AA.⁵
- Regularly monitoring and testing apps for accessibility, incorporating user feedback.
- 2. Provide information about the functionality of the app and its accessibility, through:
 - a) Creating a dedicated accessibility section within the app settings or menu that provides comprehensive information about the accessibility features available.
 - Providing multiple methods for customers to provide feedback on accessibility.
- 3. Assess innovation benefits to deliver the best outcome for customers, through:
 - a) Evaluating if the innovative solution will enhance accessibility.
 - b) Considering customer feedback and conducting user research to analyse what would be beneficial to customers, including accessibility considerations.
 - Example: prioritising software innovation over hardware changes.
- Use native controls over custom controls wherever possible to achieve automatic accessibility.

- Be aware that cross-platform app development tools can result in inaccessible apps.
- Be aware that if apps are based on single-page web app approaches they will need very careful design and testing throughout development phases.
 - Example: many JavaScript libraries do not support accessibility and ARIA coding is often more involved on mobile devices and operating systems.
- Establish minimum accessibility criteria to be signed off before deployment of apps and updates.
- Resolve accessibility barriers on apps (including those identified by customers) as soon as possible, providing customers with alternative means to access banking services and updates on progress of resolution.

Useful resources

- Apple (accessed 2023)
 - Guidelines for accessibility on iOS
- Australian Payments Network (2019)
 Guidelines for Accessibility in PIN entry on touch screen terminals
- Google (accessed 2023)
 - improving Android accessibility

Noting that WCAG 2.2 was released in October 2023. Banks should implement changes to web content to conform to WCAG 2.2 guidelines as soon as practicable.

3.4 Banking terminals and ATMs

For customers with disabilities and their carers to access banking services, hardware like banking terminals and ATMs must be designed and run in a way that makes them easy to use. Banks also know that customers with disabilities benefit from designs that are consistent and easy to understand. For example, keypads that are in the same place on different devices and have a dot on the number 5 to help identify them.

Design and production

- Establish minimum accessibility requirements with suppliers and partners who are involved in design and production.
- Design the user interface of the product, including handling, controls, feedback, input, and output, to meet the relevant Functionality Accessibility Requirements in AS EN 301 549.
- 3. Embed inclusive design and testing of new technology at all stages of product development. This is particularly important for touch screens which can be challenging for people who are blind or have low vision or have specific dexterity needs.



- 4. Comply with the <u>National</u>
 <u>Construction Code</u> and its related standards for installation.
- Conduct regular accessibility testing and maintenance of devices to remain in compliance with accessibility standards.

User interface and functionality design

- Provide a clear and visible display with legible text, using large fonts to enhance readability, with sufficient contrast between the text and background.
- 2. Allow for multiple methods to interact with and operate the device:
 - Sequential control to allow users to navigate through options or menus step by step.
 - b) Provide alternatives to fine motor control such as keyboard mapping.
 - c) Consider the needs of users with limited reach and strength, which may include positioning of controls and size of buttons.
- Provide audio and visual feedback to confirm successful input and transaction completion.
 Additionally, banks may consider providing tactile feedback.

- Provide easy navigation with clear instructions that are available in accessible formats. Minimise the steps required to complete a transaction.
- 5. Enable users to control volume. The AS EN 301 549 Standard specifies that the user should be able to control the volume in incremental amounts, over a minimum decibel range. It also requires that users be able to activate speech output and control the volume via a non-visual method (i.e., a physical control).
- Avoid using content that can trigger photosensitive seizures.
- 7. Provide enough lighting to enable operation of terminal and ATMs and safety of the user.
- 8. Reduce glare on screens.
- 9. Embed accessibility into security measures, for example, by allowing users to input personal information without fear of it being compromised (for example, Personal Identification Numbers or PINs).

Note: PINs for ATMs are often subject to specific security requirements, intended to prevent third parties from discovering entered PINs. Care must be taken to ensure that any accessibility improvements do not compromise the security of sensitive data, and that all security-related compliance requirements continue to be met by banks.

Customer support

- Provide accessible user documentation, instructions, and warnings in multiple accessible formats for example large print, Braille, or digital formats.
- Provide guidance to bank employees and vendors on accessibility features and how to assist customers with disability and their carers who may require support using terminals or ATMs.
- Provide device interface and instructions in multiple languages to cater to diverse user groups. This accommodates customers with different language preferences or those with limited English proficiency.
- 4. Where a terminal or ATM is relocated or removed, provide information to customers in multiple formats to locate their nearest accessible ATM.
- Encourage accessibility feedback from customers, by providing multiple accessible methods to share feedback.

3.5 EFTPOS and other payment devices

The way customers make payments is evolving with payment devices, such as mobile payment terminals, contactless payment options, and biometric payment systems. It is important that these technologies incorporate accessibility principles into their design and implementation.

Accessibility is essential so that customers with disability can fully participate in and benefit from the convenience and efficiency of these payment devices.



Design and production

Banks providing best practice in accessibility of the design and production of EFTPOS and other payment devices should:

- 1. Establish minimum accessibility requirements with suppliers and partners who are involved in design and production.
- Design the user interface of the device, including handling, controls, feedback, input, and output, to meet the relevant Functionality Accessibility Requirements in AS EN 301 549.
- Enable compatibility with a wide range of assistive devices and technologies.



- 4. Embed inclusive design and testing of new technology at all stages of product development so it can be released with reliable accessibility at the same time. This is particularly important for touch screens which can be challenging for people who are blind or have low vision or have specific dexterity needs.
- 5. Conduct regular accessibility testing and maintenance of devices.

Note: PINs for EFTPOS and other payment devices are often subject to specific security requirements, intended to prevent third parties from discovering entered PINs. Care must be taken to ensure that any accessibility improvements do not compromise the security of sensitive data, and that all security-related compliance requirements continue to be met by banks.

Customer support

Banks providing best practice in the accessibility of customer support for EFTPOS and other payment devices should:

- Provide accessible user documentation, instructions and warnings in multiple accessible formats such as large print, Braille, or digital formats.
- 2. Provide guidance to vendors on accessibility features and guidance on how to assist customers with disability and their carers who may require support using EFTPOS or payment devices.
- Provide device interface and instructions in multiple languages to cater to diverse user groups. This accommodates customers with different language preferences or those with limited English proficiency.
- Encourage accessibility feedback from customers by providing multiple accessible methods to share feedback.
- 5. Comply with the Australian Payments
 Network <u>Guidelines for Accessibility in</u>
 PIN entry on touch screen terminals.

3.6 Telephone banking services

Telephone banking services are particularly important for customers who experience barriers accessing in-person or digital banking services. By ensuring accessibility of their telephone services, banks can enable customers with disability to manage their accounts, inquire about transactions, transfer funds, and access other banking services independently and securely.

Phone banking

- Provide communication channels which give customers with disability access to employees who have training in working with customers with disability.
- Ensure consistent approaches and data sharing between departments so that customers receive relevant information and are not required to explain their circumstances on multiple occasions.
- Provide customer-facing employees with regular disability awareness training.



- 4. Ensure customer-facing employees are utilising accessibility flags on Client Relationship Management software, through:
 - a) Entering and updating accessibility information with consent from the customer.
 - Reviewing accessibility flags and consistently engaging with customers to adopt their preferred accessibility requirements.
- 5. Provide multiple authentication methods to allow customers to confirm their identity, through:
 - a) Making bank employees aware of accessibility options for authentication to offer to customers when required.
 - b) Training bank employees to be patient and clearly explain authentication process with customers in recognition of their accessibility needs.
- 6. Enable accessible telephone services and provide training so employees are aware of how to use these features; for example, TTY (Text Telephone), National Relay Service (NRS), Translating and Interpreting Service (TIS), Real Time Text technology and video calls for Auslan interpretation.



Automated telephone services

- For any DTMF (touch-tone)
 automated phone services, ensure
 compliance with AS/NZS 4263.
- Apply consistency in the terminology, design, and function of the service.
 Example: avoid duplicating terms, such as calling the the hash key and the pound key.
- 3. Minimise keystrokes.
- 4. Provide an option to speak with an operator.

- Provide information about the functionality of the service and its accessibility:
 - a) The content should be available in text formats and via more than one sense.
 - b) Alternatives to non-text content should be available.
- Make allowances for the use of assistive or support services. For example, National Relay Service, Translating and Interpreting Service or Real Time Text technology.
- 7. Provide users with the opportunity to fix errors without needing to re-enter correct information.
- 8. Address the needs of customers with disability in the functions, practices, policies, procedures, and alterations in the operation of the service.

3.7 Artificial Intelligence (AI) technology

The increasing use of AI in banking services has the potential to transform the way banks interact with customers and deliver their services. Al technologies such as chatbots, virtual assistants, and automated decisionmaking systems can streamline processes, improve efficiency, and enhance the customer experience. However, it is crucial to ensure that accessibility considerations do not change when AI is involved in the solution. Ethical and inclusive practices continue to apply regardless of who the interaction is with.



Al in general

- Provide regular training on how to develop, train and deploy AI that is free of discrimination and bias.
- 2. Follow a privacy by design process to embed privacy processes in the development, deployment and training of Al products used by banks to improve accessibility.
- 3. Once the AI system is operating, closely monitor it throughout its lifecycle to check that algorithmic bias does not arise in practice.

Voice-based Artificial Intelligence (AI) technology

Some banks are offering voiceactivated banking services, and the trend is forecast to grow rapidly. However, while voice-activation may be accessible for some customers with disability, it may be problematic for others with speech, language, and communication access requirements.

- 1. Provide security and privacy measures to cover all users.
 - Example: allow for the use of headphones and/or blanking of screens when appropriate.
- Provide alternative methods of transaction.

Example: entry of PIN via voice as well as keypad.



3. Provide equality of access to the service or its alternative.

> Example: an alternative human operated telephone service could be available for the same time periods as a voice-based service.

Useful resources

- Australian Government, Digital Identity System (2023) – Trusted Digital Identity Framework
- Australian Human Rights Commission (2023) - HRIA tool for AI in banking
- Australian Human Rights Commission (2023) – Safeguarding the Right to Privacy submission (specifically the section on AI)
- Australian Human Rights Commission (2020) – Technical Paper on Addressing the problem of algorithmic bias
- Microsoft (accessed 2023) In Pursuit of Inclusive Al Microsoft Inclusive Design



An unintended consequence of these barriers to access is that customers often rely on friends or family for help, and end up compromising their privacy and security, giving up their passwords and personal data to third parties.

Survey response, March 2023.



3.8 Authentication

Cybersecurity threats and the risk of fraud, identity theft, and unauthorised access to sensitive information mean banks need to implement and maintain robust security measures. Authentication measures, such as multi-factor authentication and biometric verification, enhance security and protect customer accounts from unauthorised access. It is essential for banks to consider accessibility when implementing these authentication methods, and to strike a balance between robust security measures and inclusive access.

- Engage in testing of authentication methods with customers with disability.
- Provide alternative accessible means of identification, authentication, and transaction to meet accessibility requirements of customers. Make customer-facing employees aware of alternate authentication methods to offer to customers with disability and carers when required.
- 3. Strike an appropriate balance between robust security measures and inclusive access.
- 4. Design authentication interfaces and interactive elements in ways that accommodate various input methods and accessibility requirements of customers. For example, entry of a phone banking Personal Identification Number (PIN) via voice, as well as keypad.
- Test compatibility with assistive technologies, including when updates are made to check ongoing compatibility.

- 6. Design biometric authentication solutions to maximise accessibility for people with disability.
- 7. Regularly review and monitor accessibility of authentication methods, incorporating customer feedback in updates.

Useful resources

- International Standards on the Protection of Personal Data and Privacy (The Madrid Resolution) (2009) – The Madrid Resolution
- Office of the Australian Information Commissioner – <u>Australian</u> Privacy Principles Guidelines
- University of Technology Sydney
 (2022) <u>Facial Recognition</u>
 <u>Technology Report</u> Where banks
 seek to utilise facial recognition
 technology (FRT), they can complete
 a 'Facial Recognition Impact
 Assessment' to review potential
 harms and human rights risks. Pages
 45-53 provide guidance.

3.9 Physical locations for banking

Digital technology is revolutionising the way that customers choose to bank. However, spaces for physical interactions, like branches, remain a feature of banking and it is important that accessibility is considered in their design. Banks remain committed to providing their customers with different options to access banking products and services, regardless of where they live.

- Embed inclusive design principles in the acquisition, refit, and refurbishment of all spaces for physical interactions and incorporate feedback from customers with disability.
- 2. Provide employees with regular disability awareness training and resources.
- Train design teams on how to embed accessibility into designs.



- 4. Provide up-to-date information about accessibility features of spaces for physical interactions across banking channels including websites, telephone banking and mobile apps. This information may include detail about the availability of accessible bathrooms, ramp access, lifts, hearing augmentation technology, accessible parking spaces and use of beacon technology (for example Bindi Maps).
- 5. Provide private spaces for sensitive conversations that are accessible for customers with disability, considering the available furniture, lighting, and noise levels.
- 6. Provide clear and legible signage throughout spaces for physical interactions to assist customers navigate the premises. Signage could include visible symbols, high contrast colours and tactile elements such as Braille.
- 7. Keep aisles and pathways free from obstructions and allow for easy access of wheelchairs, other mobility devices and assistance animals.



- 8. Review entrance door pressures for a best practice weight of no more than 2kg. Automatic doors are best practice.
- Provide counters with heights suitable for customers using wheelchairs or customers of shorter stature.
 Best practice is to provide height adjustable desks with cut outs.
- 10. Where accessible bathrooms are available, comply with Australian Standards:
 - a) Review door pressures for a best practice weight of no more than 2kg. Automatic doors are best practice.
 - b) Install emergency alarm systems that provide both audio and visual output.

- 11. Provide multiple seating options considering the needs of customers who may need to sit, and who require additional back support and arm rests for assistance.
- 12. Provide accessible contact information for customers to provide feedback on the accessibility of spaces for physical interactions.

Useful resources

- Australian Network on
 Disability (2016) Design for
 Dignity Guidelines
- Australian Network on Disability (2016) – <u>Retail Guidelines (Design</u> for Dignity)

3.10 Communications and Marketing

Bank communications and marketing should be inclusive and accessible so that all customers, regardless of disability, can fully understand and engage with the information and messages conveyed. Inclusive marketing also reflects the diverse customer base and fosters a sense of inclusion and belonging among customers. By prioritising inclusive and accessible communications, banks can effectively engage with all customers and promote equitable access to banking information.

- Comply with relevant WCAG guidelines for digital communications and marketing materials.
- Provide regular training and resources to employees working in communications and marketing on how to develop accessible materials.
- 3. Develop, review and update guidelines so that they embed information relating to accessible communications (including reference to meetings, events, multimedia, media engagement, digital content, internal communications, social media, and surveys).



- 4. Use plain English, inclusive language and be free from jargon.
- 5. Providing descriptive alternative text for images, icons, and other non-text content. This enables users to understand the purpose and meaning of visual elements when using screen readers, and where images fail to load.
- Make alternate formats available, for example, word.doc formats, Auslan interpreted videos and easy read documents.
- 7. Provide captions or transcripts for multimedia content, such as videos or audio files.
- Review colour contrast between text and background elements to improve readability and accessibility. Use colour combinations that meet the WCAG contrast ratios.
- 9. Implement internal checklists, third party testing of sample materials and testing of all new materials.
- 10. Proactively update existing material based on highest use of demand.
- Provide customers with the opportunity to share feedback on communications and marketing materials and events, including accessibility.

- 12. Formalise internal review mechanisms for development of communications and marketing materials, considering feedback from customers on accessibility.
- 13. Include customers with disability in external communications and marketing materials:
 - a) Customers with disability should be represented in broader communications materials, not just those that relate to disability programs or initiatives.
 - b) Representation of customers with disability should be respectful and not based on stereotypes.
 - c) Customers with disability who feature in communications and marketing materials should be offered inclusive and accessible approaches and be provided payment for their time.
 - d) Information should be provided in accessible formats to allow customers to provide informed consent about participation and the use of their images/story.
- 14. Provide customers with accessible information to manage their marketing preferences.

Useful resources

- Attitude Foundation (accessed) 2023) - Guidelines for Content
- Bus Stop Films (2020) The Inclusive Filmmaking Toolkit
- Centre for Inclusive Design (2020) Captioning, audio description and transcription contacts
- Centre for Inclusive Design (2021) - Easy English versus Plain English Guide
- Microsoft (accessed 2023) Accessibility Checker
- The Commons, Social Change Library (2023) – Guidelines: Images Portraying People with Disability
- Vision Australia (accessed 2023)
 - Colour Contrast Analyser

04

Design Frameworks

Banks can ensure their banking services are accessible, inclusive and usable for their customers through incorporating and adhering to an accessibility-friendly design framework.

In this section, three design frameworks have been included to guide a structured approach to ensuring the accessibility of banking services. They are:

- 1. Inclusive design
- 2. Universal design, and
- 3. Web Content Accessibility Guidelines.



4.1 Inclusive Design Process



The inclusive design process provides a design framework that enables and draws on the full range of human diversity. Most importantly, this means including and learning from people with a range of perspectives during the design process.

It includes three dimensions based upon research by the Inclusive Design Research Centre in Toronto:⁶

- Recognising diversity and uniqueness by understanding that people do not fit neatly into a 'one size fits all' method.
- Using inclusive design process and tools ('nothing about us without us') to include the perspectives of customers with disability and their carers in decision-making, innovation and identifying solutions.
- Ensuring a broader beneficial impact by understanding the wider influence of their designs. They aim to create a positive impact that goes beyond just the immediate users.

Activities under each dimension of inclusive design include:

1. Recognise diversity and uniqueness

Project initiation

- Identifying the problem that requires an inclusive design solution.
- Definition of project objectives and scope.
- Formulating a project team that includes diverse perspectives, including people with disability (which may include external expertise if required).
- Scope the time required to engage in consultation and include risk analysis to reduce unconscious bias and discriminatory processes that could exclude the voices of customers with disability.
- Budget is allocated to pay customers with lived experience for their time and cover costs for access requirements.

⁶ Centre for Inclusive Design. (2019). The Benefit of Designing for Everyone. Retrieved from: <u>The Benefit of Designing for Everyone (centreforinclusivedesign.org.au)</u> [accessed on 15 September 2023]

2. Inclusive process and tools

User research

- Conducting research to understand the experiences of customers, including intersectional customers with disability and their carers, including what is working well, what barriers are experienced and suggestions for improvement.
- Utilise accessible and inclusive research methods, using a range of consultation methods which may include surveys, interviews, and focus groups.
- Review and analyse findings being conscious of any bias that can occur.

Ideation

- Brainstorm ideas and concepts that include considerations around accessibility and inclusion.
- Encourage creative thinking and consider diverse perspectives.
- Prioritise solutions that address identified accessibility needs and align with project objectives.

Prototyping

- Develop prototypes of proposed design solutions.
- Test prototypes with users, ensuring that customers with disability, carers and support workers are invited to participate.
- Utilise inclusive and accessible testing methodologies to reduce barriers in participation.
- Refine design based upon user feedback.

Implementation

- Conduct extensive user testing prior to launch, reviewing accessibility and user satisfaction.
- Finalise the design based upon user feedback.
- Embed accessibility into design solutions and provide alternate methods for interaction and usability.
- Incorporate accessibility features and standards to comply with accessibility guidelines (for example WCAG detailed below).



A whole of banking service approach to accessibility is needed to ensure all customers with disability have equal access to financial opportunities and security.

Corene Strauss, CEO Australian Network on Disability

Deployment and post-deployment

- Monitor and collect feedback from users to assess the accessibility and effectiveness of the design.
- Continually improve and update the design based upon user feedback and evolving updates in accessibility.

3. Broader beneficial impact

- Work with disability advocates (in a paid capacity) to identify any potential negative consequence or positive broader benefit of project.
- Ensure that there is the ability to roll back or change outcomes through the design and implementation process if there are barriers.
- Align projects considering the principle, 'Will this make things better or worse for vulnerable communities?'.
- Incorporate a framework of personalisation. This allows people to access banking services in the different ways that suit them (for example face to face, digital, on phone), rather than one size fits all.

Useful resources

Centre for Inclusive Design (2019)

- The Benefit of Designing for

Everyone Report

4.2 Universal Design Principles

Universal Design allows banks to design products, services, and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design.⁷ The Universal Design Principles are outcomes focused and are broken down into seven key principles.

The 7 Principles of Universal Design

Principle 1: Equitable Use

The design is useful and marketable to customers with disability and their carers.

- 1a) Provide the same means of use for all users: identical whenever possible; equivalent when not.
- Avoid segregating or stigmatising any users.
- 1c) Provisions for privacy, security, and safety should be equally available to all users.
- 1d) Make the design appealing to all users.



Principle 2: Flexibility in Use

The design accommodates a wide range of customer preferences and abilities.

- 2a) Provide choice in methods of use.
- 2b) Accommodate right or left-handed access and use.
- 2c) Facilitate the user's accuracy and precision.
- 2d) Provide adaptability to the user's pace.

Principle 3: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

- 3a) Eliminate unnecessary complexity.
- 3b) Be consistent with user expectations and intuition.
- 3c) Accommodate a wide range of literacy and language skills.
- 3d) Arrange information consistent with its importance.
- 3e) Provide effective prompting and feedback during and after task completion.

North Carolina University. (n.d.). Centre for Universal Design. Retrieved from: Center for Universal Design | College of Design (ncsu.edu) (retrieved on 12 September 2023).

Principle 4: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

- 4a) Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- 4b) Provide adequate contrast between essential information and its surroundings.
- 4c) Maximise 'legibility' of essential information.
- 4d) Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- 4e) Provide compatibility with a variety of techniques or devices used by customers with sensory limitations.

Principle 5: Tolerance for Error

The design minimises hazards and the adverse consequences of accidental or unintended actions.

- 5a) Arrange elements to minimise hazards and errors: most used elements, most accessible, hazardous elements eliminated, isolated, or shielded.
- 5b) Provide warnings of hazards and errors.
- 5c) Provide fail-safe features.
- 5d) Discourage unconscious action in tasks that require vigilance.



Principle 6: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

- 6a) Allow user to maintain a neutral body position.
- 6b) Use reasonable operating forces.
- 6c) Minimise repetitive actions.
- 6d) Minimise sustained physical effort.

Principle 7: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

- 7a) Provide a clear line of sight to important elements for any seated or standing user.
- 7b) Make reach to all components comfortable for any seated or standing user.
- Accommodate variations in hand and grip size.
- Provide adequate space for 7d) the use of assistive devices or personal assistance.



4.3 Web Content Accessibility Guidelines



The Web Content Accessibility Guidelines (WCAG) are internationally recognised standards that explain how to make web content more accessible to customers with disability. The WCAG documents have been developed by the World Wide Web Consortium (W3C) and are adapted from the Universal Design Principles.

The WCAG include WCAG 2.0, WCAG 2.1 and WCAG 2.2. Within each WCAG are four main principles, 13 guidelines, and three conformance levels – A, AA, and AAA.

In terms of a succinct expression of principles for accessibility, WCAG 2.1 AA is standard currently used by banks wanting to provide digital accessibility. With the release of WCAG 2.2 in October 2023, banks should implement changes to digital content to conform to WCAG 2.2 as soon as practicable.

Perceivable

Web content is made available to the senses – sight, hearing and/or touch.

 Provide text alternatives for non-text content.

Example: if you can't see a graphic or chart, alt text will enable a screen reader to convey its information.

 Provide alternatives for time-based media.

Example: if you can't hear, captions and transcripts will assist; if you can't see. audio will assist.

 Create content that can be presented in different ways (for example, using a simpler layout) without losing information or structure.

Example: if content is available to assistive technologies, anyone can access it.

 Make it easier for users to see and hear content including separating foreground from background.

Example: use enough contrast to make it easy to see in all environments, avoid using colour to provide meaning or layering sound that may fight with audio screen reader output.

Operable

Interface forms, controls and navigation are operable.

- Make all functionality available from a keyboard.
 - Example: if you have limited motor control, a pointing device may not work for you.
- Provide users enough time to read and use content.
 - Example: time dependent functions limit accessibility for users with low vision, and with dexterity or cognitive limitations.
- Do not design content in a way that is known to cause seizures.
 - Example: strobing, blinking, flashing, or flickering can cause seizures.
- Provide ways to help users navigate, find content, and determine where they are.
 - Example: users with cognitive impairments may value consistent navigation; users with reduced dexterity may value large buttons and links that can be selected easily.
- Make it easier for users to operate functionality through various inputs beyond keyboards.

Example: use of assistive technology.

Understandable

Content and interface are understandable.

- Make text content readable and understandable.
 - Example: if you have low vision, you may value simple, clear language displayed in a non-serif typeface on a plain background.
- Make web pages appear and operate in predictable ways.
 - Example: screen readers may not read content that updates dynamically without a page refresh.
- Help users avoid and correct mistakes.

Example: screen readers need clear labels and alerts to help users be aware of and navigate submission errors.

Robust

Content can be used reliably by a wide variety of user agents, including assistive technologies.

- Maximise compatibility with current and future user agents, including assistive technologies.
 - Example: add descriptions and instructions for all accessibility features and follow conventions that allow assistive technologies to work.

Appendix 1 Sources

Australian sources

Australian Standards concerned with accessibility

AS EN 301 549:2020 Accessibility requirements suitable for public procurement of ICT products and services AS EN 301 549:2020

AS ISO 14289.1:2017 Document management applications – Electronic document file format enhancement for accessibility Use of ISO 32000-1 (PDF/UA-1) AS-ISO-14289-1-2017

ISO 9241-154:2013 Ergonomics of human-system interaction — Part 154: Interactive voice response (IVR) applications ISO 9241-154:2013

<u>Disability (Access to Premises –</u> Buildings) Standards 2010 (Cth)

National Construction Code 2016

Australian legislative instruments and principles

Centre for inclusive design Inclusive Design – Centre for Inclusive Design

Disability Discrimination Act 1992

Guiding Principles for Accessible Authentication (2007) Guidelines for Accessible Authentication

National Disability Insurance Scheme Act 2013 (Cth)

National Disability Strategy 2021—2031
The Strategy and supporting documents

International sources

How to Meet WCAG (Quick Reference)

PDF/UA: The ISO standard for universal accessibility The ISO standard for universal accessibility

Principles of Universal Design What is Universal Design

UN Convention on the Rights of Persons with Disabilities

Web Content Accessibility Guidelines

Web Content Accessibility
Guidelines 2.1 at a Glance

Web Content Accessibility
Guidelines (WCAG) 2.2

What's New in WCAG 2.2

Appendix 2 Glossary

Accessibility

Accessibility, in the context of banking services, refers to the design and provision of financial products, services, and infrastructure that are usable and available to customers, regardless of disability. Accessibility encompasses various aspects, such as physical accessibility of branches, digital accessibility of online platforms, availability of alternative communication channels, and inclusive customer service practices.

Assistive devices and technology

The primary purpose of assistive products is to maintain or improve an individual's functioning and independence, thereby promoting their well-being. They enable people to live healthy, productive, independent and dignified lives.8

App

A software application designed for mobile devices.

Bank

A bank that has signed up to the Banking Code of Practice.

Banking service

Means any financial service or product provided by a bank in Australia to a customer:

- a. whether supplied directly or through an intermediary; and
- b. if provided by another party and distributed by a bank, extends only to the distribution or supply, and not to the service or product itself.⁹

Customer

Means a customer at the time the bank provides the banking service or information, that is:

- a. a customer or a prospective customer, and is either:
 - a customer, who is not treated as a business under the Code; or
 - ii. a small business; or
- a customer who is a guarantor, or a prospective guarantor, of a customer or prospective customer referred to in subparagraph (a) above.¹⁰

⁸ World Health Organisation. (n.d.). <u>Assistive Technology. Retrieved from: Assistive technology (who.int)</u>. [Accessed on 15 September 2023].

⁹ This reflects the definition in the Banking Code of Practice.

¹⁰ This reflects the definition of who the Code applies to in paragraph 1 of the Banking Code of Practice.

Equitable access

Means all customers, including customers with disability, have equal and fair access to banking services.

Inclusive design

Design that considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference.¹¹

Universal design

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.¹²

User experience

A person's perceptions and responses resulting from the use and/or anticipated use of a product, system or service. It includes all users' emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviours and accomplishments that occur before, during and after use.¹³

¹¹ Inclusive Design Research Centre. (n.d.). Philosophy. Retrieved from: Philosophy – Inclusive Design Research Centre (ocadu.ca). [Accessed on 15 September 2023].

¹² Centre for Excellence in Universal Design. (2020). What is Universal Design. Retrieved from: What is Universal Design [Accessed on 15 September 2023]

¹³ International Organization for Standardization. (2019). ISO 9241-210:2019 Ergonomics of human-system interaction. Retrieved from: ISO 9241-210:2019(en), Ergonomics of human-system interaction. [Accessed on 15 September 2023].







