Deloitte. Insights



How can banks better serve people with disabilities, and why the time is now

With equity-centered design, banks can help elevate the financial well-being of people with disabilities—a growing segment of the US and global population. Deloitte research has identified areas where banks can make a significant impact in serving their needs.

"Around 15% of the world's population, or an estimated 1.3 billion people, live with disabilities. **They are the world's largest minority**."

—United Nations¹

"If one considers people who now have disabilities ... [and] people who are likely to develop disabilities in the future, and ... [those] ... who are or will be affected by the disabilities of family members or others close to them, then disability affects today or will affect tomorrow the lives of most Americans."

—Institute of Medicine Committee on Disability in America²



Table of contents

04 Kovtak

Key takeaways

05

Delivering banking experiences that meet the unique needs of people with disabilities

11

Addressing financial challenges through equity-centered design

30

Sharpening the focus and strengthening banks' commitment to better serve the needs of people with disabilities

32

Appendix

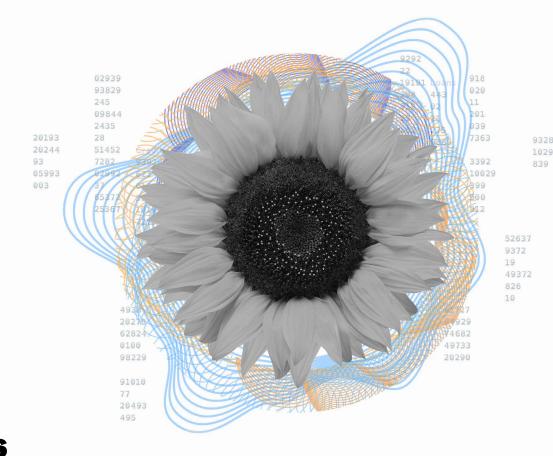
35 Endnotes

Key takeaways



- People with disabilities are a large and diverse community. One in four adults in the United States has a disability, and this community is growing.
- Financial insecurity likely compounds the myriad challenges many people with disabilities face. According to our survey, only 35% of respondents with a disability agree that their bank has made it easier for them to access credit by offering services that are tailored to meet their needs.
- While 54% of survey respondents with a disability consider banks to be their

- go-to source for financial information and advice, only 20% of respondents feel empowered by their primary bank.
- Banks have an opportunity to help elevate the financial well-being of people with disabilities, along with their caregivers.
- People with disabilities—and customers in general—can be better served if banks adopt an equity-centered design philosophy to create more accessible and equitable products and experiences.



Delivering banking experiences that meet the unique needs of people with disabilities Kelly was no stranger to discomfort, both physical and psychological. As a 39-year-old using a wheelchair for nearly two decades since her accident, she had experienced social apathy, given her disability. As a result, she often shunned interactions with others. But several weeks ago, she reluctantly visited a bank branch to inquire about a small business loan. For some years, she had dreamt of starting her own business selling art online.

The journey to the branch office several miles from her apartment in a ride-hailing taxi contained the usual indignities that someone in a wheelchair experiences regularly. As often in the past, she had to wait nearly an hour for a wheelchair-accessible taxi to arrive. Even the more popular taxi services have limited wheelchair-accessible vehicles. Kelly also

had to pay nearly double the standard fare for the ride, as is common for such vehicles.

But when she arrived at the branch, she found a welcoming staff who treated her with dignity and respect. This was quite unlike the last time she visited the same branch several years ago, before the pandemic, when Kelly not only found the tight spacing in the branch difficult to navigate in her wheelchair, but also received unsatisfactory responses to her queries. The staff were also not especially empathetic to her financial status as a freelance worker with no stable source of income. It is possible this treatment was not directed only to Kelly but also others with similar economic backgrounds.

In contrast, on this visit, Kelly found that the bank had recently enhanced their financial inclusion programs to better serve people with disabilities. The bank embraced an equity-centered design approach, by engaging with the bank's employee disabilities resource group, to implement a variety of new solutions. The branch staff had been trained on how to demonstrate empathy and advise on the special loan products available for people with disabilities and others with similar financial needs.

Kelly obtained the loan with minimal stress, and she reveled in the whole experience so much that she shared it on her social media accounts and acted as an unofficial goodwill ambassador for the bank.

Kelly's experience isn't unique. One in four adults in the United States has a disability, totaling 67 million people³— and counting, as the US population ages and chronic conditions among the nonelderly seem to become more common. The COVID-19 pandemic added to the equation, having likely resulted in 1.2 million more disabled people by 2021.⁴

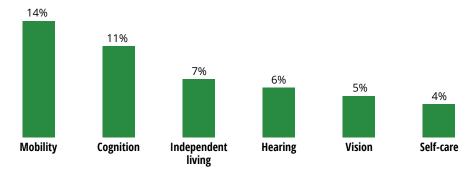
This pandemic-induced increase in the percentage of the US population who have disabilities is a stark reminder that being "able-bodied" may not be a permanent state. Many people, at some point in their lives, could lose some functional abilities due to aging, illness, or injury. And often, disability can happen without warning, so even if people don't need equitable accommodations today, they may need them tomorrow.

Disabilities can be physical (e.g., vision loss) or cognitive (e.g., Alzheimer's), present from birth (e.g., Down Syndrome), developed early in life (e.g., autism), or acquired due to age (e.g., dementia), chronic illness (e.g., limb loss due to diabetes), or injury (e.g., spinal cord injury).⁵ They can be apparent, invisible, or both (figure 1).

There has been notable progress in expanding the rights of people with disabilities, ever since the Americans with Disabilities Act (ADA) came into force in 1990. However, societal stigma, ableism, and stereotyping continue to be pervasive and perverse realities. Social and economic challenges, inaccessible

Disabilities exist in many forms

Percentage of US adults with the following disabilities



Source: US Census Bureau and the Centers for Disease Control and Prevention (CDC).

infrastructure, and lack of assistive technologies, among other factors, may perpetuate the inequities confronting those with disabilities.

Furthermore, for many people with disabilities, financial insecurity can compound the challenges they face, and accentuates the pernicious anxiety they and their families may confront on a daily basis. As of 2021, the median earnings for people with disabilities were more than 37% lower than people without a disability. Also, people with disabilities are twice as likely to be unemployed than people without a disability,7 and the poverty rate among people with disabilities is two times higher (figure 2).8 Moreover, a 2021 Federal Deposit Insurance Corporation (FDIC) survey showed that among working-age

households with a person with a disability, the unbanked rate (14.8%) was four times the rate of households without a person with a disability (3.7%).⁹

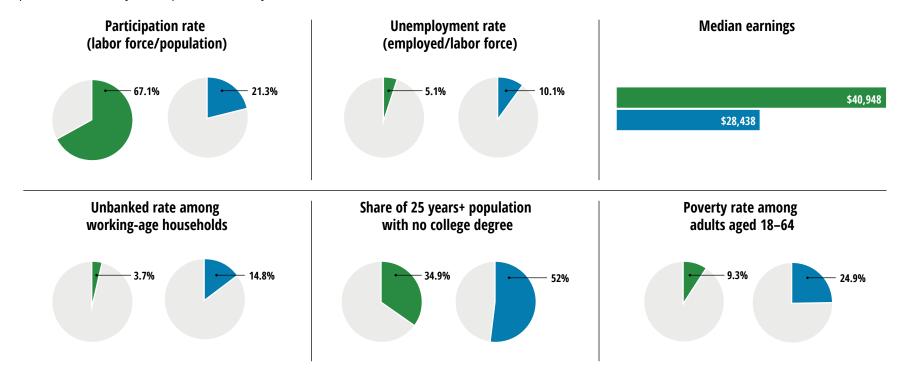
And race can often further compound the effects of disability. For instance, the proportion of Blacks in the United States with a disability is higher than whites.¹⁰ On average, Blacks, Hispanics, and Native Americans with a disability experience higher incidences of poverty, and also have significantly lower net worth, than their white counterparts.¹¹

To understand the challenges that people with disabilities may face in their banking experiences and what banks can consider to better serve their needs, the Deloitte Center for Financial Services conducted a survey of 1,000 people with disabilities and 1,000 caregivers in May and June 2022. Respondents ranged in age from 18 years to 75 years and represented different racial backgrounds and income brackets (see the appendix for more details).

The results of our survey can serve as a customer needs assessment of an underserved—and growing¹²—target audience, highlighting the myriad basic struggles people with disabilities face in their financial lives, as well as an opportunity for banks to deliver more equitable experiences.

FIGURE 2
Financial insecurity is a pervasive challenge for many people with disabilities

People without a disability
 People with a disability



Note: Data in these charts are from 2021.

Sources: US Federal Deposit Insurance Corporation (FDIC), US Bureau of Labor and Statistics (BLS), and the US Census Bureau.

Many banks are making progress in better meeting the needs of their employees with disabilities by redoubling their financial inclusion initiatives. They have focused on hiring and elevating the experiences of employees with disabilities and their allies through workplace diversity, equity, and inclusion (DEI) programs. Capital One, M&T Bank, Citibank, and Goldman Sachs are some of the institutions to have received a perfect score as the best places to work for people with disabilities by Disability:IN in 2022.¹³

Similarly, the industry is focusing more attention on the needs of customers with disabilities. Bank of America, for example, offers accessible financing to customers with disabilities to buy assistive technologies and medical equipment.¹⁴ Banks have also made banking facilities more accessible over the last several decades to comply with the ADA. They installed ramps, Braille keypads, audio aids, and other assistive technologies at branches and ATMs.¹⁵

But are banks doing enough? Our research shows that, by adopting an equity-centered design philosophy and channeling the experiences, sensibilities, and perspectives of their employees with disabilities and their allies, banks can create more targeted products and experiences. Some of these refinements, whether increasing accessibility, offering new credit products, or leveraging new technologies to create more inclusive and accessible experiences, may be essential for people with disabilities but should likely benefit other customers as well.

Addressing financial challenges through equity-centered design



Banking and other industries often have used design thinking to help innovate. But recently, there has been a growing critique that design thinking has not fully served the purpose of making the end products and experiences inclusive, equitable, and accessible to all.¹6 Enter equity-centered design, which differs in the selection of—and engagement with—its design target. In equity-centered design, the lived experiences of the people for whom one is designing—and how such input is sought and included in the design—are intentionally considered in constructing the design process. The contrast between

design thinking and equity-centered design is more in the "codesign" element, designing "with" the end user and inviting those lived experiences to the table to participate in the design process as codesigners.¹⁷ "Inclusive design" and "design by equity" are similar in theory to equity-centered design. The common thread is engagement.

Banks are beginning to take inspiration from equity-centered design in how they design products and experiences for people with disabilities (and other groups). NatWest Group created an inclusive design panel of individuals and specialists who share feedback during the design processes and highlight challenges that people with disabilities might face consuming products or experiencing services. Likewise, U.S. Bank has created a dedicated digital accessibility team that listens to customers with disabilities and advises product teams to consider accessibility as part of the design process. 19

FIGURE 3

The financial inclusion framework could offer a strategic construct to help elevate equity



Organization

Addressing financial inclusion within the organization's workforce

Aligning sales strategies to financial inclusion goals

Community

Making commitments to the geographies and communities where the organization recruits, operates, and invests

Offerings

Developing and deploying products and services to reach underserved communities

Ecosystem

Amplifying impact through vendors, partners, and public platforms

To better serve people with disabilities, banks should consider a bold and concerted strategy across multiple dimensions. Deloitte's financial inclusion framework (figure 3), which takes an inside-out view—from the perspective of the organization, offerings, community, and ecosystem—could be a valuable construct.

Banks should, in particular, consider focusing on four key areas in using equitycentered design to address impediments that people with disabilities face:

Source: Deloitte Center for Financial Services.

1. Elevating financial well-being with innovative products and tools

Households of people with disabilities could suffer the pressing dual realities of higher expenses and lower income. According to the National Disability Institute, "Households with an adult person with a disability need 28% more income (nearly US\$18,000 per year at the median level) to have the same standard of living as a household without an adult person with a disability."20 But, on average, households with a person with a disability make much less. According to the 2021 American Community Survey, the median earnings of a working-age adult person with a disability in the United States was US\$28,438, significantly less than the US\$40,948 for working-age adults without disabilities.21

Health care and personal assistance services constitute the largest expenses for people with disabilities.²² But not all of these expenses are covered by medical insurance or Medicare.²³ As a result, the financial burden on the families of people with disabilities can be overwhelming.

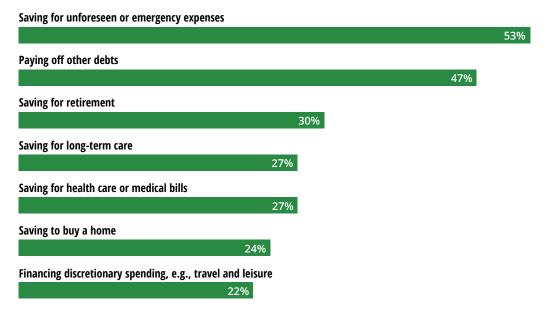
Also, people with disabilities are four times more likely to report their health to be "fair or poor" than those without a disability.²⁴ In our survey, 42% of respondents with a disability struggle to pay their health care and living costs. Owing to these realities, a majority of people with disabilities in our survey are preoccupied with short-term financial priorities. More than half of respondents with a disability would find it difficult or very difficult to come up with US\$2,000

if an unexpected need arose in the next month. For many of these respondents, long-term goals such as saving for retirement, investing money, or taking out a mortgage to buy a home do not feature among their top goals (figure 4).

FIGURE 4

Survey respondents with disabilities are often focused on meeting basic financial needs

Most important financial goals of respondents with disabilities



Note: Percentages exceed 100% as respondents were asked to choose their three most important financial goals. Source: Deloitte Center for Financial Services Survey among people with disabilities.

How can banks help?

Tailor existing products to help enable people with disabilities to save more

Many debit and credit cards offer rewards, discounts, or cashback to customers. Collaborating with health care providers and expanding these incentives to reward spending on health care could allow people with disabilities to save on a large expense category.

Banks could offer creative options for savings accounts as well. For instance, Purple, a financial technology provider, partners with banks to offer people with disabilities a checking account, a debit card, and an easy-to-access mobile banking app in the United States.²⁵ The app is designed to provide people with disabilities with accessible digital

payment options and the ability to easily move money from checking to taxadvantaged ABLE (Achieving a Better Life Experience) accounts.²⁶

Similarly, banks can collaborate with health plans to encourage their eligible customers with disabilities to more actively use health savings accounts, which can help them to cover out-of-pocket medical expenses tax-free.²⁷

Offer tailored personal financial management tools

While many banks offer personal financial management tools, often these tools are not tailored for people with disabilities. Take the case of neurodiverse individuals who have learning disabilities such as dyslexia or dyscalculia (inability to perform mathematical calculations easily), or memory difficulties. Managing money through budgeting, investing, or financial calculations may require different approaches for this cohort.

In the spirit of equity-centered design, codesigning tools or dashboards that these individuals would find valuable—

whether for savings, bills, or mortgage/ rent payments—should be a prime consideration. Also, translating basic financial concepts such as interest rates and fees for banking transactions should help foster a greater sense of independence and confidence about money. For instance, SpendAble, an Australian fintech firm, has launched a mobile app to give people with disabilities more independence and control to manage their money.²⁸ This app allows customers to view transaction receipts, identify and control who makes payments on their behalf in real time, and add spending limits for caregivers to protect themselves from financial abuse.²⁹

Banks as allies of caregivers

Caregivers can often be the unheralded heroes in the lives of people with disabilities. For many people with a disability, there is usually a family member or a friend who is their anchor of support. Nearly three-quarters of individuals with intellectual and developmental disabilities in the United States lived with a family caregiver in 2019.³⁰

Caregivers' roles span physical, emotional, and financial domains. Caregivers often help with daily activities,

housework, transportation, health care and, not least, matters of money. They may help secure funds, speak with health care providers, and often pay for expenses out of their own pockets. In a 2021 AARP study, 78% of caregivers incurred out-of-pocket expenses due to caregiving and spent a quarter of their income on caregiving activities.³¹ In our survey, caregiver respondents indicated that they have also had to make several sacrifices in their caregiver role, including cutting back on their own expenses, taking on additional debt, and pausing their investments.

Bolstering caregivers' financial well-being could directly translate to the well-being of people with disabilities. Banks can play an important role with targeted efforts to engage with the caregiving community, whether it is through financial literacy programs or tailored budgeting tools. For instance, Nationwide is collaborating with Carefull for its artificial intelligence (AI) tool designed to help participating caregivers analyze their older adults' financial accounts and detect anomalies in their banking and payments transactions, such as missed or late payments, and unauthorized cash transfers, to help prevent financial abuse.32

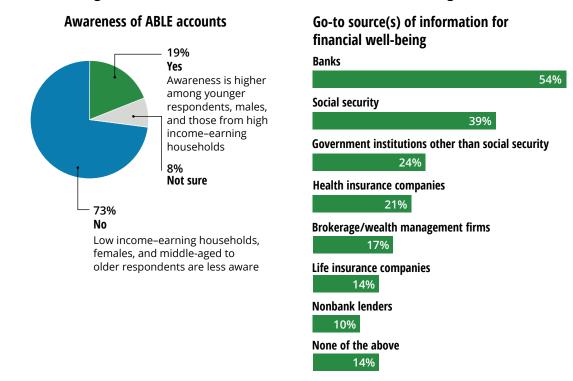
2. Empowerment through information and advice

As the National Disability Institute puts it, "Financial empowerment is the ability and confidence of individuals and communities to make positive financial decisions that promote their long-term financial stability and financial well-being."³³ Banks can play an important role in this context. However, our survey found that only 20% of respondents with disabilities feel empowered by their primary bank.

Financial empowerment is not likely to happen without financial knowledge. Take ABLE accounts, for instance: Nearly three-quarters of respondents with disabilities in our survey are not aware of ABLE accounts, let alone their eligibility as a beneficiary of one (figure 5). Although about 8 million people with

FIGURE 5

Awareness of ABLE accounts is low, but more than half the people with disabilities see banks as the "go-to source" for information on financial well-being



Source: Deloitte Center for Financial Services survey among people with disabilities.

disabilities are eligible to open an ABLE account in the United States,³⁴ as of September 2022, there were only 131,000 beneficiaries and only about US\$1 billion in assets under management, according to ISS Market Intelligence.³⁵

How can banks help?Step up financial literacy programs

Just over half of respondents with disabilities in our survey consider banks to be their go-to source of information for most things related to financial well-being, higher than other institutions, including government agencies, insurance, or wealth management companies. This could be due to the central role banks play in everyday financial transactions, and the confidence customers have in banks as guardians of money and information. As per our survey, people

with disabilities expect banks to give them financial information and advice whether it's about ABLE accounts or something else related to their financial well-being.

Banks have an opportunity to amplify their financial literacy programs for people with disabilities and their caregivers. Of course, such initiatives may need to be modified to meet the particular needs of people with disabilities. But like other similar initiatives, these could benefit banks' other customers as well.

In general, banks should rethink the resources and tools for people with disabilities. Enabling financial knowledge through digital channels should be a key priority to help maximize reach, and also minimize costs. For instance, M&T and Huntington Bank in the United States

collaborate with a life skills—sharing app for neurodiverse consumers on everyday banking tasks, such as withdrawing money or paying with debit and credit cards.³⁶ The app is designed to use a digitized deck of cards in a storytelling format to offer visual cues and step-by-step guidance to simplify the "how" of banking transactions. In addition to banking, the app extends similar accessibility for other experiences, including transportation, shopping, and health care. Developing such "super apps" can yield benefits both to people with disabilities and their caregivers.

Train frontline staff to impart financial knowledge

But where financial literacy may have the most impact is in day-to-day customer interactions at the branch or via the call center. The human touch in these interactions can help banks demonstrate greater empathy and deliver more personalization. Bankers should be trained on financial products, services, and digital tools that can address the needs of people with disabilities. But, beyond product education, they should also receive regular training on

unconscious bias, a culture of inclusion, and empathetic and equitable customer service, among other things, not just toward people with disabilities but for all customers alike.

Banks should also create special roles on the front line who cater to people with disabilities. For instance, J.P. Morgan Chase opened a branch in Washington, D.C., for customers who are hearingimpaired. The bank has several branch employees who are fluent in American Sign Language to support customers.³⁷ Lastly, by collaborating with other entities, including health care or local community organizations, banks could provide financial education, coaching, and counseling in ways that address the specific needs of those with disabilities. For instance, Australia's Greater Bank and the University of Newcastle are collaborating with the ASPECT (Autism Spectrum) School to educate students on the basics of banking and money management.³⁸

3. Easier access to credit

The need for emergency funds can be more acute among people with disabilities given their economic profile and health conditions. As our survey indicated, 42% of people with disabilities respondents struggled to pay medical and living expenses often or all the time. Even though there are other options—such as the Social Security Administration's program of "presumptive disability" payments to qualified individuals for six months until the actual payments kick in—these programs may not fully satisfy the need for emergency payments.

At the same time, access to credit can also be a pervasive challenge among people with disabilities. Furthermore, as one focus group participant said the experience of obtaining credit for people with disabilities can often be "degrading." More than four in five people with disabilities in our survey carry debt in their name, either individually or jointly. Given their poor credit record or insufficient income, 40% of people with disabilities in our survey were also denied new credit, leaving some of them no choice but to seek help from sources, including nonbanks.

People with disabilities also face credit discrimination. A 2022 study by the National Fair Housing Alliance suggests that more than half of housing discrimination complaints filed in 2021 across different interactions, including rental, real estate sales, mortgage lending, housing-related insurance and appraisal, and marketing, among others, were based on a disability (see sidebar, "Banking regulations protecting people with disabilities against credit discrimination" for more details).

In fact, since many people with disabilities are either underbanked or unbanked, the reliance on nonbank lenders is a common phenomenon.³⁹ People with disabilities are some of the heaviest users of payday lenders, who charge exorbitantly high interest rates. Often, these loans are meant as temporary arrangements until disability insurance or Supplemental Security Income from the US Social Security Administration come through. Even so, the vicious cycle of debt, at least for some people with disabilities, can be difficult to escape.

How can banks help?Offer innovative credit products and flexible pricing

New products and innovative pricing to serve the unique needs of people with disabilities and others with similar financial needs could be a clear opportunity for banks. In this regard, health care—related loans that incorporate elements of microloans or buy-now-pay-later (BNPL) loans, such as instant credit and flexible payment terms, should be received favorably by people with disabilities and their families.

These programs, along with timely payment nudges, may also help improve their credit history and build their credit scores.

At the same time, introducing credit products that enable borrowers to pay with their disability income, such as those offered by the US Department of Agriculture's home loan program and Fannie Mae HomeReady loans, should be welcomed. However, many of these loans require a credit score of 620 or higher, which could be difficult to achieve for people with disabilities.⁴⁰ Banks may need

more creative solutions that promote affordable and accessible lending. For instance, Bank of America launched a mortgage solution as a special-purpose credit program, requiring no minimum credit scores and a "zero down payment" option, to extend access to credit to underserved communities. According to their press release, eligibility is based on income and home location, and the product is expected to increase home ownership in some Black and Hispanic communities.41 Moreover, people with disabilities meeting the eligibility criteria could also benefit from this affordable loan solution program.

Banking regulations protecting people with disabilities against credit discrimination

Regulations play a key role in helping to ensure people with disabilities receive fair access to banking services and credit opportunities. In the United States, there are multiple federal and state statutes that implicitly or explicitly prohibit credit discrimination and unfair lending practices on the basis of disability.

The Community Reinvestment Act (CRA), for instance, encourages financial

institutions to help meet the credit needs of the communities where they operate, including low- and moderate-income neighborhoods. This law does not explicitly reference people with disabilities; however, federal banking regulators recently issued an advance notice of proposed rulemaking to strengthen the CRA, with one aspect of the proposal being the increased focus on the disability community.⁴²

Similarly, the Equal Credit Opportunity Act (ECOA) stipulates that banks should not discriminate against those who receive federal disability assistance, such as Social Security Disability Insurance.⁴³ The ECOA does not directly address disability status though, unlike the Fair Housing Act, which is more explicit about prohibiting discrimination on the basis of disability (in addition to other characteristics) in residential real estate transactions.⁴⁴

In addition, unfair or deceptive acts or practices under Section 5 of the Federal Trade Commission Act as well as unfair, deceptive, or abusive acts or practices pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act also provide protection to people with disabilities. This protection covers consumer-facing financial products and services and is based on standards for determining whether an act or practice is unfair, deceptive, or abusive.

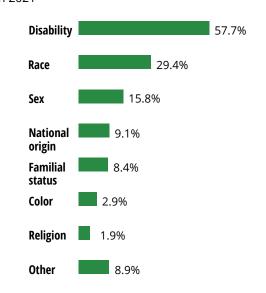
In addition to the prudent federal banking regulators, such as the Federal Reserve, the Office of the Comptroller of the Currency, and the FDIC, the Consumer Financial Protection Bureau provides oversight of the statutes highlighted above.

Despite these laws, credit discrimination against people with disabilities is a persistent problem in American society. For instance, in 2021, nearly 58% of discrimination complaints filed with the Department of Housing and Urban Development were on the basis of disability (figure 6).⁴⁵

FIGURE 6

More than half the discrimination complaints filed with the Department of Housing and Urban Development have a disability basis

Percentage distribution of discrimination complaints filed by the basis of discrimination in 2021



Source: 2022 Fair Housing Trends, National Fair Housing Alliance

4. Designing more accessible banking experiences

Title III of the ADA focuses on accessibility to places of "public accommodations," including bank branches and ATMs. Although websites, mobile apps, and other digital channels are not explicitly mentioned in the ADA, the spirit of the law extends to digital accessibility as well.⁴⁶

In our survey, only 8% of respondents with a disability said bank branches and ATMs provide the most accessible in-person experiences, compared to 24% of respondents who said hospitals and health care facilities were most accessible. No doubt, the purpose of the physical designs of a hospital, for instance, are different from those of bank branches. Nevertheless, matching the

level of accessibility in medical facilities is a worthwhile goal.

Similar challenges may exist with hybrid devices that have both physical and digital features, such as ATM screens, self-service kiosks,⁴⁷ and video-conferencing screens, all of which may not be designed to accommodate all people with disabilities. A recent notice for proposed rulemaking on the accessibility of self-service kiosks could raise the impetus for banks to broaden their efforts to hybrid devices.

Digital channels are another important area to elevate accessibility as technology becomes more pervasive and embedded in our lives. Our survey indicates that people with disabilities actively use digital channels, such as online and mobile banking—banks appear to be

doing a reasonable job in this context. One-fifth of respondents with disabilities rated banks' websites and apps to be the most accessible corporate sites and apps they engage with, much higher than for other industries.

Especially since the start of the COVID-19 pandemic, customers are increasingly using mobile banking apps to conduct simple informational and transactional banking activities, such as logging into their accounts, checking their bank balance, paying bills, or transferring money. But these simple tasks can be frustrating for people with disabilities if digital interfaces are poorly designed. Imagine how a consumer with visual impairment who is using a screen reader to access their mobile banking app would feel if the "transfer to another person" button is labeled incorrectly as "button."

How can banks help? Redesign physical spaces

Banks could potentially do more to elevate accessible physical banking experiences. Take teller counters at bank branches, for instance: People in wheelchairs or those experiencing other physical disabilities may find it difficult to reach across teller counters. About half of our respondents believe banks can make branches and ATMs more accessible with assistive technologies to help elevate their banking experience. Banks could extend accessible banking hours for customers who rely on caregivers to help them visit their bank branches or ATMs. In addition. banks can have dedicated counters for those people with disabilities who would like such service.

Redesign digital interfaces

Forty-five percent of people with disabilities in our survey believe that banks can elevate their experience by making digital banking channels more accessible. In pure digital contexts, having the option to customize the font or design, offering text alternatives for people who cannot see images or colors, and offering keyboard support for people who cannot use a mouse, for example, are perhaps necessary accommodations to make for people with visual, auditory or other motor disabilities.

In 2008, the World Wide Web Consortium set WCAG 2.0 guidelines to make websites more perceivable, operable, understandable, and robust for people with disabilities, and extended these standards to include mobile devices and wearables in the WCAG 2.1 version published in 2018.⁴⁸ For instance, these standards include providing text alternatives to nontext or multimedia content, maximizing compatibility with current and future assistive technologies, and making it easier for users to operate through various inputs beyond a keyboard to improve accessibility.

Banks should consider WCAG 2.1 (or better, WCAG 2.2 standards to be finalized in 2023) as their baseline expectations and build from there. More importantly, they should make digital accessibility an organizationwide priority. These refinements can translate to other customers as well, possibly increasing satisfaction.

Embrace generative AI and the metaverse to increase accessibility

Emerging technologies, such as generative AI and the metaverse, hold much promise to improve digital accessibility for people with disabilities and other customers as well. For instance, chatbots that use generative AI and voice recognition technology could potentially make interactions smoother, especially for customers without caregivers or those who struggle with text communications. It could also analyze a customer's interaction history to recommend more tailored actions and products.

Similarly, augmented and virtual reality (AR/VR) technologies may offer attractive possibilities. Researchers are developing devices so users can do simple abstract and metaphoric gestures to operate

VR controls.⁴⁹ Even though this is still a nascent concept for some, a quarter of people with disabilities responding to our survey said they are likely to engage more with their primary bank if it offered immersive AR/VR experiences for banking interactions.

Yet, emerging technologies potentially raise new risks, such as algorithmic bias and ethics, which may only perpetuate unintended ableism and marginalization of people with disabilities. Recent academic research found that a majority of the AI models they studied scored statements associated with a "disability" more negatively compared to sentences without such words.⁵⁰

Therefore, developers should be mindful of these biases and embrace equity-centered design philosophy in their innovations from the start, rather than building equity and accessibility as an afterthought. In this regard, disability representation data would also be necessary to train Al models on more inclusive decision-making. With this intent, Microsoft has partnered with the World Bank and Disability Data Initiative at Fordham University to develop a global, publicly available online disability data hub covering the population and its developmental metrics.⁵¹

Self-identification and early understanding of unique accessibility and service preferences

Disabilities such as autism and hearing or vision loss are quite common in our society. This can present a challenge to bank staff, as they may not easily be able to identify a priori how best to serve such customers. To solve this problem, banks could ask their customers with disabilities to self-report desired functional assistance and preferences. In our survey, only 31% of people with disabilities said that their banks asked them to self-identify their preferences for the kind of service they would like.

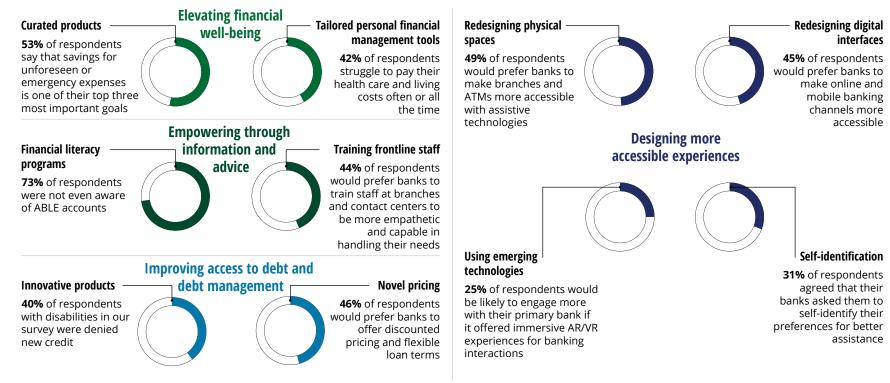
Danske Bank, for example, implemented the "Hidden Disabilities Sunflower" lanyard program to enable people with "invisible" disabilities to receive the support they need.⁵² This program has been adopted by other service providers as well, including many large airports and retail stores globally. This is a voluntary program for those who choose to identify themselves for the functionality and services they need.

In implementing such programs, banks and other service providers should keep in mind that not all people with disabilities may be comfortable identifying themselves this way. This does not preempt the need to train staff to recognize the needs of people with disabilities in service interactions. Institutions may also want to consider alternate, inconspicuous methods of identification using technologies such as beacons.

One of the principles of accessible and inclusive design is that it provides an uplifting experience for everyone, so the principle of how to offer more personalization and self-identification for service preferences can apply to all, not just those with disabilities. Such initiatives can, in fact, widen the scope of experiences to all. If everyone has to self-identify and self-select service preferences, it's less "othering" and could be seen as a universal experience enhancement.

Banks should use a multifaceted approach to help elevate the financial well-being of people with disabilities

Addressing financial barriers for people with disabilities with equity-centered design



Source: Deloitte Center for Financial Services Survey among people with disabilities.



Sharpening the focus and strengthening banks' commitment to better serve the needs of people with disabilities

Banks are already intimately involved in the financial lives of many people with disabilities. They are also seen by many as a key source of information on financial well-being. And while banks have made a number of strides in recent years to better serve customers with disabilities. more should be done. The percentage of the US population that has a disability or is caring for a person with a disability is growing, and our research highlights that this is an underserved market. Many people with disabilities face challenges in managing their financial well-being, and these are challenges that banks could be well-positioned to address.

But this may require a fresh, multifaced strategy. One step is a stronger, bolder, organizational commitment. As an example, 75 financial services firms have joined The Valuable 500, a collective of 500 global chief executive officers pledging their commitment to disability inclusion, both in the workplace and the marketplace.⁵³

Banks should also lean onto their employees who have disabilities, such as the neurodiverse workforce, and their allies as well to learn from their sensibilities, experiences, and passion for the purpose. A more active engagement with the broader ecosystem should also be a key consideration. Working with third-party organizations committed to sustaining the future of people with disabilities in local communities could lay the foundation for greater impact. Similarly, banks could collaborate with public and private entities, including bigtechs and fintechs, and adopt new technologies to enhance the banking experiences of people with disabilities.

Lastly, embracing an equity-centered design philosophy in curating products and experiences could not only benefit people with disabilities, but may also have a spillover effect,⁵⁴ elevating banking experiences for all.

Appendix

Methodology

The Deloitte Center for Financial Services worked with an independent survey research firm to survey more than 1,000 people with a disability and 1,000 caregivers between May and June 2022. Consumers responding to our survey came from different demographic backgrounds. Some caveats to note:

- The survey results presented in this report are not weighted for age, income, or other demographic variables in the population of people with disabilities.
- Respondents in our survey selfidentified as a person with a disability, and they represented a spectrum of disabilities; however, the disability distribution in our survey differed from that in the US population.

FIGURE 8

Respondents' demographic profile

Respondents with a disability by age	18–23 years	24–39 years	40–55 years	56 years or more	
%	11%	29%	30%	30%	
Respondents with a disability by household income	Less than \$35,000	\$35,000- \$74,999	\$75,000- \$99,999	\$100,000 or above	Prefer not to answer
%	39%	36%	10%	14%	1%

Type of disability among respondents with disabilities Cognition, intellectual, or psychological (such as autism, ADHD, Alzheimer's, Down syndrome, anxiety disorder, bipolar, post-traumatic stress disorder, and depression)	
Independent living and/or self-care (difficulty doing errands alone)	14%
Hearing (deafness or hard of hearing)	14%
Vision (blind or having low vision)	13%
Speech (speech impediment or have serious difficulty speaking)	7%
Other	17%
Prefer not to answer	2%

of focus-group discussions with over a dozen Deloitte professionals in the People with Disabilities and Allies community who either have a disability or are caregivers to a family member with a disability.

In addition, we also conducted a couple

Note: All dollar amounts are in US dollars.

Source: Deloitte Center for Financial Services analysis.

Endnotes

- United Nations, "Factsheet on persons with disabilities," accessed March 28, 2023.
- Institute of Medicine (US) Committee on Disability in America, The Future of Disability in America (Washington, D.C.: National Academies Press, 2007).
- 3. CDC, "Disability impacts all of us," accessed January 5, 2023.
- 4. Monika Mitra et al., "Advancing health equity and reducing health disparities for people with disabilities in the United States," Disability & Health 41, no. 10 (2022); Lily Roberts, Mia Ives-Rublee, and Rose Khattar, "Covid-19 likely resulted in 1.2 million more disabled people by end of 2021—Workplaces and policy will need to adapt," Center for American Progress, February 9, 2022.
- Gloria L. Krahn, Deborah Klein Walker, and Rosaly Correa-De-Araujo "Persons with disabilities as an unrecognized health disparity population," American Journal of Public Health 105, no. S2 (2015): pp. S198–S206.

- 6. US Census Bureau, "Median earnings in the past 12 months (in 2021 inflation-adjusted dollars) by disability status by sex for the civilian noninstitutionalized population 16 years and over with earnings," accessed March 28, 2023.
- Bureau of Labor Statistics, "Persons with a disability: labor force characteristics—2021," press release, February 24, 2022.
- 8. John Creamer et al., "Poverty in the United states: 2021," Census Bureau, September 2022.
- 9. Federal Deposit Insurance Corporation, 2021 FDIC National Survey of Unbanked and Underbanked Households, November 2022.
- 10. CDC, "Adults with disabilities: Ethnicity and race," accessed on March 28, 2023.
- National Disability Institute, Race, ethnicity, and disability, August 2020; National Disability Institute, "Race, ethnicity, and disability," accessed March 28, 2023.
- 12. WHO, "Disability," accessed March 28, 2023.
- 13. Disability:IN, "2022 Disability equality index," accessed March 28, 2023.

- Bank of America, "Accessible financing for customers with disabilities" accessed March 28, 2023.
- Nathan Moore, "How ADA compliance changes will affect self-service in banking," CFM, accessed March 28, 2023.
- 16. Julius Tapper, "All for one, not one for all: The power of equity-centered design," Deloitte Digital, August 11, 2022.
- 17. Ibid.
- 18. NatWest Group, "7 ways we're making banking more accessible to our customers," December 2, 2022.
- 19. U.S. Bank, "How U.S. Bank built a world-class digital accessibility practice," October 12, 2021.
- Nanette Goodman et al., The extra costs of living with a disability in the United States—Resetting the policy table, National Disability Institute, October 14, 2020.

- 21. US Census Bureau, "Median earnings in the past 12 months (in 2021 inflation-adjusted dollars) by disability status by sex for the civilian noninstitutionalized population 16 years and over with earnings."
- 22. Goodman et al., The extra costs of living with a disability in the United States.
- Michael H. Barber, "Navigating Medicare and Medicaid: Understanding your coverage options for long-term care," LinkedIn (blog), March 9, 2023.
- 24. Krahn, Klein Walker, and Correa-De-Araujo "Persons with disabilities as an unrecognized health disparity population," pp. S198–S206.
- 25. Purple, "Mobile banking for people with disabilities," accessed March 28, 2023.
- 26. Ibid.
- 27. Karla Denis, "Understanding health savings accounts their advantages," *Forbes*, December 9, 2022.
- 28. SpendAble, "Why SpendAble?," accessed March 28. 2023.
- 29. Ibid.

- The State of the States in Intellectual and Developmental Disabilities, "Percentage of individuals with IDD by living arrangements," The University of Kansas, 2019.
- 31. AARP Research, Caregiving out-of-pocket costs study, accessed March 28, 2023.
- 32. Carefull, "Carefull and Nationwide team up to support 'financial caregivers," Finextra, April 1, 2022.
- 33. National Disability Institute, "Financial Empowerment," 2021.
- 34. Michael Morris et al., "Closing the disability gap: Reforming the Community Reinvestment Act Regulatory Framework," *Georgetown Journal on Poverty Law and Policy* 26, no. 3 (2019).
- 35. Michelle Diament, "IRS increases limit for ABLE accounts," Disability Scoop, January 9, 2023.
- 36. M&T Bank, "M&T Bank and life-skills app Magnusmode collaborate to support customers with autism, cognitive, and intellectual disabilities," *PRNewswire*, June 2021; Gabrielle Saulsbery and Anna Hrushka, "Huntington Bank partners with app to help neurodiverse people bank better," *Banking Dive*, December 16, 2022.

- 37. Miriam Cross, "Banks are stepping up tech for people with disabilities," *American Banker*, September 11, 2020.
- 38. Greater Bank, "Financial literacy program ensuring teens with autism are on the money," October 17, 2022.
- 39. Center for Retirement Research at Boston College, "People on disability use payday loans," March 19, 2020.
- 40. Fannie Mae, "Selling guide," 2020; Fairway, "Buyer's Guide to USDA loan credit score requirements," May 10, 2022; FINRA and National Disability Institute, "Access to credit for adults with disabilities," accessed March 28, 2023.
- Bank of America, "Bank of America introduces community affordable loan solution to expand home ownership opportunities in Black/African American and Hispanic Latino communities," August 30, 2022.
- 42. National Disability Institute, "Reforming the Community Reinvestment Act Regulatory Framework," accessed March 28, 2023.

- 43. National Consumer Law Center, Credit discrimination, accessed March 28, 2023. Alliance, accessed March 28, 2023.
- 44. Ibid.
- 45. Lindsay Augustine et al., 2022 Fair Housing Trends Report, National Fair Housing Alliance, accessed March 28, 2023.
- 46. Courtney Mullin, Rob Gould, and Sarah Parker Harris, Digital access and Title III of the ADA, Department of Disability and Human Development, University of Illinois at Chicago, accessed March 28, 2023.
- 47. Katie Deighton, "Disabled shoppers struggle with inaccessible self-checkouts," *The Wall Street Journal*, November 21, 2022.
- 48. Web Accessibility Initiative, "WCAG 2 overview," January 25, 2022; World Wide Web Consortium, "Requirements for Web Content Accessibility Guidelines 2.1," June 8, 2018; United States Department of Justice, "Justice Department issues web accessibility guidelines under the Americans with disability act," press release, March 18, 2022.

- 49. Rosemary Musachio, "Can persons with disability live in the metaverse," Ruh Global IMPACT, May 31, 2022.
- Pranav Venkit, Mukund Srinath, and Shomir Wilson, A study of implicit language model bias against people with disabilities, Proceedings of the 29th International Conference on Computational Linguistics (COLING), 2022.
- 51. Steven Aquino, "Microsoft chief accessibility officer Jenny Lay-Flurrie talks the importance of gathering reliable data and further bridging the disability divide," Forbes, June 16, 2022.
- 52. Danske Bank, "Danske Bank launches Sunflower lanyard scheme to support children with hidden disabilities," November 3, 2020.
- 53. The Valuable 500, "Members," 2023.
- 54. Monika Mahto et al., A rising tide lifts all boαts, Deloitte Insights, January 18, 2022.

About the authors

Jon Valenti | jvalenti@deloitte.com

Jonathan Valenti is a principal in the Financial Services practice of Deloitte focused on Customer Strategy & Applied Design and lead for Deloitte Digital's Applied Innovation offering. He brings 20 years of experience consulting organizations on various strategy projects and transformation programs, including those for growth strategy, customer segmentation, customer experience design, digital transformation, and innovation.

Courtney Davis | coudavis@deloitte.com

Courtney Davis is a principal in Deloitte & Touche LLP providing risk and regulatory advisory services in the banking and capital markets industry, focused on regulatory reform, credit risk management, and capital management. He has more than 20 years of experience and has supported several of the firm's largest clients leading complex engagements for various functions including risk, treasury, finance, and technology.

Val Srinivas | vsrinivas@deloitte.com

Val Srinivas is the banking and capital markets research leader at the Deloitte Center for Financial Services. He leads the development of our thought leadership initiatives in the industry, coordinating our various research efforts and helping to differentiate Deloitte in the marketplace. He has more than 20 years of experience in research and marketing strategy.

Richa Wadhwani | rwadhwani@deloitte.com

Richa Wadhwani is a research manager at the Deloitte Center for Financial Services focusing on banking and capital markets research. Wadhwani researches and writes on a variety of topics, including banks' digital transformation and Deloitte's annual banking and capital markets outlook. She is also a digital-payments enthusiast and analyzes the latest trends in the payments industry.

Acknowledgements

The authors wish to thank **Shivalik Srivastav** for his contributions toward research, data analysis, and overall development of this report. The Center would also like to thank the following Deloitte subject matter specialists for their insights in shaping this report: **Ryan Walters** and **Tara Buffi** from the Deloitte People with Disabilities and Allies community; **Jay Bhatt**, **Nicole Kelm**, and **Wendy Gerhardt** from the Deloitte Center for Health Solutions and Deloitte Health Equity Institute; **Sam Friedman**, **Jill Gregorie**, **Paul Kaiser**, and **Patricia Danielecki** from the Deloitte Center for Financial Services; **Nick Cowell** and **Julius Tapper** from Deloitte Digital; **Alec Roberts** and the Deloitte Diversity, Equity, and Inclusion (DEI) Institute; and **Neil Blefeld** and **Arjun Sharma** from Azure.

About the Diversity, Equity, and Inclusion (DEI) Consulting Services

Deloitte's Diversity, Equity, and Inclusion (DEI) Consulting services change the world by taking a systematic approach to help organizations access and engage a more diverse workforce; build inclusive leadership capabilities; foster a culture of belonging; and embed equity and inclusion across every business function. Learn more about DEI and our services at **Deloitte.com**.

About Deloitte Consulting LLP's Customer Strategy and Applied Design practice

Deloitte Consulting LLP's Customer Strategy and Applied Design practice helps companies navigate a profitable path through new digital customer business models, offering your customers love, new digital experiences, and transformational end-to-end digital strategies. Contact the authors for more information or read more about our customer strategy and applied innovation services on **Deloitte.com**.

Contact us

Our insights can help you take advantage of change. If you're looking for fresh ideas to address your challenges, we should talk.

Industry leadership

Monica O'Reilly

US Financial Services Industry leader | Principal | Deloitte & Touche LLP

+1 415 783 5780 | monoreilly@deloitte.com

Monica O'Reilly leads the US Financial Services Industry group focused on the banking, capital markets, insurance, investment management, and real estate sectors.

Deron Weston

US Banking and Capital Markets leader | Principal | Deloitte Consulting LLP

+1 404 631 3519 | dweston@deloitte.com

Deron Weston is a principal in the Financial Services Banking and Capital Markets practice with 28 years of retail and commercial banking experience.

Jon Valenti

Principal | Deloitte Consulting LLP

+1 917 837 1700 | jvalenti@deloitte.com

Jonathan Valenti is a principal in the Financial Services practice with 20 years of consulting experience focused on Customer Strategy & Applied Design and lead for Deloitte Digital's Applied Innovation offering.

Courtney Davis

Principal | Deloitte & Touche LLP

+1 516 918 7322 | coudavis@deloitte.com

Courtney Davis is a principal with more than 20 years of experience providing risk and regulatory advisory services in the banking and capital markets industry.

Deloitte Center for Financial Services

Jim Eckenrode

Managing director | Deloitte Center for Financial Services | Deloitte Services LP

+1 617 585 4877 | jeckenrode@deloitte.com

Jim Eckenrode is a managing director within Deloitte's Research & Insights team, responsible for defining and guiding the strategy, research agenda and marketplace deployment for the Center for Financial Services and the Center for Regulatory Strategy.

Val Srinivas, PhD

Research leader | Deloitte Center for Financial Services | Deloitte Services LP

+1 212 436 3384 | vsrinivas@deloitte.com

Val Srinivas is the banking and capital markets research leader at the Deloitte Center for Financial Services. He leads the development of thought leadership initiatives in the banking industry, coordinating the various research efforts and helping to differentiate Deloitte in the marketplace.

Richa Wadhwani

Research manager | Deloitte Center for Financial Services | Deloitte Support Services India Pvt Ltd rwadhwani@deloitte.com

Richa Wadhwani is a research manager in the Center for Financial Services team responsible developing thought leadership in the banking and capital markets industry.

Deloitte. Insights

Sign up for Deloitte Insights updates at www.deloitte.com/insights



Follow @DeloitteInsights

Deloitte Insights contributors

Editorial: Karen Edelman, Abrar Khan, Hannah Bachman, Arpan Kr. Saha, Emma Downey, Sarah Jersild

Creative: Natalie Pfaff, Sofia Sergi, Govindh Rai, Jim Slatton

Deployment: Atira Anderson, Nikita Garia, Kelly Cherry, Maria Martin Cirujano

Cover artwork: Natalie Pfaff

About Deloitte Insights

Deloitte Insights publishes original articles, reports and periodicals that provide insights for businesses, the public sector, and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders. Deloitte Insights is an imprint of Deloitte Development LLC.

About this publication

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. None of Deloitte Touche Tohmatsu Limited, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte. com/about to learn more about our global network of member firms.

Copyright © 2023 Deloitte Development LLC. All rights reserved. Member of Deloitte Touche Tohmatsu Limited