

OLDER ADULTS & DIGITAL EQUITY

REDUCING BIAS AND IMPROVING OPPORTUNITIES

A PLAYBOOK



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EXECUTIVE SUMMARY

A ROADMAP FOR INCLUSIVE TECHNOLOGY

In 2024 Aspen Digital, a program of the Aspen Institute, launched an initiative to identify the top challenges older adults face as they navigate an evolving digital world that too often is not built with them in mind. In partnership with the [SCAN Foundation](#), we spoke with top tech companies, community advocates, and a wide range of experts about the many ways data on older adults is (and isn't) used in developing technology, how products are (and aren't) built with communities, and what steps must be taken across the innovation ecosystem to advance equity for this rapidly growing population.

We wrote the Digital Equity & Older Adults Playbook to highlight key challenges and actionable recommendations that came up time and again during these conversations.

KEY CHALLENGES

- The rapid pace of technological innovation risks exacerbating [digital ageism](#), excluding older adults from the benefits of new technologies.
- Incomplete and biased data leads to algorithms that discriminate against older adults, yielding potentially dangerous outcomes, particularly when it comes to key social determinants of health.
- Products are often designed without older adults in mind, creating usability barriers.
- Low trust in technology companies exists among older adults and is one barrier to adoption.
- Older adult communities often do not have access to insights from the data that is gathered on them and systemic barriers to access persist.



TOP RECOMMENDATIONS

This Playbook offers a comprehensive approach to address these issues, with a focus on three key pillars:

1. Inclusive Data for Better Outcomes:

- Invest in collecting data on older adults across diverse identities and experiences.
- Develop standards and practices for data collection, disaggregation, and use.
- Ensure older adults have control over their data.

2. Building for All, Not Just the Majority:

- Include older adults in all stages of design and testing.
- Build diverse design teams and partner with older adult communities.
- Create universally usable technologies that benefit everyone.

3. Transparency, Trust, and Iteration:

- Be transparent about data collection and use practices and share data with communities.
- Build trust through meaningful partnerships and a responsive feedback loop.
- Engage older adults communities post-launch to iterate on products and processes.

THE PLAYBOOK ALSO FEATURES:

- **Maturity Model:** This framework helps organizations assess their progress in including older adults and identify areas for improvement.
- **Case Studies:** Real-world examples illustrate how companies can address the challenges faced by older adults.

HOW TO USE THIS PLAYBOOK



TECHNOLOGISTS & INDUSTRY EXPERTS

Learn how to design and build inclusive products that benefit older adults.



CIVIL SOCIETY LEADERS

Advocate for the needs of older adults in the tech sector and build trust between communities and tech companies.

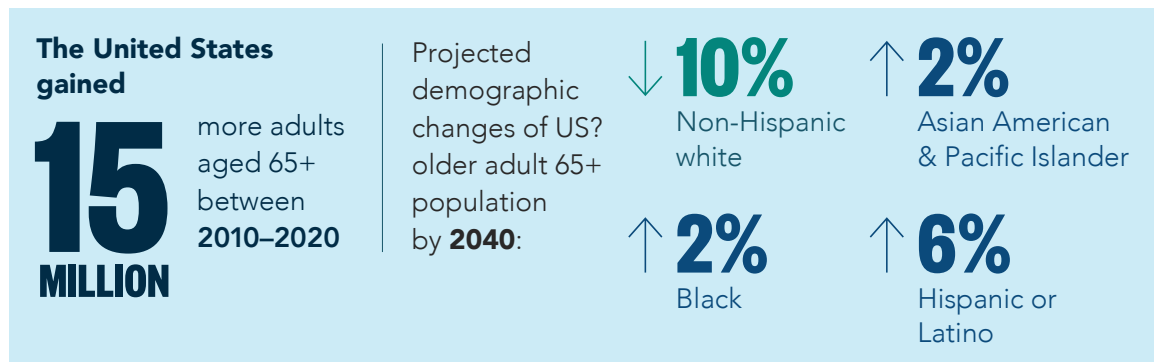


PUBLIC POLICY

Develop policies and programs that promote digital equity for older adults.

CHANGING LANDSCAPE OF OLDER ADULTS

Older adult¹ populations, both globally and across the United States² are not only growing at the fastest rate ever recorded, but are also becoming increasingly diverse (by race, geography, language, country of origin, and beyond). This demographic shift dovetails with a period of unprecedented innovation, propelled in the 21st century by increasingly sophisticated algorithmic models. Such progress provides promising opportunities to reimagine how society can support this growing population—but can also come with great risks if we are not careful.



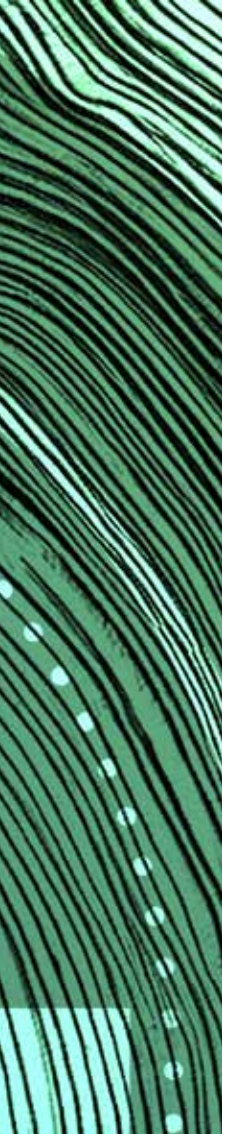
Source: US Census Bureau

The speed at which new technology is developing threatens to exacerbate [digital ageism](#), which is often defined as the lack of “representation of diverse older individuals in the design, development, and marketing of digital technologies and in the actual algorithms³ and datasets that constitute them.” If companies work intentionally to combat digital ageism, innovative solutions can dramatically enhance quality of life for older adults, particularly when it comes to improving their key social determinants of health (SDOH), or the non-medical factors that affect overall health.

¹ “The National Institute on Aging generally describes older adults as people age 65 or older, however, definitions of older adulthood vary.” [Age | National Institutes of Health \(NIH\)](#).

² “The U.S. population age 65 and over grew nearly five times faster than the total population over the 100 years from 1920 to 2020, according to the 2020 Census. The older population reached 55.8 million or 16.8% of the population of the United States in 2020.” [2020 Census: 1 in 6 People in the United States Were 65 and Over](#)

³ “While a general algorithm can be simple, AI algorithms are by nature more complex. AI algorithms work by taking in training data that helps the algorithm to learn” [Artificial intelligence \(AI\) algorithms: a complete overview | Tableau](#)



To achieve these results, innovators must intentionally design products to be inclusive and accessible to older adults. In addition to inclusive product design, the underlying data used to build and train these new systems must also be closely examined through more standardized approaches that are co-developed with impacted communities, academics, and civil society leaders to ensure the information we build our future on is truly representative.

The rapidly increasing diversity of older adults also demands more tailored approaches that specifically address distinct forms of systemic marginalization and exclusion. Older adults in rural areas often express different priorities than those in urban communities. Undocumented older adults face additional barriers to receiving care and support. Older adults who enjoy dependable financial security have different needs than those working paycheck to paycheck. Many older adults experience intersectional forms of exclusion and require an equally intersectional approach to intentional inclusion.

In summary: older adults, now more than ever, are far from a monolith. The recommendations in this Playbook present a comprehensive approach to better serving diverse communities through inclusive, intersectional, and equitable data-driven innovation.



THE MATURITY MODEL AND HOW TO USE IT

Digital equity for older adults is not just a switch that can be flipped; it requires a journey of many steps that can vary widely depending on an organization's capacity, resources, and unique needs. Whether it's a top tech company or a burgeoning startup, whether a company is new to digital equity entirely or already has products and processes that are inclusive of other marginalized communities, they may still be in the early stages of maturity when it comes to specifically addressing the needs of older adults.

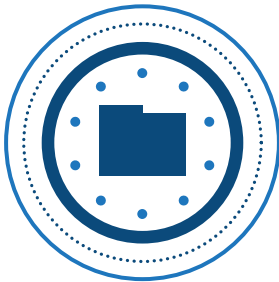
In order to address initiatives that similarly require major transformational change, many organizations in the tech sector and other industries use a "maturity model" approach to gauge their progress and measure success across a variety of functions. To help readers more easily use this Playbook, we used a similar approach that categorizes key recommendations into different levels of organizational maturity so that no matter where readers are in their journey, they can find a good place to start.

Our experts from industry and community outlined what a company or organization that is holistically including older adults across functions and teams looks like. They have also shared which pitfalls or setbacks keep teams from advancing to greater inclusion. Acknowledging that older adult inclusion is an iterative process, stakeholders recommended a tool summarizing how teams across industries assess older adult inclusion with concrete next steps.

At the end of each section readers will find maturity levels ranging from "0" (organizations that are just starting to consider inclusion of older adults) to "3" (mature teams who have older adult inclusion deeply embedded into their processes, research, and iteration of the work). The maturity model reflects actions on a team to help organizations identify where they are with concrete next steps on how to reach the next stage in the process. Reaching a "3" on this maturity model is not a final destination but an integral and continual commitment to the inclusion of older adults as new technologies emerge and landscapes continue to shift.

1

INCLUSIVE DATA FOR BETTER OUTCOMES





OVERVIEW

Incomplete data is one of the biggest drivers of inequitable outcomes for underrepresented communities, including older adults⁴. As a [UN Independent Expert](#) reports, “information about the lived realities of older persons is at best fragmented, at worst, non-existent⁵.” With the swift rise of AI-powered solutions for society’s most intractable challenges, it’s critical that the data used to train these applications accurately represents the current realities facing all older adults across race, gender, socioeconomic status, and geography. Otherwise, we risk only further encoding long-existing biases into emerging technologies.

We see some of the starkest consequences of using non-inclusive data in the field of health innovation. Newer AI models are trained on data that often include older adults as a non-representative “minority” subset⁶. This exclusion of data on older adults can translate into issues as serious as misdiagnoses and other potentially harmful recommendations for treatment. In other words: a dataset that disproportionately focuses on younger adults leads to products and services that only work properly for younger adults⁷.

Not addressing bias in data results in biased algorithms, artificial intelligence, and other emerging technologies trained on incomplete or inaccurate information. This is illustrated in two specific cases involving denied health coverage for older adults based on algorithm-informed decisions.

NaviHealth, a subsidiary of UnitedHealth Group, developed⁸ an AI-enabled algorithm that was supposed to predict Medicare Advantage patients’ healthcare service use based on demographics and medical history. However, the algorithm was found⁹ to underestimate patients’ needs and erroneously deny post-acute care to this population of older adults. With an error rate

⁴ “Missing data are a special challenge in clinical aging research because older adults are more likely than younger adults to experience health and functional problems that limit data collection.” [Missing Data: A Special Challenge in Aging Research - PMC](#)

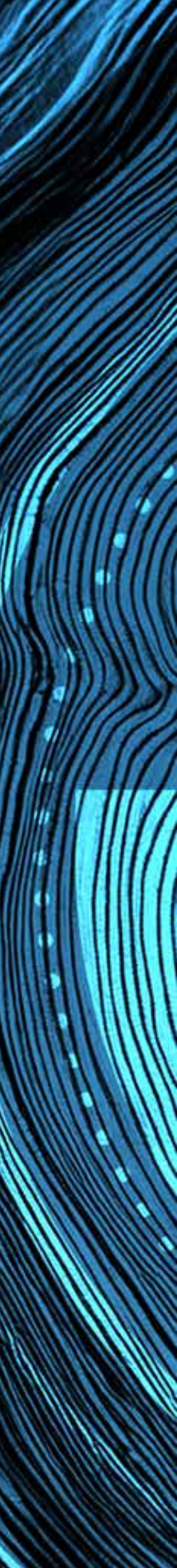
⁵ [Expert: “flagrant” lack of data on older persons impacts their human rights | OHCHR.](#)

⁶ World Health Organization’s (WHO) Report “Global Campaign to Combat Ageism: Ageism in Artificial Intelligence for Health.”

⁷ [WHO POLICY BRIEF](#)

⁸ [Denied by AI: How Medicare Advantage plans use algorithms to cut off care for seniors in need](#)

⁹ <https://aboutblaw.com/bbs8>



up to 90%, this led to patients missing needed rehabilitation services, in some cases leading to death. Data quality was likely a factor at play, and more complete and representative data might have improved the accuracy of the algorithm's predictions.

Similarly, a class action lawsuit against Humana alleges that it used "AI to override doctors' recommendations and deny care owed to elderly patients under their Medicare Advantage Plans." This example highlights the potential consequences of using algorithms that do not take into consideration older adults as the plaintiffs included "a woman over the age of 85 whose coverage for rehabilitation for a leg fracture was allegedly terminated prematurely, and a woman who, along with her family, allegedly incurred more than \$24,000 in medical expenses for treatment that Humana denied¹⁰." This example also calls into question whether the harmful outcomes are endogenous to the algorithm itself due to bad data and bias built into the code or if harms are due to gross negligence and nefarious business decisions in the use of demonstrably damaging technology. Although we cannot change the heinous disregard for harms caused as a business practice, our first case study outlines actionable steps to take to diversify data sets and improve technology to avoid harms where possible (and our last case study in this playbook addresses trust-building with communities).

¹⁰ [Humana's Alleged Use of AI to Deny Claims Draws Class Action](#) "Health insurer Humana Inc. is facing a class action alleging it used artificial intelligence to deny elderly patients care, the latest legal action over the use of advanced technology in making care determinations. Filed in the US District Court for the Western District of Kentucky, the complaint accuses Humana of using AI to override doctors' recommendations and deny care owed to elderly patients under their Medicare Advantage Plans. The AI, the lawsuit said, renders predictions Humana knows to be "highly inaccurate," though the insurer "continues to systemically use this flawed AI model to deny claims because they know that only a tiny minority of policyholders" will appeal."



CASE STUDY

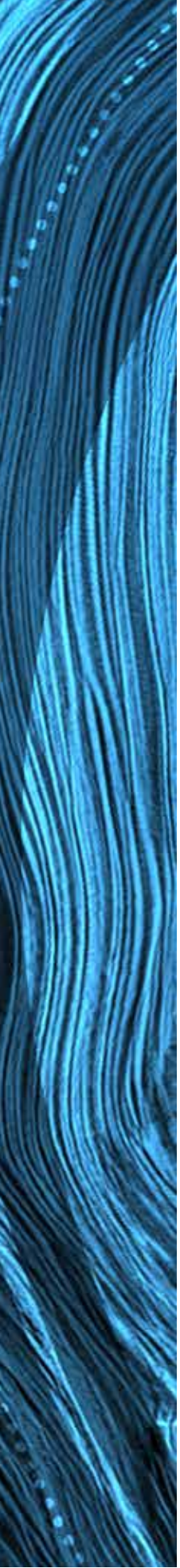
Incomplete healthcare data can lead to inequitable access to care and health outcomes for marginalized older adults

In this case study, we have synthesized and anonymized all our cross-sector interviews into this case study of a company we are calling “QuantumCare,” which is a business to business (B2B) company selling software-as-a-service (SAAS) products that offer machine learning solutions for health care providers. “QuantumCare” is trying to improve its outcomes for older adults.

CHALLENGES

“QuantumCare” has been training its algorithms on health care data to provide its clients with outcomes that are efficient and effective. However, “QuantumCare” clients at health systems across the United States have seen less than accurate results for care determinations for older adults. The “QuantumCare” team has examined its training data and use of its tools and found these two overarching challenges:

- **Decades of incomplete data:** compounding effects of years of underinvestment and structural exclusion of data from older adults- especially from marginalized groups- whether intentional or unintentional resulted in training sets that contained many forms of bias.
- **Unmonitored decision making:** when technology becomes a black box obscuring the rationale behind decision making, it can increase unfettered bias to corrupt the outcomes. If algorithms trained on biased data are overriding decisions made by healthcare providers or other practitioners, they may introduce an number uninterrupted biases. While the goal is



to reduce bias in algorithmic decision-making to ensure that technology is used as a tool to create a more [fair data future](#)¹¹, this requires a process of transparency, iteration, and accountability.

CONSEQUENCES

“QuantumCare” explored the consequences of having incomplete older adult data in its training set. Other than losing clients and paying massive legal fees for unfair business practices, the team found the following major negative outcomes for not considering older adults in their product development process:

- **Inequitable outcomes:** Individuals and communities who were supposed to benefit from the emerging technologies experienced varying and untrustworthy outcomes. Technologies that promised to save time, increase efficacy, and ensure accuracy, resulted in real and lasting harm. In some cases, this may just be a longer wait time for some older patients. However, in other cases of NaviHealth and Humana outlined above, this can result in serious financial harm, physical distress, or even death.
- **Erosion of trust:** As a result of not investing in better training data and ensuring checks for bias, these companies experienced a loss of reputation among patient populations. Trust¹² is one of the most important metrics of success and one that is hard earned and even harder to rebuild.

¹¹ The Aspen Digital team recently convened a group of 30 experts “over a period of 7 months to align on its understanding of the issues and opportunities, and to discuss the possibilities to build a fair data future at a time when data has become the critical fuel for innovation.” To read more about this work and findings from this group of experts, visit: <https://www.aspendigital.org/report/building-a-fair-data-future/#recommendations>

¹² “Trust is the foundation that allows an organization to take responsible risk, and, if it makes mistakes, to rebound from them... Without trust, credibility is lost and reputation can be threatened.” <https://www.edelman.com/trust>



THE PATH FORWARD

Organizations must commit to greater investment in supplemental data sets that include older adults- across identities and experiences. Investing in more complete and granular datasets for older adults improves the quality of the data available to technologists and the outcomes for the communities at large.

Emerging technology offers an opportunity to create more granular data sets that accurately represent all older adults. Some are trying to do this by turning to [synthetic data](#); however, there is an ongoing debate about how accurately it can represent diverse and intersectional identities. While others are using significant advancements in computing capabilities that allow them to parse data more efficiently and may be used to fill information gaps for older adults. Advancements in computing technologies aside, the greatest takeaway here is to ensure that there are budgets, experts, and partnerships in place to ensure companies have comprehensive and intersectional older adult data.

Organizations should ensure they are specifically using data about older adults that accurately represent their experiences. When collecting data on older adults, it is imperative to have a clear set of definitions for who is included, what level of disaggregation to use, and what are the standards for involving “hard to reach” communities.

DATA GUIDELINES DEFINITIONS AND DISAGGREGATION PRACTICES

From our expert roundtables and industry consultations, the Aspen Digital team found that there is a lack of alignment on defining “older adults”. A suggested next step here would be a landscape analysis of what is considered an older adult across departments, policies, and industries as well as a map of how the definitions of older adults are disaggregated across intersectional identities. Lastly, a data transformation guide on how to take previous age data that may be bucketed different or have incongruent parameters into a more congruent. We believe this would allow for more interoperability, standardization, and even cross-industry learning about how to serve older adults.



TECHNOLOGISTS

- Invest in data collection of older adults across identities by dedicating a portion of budgets.
- Partner with civil society leaders representing marginalized groups of older adults to provide the right level of data disaggregation and qualitative context.

CIVIL SOCIETY

- Highlight intersectional concerns with older adult data and access to technology. For example, if an organization focuses on rural Americans, consider including a section on older rural Americans in the research and report.

PUBLIC POLICY

- Create an older adult and Tech Futures taskforce¹³ to ensure consistent engagement and inclusion of older adults across agencies.
- Increase data collection efforts on older adults in underrepresented communities.
- Establish standards and practices around the collection, disaggregation, use, and sharing of data pertaining to older adults at the state and federal levels.

¹³ Acknowledging the efforts of the Department of Justice and many others in starting work on Elder Justice <https://www.justice.gov/elderjustice> and the Congressional Equality Caucus's Aging and Older Adult taskforce <https://equality.house.gov/aging-and-older-adults-task-force> and recommending a tech focus in the roadmap of these organizations

INCLUSIVE DATA FOR BETTER OUTCOMES

MATURITY MODEL

0

Ad-hoc data collection with no defined parameters for who is an older adult and unintentional variance across the org's work.

1

Basic data collection practices are established, with no specific call outs for older adults.

2

Defined standards for data collection with some consideration for inclusivity of older adults.

3

Standardized data collection practices ensure accurate representation of older adults.

Older adults are able to opt out of data sharing and have full access to their insights.

Lack of awareness or consideration of potential ageism in data.

Some initial recognition of potential bias in data.

Efforts to identify and mitigate bias in data related to older adults.

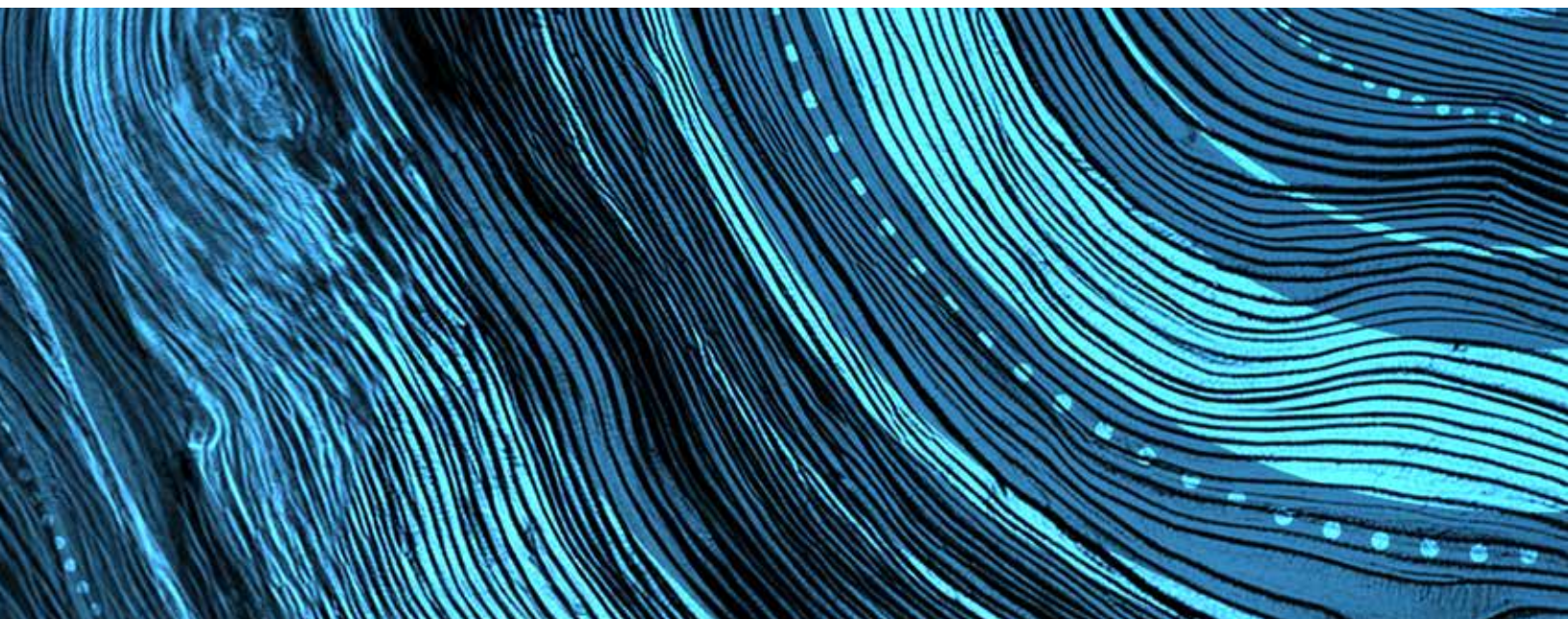
Clear definitions and checkpoints exist to identify and address bias throughout the data lifecycle (collection, analysis, use).

Data used for new technologies may be fragmented, outdated, or non-existent for older adults.

Limited efforts to incorporate data on older adults, potentially relying on historical data.

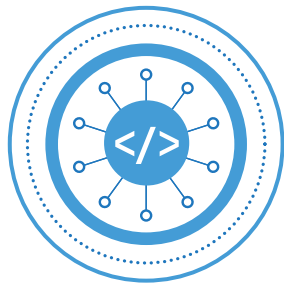
Start of data collection specific to the needs of older adults.

Comprehensive data sets on older adults inform the development, testing, and deployment of new technologies.



2

BUILDING FOR ALL, NOT JUST THE MAJORITY





OVERVIEW

In today's race to build new technologies that can reach as many people as possible, certain groups, like older adults, often end up being excluded. This is more prevalent in companies that lack age diversity in their employees, testing, and partners. A literature review in [The Gerontologist](#) found that "only 10% of studies involved older persons in all stages of the design¹⁴" of new technology. Exclusionary design in the digital realm is an extension of broader systemic barriers that lead to a world not built for all communities. By including older adults in every stage of the design and testing process, companies can identify blockers that prevent older adults from successfully using a product early on, which will increase adoption of the product and overall satisfaction of older users.

Product teams can better recognize ageist biases and unintended impacts throughout the product lifecycle by including experts with experience building for older adults into their team. Having older adults on their team is as critical as having experts with specialized technical skills. The team at LinkedIn has even created a "Wisdom¹⁵" employee resource group (ERG) to promote a sense of belonging for older adults across their workforce.

In addition to seeking experts for their teams, external engagement with older adults and community leaders in every stage of the design process of new technology is critical to ensuring products and features don't omit this growing user group. In the case study below, we have outlined what this looks like for our civil society and industry experts.

Engagement should never be a one-time, transactional, or extractive exercise or it will erode the trust companies seek to build with older adults. Beyond the bottomline, the negative feedback loop of not building with older adults creates an environment where this growing and important community is left behind as technology continues to progress.

¹⁴ [An "ultimate partnership": Older persons' perspectives on age-stereotypes and intergenerational interaction in co-designing digital technologies - ScienceDirect](#)

¹⁵ <https://www.linkedin.com/pulse/celebrating-age-diversity-linkedin-our-employee-resource--1c/>



CASE STUDY

Building with older adults across platforms and levels of access

In this case study, we have synthesized and anonymized a number of real-world experiences into a composite example for a company we are calling “TransportTech.”

CHALLENGES

“TransportTech”, a rideshare company, noticed aberrations in older adult data. In initial research, the team thought that older adults were largely not using the app. Upon deeper exploration, “TransportTech” found that older adults wishing to hail a ride often had other users call rides for them instead of using the app themselves. The team honed in on two key barriers:

- Lack of access to the app due to systemic limitations like outdated or no smart devices
- Lack of digital literacy around using the app

The underlying problem here was the omission of a growing user base. With the market size of older adults growing year by year, not building with older adults would result in larger gaps in a key demographic over time. A result of this omission is a massive gap in experience for older adults who remain underserved.

CONSEQUENCES

Failing to include older adults in product development and deployment means missing out on optimal engagement from a large and growing sector of the population. The potential shortcomings that the “TransportTech” team brainstormed included:

- **Exclusionary app design:** Features were difficult for older adults to navigate due to limited tech experience as well as physical and other limitations.



- **Inaccurate wait time estimates and missed pick-ups:**
Because data on older adults was not collected accurately, the resulting algorithms may not account for factors relevant to older adults. This leads to frustrating or even potentially dangerous scenarios of failed transportation.

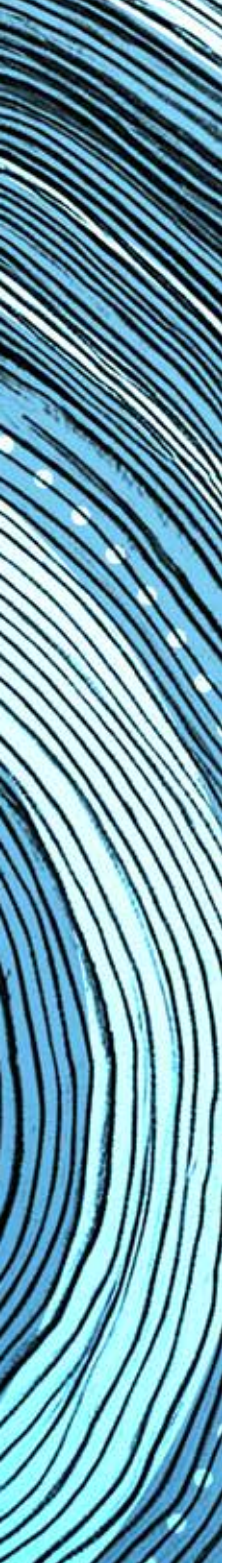
Because other users called rides for older adults, inaccuracies were introduced into the data of other user groups as well, resulting in multiple groups with inaccurate data. “TransportTech” teams were not able to differentiate the challenges and needs of older adults because older adult data was mixed in with the data from the users that called the rides on their behalf.

Serving older adults became a clear business imperative for the team to expand into a rapidly growing and previously underengaged user group. As a result, one of the new goals of “TransportTech” was to create accurate, authentic, and enjoyable experiences for the underserved demographic of older adults.

SOLUTIONS

“TransportTech” implemented the following solutions after engaging older adults across key user groups resulting in the ability to track rides taken on the platform and to allow for broader access:

- **Including older adults in research:** The team gathered data on the specific needs and challenges faced by older “TransportTech” users. Aligned on the goal of including older adults, this team researched what made the app successful with existing older adults users. They included older adults as a segment in broader research and invested deeply in qualitative user research to understand what were the needs, challenges, and opportunities for this user segment.
- **Developing age-neutral and accessible interfaces:** The team designed user interfaces (UI) that are clear, easy to use, and accessible for a wider range of ages and abilities. Ensuring an intuitive user experience (UX) came from engaging in usability testing across segments of older adults. The team employed an intersectional approach to include older adults with limited English proficiency, visual impairments, or low dexterity, to name a few.



- **Creating greater access to the app through alternate methods:** After partnership and research, “TransportTech” created features to allow for users to call for rides via websites or to allow for other users to call rides for the older riders in their lives. “TransportTech” identified key gaps through their research: limited data availability, access to older devices, and calling via phone or using a public computer instead of a personal smart device to set up a ride. The team then tested their new solutions for usability through alternate platforms for all the gap scenarios that they found in their research until their solutions were able to bridge the challenges where the older adult would originally leave the service.

THE PATH FORWARD

In the case of “TransportTech,” building with older adults not only improved the experience and utility for older adults, but also grew the user base by creating access for other demographics. This process created technological [curb-cut effects](#) or positive externalities allowing other users with similar needs to access to the app to call rides through alternate methods. This grew user segments who did not have the means to own a personal smart devices, users who had limited data plans, etc. Calling a ride for someone else and tracking the ride accurately had several secondary beneficiaries including children, people with disabilities, and other riders whose engagement was previously misidentified.

Having this data, as well as deep and continued design partnerships, is critical in ensuring that algorithms, products, features, and community systems are building off the real lived experience of older adults. In the next section on trust and transparency, we explore the third and pivotal part of our findings: partnerships and trust as it relates to how data is being stewarded, how users are being considered post-launch, and how the community gaps are being invested in holistically to bridge the digital age gap.



MARKET SIZING THE FIRST STEP TO INDUSTRY INCLUSION

Our industry experts noted one of the initial hurdles for advocating internally for the expansion of a company's user base is an analysis of the market size and demand factors of the older adult customer segment.

Experts have also identified that this resource, if available from trusted civil society and academic partners, would save time in the first step towards older adult inclusion. This third-party validated tool would expedite their internal process of approvals and strategy decisions. The Aspen Digital team sees this as a potential follow-up project that would yield great results in long-term systemic inclusion of older adults.

TECHNOLOGISTS

- Create more frequent opportunities for co-design e.g., leverage “digital navigators” who are trained in design practices to offer insight
- Disaggregate data beyond the dominant groups of older adults

CIVIL SOCIETY

- Organize specific points of feedback for technologists to consider when building for older adults

PUBLIC POLICY

- Fund research on which groups have systematically been left out of the product design process
- Create a ranking, or “Bias Score”, of inclusion or bias built into products to create transparency and consumer protection

BUILDING FOR ALL, NOT JUST THE MAJORITY

MATURITY MODEL

0

Designs primarily focus on younger demographics or the majority user base.

Lack of age diversity in design teams, testers, and partners.

Risk of excluding older adults due to unintentional age bias.

1

Starts to acknowledge the importance of considering older adults in design.

Limited efforts to identify and mitigate age bias in design choices.

New technologies may still have usability barriers for older adults.

2

Integrates older adults into multiple stages of the design process (e.g., ideation, testing) with proactive efforts to identify and address potential age bias in design.

Design teams begin to reflect a wider range of ages.

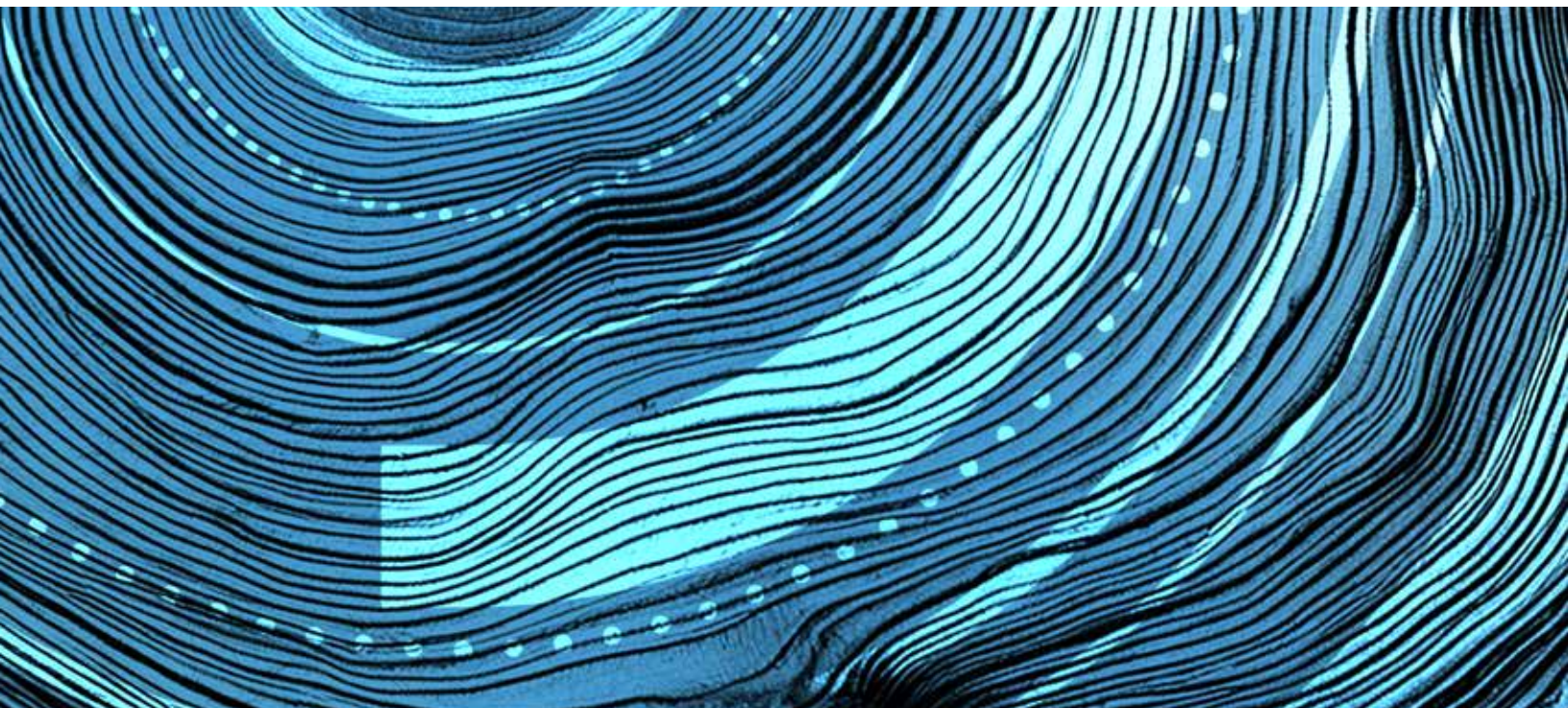
New technologies are increasingly usable for older adults.

3

Older adults are consistently included throughout all stages of design and testing.

Design teams are diverse in age and actively seek input from older adults.

New technologies are designed to be universally usable, benefiting everyone regardless of age or other intersectional dimensions of identity.



3

TRANSPARENCY, TRUST, AND ITERATION





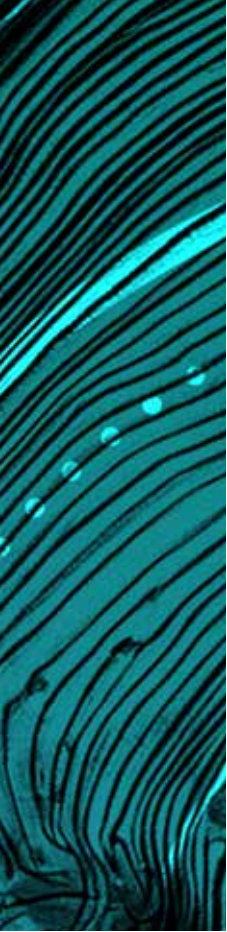
OVERVIEW

While no new technology is flawless upon launch, many communities harbor mistrust towards the companies¹⁶ who collect data. One method to mitigate the deficit of trust is increased transparency about a company's iterative product development process, stewardship of data, and initiatives to allow for greater community access to data. In discussing the role trust plays in the success of a product with technology experts, it was generally agreed that by building trust through a deeply collaborative approach and a comprehensive feedback loop, companies can proactively recalibrate products to address challenges like unintended biases and improve the use of tech for marginalized groups.

Community feedback and responsive, iterative improvement is an important step towards establishing a solid foundation of trust within the community. After launching a product or feature, continued inclusion of older adults as a distinct user group in post-launch activities and analytics will help ensure optimal adoption. Many of our industry leaders flagged this post-launch engagement as a critical moment of refining strategy bolstering retention rates and net promotion to peers. Post-launch engagement and demographic-aware product marketing can turn a well-researched and well-built product into a widely-loved product.

During the consultations, industry experts stated that a key component to successfully including older adults is collecting and analyzing feedback from diverse subsets of older adult community groups. For example, older adults of color, older adults in rural areas, and older adults with accessibility needs, etc. who may have been included in user research during product development should also be consulted in the post-launch phase to ensure that the tools and features are adequately meeting the needs of older adults.

¹⁶ The Brookings Institute has conducted "The American Institutional Confidence poll" ("AIC") for the past five years and, "discovered a marked decrease in the confidence Americans profess for technology and, specifically, tech companies—greater and more widespread than for any other type of institution" <https://www.brookings.edu/articles/how-americans-confidence-in-technology-firms-has-dropped-evidence-from-the-second-wave-of-the-american-institutional-confidence-poll/>



It is important to avoid a transactional or extractive relationship with communities. Organizations can create bidirectional benefits by providing report-outs to any community organizations who inform the work. Communities should have access to their data. With access to more of their data, communities have an opportunity to build stronger, healthier lives independent of any one company or organization while also increasing their general understanding of their members, which in turn will benefit the organizations and companies seeking feedback, leading to more inclusive products.

Building trust with user groups like older adults does not stop at launch and evaluation. Many practitioners found systemic barriers during this post-launch phase that they were able to take back to their teams to invest in mitigating holistically. These can include investing in rural broadband access, grants for physical products, or funding research to allow for new technologies to bridge the systematic age gaps identified. Examples of these from companies mature in their journey of trust building are outlined in the case study below.



CASE STUDY

Post-launch strategies for trust-building with older adults

In this case study, we have synthesized and anonymized all our cross-sector interviews into this case study of a company we are calling “Marketplace,” which is hoping to have older adults use its multiple products and features in their daily lives.

CHALLENGES

Despite user research, low adoption rates led “Marketplace” to reevaluate long-term investments in community engagement to earn trust among older adults- especially those of marginalized backgrounds who made up most of the gap in adoption. Here were some of the challenges that “Marketplace” faced in this process:

- **Inconsistent definitions of older adults:** The lack of a standardized definition across industries was a challenge to tailoring data collection and outreach efforts to specific needs. This lack of shared definitions resulted in reduced interoperability across teams at “Marketplace” because each team used different parameters for older adults creating asymmetry between the data. In essence, the team could not compare the experience of older adults from one feature to another. One team defined older adults as “50+” and another defined older adults as “65+.” The group of older adults ranged from whichever starting parameter age the team used to an infinite ending parameter, even though the experience of a 50 year old is vastly different from the experience of a 105 year old user.
- **Post-launch adoption:** Encouraging older adults to adopt new tools and resources developed by “Marketplace” was challenging due to external systemic factors like a lack of digital literacy or a lack of access to technology.



CONSEQUENCES

- **Limited user base:** Without established trust, older adults were hesitant to use “Marketplace” products and services affecting overall user growth and creating a barrier for a group from accessing products and services.
- **Ineffective solutions:** Without a deep understanding of older adult needs, “Marketplace” products did not address their specific challenges, leading to frustration and abandonment of their platform.
- **Lack of trust in data stewardship:** Without insight into how data was being used by “Marketplace,” users were hesitant to share demographic data resulting in a deficit of information to better serve older adults.

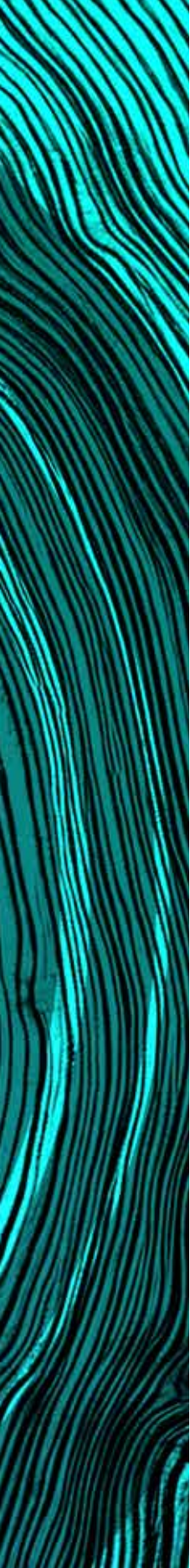
THE PATH FORWARD

“Marketplace” built trust by investing in long-term partnerships with local organizations that serve older adults locally and globally. This fostered community engagement and empowers local groups to advocate for the needs of their populations.

“Marketplace” focused specifically on older adult communities who have systematically been underrepresented to ensure they were focusing on the margins instead of building again for the majority. “Marketplace” addressed the systemic lack of digital literacy and tech access directly to ensure a favorable environment for their product, to build community trust with their brand, and to help reduce long-term structure barriers for older adult communities.

Integral to building trust are:

- **Data protections and privacy as a major component of trust:** Ethical data stewardship is a key component of trust building with communities. Major data breaches and histories of misconduct by data brokers has created an environment of massive distrust. Having transparent, easy to understand, and clear points of engagement for opt-out are just the starting point for creating trust around data protections.
- **Community and individual access to data:** “Marketplace” understood that part of supporting a community and working in a non-transactional partnership is allowing access to the valuable resource of insights from data. “Marketplace” was



gathering data from the community for its marketing and product development purposes, and by allowing communities to not only access the data being gathered about them, but also returning to community leaders with organized insights on how to overcome systemic barriers using the data was a massive component in the success of the product launch and adoption campaign by “Marketplace.” “Marketplace” was able to regain the trust of the community members, boost its demographic survey response rates, and successfully pinpoint and fix where the gaps in use of their product by older adults. Additionally, it was able to work with the community to provide resources to address some of the larger systemic barriers to use for the older adult community.

As a result of these trust-building efforts, “Marketplace” refined their product to better serve the community that it intended to reach and created a product that not only met the minimal viable standards but the minimum lovable standards. These efforts yielded a product that older adults across identities were able to access, adopt, and enjoy. Post launch engagement and iteration was seen as a continual process for “Marketplace” and their investments and engagements in communities continue to today.

In alignment with previous case studies in the earlier sections on [inclusive data](#) and [building for all](#), “Marketplace” also took into consideration:

- **Standardizing definitions:** “Marketplace” collaborated with industry leaders to establish a clear and uniform definition of older adults for data collection and outreach purposes. Here, “Marketplace” took into consideration the other dimensions of identity needed in the outreach of each product.
- **Intersectional data analysis:** “Marketplace” moved beyond standard demographics to analyze data through an intersectional lens, considering factors like language, cultural background, and physical limitations to create a more nuanced understanding of older adults. Not only did “Marketplace” look at language differences, but it also dug one level deeper to accents and affected speech. Similarly, it not only added in the context of disability, but also looked at considerations such as “frailty” that play a role in an older adult’s experience and adoption of the product.



FELLOWSHIP OLDER ADULT “DIGITAL NAVIGATOR” PROGRAM

Another project that has been highly requested is the development of a “digital navigator” program that specifically bridges the divide between tech and older adult communities. Experts across backgrounds have expressed interest and excitement in the creation of an Aspen Digital program developing community leaders or “digital navigators.” This potential project would result in community leaders who are trained in design and product development practices to offer tactical insight into the industry efforts while having lived and community leadership experience from marginalized backgrounds.

TECHNOLOGISTS

- Center diverse groups of older adult communities in and after product development by ensuring older adult research participants, team members or consultants, and civil society organizations
- Increase transparency around how data will be used and clear consent from users
- Accountability in post-launch engagement and investment

CIVIL SOCIETY

- Identify the key segments within communities that are left out of products and connect interested and invested companies to these communities
- Work with companies to shift from transactional to involved long-term investment in communities

PUBLIC POLICY

- Community Design Monitor¹⁷: monitor how companies are engaging communities in their work to ensure that the engagement is neither transactional nor creates a negative or predatory targeting of certain communities through their insights gathered.¹⁸

¹⁷ An example of this work in practice may look like the Federal Trade Commissions work on tech accountability: [FTC and Justice Department Host First Strike Force on Unfair and Illegal Pricing Meeting](#)

¹⁸ An example of this work in practice is Airbnb's project lighthouse <https://news.airbnb.com/sixyearupdate/>

TRANSPARENCY, TRUST, AND ITERATION

MATURITY MODEL

0

Minimal post-launch user feedback mechanisms. No specific focus on collecting feedback from older adults.

Risk of missing crucial insights into how older adults interact with the technology.

Limited ability to identify and address unintended biases or usability issues impacting older users.

1

May include some older adults in feedback loops, but not consistently.

Limited analysis of feedback data specific to older users.

Engages with research from diverse civil society groups representing older adults.

2

Proactive approach to collecting feedback from diverse older adult groups (e.g., accessibility needs, success rates, etc.). Analyzes feedback data to identify and address issues impacting older users.

Regularly iterates on the technology based on user feedback.

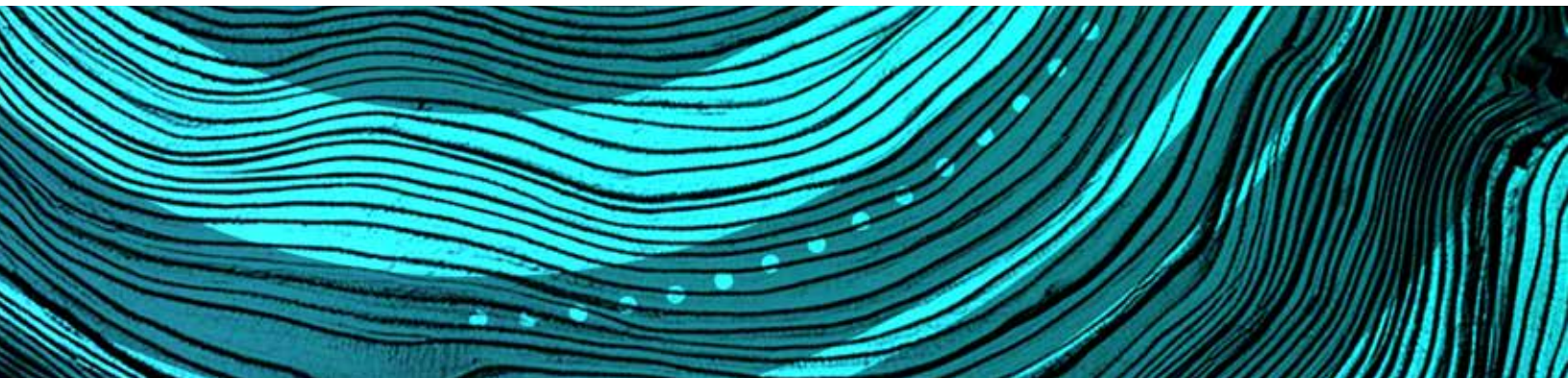
Starts to build trust with older adult user communities and organizations; establishes a roadmap for investment in systemic change from sponsorships to removing barriers to access for older adults.

3

Robust feedback mechanisms capture insights from various older adult demographics with a variety of methodologies to allow for both broad quantitative and deep qualitative insight.

Transparent communication with user communities about product development and changes. Proactive efforts to address identified gaps in usability or inclusivity. Strong trust established with older adult user communities through ongoing engagement and long-term investment.

Communities have access to research results and insights about their communities to better address gaps and needs and to avoid one-sided transactional data extraction.





CONCLUSION

Throughout our conversations with a variety of stakeholder groups we consistently heard a common vision of a future where technology serves as an enabler, empowering older adults to live independently, participate fully in society, and enjoy a high quality of life. Older adults face unique challenges in navigating an increasingly digital world- and these gaps will widen if they are not taken into consideration at every step of the innovation cycle. This Playbook highlighted key areas where we can make a significant impact: diverse and disaggregated data, inclusive and community-centered design, and trust built through transparency and iteration.

Another overall message we received loud and clear: we must together move beyond a one-size-fits-all approach and recognize the diverse needs of older adults. By collecting and utilizing representative data, we can develop products and services that truly meet the needs of this growing population. Shared definitions and shared standards around older adult data will get us to this point of interoperability.

Finally, building trust is essential for successful implementation. Transparency, open communication, and ongoing engagement with older adult communities are crucial for building lasting relationships. The goal is to eliminate systemic barriers to access while creating products that increase older adults' ability to equally access goods and services regardless of identity, race, ability, geography, etc.

This playbook is a starting point, not a definitive guide. We encourage organizations to adapt and build upon these recommendations to create their own path towards digital equity for older adults.

By working together, we can create a future where older adults can fully participate and thrive.



ABOUT US: ASPEN DIGITAL

A program of the Aspen Institute, we bring together thinkers and doers from around the world to uncover new ideas and spark actions that empower communities and strengthen democracy. We engage and advance perspectives from industry, government, and civil society to find clarity in the chaos of public discourse and chart a path forward.

To connect about this work, email
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ABOUT OUR FUNDER: THE SCAN FOUNDATION

The SCAN Foundation, an independent public charity devoted to transforming care for older adults in ways that preserve dignity and encourage independence, for funding this project.

The SCAN Foundation envisions a society where all of us can age well with purpose. They pursue this vision by igniting bold and equitable changes in how older adults age in both home and community.

The Foundation prioritizes communities that have been historically marginalized with an emphasis on:

- Older people of color;
- Older adults with lower incomes (duals, near duals, and lower-middle income — below 400 percent of the federal poverty level); and
- Older residents of geographically underserved areas.

We know that if we improve the aging experience for these priority populations and their networks of support, it will improve for everyone.

To connect about this work, email
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METHODOLOGY

This project was executed from January to August 2024 with the five stages outlined above. Each of these stages involved significant input from the experts below.

PRIMER → **CONSULTATIONS** → **ROUNDTABLE** → **PLAYBOOK**

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Thank you to the following teams and experts for taking considerable time to speak with our team about their work with older adults or their own experiences. Their insights on the challenges, opportunities, and solutions available to technologists to include older adults in their work are the basis for this document.

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