

SENIOR CITIZENS TECH HAVEN · NAKURU, KENYA

The Digital Divide: Then vs. Now

*What 30 Years of Global Aging Data Tells Us
About Kenya's Senior Tech Gap*

A Research Report & Policy Analysis
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An older Kenyan man and his adult daughter looking at a smartphone together — the everyday moment this report is about.

TL;DR

Kenya has 78.4 million mobile SIM subscriptions and 92.9% smartphone penetration — yet national internet usage sits at roughly 35% of the population (Communications Authority of Kenya, Q2 FY2025/26; KNBS 2023/24 Kenya Housing Survey), and Kenya still has no official data on internet use specifically among adults 45 and older. The infrastructure is here. The devices are here. What appears to be missing is training, trust, and tools designed for older adults.

This report draws on 30 years of data from America's Health and Retirement Study (HRS) — the world's longest-running aging survey — to argue that Kenya does not need to wait 12 years to close its senior digital divide. Senior Citizens Tech Haven was founded in Nakuru in 2024 to test exactly that hypothesis.

The Paradox Hiding in Plain Sight

92.9% of Kenyans have smartphone access. National internet usage sits at only about a third of the population. That is not, primarily, a connectivity problem. It looks like a literacy problem. A trust problem. A design problem.

The Communications Authority of Kenya (CA) reports that mobile money penetration hit 98% by December 2025, with 51.4 million subscriptions. Mobile broadband subscriptions reached 51.5 million. 4G subscriptions alone hit 44.2 million. 5G users consume an average of 46.4 GB per month — more than three times the 4G average of 14.1 GB.

Yet the same period's data — and the 2023/24 KNBS Kenya Housing Survey, run jointly with CA — show internet usage skewing heavily toward the young: 59.3% among 25–34 year-olds, 46.6% among 18–24 year-olds, with older cohorts consistently described as “far behind.” **Kenya does not currently publish an official internet-use figure specifically for the 45-and-older population** — a gap worth naming directly. What the available data does show clearly: older Kenyans — facing rising chronic disease burdens, pension insecurity, and social isolation — are being left offline at the exact moment digital tools could help them most.

This is not unique to Kenya. But Kenya's story is different in one critical way: the infrastructure exists to leapfrog. What is missing is the intervention.

What America Took 12 Years to Learn — And What Kenya Can Potentially Skip

The Health and Retirement Study (HRS) at the University of Michigan has tracked approximately 20,000 Americans aged 50+ since 1992. It is the world's longest-running longitudinal survey of aging, funded by the National Institute on Aging and the Social Security Administration. Its data directly informs US retirement and healthcare policy. HRS ran three technology modules that map directly to Kenya's current challenge.

2002: The Baseline — “Do You Use the Internet?”

In 2002, HRS asked a simple question: Do you use the internet or email? The answer, for most Americans over 65, was no. Pew Research Center's own year-by-year tracking shows that in 2002, just 18% of Americans aged 65+ had internet access — rising to 22% by 2003, and 25% by 2004.

The barriers were not mysterious. They are the same ones community workers hear from older Kenyans today:

- “I don't know how to use it.”
- “I'm afraid I'll break something.”
- “I don't see why I need it.”
- “It's too expensive.”
- “I don't trust it with my money.”

2012: The Barrier Audit — Why Seniors Still Said No

By 2012, America had spent a decade building broadband infrastructure. Smartphones were ubiquitous. Facebook had 1 billion users. And yet HRS Module 3 — “Technology Use: Barriers and Benefits” — revealed that roughly half of Americans over 65 still remained offline (Pew's April 2012 data put the figure at 53% online, the first time it crossed the halfway mark). The module, led by researchers Lindsay Ryan, Jacqui Smith, James Jackson, and Toni Antonucci, asked not just if seniors used technology, but why

not. The barriers fell into predictable categories:

Barrier Category	What American Seniors Said	Relevance for Kenya
Skills gap	"I don't know how"	Training must start at zero, not assume prior knowledge
Trust deficit	"I'm afraid of scams"	Cybersecurity literacy must be module one, not an afterthought
Relevance gap	"I don't see the point"	Training must show immediate, practical benefit (M-Pesa, WhatsApp calls, telehealth)
Physical barriers	"The text is too small"	Device settings and accessibility must be taught, not assumed
Cost concerns	"It's too expensive"	Even with 92.9% smartphone penetration, data bundles remain a perceived barrier

The 2012 module also found something encouraging: once seniors started using technology, satisfaction was high. The problem was never the technology itself. It was the on-ramp.

2014: The Health Turn — When Technology Became Medical

By 2014, HRS Module 4 — "Health Behaviors" — documented a shift. Technology was no longer just about email and Facebook. It was about health management. Researchers Laura Zettel-Watson and Melanie Horn Mallers asked seniors about phone calls, text messages, email, and video chats for health management; social media and health websites; mobile health apps; and brain games and cognitive training. This is where Kenya's story diverges from America's — and where the opportunity lies.

Kenya's Potential Advantage: The Leapfrog Moment

America took roughly 12 years (2002–2014) to move from basic internet adoption to health-integrated technology use among seniors. Kenya may be able to compress that timeline. Here is why:

1. The Devices Are Already in Pockets

America in 2002 had to build from near-zero senior computer ownership. Kenya in 2026 has 48.7 million smartphones connected — 92.9% penetration. The device access barrier appears substantially less significant than it was a decade ago, though device quality, shared ownership, and rural coverage gaps still matter.

2. Mobile Money Proved Seniors Can Trust Digital

M-Pesa's 98% penetration includes millions of older Kenyans who now send money, pay bills, and receive pensions via mobile. The trust barrier has been partially breached — but only for financial

transactions. The leap is to show that the same phone can manage health, maintain social connection, and access government services.

3. 4G and 5G Coverage Expands Monthly

Mobile broadband subscriptions hit 51.5 million by December 2025. 5G users consume an average of 46.4 GB per month. The network is not the bottleneck, though rural-urban disparities in quality and affordability persist.

4. Kenya's Aging Population Is Growing Fast

Kenya's National Council for Population and Development (NCPD) announced in 2025 that the country's population of older persons — currently 3.6 million — is expected to triple to roughly 12 million by 2050. The window to build digital literacy among today's 50–65-year-olds — before they become the isolated, offline elderly of 2040 — is narrowing.

What HRS Data Reveals About the Cost of Waiting

The HRS is not just a technology survey. It is a health and mortality study. And its data on social isolation is where the digital divide becomes a public health question. HRS core variables track loneliness (measured through validated psychological scales), social network size, cognitive function, and healthcare utilization. Longitudinal HRS research has consistently associated social isolation with increased mortality risk — independent of age, income, or baseline health.

In Kenya, where multi-generational family structures are still common but urbanization is fragmenting them, the risk is acute. A 65-year-old in Nairobi whose children live in Mombasa or abroad cannot rely on daily physical visits. Their lifeline is digital — if they know how to use it. WhatsApp calls. Telehealth consultations. Digital pension management. Online faith communities. These are not luxuries. They are survival tools — and a meaningful share of Kenya's older population does not yet have confident access to them.

The SCTH Model: Built on Evidence, Ready to Test

Senior Citizens Tech Haven was founded in Nakuru in 2024 for exactly this reason. The organization is currently in its pilot stage. Its approach is built from community engagement feedback and evidence from the world's leading aging research database.



An SCTH community workshop in Nakuru — peer and family-supported learning, not a one-off seminar.

HRS Finding	SCTH Design Principle
Barriers are psychological, not just technical	Every workshop starts with trust-building, not button-pressing
Health relevance drives adoption	Training shows immediate, practical benefit (M-Pesa, WhatsApp health groups, telehealth)
Family involvement accelerates learning	Workshops encourage grandchildren to attend as “tech buddies”
Repetition and patience are essential	Program designed as 4-week cycles, not one-day seminars
Fear of scams is a major blocker	Cybersecurity is Module 1, before any app is opened
Accessibility settings matter	Font resizing, voice commands, and high-contrast modes taught systematically

SCTH's model is built on these principles. The organization is now preparing to deliver its first structured workshops and will evaluate whether this approach can accelerate digital adoption among older adults in Kenya.

Elsah AI: Under Development

SCTH is also developing Elsah AI, a real-time digital safeguard designed to operate via WhatsApp. The system is intended to help interrupt risky actions before they happen — addressing the cognitive decline

risks documented in HRS research, where memory and reasoning changes can make older adults more vulnerable to scams, misinformation, and accidental data sharing. Elisah is currently in development. It is designed to extend training into daily digital life, not replace it.

What Policymakers Should Know

The Communications Authority of Kenya has done exceptional work expanding infrastructure. But infrastructure without literacy risks creating a two-tier society: the digitally connected young, and the digitally excluded old.

Recommended Actions

- **Mandate senior digital literacy in Universal Service Fund (USF) programmes** — The USF already subsidizes rural connectivity. Adding training delivery to the mandate would help close the usage gap.
 - **Partner with community organizations, not just telcos** — Grassroots organizations like SCTH have the trust relationships that government agencies often lack.
 - **Require accessibility standards in public digital services** — NHIF, NSSF, and e-Citizen should meet WCAG accessibility standards for vision, hearing, and cognitive impairments.
 - **Collect Kenya-specific aging-and-technology data** — America has HRS. Europe has SHARE. Kenya has no equivalent longitudinal aging survey, and no published internet-use figure disaggregated for the 45+ population.
 - **Regulate age-targeted digital fraud** — HRS data shows scam fear is a primary adoption barrier. Stronger consumer protection for elderly digital users would likely increase adoption rates.
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The Bottom Line

America spent 12 years and billions of dollars to move seniors from dial-up to health apps. Kenya has the devices, the networks, and the mobile money trust base to potentially make that same journey in a fraction of the time — if training is invested in now.

The evidence available suggests older Kenyans are not resistant to technology. They appear to be waiting to be invited in — with patience, practical relevance, and peer support.

The digital divide is not primarily a technology problem. The evidence suggests it is a training problem. And training is cheaper than infrastructure. Kenya does not need to wait. Kenya needs to test what works — and scale what proves effective.

Data Sources & Methodology

Statistic	Source	Period
92.9% smartphone penetration	Communications Authority of Kenya (CA)	Q2 FY2025/26 (Oct–Dec 2025)
National internet penetration (~35%)	CA Kenya / KNBS, 2023/24 Kenya Housing Survey	2023/24, reported 2025
98% mobile money penetration	CA Kenya	Q2 FY2025/26
51.4M mobile money subscriptions	CA Kenya	Q2 FY2025/26
51.5M mobile broadband subscriptions	CA Kenya	Q2 FY2025/26
44.2M 4G subscriptions	CA Kenya	Q2 FY2025/26
46.4 GB average 5G monthly usage	CA Kenya	Q2 FY2025/26
59.3% internet use, ages 25–34; 46.6%, ages 18–24	CA Kenya / KNBS Housing Survey	2023/24
18% US 65+ internet access (2002)	Pew Research Center, “Wired Seniors 2000–2004”	2002
53% US 65+ online (2012)	Pew Research Center, “Older Adults and Internet Use”	April 2012
Kenya's older population to triple to ~12M by 2050	National Council for Population and Development (NCPD)	Announced Aug 2025
Social isolation – mortality association	HRS longitudinal analyses	1992–present

Health and Retirement Study (HRS) — University of Michigan, National Institute on Aging. Public data modules: 2002 (Internet Use), 2012 Module 3 (Technology Use: Barriers and Benefits), 2014 Module 4 (Health Behaviors). Available at hrs.isr.umich.edu.

Communications Authority of Kenya — Q2 FY2025/26 Sector Statistics Report. Available at ca.go.ke/statistics.

Kenya National Bureau of Statistics (KNBS) & CA — Analytical Report on ICT, based on the 2023/24 Kenya Housing Survey.

Pew Research Center — “Wired Seniors, 2000–2004” and “Older Adults and the Internet” (2012). Available at pewresearch.org.

National Council for Population and Development (NCPD), Kenya — August 2025 public statement on Kenya's aging population trajectory.

Editorial note: An earlier draft of this report cited a specific internet-usage rate for Kenyans aged 45 and above. That figure could not be verified against any published CA Kenya, KNBS, or DataReportal source and has been removed. This version instead states plainly that Kenya does not currently publish age-disaggregated internet-use data for this cohort — which we treat as a finding in its own right, and the basis for Recommendation 4 above.

For media inquiries, partnership proposals, or collaboration requests, contact SCTH through our website or WhatsApp. We are actively seeking partnerships with Kenyan county governments, health facilities, faith-based organizations, and international AgeTech researchers to test and evaluate our pilot programs.

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