



HUMAN-CENTRIC DIGITAL IDENTITY: THE KEY TO UNLOCKING A FAIRER FUTURE

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Who are you? This is a question often asked, whether paying a bill, applying for a job, or accessing funds. And, as the world becomes more digital, nearly half of Africa's population, an estimated 500 million people, face the challenge to prove who they are because they lack any form of officially recognized identification.¹ Without a proper form of identification, individuals are often invisible—unable to fully participate in the most basic human rights, including obtaining the right to vote, accessing healthcare, opening a bank account, or applying for a job or schooling—and bear higher risk for trafficking.² Those with a form of verifiable identity also face risks as the amount of data shared with organizations becomes difficult to manage.

The UN's Sustainable Development Goals and World Bank's ID4D initiatives set a goal of providing everyone on the planet with a legal ID by 2030.³ With Africa accounting for roughly 17% of the global population,⁴ the need to find the most appropriate solution for strong, verifiable IDs has never been so important. Governments and enterprises are already taking advantage of technologies that enable identity verification, but humans have been less inclined to trust the technology and what it can do for them, and rightfully so.

Given the challenge of obtaining a legal or official form of identity, one may ask if digital identity is the key to proving and verifying existence in the digital world and establishing trust in a digital interaction, how will organizations that are tasked with the responsibility of designing digital identity ecosystems encourage adoption?

This article explores the current state of digital identity, the challenges that society must overcome to achieve broader adoption, and the benefits of human-centered digital identities.

The current state of digital identity and the underlying fear factor

Digital identity is possibly one of the most pervasive technology trends to take place in our lifetime. The underlying basis for the Fourth Industrial Revolution,⁵ as described by Professor Klaus Schwab, founder and executive chairman of the World Economic Forum, includes unprecedented advances in communication and connectivity. The use of mobile phones is now more common than electricity for Sub-Saharan Africans.⁶ Around 29 billion connected devices are forecast by 2022.⁷ These are staggering statistics that equate to a vast amount of data—data of which individuals are no longer in control, making the case for digital identity that much more critical.

Digital identity programs that follow appropriate protocols put the control of identity information back into the hands of the individual owner. However, fear and mistrust can also be associated with identity programs. What do identity programs entail? What are the associated risks? How will I know that my information is secure? What if my information is used against me by the entities in control of the data? There are also religious and societal factors to consider, especially when it pertains to biometric data. For example, refugee and displaced populations have varying degrees of native-language literacy and education. And these literacy and education levels are often lower for women. Further, persecution or violent displacement may cause individuals to flee their home countries, creating a level of mistrust of authorities. Providing fingerprints can be viewed as a stiff price to pay for much-needed food and shelter when it is perceived as giving authorities

a means to track refugee whereabouts. Further, collecting and maintaining biometric data are challenges in today's landscape of stricter data privacy laws.

These are all valid concerns that need to be addressed as digital identity solutions continue to advance in Africa and around the globe, but the benefits must also be considered.

Benefits

If designed to be privacy enhancing, inclusive and user-centric, digital identities can unlock incredible potential for individuals and the societies in which they live. They can provide individuals with greater access to new economic, political, and social opportunities, including the ability to vote, an education, and access to healthcare and protections under the law, while simultaneously providing the potential for greater security and privacy of their personal data.

For countries, digital identities offer the potential to deliver vital services to people, govern effectively, eliminate duplicative or inefficient programs, and make better use of limited resources. Take Gabon in central Africa, for example. It initiated a voter biometrics program in 2012. The government hopes the new system will improve public governance in Gabon and that its digital electoral register will make the country's elections more credible and transparent.⁸

Highlighting clear benefits for the individual can potentially overcome obstacles and increase adoption rates. Consider M-Pesa, a service launched by Vodafone's Safaricom mobile operator in 2007, to facilitate a simple method of texting small payments between users. M-Pesa has over 30 million subscribers across 10 countries,⁹ because it offered social value. Among rural households that adopted M-Pesa, studies indicate that household incomes have risen by up to 30%,¹⁰ lifting 2% of Kenyan households out of extreme poverty. To access this service, and to combat fraud, users of the Safaricom SIM card who want to register for M-Pesa must do so with a valid ID such as the Kenyan National ID card or a passport. This process allows each transaction to be marked with the identification of the party transferring, paying, depositing, or withdrawing money from an account.¹¹



Accenture believes that digital identity can open new opportunities for the smallholder-farmers who make up 65% to 70% of the African labor force.¹² Accenture's Circular Supply Chain prototype¹³ is a capability that leverages digital identity, payments, and blockchain to directly reward sustainable practices of small-scale growers and suppliers and to help them to more fully participate in the growing value of the green economy.

It works by enabling small producers to establish their identity, including biometrics (e.g., a photo for facial recognition), to create a unique identifier that is recorded on the blockchain. When producers are ready to send goods to market, they can create an identity for their goods with relevant details, like materials used or organic certifications, and link it to their individual identity as the producer, selecting the specific information that they would like to share. All stakeholders can see this information as the goods move through the supply chain from beginning to end. It is a model that allows consumers to directly reward or incentivize farmers at the beginning of the supply chain where blockchain's immutable ledger ensures transaction integrity and biometric verification reduces payment fraud. To build upon this capability, Accenture is working with Mastercard, Amazon Web Services, Everledger, and Mercy Corps to explore solutions that empower consumers, enable transparency, and promote financial inclusion for small-scale producers.

The way forward: designing "good" digital identity ecosystems

The way forward for organizations tasked with the heavy responsibility of developing identity solutions is clear: it must be fit for purpose, useful, inclusive, privacy enhancing, and secure, and must offer choice to users.¹⁴ These key elements were outlined in a report by the World Economic Forum, titled, "Identity in a Digital World: A new chapter in the social contract." By focusing on these elements, digital identities can be

designed to work for users, thus leading to broader adoption of the technology.

Meanwhile, ongoing collaboration among government, private-sector, and civil society communities responsible for creating identity solutions is clearly essential. The diverse perspectives and expertise of this growing community are already driving meaningful progress toward shared understanding and practices to achieve the vision of digital identity that empowers the individuals. But it is just the start. A new model of digital identity that expands beyond individuals to organizations, "things," devices, and places is already on the threshold. It will provide the foundation by which our digital selves will interact with online systems, control our connected devices, leverage the learnings of applied intelligence, and protect the earth's resources. Getting this right is critical to our future growth. By decentralizing identity stove-pipes, removing identity intermediaries, putting the individual in control of their identity information, and responsibly harnessing technology innovation, we can enable a better, more responsible digital life for all.

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¹ <https://en.wikipedia.org/wiki/ID2020>

² <https://en.wikipedia.org/wiki/ID2020>

³ <https://sustainabledevelopment.un.org/post2015/transformingourworld>

⁴ <http://www.worldometers.info/world-population/africa-population/>

⁵ <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab>

⁶ <https://www.economist.com/graphic-detail/2017/11/08/in-much-of-sub-saharan-africa-mobile-phones-are-more-common-than-access-to-electricity>

⁷ <https://www.ericsson.com/en/mobility-report/internet-of-things-forecast>

⁸ http://www.id4africa.com/2019/media/The_Review-Every_Citizen's_Right.pdf

⁹ <https://www.cnn.com/2017/02/21/africa/mpesa-10th-anniversary/index.html>

¹⁰ <https://rctom.hbs.org/submission/m-pesa-transforming-kenya-with-mobile-money/>

¹¹ <https://www.investopedia.com/terms/m/mpesa.asp>

¹² <http://blogs.worldbank.org/african/how-can-we-help-smallholder-farmers-seize-opportunities-in-africa>

¹³ <https://newsroom.accenture.com/news/accenture-collaborates-with-mastercard-amazon-web-services-everledger-and-mercy-corps-to-increase-the-sustainability-and-fairness-of-global-supply-chains.htm>

¹⁴ http://www3.weforum.org/docs/WEF_INSIGHT_REPORT_Digital%20Identity.pdf