



INNOVATION AWARD
Advancing financial inclusion through data innovation

Inclusive: Identification that removes barriers to financial inclusion

DataHack4FI Innovation Award Season 2
In-country winner for Ghana

Targeting the financially excluded with an identification product

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Advancing Financial Inclusion

A lack of verifiable identification presents a significant barrier to individuals' access to financial services. According to Findex 2017, 20% of financially excluded individuals mention a lack of identification as the main reason¹. In sub-Saharan Africa specifically, 46% of individuals don't have a form of identification²; and while the majority of countries on the continent have opted for digitised national ID systems, implementation of most of these is still underway³.

Inclusive Financial Technologies (Inclusive for short), winner of the Ghanaian leg of the DataHack4FI Innovation Award Season 2, uses a data-driven approach to tackle some of these challenges.

The company: Inclusive

Inclusive verifies identities across African countries and facilitates Pan-African commerce. It also enables verification of African identities in global markets. With a background in financial services (insurance and retail banking), its founder Paul Damalie has first-hand experience in the ways in which the lack of identification prevents clients from accessing financial services. Responsible for signing on new customers, Damalie would experience frustration at how long it took for customers' identity to be verified and at how many of "his" customers' applications would be rejected because of verification challenges. He also understood clearly how anxious the insurance provider was to not be found non-compliant in know-your-customer (KYC) matters, and so witnessed both parties (provider and potential customer) missing out.

Having identified a clear need in the market, Damalie founded Inclusive in 2016, with the vision of connecting unbanked Africans to the global

economy through a single identity verification API. Inclusive's API was rolled out to financial service providers (FSPs) in November 2017 and currently serves 30 corporate clients. These clients are mostly banks, fintechs and insurance providers, but they include a variety of other businesses, such as online lenders, microinsurance providers, travel agencies and online betting companies. Most of Inclusive's clients are in Ghana, with the rest located in Kenya, Nigeria and South Africa.

The challenge: Cumbersome and costly identity verification increases risk of exclusion

The process of verifying new clients' identities is cumbersome and costly, which creates inefficiencies in customer onboarding and leads to the exclusion of many potential clients. With strict KYC requirements set by the regulator, FSPs cannot afford to be uncertain about their clients' identities. Especially in countries that do not have a national ID database, it can take days for an individual who signs up for a service with an FSP to be approved and onboarded. Moreover, this leads to the exclusion of individuals who do not have easily verified identification documents from access to financial services, and from the process.

The data solution: Multiple-database verification API

The Inclusive API links to a variety of identity databases, depending on the availability of each in the respective countries of operation. The ideal option is an integrated national ID database that includes all identity information about citizens – from birth certificates to passports and driver's licences, and everything in between. The Integrated Population Registration System (IPRS) in Kenya is a good example. Such a solution is not available in most sub-Saharan African countries; and in those cases, Inclusive links to individual databases for each relevant type of identity document – most commonly ID documents, driver's licences and voter's IDs. The data provided by clients upon sign-up is used as input for the algorithm.

1 Demircuc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution. Washington DC: The World Bank.

2 The World Bank. (2017a). Global ID4D Dataset 2017. Washington DC: The World Bank.

3 The World Bank. (2017b). The state of identification systems in Africa. Washington DC: The World Bank.



The most important rationale for using the selected data sources is that they meet the requirements set by financial regulators. FSPs are thus ensured that they are fully KYC compliant. Unfortunately, this does not yet extend access to those that don't have the official identification. The identity of these individuals may be verified by considering their SIM card registration with telcos, or their proof of payment and address with their utility bills. See "the future" below for how Inclusive plans to do this in the future.

When onboarding new clients, FSPs load the client's data into the Inclusive system. An algorithm searches all linked databases for a match and is able to quickly verify whether the individual matches any records in the databases. This automation removes the possibility of human error (missing a match) in a manual search. However, the system searches for exact matches, which means it is still sensitive to capturing errors. This is another feature that Inclusive is working on to improve in the future (see "the future" below).

The impact: Significant increases in efficiencies and inclusion

Largely through the use of digital channels, Inclusive's tool has reduced the verification process time to an impressive 15 seconds, which saves its clients time and money. The company estimates that a traditional FSP verifies between 5,000 and 10,000 potential customers per month, and a fintech around 1,000 per month. For each of these individuals, the added certainty that FSPs have about their identity significantly increases the likelihood that they will be onboarded as financial customers. In this way, Inclusive has a positive impact on the bottom-line of its clients, as well as on the financial lives of its ultimate beneficiaries: people living in Africa.

The future: Additional verification options

In the near future, Inclusive intends to expand its offering and functionality in the following ways:

- **Increased nuance in identity verification.** The next version of Inclusive's verification API will allow searches for near matches of information, allowing for slight differences in

data to be acknowledged. Misspelled names and human errors in fields like telephone numbers will then not necessarily result in a negative verification, as the algorithm will produce those as part of the results. Moreover, rather than indicating a binary confirmation or rejection of identity, the algorithm will produce an identity confidence score, allowing FSPs to determine which confidence level they are comfortable with, and applying this to different product types as appropriate. These functions will increase the power of Inclusive to successfully verify the identity of increased numbers of underserved African consumers.

- **Alternative identity verification through telco and utilities data.** By linking up to additional databases, Inclusive intends to increase the verification power of its API. Especially in countries with no consolidated national ID database, the verification power of official identity types (such as driver's licences and voting cards) might be limited. Moreover, many individuals might not have access to these identity types. Telco and utilities databases can be used as alternative identity verification tools, as SIM cards and utilities payment records are sufficiently trusted as proof of identity.
- **Additional (remote) onboarding services.** In addition to its key product, Inclusive offers selfie recognition (using an image-recognition algorithm to match a selfie with a picture ID), and it intends to offer remote biometric onboarding services.
- **Deduplication solution for improved accuracy of FSP data.** Finally, Inclusive intends to expand its offering to include a deduplication tool. This add-on would perform the same search activity, but on an FSP's internal databases. It would notify the FSP when a seemingly "new" client is already part of its database (for example, as a client of another subsidiary) or is likely to be fraudulent (as their information is overly similar to that of an existing client). This will increase FSPs' efficiency and reduce fraud in the financial sector.

This case study is part of the DataHack4FI Innovation Award competition Season 2 series. It describes the solution as developed by the tech startup and its partnered data fellows during the competition. The competition brings together data enthusiasts and financial service providers to promote the use of data-driven decision-making in financial inclusion.

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