



Use Case

## Mobile Subscriber Identification for Telecom Operators in Africa

## Overview

More than a half-billion people across Africa are now subscribed to mobile services, while the African continent continues its rapid deployment of high-speed mobile networks and infrastructure. A recent study by GSMA reveals that 78% of the African SIM market is prepaid, with 1.62 SIM cards registered per user, and as many as 3 SIMs per user in South Africa. For nearly 15 years, African countries have undergone an identification process to match mobile subscribers to their SIM cards so that users and their behaviors are known through a KYC (Know Your Customer) process to reduce fraud, money laundering and other fraudulent activities.

Massive campaign efforts in many countries have been successful, whereas in other cases, the databases maintained by mobile operators are still not reliable and present anomalies that must be validated. By not complying with KYC guidelines, operators can face significant monetary fines imposed by the regulators.

In fact, in 2015, the Communications Fraud Control Association (CFCA) estimated that mobile network operators lost more than \$38 billion in Africa alone. Because of this, most of the National Telecommunication Regulation Agencies have defined new applicable regulations to more clearly define the requirements around the identification of mobile subscribers, including:

- The physical and electronic identification of all mobile phone subscribers.
- A digital archive of all information related to the subscriber, maintained in a reliable and secure database.
- The obligation of each subscriber to identify himself immediately upon subscription. This includes the requirement to provide a copy of an identity document, such as an identity card, passport, residency card and proof of residency.
- The activation of pre-paid mobile cards by operators only after operators have received all documents and requirements.
- An automatic suspension of subscribers whose accounts do not include names or identity card numbers.

## The African Mobile Market

**557 million** unique subscribers

**965 million** SIM cards

**78%** of the African SIM market is prepaid

(Source GSMA, 2015)

1 An unique mobile subscriber is a person who may possess several mobile connections (SIM cards).

2 A mobile connection corresponds to an active SIM card registered with a mobile carrier network.

## Challenge

African telecom operators are faced with the challenge of simply and quickly identifying millions of active subscribers with the following objectives:

- Mitigate fraud and identity theft
- Comply with regulatory and safety requirements

## Identification process for mobile subscribers

- ✓ Integrated and intuitive system, including a module that allows for the automatic detection of the MRZ codeline of the subscribers' identity card (ID, passport, residence card).
- ✓ Deployment on-site of dedicated teams to collect subscriber details and to collect their identification by means of mobile devices such as tablets and smartphones.

## Added Value: *a2ia Mobility™*

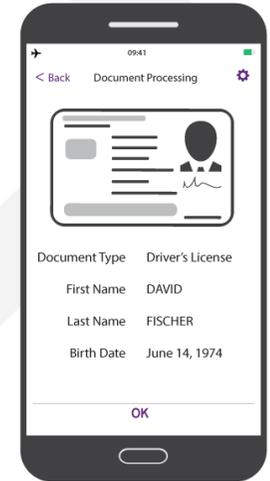
- Handwritten/Printed Recognition.
- Automatic Image Capture with *Auto-Locate™*.
- Offline Image Pre-Processing.
- Image Quality and Usability (IQA / IUA).
- Offline Data Extraction.
- Significantly Reduced or Eliminated Manual Keying.
- Data Validation by User Prior to Submission to the Workflow.



ID Capture



Image Pre-Process



Data Extraction

## Solution

A2iA's mobile software processes client-side, enabling the user to capture and extract data in remote locations, without a connection to cellular service or Wi-Fi.

Embedded into mobile apps, A2iA's advanced image analysis and intelligent recognition engines enable users the ability to capture handwritten and machine-printed information from supporting documents (IDs, passports, proof of residency, bank account details, etc.).

With automatic data extraction (first name, last name, address, MRZ codeline), manual keying is significantly reduced and can even be eliminated, delivering a fast and simple user experience.

With a customizable and scalable offering, A2iA's software can be utilized for part of the workflow, such as the capture only, or the full recognition process, including the capture and data extraction. A2iA's capabilities, within the full mobile workflow, help to identify mobile subscribers through an innovative, efficient and flexible technology of handwriting recognition, data extraction and document classification software (SDKs) for mobile and desktop based applications.

## A2iA Key Benefits

A2iA's capabilities, within the full mobile workflow, help to identify mobile subscribers through an innovative, efficient and flexible technology of handwriting recognition, data extraction and document classification software (SDKs) for mobile and desktop based applications.

### Telecom's benefits:

- ✓ Automatically **locate and extract the MRZ codeline**, aiding in the full solution's capabilities to determine the **legitimacy of the ID**.
- ✓ A quicker, more seamless user experience – automated image capture significantly reducing manual data-entry. Gain immediate data recognition results, from **handwritten and digital documents**.
- ✓ Image analysis, **image clean-up and recognition** performed **offline and client-side**. No data connection or Wi-Fi needed.
- ✓ **Small image output** - less network bandwidth to transmit, and **less storage required** on the back-end.
- ✓ Address international markets with **multiple country/language versions**.