Shufti Pro

NFC Verification

Not Cutting Any Corners With Remote ID Authentication

Copyright © Shufti Pro Ltd. All Rights Reserved.

Table of Contents

Overview

Smartphones have streamlined the automation of our daily chores with significant ease and pace. The world is benefitting from a wide variety of applications introduced by smartphones. One of these applications is the NFC technology. Coupled with AI-powered document authentication and biometric technology, NFC-enabled smartphones are increasingly being used for digital identity verification.

The customer onboarding process has moved from fingerprint scanners to contactless technologies in every sector. Therefore, in this report, we'll discuss how identity verification technology has evolved owing to the new demands and trends in the IDV space. Moreover, we will go through the introduction, applications, and working of NFC technology and its incorporation in the digital ID verification process.

[1] "Identity Verification Market Size, Share and Global Market Forecast"

Recent Headways in ID Verification Industry

The global ID verification market is forecasted to grow from US$ 7.6 billion in 2020 to US$ 14.8 billion by 2025. This translates into a Compound Annual Growth Rate (CAGR) of 15.6% during the said period. Hence, the afore-mentioned number points to the fact that there is a growing need for only those identity verification services that fit the current scenario.

Coronavirus pandemic took a toll over the traditional identity verification methods such as fingerprint scanners and nearly eliminated in-person identity checks from several industries. During the current landscape, new techniques and technologies of conducting the customer onboarding process became more pronounced. It is safe to say that only a few of these were adopted by the identity verification world owing to their feasibility and efficiency. Right now, organizations across the globe are looking for robust ways to digitally verify the biometric identity documents of their customers.

The Technological Evolution in Digital Identity Verification

There are multiple elements that make a feasible and foolproof identity verification process; ID documents; the device used for verification, and the technology employed are the primary ones, to name a few. Thanks to the rapid technological advancements, remote identity verification are becoming easier for businesses and their customers. Every mobile has a selfie camera which makes it easier for businesses to shift to selfie logins in a go.

The nature of ID documents, another important element of identity verification, is also changing. Chip-based identity documents are becoming commonplace across many countries. Thus, the recent headways in verification devices and ID documents call for advancement in the third element of identity verification, i.e technology. So, NFC technology fills up this space quite efficiently. Therefore, an NFC-based identity verification solution is the need of the hour to address the gradual change in user demands.

In Biometric Technologies

By the end of 2021, the global market value of biometric technology will reach $30 billion. Moreover, it is reported that more than half a billion users will be in need of biometric verification. Moreover, the types of biometric technologies differ on the basis of three identifiers: behavioral, biological, and morphological. However, the most common biometric technologies currently used for identity verification are based on morphological identifiers i.e, fingerprint, face, etc. As far as fingerprint scanning is concerned, it only became pronounced when Apple incorporated it in iPhone 5S.

As to face recognition technology, the work on identifying faces through computers began in the 1960s. At first, owing to the limited application of assisting technologies, it dealt with issues ranging from inaccuracy and identification of different markers on the facial area. However, with time, face recognition technology has witnessed an upward learning curve. Now, facial biometrics draws from cutting-edge technology of artificial technology and machine learning models. Also, with the incorporation of high-resolution cameras in highly compact smartphones, digital identity verification providers are increasingly devising their solutions around face recognition technology.

In Document Verification

The process of identity verification, either manual or digital, was highly based on conventional identity cards. In the manual verification method, users needed to visit the place of verification and the organization's official would check whether it is valid or not. Moreover, in the automated method, the digital ID verification providers extracted the information incorporated in the document through Optical Character Recognition (OCR) technology. It should be noted that the latter method was considerably better than the former one as it enabled automation of the process. Furthermore, the accuracy of the information extracted from the scanned document is above 90%.

This process was suitable owing to the technologies available at hand. However, now the advent of e-identity cards has instigated a change in the process and a better one at that. These e-ID cards are installed with an NFC chip containing the data printed on the document. The data on these chips is digitally signed and encrypted which makes them highly secure and impenetrable.

[2] "ABI Research Prediction on Fingerprint Sensors and Facial Recognition"

Since 2016, countries are required to issue passports with Machine Readable Zone (MRZ) section. Moreover, ICAO 9303 regulation is an international standard introduced by the UN that requires countries to issue chip-based ID cards and passports. Right now, there are more than 150 regions and countries issuing e-passports. Owing to these rules, more countries are expected to employ NFC-enabled identity cards.

Using NFC Technology to the Fullest

By 2023, the number of smartphone users in the world is expected to reach 4.3 billion. Currently, reports claim that there are approximately 2 billion NFC-installed devices in the world. Most of these devices are smartphones. This means there is more than 20% of the world population is exposed to NFC technology right now. So, the question arises why are not we utilizing the application of this technology to the fullest?

3.8 billion

smartphone users in the world

73%

of smartphones are NFC-installed

20%+

of the world population is using NFC-enabled devices

69.4 million

NFC mobile payment users globally

$47.3 billion

is the global market value of NFC

Source: Blue Bite, NFC Forum, Allied Market Research

This question is being answered by the digital identity verification industry. The third-party service providers took the existing technology and combined it with modern methods to come up with an efficient solution. Now, NFC-enabled smartphones can be used to verify chip-based e-identity cards. Hence, let's delve into the basics of NFC and how is it being used to verify identities digitally?

NFC enabling automation across various sectors

Healthcare:

Used to record patient's temperature through a self-adhesive patch

Education:

Used for taking attendance of a large number of students

Retail:

Used for contactless mobile payments and mobile checkout

Restaurants:

Used in remote order placement and delivery process

Source: RFID journal

Then, why not incorporate it in the ID verification process?

What is Near Field Communication (NFC) Technology?

Near Field Communication (NFC) is a wireless technology used for short-range communication between electronic devices. The communication range of NFC is about 10 centimeters. The range is kept short on purpose to enhance the security of the communication channel.

NFC is often compared to QR code scanning which requires a camera to perform its task. However, NFC requires only a near-field communication chip. Moreover, NFC can be used for one-way or two-way communication. For digital identity verification, one-way NFC communication is used. Since, to read the data incorporated in the chip of an e-ID card, a device only needs to be in close proximity of the chip, thus it provides enhanced security and privacy.

Shufti Pro NFC Verification in a Go

The COVID-19 pandemic has forced people to stay indoors and, therefore, the businesses find themselves in a perplexing situation as to how to securely conduct the customer onboarding process. However, Shufti Pro never shies away from a challenge. Also, venturing on untested grounds and exploring the unknown is a trait proudly adopted by the top-of-the-line KYC/AML provider Shufti Pro. That is why it readily addressed the need of the businesses by presenting its own version of NFC chip-based authentication.

[3] "Number of smartphone users in the world"

[4] "Number of NFC-enabled devices"

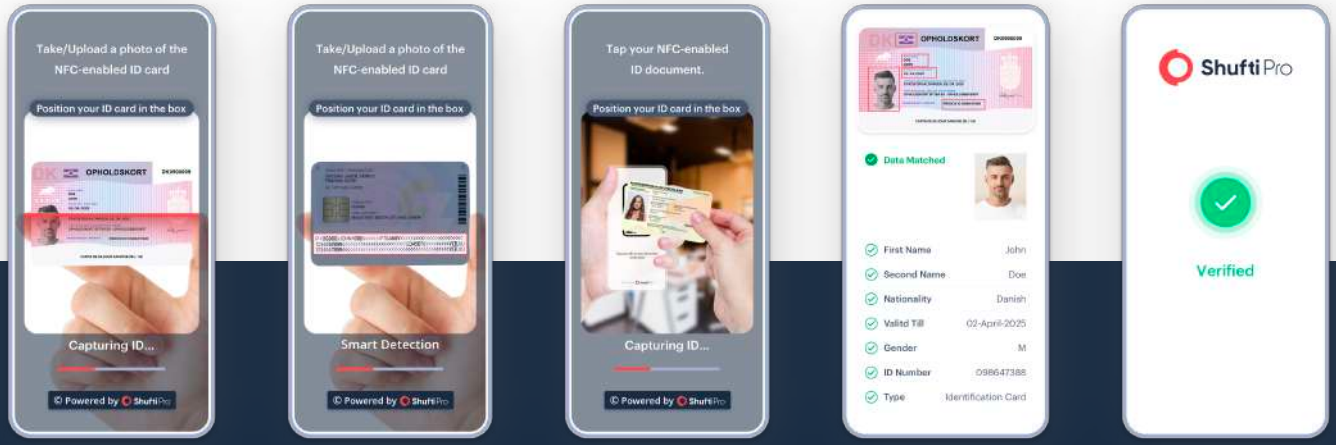
Shufti Pro's NFC-assisted identity verification solution basically provides an effortless experience to both the businesses and end-users while being ultra-reliable and highly secure.

"According to Statista, the global NFC market is expected to reach $47.3 billion by 2024. Coupled with the number of smartphone users in the world, it makes perfect sense that NFC-based solutions are used for remote ID verification."

CEO, Shufti Pro - Victor Fredung

The Walkthrough of NFC Verification

It would be an understatement that NFC-based identity verification is a simple and convenient process. All a user needs is a camera-centric mobile phone with NFC technology along with a chip-based identity document such as an e-passport. There is no need for additional hardware for the process to take place. Sounds too simple? Well, because it is. So, without further wait, let's go through the step-by-step procedure of chip-based identity verification. We warn you that there won't be many of them.

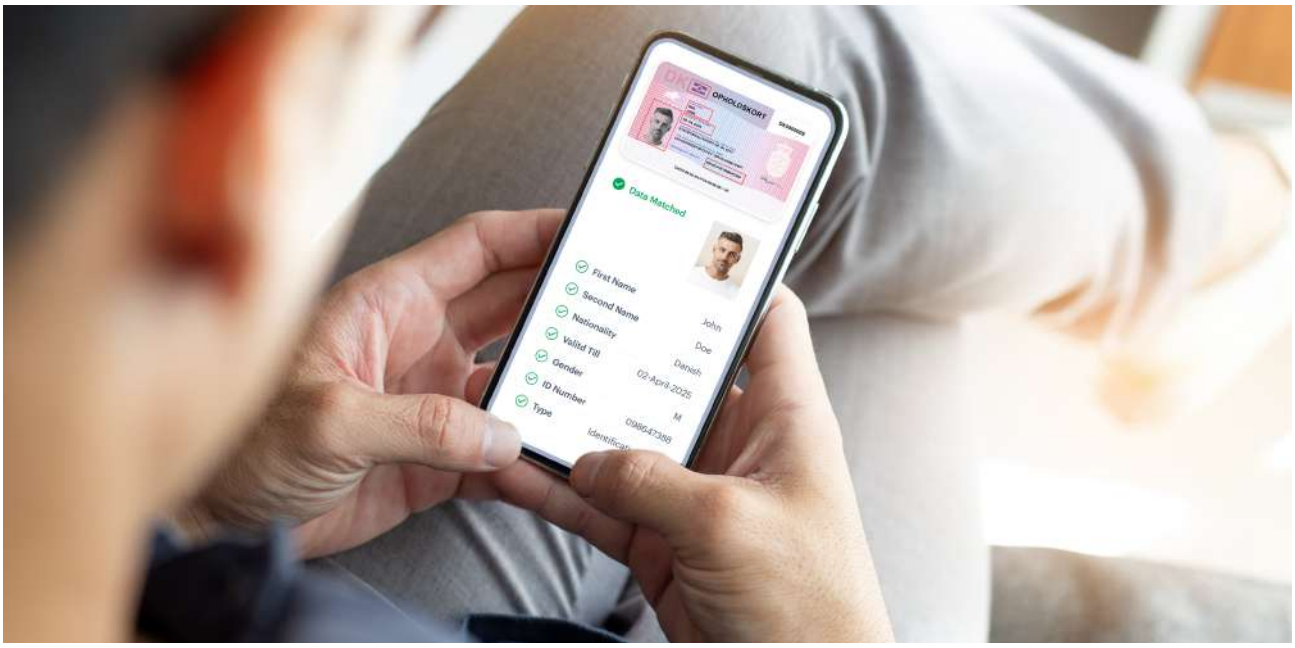


- First and foremost, the end-user is required to upload a picture NFC-enabled identity document. For this purpose, the user can also take a photo of the document by the smartphone's camera, in real-time.

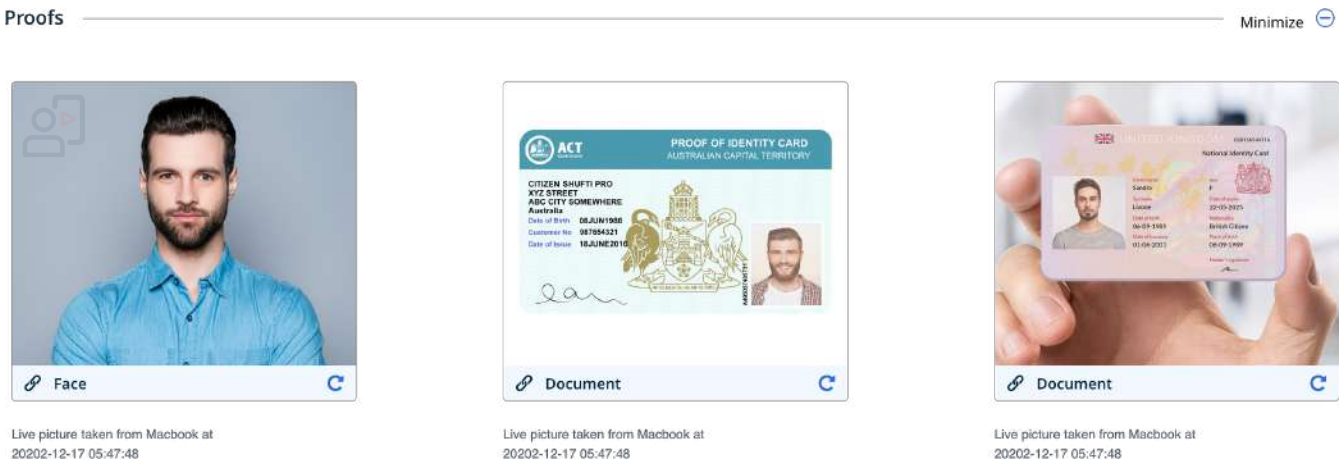
- Then, the system scans the Machine Readable Zone (MRZ) incorporated on the document. The MRZ section is checked for authenticity and then its data is extracted.

- The user taps the chip-based identity document on the smartphones for NFC-chip scanning.

- The verification process is completed when the information extracted from the document, and the NFC chip is matched. Moreover, the data extracted from the NFC chip is shown to the end-user on their smartphone screen.



- The whole authentication process is recorded with the consent of the end-user.



The Utility of NFC-Based ID Verification

Security checks are important and the absence of them can result in identity theft and fraud and customers know it. But, they don't necessarily love the idea of going through cumbersome verification processes. According to the European Business Review, approximately 70% of the users are more likely to abandon the online ID verification process owing to its complexity. However, NFC-based ID verification is a solution that is hassle-free and convenient for users. Among others, some most common benefits of employing this solution are as follows:

Increasing Conversion Rates

Secure and faster customer onboarding results in an increase in conversion rates. User experience and satisfaction are crucial for businesses conducting their operations online. The journey of turning potential customers into real customers starts and ends at the topic of user experience. Therefore, it would not be wrong to say that it is a make or break factor for businesses.

88% of the customers shopping online claim they wouldn't return to a business site after having a bad user experience.

Curbing Document Forgery

Electronic forgery tactics have advanced to a level that can fool even highly technological fraud detection systems let alone human verification. Even the unique patterns on identity documents like guilloche, OVI, rainbow prints, etc. can be forged by criminals. However, the chip-based identity verification services involve NFC-enabled biometric ID documents which are skillfully encrypted. Thus, forging or tampering with the data incorporated in the chip becomes impossible.

Enabling Contactless Verification

Digital identity verification is not a product of the CoronaVirus pandemic, however, its employment has definitely experienced a major hike because of it. Following this, the next leap taken in the remote ID authentication industry is chip-based verification. Moreover, there is a common misconception that NFC is only used for contactless mobile payments.

[5] "Online shoppers and user experience"

GSMA reports that about 96% of NFC users utilize this technology other than contactless payments. NFC technology is providing its utility to various fields and now it is enabling a smooth, swift, and secure customer onboarding process and that too without any physical contact.

Ensuring Regulatory Compliance

If a business does not properly verify the identities of their customers, they risk letting criminals in their system. When the unfortunate happens, the particular business comes in direct violation of KYC/AML regulations and subsequent penalties. However, the NFC chip-based authentication process makes the onboarding so secure that criminal attempts are detected instantly. Hence, the businesses rest easy that they are compliant with KYC/AML procedures and focus on growing their business.

Providing a Necessary Assist to a Diverse Audience

The efficacy of NFC-enabled ID authentication is not only utilized by a specific field but different sectors across various industries. The industries reaping the rewards of this service include, but are not limited to, banks, travel companies, healthcare providers, payment services, and government agencies. These industries can integrate this service in their mobile apps and seamlessly onboard customers. Moreover, being fearful of chargebacks and punitive non-compliance penalties seriously obstructs the smooth and seamless flow of their business operations. Furthermore, when businesses are sure of regulatory compliance then they invest their resources in places that actually grow their business value.

Distinctive Features of NFC Verification

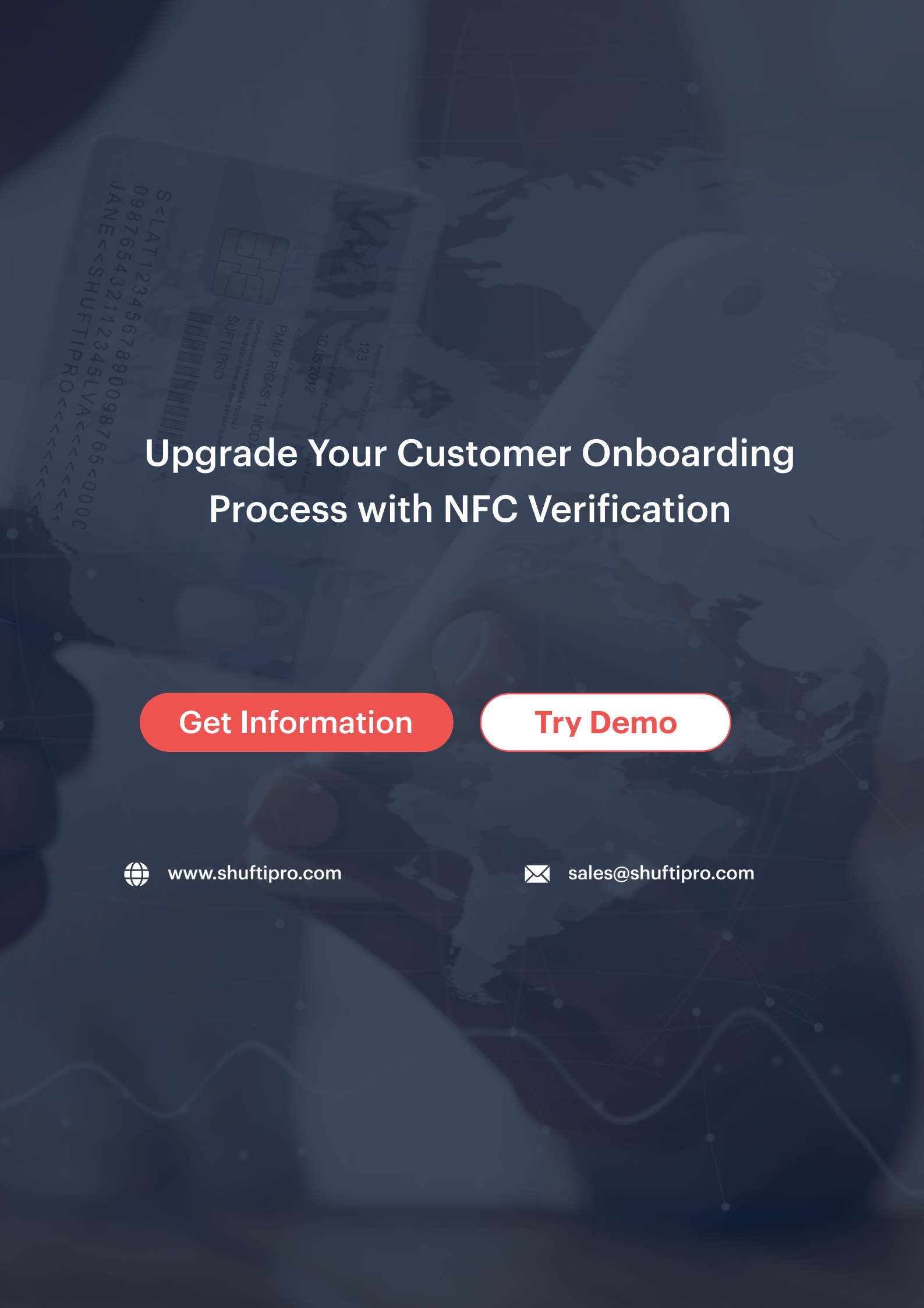
Shufti Pro, as a digital ID verification service provider, takes pride in the fact that it addresses the need of its loyal customers at the right time without even the minutest of compromises. Here, Shufti Pro, following its own convention of achieving perfection, brings out the best from NFC technology. It presents its state-of-the-art version of NFC-based identity verification to safeguard its clients amid COVID-19 and the times to come.

Features

- The completely contactless verification process
- Mobile verification with IOS or Android SDK integration
- AI-powered document authentication
- Option to integrate intelligent face verification service
- Added security layer with digitally signed and encrypted NFC chip

Shufti Pro offers Services

- Verify within **Seconds**
- In **150+** Languages
- From **3000+** ID Docmunets
- Background Screening Against **1700+** Watchlists



Upgrade Your Customer Onboarding Process with NFC Verification

Get Information

Try Demo

www.shuftipro.com

sales@shuftipro.com

Shufti Pro

True Identity Builds Trust

Expanding services to 230+ countries and territories in a short period of time, Shufti Pro envisioned playing a pivotal role in creating cyberspace where every transaction is veri˜iable and secure. With enough experience in technologies like machine learning (ML), OCR, arti˜icial intelligence, and Natural Language Processing (NLP), Shufti Pro strives to provide the best identity veri˜ication services to verify customers and businesses online.

Shufti Pro's cost-e˚ective solutions help businesses to prevent fraud and illicit crimes that can ruin the integrity and brand reputation of your business. Our perfect solution suite consisting of KYC veri˜ication, AML screening, ID veri˜ication, Facial Recognition, Biometric Authentication, Video KYC, OCR, and KYB helps to improve your company's fraud prevention, Know your Customer (KYC) and Anti Money Laundering (AML) regulatory e˚orts by automating the work˜low. With single API integration, Shufti Pro empowers you to verify customers with document checks from 3000+ ID templates and business entities from 200 million companies data.

Disclaimer: No warranty or claim is herein provided that information contained in this document is accurate, up-to-date, and/or complete. All information provided in this document is limited for general informational purposes only. In no circumstance(s), does such information constitute as legal or any other advice. Any individual or company who intends to use, rely, pass-on, or re-publish the information contained herein in any way is solely responsible for the same and any likely outcomes. Any individual or company may verify the information and/or obtain expert advice independently if required.