

FINEKSUS™

*Tackle financial crimes and risks
with AI-powered solutions*

Digital Customer Onboarding and AML/KYC

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This white paper explores all the aspects of the Digital Customer Onboarding in the financial world focusing on the journey of digital onboarding, regulatory developments in different parts of the world, importance of Know Your Customer (KYC) and Anti-Money Laundering (AML) processes, use of technological enhancements such as biometrics and ID verification methods, global applications and facts, and how FIs can prepare for the digital onboarding. It also includes the details and solutions of the Fineksus - Amani Technologies partnership for the sake of digital customer onboarding in the finance industry.



Foreword

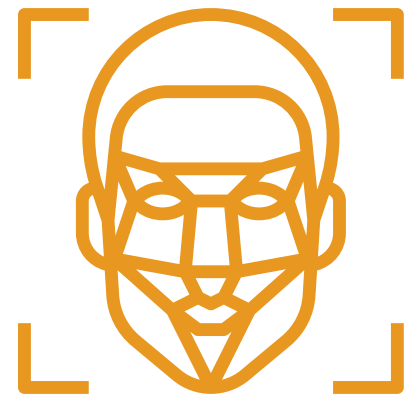
The digitalization of the customer onboarding experience in the financial eco system eliminated the physical limitations and the complicated, time-consuming processes for the customers while creating an advantageous system for the financial institutions in terms of cost-friendliness and efficiency. Introduction of digitalization in the customer onboarding process also posed some challenges for the FIs in terms of regulatory requirements and checks. In order to secure the safety of the digital onboarding system, the financial institutions are responsible for performing the ID verification, Customer Due Diligence (CDD), Know Your Customer (KYC) and Anti-Money Laundering (AML) checks effectively. The technological support is required to ensure the most satisfactory and secure digital onboarding experience. Artificial intelligence (AI), biometrics technology, behavioral analysis and ID verification and authentication systems are solutions that support the digital customer onboarding processes for a successful A to Z performance.

This white paper aims to elaborate on the Digital Customer Onboarding holistically highlighting the challenges in the financial landscape and the essentials of digital onboarding; the regulatory developments about digital onboarding in Europe, Turkey and Middle East regions; Know Your Customer (KYC) and Anti-Money Laundering (AML) processes and their relation to digital onboarding; the use of data biometrics and id verification for the sake of a successful digital onboarding; global developments and facts; and finally the importance of choosing the right partner for the financial institutions in their digital onboarding journeys.

Ahmet Vefik Dinçer, CEO



Digital Journey of a Customer Onboarding



The financial institutions are onboarding customers in 48 days, annually spends more than \$60 million, process KYC and customer onboarding with 68 employees.

Digital customer onboarding emerges as the solution to the challenges in the financial industry resulting from the digitalization and globalization. As the financial eco-system becomes more digital, the vulnerability for the cyber threats and fraudulent activities has increased. In order to assure a safe and secure financial digital environment, the regulatory requirements have been revised and in most cases have become more stringent for ID verification processes. Therefore, financial institutions struggle with creating a smooth digital experience for their clients while at the same time ensure the same quality, security and guarantee for their services as they did in their in-branch customer operations. Digital or remote onboarding, along with the artificial intelligence (AI) and machine learning integrated ID verification systems, provides advantages both for the banks, fintechs and other financial institutions besides customers in many ways. As the FIs benefit from advancements in regulatory compliance, cost-effectiveness and time-management, customers enjoy seamless, faster and more flexible online financial services.

Main challenges of the financial institutions fall under these three essential issues: compliance, user experience and efficiency. The cost of customer onboarding for the financial institutions is \$60 million annually taking approximately 48 days and engaging 68 employees to complete the KYC and customer onboarding processes. In relation to regulatory compliance, digital onboarding offers better and less time-consuming solutions for procedures of Know Your Customer (KYC) and Customer Due Diligence (CDD). Together with the improvements in the ID verification processes, the risks related to fraudulent activities and money laundering have been minimized. The levels of customer satisfaction and loyalty are increased with higher flexibility, smoother user experience and time-saving processes. Digital onboarding increases the overall efficiency of the FIs by enabling customer onboarding within a very short period of time and without dependency on physical presence and devices. Automated artificial intelligence-based systems installed for digital onboarding purposes work end-to-end and reduce the need for manual intervention to minimum which decreases the operational workload and time spent on them tremendously. Additionally, digital account openings taking less time and effort brings about higher number of transactions.

Consumers of digitalized financial eco-system expect faster and easier use of online services. Digital onboarding covers various needs and expectations of different customers by offering more flexible and smoother access to the financial services via online tools. Consumers can also benefit from mobile technologies such as e-signature and real-time banking facilities within safe online environment, overcoming physical barriers.

Key Regulatory Highlights for Digital Onboarding in Turkey, UAE and EU



EU

The European Union has an extremely serious prospect on the subjects related to data security and protection, thereby the regulatory focus has been on the necessity to manage digital customer verification and the recent update on the 5th Anti-Money Laundering Directive (AMLD) has been done accordingly. The 5th AMLD includes articles and definitions on client identification. The directive puts the highlight on the transformation of KYC (Know Your Customer) processes so that they comply with the AML standards and eIDAS (electronic IDentification, Authentication and trust Services) regulations and work on the guidelines to follow during customer verification processes with the highest-level security. Financial institutions that successfully adopt the rules of the 5th AMLD gain the advantage of reaching out new potential clients more easily and remaining compliant at the same time.

Another important alteration set forth with the new AMLD is the requirement of complete identity verification of the real bank account owners which could be anonymous previously. As an equivalent to face-to-face ID verification, 5th AMLD establishes video-based customer identification process in combination with artificial intelligence (AI) and biometric authentication with facial recognition technology as the method to ensure high level of regulatory and technical security.



TR

Turkey recently has embarked on the video-based customer identification, taken the first steps to amend its regulations regarding digital customer onboarding, and the related law will be put into effect in May 1, 2021. Until early 2021, banks were unable to use digital ID verification for customer due diligence (CDD) and know your customer (KYC) applications. The digital transformation in the banking industry and customer identification in Turkey was legally approved with the reformation to Banking Law No. 5411 in June 2020. The amendment in the law allows the banks to manage the relationships with their customers and verify their identities via remote communication softwares and apps. The Banking Regulation and Supervision Agency (BRSA) of Turkey published the new legislation on Remote Identification Methods To Be Used By Banks in the official gazette of Turkish Government on April 1, 2021 after first opening the draft to the public opinion in September 2020. According to the regulation, starting from May 1, 2021, banking services can be done online without the need to visit a physical branch in Turkey. A financial institution will be able to onboard a customer without a need to face-to-face meeting by implementing necessary technology for digital onboarding and remote ID verification.

The important point of the new BRSA regulation is that the BRSA is the regulator of the banks in Turkey but not the FinTechs. Therefore, it is clear that starting from the 1st of May 2021, Turkish banks can enroll customers via digital onboarding software or app while FinTechs are still subject to conventional account openings until the law supports remote technology for other financial institutions.



UAE

In the Middle East and North Africa (MENA) region, the regulations regarding the digitalization of the financial industry and adopting technologies to battle financial crimes were in the focus and the progress has gained a momentum with the COVID-19 pandemic. The Arab Monetary Fund prepared and published a report called "Digital Identity and e-KYC Guidelines for the Arabic Countries" in April 2020 to accelerate the move towards benefitting from the software / apps for digital onboarding technology. Bahrain and UAE introduced their own eKYC platforms in the past year by taking the lead in the Middle East region. Dubai International Financial Centre (DIFC) developed its own digital onboarding platform in January 2020 offering a more user-friendly and simplified customer onboarding process.

Essentials of AML/KYC



KYC processes are applied to verify the identities of customers, evaluate whether they are suitable and detect the possible threats and risks that may enclose any illegal intention for the business relationship.

Know Your Customer (KYC) processes are applied to verify the identities of customers, evaluate whether they are suitable and detect the possible threats and risks that may enclose any illegal intention for the business relationship. The importance of a successful application of Know You Customer (KYC) procedures lies in prevention of financial crimes because any criminal activity in relation to money laundering, terrorism financing and fraudulent schemes can be detected and hindered by knowing your customer.

The integration of technological enhancements and advanced algorithms in the KYC processes was both a necessity and improvement in the digitally evolving financial atmosphere. Especially the use of artificial intelligence (AI) and machine learning (ML) technologies in the procedures of ID verification, false positive reduction, intelligent detection prioritization, anomaly detection and data analysis reinforces the overall quality of digital onboarding and crime detection which in turn supports Anti-Money Laundering (AML) compliance.

Customer Due Diligence (CDD) is a set of processes the financial institutions operate in order to obtain and analyze data about a potential customer for the purpose of achieving Know Your Customer (KYC) requirements. The fundamental purpose of CDD is to detect any risky behavior or activity that may threaten the financial institution via collecting data from various sources provided either by the customers or sanction lists.

Enhanced Due Diligence (EDD) is a risk-sensitive, enhanced form of customer due diligence (CDD) as the title implies. Higher-risk customers that are associated with higher risk of money laundering or terrorist financing crimes are subject to enhanced due diligence processes which focus on a risk-based approach. For the purpose of performing effective EDD, data requested to provide from customers include background information, source of funds, source and structure of wealth and adverse media screening.

Digital onboarding and AML complement on the idea of ensuring the safest and most convenient customer experience in digital financial eco-system. The employment of improved ID verification, AI-based technology and Customer Due Diligence (CDD) processes reduces the risk of money laundering crimes to the minimum. Financial institutions that use different kinds of ID verification methods such as biometric verification, two-factor authentication and identity document validation at the phases of account creating and authentication, are the ones that secures the most reliable and effective fraud prevention system.

Importance of ID Verification and Biometrics Technology in Digital Onboarding



ID Verification Steps

1. Facial liveness detection
2. Voice liveness recognition
3. Voice liveness recognition
4. Behavioral analysis

According to a research data conducted by Javelin Strategy & Research, identity fraud costed \$16.9 billion lost in 2019 and affected 5.1% of consumers globally. Federal Trade Commission (FTC) announced that the most common identity fraud types are opening new credit card accounts, mobile phone accounts, business and personal loans, and auto loans and leases. Digitalization trend in the financial ecosystem unfortunately increased the vulnerability to identity fraud apart from its countless benefits. Therefore, effective and accurate ID verification methods have become even more important. During the digital onboarding process, AI-based digital ID verification actually offers simpler, more secure and cost-effective process handling both for the institutions and the consumers.

Biometrics technology is another powerful player in the prevention of online ID fraud as it helps financial institutions to apply the KYC procedures successfully with biometric authentication. Biometrics can be applied to various areas in financial industry; however, the most prominent and useful application of biometrics is in digital identity verification. It works as a powerful alternative to user names and passwords, protection against ID fraud and theft. In the activities of mobile log-ins, payments and most importantly digital onboarding, biometric authentication is of great use in new and returning customer verifications.

In preventing deep fake cases of ID fraud, behavioral biometrics and artificial intelligence (AI) technologies play vital role in the ID verification processes. Some of the steps included in this process are:

Facial liveness detection is a technology that verifies whether the face on the facial recognition system belongs to a real, alive person or not. Customers are required to take a selfie and upload it to the system that detects whether the image is matching the image on their government issued ID.

Voice liveness recognition, similar to facial liveness detection, checks if the sound provided is of a living person or it is a replayed one. This method automatically verifies the speakers in seconds by using their voice as a highly accurate biometric identifier.

Age and gender analysis aims to provide a verification of the customer's age and gender by analyzing the particular vocal and visual characteristics by using AI-powered technologies.

Behavioral analysis is highly effective to decide if a person is onboarding with consent or by illegal enforcement of others. Behavioral analysis is capable of detecting suspicious behavior by analyzing the patterns and speed of typing, clicking or swiping online. Even though the user is completely new, the machine learning technology conducted by the behavioral biometrics analysis system can identify the statistically collected "good" and "bad" behavior.

Global Facts on Digital Onboarding

85%

Mobile Banking traffic raised up in USA according to FIS



50%

Eurostat announced that more than 50% of Europeans have already moved to digital banking.

Digital onboarding has become a global financial trend over the recent years as a result of the evolving digital customer expectations and Covid-19 pandemic has accelerated the growth of digital customer onboarding. Below, the global facts on the adoption and process of digital customer onboarding mainly in the United States and Europe are listed.

Digital onboarding in USA

According to US Fidelity National Information Services (FIS), together with the help of the global pandemic, the digital banking has become extremely popular. In April 2020, mobile banking registrations raised up to 200% and mobile banking traffic to 85%.

A survey conducted by Novantas in US suggests that 60% of the respondents do not have the intention of returning back to physical bank branches even after Covid-19 which signals that moving towards digital is to be permanent.

Cornerstone Advisors report of “What’s Going on in Banking 2021” indicated that the replacement or adoption of a digital account opening system is the top trend among the banks in the U.S. 44% of banks stated that they will renew their consumer digital account opening systems in 2021.

Digital onboarding in EU

Eurostat announced that more than 50% of Europeans have already moved to digital banking.

At the same time, data show that the rate of European consumers abandoning digital banking applications has risen in 2020 compared to 2019 due to the lack of user-friendly mobile applications. Therefore, it is expected that European banks will search for efficient FinTech partners for improving their digital onboarding services and capabilities.

According to Signicat, 68% of European consumers are looking forward to a 100% digital onboarding experience in 2021. Banks that invested in the technological improvements enriching their ID verification systems achieved 84% of customer acquisition.

Forecasts on Implementation Process of the Technology in Turkey

In line with the global trend, Turkish consumers also have high expectations when it comes to the smoothness of the digital onboarding experience. 76% of the respondents by proving identity digitally, 59% of them by proving where they live and 58% of them by setting up a biometric expect that they can open an account digitally, without a need to visit a branch physically.

In 2021, Turkey's The Banking Regulation and Supervision Agency (BRSA) published a new regulation that paves the way for the digital customer onboarding for the banks in Turkey. The legislation states that video identification can be used as the primary method for id verification processes during digital onboarding in Turkey.

The remote ID verification process is subject to some technical and organizational requirements by law. The process must be executed in real-time, without any interruptions, only in the form of end-to-end encrypted video chats. The sound and image quality must be ensured within the given guidelines. The bank employee who is conducting the remote ID verification process is responsible for taking photos and screenshots that clearly shows the person to be identified. During the process, these three steps need to be fulfilled successfully:



How Banks, Fintech and Other Financial Institutions Need to Prepare for Digital Onboarding?

The integrated solution represented by the partnership of Fineksus and Amani Technologies enables financial institutions to benefit from the undermentioned modules and integrations:

- 1.**
An integrated Document Support
- 2.**
4D Biometrics
- 3.**
The Digital Contract module
- 4.**
Document Management
- 5.**
Integration with Fineksus AML solutions serving more than 85% of banks in Turkey.
- 6.**
Risk-Based Approach

The importance of digital customer onboarding for banks, FinTechs and other financial institutions in terms of the improvement of customer relationships and overall efficiency was explained in detail in the previous chapters. In order to be able to ensure a seamless digital customer onboarding experience and thrive in the competitive financial eco-system, the financial institutions must be extremely selective in their choices of partners that will equip them with the best technological and most effective solution in the transformation to digital onboarding process.

Fineksus & Amani Digital Onboarding Solutions

Fineksus, having a respectable amount of experience in providing solutions in the financial messaging software and compliance related matters, collaborated with Amani Technologies, a company specialized in AI-based authentication solutions, to offer a complete digital and integrated KYC/AML solution for the financial institutions which includes the digital customer onboarding as well.

The digital customer is expecting smooth, fast and secure financial experience. Therefore, financial institutions need to come up with technological solutions to manage the digital identity related issues both to offer the most user-friendly and safe digital experience. Know Your Customer (KYC) and Anti-Money Laundering (AML) procedures are among the key prerequisites of a successful digital onboarding process. Identity authentication and legal requirements need to be fulfilled completely and correctly without meeting a potential customer in person. The regulatory framework and improvements supported KYC processes in the past years; however, the challenges are still available as the web-based KYC applications remain inadequate. Collaborations like Fineksus-Amani Technologies address the gaps and important needs in the financial world by bringing in the powerful sides of each partner and creating the most effective solution. Amani Technologies' document verification, data integrity, and customized solutions combined with Fineksus' expertise in the KYC and AML solutions serves as an innovative approach for the digital onboarding processes and has been rapidly adopted in the industry.

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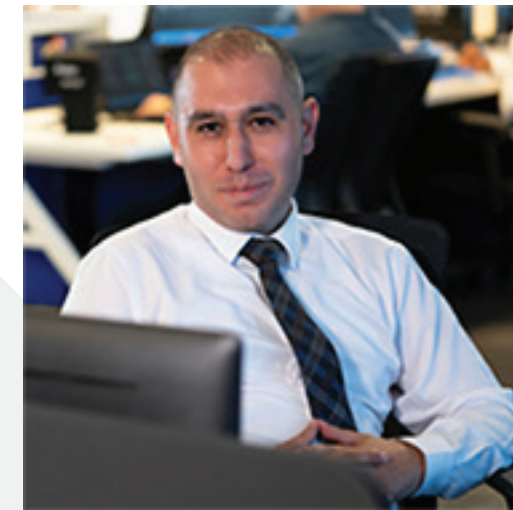
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About Us

Milestones

Fineksus was founded in Istanbul, Turkey in 2002 as a software and professional service provider to deliver technical consultancy, outsourcing services, standalone / SaaS AML and payment software solutions for banks, brokers and corporations. In the beginning of 2013, Fineksus started managing its ongoing GCC Region operations at its new office in Dubai, UAE.

Fineksus is the market leader of compliance and financial messaging solutions in Turkey by providing its products and services for more than 95% of the banking industry, and aims to expand its offerings global wide which makes the company at the forefront for providing AML solutions and financial messaging tools.

PayGate™ Suite as AML trademark

Fineksus provides products and services across 29 countries from Hong Kong to the UK with offices in Istanbul, Dubai and Qatar. By meeting ever-changing demands of RegTech industry with 18 years of know-how, Fineksus develops cutting edge tools to bring value for more efficient and effective way of AML compliance and financial messaging. PayGate™ Compliance package covers all the fundamental operations based on AI and machine learning to maintain surveillance of financial systems.



PayGate™ KYC
Know your customer.
Know your risk.



PayGate™ Analyzer
Next generation
transaction monitoring.



PayGate™ Inspector
AI-powered blacklist
filtering.

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