

fintech **OS**

Retail Digital Onboarding 1.0

User Guide

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Overview

Retail Digital Onboarding is a complex digital journey that allows a customer to open a current account digitally. By first inserting a few details about the customer, such as contact information and answering questions, the software returns a tailored loan product to fit the scope and needs of an applicant. Throughout the process, the identity of the customer is checked by scanning an ID or transferring data from another bank or Near Field Communication with an ID document. At the end of the process a current account is opened, and, if selected, a debit card is shipped. The journey has modern-day components to ensure full automation. Lastly, a feedback form was introduced to collect the opinion of the user and the possibility to invite a friend by copying a promo code.

The user is an **Un-Authenticated Customer** (a new customer to the bank, un-authenticated in the Portal) and the customer segment is **retail individuals**.

The digital journey is built for mobile mode with a user interface easy fitted for smaller screens. The journey can be used in desktop mode as well.

Business Pain Points

The Retail Digital Onboarding digital journey by FintechOS is aimed at resolving some of the pain points when opening a current account:

- the application takes time to fill in;
- requires various documents to verify identity;
- customers rely on information received from clerks;
- too many fields to be configured and data to be collected;
- multiple steps to be performed by the user.

The Retail Digital Onboarding journey by FintechOS solves these pain points by offering a fully digital seamless way for your customers to open an account.

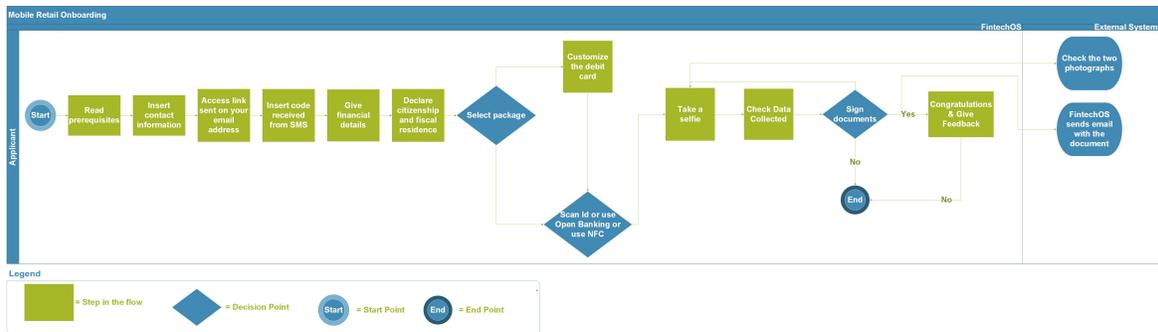
Advantages of the Retail Digital Onboarding:

- Digital. The application is 100% digital, including the signature of the contract. The result is a fully functional current account.
- Time-efficient. The process has only a few steps.
- Personalization. This digital journey is highly configurable and can be further enhanced via FintechOS Studio to adapt it to your business requirements.
- Unassisted. The journey does not require the assistance of a bank employee for the user to open the account. It can be done by any customer on a mobile phone with access to Internet.

Solution Walkthrough

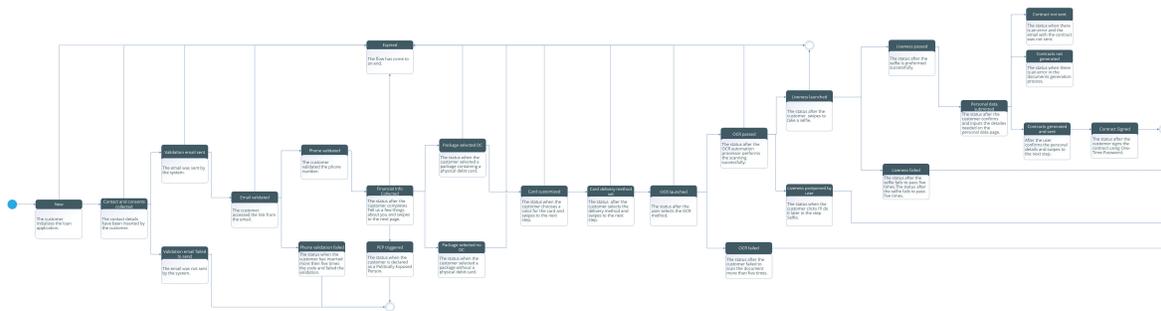
The Retail Digital Onboarding digital journey enables a user to open an account and receive a debit card delivered. It is powered by automation processors such as "Configuring the Banking Products" on page 53, and "Configuring the Business Workflows Processor" on page 51. It is configurable to fit the business needs of any financial institution by use of such micro-services.

Below is a UML diagram showing the main actions that the user takes to open an account.



To download the diagram, click [here](#).

The image below describes a detailed Retail Digital Onboarding workflow containing the statuses the journey passes through. For each status, there is an explanation as to what action it corresponds to. The transitions between statuses are displayed as well.



To download the diagram, click [here](#).

To open a current account, and optionally a debit card, an un-authenticated customer visits the following pages which mark milestones in the process:

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Welcome

The first screens are meant to guide you and determine whether or not you are an existing customer or not, i.e., if you already have a current account with the bank.

NOTE

The welcome screens are placeholders where a bank can display marketing content about the process and the products it offers or photographs. Depending on the branding and advertisement strategies, a bank can use this space for commercial use.

1 Screen One

The first screen has two buttons:



1. **I already have an account.** This button leads to the Internet Mobile app owned by the bank for existing customers who already have an account.

IMPORTANT!

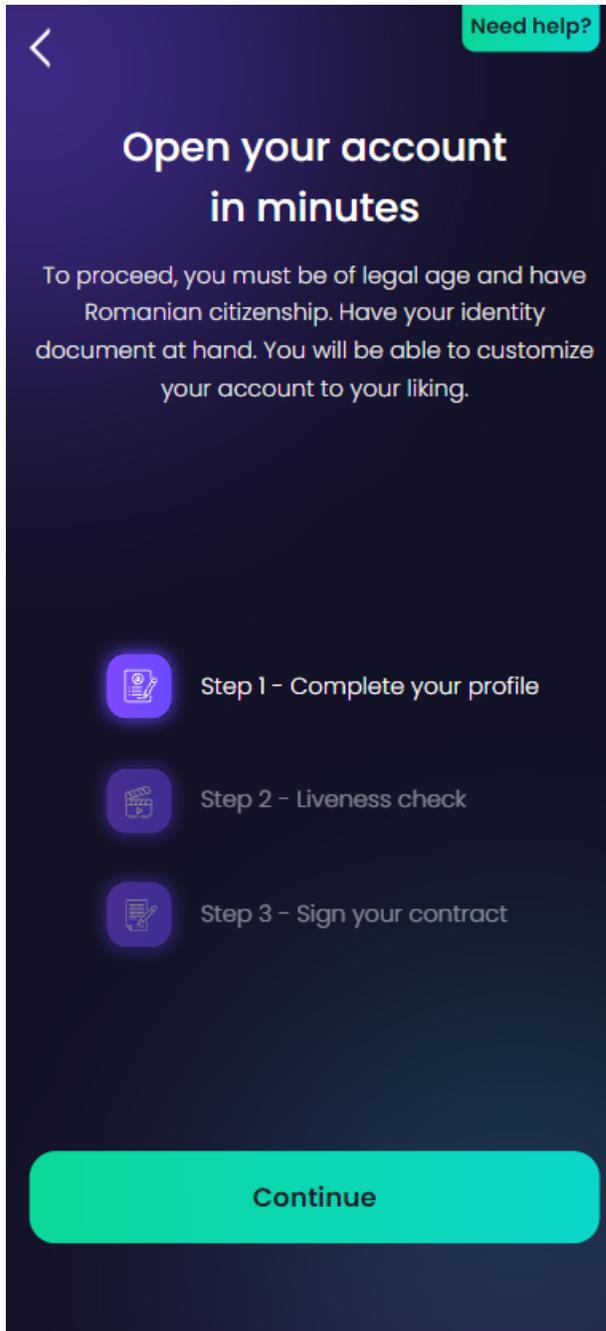
This button does not work, but it is available for configuration at a later date.

2. **I want to open a new bank account.** This button launches the process of opening a current account and ordering a debit card.

The application has the status **New** once it is launched.

2 Screen Two

The second screen explains the necessities for the process. It guides the customer, and gives some details about what to expect. In order to apply, you must meet the following conditions found under the heading *Open your account in minutes*:



- be over 18 years old
- have Romanian citizenship

- not be a politically exposed person
- not be on the black list of the bank.

Additionally, it has a presentation of the three steps of the journey:

Step 1. Complete your profile

Step 2. Selfie

Step 3. Sign your contract.

NOTE

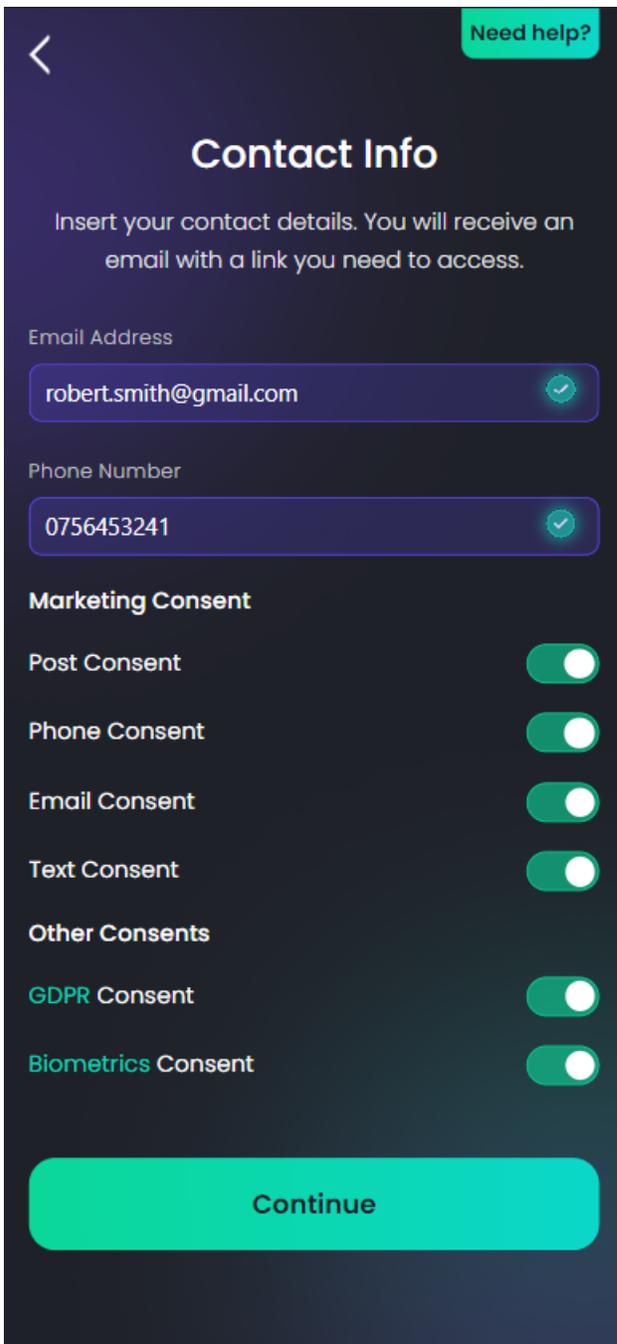
There are no input fields, it is a read-only, static page.

To move to the next page, at the bottom of the page, click the **Continue** button.

Contact Info

1 Insert data

You are asked to insert your phone number and email address to send an email with a link to open. Insert the code sent to your phone to verify the two contact addresses declared. By reaching this page, the status is **Contact Validation**.



The following fields are displayed with the message: *Insert your contact details. You will receive an email with a link you need to access.*

Field	Description
Email	<p>Insert your email address.</p> <div style="background-color: #f9c79d; padding: 10px; border: 1px solid #ccc;"> <p>IMPORTANT! For the email address to be approved it must contain the character "@" followed by a full stop.</p> </div>
Phone Number	<p>Insert your phone number. You can insert the number without a country code for Romanian numbers.</p> <div style="background-color: #f9c79d; padding: 10px; border: 1px solid #ccc;"> <p>IMPORTANT! It must have nine numbers.</p> </div>

Three consents are presented: **GDPR** (mandatory), **Marketing** (optional) with the subsidiary Post&Phone&Email&Text consents, and **Biometrics** consent (mandatory). Toggle them as needed. There are by default set to off and each consent is collected individually to mark the customer's approval. From a technical standpoint, the system registers the time when the customer agreed to the requirements. By clicking on the names of the consents for GDPR and Biometrics, a pdf is opened with details. A toast message is displayed to the customer in case the mandatory consents have not been given.

Open your email and access the link in the email to open a new web page and generate the SMS.

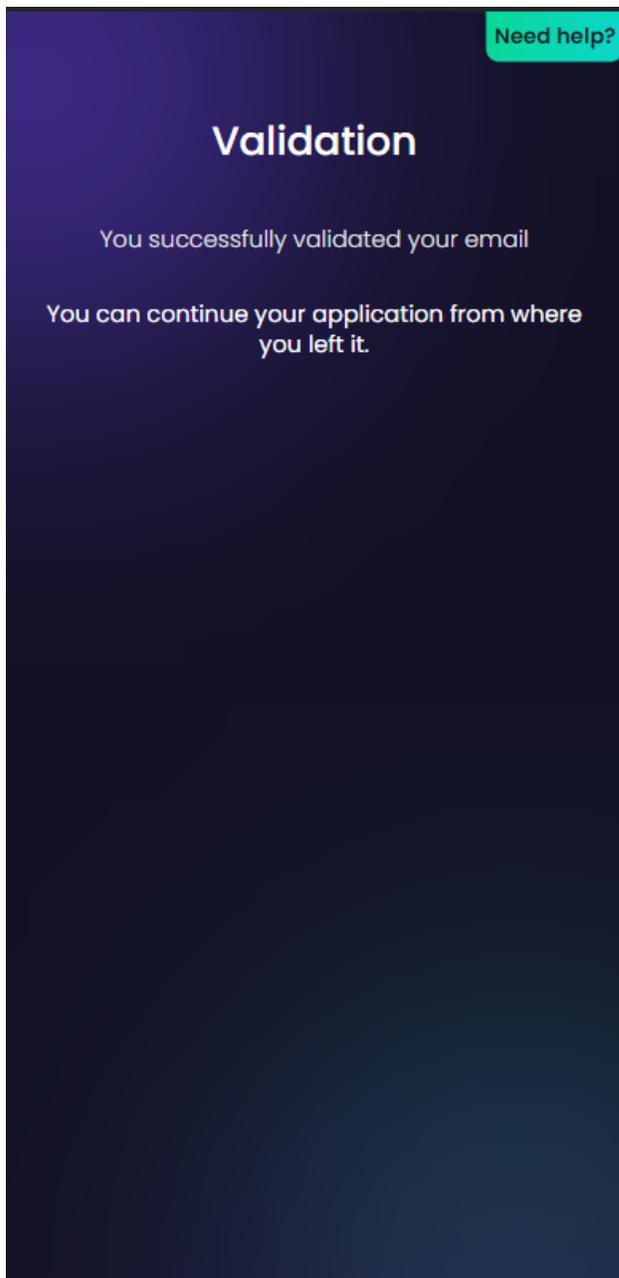
For details on how this was configured, see "[Configuring the Digital Flow Settings](#)" on page 60.

To move to the next page, at the bottom of the page, click the **Continue** button.

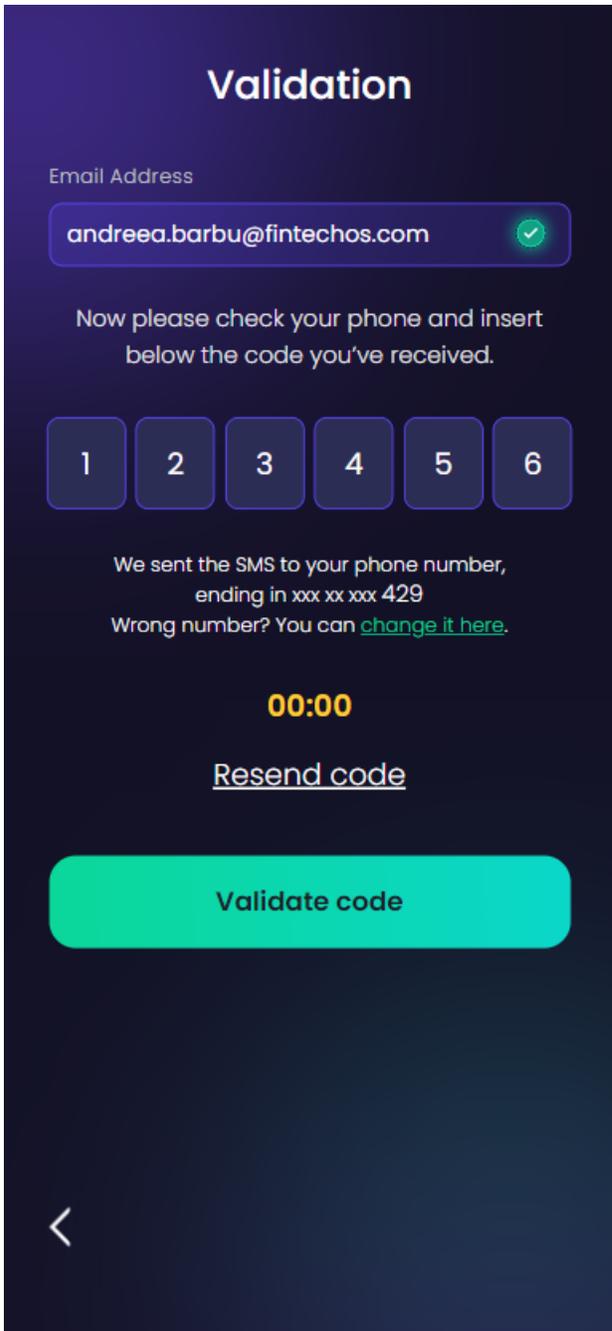
The status is **Validation Email Sent** once the swipe is triggered. Now, open the email provider, and open the email the system has sent to access that email.

2 Validation of SMS

This screen is refreshed when you accessed the email with the button **Validate**, which opens a new link. The link opens a confirmation page, but continues the flow on the original link.



As instructed, insert the code that has been sent automatically by the system to your phone number. To validate the SMS code, simply insert it. The page contains the following message: *Now please check your phone and insert below the code you've received.*



Each letter from the six-digit code has its own box.

The screen reads the message *We sent the SMS to your phone number, ending in xxx xx xxx 5855* Wrong number? You can **Change it here**. Click **Change it here** to change the phone number inserted earlier.

NOTE

For now, the **Change it here** link is not implemented.

Click **Resend** to generate the code again.

After insertion, click on **Validate Code**.

When you reach the maximum attempts, the system displays a toast message.

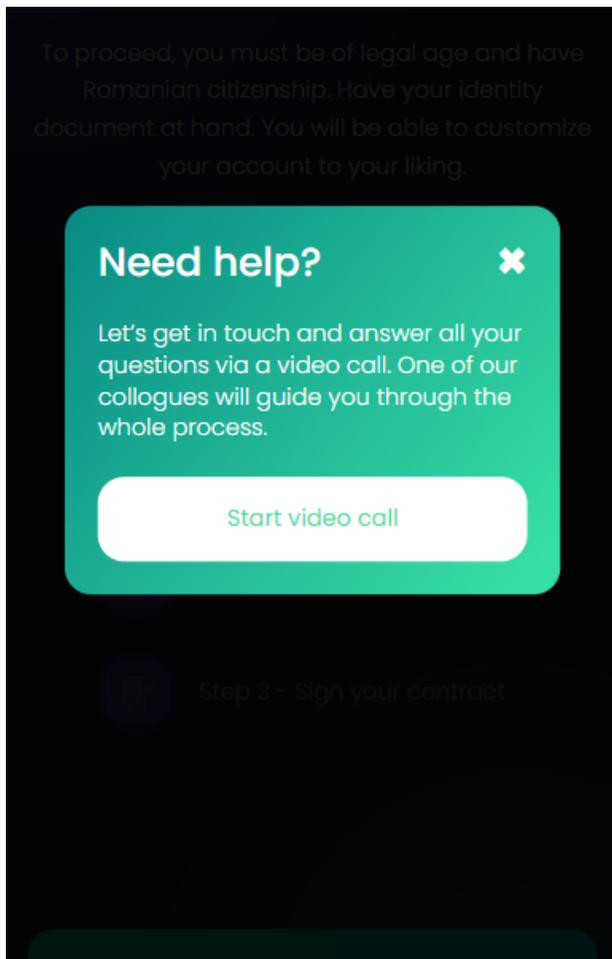
If the code inserted is correct, the system opens the next page, and the status is **Contact validated**.

NOTE

For details on the process, see "[Configuring the Digital Flow Settings](#)" on page 60. Using settings for the OTP, a code with 6 digits is generated, and the system records the pending, validated, and failed statuses of the confirmation of the channel: email and SMS in the entity FTOS_DFP_OTP.

Need help

On the top right-hand corner, there is a button labeled **Need help?** (It is not displayed on the pages "[Congratulations and FeedBack](#)" on page 46). Click it to open the pop-up with the message: *Let's get in touch and answer all your questions via a video call. One of our colleagues will guide you through the whole process.*



To abandon, click the **X** symbol to close the pop-up.

Click **Start video call** to launch the call with a bank operator, who picks up the queue in the FintechOS Portal.

NOTE

For details on how it was implemented, see "[Onboarding_VideoCall](#)" on page 64.

Tell Us a Few Things About You

After the contact details have been validated, it is time to insert some scoring and eligibility data. The scoring and eligibility data determine whether or not you can open a current account. The scoring formula is paramount as it takes into account the data collected here.

Fill in the following fields:

The screenshot shows a dark-themed onboarding form. At the top right is a teal button labeled 'Need help?'. The main heading is 'Tell us a few things about you'. Below it, a note states 'These questions are required due to existings laws'. The form contains five dropdown menus, each with a teal checkmark and a dropdown arrow, and two toggle switches. The dropdowns are: 'Employed', 'ABC', 'Inheritance', 'Cash account & savings', and 'Eur 15k-250k'. The toggle switches are for 'Are you the real beneficiary of the funds?' (turned on) and 'Are you a publicly exposed person?' (turned off). A large teal 'Continue' button is at the bottom.

Need help?

Tell us a few things about you

These questions are required due to existings laws

What do you do for a living?

Employed ✓ ▾

What's your company name?

ABC ✓

What's the source of your funds?

Inheritance ✓ ▾

Nature of business relation?

Cash account & savings ✓ ▾

Estimated Transaction Range

Eur 15k-250k ✓ ▾

Are you the **real beneficiary** of the funds?

Are you a **publicly exposed** person?

Continue

Field	Required	Description
What do you do for a living?	Mandatory	<p>This field is mandatory. One of the available options must be selected:</p> <ul style="list-style-type: none"> • Employed • Retired • Freelancer • Inactive (i.e. unemployed).
What is your company's name?	Mandatory	<p>Insert the name, it must have a maximum of 30 characters.</p>
What is the source of your funds?	Mandatory	<p>Select from the list:</p> <ul style="list-style-type: none"> • Sale of shares or other investment • Loan • Company Sale • Company Profits / Dividends • Inheritance • Gift • Maturity/surrender of life policy • Other income sources.
Nature of business of relation?	Mandatory	<p>Select from the list:</p> <ul style="list-style-type: none"> • Cash account & savings • Loans & investment • Other.
Estimated transaction range	Mandatory	<p>Select from the list:</p> <ul style="list-style-type: none"> • Eur 15k-250k • Less than Eur 15k • Greater than Eur 250k.

Afterward, there are two toggles: **Are you the real beneficiary of the funds?**

Click on it to open a tooltip with the following message: *The real beneficiary is: the natural person or persons who ultimately own or control a legal person by exercising the right of ownership, directly or indirectly, over a sufficient number of shares or voting rights to ensure its control or by participation in the equity of the legal person or by exercising control by other means, the legal person owned or controlled not being a legal person registered in the trade register whose shares are traded on a regulated market and which is subject to publicity requirements in accordance with those regulated by the legislation of the European Union or with standards set at international level. This criterion is considered to be met in case of holding at least 25% of the shares plus a share or participation in the equity of the legal person in a percentage of over 25%.*

and **Are you a publicly exposed person?** The tooltip contains:

Politically exposed person' means a natural person who is or who has been entrusted with prominent public functions and includes the following:

- a. heads of State, heads of government, ministers and deputy or assistant ministers;
- b. members of parliament or of similar legislative bodies;
- c. members of the governing bodies of political parties;
- d. members of supreme courts, of constitutional courts or of other high-level judicial bodies, the decisions of which are not subject to further appeal, except in exceptional circumstances;
- e. members of courts of auditors or of the boards of central banks;
- f. ambassadors, chargés d'affaires and high-ranking officers in the armed forces;
- g. members of the administrative, management or supervisory bodies of State-owned enterprises;
- h. enterprises;
- i. directors, deputy directors, and members of the board or equivalent function of an international organization.
- j. international organization.

NOTE

If the customer toggles yes to the politically exposed person question, the flow ends here.

To move to the next page, at the bottom of the page, click the **Continue** button. The trigger to the next page changes the status to **AML done**.

Time to Choose Your Package

The solution presents three packages from which to choose: two products are for the currency RON and one product is for Euro. To navigate between packages, swipe left and right. Underneath the header, there are two buttons to filter between the currencies of the packages: **RON** and **EURO**. Click on each to display the package that has that currency. If the currency selected was RON, then two packages are displayed and the user can navigate between them.

NOTE

The products were built using "[Configuring the Banking Products](#)" on page 53.

Each product has a card displayed with the following details for the consumer to know: the package name and price, expiry date of the debit card (the current date and additional 3 years) and card number, a sixteen-digit number.

1 Starter Pack

This product has the following features:

Feature	Required	Description
Current account	mandatory	RON
Visa Debit card	optional	RON
Virtual Debit Card	mandatory	RON
Internet banking	mandatory	
Monthly cost		It is free.
10 free withdrawals from any ATM/month		

Feature	Required	Description
Free account management		

2 Premium Pack

This product has the following features:

Feature	Required	Description
current account	mandatory	RON
MasterCard Debit card	optional	RON
Virtual Debit Card	mandatory	RON
Internet banking	mandatory	
Monthly cost		It is 10 RON/ month
Unlimited free withdrawals from any ATM/month		
Free account management		

3 Euro Pack

This product has the following features:

Feature	Required	Description
current account	mandatory	EUR
Visa Debit card	optional	EUR
Virtual Debit Card	mandatory	EUR
Internet banking	mandatory	
Monthly cost		It is 2 Euro/ month.
Unlimited free withdrawals from any ATM/month		
Free account management		

At the end of the page, there is a field **Yes, I want a physical debit card:**

- toggled off, the user receives a debit card.

This toggle is set as on by default. Then the information of the package is refreshed to eliminate the card information.

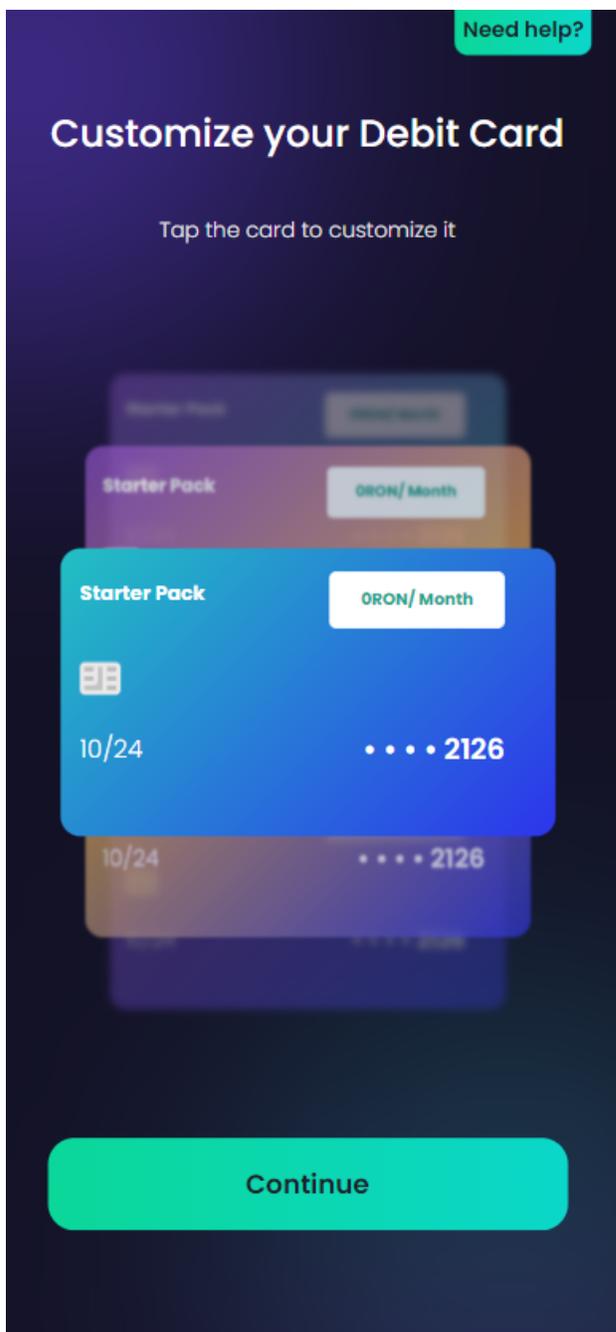
- toggled off, the user does not receive a debit card.

To move to the next page, at the bottom of the page, click the **Continue** button. The trigger to the next page changes the status to **Package selected DC**, in case you selected a package including a physical debit card, or **Package selected no DC**, in case you selected a package without a physical debit card.

If you have declined the physical debit card, then the next step is "[Identification](#)" on [page 30](#). However, if you have selected a debit card, the next step is "[Customize Your Debit Card](#)" below.

Customize Your Debit Card

If you selected in the previous step a debit card, you are directed to the following two pages:



HINT

This step is optional. If the customer did not select a card, these pages are not displayed.

1 Customize Your Debit Card

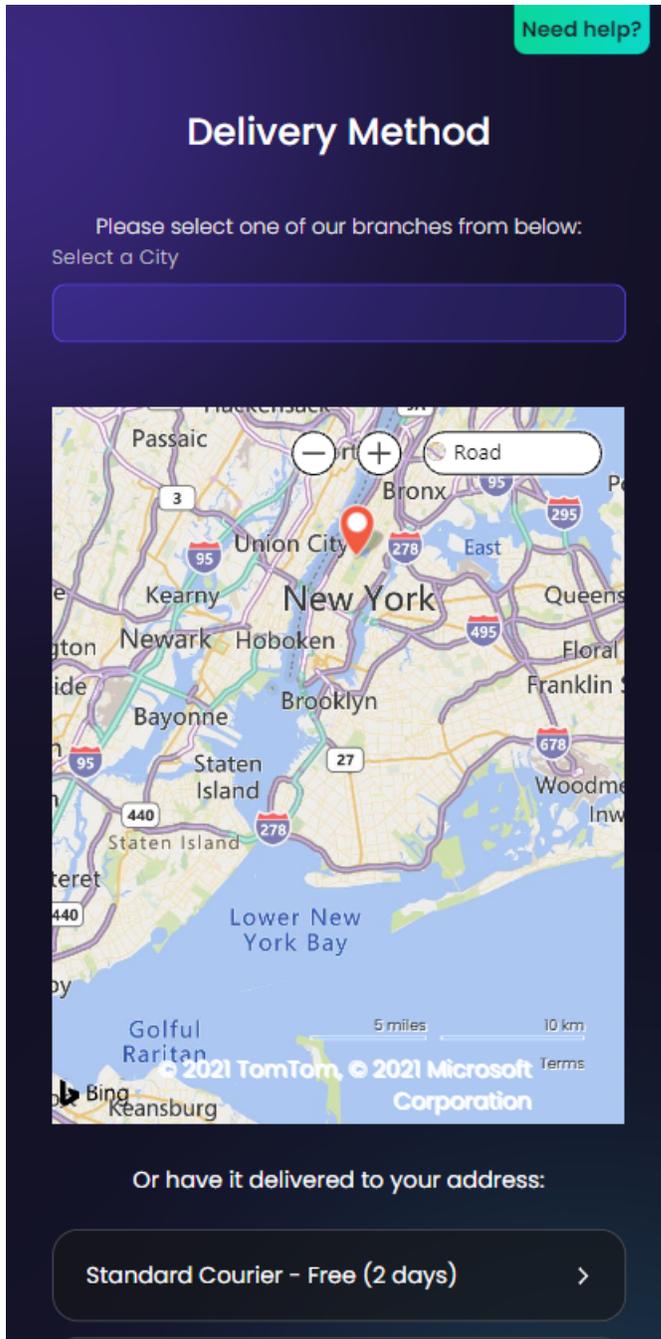
Two personalization elements are available for the debit card: the colour and name displayed on it. Tap on the card displayed to:

- customize color: choose between four colours. The default color is green and the rest are purple, black and red.
- name: the customer can choose the order of the surname and first name.

To move to the next page, at the bottom of the page, click the **Continue** button. The status is **Card customized**.

2 Delivery Method

Select one option for delivery: a branch where you can pick up the card or home delivery. This screen displays the message *Please select one of our branches from below*.

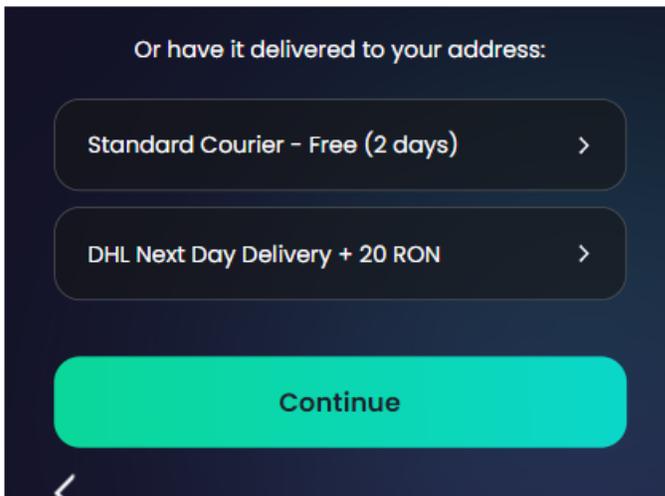


There is one field on this page labeled **Select a city** with a drop-down set of names of cities where the bank has branches and the address for the available branches. Underneath, there is a map depicting the locations available. You can choose to tap on the desired branch and select it. To navigate within the map, to zoom in and out pinch in and out.

HINT

The admin must have options to update this list, via API and an admin user for back-office users who can manually modify the data.

If you wish to have the debit card delivered to a personal address, select between:



- Standard Courier - free (2 days)
- DHL Next day delivery - 20 RON

To move to the next page, at the bottom of the page, click the **Continue** button. The status is **Card delivery method set**.

Identification

Once the package has been selected with the optional debit card, you can move to the next step where you give information about your identity. The data is collected in multiple ways allowing you to choose the method. The data is collected from a document or Open Banking or Near Field Communication to ensure that you are part of the right audience with a valid citizenship. The data collected is mandatory due to regulatory laws for contracting a loan or any financial product.

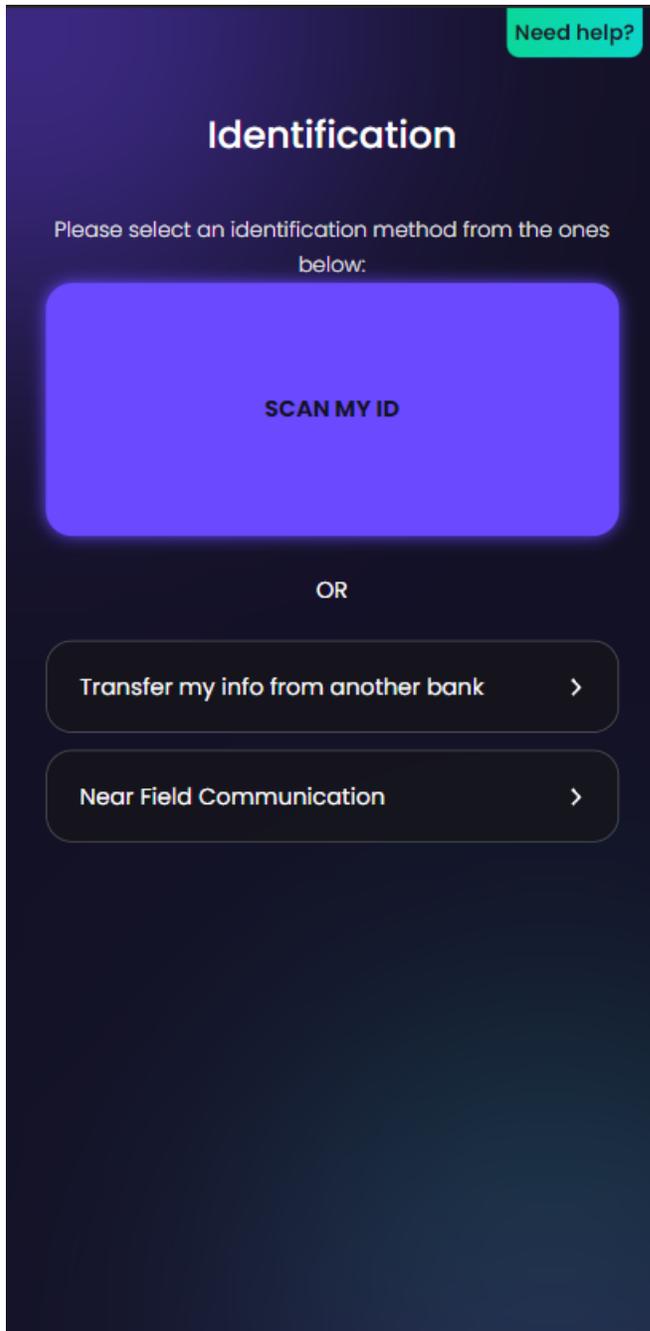
The screen displays the following list of options between which you must choose:

- Scan ID (it is the recommended option by the system. It can scan an personal identification card, driver's license and passport. See "[Configuring the Computer Vision, Face recognition and Liveness](#)" on page 64 for details.)
- Use Open Banking (allow the system to pull data from another bank where the potential customer has an account opened.)
- Use NFC (it allows the potential customer to use Near Field Communication by approaching their ID card to the phone).

From the list, the user must select one of the three options offered by FintechOS Portal as instructed *Please select an identification method from the ones below.*

There are three business statuses for this step:

Field	Description
OCR launched	After you select the OCR method, the status is set.
OCR passed	After the automation processor approves your application.
OCR failed	After the fifth attempt to scan the document is failed.



Scanning an Identity Document

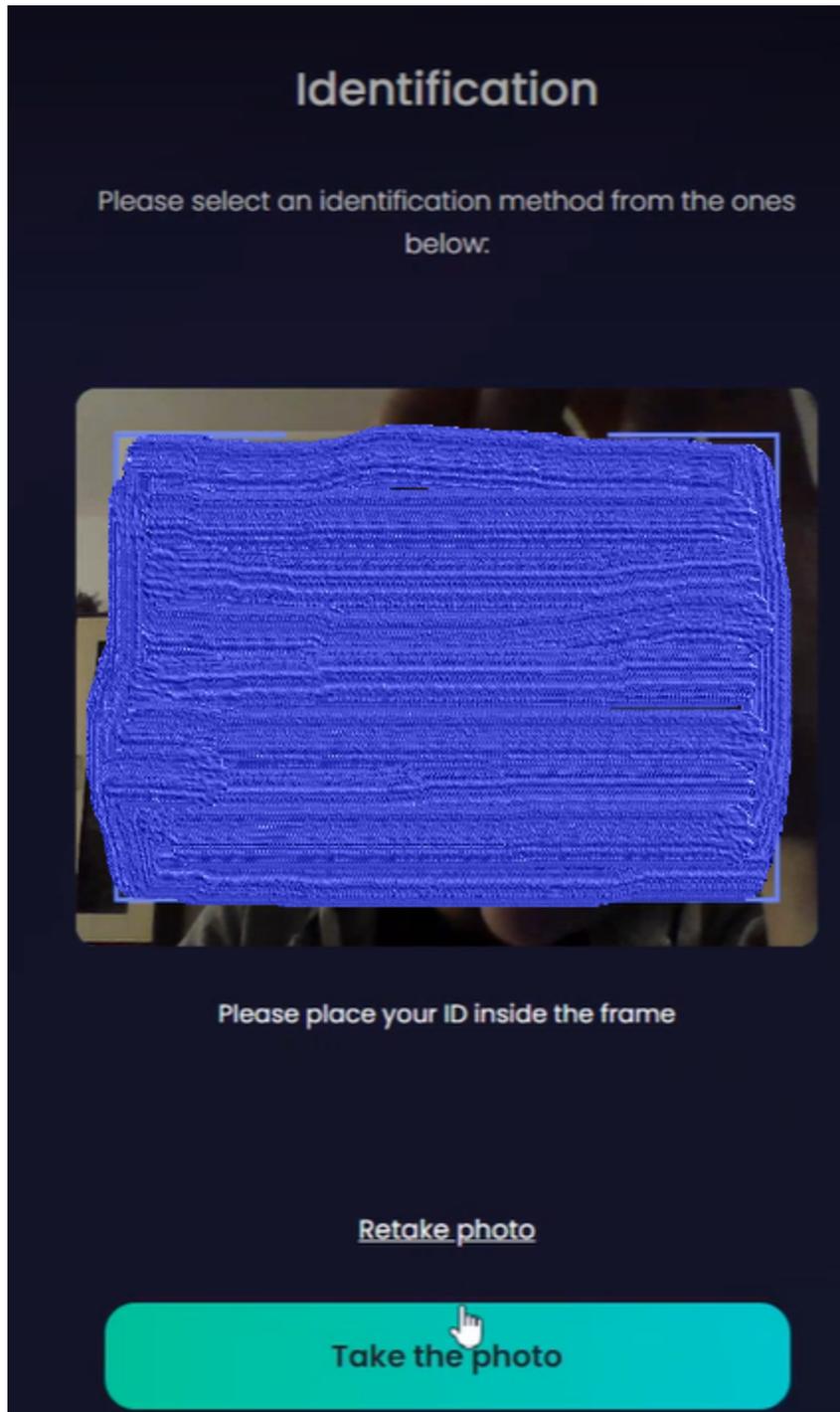
The supported ID documents are:

RETAIL DIGITAL ONBOARDING USER GUIDE

- national identity card
- passport
- driver's license (for United Kingdom citizens only)

Scanning a document

1. Click **Take the photo**.



2. Click **Process the file**.

If the photo is successful, then you are directed to the next step. If it fails, then you have 1000 tries.

NOTE

To read how it was configured, see "[Configuring the Digital Flow Settings](#)" on page 60.

Open Banking

FintechOS is able to pull data from an external database (another commercial bank where you have an account opened). This is possible through the legal framework of the Payment Services Directive 2. It's a European Union directive designed to regulate better payments services.

IMPORTANT!

There are no configurations in place for this type of gathering of data. It can be developed by banks according to their needs.

NFC

Near field communication transmits data through electromagnetic radio fields to enable two devices to communicate with each other. Approach your ID card to the phone with the NFC toggled **On**.

IMPORTANT!

There are no configurations in place for this type of gathering of data. It can be developed by banks according to their needs.

Liveness Check

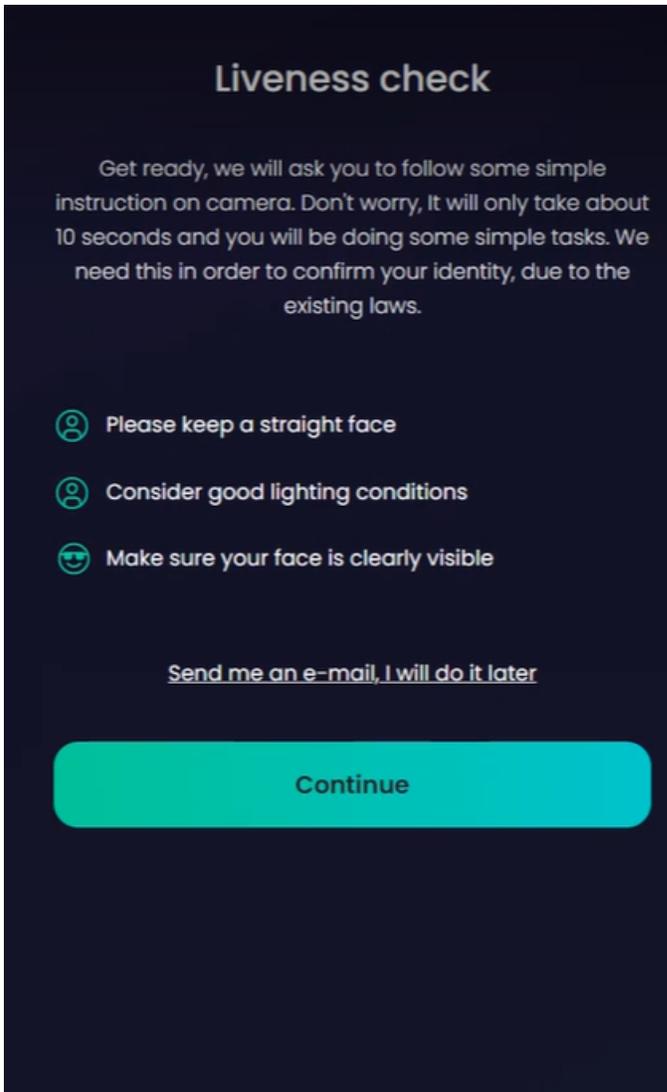
If the data was inserted successfully in the system in the previous step, you can access the selfie part of the session. This step has more duties to fulfill:

- face recognition
- liveness.

HINT

The customer can choose to skip the liveness check and resume it in the step ["Signature of Documents" on page 44.](#)

The page entitled *Liveness check* is displayed with the following message:



1. Click **Continue**. From there, follow in instructions on the screen. You are instructed to perform some tasks including moving your head to confirm it is a live person, not a photograph. The result is matched with the photograph from the identity document from the database.

or

2. Click **Send me an e-mail, I will do it later**. This button triggers the sending of an email with a **Pickup Now** button to continue the flow from this step.

The selfie is necessary to progress in the application. If this step is successful, the business status is **Liveness passed**. If this step is failed the business status is changed to **Liveness failed** as presented in "Configuring the Business Workflows Processor" on page 51.

You have 5 possibilities to retry should the selfie fail.

NOTE

To configure the recording, see "Onboarding_Liveness" on page 68.

Good job, Name!

This screen displays what are the steps left to achieve to open an account. The header is dynamic, and it displays the name of the customer after scanning the document.

The following message is displayed: *You're almost there!*

Step 1. Complete your profile

Step 2. Selfie

Step 3. Sign your contract.

Steps 1 and 2 are done and the last one is awaiting.

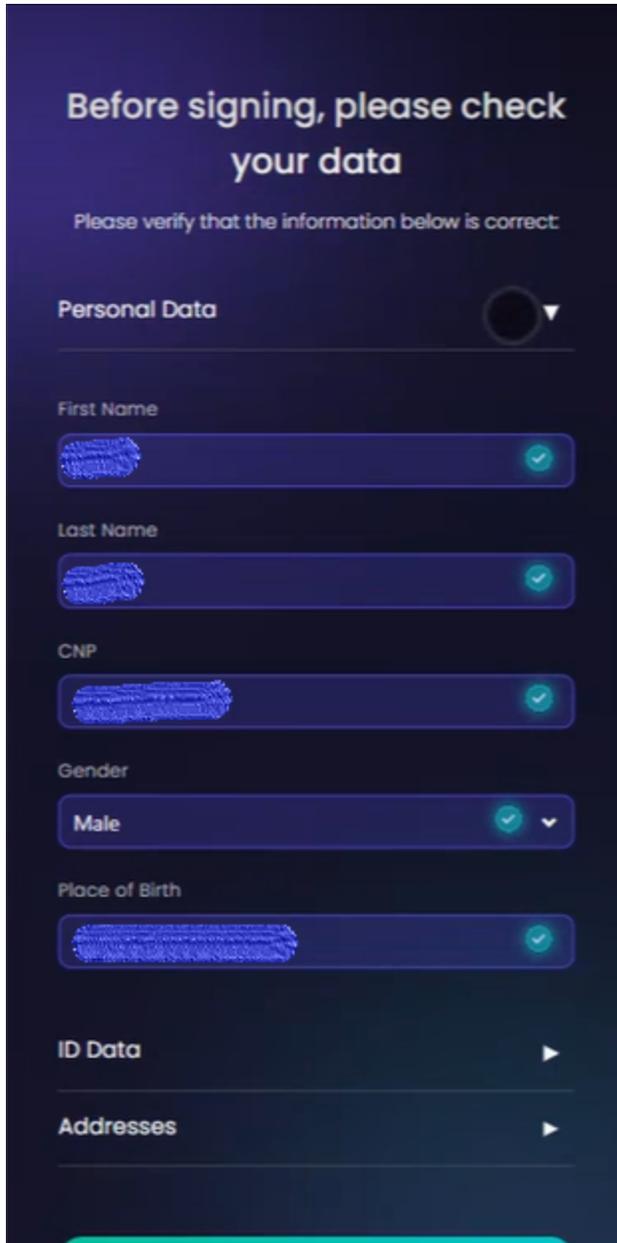
To move to the next page, at the bottom of the page, click the **Continue** button.

Check Data Collected

You have given the following information using one of the three methods available (scan ID, use NFC and Open Banking). If it was collected wrongly, you can edit the following fields, which are already completed with the data collected earlier.

The fields for every section are expanding texts. Tap on each section to reveal the fields:

1 Personal information



Field	Data Type	Description
First Name	Text	Edit your first name.
Last Name	Text	Edit your last name.
Personal Identification Number	Text	Edit your Personal Identification Number.

Field	Data Type	Description
Place Of Birth	Text	Edit your place of birth.
Gender	Text	Male/Female

2 ID card information

Field	Data Type	Description
ID issue date	Text	Edit the date when the document was released.
ID series	Text	Edit the number of the document.
ID expiration date	Text	Edit the date from which the document is no longer valid.
Institution who issued the ID	Text	Edit the institution who created the ID.

3 Address information

Field	Data Type	Description
Country	Lookup	Select your country.
District	Lookup	Select your district.
City	Lookup	Select your city.
Street	Text	Edit your street name.
Number	Whole Number	Edit street number.
Building No	Text	Edit the building number.
Stairway	Whole Number	Edit floor number.
Apartment	Whole Number	Edit apartment number.

In case you selected a physical debit card and the delivery method is by courier, a toggle is displayed asking whether the card to be sent to the same address as the one provided in the ID document or to add another address for the card delivery:

- The toggle on signifies *I want my debit card sent to this address*
By default, the toggle is set to on.
- The toggle off signifies *I want my debit card to be sent to a different address.*

To move to the next page, at the bottom of the page, click the **Continue** button.

Citizenship and Fiscal Residence

This screen is imposed by legal standards in the domain, and both sections are mandatory to be toggled before moving to the next step. The first part is by default set to no, you are not a Green Card holder, and the second, you have Romanian citizenship.

NOTE

After this page loads, an email is sent with the Terms & Conditions, the price list, and the contract.

1 US Citizenship

Once the anti-money laundering step is completed, the bank is obligated to ask the potential customer information about the USA green card with the following message due to the legal requirements for opening an account: *Are you a US Citizen or Green Card holder? We're asking you this because of FATCA.* By clicking on FATCA, a static pdf document is opened with all the legal details concerning Foreign Account Tax Compliance Act.

To answer this question, toggle the field:

- the toggle off signifies *No, I am not a Green Card holder*
- the toggle on signifies *Yes, I am a Green Card holder.*

The toggle is off by default.

IMPORTANT!

If you are a Romanian citizen, then the fiscal residence step is skipped. It is automatically inserted into the database.

2 Your Fiscal Residence

The second half of the screen treats the Common Reporting Standard legal requirements with the message *Please list all of the countries you are a tax resident in. We ask this because of CRS. Are you a Romanian Citizen?* By clicking on CRS, a static pdf document is opened with all the legal details.

To answer this question, toggle the field:

- the toggle off signifies *No, I am not a Romanian citizen*
- the toggle on signifies *Yes, I am a Romanian citizen.*

The toggle is on by default.

To move to the next page, at the bottom of the page, click the **Continue** button. If you move to the next step the status becomes **FATCA done**.

Fiscal Residence

You are asked to declare the country where you are paying taxes: *Please list all of the countries you are a tax resident in. We ask this because of CRS.* By clicking on CRS, a static pdf document is opened with all the legal details.

Three fields are displayed on this page:

Field	Data Type	Required	Description
Select a country	Option set	Mandatory	Select the name of the country where you are paying your taxes to a state.
Tax ID	Text	Optional	Insert the Id for identification. It must have a maximum 20 characters limit.
Add another fiscal residence		Optional	The customer has the option to add more (up to five) fiscal residencies. By clicking this button, a new set of country and tax id fields are displayed in the existing set.

IMPORTANT!

At least one residence must be filled in.

To move to the next page, at the bottom of the page, click the **Continue** button. If you move to the next step the status becomes **Fiscal residence done**.

Signature of Documents

Once you checked the data, then you can preview the documents for the package you are acquiring. An email is sent with the paperwork allowing you to read at leisure the current account and debit card contracts.

The screen labeled **It's time to sign your contract** has all the documents displayed. To view any one of the documents, click on the pdf symbol at the beginning of each row. An email with the documents has been sent as well to allow the user to take their time to read them carefully: *Please, click below to sign it. To carefully read it, a PDF version has been sent to your email address.*

An email is sent with the documents to be read. For details on how the email is configured, see [Email&SMS Generation](#).

To move to the next step, click **Sign contract**. The signature is done 100% digitally.

IMPORTANT!

The signature is simulated. A One-Time-Password (OTP) is generated.

You must:

1. Read the contract.
2. Insert the One-Time-Password inserted from the SMS received.

Insert one number in each box. There is one minute to fill in the code. There are six boxes for every character of the OTP, followed by the message *We sent the SMS to your phone number, ending in xxx xx xxx 453. Wrong number, you can change it here.* A pop-up modal is displayed to insert a new phone number.

3. The documents have been successfully signed. An email is sent with the documents signed as explained in [Email](#).

NOTE

To see how it was configured, click on "[Configuring the Documents](#)" on page 59 & "[Configuring the Digital Flow Settings](#)" on page 60.

Time to Finish the Liveness Check

This page is displayed if you have not done the selfie: *Get ready, we will ask you to follow some simple instructions on camera. Don't worry, It will only take about 10 seconds and you will be doing some simple tasks. We need this in order to confirm your identity, due to the existing laws.*

There are a few requirements for the video:

- Please keep a straight face
- Consider good lighting conditions
- Make sure your face is clearly visible

Click on **Take a selfie** to begin the selfie part.

If the action is successful, you are directed to the signature page and can complete the process with that last step.

Congratulations and FeedBack

1 Hooraaay!

If the signature of the document has been successful, then you arrive at the final screen where the information about the account is presented. The status of the application is **Contract Signed**. The screen has the message: *Your account has been opened and an email containing details about your account has been sent. You can manage your account further using our Mobile Banking App*. The IBAN is displayed, and you can copy it, and save it.

2 Feedback

It is essential to store data about the experience of the customer. By clicking **Give feedback** a new page is displayed with a feedback form:

- Rate the experience.
- Select from the list the source from where you hear about the bank.

NOTE

The feedback information is stored in the database with the use of a server automation script named `FTOS_BARET_AddFeedback`. For the referral, see [FTOS_BNKAP_SendReferralEmail](#) and [FTOS_BNKAP_ValidateReferral](#). For details see [Validations](#).

3 Your Promo Code

Another added advantage for you is the promo code. The system allows you to introduce a friend to the bank and this current account process by generating a code to send it to a friend. Click **Copy** to automatically copy the code and send it to

someone.

To return to the homepage, click **Continue**.

Installation

Prerequisites:

- Standard FTOS infrastructure (with B2CPortal, B2CProxy and Jobserver) v21.1.6;
- Banking Product Factory v21.1.8001;
- OTP project;
- B2C Setup project OR a manually configured B2C security role assigned to the Guest user and a frontend domain named B2C.

1 Install the solution

Add the latest syspackdeployer in the reset folder, edit the installer and run it in admin mode.

Add the latest syspackdeployer in the solution folder, edit the installer and run it in admin mode.

2 Set up the additional files

Copy/upload the custom folder in the B2CPortal folder.

Copy/upload the content of the UploadEBS in your UploadEBS folder.

Add the keys from keys-for-b2c file in the web.config of the B2CPortal and change it with your values. If you don't want to integrate with the core banking system, just set the key CB-use-integration to 0 and you can leave the other keys with the default values.

Add the keys needed for the Cognitive Processors and SMTP in the web.config of the B2CPortal.

Add the keys needed for the Cognitive Processors in the serviceSettings of the Jobserver.

Add the proxy routes in proxy config file.

Restart the application pools/services for B2CPortal and B2CProxy.

3 Install default banking products

Add the latest syspackdeployer in the solution folder, edit the installer and run it in admin mode.

Configurations

The following chapter of this guide is meant to explain the automation processors used to build the products, and statuses, as well as technical details of how automation scripts aid the validation process or the process of comparing, returning and storing data. Automation is a powerful way to make business processes more time-efficient. Automation processors can help achieve exactly that. They can be configured to be consumed by any digital journey using the FintechOS Studio. The Retail Digital Onboarding digital journey is comprised of several automation processors that ensure a smooth process of applying for a current account.

Several banking products were configured to offer the customer an actual product, with additional features, and commission. This section of the user guide unveils information about which code snippet was used where, and what it enables in the journey.

Furthermore, there are different statuses to let the user know at which stage they are during the journey. To create a personalized Retail Digital Onboarding digital journey to fit your banking requirements and offerings, more automation processors and other features are available in the FintechOS Studio to build a customer-centric digital flow.

Additionally, you can modify the user interface to fit your brand. There are several modifications that can be made without the need for writing code. For more details, see [Digital Experience Portals](#). However, if you need advanced modifications editing the CSS file found by accessing Innovation Studio > Digital Experience > Digital Journeys > Form Driven Flow > the record you need to modify > General, and scroll down to the field Style Sheets.

Consult the following pages to read more on the internal set-up of the solution:

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Configuring the Business Workflows Processor

The Business Workflows Processor uses rules-driven business transitions between statuses to help a bank see the status of an application. It renders the status of a record, i.e. in this case the loan application, in the workflow and provides processing that must occur for the application to move to the next step in its life cycle. For the Retail Digital Onboarding, there is an end-to-end self-service flow.

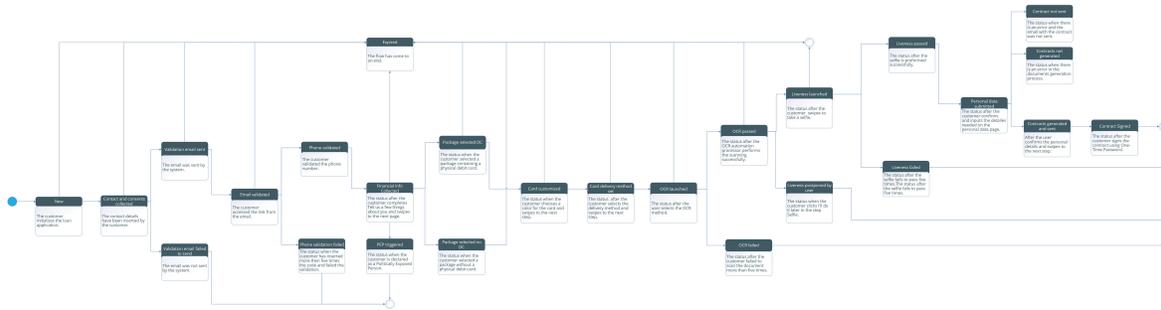
HINT

The statuses can be used as input to generate reports and see the number of successful applications or to see the status of each customer.

These are the following configurations:

The name is **FTOS_BARET_MobileOnboarding** attached to the entity FTOS_BARET_AccountApplication.

RETAIL DIGITAL ONBOARDING USER GUIDE



To download the diagram, click [here](#).

Here is a list with the statuses and a definition for what it marks:

Status name	Description
New	The status after the customer clicks on I want to open a account in Welcome screens .
Contact and final consents collected	The status after the customer inserts the email and phone number, agrees with the consents and swipes to the next page.
Validation email sent	The status after the email is sent.
Validation email failed to send	The status that marks if the servers fail to send the validation email.
Email validated	The status after the customer validates the email address.
Phone validated	The status after the customer validates the phone number.
Phone validation failed	The status when the customer has inserted more than five times the code and failed the validation.
Financial info collected	The status after the customer completes Tell us a few things about you and swipes to the next page.
PEP triggered	The status when the customer selects that they are as a Politically Exposed Person.
Package selected DC	The status when the customer selected a package containing a physical debit card.
Package selected no DC	The status when the customer selected a package without a physical debit card.
Card customized	The status when the customer chooses a color for the card and swipes to the next step.
Card delivery method set	The status after the customer selects the delivery method and swipes to the next step.
OCR launched	The status after the user selects the OCR method.
OCR passed	The status after the OCR automation processor performs the scanning successfully.
OCR failed	The status after the customer failed to scan the document more than five times.

Status name	Description
Liveness launched	The status after the customer swipes to take a selfie.
Liveness postponed by user	The status when the customer clicks I'll do it later in the step Selfie .
Liveness passed	The status after the selfie is performed successfully.
Liveness failed	The status after the selfie fails to pass five times.
Personal data submitted	The status after the customer confirms and inputs the details needed on the personal data page.
Contracts generated and sent	After the user confirms the personal details and swipes to the next step.
Contracts not generated	The status when there is an error in the documents generation process.
Contract not sent	The status when there is an error and the email with the contract was not sent.
Contract Signed	The status after the customer signs the contract using One-Time-Password.
Expired	The status when an application was left open for 24 hours.

For more details, see [Business Workflow](#).

Configuring the Banking Products

This processor creates and maintains products that are used in FintechOS form driven flows and later in digital journeys. To visualize and to administer them, access the dedicated menu for Banking Product Factory within the FintechOS Studio. It offers configurations such as product dimensions for commissions and interests and product filter to navigate through the list of products created based on a filtering scope. The Retail Digital Onboarding journey has after installation banking products configured with the Active status:

HINT

The products from the package that can be used are those that are valid in between the given start date and end date. Additionally, the products which have the Active status are displayed in the journey.

For this solution, five banking products were configured for loans and two for credit cards:

- Starter Pack
- Premium Pack
- Euro Pack.

1 Starter Pack

This banking product has the following configurations:

Main Info

Fields	Description	Example
Product Type	Select from the list the entry bank account.	Card
Banking Product code	Insert a unique code.	BDL-SP
Name	Insert a suggestive name.	Starter Pack
Class	This ladder is designed to categorize the major banking products any bank offers.	Retail
Subclass	These are subordinated to the classes above.	Retail Bundle
Start date	Select the date when to have the product valid.	01/09/2021
End date	Select the date when the product availability ends.	01/09/2029
Product Features	Insert the features that are additional to the product offered.	<ul style="list-style-type: none"> • Contactless Visa Debit card • 10 free withdrawals from any ATM/month • Free account management • Virtual Card included

Details

Fields	Example
Associated Products	<ul style="list-style-type: none"> • Current Account RON • Internet Banking • Virtual Debit Card RON • Visa Debit Card RON

Availability

Fields	Description	Example
Currency	Choose the currency for this banking product.	RON
Period Type	Choose one: <ul style="list-style-type: none"> • Days • Weeks • Months • Years 	Months

2 Premium Pack

This banking product has the following configurations:

Main Info

Fields	Description	Example
Product Type	Select from the list the entry bank account.	Card
Banking Product code	Insert a unique code.	BDL-PP
Name	Insert a suggestive name.	Premium Pack

Fields	Description	Example
Class	This ladder is designed to categorize the major banking products any bank offers.	Retail
Subclass	These are subordinated to the classes above.	Retail Bundle
Start date	Select the date when to have the product valid.	01/09/2021
End date	Select the date when the product availability ends.	01/09/2029
Product Features	Insert the features that are additional to the product offered.	<ul style="list-style-type: none"> • Contactless MasterCard debit card • Unlimited free withdrawals from any ATM/month • Free account management • Virtual Card included

Details

Fields	Example
Associated Products	<ul style="list-style-type: none"> • Current Account RON • Internet Banking • MasterCard Debit Card RON • Virtual Debit Card RON

Availability

Fields	Description	Example
Currency	Choose the currency for this banking product.	RON

Fields	Description	Example
Period Type	Choose one: <ul style="list-style-type: none"> • Days • Weeks • Months • Years 	Months

Other details:

Fields	Example
Interest & Commissions	Premium Pack Commissions

3 Euro Pack

This banking product has the following configurations:

Main Info

Fields	Description	Example
Product Type	Select from the list the entry bank account.	Card
Banking Product code	Insert a unique code.	BDL-PP
Name	Insert a suggestive name.	Premium Pack
Class	This ladder is designed to categorize the major banking products any bank offers.	Retail
Subclass	These are subordinated to the classes above.	Retail Bundle
Start date	Select the date when to have the product valid.	01/09/2021
End date	Select the date when the product availability ends.	01/09/2029

Fields	Description	Example
Product Features	Insert the features that are additional to the product offered.	<ul style="list-style-type: none"> • Contactless MasterCard debit card • Unlimited free withdrawals from any ATM/month • Free account management • Virtual Card included

Details

Fields	Description	Example
Banking Account Type	Choose Savings Account from the list.	EUR
Interest Payment Type	Choose one from the following: <ul style="list-style-type: none"> • Monthly • Maturity • Yearly • Daily • Quarterly. 	Months

Availability

Fields	Description	Example
Currency	Choose the currency for this banking product.	EUR

Fields	Description	Example
Period Type	Choose one: <ul style="list-style-type: none"> • Days • Weeks • Months • Years 	Months

Other details:

Fields	Example
Interest & Commissions	Euro Pack Commissions

For more details about this automation processor, see [Banking Product Factory v2.2.6000](#).

Configuring the Documents

The Retail Digital Onboarding solution used in the flow one document which is signed by the customer at the end of the journey. The template is imported with the package and it has the extension .docx. Furthermore, this file is attached to the digital document which uses an entity as source and finally, a report is attached to the entity pointing to the document. It is used in the flow via an action of generating the digital document and added to the UI, where it becomes accessible to the customer.

1. Open FintechOS Studio in developer mode.
2. Click the Main Menu icon at the top left corner.
3. Click **Fintech Automation > Digital Documents**. The **Digital Documents List** page appears. Select from the list the record **RetailContract**. The **Edit document** page is displayed.
4. Attach a Report to the Entity pointing to the document. Navigate to **Reporting & Analytics**.

5. Select **Reports**. The **Reports List** page appears. Select from the list the record **RetailContract**.

Name	Output Method	Scope	Entity	Report Item	Destination Field	Destination File Name	Report Document Type
RetailContract	Attach to entity	Entity	FTOS_BNKAP_RetailApplicationData	RetailContract	retailContract	RetailContract	PDF

For more details, see [Digital Documents Processor](#).

Configuring the Digital Flow Settings

In this part of the configuration, for automation processors such as Computer Vision and Onfido and the email&SMS generation with the one-time-password, some settings are created to be used in the solution and further the mastery entity's attributes are mapped to store the results.

Name	Description
Onboarding_eSignConfig	It is used by the bank to set whether the customer must sign using the electronic signature.
Onboarding_SignContract	It is used to set the generation of the SMS with the code.
Onboarding_OTP	This holds the setting for the generation of the email one-time-password.
Onboarding_OCR	This is the Computer Vision processor to scan the ID.
Onboarding_Liveness	This is an integration with the provider Onfido.
Onboarding_Second_Liveness	This is used when the selfie is done right before the signature of the contract when initially it was skipped.

Name	Description
Onboarding_OTP_SMS	This holds the setting for the generation of the SMS one-time-password to sign the contract.
Onboarding_VideoCall	It is used to facilitate the video call between the customer and the bank's support center.

Onboarding_OTP

Settings	Value	Description
Name	Email	The channel.
RelatedEntityName	FTOS_BNKAP_RetailApplicantData	The entity.
RelatedAttribute	email	The attribute from where the address is extracted and used to send the codes to.
LookupAttribute	FTOS_BNKAP_RetailApplicantDataid	
OTPDigitsNumber	4	The number of numbers of the code.
MaxRetry	5	The maximum number of retries to insert the code.
MaxResendRetry	3	The maximum number of emails sent.
MaxResendRetryIntervalSeconds	120	The interval between the sending of the emails.
RelatedAttribute	email	The channel.
LookupAttribute	FTOS_BNKAP_RetailApplicantDataid	The primary key.
OTPDigitsNumber	4	The number of numbers of the code.
MaxRetry	5	The maximum number of retries to insert the code.
MaxResendRetry	3	The maximum number of emails sent.

Settings	Value	Description
MaxResendRetryIntervalSeconds	120	The interval between the sending of the emails.
ValidTimeIntervalMinutes	3	
Name	Sms	The channel.
RelatedEntityName	FTOS_BNKAP_ RetailApplicantData	The entity.
RelatedAttribute	phone	The attribute from where the address is extracted and used to send the codes to.
LookupAttribute	FTOS_BNKAP_ RetailApplicantDataid	
OTPDigitsNumber	4	The number of numbers of the code.
MaxRetry	5	The maximum number of retries to insert the code.
MaxResendRetry	3	The maximum number of SMSes sent.
MaxResendRetryIntervalSeconds	60	The interval between the sending of the SMS.
Name	Sms	The name.
RelatedEntityName	FTOS_BNKAP_ RetailApplicantData	The entity.
maskNextStepURLFail	contactInfo	The step where the user is redirected if the insertion of the code has been unsuccessful.
maskNextStepURLSuccess	ProofOfIdentity	The step the user is redirected if the insertion of the code has been successful.
successStatus	ContactInfoValidated	The status if the insertion has been successful.

Settings	Value	Description
failedStatus	ContactInfoFailed	The status if the insertion has been unsuccessful.

Onboarding_eSignConfig

This is where the bank can define whether or not the contract must be signed or not. It is set that the customer must sign.

Settings	Value
signDoc	true
useIntegration	false

Onboarding_SignContract

Settings	Value
SourceEntityName	FTOS_BNKAP_RetailApplicantData
Channels	
Name	Sms
RelatedEntityName	FTOS_BNKAP_RetailApplicantData
RelatedAttribute	mobilePhone
LookupAttribute	FTOS_BNKAP_RetailApplicantDataid
OTPDigitsNumber	6
MaxRetry	5
MaxResendRetry	3
MaxResendRetryIntervalSeconds	60
ValidTimeIntervalMinutes	3
maskNextStepURLChanged	
entity	FTOS_BNKAP_RetailApplicantData
maskNextStepURLSuccess	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_AboutYou
section	AboutYou
maskNextStepURLFail	
entity	FTOS_BNKAP_RetailApplicantData

Settings	Value
form	FTOS_BNKAP_AboutYou
section	AboutYou
businessWorkflow	
entity	FTOS_BARET_Loan
bwAttribute	FTOS_BARET_Loanid
successStatus	ContractsSigned
failedStatus	ContractsFailed

Onboarding_VideoCall

Settings	Value
DestinationEntityName	FTOS_BNKAP_RetailApplicantData
SourceEntityName	FTOS_BNKAP_RetailApplicantData
SourceLookupDestinationName	FTOS_BNKAP_RetailApplicantDataid
maskNextStepURLSuccess	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_VideoRedirect
section	VideoRedirect
maskNextStepURLFail	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_VideoRedirect
section	VideoRedirect
FormName	FTOS_BNKAP_RetailApplicantData_Operator
QueueParameters	
ParamName	Name
ParamValue	VideoCallQueue

Configuring the Computer Vision, Face recognition and Liveness

The solution uses liveness to verify the identity of a customer by scanning an ID (its front) to authenticate the document as in the step ["Identification" on page 30](#), it declares if the ID is authentic or fraudulent. Moreover, it compares the photograph

taken from the ID document of the loan applicant and the [Selfie](#) using AI and human experts to analyze biometric data points and declare the authenticity (the confidence score).

Computer Vision

For the scanning of the Id documents, there are three digital flow settings created:

Name	Digital Processor Type	Source entity name
Onboarding_OCR	OCR ¹	FTOS_BNKAP_RetailApplicantData

The maximum number of retries for the scanning is 5 times for all types of documents.

OCR_ID

Settings

SourceEntityName	FTOS_BNKAP_RetailApplicantData
DestinationEntityName	FTOS_BNKAP_RetailApplicantAddress
SourceEntityName	FTOS_BNKAP_RetailApplicantData
SourceLookupDestinationName	FTOS_BNKAP_RetailApplicantDataId
MaxRetry	5
ShowTakePictureButton	true
ShowUploadPhotoButton	true
WaitUserConfirmation	true
OptionSets	
OptionSetName	Gender Type
MappingName	Sex
OptionSetItems	
M	Male
F	Female
OptionSetName	Citizenship
MappingName	Nationality

¹The employability of technology to recognize scanned documents.

OptionSetItems	
ROU	Romanian
GBR	UK
LookupEntities	
MappingName	DistrictCode
EntityName	District
AttributeKey	Code
MappingName	Country
EntityName	FTOS_CMB_Country
AttributeKey	code
Validations	
type	IdROM
Validations	V01,V05
CheckScriptName	ValidateIdROM
type	Passport
Validations,	V05
CheckScriptName	ValidateIdPass
AvailableDocumentTypes	
type	IdRom
DocumentType	IdentityCard
Country	RO
Provider	Azure
type	IdBG
DocumentType	IdentityCard
Country	BG
Provider	Abbyy
type	Passport
DocumentType	MRZ
Provider	Azure
type	DrivingLicence
DocumentType	DrivingLicence
Provider	Azure
maskNextStepURLSuccess	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BARET_RetailApplicantDataMaster
section	Step1
maskNextStepURLFail	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BARET_RetailApplicantDataMaster

section	Step1
DocumentType	IdRom

Mappings

The array `DocumentsMapping` contains:

type	IdRom
Map	
PictureAttribute	pictureOcr
LastName	lastName
GivenName	firstName
DocumentNumber	IdCardSeries
StreetType	streetType
PersonalNumber	PIN
BirthDate"	dateOfBirth
PlaceOfBirthBody	placeOfBirth
Address	fullAddress
Sex"	gender
Nationality"	citizenshipId
Country	countryId
DistrictCode	districtId
City	cityName
Street	street
StreetNo	streetNo
Storey	floor
Stairway	stairway
ApartmentNo	apartmentNo
ApHouse	buildingNo
IssuedBy	IdIssueInstitution
IssuedAt	IdIssueDate
IssuedUntil	IdExpirationDate
IssuingCountry	issuingCountry

Liveness

It uses two flow settings:

- Onboarding_Liveness
- Onboarding_Second_Liveness.

Onboarding_Liveness

Settings:

Property	Value
isLiveness	true
DestinationEntityName	FTOS_BNKAP_RetailApplicantData
SourceEntityName	FTOS_BNKAP_RetailApplicantData
SourceLookupDestinationName	FTOS_BNKAP_RetailApplicantDataid
FileAttributeName	pictureOcr
MaxRetry	5
MinimumAcceptedConfidence	0.1
maskNextStepURLSuccess	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_LivenessCheck
section	Step 2 - Redirect
maskNextStepURLFail	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_LivenessCheck
section	Step1

Mapping

confidence	confidence
------------	------------

Onboarding_Second_Liveness

Settings:

Property	Value
isLiveness	true
DestinationEntityName	FTOS_BNKAP_RetailApplicantData

Property	Value
SourceEntityName	FTOS_BNKAP_RetailApplicantData
SourceLookupDestinationName	FTOS_BNKAP_RetailApplicantDataid
FileAttributeName	pictureOcr
MaxRetry	5
MinimumAcceptedConfidence	0.1
maskNextStepURLSuccess	
entity	FTOS_BARET_AccountApplication
form	FTOS_BARET_Hooray
section	Step 2 - Redirect
maskNextStepURLFail	
entity	FTOS_BNKAP_RetailApplicantData
form	FTOS_BNKAP_LivenessCheck
section	Step1

Mapping

confidence	confidence
------------	------------

Validations

Within the FintechOS Studio, there are Server Scripts that execute several actions which embody a business need such as: filtering products, returning products and setting amounts or periods. On-demand automation scripts are available for being called from any object or context. Here is a list of the scripts used in this solution.

Server automation Scripts

Name	Type
FTOS_BARET_AccountApplicationChangeStatus	On demand
FTOS_BARET_GetCardSelection	On demand
FTOS_BARET_GetIban	On demand
FTOS_BARET_InsertDeliveryAddress	On demand
FTOS_BARET_SetOnboardingApplicationAsExpired	On demand
FTOS_BNKAP_ChangeEmailAndResendValidation	On demand

Name	Type
FTOS_BNKAP_ChangePhoneNo	On demand
FTOS_BNKAP_CheckEmailValidated	On demand
FTOS_BNKAP_CheckExistingFiscalResidence	On demand
FTOS_BNKAP_DeleteQueueItem	On demand
FTOS_BNKAP_GetAllCities	On demand
FTOS_BNKAP_GetLocations	On demand
FTOS_BNKAP_InsertFiscalResidence	On demand
FTOS_BNKAP_OperatorApproval	On demand
FTOS_BNKAP_PostponedSelfie	On demand
FTOS_BNKAP_SendMailPricelistDocuments	On demand
FTOS_BNKAP_SendMailRetailContract	On demand
FTOS_BNKAP_SendValidationMail	On demand
FTOS_BNKAP_SendMailWithSignLink	On demand

FTOS_BARET_AccountApplicationChangeStatus

This script changes the status of a record based on the id. It is used in

- FTOS_BARET_AccountApplication/User Journeys/Section Step1/afterSave.js
- FTOS_BARET_AccountApplication/User Journeys/Section Step1/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section AboutYou/afterSave.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section AboutYou/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section AboutYou/beforeSave.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section DeliveryMethod/beforeSave.js

- FTOS_BNKAP_RetailApplicantData/User Journeys/Section EmailValidated/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step 2 - Redirect/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step1/beforeSave.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step 2 - Redirect/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step1/afterGenerate.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step1/beforeSave.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section OCRCheckData/beforeSave.js
- FTOS_BNKAP_RetailApplicantData/User Journeys/Section ContactInfo/beforeSave.js.

Input: var `recordId`; var `status`.

Output: var `err`.

FTOS_BARET_GetCardSelection

This returns the banking product details. It is used in FTOS_BARET_AccountApplication/User Journeys/Section Step1/afterGenerate.js.

Input: array `final`.

Output:

FTOS_BARET_GetIban

This script generates an IBAN randomly. It is used in FTOS_BARET_AccountApplication/User Journeys/Section Step1/afterGenerate.js.

Input: var `numeric`; var `iso`; var `checkDigits`; var `bankIdentifier`; var `ibanNo`; var `fullIban`.

Output: string `fullIban`.

FTOS_BARET_InsertDeliveryAddress

This script gets the existing address and sets it as the delivery address.

It is used in:

- FTOS_BARET_Loan/User Journeys/Section chooseDeliveryAddress/afterGenerate.js
- FTOS_BARET_Loan/User Journeys/Section insertDeliveryAddress/afterSave.js.

Input: var `params`.

Output: var `params`.

FTOS_BARET_SetOnboardingApplicationAsExpired

This script sets the application as expired.

Input: var `failEmail`; var `failPhone`; var `failPEP`; var `failOCR`; var `failLiveness`; var `failContract`; var `failContractGeneration`; var `livenessPostPoned`; var `finalStatus`.

Output: sets the business status

FTOS_BNKAP_ChangeEmailAndResendValidation

This script generates the email link to be sent to the customer to be accessed.

Input: N/A

Output: N/A

FTOS_BNKAP_ChangePhoneNo

This script changes the phone number of the customer. It is used in the Custom User Journey FTOS_DFP_OTP_Sms/afterGenerate.js.

Input: N/A

Output: N/A

FTOS_BNKAP_CheckEmailValidated

This script verifies if the email has been validated by the customer. It is used in:

- Custom User Journey FTOS_DFP_OnboardingOTP/afterGenerate.js
- Custom User Journey FTOS_DFP_OnboardingSignContract/afterGenerate.js.

Input: var `applicantDataId`.

Output: array `data`.

FTOS_BNKAP_CheckExistingFiscalResidence

This script checks the fiscal residence, It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section YourFiscalResidence/afterGenerate.js.

Input: var `fiscalResidence`.

Output: array `res`.

FTOS_BNKAP_DeleteQueueItem

This script deletes a queue item based on the application id. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section VideoRedirect/afterGenerate.js.

Input: var `qi`.

Output: N/A

FTOS_BNKAP_GetAllCities

This script returns the list of cities. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section DeliveryMethod/afterGenerate.js.

Input: var `city`; var `data`.

Output: array `data`.

FTOS_BNKAP_GetLocations

This script gets the locations for the delivery of the debit card. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section DeliveryMethod/afterGenerate.js.

Input: var `loc`; var `city`.

Output: array `data`.

FTOS_BNKAP_InsertFiscalResidence

This script inserts the fiscal residence the customer has. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section YourFiscalResidence/afterGenerate.js.

Input: var `FR`.

Output: inserts item

FTOS_BNKAP_OperatorApproval

This script displays the answer of the operator. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/FTOS_BNKAP_RetailApplicantData_Operator/Base/afterGenerate.js.

Input: var `queueItemId`; var `decision`.

Output:

FTOS_BNKAP_PostponedSelfie

This script is used to delay the selfie step. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section Step1/afterGenerate.js.

Input: var `applicantDataId`; var `email`; var `name`; var `sessionId`.

Output: var `link`.

FTOS_BNKAP_SendMailPricelistDocuments

This script sends the email with the Account-Pricelist-FintechOS.pdf. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section OCRCheckData/afterSave.js.

Input: var `email`; var `templateName`.

Output: string `templateName`.

FTOS_BNKAP_SendMailRetailContract

This script sends the email with the contract. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section SignContract/afterGenerate.js.

Input: var `applicationId`; var `email`.

Output: var `doc`.

FTOS_BNKAP_SendValidationMail

This script sends the email for the validation of the email address inserted by the customer. It is used in FTOS_BNKAP_RetailApplicantData/User Journeys/Section ContactInfo/afterSave.js.

Input: var `accountApplicationId`.

Output: N/A

FTOS_BNKAP_SendMailWithSignLink

This script sends the email with the link for signature of the contract.

Input: var `applicationId`; var `email`.

Output: sends the email.

Glossary

A

ANAF

Agenția Națională de Administrare Fiscală
(ANAF)

It is the specialized body of the central public administration in Romania. It has its own legal persona, by detaching the directions with attributions in the administration of the state revenues within the Ministry of Public Finance. It ensures the resources for the public expenses of the state by collecting and administering effectively and efficiently the taxes, taxes, contributions and other amounts due to the general consolidated budget.

APR

Annual percentage rate. APR is an annualized representation of your interest rate.

Available DTI

It represents the additional monthly payment that the applicant could pay until the customer reaches the maxDTI defined at a bank level.

C

Credit Bureau

The Credit Bureau aims to support the participants in the system by providing real, up-to-date and consistent information regarding individuals who have taken loans from banks or financial companies, purchased a product under a leasing system or have been insured against the risk of non-payment by an insurance company.

D

DTI (Debt-to-income)

The Debt-to-Income ratio (DTI) is a personal indicator of a good balance between debt and income.

Monthly debt payment amount / Monthly gross amount (before taxes and other deductions).

E

Effective interest rate

The effective annual interest rate is the real return paid on savings or the real cost of a loan as it takes into account the effects of compounding and any fees charged.

F

FEIS

The European Fund for Strategic Investment (EFSI) is an initiative launched jointly by the European Investment Bank Group – the European Investment Bank and European Investment Fund and the European Commission to help overcome the current investment gap in the EU. EFSI is one of the three pillars of the Investment Plan for Europe that aims to revive investment in strategic projects around the continent to ensure that money reaches the real economy.

FICO score

The FICO score is an algorithm used internationally, mainly by banks, to determine the degree of risk for a person who applies for a loan, and is collected by the Credit Bureau.

G

Gamification

The application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to other areas of activity, typically as a technique to encourage engagement with a

product or service.

GDPR

The General Data Protection Regulation is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area.

I

IBAN

International Bank Account Number

Interest Rate

The interest rate is the amount a lender charges a customer and is a percentage of the principal—the amount loaned.

K

KYC

Know Your Customer is the process of verifying the identity of a client, in order to avoid the potential risks of illegal intentions, like fraudulent usage of another person's online identity.

O

OCR

The employability of technology to recognize scanned documents.

OTP

One-Time-Password. It is a password generated by the system to validate a piece of information or sign a document.

P

PMT

It calculates the monthly payment (principal and interest) required to settle a loan or an investment with a fixed interest rate over a specific time period.

Q

QR code

A QR code (abbreviated from Quick Response code) is a type of matrix barcode (or two-dimensional barcode).