QIVOS CLOUD

Detailed Product Description
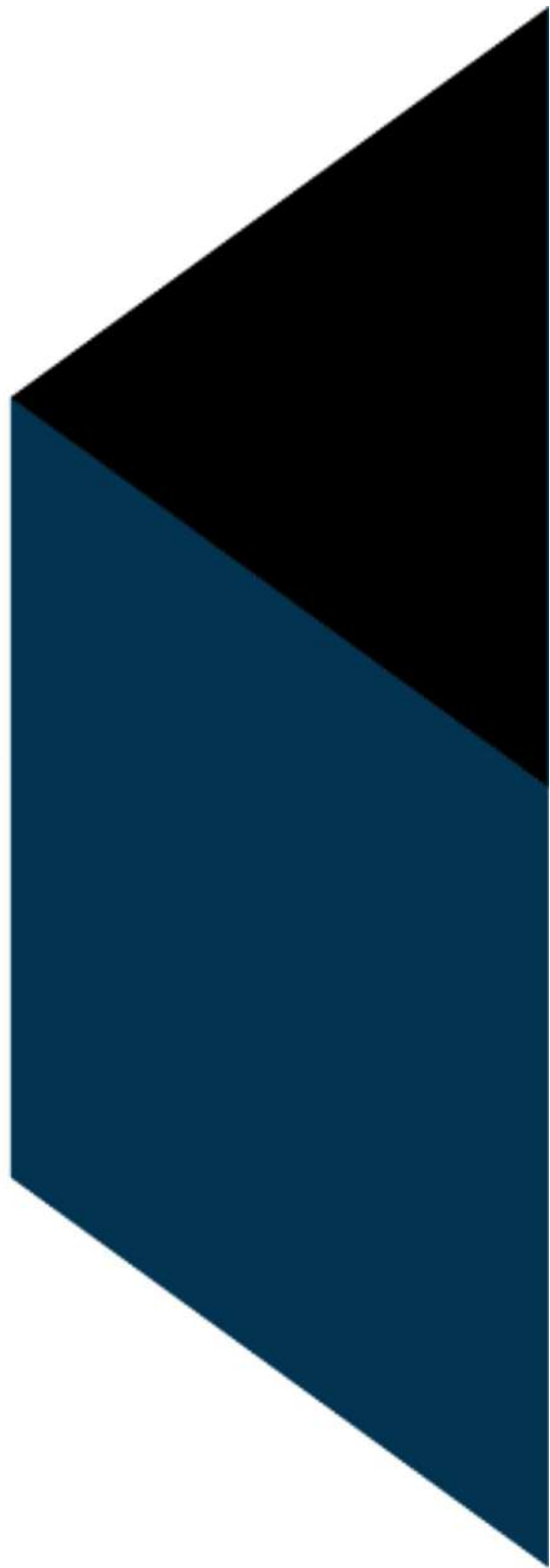
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1. QC Overview

QIVOS CLOUD is a Customer Data and Loyalty Platform that enables retail companies to identify shoppers, analyze their behavior and engage with them across all touchpoints (in-store and online). It is a user-friendly and easily customizable platform that can completely cover all functionalities and procedures, necessary for a seamless multi-partner, multi-layer CRM / Loyalty scheme operation and maintenance, since it is provided as a "Software as a Service" (SaaS). Its scope is to help marketers connect with their customers, understand their needs and make smarter decisions that that will lead to greater conversion rates and maximize their loyalty program's ROI.

Specifically, using the QIVOS Cloud platform, companies are able to gather customer data and build unified customer profiles. Then, through data science and artificial intelligence, they can get a 360-degree customer view and define key shopping patterns which in turn contribute to delivering relevant, personalized and multi-channel campaigns. In this way, members get an elevated and consistent customer experience during every interaction with the brand and therefore their average basket and visit frequency increase significantly.

QIVOS CLOUD also guarantees, from member registration and reward/redemption to customer engagement processes, error-free data handling, seamless operation, adaptability to complex demands and customizable actionable reporting tools for instant market feedback. Business intelligence component is embedded in the platform and sophisticated analytics tools are integrated via its proprietary integration framework software. Besides, QIVOS CLOUD is designed to integrate into company's existing systems and can be fully migrated, so company can be assured of a seamless experience for itself and for its customers.

Last but not least, QIVOS CLOUD Platform has been designed to be user friendly in order to meet all today's cutting-edge requirements for user experience. Being a SaaS platform, it requires minimum technical knowledge and it can be customized easily. Moreover, its role-based functionality provides a simplified user environment to a specific user or group of users, increasing productivity. Finally its fully WEB and responsive user interface makes it much easier to access it through any device and to maintain.

Figure 1: QIVOS Cloud Overview

2. Customer insights

Reporting customer behavior is crucial for companies as it helps them understand their customers' needs, preferences, and purchasing patterns, which, in turn, enables them to make informed business decisions. That is why, QIVOS provides Insights and Insights +, two systems that allow companies to track essential metrics, KPIs, and performance indicators. By using these tools, companies can identify areas for improvement and take action to enhance their customer experience.

Insights is a comprehensive dashboard that includes essential metrics such as demographics, transactions and loyalty data. It is a useful tool for companies that need to have a quick overview of their customer data in one place.

For those seeking a more advanced tool, Insights+ offers a comprehensive BI solution that goes beyond the capabilities of CORE QC. This service provides a wide array of advanced features, including customizable filters, the ability to create and save specific data sheets, and seamless data integration from other systems. With Insights+, companies can delve into a deeper understanding of their customers, identify growth opportunities, and make well-informed decisions to propel their business forward.

2.1. Insights

Insights enables users to focus on valuable metrics such as demographics, customer transactions, purchase analytics, campaign performance, and more, by combining customers' data and visualizing them with customizable graphics.

Specifically, in the first tab there are demographics KPI's like:

```
members count, opt-in mobiles and
emails, registration timeline and
customer lifecycle.
```
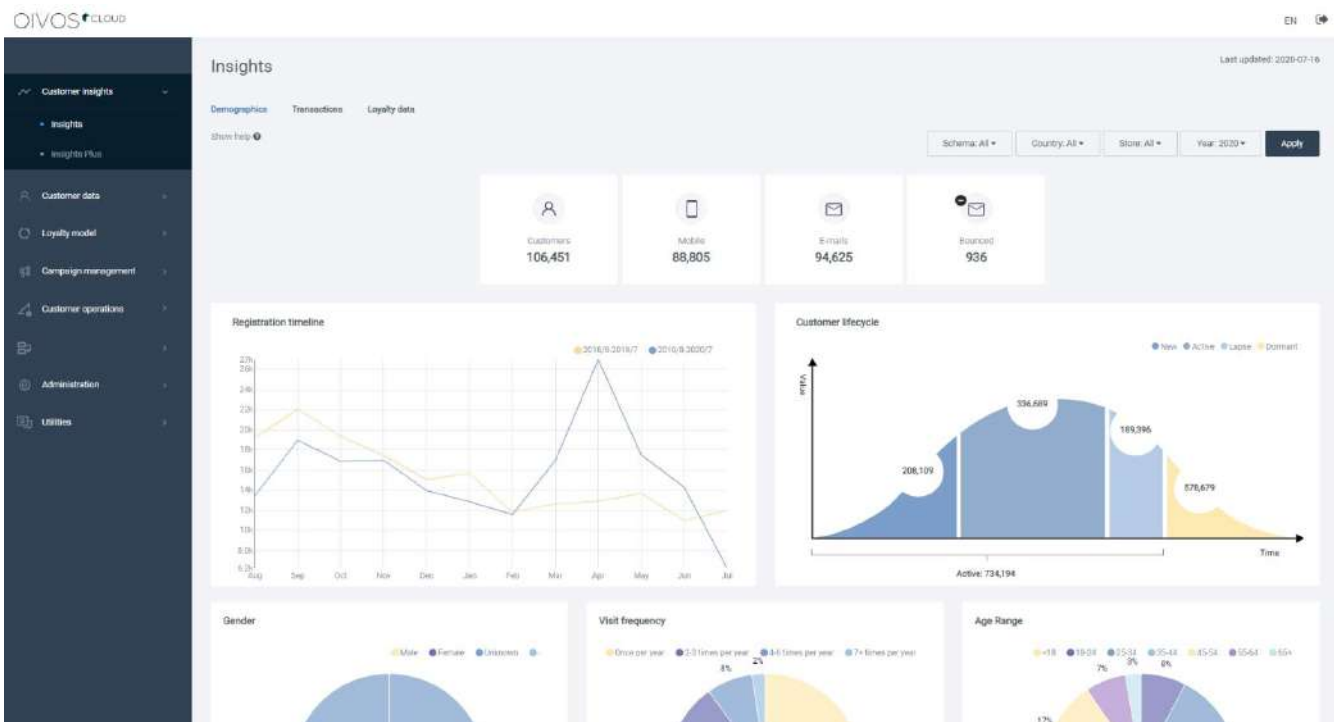

Figure 2.1.1: Insights Demographics preview

In the Transaction tab, there are KPI's such as:

```
visit  frequency,  sales  and
average basket graphs, average
CSI score and the last RFM and
MTV* analysis.
```
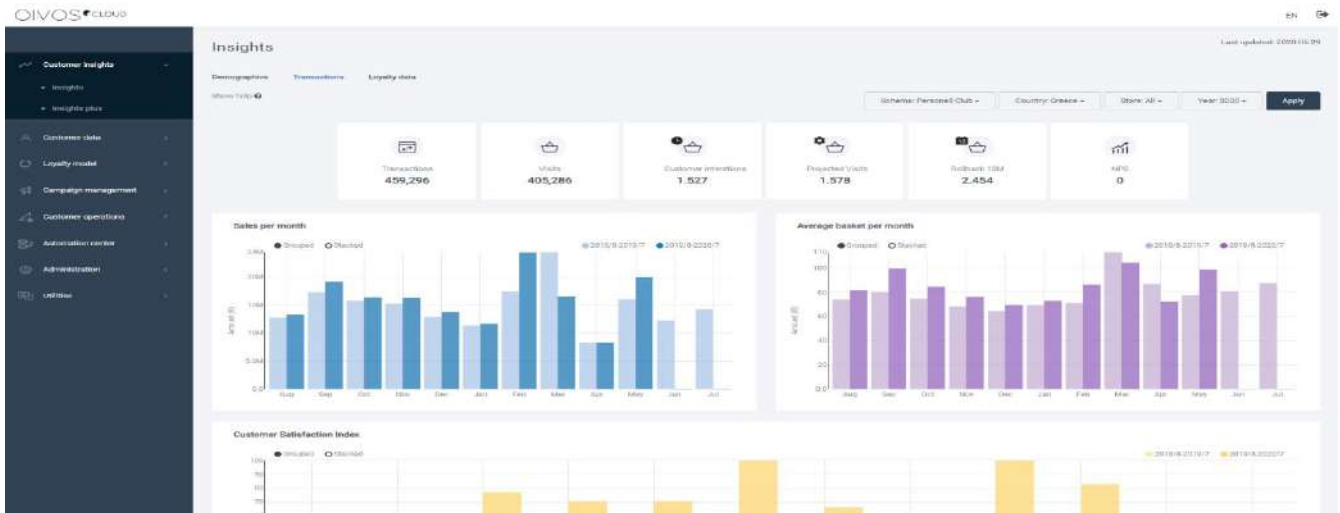

Figure 2.1.2: Insights Transactions preview

*MTV analysis is an advanced segmentation method which analyzes multiple variables from the customer database to get a deeper understanding of consumers' behavior and categorize them into homogeneous groups. For example, members of a loyalty program can be categorized by analyzing their behavior based on different factors, such as spending on a particular product or in a particular period (that of discounts). This results in the creation of groups such as "brand lovers" or "price sensitive", that can be used as campaign filters.

The last tab contains loyalty data like:

```
Redeem and reward points and
value as well as a pending
points diagram.
```

All three tabs can be filtered with the following dimensions:

- Loyalty Schema (In case there are more than one)
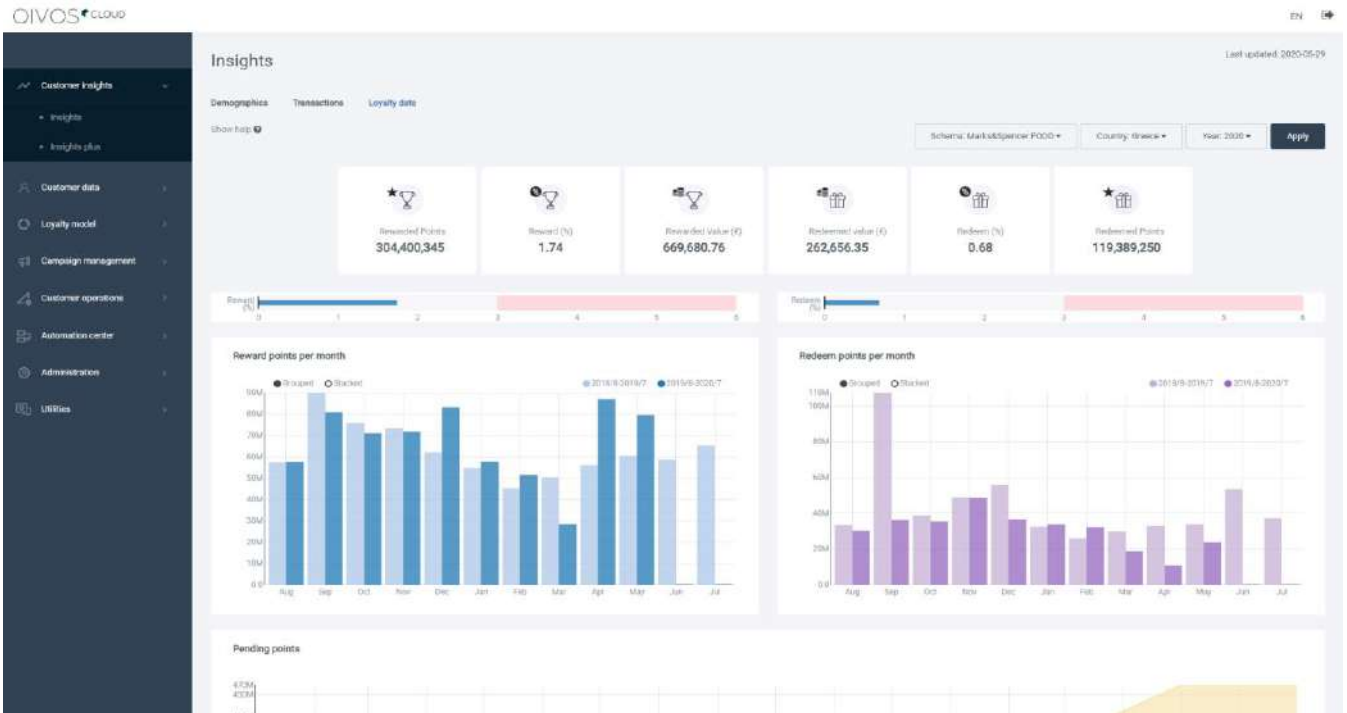- Country
- Store
- Year

Figure 2.1.3: Insights Loyalty data preview

3. Customer data

3.1. Customer

At this point it is important to underline that the term "customer" refers to a person who has provided their data, while the term "member" refers to a customer that has, also, accepted the terms and conditions of a loyalty schema. All members are customers but the opposite is no necessarily true. Finally, it must be underlined that there are cases in which the same customer might be a loyalty member on several loyalty schemas.

To reach customer profiles, users should search for loyalty members or customers, by applying filters such as:

- Loyalty information (member search only): Card number, Registration date, Registration store, Schema and Category, Club, Member category

- Personal information: First and Last name, Mobile and Email

- Other Information: Country, Member tag, Club, QIVOS Id, Attribute* type and User status

*Attributes are customized fields that differ per customer and store specific members' characteristics that are not part of the CORE QC model.

These filters can be cleared all or be deleted one by one.

Users have, also, the choice to search for inactive members / customers by checking the option "Include inactive"

The results can be adjusted by changing the number of items shown, sort fields, and order type. Likewise, there is a pagination link, to navigate through results.

When there is only one member / customer in the results page, users will be redirected to that person's

summary page.

By clicking the member's **pencil icon**, users can edit the member's profile, whereas by clicking the **eye icon**, they will be redirected to the member's summary screen.

In every **Unified Customer Profile**, a user can view:

- Personal details: e.g., Name and Birth date

- Contact information: e.g., Mobile, Email, Consent information, Social and Map

- Loyalty information: e.g., Card number, Schema, Registration store and date, Category and RFM for past years

- Total, Reserved, Available, Lifetime, and Expiring points.

Total points = The points that are neither redeemed nor expired.

Reserved points = The points that are reserved by an online purchase.

Available points = The points that the member can use for redemption as they are not redeemed, expired or reserved.

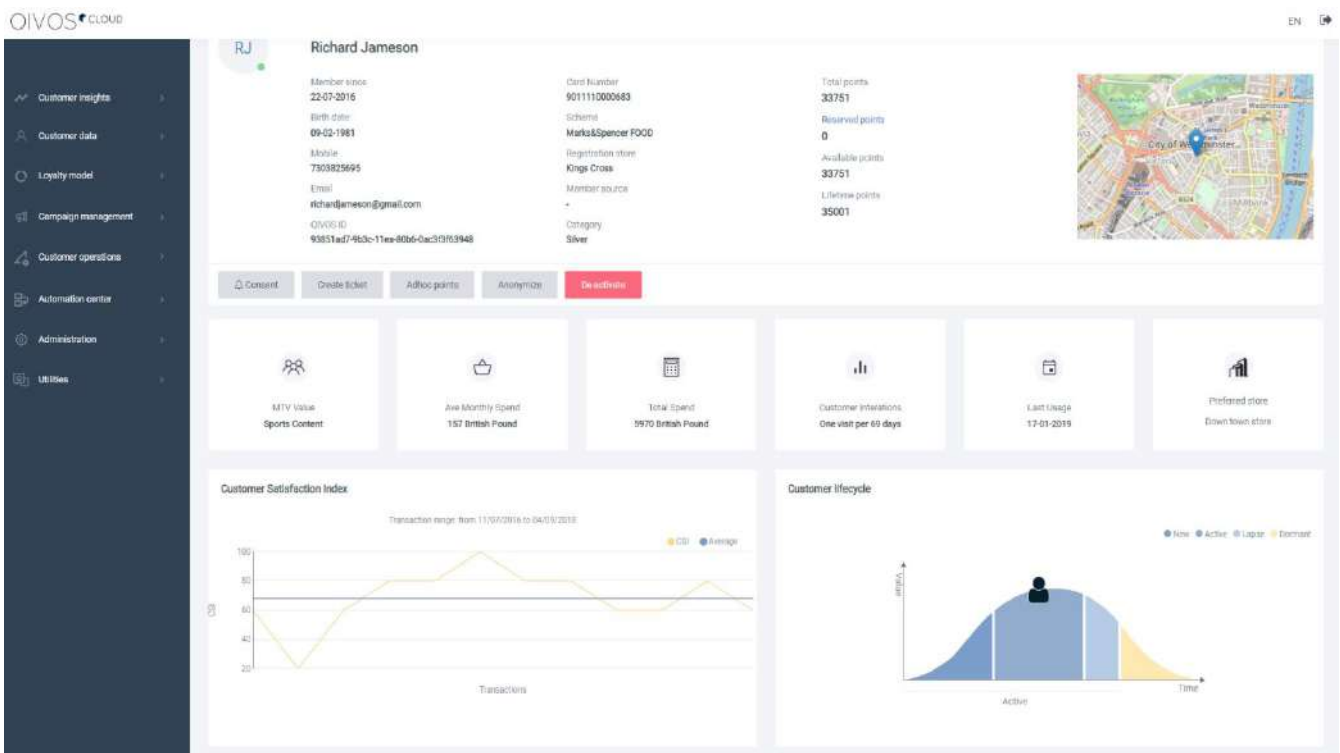**Lifetime Points** = All the points that the member has ever received.

Figure 3.1.1: Member Summary

As well, links for:

```
Resetting MS password, creating a ticket, adding ad-hoc points, de-activating
member/customer, adding to list, assigning/destroying a card and anonymizing.
```

NOTE: When anonymizing a member, all of their information is permanently deleted from the system, and this action cannot be undone.

There is, also, a summary for member behavior that includes data like:

```
MTV value, RFM value, average basket, total purchases, visit frequency, last
visit and preferred store.
```

Following, the "Customer Satisfaction Index" diagram shows the member's CSI score for the last 12 transactions that the CSI form has been answered while the "Customer lifecycle" diagram shows where the member is on the lifecycle.
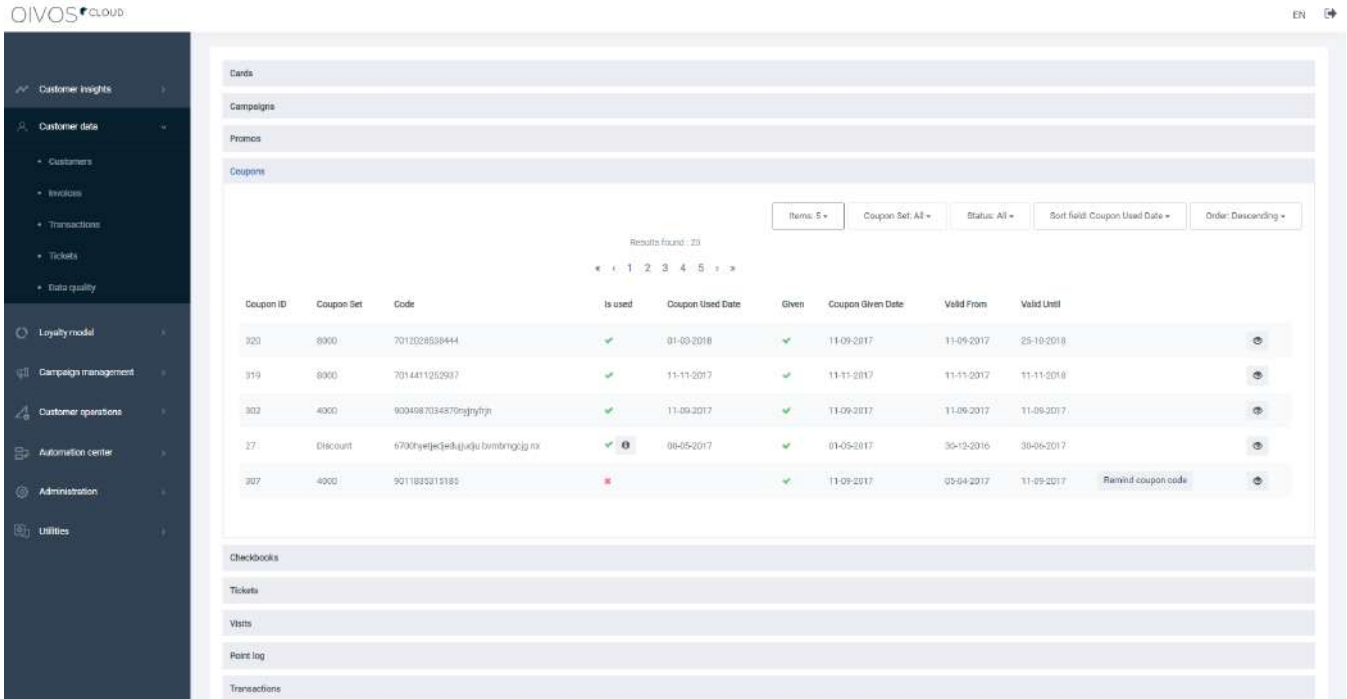
```
•  New = The member registration has taken place in the last 12 months.
•  Active = The member has been part of the schema for more than 12 months and has
   made purchase at least once during these 12 months.
•  About to lapse = The member has been part of the schema for more than 12
   months and this year's transactions are less than last year's ones.
•  Dormant = The member has been part of the schema for more than 12 months, but has
   not made a purchase the last 12 months.
```

Besides, there is a member / customer log history regarding the categories below:

- **Cards:** A list of all member loyalty cards. Only one can be active at a time.

- **Campaigns**: Every campaign the member has participated in.

- **Coupons**: Both the used and unused coupons, with a link for reminding coupon code and a delete button. The results can be adjusted by changing the coupon status and the order type or by selecting specific coupon sets.

- **Checkbooks**: All given checkbooks, as well as every coupon's information and a link to unassign it.

- **Tickets**: The tickets that have been created for the member, with the option to create a new one.

- **Visits**: The offline visits.

- **Point log**: The reward, redeem and Ad-hoc points.

- **Point request**: The point requests that were sent to another system. This feature is used for the clients with an external point log.

- **Transactions**: The member's purchase history, with a delete button.

- **Clubs**: The clubs the member is part of (both active and inactive).

- **Member Tag**: Both the active and inactive tags the member has, with a button to assign a new tag as loyalty customer.

- **Customer Tag**: Both the active and inactive tags the customer has, with a button to assign a new tag

as simple customer.

- **RFM Analysis:** The last RFM segments.

Figure 3.1.2: Coupons log history

In the above section, the user can change the display number of rows, the sort fields and the order type of results.

In the "**Details**" section, extra information that the member has provided during the registration process can be viewed and edited. Analytically, there are the following categories:

- **Personal**: e.g., Gender, Salutation, First & Last name, Birth date, Children Information, Marital Status, Nationality, Nameday, Language, Nameday month

- **Contact**: e.g., Telephone number, Email, Address, and Map (for all these fields, there is primary characterization)

- **Consent**: The opt-in information per channel and category (promotional, informational, and profiling)

- **Employee**: e.g., Job position, Store name, Hire date (It is not accessible in every schema)

- **Loyalty**: e.g., Registration store, Total purchases, Last visit, Visit Frequency, Registration country, Member category, Classification, Registration Date

- **Transaction**: e.g., Payment method, PayPal (It is not accessible in every schema)

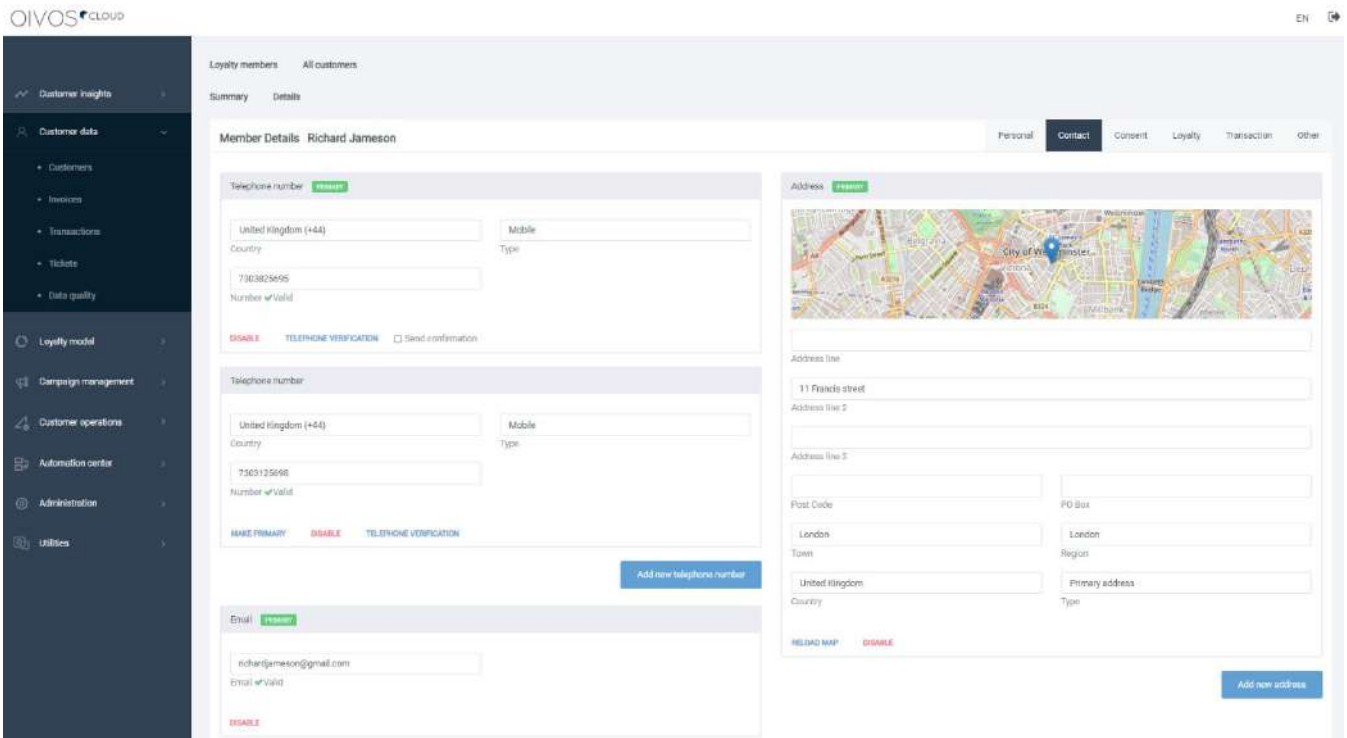- **Other**: Customer Attributes, Member Attributes

Figure 3.1.3: Contact details

If the customer is not a member, the user cannot see neither the loyalty and employee section nor the log history for coupons, visits, and transactions.

Lastly, the user can download personal information and use it for portability reasons.

3.2. Clubs

By creating clubs, users have the opportunity to group and categorize the members that participate in a loyalty schema. Specifically, by assigning specific members to a club, not only are users able to see and analyze their data, but they can also offer them different privileges. For instance, a company may assign its employees to a club, in order to give them exclusive discounts.

When creating a club, the user should predetermine the duration, in which the club will be active, by setting a start and end date. It is important to point out that the period that each member will belong to a certain club does not necessarily coincide with the lifespan of a club set by the user as described. For example, there may be a club with a predetermined lifespan of 2 years, in which every member will have a 3-months membership.

To search already created clubs, the following fields should be completed:

- **Name**: Club's name
- **Code**: Club's code
- **Start Date**: Start date of the offer
- **End date**: Expiration date of the offer

Then, the user presses the "Search" button to display the results. In the image below, a possible search scenario is shown:
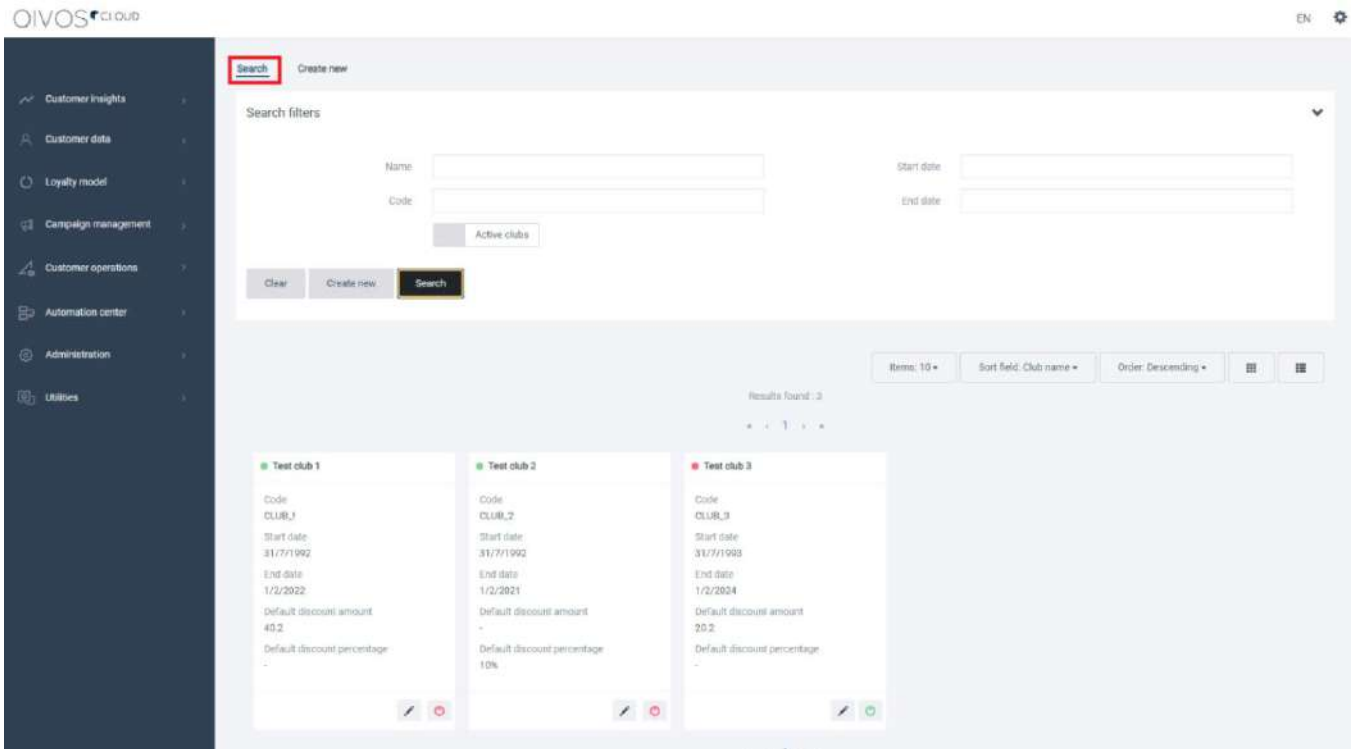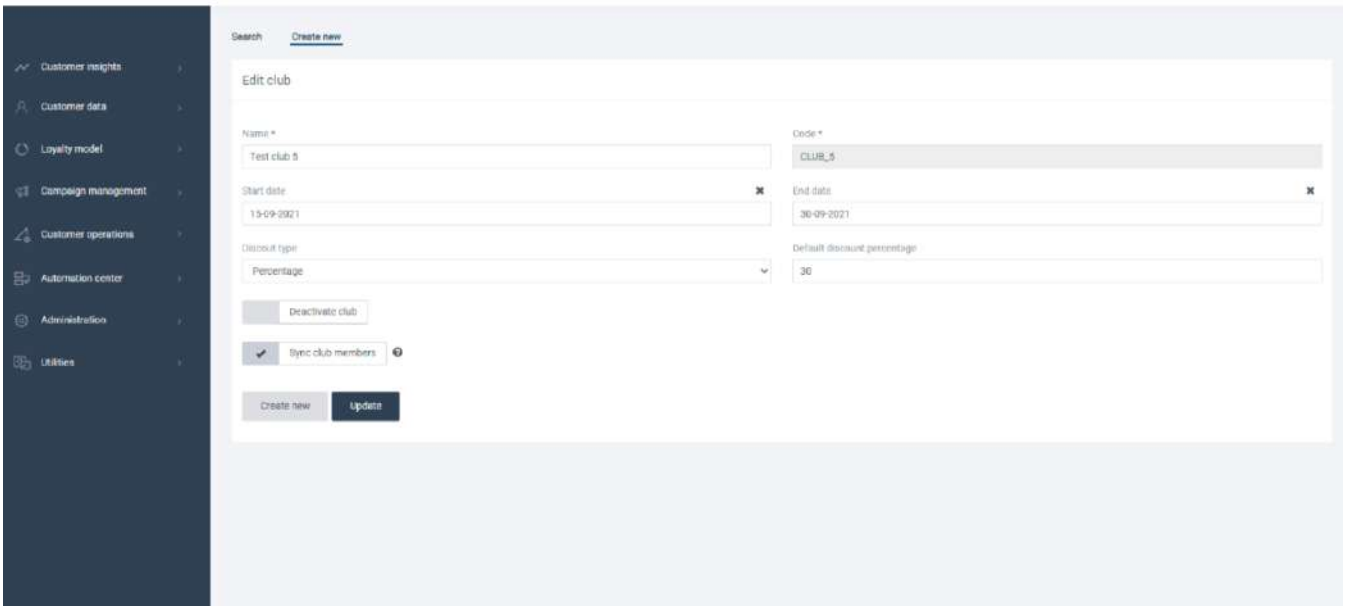

Figure 3.2.1: Club Search

By selecting the "pencil icon", the user is able to edit or update some of the following fields:

- **Name**: Name of the club
- **Start date**: The start date of the club
- **End date**: The end date of the club
- **Discount type**: The discount type of the club (amount or percentage)
- **Default discount amount**: The amount of the discount (for example 10 euros)
- **Default discount percentage**: The percentage of the discount (for example 10%)
- **Deactivate Club**: The user has the option to deactivate the club without deleting it
- **Sync club members**: It is mandatory to be clicked in order to update the club's dates to all members that participate in it.

Finally, for the changes to be saved, the user needs to click the "Update" button
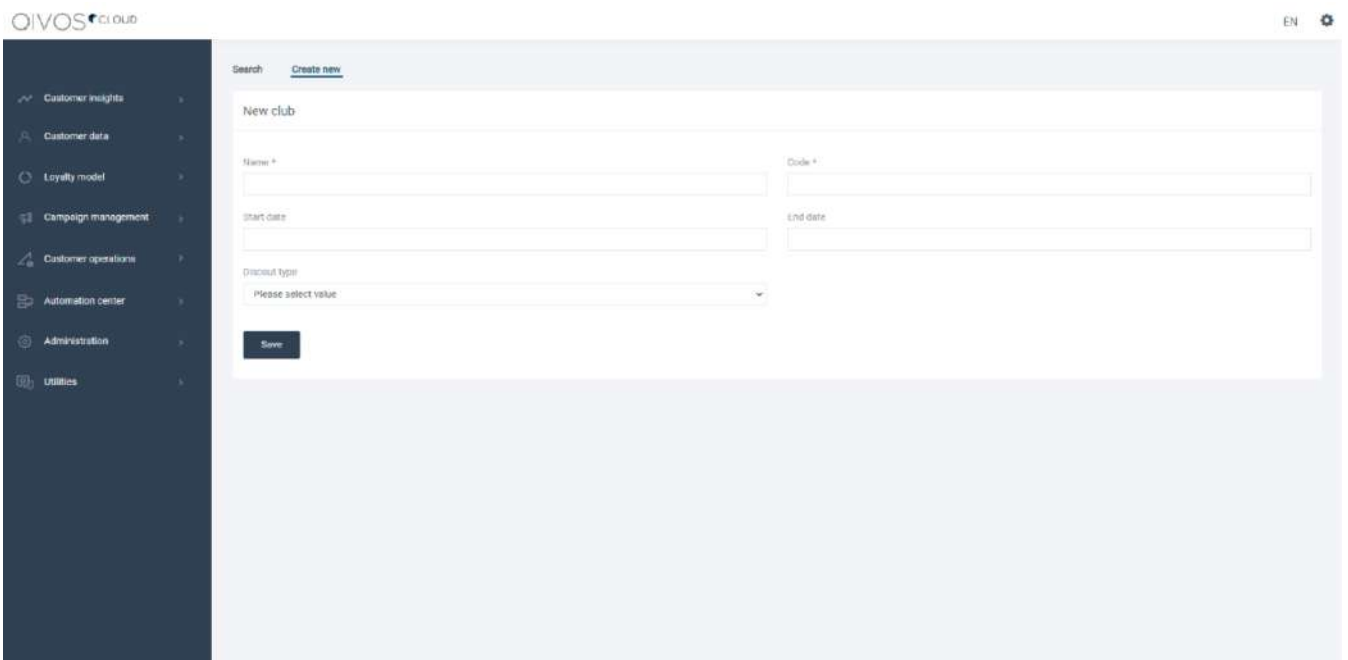
Figure 3.2.2: Club Editing

Moreover, in the second tab called "Create New", the user can create a new Club, by completing the fields below and pressing "Save"

- **Name**: the name of the club (mandatory)
- **Code**: the club code (mandatory & unique)
- **Start date**: the start date of the discount in the club
- **End date**: the end date of the discount in the club
- **Discount type**: the discount type of the club (amount or percentage)
- **Default discount amount**: the discount as amount (for example 10 euros)
- **Default discount percentage**: the discount as percentage (for example 10%)

Figure 3.2.3: Club Creation

3.3. Invoices

Aiming to gain insight in loyalty members' behavior and preferences, the QC platform saves the data included in their invoices.
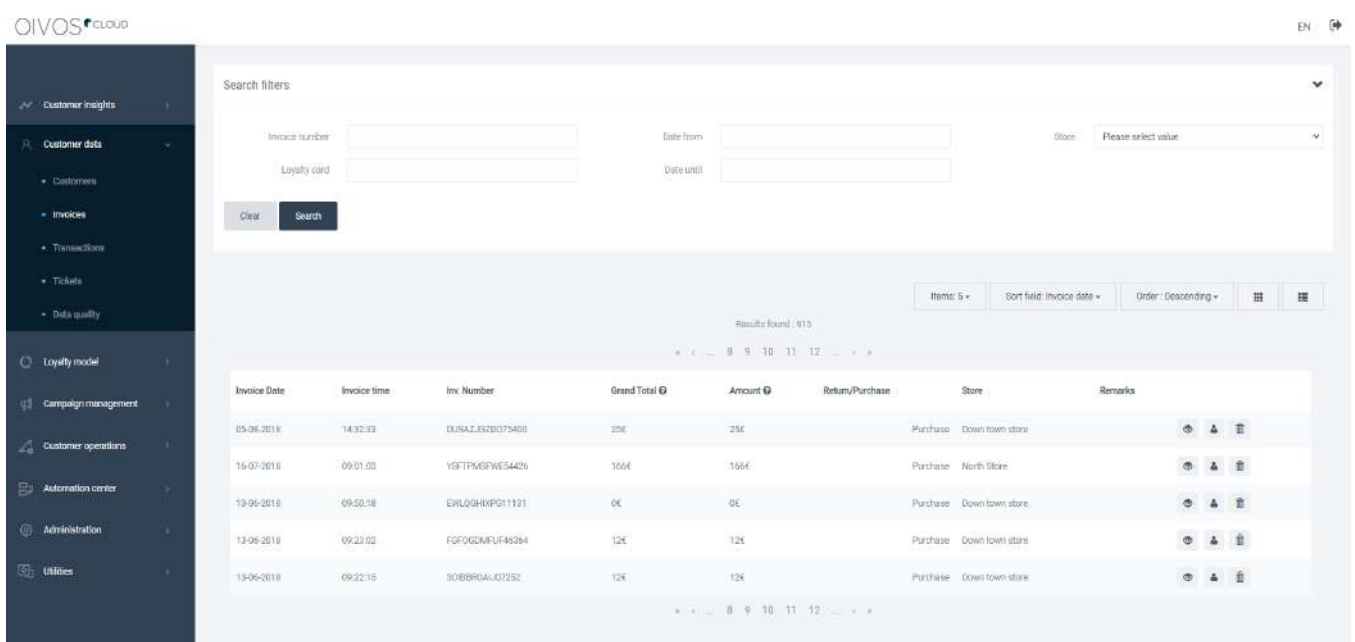
To access them, users should use filters like:

```
invoice number, loyalty card, date and store.
```

They can define the display number, sort fields and order type of results. For every invoice, they can view information such as:

```
invoice date, number, member card, total, invoice time, amount, return/purchase,
store, remarks
```

By clicking the preview button, the invoice details (such as what products the member has purchased) appear. There is, also, the option to delete an invoice, which will result in removing all the points related.

Figure 3.3.1: Invoices

3.4. Customer Satisfaction Index

The Customer Satisfaction Index (CSI) is a group of questions that are sent to the customers, via SMS or email, after every transaction (purchase), so that they can rate their whole experience. Its purpose is to measure the customer's satisfaction and act accordingly.

The CSI is mainly composed of 3 questions that focus on the quality of customer service, the quality of the product / service purchased and whether it was value for money or not. Both the form and the weight of these questions can be customized. There can be, also, a fourth question that shows the Net Promoter Score (i.e., the possibility of a customer to recommend the store to their friends).

Figure 3.4.1: CSI form

For more information regarding the CSI, please visit the following link: <u>CSI v1.pdf</u>

3.5. Tickets

In order to address a variety of members inquires (such as lost card cases, issues with the member's point balance, profile data update etc.), the QC platform enables users to create a ticket in which they can explain the problem and keep track of its status. Specifically, there are three mandatory steps that should be taken for a member's issue to be resolved. First of all, the Customer Support has to create a ticket which will explain the issue. Then the ticket should be assigned to the department in charge. Finally, the ticket must be resolved, and its status must be updated to reflect that. When the ticket is resolved, the agent assigned to it must write down the actions that were performed, in the body area.

To search all created tickets, these criteria need to be set:

```
id, severity, status, category, subject, et cetera.
```

Besides, by clicking the edit button, the user is able to:

- Change the existing information.
- Update the status, assignee, and severity of the ticket.

It is worth mentioning that this button does not allow the user to delete the ticket.

Additionally, for a new ticket to be created, the following fields should be completed:

- Category
- Subject
- Country
- Body

By searching the member's email, mobile or loyalty card number, the user attaches the ticket to this particular member.

There is also the option to create a ticket from the member/person's profile; it will be bound to this member/person automatically.
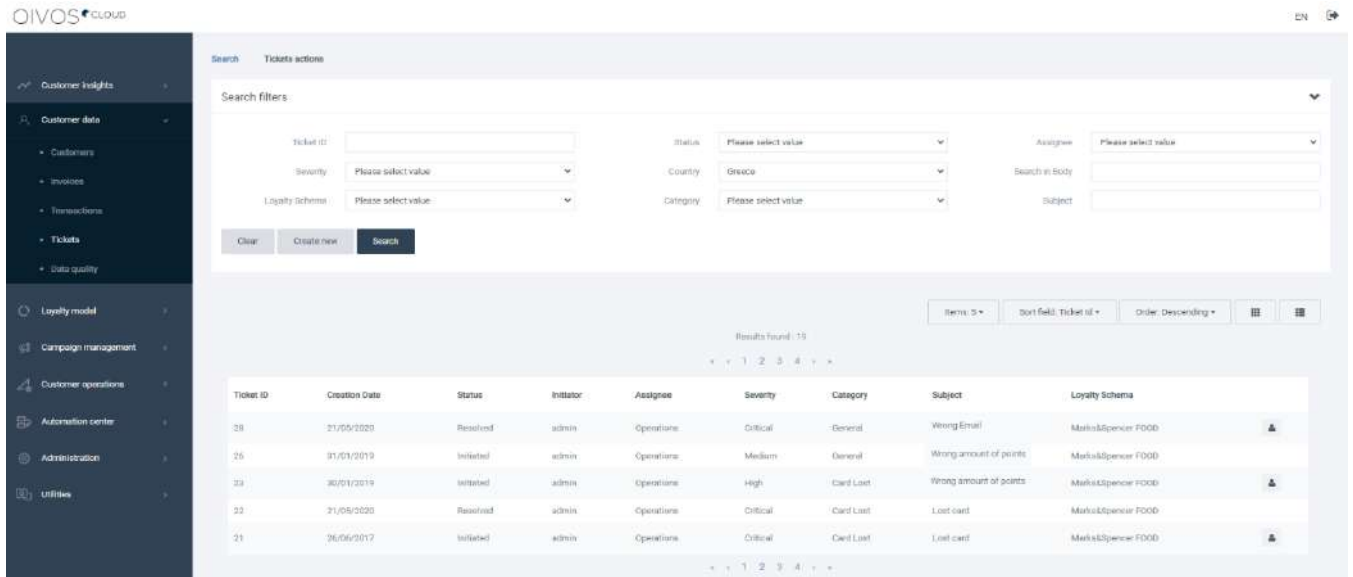

Figure 3.5.1: Ticket Search

In every case, the ticket will send a notification email to authorized users automatically, for further actions.

Once the ticket is resolved, the system will inform the user who created it.

Moreover, the user can export a ticket list, for further use, mass insert tickets by uploading a file with the subject, body and card number and mass resolve tickets by updating a file with the tickets' id and comments.

3.6. Data quality

For the customer insights to be trustworthy, it is vital to ensure that the customer data, in which they are based on, are valid. For this to be achieved, the QC platform provides this section, in which the user is able to check the data provided by the customers, make the necessary changes and flag them as "valid", "invalid" or "skipped".

Using search filters, such as loyalty schema and type of members, users can run a validation process in the QC; editing members contact and personal data in batches.

They can view and edit:

```
Personal data: like gender, First
Name, Last name
Contact data: like e-mail, mobile,
address
```

There is also the option to swipe a member's first and last name, using the arrow image in the results and to preview a ticket if it is available.

The original data are shown on the right of every field, in order for the user to be able to replace them back in

case of a mistake.

There is an address helper that assists in finding the correct address information if the one inserted is invalid.

The QC assigns a white flag to the members that have all fields completed so that the user can separate them from the rest that need validation.

The user can flag a member using one of the following three choices:

```
Valid: all data are correct (green)
Invalid: the data are incorrect and it is not possible to correct them (red)
Skip: the member will be reviewed later (yellow)
```
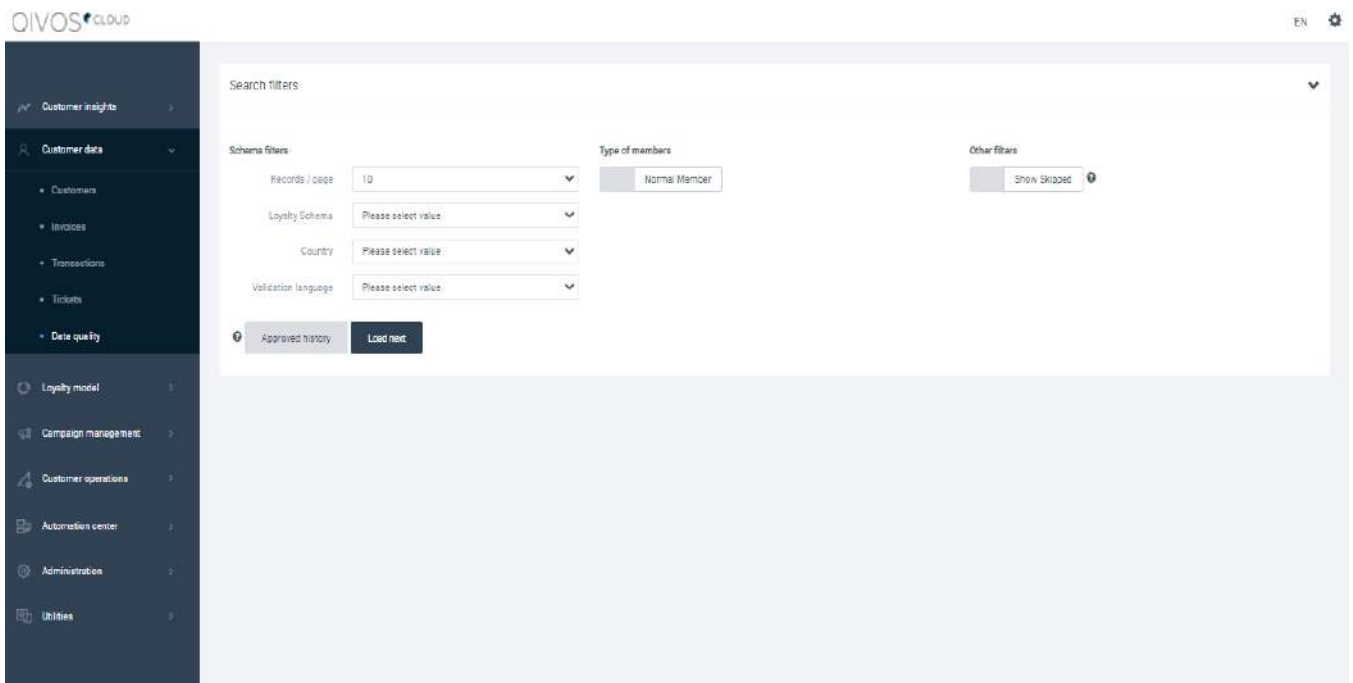

Figure 3.6.1: Data Validation

After finishing the validation of the batch, users should save all the changes or unlock them (discard).

Finally, there is a link to "approved history", where users can view all validated members and access their profile.

3.7. RFM configuration

RFM analysis is an advanced segmentation method whose philosophy is that customers are to be arrayed in terms of recent purchases, the frequency of their purchases and the purchase amount. For each of these three values, the customers are sorted and separated to six groups. Each group has a score from 1 to 5. Taking a weighted average of those scores, a final customer score is created and, based on given percentages, 6 different clusters (Star, Gold, Silver, Bronze, Yellow, White) are formed. The clusters may differ in size and if the general shopping behavior of customers changes from year to year, the characteristics of each cluster also change. It has to be pointed out that, the outliers are detected and excluded from the

procedure of clustering, in order for the high diverted values to not affect the accuracy of the algorithm. These outliers are usually the people that either tend to spend more money and have many visits (High Spenders) or have only 1 visit and an average basket smaller than the half of the general average basket (Low Spenders).

In this section, the user can edit the existing RFM or add a new one. The editable fields are the following:

- **Schema**: The schema that it belongs to

- **Selection Criteria**: The transaction that happened via POS or in store (and which store)

- **Look back (in months)**: The specific amount of months

- **Execution type**: The user can choose either the latest or a snapshot in every 6 or 12 months to be executed

- **Active until** the user selects the date range, during which The RFM will be active
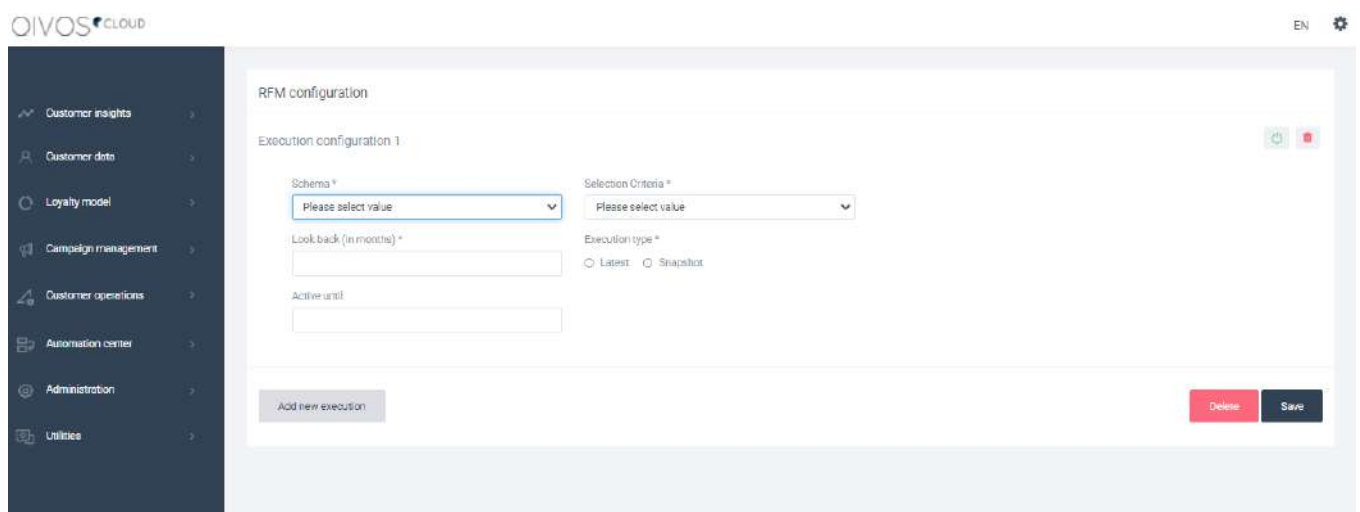

Figure 3.7.1: RFM creation and editing

In the second tab, the user, by selecting the schema, the start and end date and the selection criteria, can create an ad-hoc RFM.
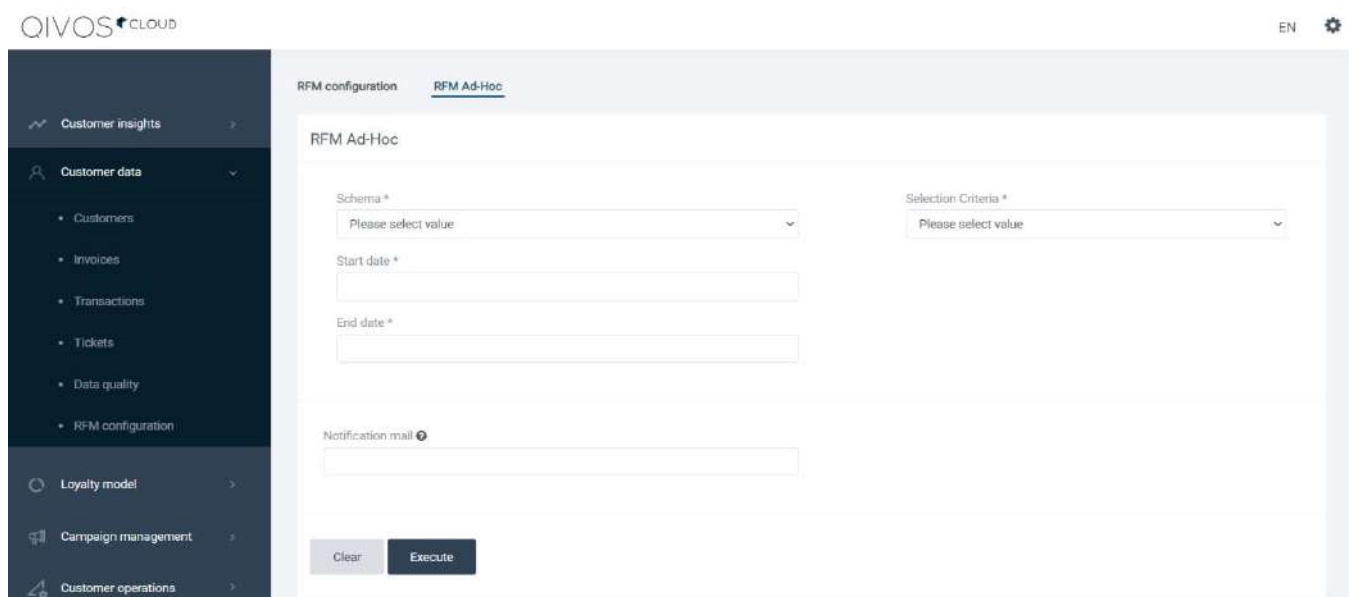
Figure 3.7.2: Ad-Hoc RFM

Finally, by clicking the "Notification mail", the user will be notified about the status of the ad-hoc RFM via email.

4. Loyalty Model

4.1. Schemas

A loyalty schema is a rewarding program offered by a company to its customers, who frequently make purchases. Regarding each company's needs and purposes, a loyalty schema may give a customer advanced access to new products, exclusive sales coupons or free merchandise.

There can be more than one schema per client.

Users can create a new schema, providing information like:

```
name, level, company, card type.
```

Likewise, they can update a schema adjusting fields like:

```
SMS provider, schema level, redemption type, and redemption threshold.
```

They can, also, configure tickets and welcome kits.

Figure 4.1.1: Schema search

QC schemas may address separate groups of members and focus on diverse purposes. As a result, they have:

```
Different rules
Different segmentation
Different reporting
```
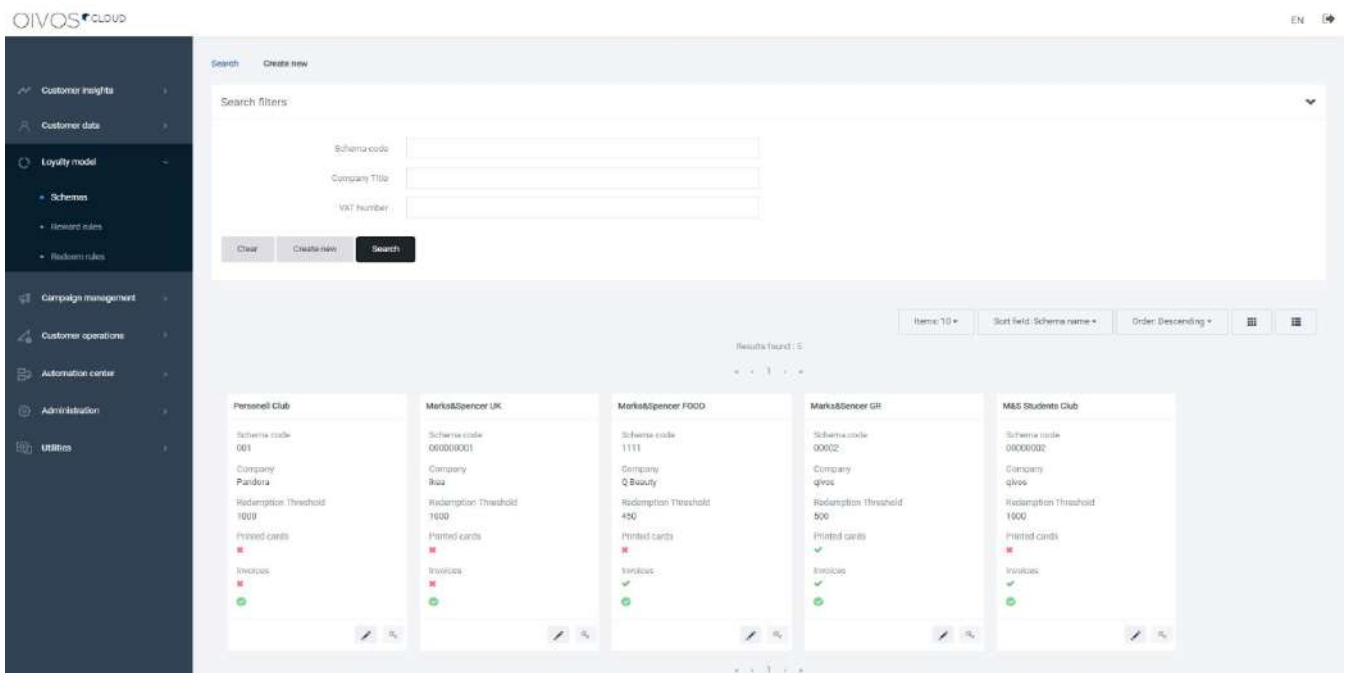
4.2. Reward Rules

The philosophy of a loyalty schema is to enable the marketers to engage with their customers and convert them into repeat buyers. A way to achieve that is to reward the customers for their actions by giving them some points and offer them the opportunity to redeem them. For example, a company may give 100 points to its customers, once the registration process is completed, give 10 points for every transaction they make, or give 0.5 points for each 1€ spent etc.

That is why, the QIVOS cloud platform uses the "reward rules" whose purpose is to determine when the customer is going to receive points, as well as the way that these points will be calculated and the rule type. It has to be underlined that every rule is associated with a loyalty schema.

In this section, the user is able to search, edit and create reward rules. To create a new rule, the fields below have to be completed:

```
• Schema: To which schema the rule will apply
• Country: In which country the rule will take place
• Points source: Reward, redeem, ad-hoc etc.
• Start - end date: Running period
• Description
```

Additionally, users may fill in the fields named "Member Category" or "Member Tags", if they want the rule to apply to members that belong to a specific member category or have been assigned to certain member tags

Next, they have to determine when the rule is going to be executed (On the transaction, on the member update or on the store visit) and the rule type. In case they select "On transaction", they have to define whether the points will by calculated by coupons, by product lines or by the invoice head, before proceeding on choosing the rule type.

Finally, users need to set the rest properties of the new rule as shown below:

On the transaction

1. *By coupon*

    o <u>Points for coupon</u>: The coupon set, the rewarding amount and either the included or excluded stores

    o <u>Points for coupon redemption</u>: The coupon set and the amount to redeem

2. *By product lines*

    o <u>Points per product</u>: Multiplier, rounding mode, product and the valid period

    o <u>Points for product amount</u>: Rounding mode, product combo or product list (or both) and the valid

period

- o <u>Points for product multiplier</u>: Multiplier, rounding mode and the valid period

3.   By the invoice head

- o <u>Points for invoice amount</u>: Multiplier, rounding mode, either included or excluded stores and the valid period

- o <u>Points after invoice amount</u>: Multiplier, rounding mode, operator, invoice amount either included or excluded stores and the valid period

On member update

- o <u>Points on member update:</u> Points, referral points, award count limit, gender, member source, member fields

- o <u>Points on member consent :</u> Points, consent type

On store visit

Points, referral points, award count limit, gender, member source and member fields.

All rules run by themselves, without affecting one an another.

For example:

```
Give 100 points to all members on registration
Give 1 point to female member per store visit
```
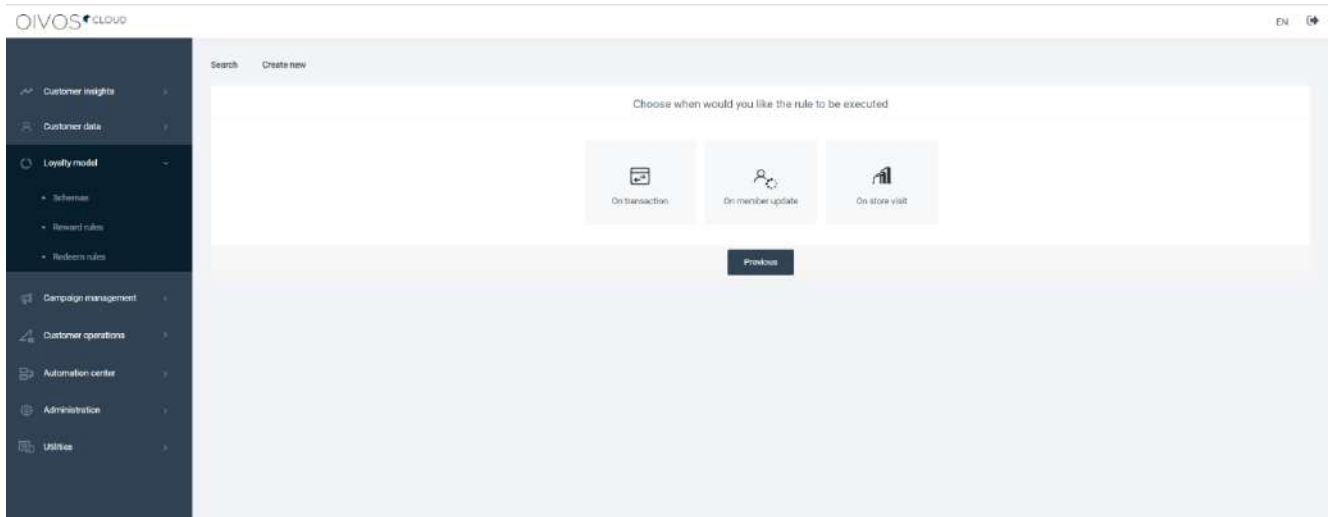

Figure 4.2.1. Reward rule creation

Besides, users can search a reward rule, by completing the rule type, the schema, the country, the point source, whether it is active and whether it is deleted. Once the results appear, they are able to edit the rules they want. Finally, in every row, there is a deactivation/activation button so the user can deactivate or activate a rule.
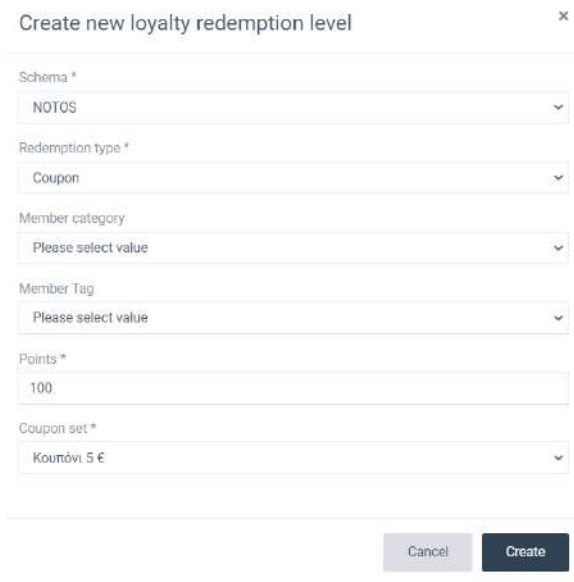
4.3. Redeem Rules

As stated above, a loyalty schema rewards the customers for their actions, by giving them some points, and

then offers them the opportunity to redeem them. For example, a company may give its customers a coupon, once they have reached 100 points.

For this to be realized, the QIVOS cloud platform uses the "redeem rules" whose purpose is to determine when customers are able to redeem their points and what gifts they are going to receive.

In this section a user is able to search, edit and create redeem rules.

To create a redeem rule, the user has to click the "create new" button and then select the schema, the redemption type and the number of points that the member has to reach in order to receive that gift.
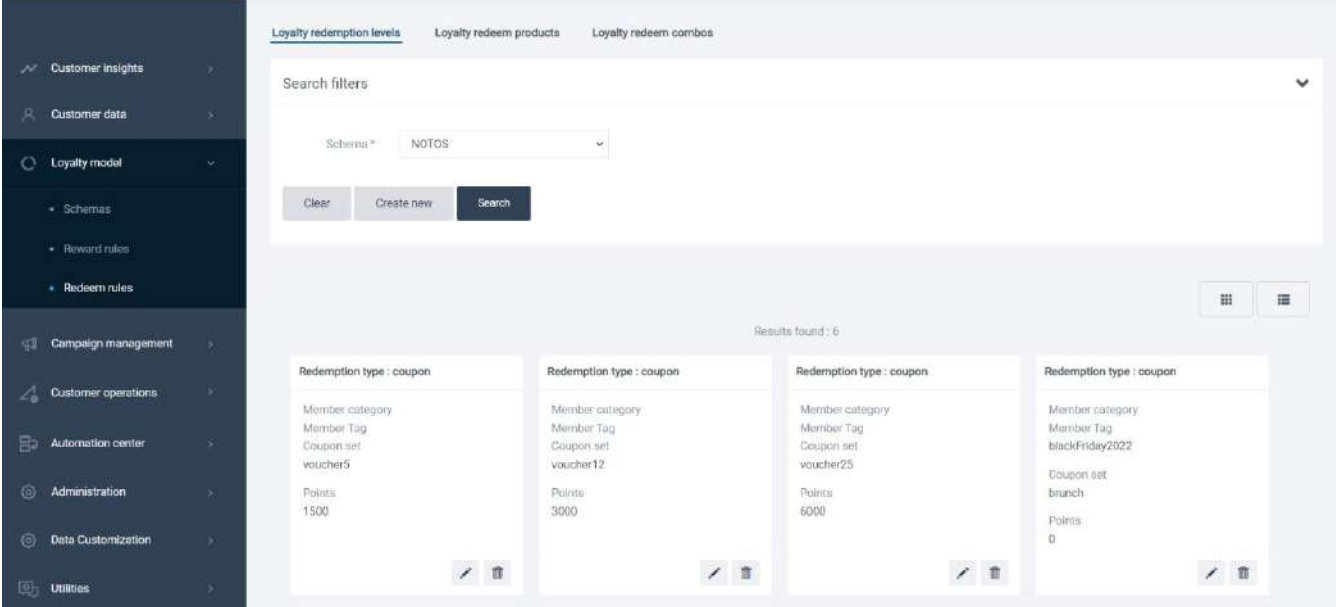

Figure 4.3.1: Creating Redeem Rules

The available redemption types are:

- **Amount:** The customer will receive a certain amount of money, once the redemption level has been reached. In this case, the user has to determine the amount and the currency.

- **Coupon:** The customer will receive a coupon, once the redemption level has been reached. In this case, the user has to determine the coupon set.

- **Discount:** The company will offer a discount to a customer, once the redemption level has been reached. In this case, the user has to determine the percentage of the discount.

- **Book Coupon Group:** The customer will receive a book coupon group, once the redemption level has been reached. In this case, the user has to determine the book coupon group's code,

- **Other:** The customer will receive a message, once the redemption level has been reached. The content of this message depends on each company's loyalty schema.

Additionally, users may fill in the fields named "Member Category" or "Member Tags", if they want the rule to apply to members that belong to a specific member category or have been assigned to certain member tags

Finally, users can search a redeem rule, by completing its schema. Once the results appear, they are able to edit the rules they want or delete them by clicking the "garbage bin" button.

Figure 4.3.2: Searching Redeem Rules

5. Campaign management
5.1. Campaigns

Advertising campaigns are built to accomplish a particular objective or a set of objectives. Such objectives usually include establishing a brand, raising brand awareness and aggrandizing the rate of conversions/sales.

Campaigns broadcast through several media channels, they may be directed at a particular segment of customers and may last from a few weeks and months to years.

There are five steps that the user needs to complete, using the wizard, to create a campaign.

The first step is **Setup**.

Here users choose the target group (loyalty member, person) and if they choose "loyalty member", they, also, define the general information for the campaign (member schema and registration country).
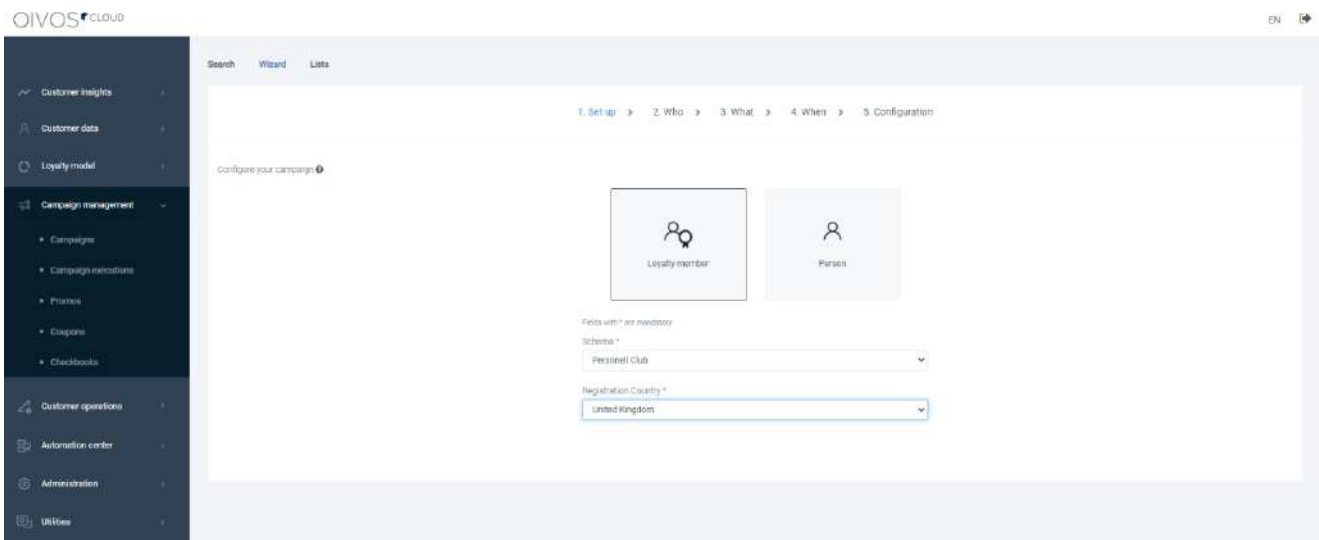
Figure 5.1.1: Setup

<u>The second step is **Who**.</u>
Here users can use multiple filters for the segmentation, such as:

Personal filters

Active loyalty card: All members with an activated loyalty card.

Age group: The age range. Users can select members / customers age from…to.

Birthday: The member's or customer's birthdate (if available). Users select the member's or customer's age from…to.

Bounced email: Members whose emails cannot be delivered to an email server.

Child birthdate: Users can declare the number of days before or after the child's birthday and define the maximum age of child. Child's birthdate is a prerequisite.

e.g., The campaign is sent to the members 6 days before their child's birthday. If the child's birthday is on 16/10 then the campaign will be sent on 10/10. Max child age is defined to 18 years old.

Child name day: Users can declare the number of days before or after the child's name day and define the maximum age of the child.

e.g., The campaign is sent to the members 6 days before their child's name day. If the child's name day is on 26/07 then the campaign will be sent on 20/07. Max child age is defined to 18 years old.

Note! Name day can also be defined via a predefined name day service, where all name days are declared.

Consent: Users can target members by defining the consents for member/customer. They can search for a member that has given consent per channel. This has to be used when more than one opt-in per channel is available. Otherwise, the Valid email or Valid mobile should be selected.

Contact country-region: Users define the contact country-region address and find members / customers that have a specific region/s primary address.

Gender: Users choose the gender type; multivalued selection of gender.

Member notification device: Users find the members to which they are able to send push notifications from a mobile App, since the needed information regarding their device has been provided.

Member source: The way through which the member has registered (e.g., ESHOP, POS, MOBILE_APP)

Name day: Days from or after a person / member name day. This demands the member to have the proper day and month. Otherwise, the name day service, which checks the name table for the names you want it to run, has to be used. Using this, name days that are not static, can, also, be found.

Number of children: The children count with an option of more, less or equal.

Person notification device: Users find the customers to which they are able to send push notifications from a mobile App, since the needed information regarding their device has been provided.

Person source: The way through which the person has registered (e.g., ESHOP, MOBILE_APP)

Preferred language: The language the member / customer prefers to use

Preferred store: The store that member / customer prefers to purchase from. This information is stored either from visits or from the registration form, depending on the business.

Registration store: The store, in which the user registered.

Valid email: The correct and opt-in primary email.

Valid mobile: The valid and opt-in primary mobile

Valid personalize: Valid personal information like last name, first name, and salutation. This filter can be used to ensure that the respective placeholder will have the right data on the messages.

Campaign filters
Campaign e-mail reporting (clicked): The people that have clicked the link, for a specific email campaign that has already been launched

Campaign e-mail reporting (opened): The people that have opened the email, for a specific email campaign that has already been `launched

Campaign In-App-message reporting (clicked): The people that have clicked the link in an In-App-message, sent by a previous campaign

Campaign In-App-message reporting (opened): The people that have opened an In-App-message, sent by a previous campaign

Campaign participants: The people that have participated in a specific campaign, during a particular period of time. This campaign can be excluded, when NOT IN operator is used.

Campaign Push Notification reporting (clicked): The people that have clicked on an out-of-application notification, sent by a previous campaign

Have already received this campaign: Include or exclude members that have already received this campaign this year or this month, or at least once in the last days or months. Users will use this filter to exclude all participants that have already received the same campaign (in automated campaigns).

Have received a number of campaigns: The people that have received less equal or more than a specific number of campaigns, via a given communication channel either in that specific day or during a particular period of time. This filter does not take into account members who have **not** received at least one campaign based on the selected communication channel.

Transaction filters
Invoice: The people who have received an invoice either with a specific invoice number or during a specific period of time

Member/Person instore invoice: Users can find if the member / customer has purchased something in a particular period from a specific store.

Member/Person inregion invoice: Users can find if the member/customer has purchased something in a particular period and in a specific region.

No transaction: The people that have not purchased anything during a specific period of time. The selection can be narrowed down to specific stores.

Coupon filters
Coupons expiration: Members that have a specific coupon set and the coupons expire at a particular time. Users can use this filter in coupon expiration campaign.

e.g., Coupons of coupon set Cafe_la_mode10 expire on a certain date (e.g. 30/12/2019) or a number of days from the campaign execution.

Coupons: Members that have a coupon from a specific coupon-set and is given or / and used at a particular time. There is, also, the option to add coupon or coupon-set attributes.

Other filters
Attributes: Specific attributes could be used as filters based on selected type:

- INTEGER
- STRING
- DATE
- BOOLEAN

CSI Average Score: The average score range of the Customer Satisfaction Index.

Custom list: Segmentation is done by choosing an existing list or creating a new one of members' / persons' IDs. This can be a list that has been uploaded from a different system or a list that has been created using the "Add to list" QC functionality on every member's / customer's profile.

Customer Attributes: Specific attributes could be used as filters based on selected type:
- INTEGER
- STRING
- DATE
- BOOLEAN

Expired members: Members without an invoice for two years (the time period may change per business).

Loyalty card type: Segmentation is done based on member's card type:

- Unknown
- Temporary
- Permanent

Member category: Segmentation is done based on the member's category (e.g., normal, employee, VIP, tourist)

Member data entry date: Members that have been inserted into the QC Platform via DEF on a defined period (more than, less than, equal) and a day/month or date duration. Data Entry Form (DEF) is a prerequisite.

Member mobile login: Users can find the members with which connected via mobile for the first time, during a particular period of time.

Member registration date: Members who have registered on a predefined period of time (more than, more than or equals, less than, less than or equals, equals) in days/months or date.

Member social media likes: Segmentation based on likes made in a period of time (Days/Months from) or a certain date (Date from). This requires a configuration of the client social page and will find members that had liked posts in a particular date range.

MTV Analysis: The last MTV segments.

No check-in: The members without an in-store check-in, during specific days/months.

Plastic loyalty card: Card batch creation days/month range or date range. Users find member that had to receive a plastic card from a specific card butch.

Point log expiration: The members whose points are going to expire in a specific days/month range or date range. This can be used to send a message to these members notifying them that their points are about to expire or to ensure that a campaign will be sent to members whose points will not expire in the next days.

Point logs: The members that received a specific type of points during a period of time.

Points: The member's available points at the time the campaign will be launched.

RFM Analysis: The last RFM segments.

Tag: A label that members or customers have or had for a particular time.
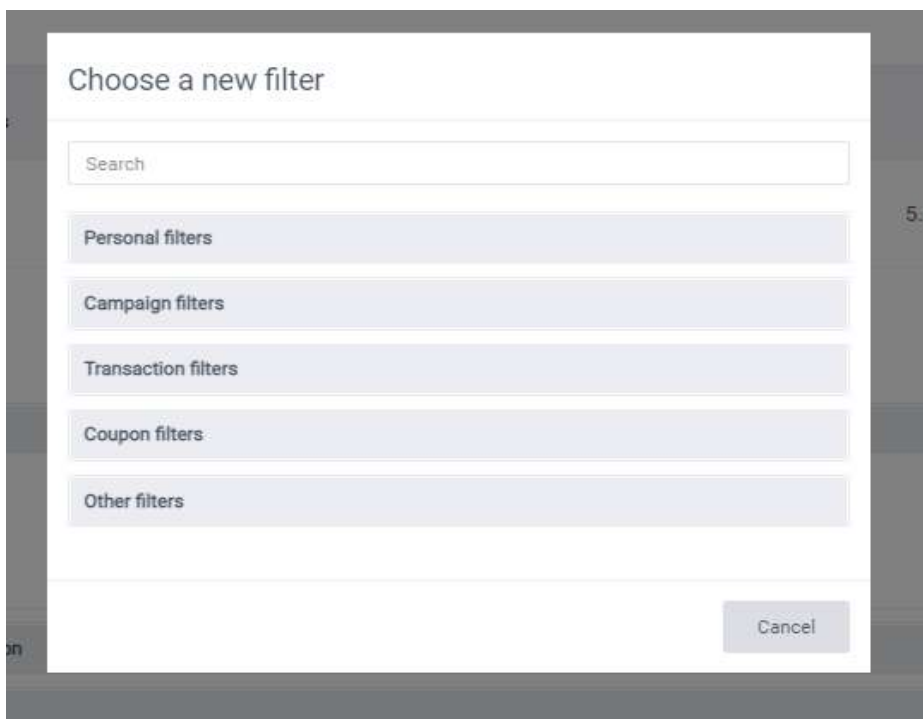
Figure 5.1.2: Campaign filters

A user can, also, create an empty list and add members/customers to it from their profiles or upload a file with ids. This list can be used in the campaign filters, in additional recipients or as a test list and can preview the members/customers that are part of it. The user can deactivate a list that no longer is using by using the status button.
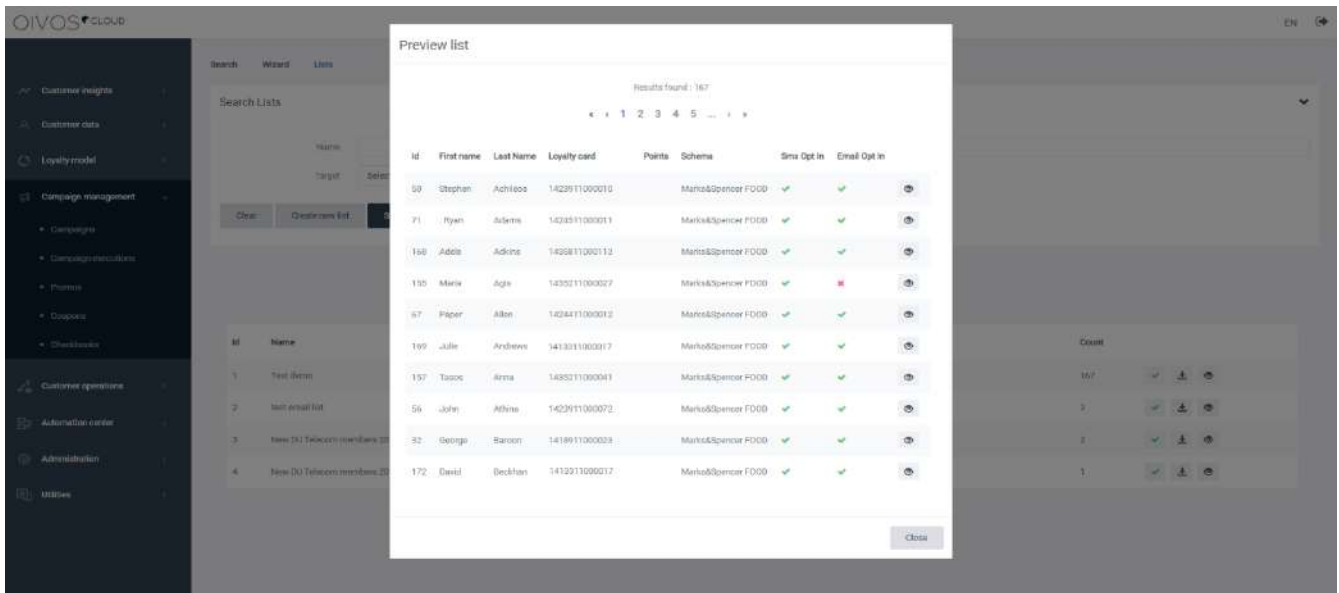
Figure 5.1.3: List

All the filters can be added more than once. For example:

```
One filter with point more than 10 and another filter with points less than 99.
```

Moreover, the user can combine the filters in a logical group using connectors like AND, OR NOT IN.

For example:

```
Members with valid email OR valid mobile.
More than 1000 points AND less than 2000 points AND NOT IN Multiple campaign
exclusion
```

By default, the filters selected are combined with an "and" clause.

The user can also select the control group. The basic idea of a control group is simple. A random (or nearly random) sample from a campaign's marketing list is selected and excluded from the promotion. Then, the control group's activity is measured and compared to the activity of the group targeted via the campaign.

With the *estimation button*, the user knows how many recipients there going to be.

When the estimation brings results, the user can use the sample button to preview ten random contacts that are in this estimate. Also, when the estimation result is more than ten, there is a refresh button that will randomly change the results.

There is also the *Additional recipient's* section, where the user can choose a contact list, which will always be included as participants of this campaign and excluded from the control group.
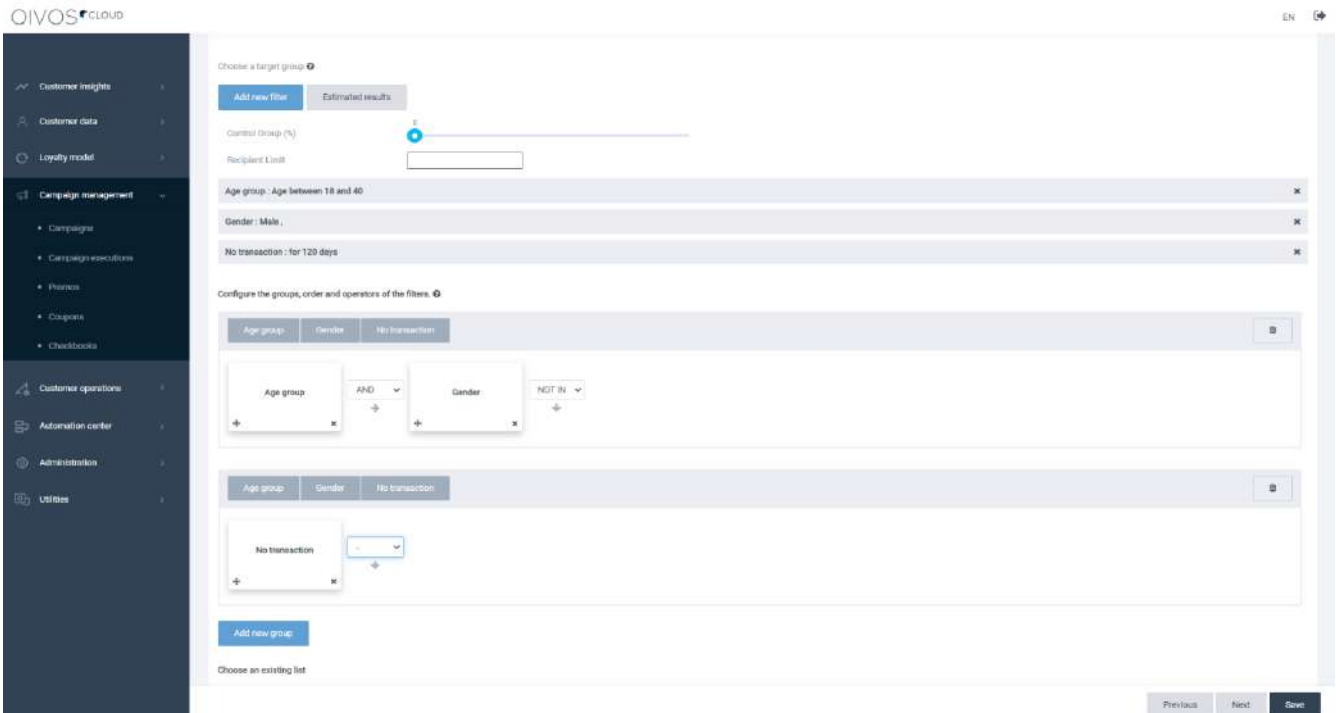
Figure 5.1.4: Who section

The third step is the **What** section. Here users select what the campaign will do:

- **Send SMS**: Users choose the account and the language for the SMS. For every language, there can be a different message. There are placeholders for salutation, member/customer, first and last name, coupon id and expiration date, points expiration date and card number.

- **Send email**: This is an enBox campaign option. Users can create different emails per language. There is the option to add a template URL for the email, the subject, the from address and the sender's name.

- **Send Viber**: Users choose the Viber account and create the message with placeholders, images, and links. There is, also, the option of SMS fallback, so that the recipient can receive an SMS in case that the Viber has not been delivered.

- **Send push notification:** Send push notification in mobile App

- **Send In-App message:** Send messages in mobile App

- **Give coupon**: Users choose the coupon set and the expiration property from the bellow options: the duration in days, valid date range or no expiration. There are, also, the following options:

  - Use available coupon

  - Give pre – assigned coupon to customer

  - Remind customer for coupon

  - Custom Coupon action

- **Give points**: Users select the point source and the points to be given to the member.

- **Create a list**: The result of the campaign will be a list of the member's / customers IDs.

- **Record**: This option is used, when the campaign is executed from another system, and the user wants to record only the action.

- **Give Tags:** This option will give specific tags to the members of campaign
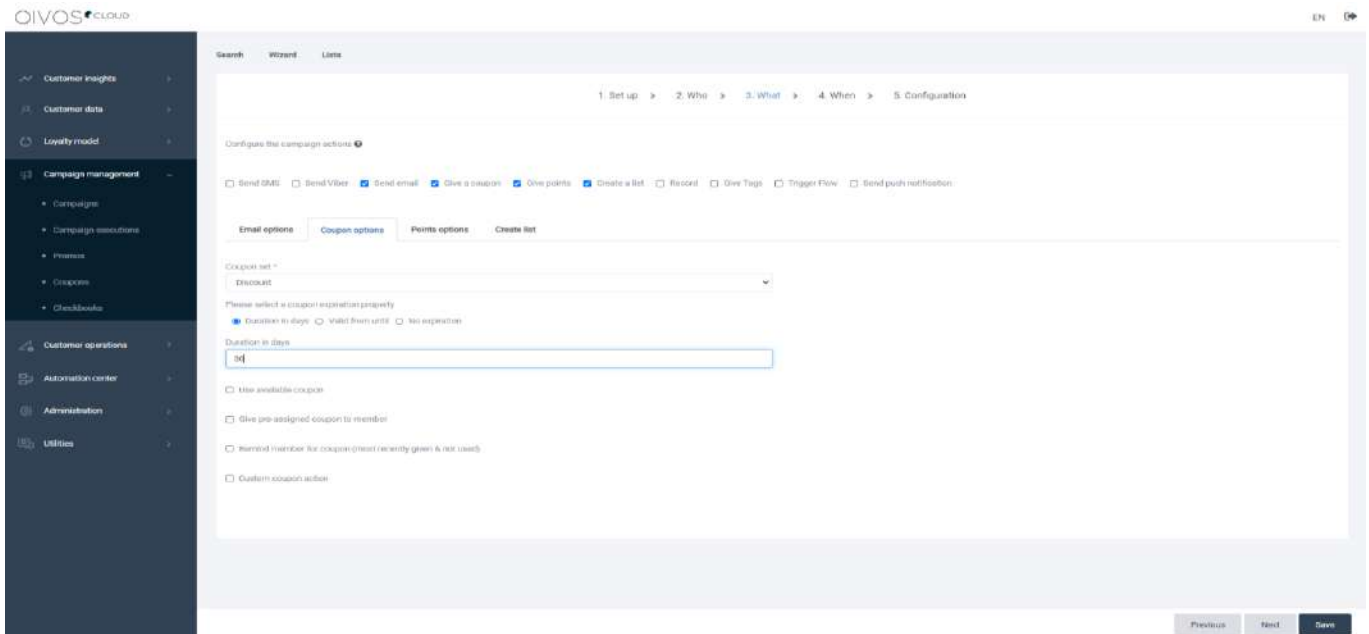- **Trigger flow:** Users can decide to trigger a specific flow to run in the campaign

Figure 5.1.5. What

In the **When** step users select when the campaign should run:

- **Set a schedule:** The campaign will be executed every Hour/Day/Week/Month/Year. There may be multiple schedules
- **Once off:** The campaign will be executed in specific dates and times
- **I'll run it myself:** This campaign will run only manually; users will need to use the Send button on the campaigns result page.

When a campaign is scheduled, for example every Monday at 1 pm, it will run between the start date and the end date determined by the users in the setup section.

Although every QC has its own time zone, users can change it when choosing the "schedule" and "once off" options.
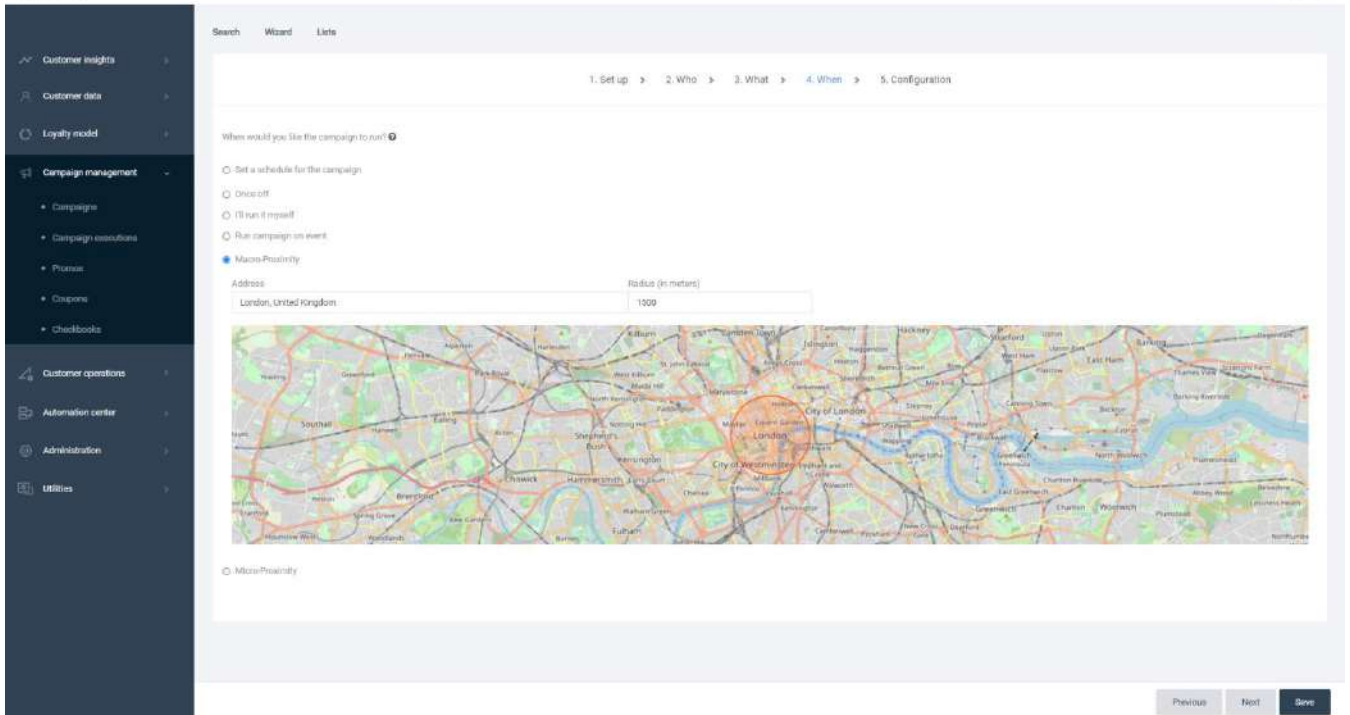
Figure 5.1.6. When

Finally, in the **Configuration** section, the user sets the name, category, control group and description. All campaigns that are created are *in design* status; there are no validations till the status is changed. In this status, the campaign cannot be executed.

In the *Ready to test* state, the SMS or Email campaign can be **tested**, by selecting a contact list of recipients and send them the message. Before every test, the campaign is autosaved.
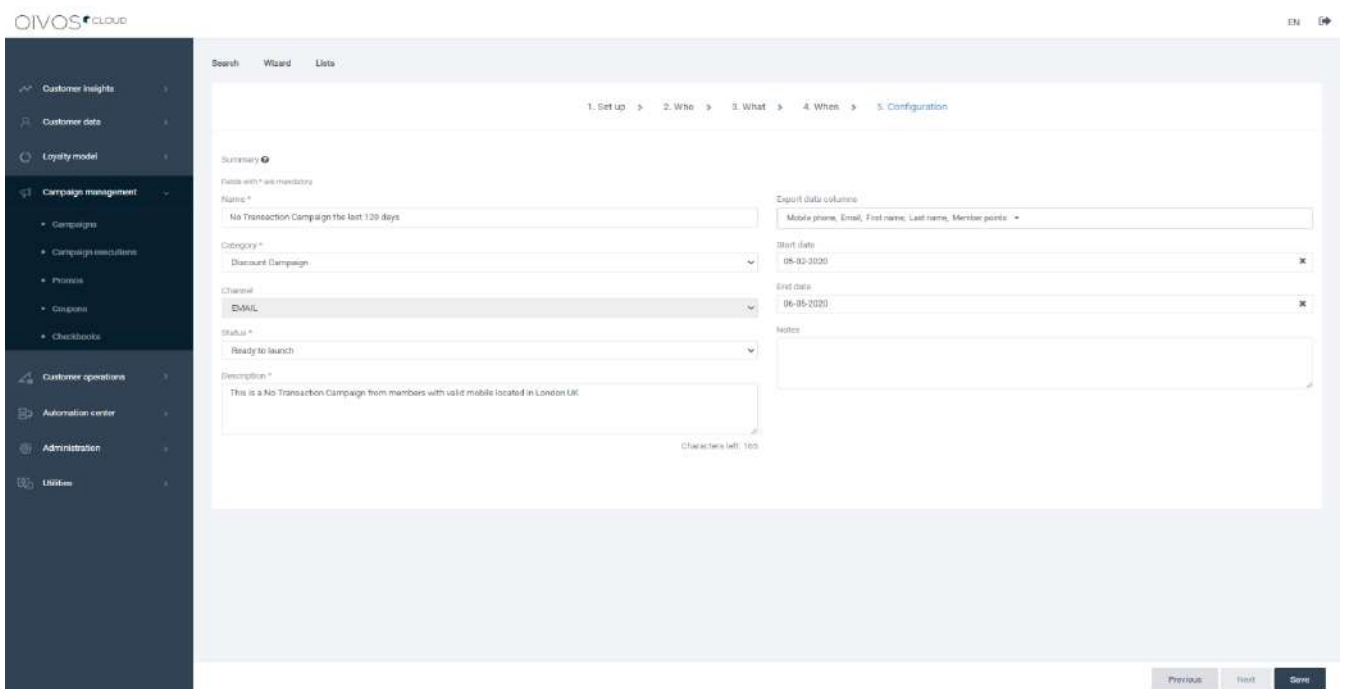

Figure 5.1.7: Configuration

The user can update the status when the campaign is *Ready for launch*. When the campaign has a scheduler, it will only run when the status is "Ready for launch" or "launched". It is strongly recommended not to make any edits to a launched campaign. However, if a user has launched a scheduled campaign and wishes to make edits, the changes will take effect from the next execution and onwards

Finally, the user can search all campaigns, using filters like name, category, status and take some actions like

```
Activate/Deactivate Preview: view the results
Edit: change the
campaign
Execute: run it
Duplicate: duplicate the campaign
```

5.2. Campaign Executions

In this section the user has the ability to search for the campaigns he wants by completing the following criteria:

- Campaign Name: The name of the campaign

- Schema: The schema that it belongs to

- Country: The country where it takes place

- Channel: The channel through which it takes place

- Start date: The date that the campaign starts

- End date: The date that the campaign ends

After the user completes the necessary criteria, he presses the "search" button
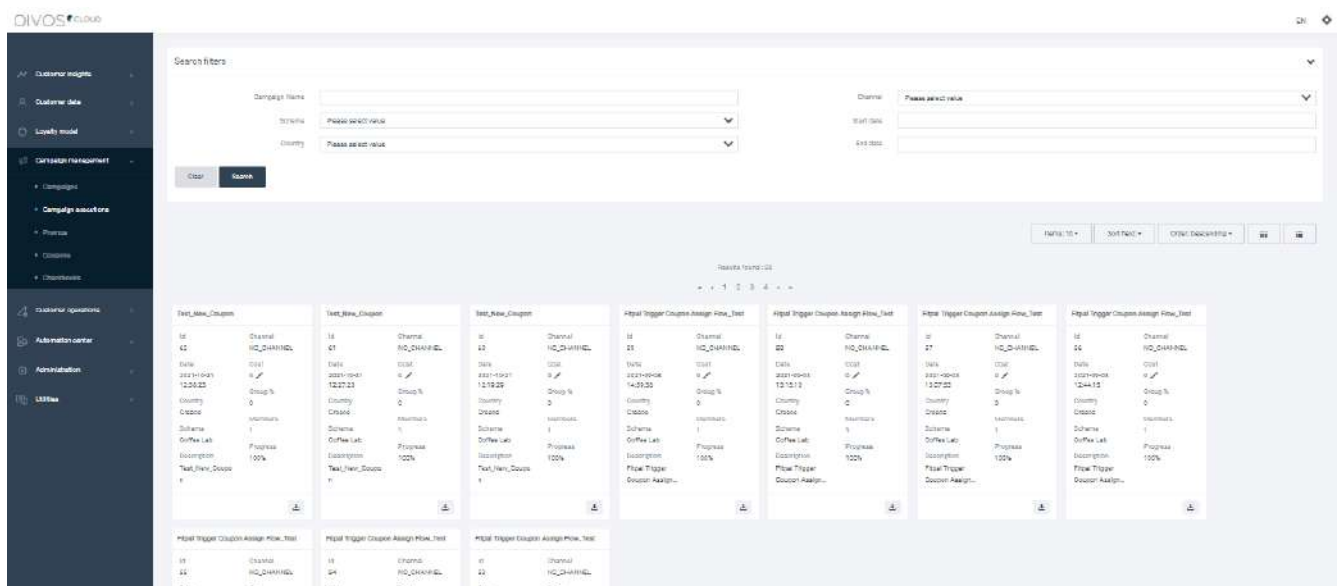
Figure 5.2.1: Searching Campaigns

5.3   Coupons
According to QIVOS Cloud, the term "coupon" represents the encashment state of a coupon during a purchase and it matches a unique invoice.

In the first tab called "Search Coupons", the user is able to:

1. Search coupons using filters.
2. Export coupon codes by clicking the button "export results", next to "search".
3. Edit Coupons.
4. Assign or Unassign coupons.
5. See the log history of changes in coupons.

To search for coupons, the user should apply some of the available filters, below:

1. Basic Filters:
   a. Coupon Code
   b. Coupon set (There is a drop-down list, containing the titles of the Offers (coupon sets)
   c. Deleted
   d. Valid issue from (The date from which the coupon can be issued)
   e. Valid issue until (The date until which the coupon can be issued)
   f. Valid from (The date from which the coupon can be redeemed)
   g. Valid until (The date until which the coupon can be redeemed)

Figure 5.3.1: Basic filters for searching coupons

2. Advanced Filters:
   a. Given
   b. Date Given
   c. Used
   d. Date Used
   e. Cancelled
   f. Date Cancelled
   g. With attribute
   h. Attribute type
   i. Attribute name
   j. Attribute value
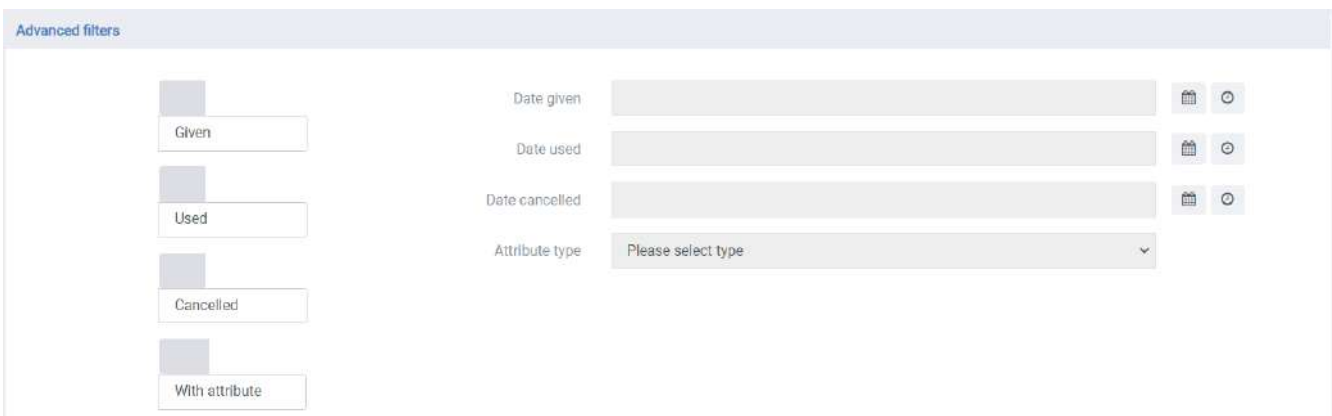
Figure 5.3.2.: Advanced filters for searching coupons

Next to the place where the date is supposed to be defined, two buttons can be found. The first one gives the user the opportunity to determine a range of dates, while the second one can be used for determining a specific date and time.

Moreover, it has to be underlined that in every checkbox (except the one called: "with attribute"), the user has three options:
1. To click it once: In this way, a check ☑ will appear and the user will be able to see the coupons that match the selected status
2. To click it twice: In this way, an X will appear and the user will be able to see all the coupons, except the ones that match the selected status
3. To leave it blank: In this way, this filter will be totally indifferent and thus the coupons in the result page may or may not match the selected status

The user can view all created coupons with:

```
   coupon set information, validation date, and status (if they  were given and
used), as well as the invoice number that was registered with it.
```

Once the searching process is completed and the desired coupon is selected, the user can edit the fields below:
- Used
- Used Date
- Given
- Given Date
- Cancelled
- Cancelled Date
- Deleted
- Valid issue from date
- Valid issue until date
- Valid from date
- Valid until date
- Used Invoice Number

Figure 5.3.3.: Editing Coupons

Additionally, the user can assign a coupon to a member by clicking the button in the red square and completing the Card Number, Given Date, Valid from and Valid Until Date.

Coupon ID	Couponset title	Code	Card Number	Valid issue from	Valid issue until	Valid from	Valid until	Given	Used	Cancelled	Deleted	
2482	Parking για το Ελ. Βενιζέλος με έκπτωση 2,5€	2120000000126	-	03-12-2020	07-01-2021	03-12-2020	07-01-2021	✗	✗	✗	✗	✎ 👤+ ↺

Figure 5.3.4: Assigning a coupon to a member (step 1)

Figure 5.3.5: Assigning a coupon to a member (step 2)

Finally, the user can view all the changes taken place in a coupon by clicking the button shown below:

Coupon ID	Couponset title	Code	Card Number	Valid issue from	Valid issue until	Valid from	Valid until	Given	Used	Cancelled	Deleted	
2482	Parking για το Ελ. Βενιζέλος με έκπτωση 2,5€	2120000000126	-	03-12-2020	07-01-2021	03-12-2020	07-01-2021	✗	✗	✗	✗	

Figure 5.3.6: Coupon's Log History

In the second tab called "Search Coupon Set", users can search coupon sets, create new coupon sets and generate new coupons out of an existed coupon set.

At this point is essential to state that, according to the QC platform, the term "coupon set" represent the categorization of coupons.

The available filters for searching coupon sets are:
1. Coupon set Title
2. Coupon set Code
3. Schema
4. Coupon set Category

5. Coupon set Type
6. Whether the coupon set is active or not

To create a coupon set, users need to click "create new" and fill the fields below:

- Coupon set: the name for the coupon set

- Type of the coupon set

- The logic for the coupon code

- The amount, the value of the coupon

- The coupon set code

- The prefix of the coupons code

- The count of the coupons

- The schema that the coupons will apply

Users can, also, upload a file for mass coupons use. All the coupons inside it will be flagged as used.

The file should contain the:

```
coupon code, member id and the transaction date used.
```

Every coupon should be marked as used. If the invoice number is provided, then the coupon should be marked as used with the invoice id and the invoice date as the used date. If a used date is provided, then the coupon should be marked as used with this used date.
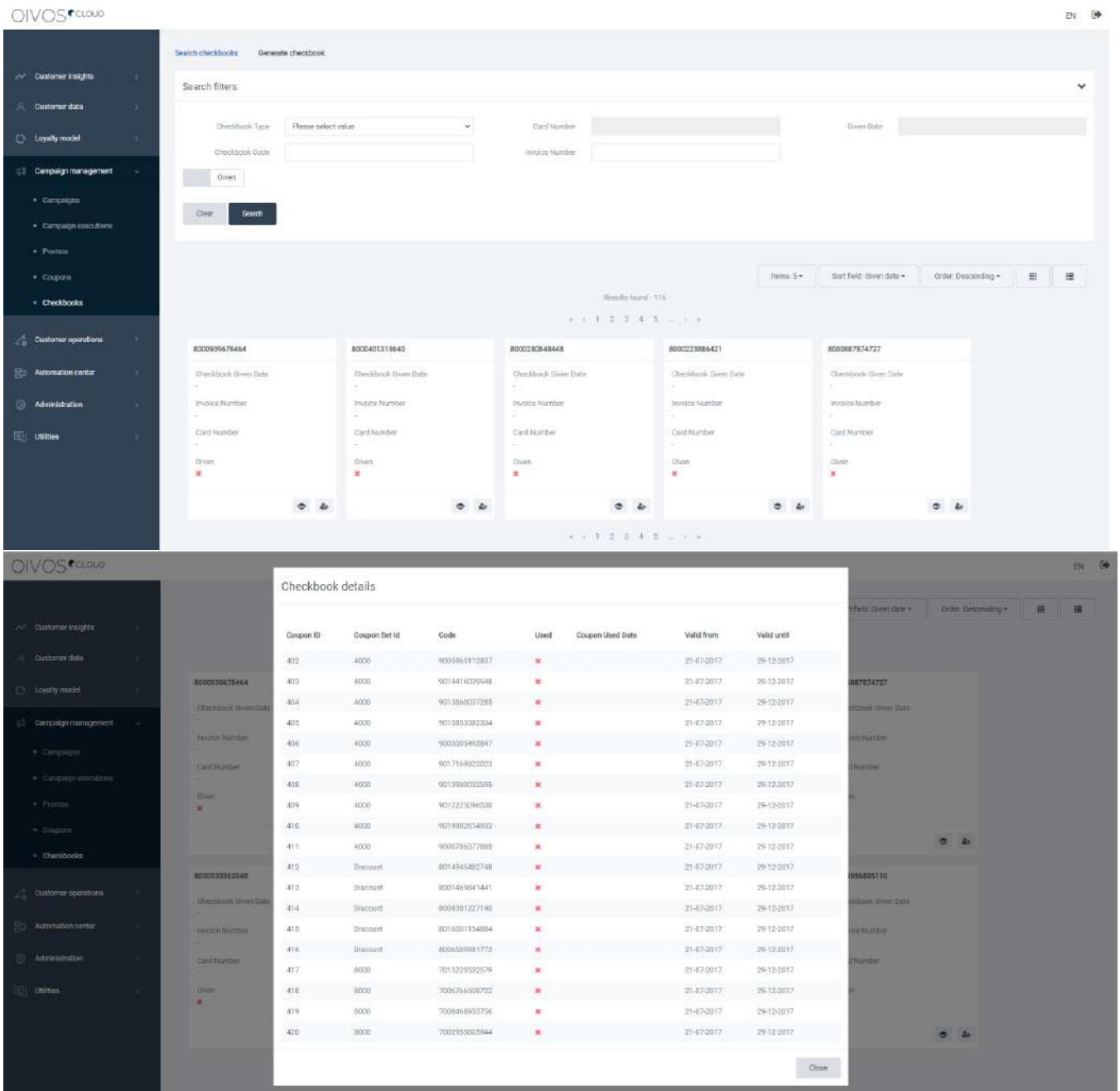
Points of failure:

1. If the coupon code or card number is empty, the import will not continue and the system will inform the user.

2. If the used date's format is different than dd/mm/yy (ex. 15/09/18), the import will not continue and the system will inform the user.

3. If the coupon code is wrong and the coupon cannot be found, the user will be notified by email.

4. If the coupon has not been assigned to a member, the user will be notified by email.

5. If the loyalty card provided is wrong and the member cannot be found, the user will be notified by email.

6. If the member, to which the coupon has been assigned, is different from the given card, the user will be notified by email.

7. If the invoice and the used date is not provided, the system will not mark the coupon as used and the user will be notified by email

8. If an unhandled exception occurs, the user will be notified by email

9. If the given invoice number cannot be found, the user will be notified by email.

10. If the coupon is already used, the user will be notified by email.

5.4. Checkbooks

A Checkbook refers to a collection of coupons that the members / customers get when they reach a certain redemption level. The users can search all checkbooks by completing Checkbook Type and Code, Card and Invoice Number and Given Date. Once they click "Search", the following checkbook details will appear:

```
coupon's information, validation date, and status (if they were given and
used), as well as the invoice number that was registered with it.
```


Figure 5.4.1. Checkbooks

Users can, also, assign a checkbook to a member or unassign it, by searching the member's email, mobile or

card number.

Likewise, they can generate new checkbooks, by selecting this section's second tab and defining the checkbook's type and number.

6. Customer operations
6.1. Bulk Operations

In the QIVOS cloud platform, the term "Bulk operations" refers to a tool that is designed to import items in the QC, on a mass scale, safely. The user can import files that follow a specific structure and contain items, which are part of an entity that the QC platform is able support, such as "customers", "members", "coupons", "member tags", "flows" etc. These entities are called "Profile Models".

So, the user has to make a configuration that will be set to import a file that contains a certain profile model and follows a predetermined structure. Each time a file that meets these criteria has to be imported, the user should select this configuration. Finally, for each individual task of a bulk operation, the system creates a message, and it publishes it in a message queue.

To sum up, in this section, the user is able to
- Search a configuration
- Add a new configuration
- View previous bulk operations

In the "Search" tab, the user completes the following criteria to find relevant configurations:

- Configuration name
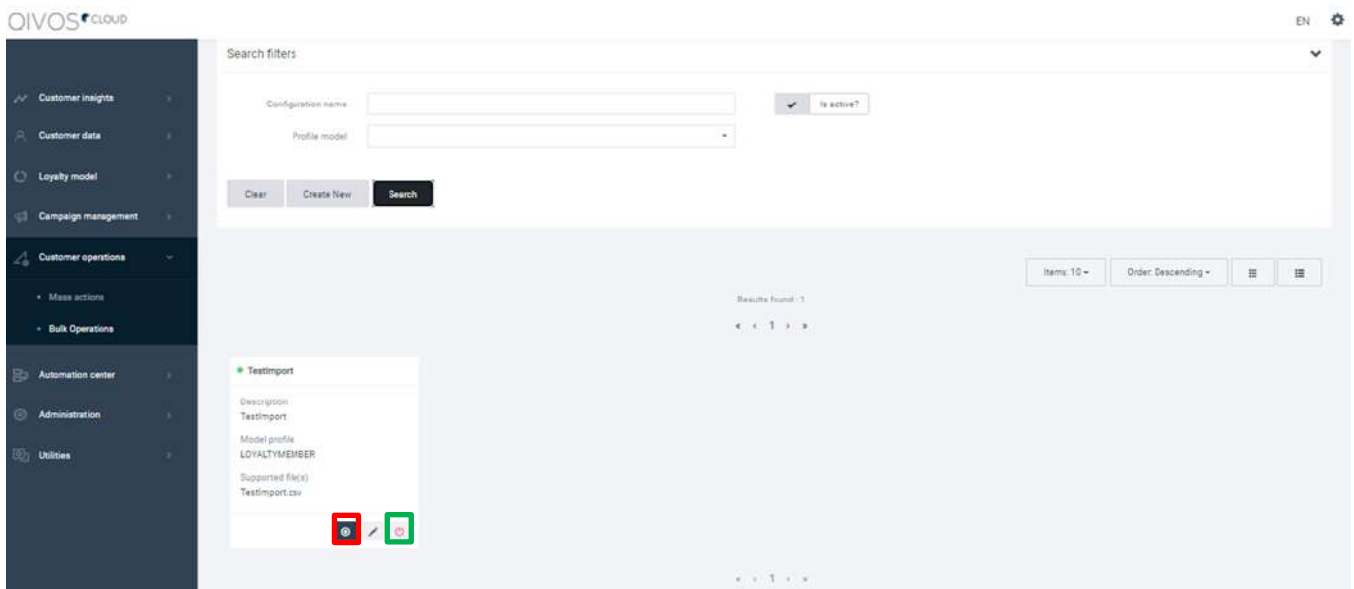- Profile model
- Active / Inactive

Figure 6.1.1: Searching Bulk Operations

After pressing search, users can view the different configurations that match their criteria and edit them, by clicking the pencil icon.

If the configuration is active, users can press the button in the red box to execute a new bulk operation, i.e.,

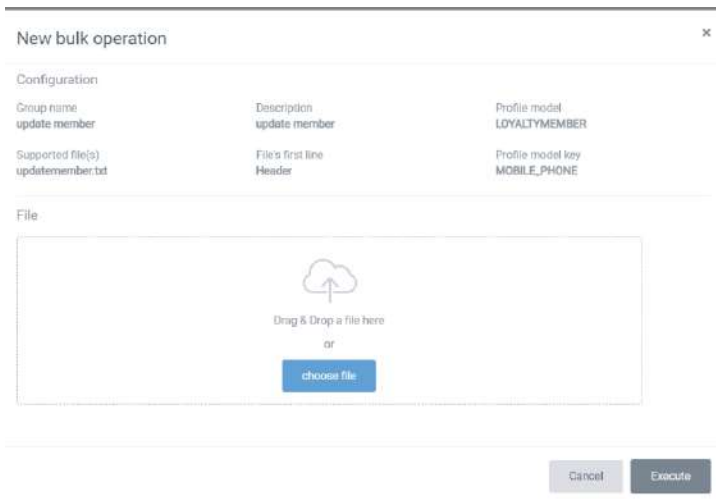to import a file into the QC platform. (This is further described below)

Figure 6.1.2: New Bulk Operation

Users are also able to deactivate a bulk operation, using the button in the green box.

The next section offers the opportunity to create a new configuration. At this point, just the people in QIVOS are supposed to complete that, by following the steps below.

- **STEP 1:** Choose one of the available profile models to import, such as "Customer Model".
- **STEP 2:** Import the file data to model properties and then choose the file's name and type and check the box "the file contains headers" if it is true.
- **STEP 3:** Choose the name of the configuration and compose a brief description about it.

Last but not least, they should check the box "I want to start a new bulk operation using this configuration" if this is true, and press the "save" button.

In the last section called "History", users can search for the bulk actions that have been completed or are still in progress by completing the following filters:
- Configuration name
- Status
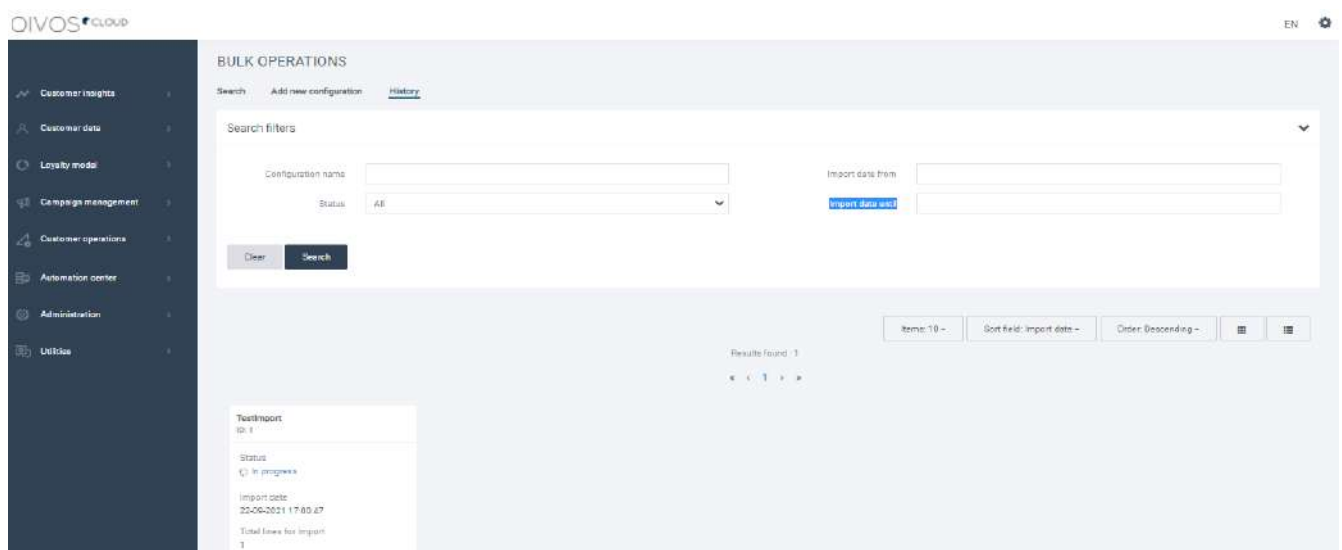- Import date from
- Import date until

Figure 6.1.3: Bulk Operation's History

How to import members / products in QC using Bulk Operations

In order for the concept of Bulk Operations to be understood, the process required for importing members and products using Bulk Operations will be described below. Specifically, two specific cases will be used as an example.

First case scenario: The user wants to import members in a loyalty schema

Second case scenario: The user wants to import products in a loyalty schema

Step 1: Create the proper file
Users have to create a file containing the members or products they want to import. As stated above, this file has to follow a specific structure, which is described in detail by the Integration document of each loyalty schema.

The file has to be created via notepad, notepad++ or Excel in order to be saved as a CSV (Comma Separated Values) file. Moreover, the file's name should not contain spaces an special characters. It has to be underlined that comma acts as the predetermined data delimiter and the file's first line represents the headers. Besides, for each loyalty schema and each profile model, there is a different key (e.g. the phone member, the card code, the email, the product code etc.)

For example, in the 1st case described above, users have to create a file like the one presented in figure 6.1.4 , while in 2nd case, the file should be like the one presented in figure 6.1.5:

Firstname	Lastname	MOBILE_PHONE	Company	TELEPHONE_COUNTRY	SCHEMA_CODE
Firstname1	Lastname1	111111111	Neptuna	al	0
Firstname2	Lastname2	222222222	Neptuna	al	0

MEMBER_CATEGORY	REGISTRATION_COUNTRY	DATE_OF_BIRTH	GENDER	BALFIN_TERMS_JULY_2019
Employee	al	26/03/2004	Male	1
Employee	al	22/08/1977	Female	1

MEMBER_CLUB_CODE	MEMBER_CLUB_START_DATE	MEMBER_CLUB_END_DATE	Card Number
Employees	30/11/2022	30/11/2052	1300000062666
Employees	30/11/2022	30/11/2052	1300000062673

SMS_OPTIN	SMS_FLAG_CHANGE_DATE	SMS_FLAG_SOURCE	EMAIL_OPTIN	EMAIL_FLAG_CHANGE_DATE
TRUE	30/11/2022	Import tool	TRUE	30/11/2022
TRUE	30/11/2022	Import tool	TRUE	30/11/2022

EMAIL_FLAG_SOURCE	VIBER_OPTIN	VIBER_FLAG_CHANGE_DATE	VIBER_FLAG_SOURCE
Import tool	TRUE	30/11/2052	Import tool
Import tool	TRUE	30/11/2052	Import tool

ADDRESS_COUNTRY	ADDRESS_TOWN
al	TIRANE
al	TIRANE

Figure 6.1.4: 1st file sample (excel)

PRODUCT COUNTRY CODE	PRODUCT CODE	PRODUCT DESCRIPTION	LOCALE	TITLE LOCALE
gr	101S111	DUO EYE COLOR No 1 RAD	el_GR	DUO EYE COLOR No 1 RAD
gr	107S110	DUO EYE COLOR No 3 RAD	el_GR	DUO EYE COLOR No 3 RAD

DESCRIPTION LOCALE	BARCODE	ITEM PRICE VALUE	BRAND CODE	BRAND DESCRIPTION
DUO EYE COLOR No 1 RAD	5201632683926	8.8	RAD	Radiant
DUO EYE COLOR No 3 RAD	5201641654965	8.8	RAD	Radiant

PRODUCT CATEGORY LEVEL 1 CODE	PRODUCT CATEGORY LEVEL 1 DESCRIPTION	PRODUCT CATEGORY LEVEL 2 CODE	PRODUCT CATEGORY LEVEL 2 DESCRIPTION	PRODUCT CATEGORY LEVEL 3 CODE
040_1	Eyes	062_2	Eyeshadow	......_3
040_1	Eyes	062_2	Eyeshadow	......_3

PRODUCT CATEGORY LEVEL 3 DESCRIPTION	PRODUCT CATEGORY LEVEL 4 CODE	PRODUCT CATEGORY LEVEL 4 DESCRIPTION	PRODUCT CATEGORY LEVEL 5 CODE	PRODUCT CATEGORY LEVEL 5 DESCRIPTION
......	KAT_4	Καταργημένο Προϊόν	010_5	Product – Προϊόν
......	KAT_4	Καταργημένο Προϊόν	010_5	Product - Προϊόν

BRAND_CODE (STRING ATTRIBUTE)	BRAND_DESCRIPTION (STRING ATTRIBUTE)
RAD	Radiant
RAD	Radiant
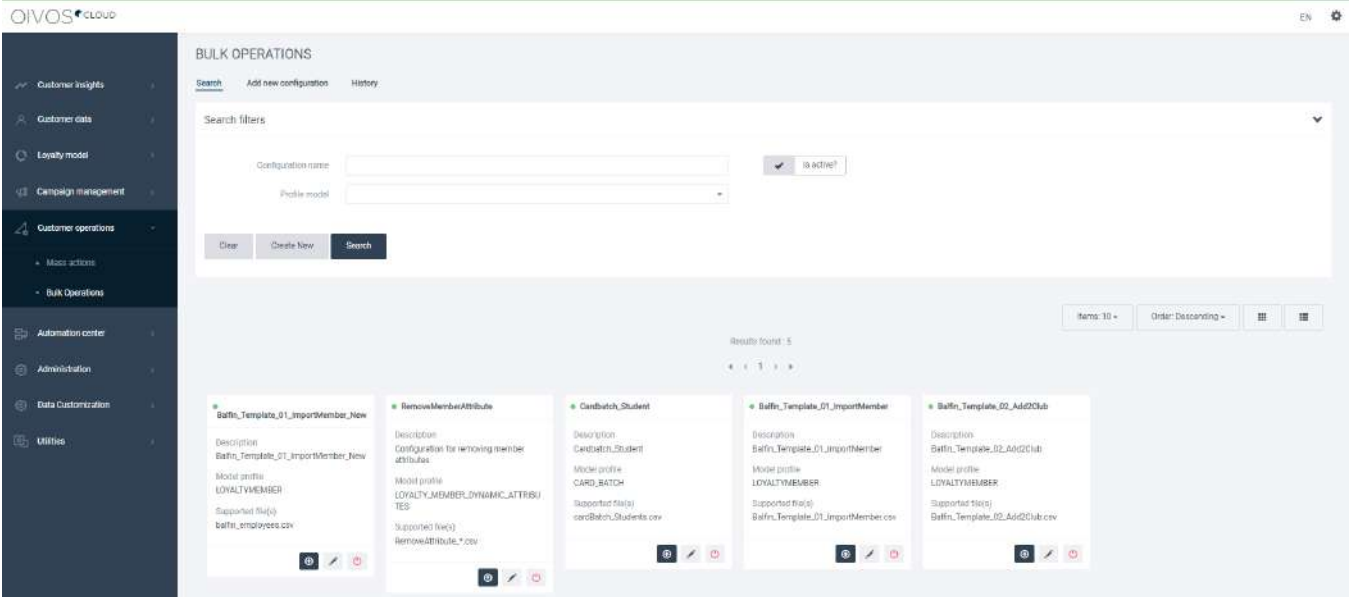
Figure 6.1.5: 2nd file sample (excel)

Step 2: Choose the configuration

After creating the document, users have to open the QIVOS cloud platform, go to Customer Operations and select the tab called "Bulk Operations".

Then, in the case they want to import loyalty members, they select "LOYALTYMEMBER" as the profile model, check the "Is active?" box and click "Search". Finally, they press the dark button (with the "upload" symbol) of the configuration that serves them.

For instance, in the 1st example, users need to press the dark button of the configuration named "Balfin_Template_01_ImportMember_New".

Figure 6.1.6: Choose the proper configuration in the 1s case

Similarly, in the case they want to import products, they select "PRODUCT" as the profile model, check the

"Is active?" box and click "Search". Finally, they press the dark button (with the "upload" symbol) of the configuration that serves them.

In the 2nd example, users need to press the dark button of the configuration named "Product Integration".
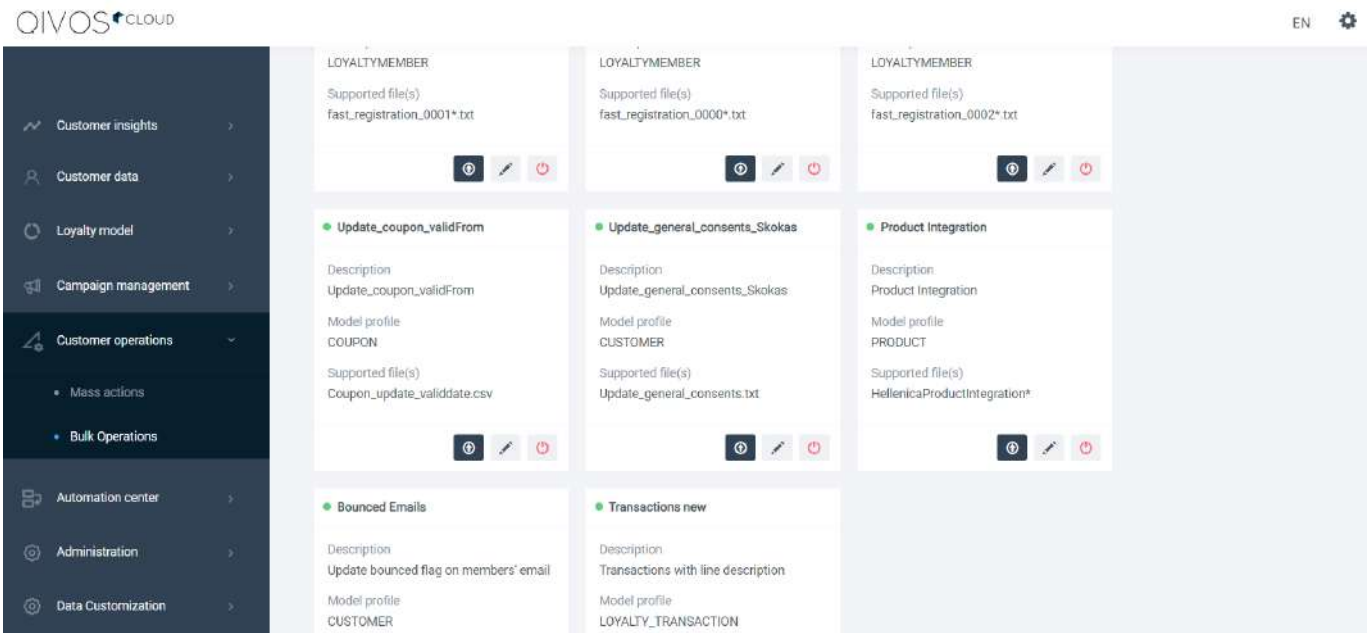

Figure 6.1.7: Choose the proper configuration in the 2nd case

Step 3: Upload the file

A new window will open, in which users have to upload the file that they created in the first step. After doing so, they have to check the file's characteristics that will appear, as well as the Data map. In case mistakes are spotted, they need to press "Cancel", correct the file and upload it again. Otherwise, they click "Execute". At that point, a message saying that the process has begun appears. For the import to be completed, users have to wait for a few minutes - the exact duration of the process depends on the number of members / products imported.
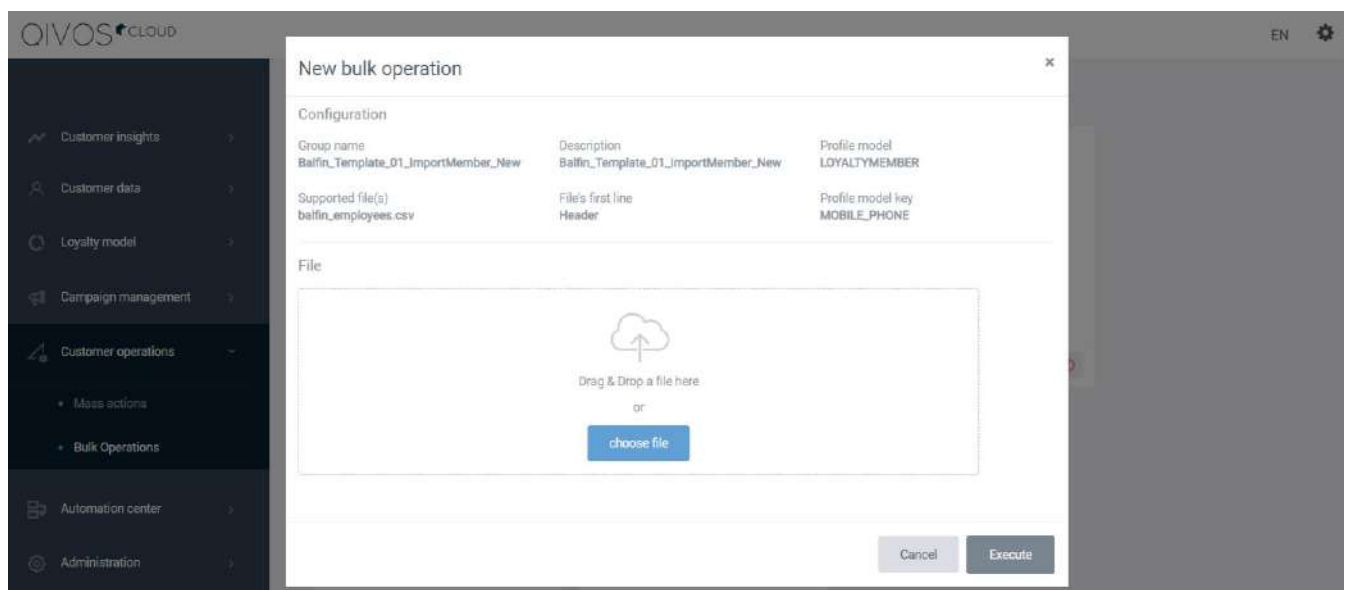

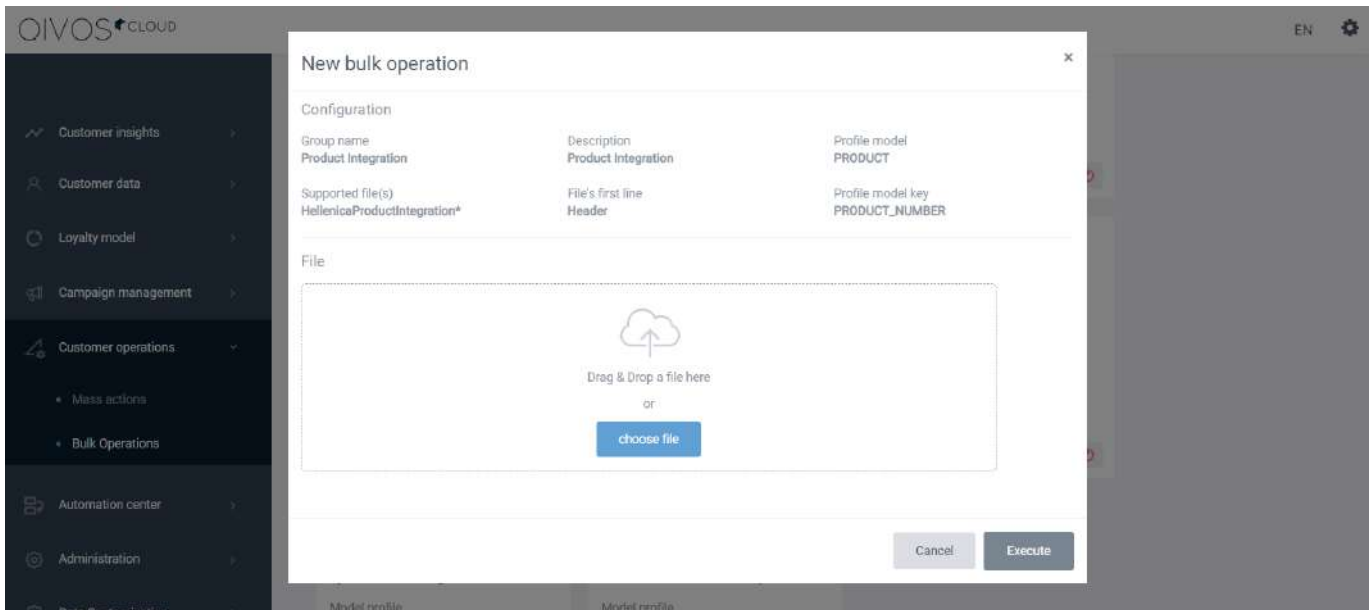*Figure 6.1.8: Upload the file in the 1st case*

Figure 6.1.9: Upload the file in the 2ⁿᵈ case

Step 4: Check the status of the Bulk Operation

After closing the message, users have to open the tab called "History", to view the progress of their bulk operation.

By clicking "Search", they will see every bulk operation from the most recent one to the oldest one. Thus, they will be able to check the status of their import, that, supposing everything is fine, should be either "In Progress" or "Complete". If it is "Complete", then the import process has been completed successfully and users are able to view the imported members / products in the QIVOS Cloud platform.

In case something has gone wrong, there will be a red box containing the number of errors that have occurred. To see the errors in detail, users have to click that box and view the Error logs. Then they have to make the proper corrections in their file and import it again, following the steps described above.

7. Automation Center

7.1. Flows

To achieve maximum time and cost efficiency, the QC platform provides customizable pieces of code that are designed to perform specific tasks, which are called "flows". Technically speaking, flows are, actually, a DSL (Domain Specific Language).

Thanks to them, when users need a new action in the QC to take place, instead of waiting for it to be developed from scratch, tested and launched, they are able to select the related flow and customize it. For example, if they want to send a welcome SMS to their customers, they can choose the proper flow and determine fields such as what will be written in that SMS.

In this section, the users can handle flows in three ways:

- Search Flows
- Deactivate Flows
- Update Flows

At this point, the responsibility of creating flows lies with developers, but there are plans to offer this capability to users as well.

In the search section, users can enter the name and context of the flow, as well as choose whether what they

are looking for is active or not. Context flow is the main subject that all tasks will share. Flow event is the trigger point that will initiate the execution of all configuration tasks, according to specific order. A context flow can have one or more flow events. Once the results appear, users can either view, edit or deactivate the flow they want by clicking the corresponding button.
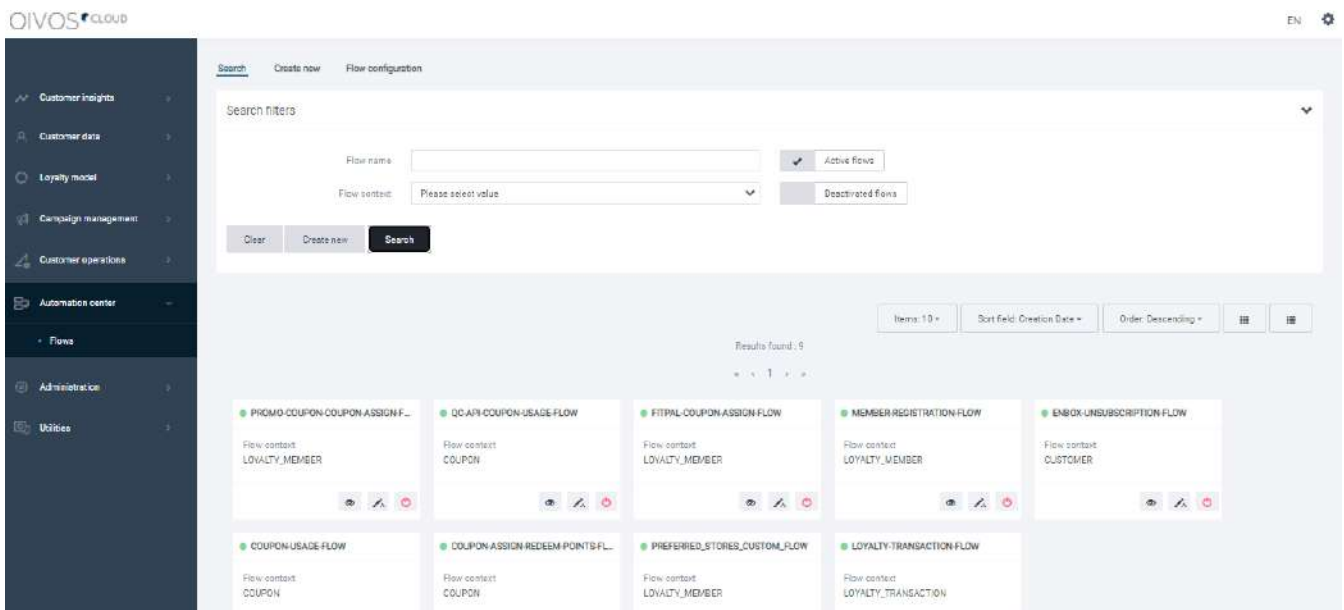

Figure 7.1.1: Search Flows

In the "Create New" option developers can create a new flow and fill in the characteristics they want. For example, they can choose the name, the content and whether it will be active. This section is about to be updated in order to offer users the ability to create flows, too.
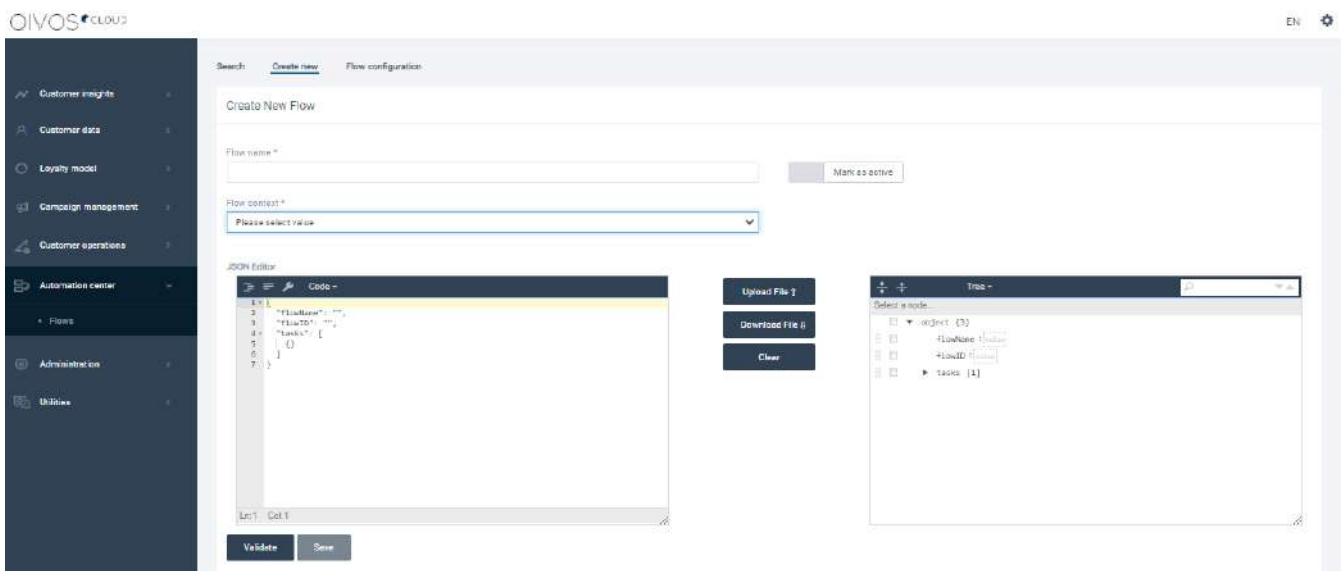
Figure 7.1.2: Create new Flows

In the "Flow Configuration" panel, they are able to configure a flow by selecting available context and event trigger point. There, the user is able to change the dates of a flow

8. Administration

8.1. User management

The term user refers to a person who has access to the QIVOS Cloud platform and can view or edit specific areas within it. The access option for each user is derived directly from the security group the user is bound

to.

Security groups consist of policy documents and each policy document consist of Security Roles. Security roles are the building blocks of user access.

I.e. Customer support is a security group containing the policy documents: Manage Tickets, Manage Profile, etc.

The user can search for all QC users, using criteria like:

```
username, email, security group, Display Name, Business Group
```

Moreover, the user can change their password, email, language, security group and deactivate them.

For new users to be created, the following fields should be completed:

```
username, password, display name, email, security groups, business group,
language
```

There is, also, the option to create a new security group or update an existing one. The user has to fill in a name and a list of policy documents that control which areas of the QC platform each user, which belongs to this group, can view and edit.

Due to the fact that the user can select which documents the group contains, if a permission for all the users in a specific security group has to be altered, the user can modify just the security group policy documents and not every user separately.
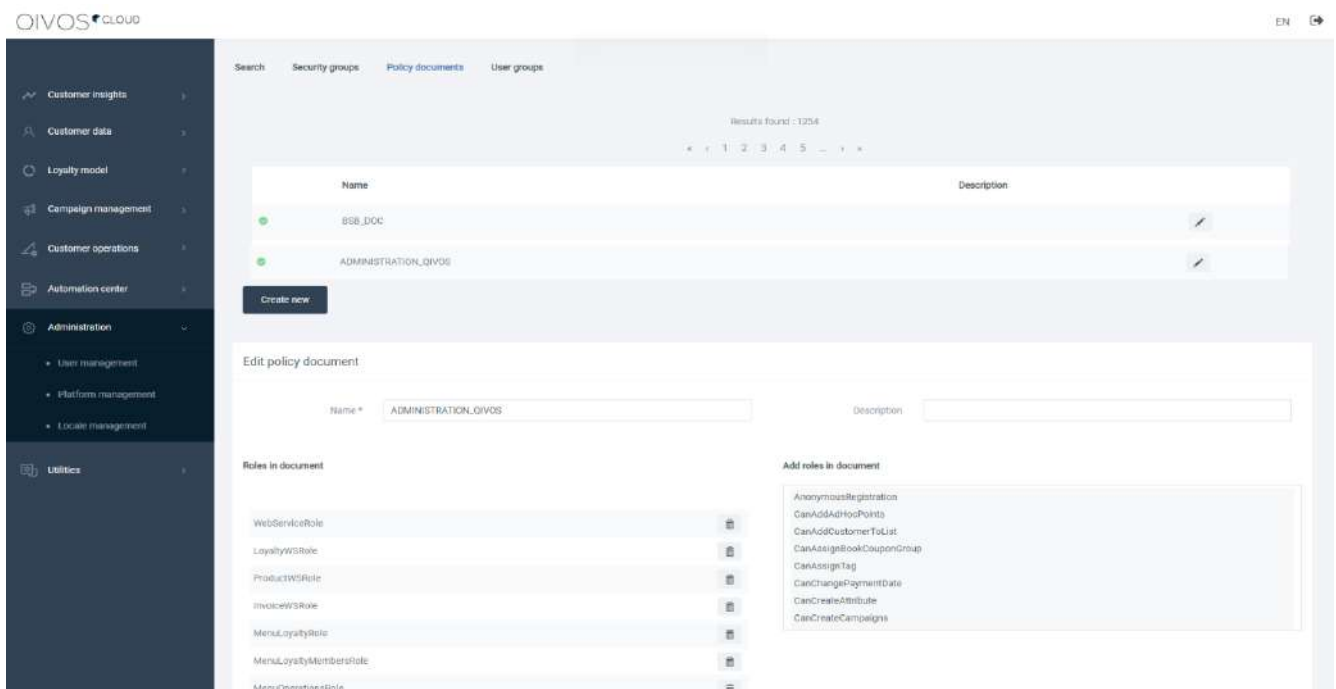

Figure 8.1.1: Policy documents

Finally, there is a "*User Groups*" section, which is for grouping users for reporting and searching purposes. The users that are in a user group do not get any different privacy rules. At present QC does not use them,

but they are going to be used for search criteria, history logs, et cetera, in the near future.

8.2. Platform management

This area's objective is to give the user the opportunity to manage QC configurations in order to increase the platform's usability and functionality.

Specifically, in the "Global Configuration" tab, the user can modify the fields below:

```
SMS provider, Language Code, Web Services, Notification email
```

Then, in the "Application" tab, the user is able to make changes on the Application, if available.

8.3. Locale management

This area's objective is to manage all the custom literals, per language. The users can search filters by completing the fields "Literal code" and "Literal".

They can also create a new Literal by selecting the desired code and language.

At this point, it has to be pointed out that if other languages are not selected, the literals will be automatically assigned to the English literal, on submit.

Finally, users are able to either import a file containing literals (whose format must be in .json) or export one for further use, outside the QC.

8.4. Integration Management

In order for the QC platform to provide complete services, it is necessary to connect with other systems, such as Enbox, MailChimp, QC Message App etc. These integrations can be viewed and created in this section, as described below.

In this section, users enter the following filters so that they can search for the desired integration system and either browse it or just review it. The filters are the following:

- Name: The name of the system
- Integration system: The system that it belongs to
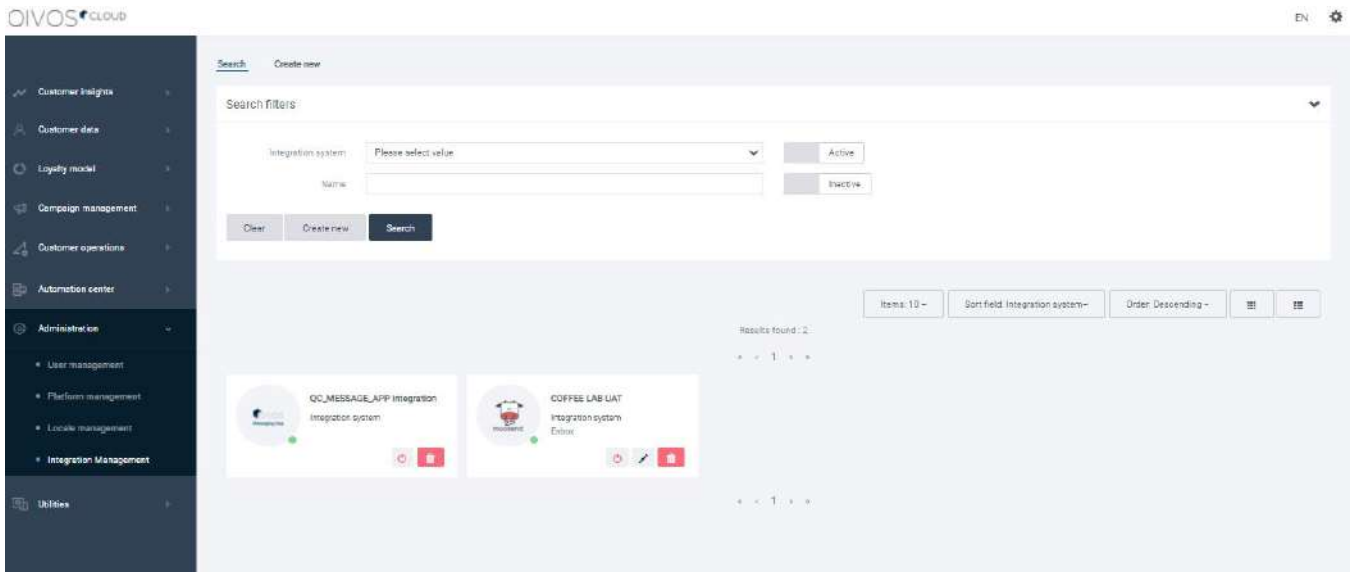- Active/inactive button: If the system is active or inactive

Figure 8.5.1: Integration Searching

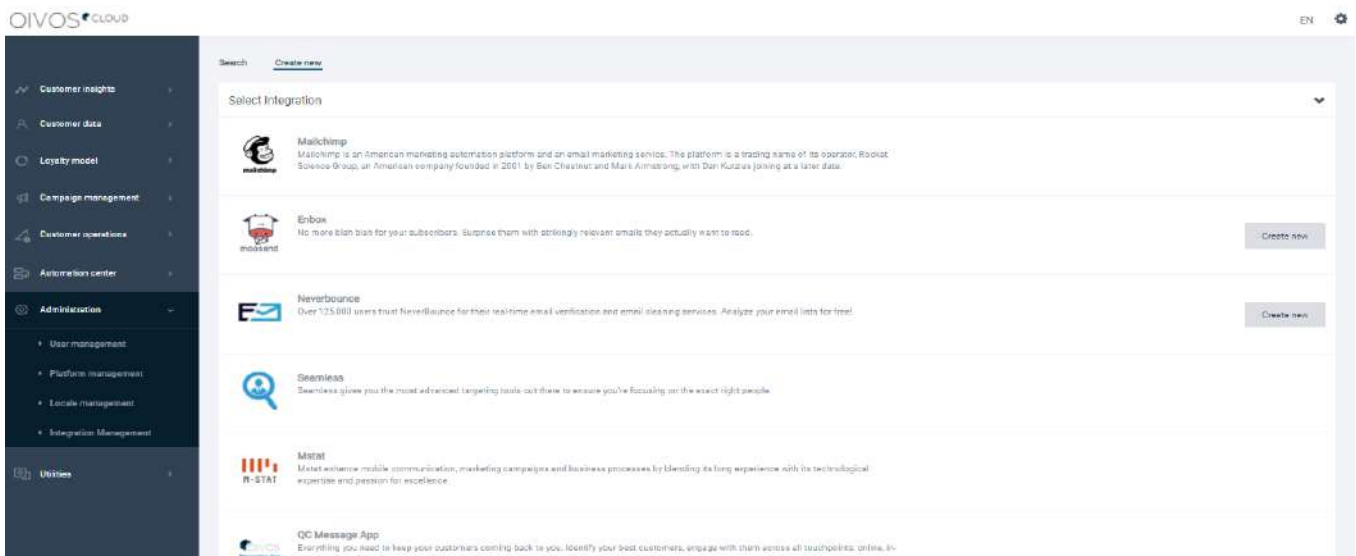The "create new" section is for creating a new integration by following the steps below.

Figure 8.5.2: Integration Creation

In the first step, the users decide the name of the integration and whether it is going to be active or not.

Figure 8.5.3: Integration's name and status

Then, in the "Root configuration" section, general information about the integration has to be provided.
For example, the general information of Enbox contains:
- External ID - a unique ID about the integration

- Languages - the supported languages of the integration.

Root configuration @

Root configuration contains general information about the integration. The general information of Enbox contains:
- External ID - a unique ID about the integration
- Languages - the supported languages of the integration.

External ID		Languages	None Selected ⌄
Admition fee	0	Credit cost	0
Segments retention days	0		

Figure 8.5.4: Root Configuration

Next, the "Endpoint configuration" contains information about the integration's web service.
For example, the information of Enbox regarding the endpoint contains:
- Base URL - the uniform resource locator address of the integration's web service
- Read timeout - the timeout number on waiting to read data from the server
- Connection Timeout - the timeout on waiting for a connection from the server.

Endpoint configuration @

Endpoint configuration contains information about the integration's web service. The information of Enbox regarding the endpoint contains:
- Base URL - the uniform resource locator address of the integration's web service
- Read timeout - the timeout number on waiting to read data from the server
- Connection Timeout - the timeout on waiting for a connection from the server.

| Base URL * | | Read timeout | 10000 |
| Connection timeout | 10000 | | |

Figure 8.5.5: Endpoint configuration

Last but not least, the "Credentials configuration" contains the information needed, to connect to the integration's server.
For example, the information needed for Enbox is:
- API Key - the API Key that is required to connect with the server

Credentials @

Credentials configuration contains the information needed to connect to the integration's server. The information needed for Enbox is:
- API Key - the API Key that is required to connect with the server

| API Key * | |

Figure 8.5.6: Credentials Configuration

9. Data Customization

9.1. Store Management

This section enables users to search a store using its name, its code or whether it is active or not. They can also search a store by a combination of the above criteria.
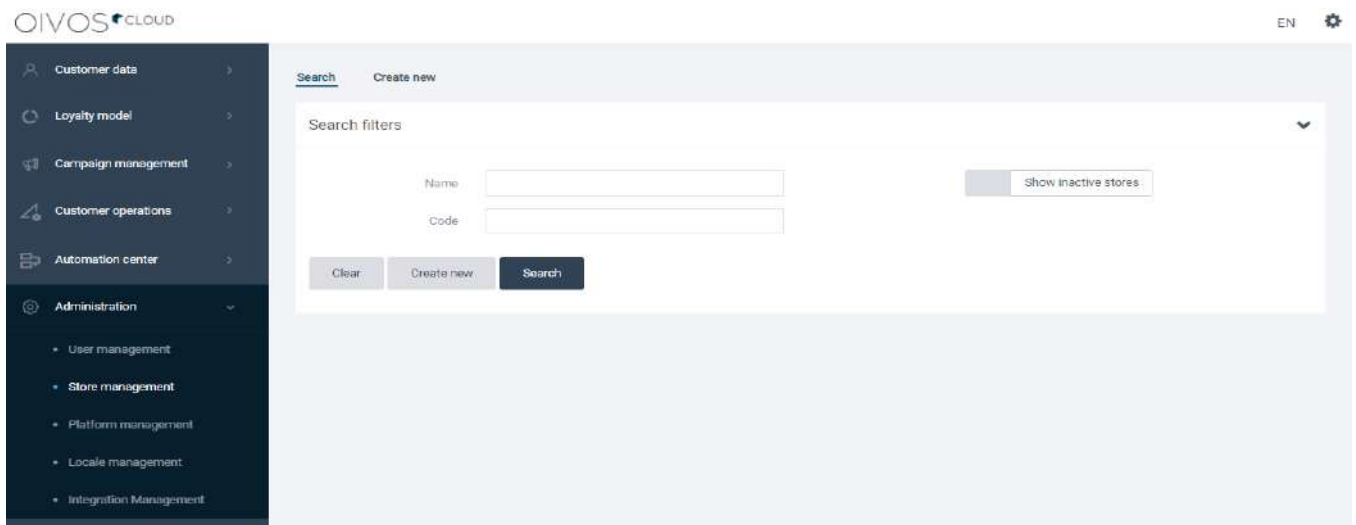

Figure 9.1.1: Searching stores

Next, they can edit the store of their choice by clicking on the icon as shown in the red box in the image below.
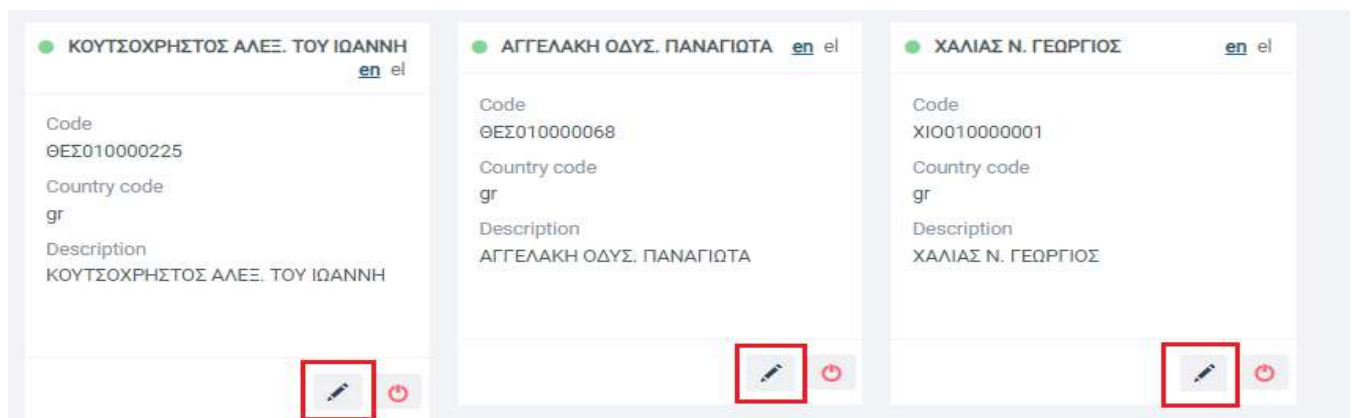

Figure 9.1.2: Search Results

The fields that can be edited are the following:

- Country code: The country code that the shop belongs to
- Name: The name of the shop
- Description: The description of the shop
- Store Groups: The store groups the store belongs to
- POS: The POS the shop uses
- Attributes: Here the user can create new attributes or edit existing ones for the specific shops
- Clubs: The club that the shop belongs to
- Brands: The brand that the shop belongs to
- Coupon sets: The coupon set that the shop can use
- Users: The users that belong to the shop
- Address Details: Address Line, Town/District, Post Code, Country Region

If more than one language is available, users have to make the desired changes in each language separately, by selecting the respective tab.
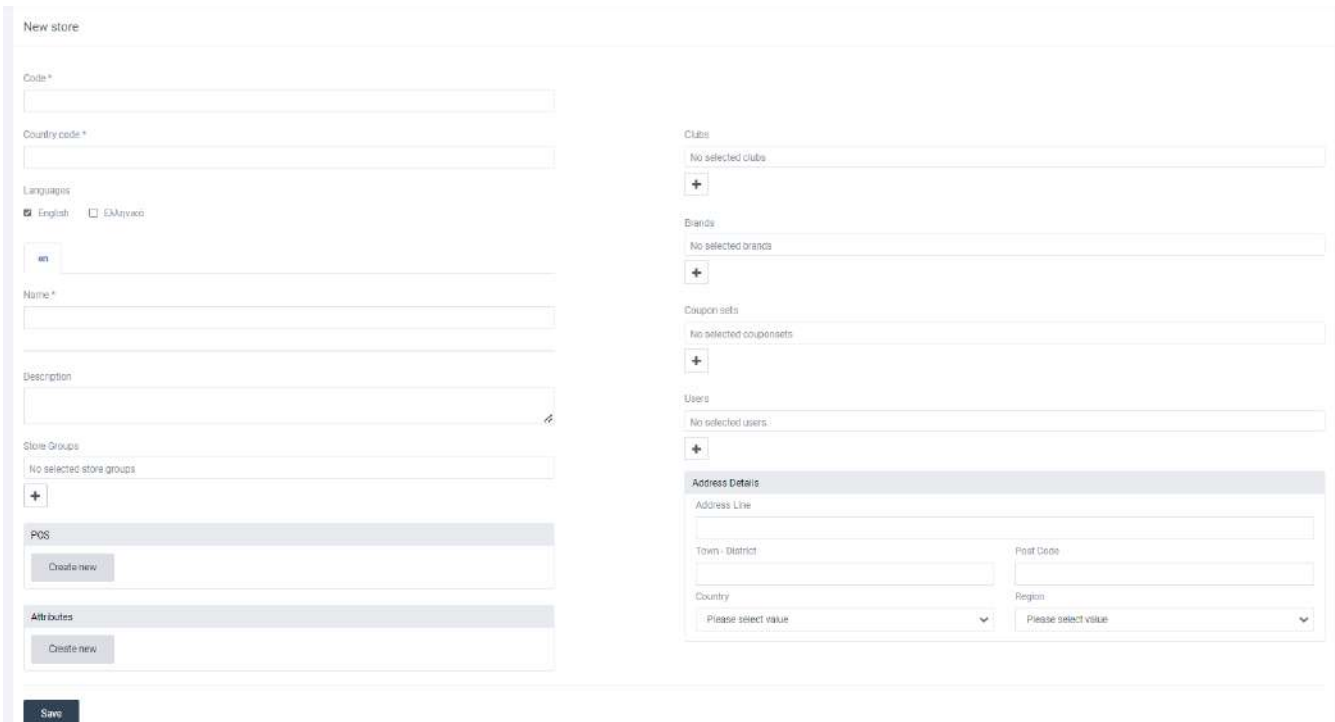
Lastly, users can deactivate the shop by pressing the deactivation button.

Figure 9.1.3: Store Editing

In the "Create new" Section users can create a new store and complete the following fields:

- Code: The code of the shop in the QC
- Country code: The country code that the shop belongs to
- Name: The name of the shop
- Description: The description of the shop
- Store Groups: The store groups the store belongs to
- POS: The POS the shop uses
- Attributes: Here the user can create new attributes or edit existing ones for the specific shops
- Clubs: The club that the shop belongs to
- Brands: The brand that the shop belongs to
- Coupon sets: The coupon set that the shop can use
- Users: the users that belong to shop
- Address Details: Address Line, Town/District, Post Code, Country Region

If more than one language is available, users have to make the desired changes in each language separately, by selecting the respective tab

Figure 9.1.4: Store Creation

At this point it must be underlined that "store groups" is a smart grouping of stores that provides companies with an organized and efficient way to manage their multiple stores. Specifically, thanks to "store groups" users have the opportunity to perform actions in different groups of stores, without the need of technical knowledge nor a developer's assistance, while, reducing the time spent on writing long pieces of code. For example, QIVOS CLOUD users can easily set a flow for a specific group of stores by creating a store group containing the stores they want, instead of setting it for each store separately. Another case in which "store groups" is very useful is running reports and analyzing data for a specific cluster of stores. For instance, a company with many brands, may create a store group for each brand in order to easily track and manage their performance using Insights plus.

In order to insert a store in a store group users should click the "+" symbol under the Store Groups section. In this way, the following page will appear:
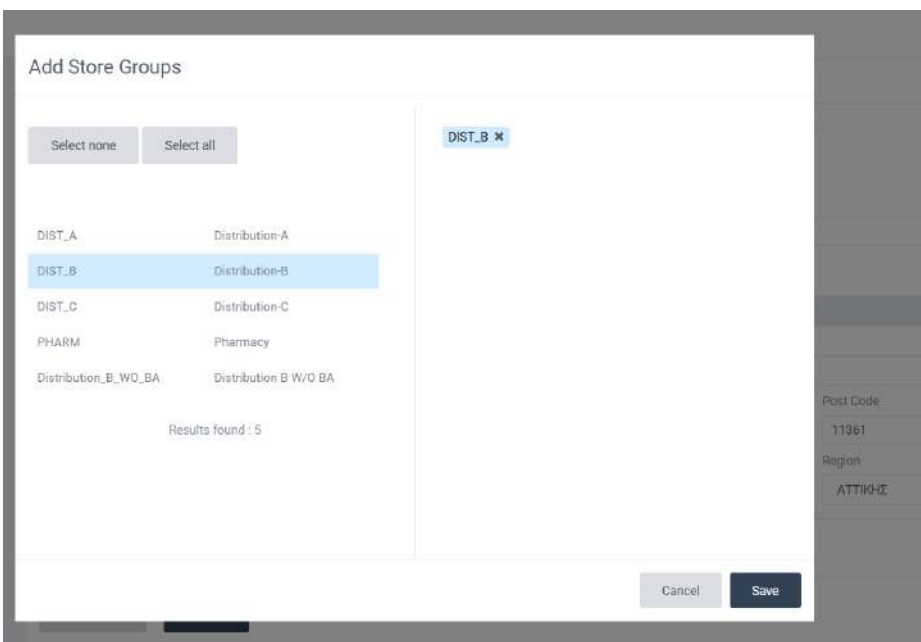

Figure 9.1.5: Inserting a store in a store group

Then by choosing the store groups they want and clicking "Save", users import stores in them. Each store can belong to more than one store groups.
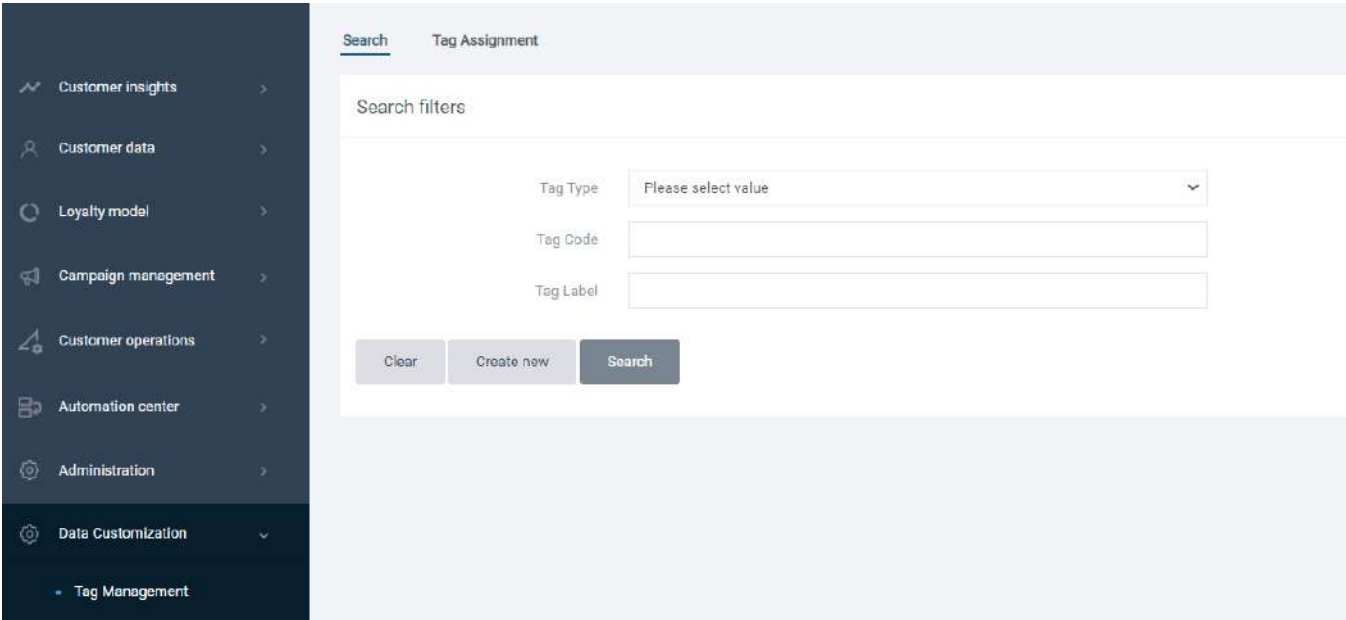
9.2. Tag Management

The QC platform allows the user to tag specific members, products or brands of a loyalty schema in order either to run a particular action, just on them, or to underline a special characteristic they have that needs to be taken into consideration.

In this section, the user can search a Tag by completing the following fields:

```
Tag Type, Tag Code, Tag Label
```

Once "Search" is clicked, the user can edit the Tag Label of the tags found by selecting the "pencil icon"

Figure 9.1.1: Tag Searching

Besides, the user can create a new Tag by completing its Type, Code and Label and then clicking "Save"
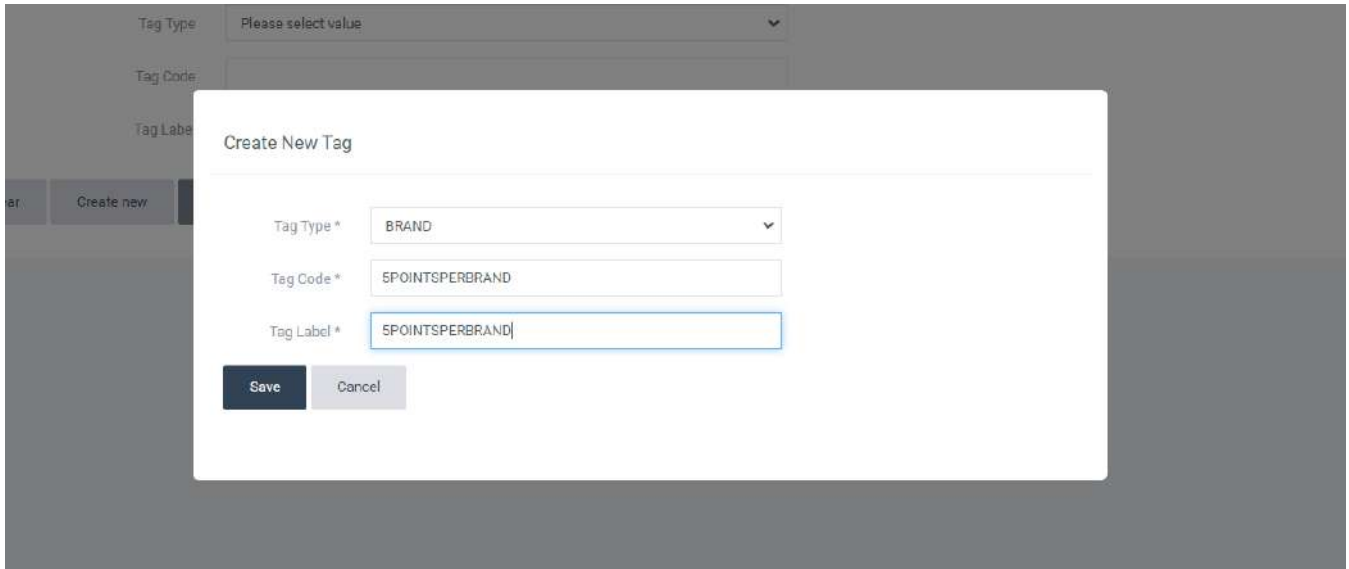
Figure 9.1.2: Tag Creation

Moreover, in the second tab called "Tag Assignment", the user can view all the tags created by selecting the desired Tag Type.

Lastly, they can edit the start and end date of the tags found by clicking the "pencil icon" next to them.
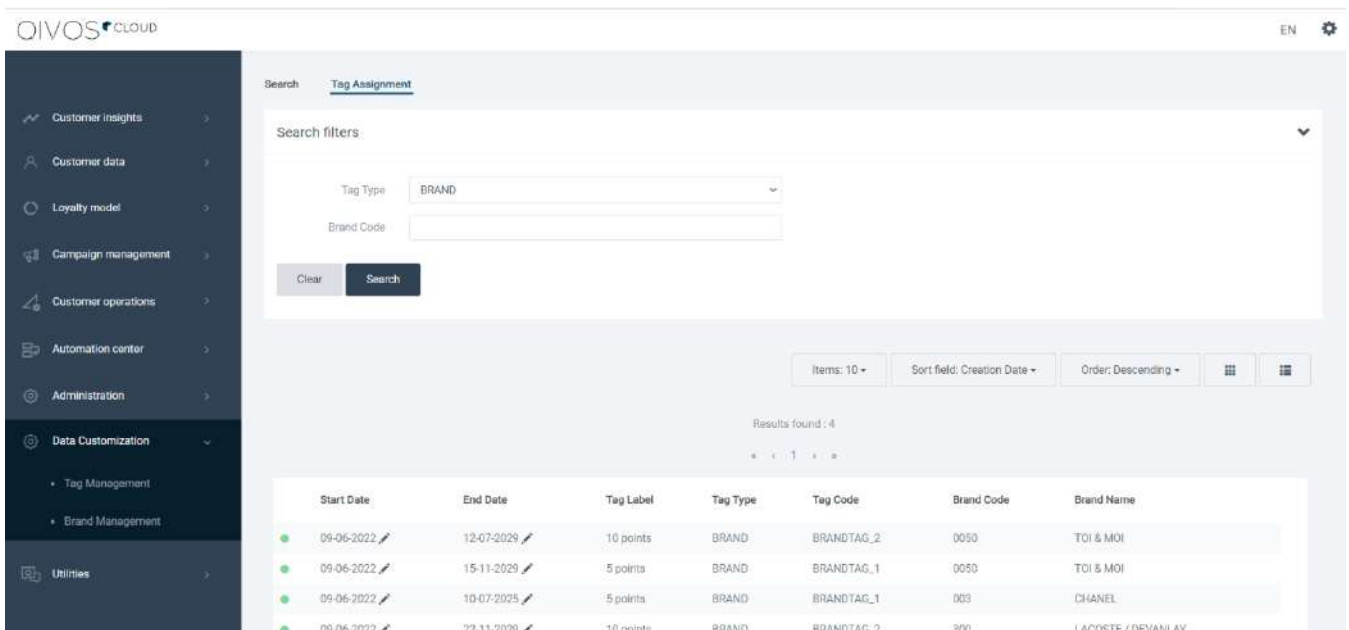

Figure 9.1.3: Tag editing

9.3. Brand Management

The QC platform gives the marketers, who sell more than one brand, the opportunity to offer to their customers different coupon sets per brand.

In this page, users are able to view the name and the code of the brands that offer a specific coupon set by selecting it and clicking "Search".

Additionally, they can check if a brand offers a specific coupon set by selecting it, typing the code of the brand and clicking "Search".
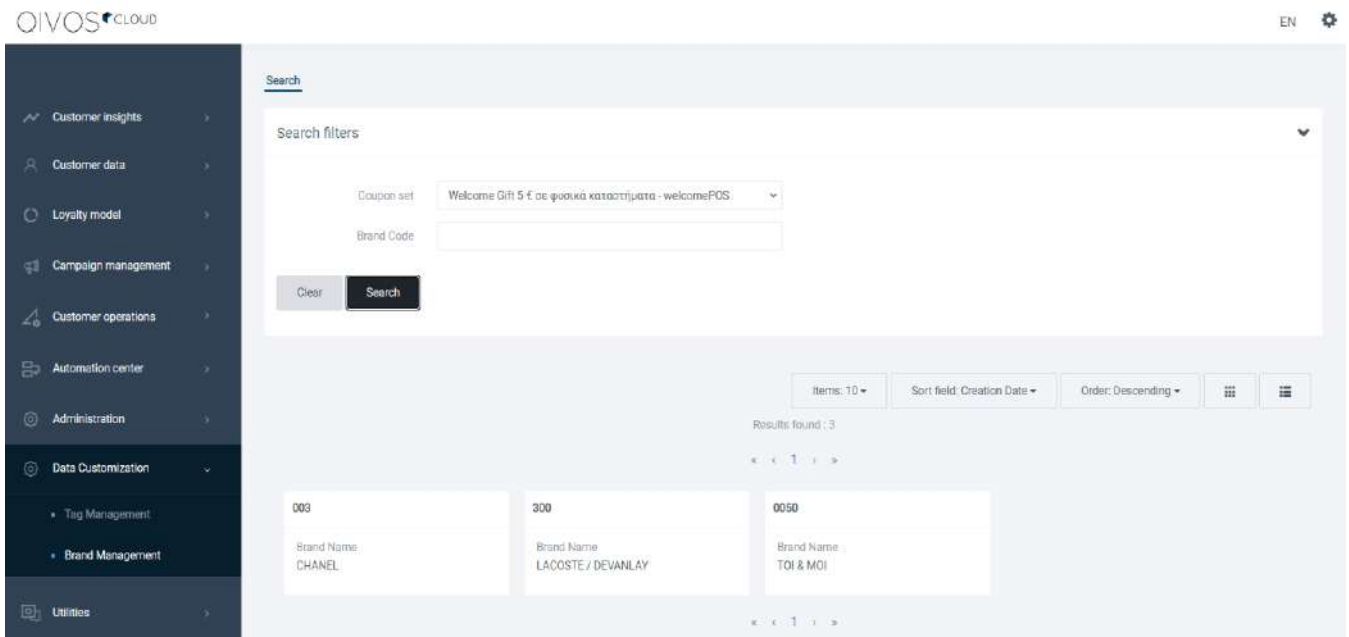

Figure 9.2.1: Brand Management

10. Home page

In the Home page, the user can access some of the most used sections.

At this time, it works temporarily and it does not save anything. However, in the near future, there is going to be a shortcut button which will give users the opportunity to customize their shortcuts and to choose different pages to add to this list.
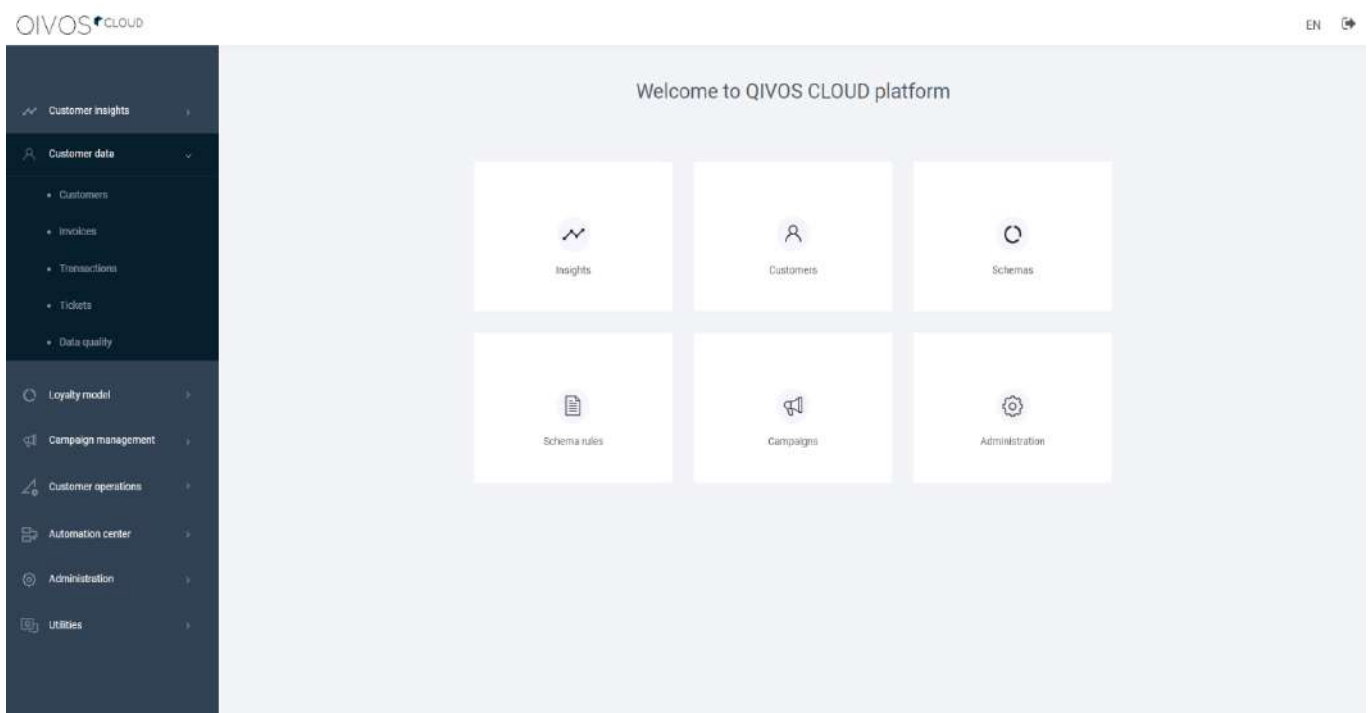

Figure 10.1: Home page

11. Utilities

A list with all the external apps the user can use.