

How to generate and use Lookalike audiences in Intelligence Workbench

All customers using Oracle Unity can now access Lookalike audience selection model as part of the Intelligence Workbench.

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What is lookalike audience selection model?

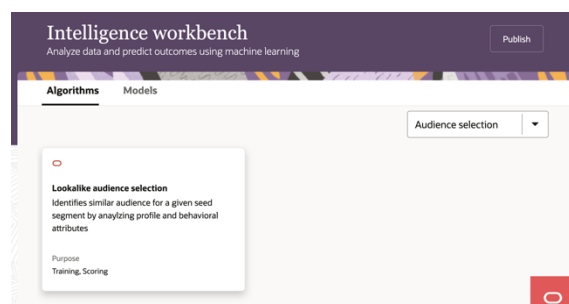
The Lookalike audience selection model empowers marketers to identify potential customers who share characteristics with their existing successful customers. This facilitates efficient targeting of prospects, customers, or accounts that exhibit similarities to the best-performing segments, thereby optimizing the audience selection process using profile and behavioral information to enhance conversion rates and ROI.

Some of the key use cases are listed below.

- *Targeting similar prospects:* Identify prospects that resemble your best customers or accounts.
- *Exclusion of unresponsive prospects:* Exclude non-responsive prospects or customers from your campaigns.
- *Enhanced audience selection:* Continuously refine your audience selection process based on ongoing customer engagement.

Benefits of leveraging Lookalike audiences

- *Data-driven audience selection:* Utilize data to make informed decisions about audience targeting.
- *Improved conversion rates and ROI:* Increase the efficiency of your marketing efforts by targeting high-potential prospects.
- *Enhanced targeting precision:* Achieve more precise targeting with lookalike audiences, improving overall campaign performance.



Understanding the segment inputs to the model

Lookalike audience selection model requires you to set up two segments as inputs – a seed and a target segment.

- **Seed segment** - The Lookalike audience modeling process begins with the identification of a reference or seed set. This set comprises customers or accounts that have performed the specific action you are targeting for new lookalikes. For instance, as a marketer, you might select a seed segment of customers who have purchased a particular product or service. The model will then search for other customers who exhibit similar characteristics and are likely to buy the same product or service in the future.
- **Target segment** - The target segment refers to the audience of customers or prospects within which you want the model to identify and score potential lookalikes. For example, a target segment could be defined as 'youth aged between 20-25 years in North America'. This helps the model focus on finding lookalikes within a specific demographic, rather than searching the entire customer base.

Generating the Seed and Target segments

The seed and target segments need to be generated based on one of the two base objects: **Mastercustomer** or **Masteraccount**. The choice between these base objects depends on your specific lookalike use case.

- **Mastercustomer segments:** Use these segments if you are planning to build a customer or contact-based lookalike model. This is ideal for scenarios where individual customer behavior and characteristics are the focus.
- **Masteraccount segments:** Use these segments if you are aiming to create account-based lookalikes. This is suitable for B2B use cases where the target is entire accounts rather than individual customers. You can opt to exclude the seed segment as a criterion in your target segment to ensure your seed audience does not appear in your lookalikes. This helps maintain the distinction between your existing successful customers and the new potential lookalikes.

By selecting the appropriate base object, you ensure that the lookalike model is tailored to your specific needs, whether it's targeting individual customers, contacts or entire accounts.

< Seed-FY23Purchaser

MasterCustomer

1

9.8K

All

Include records that meet all of these conditions

9.8K

MasterCustomer>...>Order Item Source ID

Contains (insensi...

SE4_Root X

⊕

35.6K

MasterCustomer>...>Order Item Source Product ID

Matches (insensi...

SE4VIB-15 X

⊕

18.3K

MasterCustomer>...>Customer Ok To Text

Contains (insensi...

y X

⊕

97.6K

MasterCustomer>...>Customer Ok To Email

Contains (insensi...

y X

⊕

144.2K

< Target-TargetCustomer

MasterCustomer

1

15.7K

All

Include records that meet all of these conditions

20.2K

MasterCustomer Gender

Contains (insensi...

F X

⊕

648.8K

MasterCustomer Ok To Email

Contains (insensi...

Y X

⊕

144.2K

MasterCustomer>...>Order Item Source ID

Contains (insensi...

SE4_Root X

⊕

35.6K

All

Exclude records that meet all of these conditions

9.8K

X

MasterCustomer Seed-FY23Purchaser

9.8K

Important considerations for segment sizes

- **Seed Segment Size:** Ensure your seed segment is large enough to produce robust model outcomes. For instance, if your goal is to obtain 100K lookalike customers, it is recommended to have at least 50K customers in your seed segment.
- **Target Segment Size:** Make sure your target segment is larger than the required lookalike count. In the example above, for 100K lookalike customers, the target segment should exceed this number.
- **Data Records Limit:** To maintain model efficiency, limit the overall data records (including behavioral data) to 5 million.

Note: The actual profile count in the model may be lower than the count observed on the Segmentation canvas. This discrepancy occurs because the model query excludes customers who do not have sufficient data points for the model to effectively learn from.

Configuring model parameters

The lookalike model can be tailored for different outcomes using the following parameters:

- **Lookalike Type:** Select the appropriate type for your use case – 'B2C Customer', 'B2B Contact', or 'B2B Account'. This is important to determine the granularity of the data inputs.
- **Lookback Window:** Set between 30 to 720 days to define the historical behavioral data needed for training the model.
- **Requested Lookalike Size:** Specify up to (and not more than) three times the size of your seed segment. Ensure this number is less than or equal to the target segment size. This helps define the number of lookalikes expected from the model.
- **Score Thresholds:** Define the similarity score threshold for lookalikes. Higher values yield lookalikes with greater similarity to the seed segment, while lower values increase the number of lookalikes.
- **Score Bins:** Organize lookalikes based on scores (3-bins - high, medium, low) or population distribution (4-bins - quartiles 1, 2, 3, and 4).

Parameters

Done

Input parameters

Lookalike type

Type of lookalike model

B2C Customer Lookalike

Lookback window

Analysis window for identifying lookalikes (30-720 days)

90

Requested lookalike size

Lookalike audience from the model (up to 3x of seed size)

100000

Score thresholds

Percentage threshold on the similarity score for lookalikes (0-100%)

50

Score bins

Score bins to group lookalikes based on their similarity to the seed

3 bins (score-based)

Ensuring adequate data inputs to the model

The lookalike model analyses both the profile and behavioral data to identify lookalikes. Hence, it is important to ensure you have greater data coverage across the below mentioned attributes for robust outcomes. The attributes required for the model are listed [here](#).

Creating lookalike audience selection model

Please note: Before creating the Lookalike Audience Selection model, it is crucial to create the model output object in your tenant. Please refer to [this section](#) for the necessary payload required to create the output object.

Follow the steps below to create the lookalike audience selection model.

- Navigate to the Oracle Unity home page and access the 'Intelligence Workbench'.
- Under the 'Models' tab, click on 'Create model' to start the creation of the Lookalike audience model
- Provide a name and descriptive summary for the model in the 'Details' section
- In the 'Algorithm' section, choose the 'Lookalike Audience Selection' algorithm. This will display the parameter configuration section.
- Select the appropriate parameters as outlined in the 'Configuring Model Parameters' section. Ensure that the parameters align with your specific use case for optimal performance.
- Under the 'Segments' section, choose the appropriate seed and target segments to input into the model.
- Before saving the model, go to the 'Schedule' tab and select the appropriate cadence for rescoring new lookalikes. This ensures that the model updates periodically to reflect the latest data.
- Once all configurations are complete, save the model to finalize the creation process.

The model requires a publish before it can be trained and scored for the first time.

Accessing lookalike model outputs

Lookalike model outputs are integrated into the Unity data model and can be accessed through specific data objects:

- **Customer/Contact Lookalikes:** Use the data object '*Lookalike_audience*' to refer to lookalike audiences based on individual customers or contacts.
- **Account Lookalikes:** Use the data object '*Lookalike_account*' to refer to lookalike audiences based on entire accounts.

These outputs can be utilized within the segmentation canvas, allowing for precise audience segmentation based on lookalike attributes.

'Lookalike_audience' data object

Attribute Name	Attribute Id	Description	Data type
<i>Lookalike_audienceID</i>	<i>Lookalike_audienceID</i>	Unique identifier for the object	string
LookalikeBin	LookalikeBin	Bin on the look alike score	string
LookalikeScore	LookalikeScore	Denotes lookalikes similarity to the seed audience	float
Lookalike Master Customer	MasterCustomerID	FK to the MasterCustomer Table	string
ModelName	ModelName	Lookalike model name	string
SeedSegment	SeedSegment	Segment used as a seed to the lookalike modelID	string
TargetSegment	TargetSegment	Segment used as a target universe to find lookalikes in	string

'Lookalike_account' data object

Attribute Name	Attribute Id	Description	Data type
<i>Lookalike_accountID</i>	<i>Lookalike_accountID</i>	Unique identifier for the object	string
LookalikeBin	LookalikeBin	Bin on the look alike score	string
LookalikeScore	LookalikeScore	Denotes lookalikes similarity to the seed audience	float
Master Account ID	MasterAccountID	FK to the MasterAccount Table	string
ModelName	ModelName	Lookalike model name	string
SeedSegment	SeedSegment	Segment used as a seed to the lookalike modelID	string
TargetSegment	TargetSegment	Segment used as a target universe to find lookalikes in	string

Using lookalike model outputs

Lookalike model outputs are integrated into the Unity data model and can be utilized like any other data attribute within the segmentation canvas. This allows marketers to create precise audience segments based on lookalike attributes. Below is an example illustrating how to use these outputs.

Example: Filtering Audience with Lookalike attributes

- **Seed segment selection:** Choose a seed segment, such as 'Seed-FY23Purchaser', which consists of customers who have made purchases in FY23.
- **Similarity score threshold:** Apply a filter to select lookalikes that have a similarity score of 60 or higher.

This setup filters the audience to include only those lookalike individuals who are highly similar to the specified seed segment, ensuring targeted and relevant marketing efforts.

The screenshot shows the Unity Intelligence Workbench interface for a segment named 'lookalike-customers' under the 'MasterCustomer' entity. The interface displays a filter configuration panel with the following details:

- Filter Configuration:**
 - Condition 1:** MasterCustomer Age Greater than 30 (441.4K records)
 - Condition 2:** MasterCustomer>Lookalike_audience SeedSegment Matches Seed-FY23Purchaser (11.9K records)
 - Condition 3:** MasterCustomer>Lookalike_audience LookalikeScore Greater than 60 (44.8K records)
- Summary:** The final filtered audience size is 10.1K.

Model inputs

For **b2c customer lookalikes**, the following attributes are sent as input to the model. Please consider the attributes marked with the ‘*’ as mandatory attributes.

Object	Attribute
Customer	*CustomerID
Customer	*SourceCustomerID
Customer	*SourceID
Event	*SourceEventID
Event	*EventID
Event	*Type
Event	*EventTS
Event	Source
Event	SourceCategoryID
Event	CategoryID
Event	OrderTotal
Event	*Medium
MasterCustomer	*ID
MasterCustomer	Gender
MasterCustomer	Age
MasterCustomer	City
MasterCustomer	State
MasterCustomer	Country
Order Item	SourceOrderID
Order Item	SourceProductID
Order Item	ProductID
Order Item	Quantity
Order Item	ExtendedPrice

For **b2b contact** lookalikes, the following attributes are sent as input to the model. Please consider the attributes marked with the '*' as mandatory attributes.

Object	Attribute
Customer	*CustomerID
Customer	*SourceCustomerID
Customer	*SourceID
Customer	JobTitle
Customer	JobTitleLevel
Customer	JobDepartment
Event	*SourceEventID
Event	*EventID
Event	*Type
Event	*EventTS
Event	Source
Event	SourceCategoryID
Event	CategoryID
Event	OrderTotal
Event	*Medium
MasterCustomer	*ID
MasterCustomer	Gender
MasterCustomer	Age
MasterCustomer	City
MasterCustomer	State
MasterCustomer	Country
MasterCustomer	okToEmail
MasterCustomer	okToText

For **b2b account** lookalikes, the following attributes are sent as input to the model. Please consider the attributes marked with the '*' as mandatory attributes.

Object	Attribute
MasterAccount	*ID
MasterAccount	Country
MasterAccount	ZipCode
MasterAccount	State
MasterAccount	City
Account	DNBLocationType
Account	OwnershipType
Account	LineOfBusiness
Account	Type
Account	EmployeeTotal
Account	AnnualRevenue
Account	*SourceID
Customer	*CustomerID
Customer	*SourceCustomerID
Customer	*SourceID
Customer	JobTitle
Customer	JobTitleLevel
Customer	JobDepartment
Event	*SourceEventID
Event	*EventID
Event	*Type
Event	*EventTS
Event	Source
Event	*Medium