

The Only Augmented Analytics Platform Purpose-Built for Life Sciences and Healthcare

Explain Guide

2024.77

-

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This documentation has been created for software version 2024.77

It is also valid for subsequent software versions as long as no new document version is shipped with the product.



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No Warranties and Limitation of Liability. Every effort has been made to ensure that this document is an accurate representation of the features offered by WHIZ.AI platform in the release 2024.77. However, the development of the software is a continuous process. So, small inconsistencies may occur. We would appreciate any feedback on this document.

Send comments via email to: support@whiz.ai

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Introduction

WhizAI ExplAIn is designed exclusively for life sciences which uniquely leverages state-of-the-art Artificial Intelligence (AI)/ Machine Learning (ML) algorithms, unprecedented domain expertise, and cutting-edge generative AI, to automate insights. This allows professionals to make data-driven decisions better, faster, and smarter.

Also, unparalleled scalability in WhizAI ExplAIn processes vast quantities of data with ease, which allows you to detect anomalies in the data and extract key drivers that impact performance. WhizAI ExplAIn automates and simplifies complex analysis by generating narratives.

WhizAI ExplAIn is meant to address the following business and technical trends and challenges:

Handling large data volumes: the large volume of data in life sciences can be overwhelming. The attempt to analyze these massive volumes of data either manually or with traditional analytics and BI tools can be slow and resource-intensive.

Analyst response times: Manual analysis takes time and delays in generating insights can lead to missed opportunities.

High operational costs: today's BI and analytics platforms require highly skilled resources to build, run, and maintain them.

Low adoption of analytics: analytics tools are mostly built for a technical audience with insights scattered across multiple reports and dashboards resulting in poor user experience and low adoption rates.

Intended Audience

This document is intended for the following types of users:

- Analysts Business, Market, Data
- Business users Power users in commercial and RWE teams.

Overview of WhizAI ExplAIn

WhizAI ExplAIn equips you with an integrated tool to harness the potential of cutting-edge machinelearning algorithms (ML), natural language processing, and generative AI to unlock valuable insights within the dynamic realm of life sciences. The following are the features of WhizAI ExplAIn:

- Anomaly Detection
- Key Driver Analysis
- Narratives
- ExplAIn Workbench

Anomaly Detection

WhizAI ExplAIn uses machine learning (ML) algorithms to proactively uncover insights by automatically scanning through the data and identifying anomalies within the life sciences context. Insights can be sent as alerts or asked on demand so that users can jump-start the root-cause analysis with a single click. We will deep dive into anomaly detection in the Getting Started with Anomaly Detection section.

Key Driver Analysis

WhizAI ExplAIn applies ML algorithms and statistical computations to analyze data and discover areas that are the key reasons for the change in the performance of an underlying business metric. We will deep dive into key driver analysis in the Getting Started with Key Driver Analysis section.

Narratives

WhizAI ExplAIn incorporates generative AI to intelligently automate and describe insights generated within WhizAI, with a complete understanding of the content and intent of every response. Narratives transform the data into a natural language for users to understand the data and analyze it better. WhizAI ExplAIn can generate narratives around a visualization that optimizes key findings and results with the answer to your question - highlighted, in color and brought to life in text.

ExplAIn Workbench

WhizAI offers the ExplAIn Workbench to create and manage templates to automate anomaly detection and key driver analysis. The ExplAIn Workbench is a governance module designed to give control in your hands to fine-tune the relevancy of the insights outcome and to allow access to the insights feature.

🅼 whiz.ai	Explorer Pinboards Alerts Explain Admin			0		5
Workbench -	Anomalies Create New Template					
Anomalies	General Advanced					
Key Drivers	Metric & Anomaly Type 🕢		Training Dataset 🕢			
Knowledge Graph	FAS - Automation	Ŧ	Training data scope LTD			\sim
	Data model containing the target metric.		Will be used by the anomaly detector to train the model.			
	TR×	-	N			
	Metric to be used for the analysis.		d.			
	Anomaly Type					
	Time Series Forecasting Time Series Forecasting - Single point outlier based on forecasting technique which includes seasonality.	Ť				
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				Cancer	Cr	ate

The key functionalities of this feature are:

- Trial and Error allow an Analyst user to perform the analysis with different settings to find the relevant algorithms and parameters applicable to a given business metric.
- Build and Manage Templates allows an Analyst user to save the settings in the form of a template. Multiple such templates can be created for the same business metric.
- Let Out Insights: After the templates are defined, Analyst users can enable them to generate "ExplAIn" insights for the end user.

Enabling ExplAIn features

As discussed above, the ExplAIn workbench is required to create and manage templates that govern anomaly detection and key driver analysis.

You need to set permissions to get access to the ExplAIn workbench. Anomaly Detection and Key Driver Analysis features are not enabled by default.

Note! Refer to the WhizAI Administrator guide to learn how to enable these features and set the required permissions.

Getting Started with Anomaly Detection

Anomaly detection is a machine learning-based technique to identify data points, events, and/or observations that deviate from a dataset's normal behavior. It learns how a business normally operates and uses that data to find items that deviate from the norm.

The anomaly detection feature can help a business identify the outliers in critical business metrics. These outliers can indicate critical incidents, such as an unexpected decline in sales or potential opportunities, for instance, a change in consumer behavior.

In the below image, you can see that WhizAI ExplAIn has identified and highlighted the anomalies. In the subsequent sections, we will study how to detect the anomalies and how to set the prerequisite steps.



Understanding the Anomalies panel

WhizAI offers an Anomalies panel under Workbench. With this module, you can create and manage metric-specific templates. These templates are a prerequisite to allow you to perform anomaly detection from the workspace and pinboard area.

Note! For information on how to add the anomaly templates, refer to the Creating Anomaly Templates section.

Also, the Anomalies module can be used to perform ad-hoc analysis on a specific scope, if required.

The anomalies panel displays all templates created by users as shown in the figure below:

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Workbench – Anomalies Key Drivers	Anomalies: Tem Data Model FAS - Field Analytics Name	Plates Image: Constraint of the second sec	···· Created by	Created At	Last modified by	Analyze ↓	+ Create new
клочнове снарт	le sie my limporte.	TRx	jonkpaner@efical	11/19/2024 13:53 PM	indometrical	11/19/2024 13:53 PM	
	Diregiale_1	TRx	setion-trailedpartical	11/12/2024 10:51 AM	and departure	11/12/2024 10:51 AM	
	 trainip 	TRx	MINIMPACS.	10/31/2024 16:06 PM	ghanaham@ahinai	11/08/2024 14:10 PM	
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	_ immp1	TRx	ahisishalinjahisal	10/31/2024 15:31 PM	striktelisterit.s	10/31/2024 15:32 PM	
	Select all	🛎 Import 🕮 Export			Page size:	11 To 15 from 15 K	Age 2 from 2 > >

Understanding Anomalies: Templates screen

From the Templates screen, you can create a new template or select an existing template for the selected data model. From this field, you can switch between different templates that are associated with a particular metric.

The following table describes the inputs required to be provided in the Templates screen:

Input Field	Description
Data Model	Contains a list of all the available data models. Select the model for which you want to create a template.
Metric	Contains a list of metrics. Select the metric for which you want to create the template.

The following table describes the columns of the table that list all the available templates:

Column	Description
Name	Specifies the name of the template
Insight	Specifies the type of Insights. In this case, it will display 'anomalies' as a value for all the templates.

Column	Description
Metric Name	Specifies the metric selected in the input field to create the template
Created By	Specifies the name of the user who has created the template
Created At	Specifies the time stamp at which the template is created
Last Modified By	Specifies the name of the user who has latest modified the template
Enable	This option allows the user to enable or disable the template for the end consumer use.

Understanding Analyze button

Click the Analyze button to perform anomaly detection on any metric

🥡 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				Ø 4 s
Workbench – Anomalies Key Drivers Knowledge Graph	Anomalies: Tem Data Model FAS - Field Analytics Name	Plates Metric Metric Name	✓ Created by	Created At	Last modified by	Analyze	+ Create new
клочнецде снарт	totospürperte.	TRx	instrumentation	11/19/2024 13:53 PM	(misered) that	11/19/2024 13:53 PM	
	C Tempine.1	TRx	admit.http://c.a	11/12/2024 10:51 AM	ahlduhalinjishkaal	11/12/2024 10:51 AM	
	C Indexe	TRx	annonalegorical	10/31/2024 16:06 PM	gentenevitci	11/08/2024 14:10 PM	
	inny.	TRx	which halo (settion)	10/31/2024 15:33 PM	and total parts of	10/31/2024 15:33 PM	
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🍿 whiz.ai	Explorer Pinboards Alerts Explain Admin	0	4 5
Workbench -	- Anomalies Analyze		
Anomalies	General Advanced		
Key Drivers	Metric & Anomaly Type () Training Dataset () Filter ()		
Knowledge Graph	FAS - Field Analytics Introducts cope Oransamity Data model containing the target metric Will be used by the anomaly detector to train the model Will be used by the anomaly detector to train the model		~
	Metric Period		Edit 🗷
	Pick a period		
	Select a template		
	Anomaly Type Exponential Moving Average		
	Exponential Moving Average - Single point outlier based on the previous moving average.		
	Number of periods 4		
	No of periods to be used to compute the moving average		
		Cancel	Analyze

Understanding the General Tab

The following table describes columns in the General tab:

Column	Description
Metric and Anomaly T	ype
Data Model	Contains the list of data models. You need to select the required data model which contains the business metric to be analyzed
Metric	Contains the list of applicable metrics for the selected data model. You need to select the required business metric to be analyzed.
Template	
Anomaly Type	Contains the list of the following anomaly types:
	Time-series forecasting (default option)
	Exponential Moving Average
	PoP percent change
	For more information on these types, refer to the Anomaly type summary table.
Training Dataset	
Training data scope	Specifies the period scope within which the system should support anomaly detection. The same scope is also used to train the Machine Learning (ML) model.

	The system does not allow anomaly detection for any scope outside the training data set. By default, the training is set as LTD (Latest Till Date)
Filters	
Granularity	Contains the list of time granularity. This value defines the time granularity at which the analysis needs to be performed. In the case of anomaly detection from a response card, the system refers to the granularity of the card and uses the same. By default, the value is set as 'Weekly.'
Period	

The following table describes the types of anomalies available in the general tab.

Time Series Forecasting	Exponential Moving Average	PoP percent change
 Uses a multi-stage model. Works well with Time Series with varying trends and seasonality, events, holidays, and short-range effects. Uses flexible design, intuitive interface, fast training, and scoring. Not applicable with custom calendars. 	 Uses (EMA) algorithm behind the scenes. Allows users to define the period to be used for average computation. Suitable for time series data with no clear trend or seasonal pattern. Can work with a relatively small volume of data. Emphasizes most recent data. Accommodates different data distributions. 	 Uses a custom algorithm. Suitable for detecting abnormal percentage increase/decrease. Not dependent on trend or seasonality. Detects (% Change) at each point. Calculates thresholds based on these deviations. Typically used to detect period-over- period unusual change.

Understanding the Advanced Tab

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin	0	4		5
🔄 Workbench –	Anomalies Analyze				
Anomalies	General Advanced				
Key Drivers Knowledge Graph	Algorithm Agentitien Time Series Forecasting - Single point outlier based on forecasting technique which includes seasonality. Parameters Op5 Specifies what & of the total data points should be covered within the expected range prepared by the algorithm. A possible value is greater than 0 and less than 1. The default value is 0.95 (95%).				
		Cancel	A	nalyze	

The Advanced tab is used by analysts or advanced users, only, who want to set specific parameter values and algorithms to generate insights. The Advanced tab has columns as described below:

Column	Description
Algorithm	The value shown in this column is the value selected in the General tab > Anomaly type field.
Parameters	Based on the anomaly type the required fine-tuning parameter is populated. There are two such parameters which are populated:
	• Sensitivity: Applicable for four-period moving average and PoP percent change anomaly type. The number of standard deviations of delta away from the mean, is to be considered for the anomaly. A possible value is between 1.00 and 3.00. The default is 3.
	• Coverage: Applicable for time series forecasting anomaly type. It specifies what % of the total data points should be covered within the expected range prepared by the algorithm. A possible value is greater than 0 and less than 1. The default value is 0.75 (75%).

Managing Anomaly Templates

As part of the governance process, as an authorized user, you are required to create anomaly templates and enable them for end-user usage. These templates contain relevant information to trigger anomaly detection.

Creating Anomaly Templates

- 1. From WhizAI Explorer, click Explain on the top navigation panel to open Workbench. WhizAI opens the Workbench and by default, the Anomalies module is displayed.
- 2. Click Create New to open the anomaly template page.

Note! To create the anomaly template, you have to fill details in the columns of the General and Advanced tab.

ۇ whiz.ai	Explorer Pinboards Alerts Explain Admin		0		5
🔛 Workbench –	← Anomalies Create New Template				
Anomalies	General Advanced				
Key Drivers	Metric & Anomaly Type 🕕	Training Dataset 🕕			
Knowledge Graph	FAS - Field Analytics	Training data scope			
	Data model containing the target metric.	Will be used by the anomaly detector to train the model.			
	Metric				
	Metric to be used for the analysis.				
	Anomaly Type Exponential Moving Average				
	Exponential Moving Average - Single point outlier based on the previous moving average.				
	Number of periods				
	No of periods to be used to compute the moving average				
			Cancel	Crea	te

- 3. In the General tab, select the following details:
- 1. Metric & Anomaly Type: Select the Data Model, Metric, and the Anomaly type. For example, as shown in the following figure: In the 'Field Analytics' data model, 'TRx' is selected as the metric, and Exponential Moving Average, as the anomaly type is selected.

If you select the Exponential Moving average algorithm, you get an option to define the number of periods as shown in the figure below:

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin			Ø		5
Workbench -	Anomalies Create New Template					
Anomalies	General Advanced					
Key Drivers	Metric & Anomaly Type 🕡		Training Dataset ()			
Knowledge Graph	Data model FAS - Field Analytics	~	Training data scope			
	Data model containing the target metric.		Will be used by the anomaly detector to train the model.			
	Metric TRx	Ŧ				
	Metric to be used for the analysis.					
	Anomaly Type Exponential Moving Average	w.				
	Exponential Moving Average - Single point outlier based on the previous moving average.					
	Number of periods4					
	No of periods to be used to compute the moving average					
		l⊋			_	_
				Cancel	C	reate

2. Training Dataset: In this column add the training data scope (for example, last 104 weeks), and add the granularity (for example, Weekly).

The training period option is optimized for the metric in context. The training period populates options as per the data granularity of the metric in context. If the data is at the week level, then the period option will be 'week'. There are two common options to set the training period - date range and LTD (Latest Till Date). LTD will be the default option.

For example, you can enter the date range 2022-10-30 - 2023-10-30, this means that the training period while running the anomaly detection for the metric will be from 30th October 2022 to 30th Oct 2023.

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin		0		5
Workbench -	Ceneral Advanced				
Key Drivers Knowledge Graph	Metric & Anomaly Type ① Data model FAS - Field Analytics	Training Dataset () Training data scope 2022-10-30 - 2023-10-30			
	PAS - Fried Antiarytus • Data model containing the target metric. • Metric TRx • Metric to be used for the analysis. • • Anomaly Type • • Exponential Moving Average • • Number of periods • • No of periods to be used to compute the moving average • •	2022-10-30-2023-10-30 Will be used by the anomaly detector to train the model.			
		L2 C	ancel	Cre	ate

OR

You can select the lowest granularity level in the metric. For example, you can select the Week as shown in the following figure:

🧶 whiz.ai	Explorer Pinboards Alerts Explain Admin		0		5
Workbench – Anomalies Key Drivers Knowledge Graph	Anomalies Create New Template General Advanced Metric & Anomaly Type Data model FAS - Field Analytics Data model containing the target metric. Metric in the target metric. Metric to be used for the analysis. Anomaly Type Exponential Moving Average v Exponential Moving Average - Single point outilier based on the previous moving average. Number of periods 4	Training Dataset ③ Training data scope LTD Enter date range: ✓ YYYYMMM DD Or choose a relative period: 3 4 5 6 Misc > 10 11 12 13 4 17 18 19 20 21 24 25 26 27 28	→ Fr Sa 1 2 8 9 15 16 22 23 29 30	×	~
		c	ancel	Cre	ate □

By default, the training period is set to LTD.

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin		?		\$
🔛 Workbench –	Anomalies Create New Template				
Anomalies	General Advanced				
Key Drivers	Metric & Anomaly Type ③ Traini	sing Dataset ()			
Kitowicage Graph	FAS - Field Analytics	D			\sim
	Data model containing the target metric. Will be	ae used by the anomaly detector to train the model.			
	TRx ~				
	Metric to be used for the analysis.				
	Anomaly Type				
	Exponential Moving Average - Single point outlier based on the previous moving average.				
	Number of periods				
	4 No of periods to be used to compute the moving average				
	The angle of the second second process of the second process of th				
		Car	icel	Creat	e

Also, you can set alerts for the current week, current month, current year, etc.

и whiz.ai	Explorer Pinboards	Alerts Explain Admin			0 4 0
FAS - Field An	LowTRxAlert			× FAS - Field Analytics	TRx
s Scott Fid TRx trend whiz.ai P TRx [M 2022-01 i	Add Conditions Scope For Metric TRx Filter By + @ Condition Script	For Period Current week	Delivery Method	Recipients	Hid Historic 123(55.66%) Mid-Centur 13.40% 13.40% 14.60%14.60% 1
2 2 19 10 10 10 10 10	Metric TRx	Operator V	Value Metric TRx (Expected Range)	+ Add Canditian	The pareto
Data: TRx a Generated I Source: FAS Was this hel	kov 22, 2024 11:57		Cancel	Next	TRx(s) ↓ 4.04M 3.99M 15 3.59M

Prerequisite

For this feature to work, the 'Data storage granularity' information should be available for the respected metric as shown in the figure below:

1) whiz.ai		Explorer Pinboards Alerts Explain Admin	@ 🦛 s
Ŕ	Performance Monitor Dashboard	-	Configurations	
	User Logs		Application Data Model	Reset Save
ų.	Audit Logs User & Security	+	Data Model FAS - Field Analytics	♀ data st Collapse all
.:.	Data Modeler	+	Data Modelling \vee	
Z	Content Manager Branding	-	Data storage granularity Granularity at which data is stored in the data model. It could be a week, month, or quarter.	["default":"week";"sales_nbrx":"week" <mark>"sales":"week"]</mark>
	Configurations			
	Service Configuration			
	Utilities			
16 ²	Workbench	+		la Ia

In the absence of this configuration, WhizAI displays all the 'relative period' options.

- 4. In the Advanced tab, optionally update the following details:
- Parameters: Based on the anomaly type the required fine-tuning parameter is populated. There are two such parameters:
 - Sensitivity:
 - Applicable for Exponential Moving Average and PoP Percent Change anomaly type.

The number of standard deviations of delta away from the mean, is to be considered for the anomaly. A possible value is between 1.00 and 3.00. The default is 3.00.

• Coverage:

Applicable for Time Series Forecasting anomaly type. It specifies what % of the total data points should be covered within the expected range prepared by the algorithm. A possible value is greater than 0 and less than 1. The default value is 0.95 (95%).

Note! For more information on anomaly type and parameters refer to Understanding the Anomalies module.

🅼 whiz.ai	Explorer Pinboards Alerts Explain Admin	Ø 4 S
Workbench – Anomalies	Anomalies Create New Template General Advanced	
Key Drivers Knowledge Graph	Algorithm Agorithm Exponential Moving Average Exponential Moving Average - Single point outlier based on the previous moving average.	Parameters Sensitivity 3 Number of standard deviations of delta away from the mean, to be considered for the anomaly. A possible value is between 1.00 and 3.00. The default is 3.00.
		Cancel Create

5. Click on the Create button. You see a dialog that shows the added details. In this dialog, enter a name for the template. Optionally, to enable this template for end-user consumption you can click the Enabled toggle button.

Note! You can create multiple templates for the same metric using different factors, however, only one template can remain enabled for a metric.

Save As New Template	×
Template Name My TRx Template	
C Enabled	
Metric & Anomaly Type 🖌	
Data model	
FAS - Field Analytics	
Metric	
customer_cnt	
Anomaly Type	
PoP Change	
Training Dataset 🗸	
Training data scope	
Last 104 weeks	
Advanced settings 🗸	
Cancel Save	

6. Verify the details and click Save. You see a pop-up message that the template has been saved successfully.

As shown in this example, the template for the TRx metric is added to the Templates screen.

9 WINZ.CI	Explorer Pinboards	Alerts Explain	i Admin			V "My T has be	Rx Template" template een saved successfully
Workbench - Anomalies Key Drivers	Anomalies: Tem Data Model FAS - Field Analytics	plates *	w.			Analyze	+ Create new
Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled
	C Torototi.1	TRx	attalaista	11/12/2024 10:51 AM	selectrologradical	11/22/2024 16:24 PM	•
	My TRx Template	TRx	sharia nunit(shical	11/22/2024 16:24 PM	(Preside an and a devine of a	11/22/2024 16:24 PM	
	12945	TRx Volume	phonetromerobicus	11/22/2024 11:49 AM	gharshum@ublcal	11/22/2024 11:49 AM	
	 templemented 	TRx	gloreforegrafic.al	11/21/2024 17:29 PM	ghandhundpablical	11/21/2024 17:29 PM	-
	Dempdorper Ind.a.	TRx	ghandumijtabloat	11/21/2024 17:29 PM	protometrical	11/21/2024 17:29 PM	
	interprint and an	TRx	ghandram@ubloal	11/21/2024 17:29 PM	ghandrongradicust	11/21/2024 17:29 PM	
	🗆 temploperation	TRx	gambanijahijul	11/21/2024 17:29 PM	(Farrianiantics)	11/21/2024 17:29 PM	
	tang-Importat	TRx	partometical	11/21/2024 17:28 PM	ghamilam)(inhis si	11/21/2024 17:28 PM	
		TD.				14/04/0004 17:06 044	

Viewing the list of Anomaly templates

Select the data model from WhizAI Explorer, and click Explain on the top navigation toolbar, as shown in the following figure:

Workbench -	Anomalies: Temp	olates					
Anomalies	Data Model FAS - Field Analytics	w Metric	(w)			Analyze	+ Create new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled
	Template_1	TRx	auhish kulin (junkis al	11/12/2024 10:51 AM	sheets.condeputical	11/22/2024 16:24 PM	
	My TRx Template	TRx	showing and about it, al	11/22/2024 16:24 PM	sheeta.condegraficial	11/22/2024 16:24 PM	
	12345	TRx Volume	diam'r an gwlei yr	11/22/2024 11:49 AM	glumburgation	11/22/2024 11:49 AM	
	temp (imported	TRx	ghanni amijunist al	11/21/2024 17:29 PM	ghonalrumghatticul	11/21/2024 17:29 PM	-
	temp (imported_a	TRx	granitamijetical	11/21/2024 17:29 PM	glondramaterical	11/21/2024 17:29 PM	
	temp (imported	TRx	ghandramijarki; si	11/21/2024 17:29 PM	glood angle (1.4	11/21/2024 17:29 PM	
	temp (imported_c	TRx	dramit an iteration of	11/21/2024 17:29 PM	ghambunijukinal	11/21/2024 17:29 PM	
	temp (imported	TRx	gamban()nhisal	11/21/2024 17:28 PM	grand and justiced	11/21/2024 17:28 PM	
	- tomo limonited a	TD.,	A	44/04/00/04 47/04 064	A	44/04/0004 17:02 084	

This way, whenever you want to view the templates for a given data model you can select the data model from the drop-down and the UI will populate the corresponding templates. Also, from this page, you can perform edit, delete, and enable/disable operations for a given template.

Enabling/Disabling Anomaly Templates

1. Select the data model from WhizAI Explorer, and click Explain on the top navigation toolbar, as shown in the following figure:

hiz.ai	Explorer Pinboards	Alerts Expla	in Admin				0	*
rkbench -	Anomalies: Tem	plates						
malies	FAS - Field Analytics	*	. w.			Analyze	+ Creat	e new
Drivers wiedge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled	
	Template_1	TRx	active hadrolpartic at	11/12/2024 10:51 AM	Analysis website the	11/22/2024 16:24 PM		
	My TRx Template	TRx	shariamashigahinai	11/22/2024 16:24 PM	disative residentials	11/22/2024 16:24 PM		
	12345	TRx Volume	grandrameters.	11/22/2024 11:49 AM	grand-and/odds.at	11/22/2024 11:49 AM		
	temp (imported	TRx	glundumbetti.a	11/21/2024 17:29 PM	glandardjoblad	11/21/2024 17:29 PM		
	temp (imported_a	TRx	glumburdjurtsva	11/21/2024 17:29 PM	granitamijnitical	11/21/2024 17:29 PM		
	temp (imported	TRx	ghanhan@ufited	11/21/2024 17:29 PM	patrontics	11/21/2024 17:29 PM		
	temp (imported_c	TRx	gharsham()shical	11/21/2024 17:29 PM	grand and public of	11/21/2024 17:29 PM		
	temp (imported	TRx	gharahandjishigal	11/21/2024 17:28 PM	ghone/congred/CL4	11/21/2024 17:28 PM		
	- tomo lungariad a	TD-	and a second second second	44/04/0004/47/02 064		44/04/0004 47/02 084		
	Select all	& Import & Export			Pase size:	1 To 10 from 18 K	C Page 1 from 2	> :

2. Click the Enable toggle for the template you wish to enable. WhizAI shows a confirmation message that confirms that you want to enable the template.

Note! You can click this toggle again to disable a particular template.

3. Click Confirm. A message is displayed at the top-right which says, 'The template is updated successfully.'

Now, if you ask WhizAI 'Show me TRx weekly' and click the ExplAIn icon, and then enable the Anomalies, you can view the anomalous behavior of the metric TRx as shown in the following figure:



Note! The card needs to be refreshed or re-generated to see the impact of enablement of a template for any metric.

Editing Anomaly Templates

- 1. From WhizAI Explorer, click Explain on the top navigation toolbar. You can see a list of existing templates in the anomalies panel.
- 2. Select the template you want to modify and click the Edit icon from the templates.

whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0	
Workbench -	Anomalies: Temp	plates						
Anomalies	FAS - Field Analytics	(w)	· •			Analyze	+ Crea	ite new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled	
	Template_1	TRx	which full-sports at	11/12/2024 10:51 AM	inaria mesinjahina	11/22/2024 16:49 PM		
	My TRx Template	TRx	shankamaninijahkad	11/22/2024 16:24 PM	(Poeta acorde@odical	11/22/2024 16:49 PM		1
	12345	TRx Volume	ghanghanghabkitak	11/22/2024 11:49 AM	phandrondpublical	11/22/2024 11:49 AM		
	temp (imported	TRx	grandranges/41.5	11/21/2024 17:29 PM	pharehore@ubio.al	11/21/2024 17:29 PM		
	temp (imported_a	TRx	gharshara[tableal	11/21/2024 17:29 PM	ghanhum@uhical	11/21/2024 17:29 PM		
	temp (imported	TRx	ghandum@nblcal	11/21/2024 17:29 PM	granturalphical	11/21/2024 17:29 PM		
	temp (imported_c	TRx	phandrandishtical	11/21/2024 17:29 PM	provincestories	11/21/2024 17:29 PM		
	temp (imported	TRx	ghamhamQmhical	11/21/2024 17:28 PM	phenhangeshicut	11/21/2024 17:28 PM		
	tomo funcated a	TDue	And the Rest of the I	44/04/0004 47/02 064	destant and the	44/04/0004 47/02 084	-	
	Select all	d Import d Export			Page size: •	1 To 10 from 18 K	< Page 1 from	2 > >

3. Edit the required parameters and then click Save. WhizAI confirms whether you want to save the changes.

🍿 whiz.ai	Explorer Pinboards Alerts Explain Admin		0		5
Workbench -	Canomalies Edit Template				
Anomalies Key Drivers Knowledge Graph	General Advanced Metric & Anomaly Type ③	Training Dataset () Training data scope Last 104 weeks Will be used by the anomaly detector to train the model.			~
		Cancel Save A	s New Template	Sav	e

4. Click Yes to save the template.

Save As New Template option

1. Click Save As New Template to open the Save As New Template pop-up window.

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin			0		SE
🔄 Workbench –	Anomalies Edit Template					
Anomalies	General Advanced					
Key Drivers	Metric & Anomaly Type (i)		Training Dataset ()			
Knowledge Graph	Data model		Training data scope			
	FAS - Automation	Ŧ	LTD			
	Data model containing the target metric.		Will be used by the anomaly detector to train the model.			
	Metric					
	Sample quantity	Ŧ				
	Metric to be used for the analysis.					
	Template Sample quantity Test Automation					
	Sample_quantity_rest_vatomation					
	Anomaly Type					
	Exponential Moving Average	Ť				
	Exponential Moving Average - Single point outlier based on the previous moving average.					
	Number of periods					
	No of periods to be used to compute the moving average					
	, constituires constants constituires construction or entities					
			Cancel Save As New	Tomplato	5.00	
			Cancel Save As Nev	viemplate	Sa	ne -

2. Enter the Template Name, change the Enabled flag settings (if required), and click Save to save the new template.

	Anomalias Edit Tomalata		×	
Workbench -	Anomalies Edit Template	Save As New Template		
Anomalies	General Advanced	Template Name		
Key Drivers	Metric & Anomaly Type ③	SampleQuantity Anomalies	et ①	
Knowledge Graph	Datamotel FAS - Automation	C Enabled	nope	
	Data model containing the target metric.	Metric & Anomaly Type 🖌	the anomaly defector to train the m	odel)
	Marte	Data model		
	Sample quantity	FAS - Automation		
	Metric to be used for the analysis.	Metric		
	Sample munitiv Test Automation	Sample quantity		
	Constitute of a second of	Anomaly Type		
	Anomoly Type Exponential Moving Average	Exponential Moving Average		
	Exponential Moving Average Single point outlier based on th	Number of periods		
	Assertant of seconds.	3		
	3	Training Dataset 🖌		
	ten er bereisen for en muse en enterheten mid unsamlik som efter	Training data scope		
		LTD		
		Advanced settings 🖌		
		Cancel Save		
				and the second se

Deleting Anomaly Templates

- 1. From WhizAI Explorer, click Explain on the top navigation toolbar. You can see a list of existing templates.
- 2. Select the template you want to delete and click the delete icon as shown in the following figure. WhizAI confirms whether you want to delete the template.

🖗 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0 4
Workbench -	Anomalies: Temp Data Model FAS - Field Analytics	plates wetric	w.			Analyze	+ Create new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at \downarrow	Enabled
	Template_1	TRx	action-half-sportstaat	11/12/2024 10:51 AM	divertion to design this of	11/22/2024 16:50 PM	
	My TRx Template	TRx	shankamandeğiahkoal	11/22/2024 16:24 PM	deseries web@shical	11/22/2024 16:50 PM	• Z
	12345	TRx Volume	glandrangadiicai	11/22/2024 11:49 AM	glassbanijski za	11/22/2024 11:49 AM	
	temp (imported	TRx	produced in a	11/21/2024 17:29 PM	perstangentical	11/21/2024 17:29 PM	
	temp (imported_a	TRx	glundur@ofC.8	11/21/2024 17:29 PM	grandwater	11/21/2024 17:29 PM	
	temp (imported	TRx	ghanshamiljubko.d	11/21/2024 17:29 PM	giamham@nhis.si	11/21/2024 17:29 PM	
	temp (imported_c	TRx	ghanghanghafkinal	11/21/2024 17:29 PM	gterstenijskipsi	11/21/2024 17:29 PM	
	temp (imported	TRx	gluophanatoris), si	11/21/2024 17:28 PM	plantomenhical	11/21/2024 17:28 PM	
	- tomo Resourced a	тр.,	A	44/04/00/04/47/04 064		44/04/0004 47/02 014	-

3. Click Delete.

Using Anomaly Template

Note! WhizAI allows only one template to be enabled per metric.

This enabled template is used during anomaly detection triggered by the user from the workspace response and by the system to process anomaly-based alerts.

In the case of computed metrics, if a specific template is not created then the system picks up the enabled template of the corresponding base metric.

These templates (enabled or disabled) are also utilized when you perform ad-hoc analysis from the workbench. In this case, the system auto-populates settings from the enabled template as soon as you select a metric from the drop-down list.

Optionally, you can follow these steps to change the template to get the required settings: Go to the ExplAIn > Workbench > Anomalies, the Template field as shown in the following figure:

🍓 whiz.ai	Explorer Pinboards Alerts Explain	Admin		0		5
Workbench -	Anomalies Analyze					
Anomalies	General Advanced					
Key Drivers	Metric & Anomaly Type 🕡	Training Dataset ()	Filter ()			
Knowledge Graph	Data model	Training data scope	Granularity			
	FAS - Field Analytics	LTD	Weekly			
	Data model containing the target metric.	Will be used by the anomaly detector to train the model.				
	Metric		Deriod		Edit	1
			Dielesseeled			
	Metric to be used for the analysis.					
		_				
	Select a template					
	Anomaly Type					
	Time Series Forecasting					
	Time Series Forecasting - Single point outlier based on forecasting					
	technique which includes seasonailty.					
						_
				Cancel	Analyze	
						_

From this field, you can switch between different templates that are available for the selected metric. For example, if Template A and Template B are associated with the metric TRx, then from this field you can choose any one of those templates.

Note! The Template field is auto-populated with the template associated with the selected metric which is enabled from the Templates tab. (Refer to the figures below)

🎊 whiz.ai	Explorer Pinboards Alerts Explain Admin	2 4 N
 Performance + Monitor + 	← Edit User	
🚢 User & Security –	N Nick Last Active a minute ago	Authorization Permission E Logs DEACTIVATE
Users User Group	ACCOUNT	ACCESS CHANNELS

The Authorization page appears where you can set the authorization for the user. For more information, refer Admin Manual

Detecting Anomalies in Data

When tracking trends and patterns, a crucial aspect is identifying data points that deviate from the usual range. This is where anomaly detection algorithms come into play.

Assuming anomaly detection is enabled for a given data model a template is also created for a given metric and this template is also enabled for end-user consumption, the various ways by which a business user or an analyst can make use of this feature are as follows:

- Detecting anomalies from WhizAI Explorer
- Detecting anomalies from Pinboards

Detecting Anomalies from WhizAI Explorer

You can run anomaly detection on a card for NLQs that show a trendline with weekly, monthly, quarterly, and yearly data for metrics and scope.

For example, if you ask 'Show me trx trend for southwest for Arobi' then you get a response as shown in the following figure:



- 5. Click the ExplAIn icon Explain
- 6. Enable the Anomalies toggle and then click Apply.



7. When any of the data points on the trendline are outlying from the usual range, then it gets highlighted by the algorithm as shown in the following figure:



8. When you hover the cursor over these data points, you can see the Anomaly Details as shown below:



Note! You have to create a template for anomaly detection. This template is used to automate the anomaly detection for various metrics.

Viewing Additional Information About Anomalous Data Points

With WhizAI, you can view the following additional information about anomalous data points:

- Confidence Band
- Anomaly Details

Confidence Band

As shown in the figure below, the green shadow-like band is referred to as the confidence band. For each of the data points, this band represents the expected minimum and maximum value determined by the underlying algorithm.



Anomaly Details

Anomalous data points are highlighted in red color on a trend line response. If you hover the cursor over any anomalous data point, WhizAI shows you more details about the point, as shown in the following figure:



The following table shows the details you see when you hover the cursor over any anomalous data point:

Anomaly Details	Description
Expected Min Value	The minimum value of the expected range is calculated by the anomaly algorithm for the given data points.
Expected Max Value	The maximum value of the expected range is calculated by the anomaly algorithm for the given data points.
Algorithm Name	Name of the algorithm mentioned in the corresponding template.

Automating Anomaly Detection on Pinboard

When you pin a response from the workspace with anomaly detection enabled, the response will automate the anomaly detection. Whenever the corresponding response refreshes with or without the latest content, the system will automatically run the anomaly detection and display the result.

For example, if you ask 'Show me TRx weekly' then you get a response as shown in the following figure:



1. To detect anomalies, click the ExplAIn **Explain** icon , enable the Anomalies toggle and then click Apply.



When any of the data points on the trendline are outlying from the usual range, then it gets highlighted by the algorithm as shown in the following figure:



2. Click the pin icon > Pinboard Navigator > click the Pinboard you desire to pin the card to. The card gets pinned to that board.

Since anomaly detection is enabled on this card from the response, even after this card is pinned to the board, the card will auto-detect anomalies on changes in filters or refresh.

Disabling automatic anomaly detection on Pinboards

- 1. Go to the same card on the pinboard.
- 2. From the card, click the ExplAin Explain icon > disable the Anomalies toggle > click Apply. The highlighted outliers from the trendlines are now hidden.
- 3. To save these changes click Save.

Managing Alerts on Anomalies

The alert system offered by WhizAI has advanced functionality for detecting unexpected trends in your data on a single trendline response. You can create alerts in WhizAI and manage these alerts so that if the system detects an anomaly, the alert is triggered automatically, ensuring you stay informed about any significant changes in your data.

To set up alerts for anomalies in your data, you can simply enable the automatic triggering feature from WhizAI Explorer top navigation > Alerts > Alerts Manager. When you click the alert, it displays a trend line along with the previously triggered anomaly highlighted as anomalous.

Additionally, you can view alert notifications directly on Explorer when an alert is triggered. For example, if you ask the query: Show me the TRx trend for southwest, WhizAI shows the following response.



Create the alert to detect an anomaly:

1. From the response, click ExplAIn > enable Anomalies > Apply.
| TRx [Weekly]
2022-01-01-05-06 TRx | Southwest | Explitin 🧔 i 🕫 🕂 🗄 |
|---|--|--|
| 🟥 Data Controls | | Narratives |
| 300K | | Anomalies O |
| 275К | | Key Drivers |
| Ž 250К
225К | | Apply
Workbench 🏠 |
| 200K | 1.10°, 2022 100, 2022 100, 2022 1100, 2022 100 | 1.222 100 100, 2020 100, 2021 100, 2 |

2. Hover the cursor on the anomalous data point for the latest period and click Create Alert.



3. From the new alert creation dialog, add the Scope and the Condition(s) and click Next.

Add Conditions			Delivery Method				Recipier
Scope							
For Metric		For Period					
TRx	~	Last 1 weeks	\sim				
Filter Bv							
Pagion							
rogion							
Southwest		÷					
Southwest Condition Scrip AND OR Metric	~ t	Coperator		Value Metric			+ Add Condition
Southwest Condition Scrip AND OR Metric TRx	v t	Operator Lower than	Ť	Value Metric TRx (Expected Range)	v	Ē	+ Add Condition
Southwest Condition Scrip AND OR Metric TRx Metric Metric	v t	Operator Lower than Operator	Ţ	Value Metric TRx (Expected Range) Value Metric	Ţ	Ē	+ Add Condition
Southwest Condition Scrip AND OR Metric TRx Metric TRx	v t	Operator Lower than Operator Greater than	~	Value Metric TRx (Expected Range) Value Metric TRx (Expected Range)	Ť		+ Add Condition

4. In the Delivery Method, select the Alert Channel (Web or Email) and then create the Message.

Important! Tags have to be added in the Message textbox, these tags are described in the table.

Southwest trend alert		FAS - Automatio
Add Conditions	Delivery Method	Recipien
Alert Channel		
🗸 Web 🛛 🖌 Email		
Action		
Explorer		
Natural Language Query		
Show me the TRx trend for southwest		
Message		
Anomaly Detected : < Metrics.name > for <d< td=""><td>) imensions.Name Dimensions.Values> for <cohort.name> for <timeperiod> i</timeperiod></cohort.name></td><td>s <changes> <expected range=""></expected></changes></td></d<>) imensions.Name Dimensions.Values> for <cohort.name> for <timeperiod> i</timeperiod></cohort.name>	s <changes> <expected range=""></expected></changes>

You have the following two alert channels:

1. Web: You receive the alert notification on WhizAI Explorer. After you receive the alert, you can click the Alerts to check the alert notification.

	Explorer Thibe	ards Alerts Explain	Admin	3 🦛 s
Data Model			Apply	Alerts Manager
Sort by: Newest First ~	Hide Read 🛛 🚺			W Mark all as read
🔋 whiz.ai	Explorer Pinbo	oards Alerts Explain	Admin	Ø 4 s
Data Model				
FAS - Automation			Apply	Alerts Manager
Sort by: Newest First \vee	Hide Read			Mark all as read

If you select the Web channel, you can choose the following three Actions from the Delivery Method window.

- None
- Explorer You are redirected to the workspace and NLQ is triggered, and the response is displayed on the explorer.
- Pinboard You are redirected to the pinboard that is chosen from the pinboards dropdown.
 2. Email: You receive an email with the alert notification.

Note! The email is the same email id that is configured for the user while user creation.

Description and example of tags in Messages text block:

An alert message is what the user receives in the notification menu once the alert is triggered.

Alert UI provides three default messages based on the alert type:

1. If the alert query is simple (that is, non-comparison and non-anomaly), then the default message will be.

<Metrics.code> for <Dimensions.Name Dimensions.Values> <Filter.Name Filter.Values> for <TimePeriod> is <Condition.Type Conditions.Value>

2. If the alert query is comparison (that is, time-comparison OR entity-comparison), then the default message will be.

<Metrics.code> for <Dimensions.Name Dimensions.Values> <Filter.Name Filter.Values> for <TimePeriod> for <Primary Inst> over <Secondary Inst> <changes> <Percent Change>

 If the alert query is an anomaly trend (for example, trx trend), then the default message will be. Anomaly Detected: <Metrics.code> for <Dimensions.Name Dimensions.Values> for <TimePeriod> is <changes> <Expected Range>

In all the alert messages, you can type anything out of tags (tags are covered in <>, i.e., <Metrics.code>)

Tip! All the tags will be resolved to actual values at runtime.

List of all possible tags in the Messages box:

Tags	Description
<metrics.code></metrics.code>	Code of a metric
<dimensions.name Dimensions.Values></dimensions.name 	Name of a dimension and its value (for example Region West)
<filter.name filter.values=""></filter.name>	Filter name and value (if applied on alert) (for example Region available for TRx - Southwest)
<timeperiod></timeperiod>	Time period for the alert
<condition.type Conditions.Value></condition.type 	Condition type and its value (for example condition - Greater than and value - 50,0000)
<primary inst=""></primary>	Primary instance of comparison query (for example: Arobi)
<secondary inst=""></secondary>	Secondary instance of comparison query (for example: Ofasan)
<changes></changes>	Changes in value (for example grown by, declined by)
<percent change=""></percent>	Percent change of value (for example: TRx (% Chg)
<expected range=""></expected>	Expected range of anomaly metrics
<primary val=""></primary>	Primary value of comparison query
<secondary val=""></secondary>	Secondary value of comparison query
<absolute change=""></absolute>	Absolute change of comparison query (for example: TRx (Abs Chg)
<metrics.name></metrics.name>	Name of the metrics (for example: TRx)

- 5. After defining the Alert Channel and Message, click Next. The Recipients section is displayed.
- 6. Select the User(s) and/or Group(s) with whom you want to share the alerts and click Update. You receive a message, 'Alert successfully updated.'

Southwest tren	d alert			FAS - Automatic
Add Conditions		Delivery N	fethod	Recipie
	Users		G	roups
p Search by na				
Select all				
9 300E				
an AppP				+
at Alshay?	enver			+
 Almany 				+
 Altoi 				+
Analysia	utomation test.			+
All Art Teste	8			+
		Canaal	Draviaus	Lindata

ۇ whiz.ai	Explorer I	Pinboards A	Alerts Explain	Admin					~	Alert Southwe successfully u	est trend alert pdated	×
← Alerts Manage	er								_		_	_
										I	Scheduler	
Alert Name	Delivery	Created _♥ By	Last Triggered At	Last Triggered Status	Data ⊽ Model	Trigger on Dataload	Schedule	Trigger	Subscribe	Enabled	Actions	
s	7 7	(1) Scott 🛛 🎔	dd-mm-yyyy 🗖 🏼 🎔	7	(1) FAS - At 🛛 🎗	7	dd-mm 🗖 🛛 🏹		5	7	7	
Southwest trend alert	Web Email	Scott	11/26/2024, 5:59 PM	Succeeded	FAS - Automa		None	Launch			1	
									1 To [\$ from 1	IK 🤇 Pag	e1from1 > >I	4

7. From WhizAI Explorer, click Alerts. The Alerts page is displayed, where you can manage the alerts.

🅼 whiz.ai	Explorer	Pinboards A	Alerts Explain	Admin				2 A 5
← Alerts Manage	er							
								Scheduler
Alert Name	Delivery	Created ₇ By	Last Triggered At	Last Triggered Status	Data $ abla Trigger of Model Dataload$	n Schedule Trigge	Subscribe Enabled	Actions
7	7 7	(1) Scott 🏼 🎖	dd-mm-уууу 🗖 🛛 🏹	Y	(1) FAS - Ai 🛛 💙	V dd-mm	Ÿ	Ϋ
Southwest trend alert	Web Email	Scott	11/26/2024, 5:59 PM	Succeeded	FAS - Automa	None		1
						N		
						la'		
							1 To 1 from 1 K 🔨 I	Page 1 from 1 > >I

8. Select the Data Model from the drop-down list, go to the alert that you created, and from the Trigger column click Launch. 'Alert launched successfully' message is displayed at the top-right corner. Also, you can see the alert notification at the bottom-right side of the page.

ۇ whiz.ai	Explorer	Pinboards	Alerts Explain	Admin						 Alert Southw launched suc 	est trend alert cessfully	×
← Alerts Manag	ger								-			
											Scheduler	
Alert Name	Delivery	Created ₇₇ By	Last Triggered At	Last Triggered Status	Data ⊽ Model	Trigger on Dataload	Schedule	Trigger	Subscribe	Enabled	Actions	
	γ γ	(1) Scott 🛛 🏹	dd-mm-yyyy	7	(1) FAS - Au 🛛 🎗		∇ dd-mm 🗖 5	7		γ	7	
Southwest trend alert	Web Email	Scott	11/26/2024, 6:26 PM	Succeeded	FAS - Automa		None	Launch			2 🗊	
									Anoma	alv Detected : TRx	for Last 1 weeks	×
									is great Range	ter than Expected (261146.69) v seconds		^
												_

9. Click the alert notification. A trend line with anomalous data points is displayed on the explorer.



Below are a few more examples of Alerts:

- 8. TRX Trend for Arobi or TRX for Arobi (Alert on a metric with filter)
- 9. TRX by region for Plabenil (Alert on a metric affecting all regions)
- 10. Arobi vs Plabenil (Alert on comparison between two entities)
- 11. TRX Growth, NRX growth by region for Arobi (Alert comparing two different metrics of the same scope)
- 12. TRX PoP for Arobi (Alert comparing metrics across different periods)

Managing Narratives for Anomalies

The system generates default narratives for each of the anomalous data points. The following is an example of a card showing the default narratives on the anomalies observed in the data.

TRx [Weekly] 2022-01-01-05-06 TRx	Explinin 🧔 i 🖨 🕂 =	Narratives Powered by GPT
🕂 Data Controls	Narratives 💽	1. The maximum weekly total prescriptions (TRx) recorded YTI
2.2M	Anomalies	was 2.05M during the week of 15 Jan to 21 Jan, 2022.
2.1M	Key Drivers	 The minimum weekly total prescriptions (TRx) observed YT
2M 1.9M	Apply	was 1.80M during the week of 0 Jan to 07 Jan, 2022. 3. The total TRx for the YTD period summed up to 35.26M, indicating
1.8M	Workbench 🔅	the overall volume of transaction handled. 4. The average weekly TRx throughout the VTD period was
1.7M	. 15:202 15:202 55:202 55:202	1.96M , providing a baseline for typical weekly performance.

Also, as an administrative user, you can create custom narratives to change the content of the narrative according to your needs from the Narratives Workbench.

Creating Custom Narrative for Anomaly

1. Go to Admin > NLP Workbench > Narrative Templates.

	🌾 whiz.ai	Received a construction of the construction of	Pinboards (①)	Alerts & Admin				(i)Help	AB	
	Dashboard User Logs Audit Logs	Custom Narra FAS - Field Analytics	Custom Narrative Templates (2 Templates) FAS - Field Analytics Data Image: Complate and Complete and Complete and Com							
÷	Users & + Security	Template Na	Intent	Scope	Source	Source ID	Last Updated	Language	Status	
.:.	Data Modeler +	7	7		v	v	dd-mm-yyyy 🗖 🛡	Ÿ		
	Content	01-Data Point	Data Point	> 1 scope(s) applied	Model		04.10.2023	English		
1	Manager +	02-TopN	Top N		Model		04.10.2023	English		
s¢	NLP Workbench - Synonyms Replacements Business Actions NLQ Analyzer						1 to 2 of 2	K 〈 Page 1 of 1 〉	<u>э</u> н	
[FAQ Training Narrative Templates	₽ ∠ ΰ								

- 2. Select narrative type Anomaly from the drop-down beside the data model.
- 3. Click New Template from the Custom Narrative Templates page.
- 4. Enter a name for the template.
- 5. Click Set Intent and select All from the Intent dropdown list. Click Set Intent.
- 6. Type the narratives in the context box.
- 7. Click Create.



You can select the following options while creating a custom narrative template for anomalies.

- Functions
- 13. The following functions are available to build custom narratives on anomalies.
 - Deviation
 - Smart Deviation
 - Percent Deviation
 - Smart Percent Deviation
 - Algorithm
 - Smart Expected Min
 - Expected Min

- Smart Expected Max
- Expected Max
- Dimension name
- Entity name
- Period (period from card context (last year, 2021, last 4 weeks etc.))
- Entities (Entities from card context)
- Metric Smart Values (Formatted short metric value of 1st column in comparison table)
- Metric value (Actual metric value from 1st column in comparison table)
- Computation
- Metric name
- Controls
 - If
 - If-else

Note! To know more about how to create Narrative Templates, refer to the WhizAI Admin manual.

Viewing Narratives for Anomalies

Narratives for anomalies are descriptions of these anomalies. You can view such descriptions on responses in WhizAI Explorer or cards in pinboards. These descriptions or narratives provide additional information about the anomalous data points.

For example, if you ask, 'Show me TRx weekly' and from the response, click on the ExplAin Explain icon > enable Anomalies and/or Narratives and click Apply. WhizAI detects anomalies in the response. WhizAI shows the narratives, that detail about the anomalies as shown in the figure below:





Note! If the Narrative option is disabled across the entire product, or for a given data model, the Narratives toggle from the Explain popup is also hidden.

Note! If all the other Explain features like Anomaly, Prediction, and KDA are disabled and only narrative is enabled then show the 'Explain' icon, and under that show only the narratives toggle. In this case, the 'Explain Workbench' option is also not available since all the related features are disabled.



Also, the Apply button is required if you have enabled more than one option from the admin configuration settings:

- Narratives
- Anomalies
- Predictions
- Key Drivers

You can switch the Narratives toggle to be shown /hidden.

Consider the following example:

If you ask WhizAI, Show me Trx trend for last 5 months. WhizAI shows the following response:



If you have enabled anomaly and enabled narrative, click Apply.



Then, you will see the anomaly and the narrative of the latest view.



If Anomaly is enabled, and the narrative 'is disabled. Now if you enable narrative and click Apply.

Considerations and Limitations

- Once the anomaly detection is enabled on a setup and templates are set for the required metric, it can be enabled only on cards showing trendline with a single metric (Time series intent). For example it is not supported on cards showing multiple metrics or trendlines.
- The option to enable anomaly detection on a card is available only on the fresh cards created after the anomaly detection is enabled and set up for a given metric. This means the options will not be available on the historic cards unless the card is refreshed.
- The Confidence band (expected minimum and maximum range) associated with the anomaly run will be visible only on the trend line visualization.
- Training period: The training period takes input in terms of reference period like the last 52 weeks, last 1 year, etc.
- The way the "last" keyword works is that it excludes the most recent period and starts from the previous period.
- For example, if the data is till week 23 of 2023 and if the training period is set as past 52 weeks, then it excludes week 23 and starts with week 22 and goes backward up to 52 weeks to create a training period. Then, users will not be able to see the anomalies for week 23.
- One of the critical scenarios is when the user sets the training period in terms of 'year' like 'last 2 years. Suppose the data is till June 2022 in the system then in this case, 'last 2 year' would mean the year 2021 and 2020.

Now, if there is any card showing the data for the year 2022 then you would not be able to run the anomaly detection on it.

Solution: Always use scope in the most granular data format. Example - In "weeks" term. So, for a 2year period, you can use "Last 104 weeks" as a training period. This will allow you to run anomalies on the most recent scope as well excluding the current week.

- Anomaly detection may throw errors or may generate incorrect responses in a scenario where the data set has many records with null values.
- Anomaly detection on the ExplAIn workbench may throw errors in scenarios where custom scripts or handlers are involved in processing the response for the given metric. In such cases, it is advised to proceed with template creation and use the workspace area to detect anomalies.

Getting Started with Key Drivers Analysis

Key Driver Analysis (KDA) is a feature used to identify and understand the significant factors or categories that influence a particular event for a given business metric. It helps businesses to know the key driving factors like 'what is driving the performance of a particular brand in a particular region.'

In the below image, you can see that WhizAI ExplAIn has identified and highlighted the key driving factors. In the subsequent sections, we will study how to identify these factors and how to set the prerequisite steps.

🎊 whiz.ai	Explorer Pinboards Alerts Explain Admin		🕜 🦺 s
Workbench – Anomalies Key Drivers Knowledge Graph	 Key Drivers Analyze Explicit n change in TRx in April 23 2022 to May 6 2022 as compared to April 9 2022 to A Key Insights - It was found that change in NRx contributes 64.96% of the TRx changes. This impact can be either contributes 23.32% of the TRx changes. This impact can be either positive or negative on TRx. The TRx for the Age 9652.0 is 77.33K for the period Apr 23 2022 - May 06 2022, it has grew by 10 in the TRx. 	April 22 2022 r positive or negative on TRx. During the same period, It was foun 18.57K as compared to Apr 09 2022 - Apr 22 2022. contributing 1	: 3.90M (* 0.38% (14.42%) ut that change in NBRx 27.06% to the total growth
	Causal Factors Explanation The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors. NRx 64.96% NBRx 23.32% Others 11.74%	n Key Contributors All (3) Cutperformers All (3) Combination Age: 9652 Age: 6732 Age: 7497	Flat View Abs Diff % Diff 18.57K 31.61 17.57K 36.63
	(d) (d)	1

Understanding the KDA module

WhizAI offers a Key Drivers module in the ExplAIn Workbench. With this module, you can create and manage metric-specific templates. These templates are a prerequisite to allow you to detect the Key drivers from the workspace and pinboard area.

Note! For information on how to add the KDA templates, refer to the Creating KDA Templates section.

Also, the KDA module can be used to perform ad-hoc analysis on a specific scope, if required.

Click on Key Drivers under Workbench to open the Key Drivers module. By default, it opens the Key Drivers: Templates screen:

Key Drivers: Analyze screen. two tabs:

• General

• Advanced

Understanding the General Tab

Edit 🖌
Edit Z

The following table describes the columns in the General tab:

Columns	Description
Metric	
Data Model	Contains a list of data models. You need to select the required data model which contains the business metric to be analyzed.
Metric	Contains a list of applicable metrics for the selected data model. You need to select the required business metric to be analyzed.
Template	Auto populates the enabled template from the Templates tab for the selected metric. You can choose a specific template from the drop-down list.
Context to analyze	 Contains the following two options: Selected period: runs an analysis to find out what are the top contributors who are contributing towards the decline/growth in the performance of the data point.

Columns	Description
	• Period over period/year over year runs an analysis to compare the two periods and find out what are the top contributors who are contributing towards the decline/growth in the performance of the data point.
Filters	Use this section to select the scope. This section is required to populate only when you want to perform any ad-hoc analysis on the workbench. These filters are not required to create a template. A template is created at a metric level for all the scope
Factors	The list of factors which are analyzed for the key drivers. Based on the selected metric, a recommended list of factors is pre-populated. You can update the list in this section.

Understanding the Advanced Tab

🧶 whiz.ai	Explorer Pinboards Alerts Explain Ad	dmin			(2		\$
Workbench – Anomalies	Key Drivers Analyze General Advanced							
Key Drivers	Driver Analysis Agorithm OLS Amethod used to find the simple linear regression of a set of data. Level of Significance	Contribution Analy Maximum Number of 3 A value to restrict the the specified level. De	sis Members in a Columnation analysis to find significa fault value is 3	int contributor only upto				
	0.06 The probability of rejecting the null hypothesis when it is true. Madmum Lag cycle 6	Z-Score Threshold Cr Cardinality Lower Bound	Cardinality Upper Bound	Z-Score Threshold				
	System detects lag for each of the metric set as factor. Maximum lag restrains the system to go out of the practical range.	31	250	2				
		501	2 000	7				
		2001 Z-Score value is used configuration allows t set.	eo to detect significant con o set different z-Score b	10 tributors. Following ased on the cardinality of a				
					Cancel		Analy	ze

The Advanced tab is used only by analysts or advanced users to set specific parameter values and algorithms to generate insights. The following table describes the columns in the Advanced tab:

Column	Description
Driver Analysis	
Algorithm	Contains the OLS algorithm. It is used to find the simple linear regression of a set of data. Thus, it is a simplified way to understand and predict relationships between dimensions.

Column	Description
Level of Significance	The probability of rejecting the null hypothesis when it is true.
Maximum lag cycle	System detects a lag for each of the metric sets as a factor. Maximum lag restrains the system from going out of the practical range.
Contribution Analysis	
Maximum Number of Members in a Combination	Restricts the analysis to find significant contributors to the level specified in this text box.
Z-Score Threshold Criteria	Allows you to change the upper bound of the cardinality. The lower bound is automatically updated based on your input.

Type of Key Driver Analysis

WhizAI supports the following two types of key driver analysis:

- Period over Period/Year over year
- Selected Period

Period over Period/ Year over Year

When you run the key driver analysis for the 'Context to Analyze = Period over period change' (refer image below), the system performs the change analysis between the two periods and displays the significant members whose contribution has impacted the change (growth or decline).

Here, the system uses only the dimension factors and runs through each of these dimension members and applies statistical analysis to find significant contributors. WhizAI uses the Z-score technique with the assumption that the distribution of the data is a normal distribution. The Z-score threshold varies based on the cardinality of the dimension.

As a result, the system displays a list of all such members along with their contribution towards the total change between the two periods.

🏟 whiz.ai	Explorer Pinboards Alerts Explain Admin		Ø 4 5
 Workbench – Anomalies Key Drivers Knowledge Graph 	 Key Drivers Analyze Explim change in TRx in April 23 2022 to May 6 2022 as compared to April 9 2022 to April 22 Key Insights - It was found that change in NRx contributes 66.17% of the TRx changes. This impact can be either positive contributes 26.11% of the TRx changes. This impact can be either positive or negative on TRx. The TRx for the Age 9652.0 is 77.33K for the period Apr 23 2022 - May 06 2022. It has grew by 18.57K as in the TRx. 	2022 or negative on TRx. During the same period, It was found that compared to Apr 09 2022 - Apr 22 2022, contributing 127.06	: 3.90M (* 0.305 (14.42R) change in NBRx % to the total growth
	Causal Factors Explanation The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors. Image: Constraint of the image: Con	Key Contributors All (3) • Outperformers • All • (3) Combination Abs Age: 9652 18.5 Age: 6732 17.6 Age: 7497 17.5	Statistics Flat View + Diff ↓ % Diff 37K 31.61 33K 28.87 37K 36.63

Selected Period

When you run the Key Driver Analysis for the 'Context to Analyze = Selected Period' (refer image below), the performance of your metrics is displayed for the entire selected period.

🎊 whiz.ai	Explorer Pinboards Alerts	Explain Admin	0 🦛 s
Workbench - Anomalies Key Drivers Knowledge Graph	Explorer Pinboards Alerts Image: Constraint of the strate str	Explain Admin Explain TRx drivers for 2022-02-26 - 2022-04-29 Key Insights - The TRx for the Age 8349.0 is 343.63K for the period Feb 26 2022 - Apr 29 2022. contributing 1.94% to the total TRx. Key Contributors All (5) • Outperformers • All • Flat View • (5) Combination Age: 11752 City: Miami City: Louisville City: Phoenix 	 (2) (4) (5) (3) (4) (5) (5) (6) (7) (7) (7) (8) (9) (9
	Panalyze		

Managing Templates

You can create, view, edit, delete, and enable/ disable operations on a given template. You can also perform on-the-fly data analysis using these templates.

Creating KDA Templates

With WhizAI, you can manage KDA templates for various metrics using different algorithms. When you create a template for a metric and ask a query, WhizAI understands which algorithm to run for the metric that is asked in the query to show the correct response.

To create a template, follow the steps listed below:

1. From WhizAI Explorer, go to Explain on the main toolbar. Click the. To create the template, you have to fill in details in the columns of General and Advanced tab

🅼 whiz.ai	Explorer Pinboards Alerts Ex	plain Admin			0		5
🔄 Workbench –	← Key Drivers Analyze						
Anomalies	General Advanced						
Key Drivers	Metric ()	Factors 🤅		Filter 🕡			
Knowledge Graph	Data model FAS - Automation	-	Add +	Period		Ec	dit 🗶
	Data model containing the target metric.						
	Metric						
	Metric to be used for the analysis.						
	Template						
		Ť					
	Context to Analyze Selected period	Ŧ					
					Cancel	Anabo	70
					and Parks I		

- 2. In the General tab, add the following details:
- 1. Metric: select the Data Model, Metric. For example, in the below image Field Analytics is selected as the Data Model, TRx is selected as Metric.

Note! Context to analyze is not required to create a template as this information is not stored.

2. Factors: In this column add the factors (Dimensions).

🍿 whiz.ai	Explorer Pinboards Alerts Explain Adm	in			0	4 5
🔄 Workbench –	Key Drivers Analyze					
Anomalies	General Advanced					
Key Drivers	Metric O Data model Data model FAS - Automation Data model containing the target metric. Metric TRx Wetric to be used for the analysis.	Factors ① Dimensions City X Customer X Customer Tier X Decile Group X Product X Region X	Add +	Filter ① Period Pick a period		Edit 🖍
	Template TRx_Automation_Template Context to Avalyze Period over period change					
					Cancel	Analyze

Note! The filter values applied on the scope are not saved in the template.

- 1. In the Advanced tab, add the following details:
- 1. Contribution Analysis: this is the value to restrict the analysis to find significant contributors only up to the specified level. The default value is 3.
- 2. Z-Score Threshold criteria: The Z-score value is used to detect significant contributors. The following configuration allows to set different Z-scores based on the cardinality of a set.

🎊 whiz.ai	Explorer Pinboards Alerts Explain Admin			@ 4 s
🖾 Workbench –	Key Drivers Create New Template			
Anomalies	General			
Key Drivers Knowledge Graph	Driver Analysis	Contribution Analysis	"amhlantian	
	OLS A method used to find the simple linear regression of a set of data.	3 A value to restrict the analysis to t	find significant contributor only upto t	he specified level. Default value is 3
	Level of Significance 0.06	Z-Score Threshold Criteria		
	The probability of rejecting the null hypothesis when it is true.	Cardinality Lower Bound	Cardinality Upper Bound	Z-Score Threshold
	6 Maximum Lag cycle	1	30	1
	System detects lag for each of the metric set as factor. Maximum lag restrains the system to go out of the practical range.	31	250	2
		251	500	5
		501	2 000	7
		2001	90 0	10
		Z-Score value is used to detect sig based on the cardinality of a set.	nificant contributors. Following config	juration allows to set different z-Score
				Cancel Create

2. Click Save As Template. You see a dialog that shows the added details. In this dialog, enter a name for the template and click the Enabled toggle.

Template Name				
TRX new template				
Enabled]			
Metric 🗸				
Data model				
FAS - Automation				
Metric				
TRx				
Factors 🗸				
Dimensions				
Customer Cust	omer Tier Proc	luct Prod	uct Decile	
Region Target S	itatus			
Advanced settings 🗸				

Note! You can create multiple templates for the same metric using different factors, however, only one template will be active for that metric after you click the Enabled button.

3. Verify the details and click Save. You receive a pop-up message that the template has been saved successfully.

The template for metric TRx is added to the Templates tab as shown in the following figure.

🍓 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0	4
Workbench -	Key Drivers: Ten Data Model FAS - Automation	wetric TRx	Ţ		(Analyze	+ Creat	te new
Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at \downarrow	Enabled	
	TRxTemplate (im	TRx	sekishirahdabehical	11/26/2024 11:19 AM	sheets or and other hits i	11/27/2024 14:39 PM		
	TRx new template	TRx	(hwttaatundethwhicai	11/27/2024 14:37 PM	divertion and standing of the	11/27/2024 14:39 PM]
	TRxGrowth_Auto	TRx Growth	aladamatin de Sijahiz	11/27/2024 11:52 AM	stasteration kaligedra	11/27/2024 11:52 AM		
	TRxTemplate (im	TRx	annangana	11/25/2024 16:34 PM	and a constraint of the second	11/25/2024 16:34 PM		1
	TRxTemplate	TRx	sekshalishina	11/12/2024 11:28 AM	and the second second	11/25/2024 16:19 PM		
	TRx_Automation	TRx	shinhakawhisi	11/20/2024 13:03 PM	anishhabahisal	11/25/2024 16:18 PM		
	Average1	TRx Average	and the state of t	11/22/2024 14:59 PM	analogical and a	11/22/2024 14:59 PM		
	Copy1 (imported	TRx	and the ball of particul	11/20/2024 15:47 PM	and the second sec	11/20/2024 15:47 PM		
	Select all	🛎 Import 🏦 Export		44/00/0004 45:47 044	Page size:	14/00/2024 45:47 DM	C Page 1 from 2	: > >i

Now, when you ask WhizAI 'Show me top regions by TRx' WhizAI shows the following response:

Top Regions by TRx 2022-01-01 – 05-06 TRx	Explinin 4 i 🕉 4	
🚔 Data Controls	Q	Sear
Region	TRx ↓	
1 Mid-Atlantic	5.58M	
2 Mid-Central	5.50M	
3 West	5.00M	
4 Midwest	4.96M	
5 Southeast	4.73M	
6 Southwest	4.33M	
7 Northeast	3.93M	
8 South Central	1.23M	
Total	35.26M	
Data: TRx as of 2022-08-05 Generated in: 24.79 sec Source: FAS - Automation	# 🖲 🎞 III ~	Ŧ

From this response, when you click message as shown in the following figure:

NEW

🕞 🎽 icon against Key Drivers, you can see a pop-up

🗉 🛅 2022-01-01 – 05-06 × 🕅 TRx ×	0	Model Info III My Pins	
FAS - Automation 🐱 Ask me a question	for FAS - Automation		Rx
		2022-01-01-05-06 NI	25
Coatt Mednerday New 27, 2024 15-08		Customer N	Rx [\$] 🛧
s show me top regions by TRx		1 Kevin Charles 10	90.09
whiz.ai Wednesday Nov 27, 2024 15:08		2 Alison French 10	0.27
Top Perions by TPy		3 Michael B 10	0.27
2022-01-01 - 05-06 TRx	Explilin Q $i \not\prec \Leftrightarrow \equiv$	4 Dean Cart 10	00.33
😳 Data Controls	Ø Search	5 Julian Torr 10	0.36
Region	TR× ↓	Total 34	1.72M
1 Mid-Atlantic	5.58M		
2 Mid-Central	5.50M	Top Customers by T 2022-01-01 05-06 TE	Rx
3 West	5.00M	Customer T	₹x [\$] ↓
4 Midwest	4.96M	1 Michael Jo 23	2.16K
5 Southeast	4.73M	2 Tim Phillips 2:	L86K
6 Southwest	4.33M	3 Christian 11	3.45K
7 Northeast	3.93M		
8 South Central	1.23M	Key Driver Analysis on TRx	
Total	35.26M	Scope: 2022-01-01 - 05-06	
Data: TRx as of 2022-08-05 Generated in: 0.63 sec Source: FAS - Automation	8 0 E 6 ~ F C	Vesuits are available. You can also access the same from the notifications area.	Open Analy

When you click Open Report, WhizAI displays the significant contributors of the metric TRx as shown in the following figure:

8) 8	whiz.ai Explorer Pinboards Alerts Explain Admin	6 🔺 5
٠	Explifin TRx drivers for Ytd Key Insights - • The TRx for the Product Decile Not Available is 33.67M for the period Jan 01 2022 - May 06 2022, contributing 95.5% to the total TRx.	: 35.26M ×
	Top 10 * Outperformers * All * Flat View *	Statistics
	(10) Combination	TRx
	Product Decile : Not Available	33.67M
	Product Decile : Not Available Target Status : Target	18.01M
	Product Decile : Not Available Target Status : Non-Target	15.66M
	Customer Tier: Tier 1	14.20M
	Product Decile : Not Available Customer Tier : Tier 1	13.53M
	Product: Arobi	10.96M
	Product Decile : Not Available Product : Arobi	10.44M
	Product Decile : Not Available Customer Tier : Tier 2	10.12M
	Product Decile : Not Available Product : Trexine	9.39M
		0.0011

) whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0 4	
Workbench -	Key Drivers: Ten	nplates						
Anomalies	FAS - Automation	*			(Analyze	+ Create nev	N
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled	
	TRxTemplate (im	TRx	and concerning a	11/26/2024 11:19 AM	structure and classic), al	11/27/2024 14:39 PM		
	TRx new template	TRx	their condeputing	11/27/2024 14:37 PM	diversion and categories, al	11/27/2024 14:39 PM		
	TRxGrowth_Auto	TRx Growth	dialected on the pair 2	11/27/2024 11:52 AM	and ender the particular	11/27/2024 11:52 AM		
	TRxTemplate (im	TRx	with the second se	11/25/2024 16:34 PM	and the balls high ships of	11/25/2024 16:34 PM		
	TRxTemplate	TRx	uniterationality at	11/12/2024 11:28 AM	and the hostigization of	11/25/2024 16:19 PM		
	TRx_Automation	TRx	and constraints a	11/20/2024 13:03 PM	schiel Automotical	11/25/2024 16:18 PM		
	Average1	TRx Average	and holesoft of	11/22/2024 14:59 PM	anteriologiatical	11/22/2024 14:59 PM	• /	r.
	Copy1 (imported	TRx	and reference	11/20/2024 15:47 PM	while hole parts of	11/20/2024 15:47 PM		
		TD		44/00/0004 45:47 044	and the local sector of	14/00/0004 45-47 014		

Viewing the list of KDA Templates

This way, whenever you want to view the templates for a given data model you can select the data model from the drop-down and the UI will populate the corresponding templates. Also, from this page, you can perform edit, delete, and enable/disable operations for a given template.

Enabling/Disabling KDA templates

1. Go to the ExplAIn menu on the main toolbar. A list of templates is displayed.

🖗 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0	4
Workbench -	Key Drivers: Ten Data Model FAS - Automation	Metric	w		(Analyze	+ Creat	e new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at 🗸	Enabled	
	TRxTemplate (im	TRx	and the second s	11/26/2024 11:19 AM	storetase and sports at	11/27/2024 14:39 PM		
	TRx new template	TRx	Parts confidential	11/27/2024 14:37 PM	diversion and conversions	11/27/2024 14:39 PM		
	TRxGrowth_Auto	TRx Growth	alahona te te testindiz	11/27/2024 11:52 AM	and and an address of the Party	11/27/2024 11:52 AM		
	TRxTemplate (im	TRx	and the second s	11/25/2024 16:34 PM	and the balls by points of	11/25/2024 16:34 PM		
	TRxTemplate	TRx	ano contrato de la contrato de	11/12/2024 11:28 AM	and the hole place of the	11/25/2024 16:19 PM		
	TRx_Automation	TRx	annoananca.	11/20/2024 13:03 PM	site to be a set of the	11/25/2024 16:18 PM		
	Average1	TRx Average	and distances of	11/22/2024 14:59 PM	and comparison	11/22/2024 14:59 PM		/
	Copy1 (imported	TRx	ANDIANOULA	11/20/2024 15:47 PM	which includes the of	11/20/2024 15:47 PM	•	
	Select all	the de Immort de Export		44/00/0004/45-47 064	Page size: 💌	11/00/0004 15:47 PM	< Page 1 from 2	> >

- 2. Click the Enable toggle for the template you wish to enable. WhizAI confirms the action and displays a confirmation message that says, 'Are you sure you want to enable this template.'
- 3. Click Confirm. A message is displayed at the top-right of the screen which reads 'The template is updated successfully.'

Editing a KDA Template

- 1. Go to ExplAIn menu on the main toolbar > Key Drivers. You can see a list of existing templates.
- 2. Select the template you want to modify and click the Edit icon as shown in the following figure.

🖗 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0	
Workbench -	Key Drivers: Ten Data Model FAS - Automation	mplates *	(w)		(Analyze	+ Crei	ate new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled	
	TRxTemplate (im	TRx	and the hadre beyond in all	11/26/2024 11:19 AM	stationalitication	11/27/2024 14:39 PM		
	TRx new template	TRx	shantastanlagishinal	11/27/2024 14:37 PM	shortscendighting	11/27/2024 14:39 PM		1
	TRxGrowth_Auto	TRx Growth	stademation/technology.	11/27/2024 11:52 AM	stadorstoch/20040	11/27/2024 11:52 AM		
	TRxTemplate (im	TRx	and the hadre beyond as	11/25/2024 16:34 PM	antials halo bijorito at	11/25/2024 16:34 PM		
	TRxTemplate	TRx	antik haloganta a	11/12/2024 11:28 AM	which hadro (perfect of	11/25/2024 16:19 PM		
	TRx_Automation	TRx	KINA NANDURINI K	11/20/2024 13:03 PM		11/25/2024 16:18 PM		
	Average1	TRx Average	unin helioperis d	11/22/2024 14:59 PM	a hat fall gords at	11/22/2024 14:59 PM		
	Copy1 (imported	TRx	10107-04-08-070-0	11/20/2024 15:47 PM	and the ball of period of	11/20/2024 15:47 PM		
	Thirteenslate // Select all	the Seport		44/00/0004 45-47 044	Page size: •	14.00.0004.45.47.044	< Page 1 from	2 > >1

3. Edit the required parameters and then click Save.

約 whiz.ai	Explorer Pinboards Alerts Explain Admin		0		5
Workbench -	Key Drivers Edit Template				
Anomalies	General Advanced				
Key Drivers	Metric ①	Factors ()			
Knowledge Graph	Data model				Add +
	FAS - Automation	Dimensions	_	_	
	Data model containing the target metric.	Customer X Customer Tier X Product X Product Deci	e X	Region	×
	TRx ~	Target Status ×			
	Metric to be used for the analysis.				
	Template				
	TRx new template				
		L ₂			
		Cancel Save As New Ten	nplate	Sav	re

4. WhizAI confirms whether you want to save the changes.

Х

Are you sure you want to save the changes?



5. Click Yes to save the template.

Save As New Template option

1. Click Save As New Template to open the Save As New Template pop-up window.

 Key Drivers Key Driv	🎉 whiz.ai	Explorer Pinboards Alerts Explain Admin	0		SE
Automatics Key Drivers Knowledge Graph Factors Factors Factors Cata model containing the target metric. Metric Metric Tools Metric to be used for the analysis. Texcirowth_Automation_Template	Workbench -	Key Drivers Edit Template			
	Anomalies KeyDrivers Knowledge Graph	General Advanced Metric O Data model FAS - Automation Data model containing the target metric. Metric Tax Growth Metric to be used for the analysis. Tendate TaxGrowth_Automation_Template		D	Add +

2. Enter the Template Name, change the Enabled flag settings (if required), and click Save to save the new template.

🥼 whiz.ai	Explorer Pinboards Alerts Explai	n Admin		0	4	SE
Workbench -	← Key Drivers Edit Template	Save As New Template	×			
Workbench – Anomalies Key Drivers Knowledge Graph	General Advanced Metric ① Data model FAS - Automation Data model containing the target metric. Metric Data Tax Growth Metric too bused for the analysis. TaxGrowth_Automation_Template	Save As New Template Template Name TRx Growth new template Enabled Metric Growth Factors Igree Group City Decile Group District Advanced settings	City X Decke Group X District X		~~	dd +
		Cancel Save	Cancel Save As New Ter	nplate	Save	

Deleting a KDA Template

- 1. Go to ExplAIn menu on the main toolbar > Key Drivers. You can see a list of existing templates.
- 2. Select the template you want to delete and click the delete icon as shown in the following figure. WhizAI confirms whether you want to delete the template.

🖗 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0	
Workbench -	Key Drivers: Ten Data Model FAS - Automation	mplates	*		(Analyze	+ Crea	ate new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at	Enabled	
	TRxTemplate (im	TRx	and talk hadly bijes his of	11/26/2024 11:19 AM	desertane webs@white.al	11/27/2024 14:39 PM		
	TRx new template	TRx	domain and right in a	11/27/2024 14:37 PM	singles with patient	11/27/2024 14:39 PM		1
	TRxGrowth_Auto	TRx Growth	Anderstein Aubentic.	11/27/2024 11:52 AM	viantorration had specific	11/27/2024 11:52 AM		
	TRxTemplate (im	TRx	action hody bisected of	11/25/2024 16:34 PM	annesses lanets a	11/25/2024 16:34 PM		
	TRxTemplate	TRx	and the function of the last of	11/12/2024 11:28 AM	anhish-builte@subleut	11/25/2024 16:19 PM		
	TRx_Automation	TRx	and the ball of particular	11/20/2024 13:03 PM	while during shires	11/25/2024 16:18 PM		
	Average1	TRx Average	antist holospatic of	11/22/2024 14:59 PM	utilizationalical	11/22/2024 14:59 PM		
	Copy1 (imported	TRx	action trademoches an	11/20/2024 15:47 PM	whitehological	11/20/2024 15:47 PM		
	TDuTasulata fim	TR	which had a first of the second	44/00/0004 45-47 064	California de California de California	44/00/000446-87.084		
	Select all	🕹 Import 🖾 Export			Page size: 💌	1 To 10 from 12 IC	< Page 1 from :	2 > >1

3. Click Delete.

	×
Are you	sure?
Do you want to delete the temp	late? This cannot be undone.
Cancel	Delete

Using KDA Templates

The system allows only one template to be enabled per metric. This enabled template is used during key driver analysis (PoP/YoY/selected period) triggered by the user from a workspace response. In the case of computed metrics, if a specific template is not created then the system picks up the enabled template of the corresponding base metric.

These templates (enabled or disabled) are also utilized when you perform an ad-hoc analysis from the workbench. In this case, the system auto populates settings from the enabled template as soon as you select a metric from the drop-down.

Optionally, you can follow these steps to change the template to get the required settings: From the Explain on the main toolbar > Key Drivers: Templates, you can switch between different templates that are associated with a particular metric.

For example, if Template A and Template B are associated with the TRx metric, then from this field you can choose any of the above-mentioned templates.

The name column is auto populated with the name of the template associated with the selected metric which is enabled from the Key Drivers: Templates panel.

Vorkbench -	Key Drivers: Ten	nplates					
riomalies	Data Model FAS - Automation	w Metric	w		(Analyze	+ Create ne
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at \downarrow	Enabled
	TRxTemplate (im	TRx	100.00000.0	11/26/2024 11:19 AM	Particularity	11/27/2024 14:39 PM	
	TRx new template	TRx	the Constant of the A	11/27/2024 14:37 PM	Prefactorial delication of the second desired of the second desired desired of the second desired desi	11/27/2024 14:39 PM	
	TRxGrowth_Auto	TRx Growth		11/27/2024 11:52 AM	of adversive heighting,	11/27/2024 11:52 AM	
	TRxTemplate (im	TRx	antisk take (dowler, al	11/25/2024 16:34 PM	anonal coards	11/25/2024 16:34 PM	
	TRxTemplate	TRx	which had country as	11/12/2024 11:28 AM	and the second s	11/25/2024 16:19 PM	
	TRx_Automation	TRx	-	11/20/2024 13:03 PM	an constant of	11/25/2024 16:18 PM	
	Average1	TRx Average	and desperad	11/22/2024 14:59 PM	ammahiganca	11/22/2024 14:59 PM	
	Copy1 (imported	TRx	-	11/20/2024 15:47 PM	anteringencia	11/20/2024 15:47 PM	
	ThuTeenlate flat	TD.,		44/00/0004 45-47 044		44/00/0004 45-47 084	

Identifying Key Drivers

When it comes to tracking the impact of significant contributors, a crucial aspect is identifying the key drivers. This is where Key Driver Analysis (KDA) comes into play.

With WhizAI you can perform KDA from:

- ExplAIn Workbench
- Pinboards
- Explorer response card

WhizAI supports KDA for:

- Computed metrics
- Non-aggregable metrics

KDA from ExplAIn Workbench

- 1. From WhizAI Explorer, click on ExplAIn on the main toolbar. WhizAI opens the ExplAIn Workbench and by default, the Anomalies module opens.
- 2. Click Key Drivers module > Analyze button and fill in details in the General and Advanced tabs.
- Metric: select the data Model, Metric, and context to analyze. For example, in the below image, Field Analytics is selected as the Data Model, TRx is selected as Metric, and Period over period change is selected as context to analyze.
- Factors: add the factors to be used for potential key driver analysis
- Filter: Add period of analysis: For example, the last 2 months as shown in the figure below

Note! When a template is enabled, its factors are pre-populated. Although you have the option to modify these factors as needed.

🏟 whiz.ai	Explorer Pinboards Alerts Explain Admin	Ø 4 5
🔛 Workbench –	- Key Drivers Analyze	
Anomalies	General Advanced	
Key Drivers Knowledge Graph	Metric ① Data model FAS - Automation Data model containing the target metric. Data model containing the target metric. Metric TRx TRx TRx new template Context to Analyze Period cover period change	Edit 🗸
		Click here to analyze the key factors Cancel

3. Click Analyze. You can see the top driving factors in your data.

whiz.ai	Explorer Pinboards Alerts Explain Admin		0 4 5				
Workbench -	Key Drivers Analyze		17 7214				
Key Drivers Knowledge Graph	Explifin change in TRx in February 26 2022 to April 29 2022 as compared to January 1 2022 to February 25 2022 Key Insights - It was found that change in NRx contributes 97.02% of the TRx changes. This impact can be either positive or negative on TRx. The TRx for the Customer Tier Tier 1 is 7.12M for the period Feb 26 2022 - Apr 29 2022, it has grew by 775.79K as compared to Jan 01 2022 - Feb 25 2022, contributing 36.2 growth in the TRx.						
	Causal Factors Explanation	Key Contributors	Statistics				
	without considering the influence of higher-level factors.	Top 10 Outperformers All (10) Combination Customer Tier : Tier 1	Flat View Abs Diff % Diff 775.79K 12.24				
	NRx 97.02%	Target Status : Target Customer Tier : Tier 1	457.10K 13.60				
	NBRx	Region : Mid-Atlantic	376.55K 15.28				
	Others	Customer Tier : Tier 1 Product : Arobi	249.61K 12.80				
		Customer Tier : Tier 1 Product : Trexine	237.16K 13.34				
	Note: The percentages shown may not add up to 100% since the Impact of some drivers could not be determined conclusively.	Customer Tier : Tier 4 Customer Tier : Tier 1 Product : Plabenil	224.49K 14.17 : 210.80K 12.20				

KDA from Pinboards

WhizAI provides detailed and advanced analysis of the key contributors going down to specific intersections. You can right-click any data point in the generated response and perform period over period (PoP) and year over year (YoY) Key Driver Analysis (KDA). By doing so, you can analyze the combined impact of two or more dimensions that caused the observed change. Consider a few examples to understand the KDA of PoP and YoY via workspace cards:

Suppose you are a state manager for a particular state. The card on your product performance dashboard shows a significant decline in sales quarter over quarter. You want to find out the top contributors to the decline.
whiz.ai Explorer Pinboard	s Alerts Explain Admin					0		5
My Product Dashboard ∽ ☆ Add Filters +						Hide Filters	(i)	:
Growth TRx 2022-01-01-05-06 TRx Growth	TRx [PoP] 2022-01-0105-06/2021-01-0205-07 TRx	Top Regions by TRx, 2022-01-01 - 05-06 TR	NRx x, NRx		Top Territories b 2022-01-01 05-06	y TRx, NRx TRx, NRx		
		Region	TRx ↓	NRx	Territory	TRx ↓	NRx	
		1 Mid-Atlantic	5.58M	5.47M	1 Springfield	489.43K	490.83	к
		2 Mid-Central	5.50M	5.41M	2 Columbia	453.56K	459.37	к
	05 0 (1 4	3 West	5.00M	4.92M	3 Charleston	359.56K	350.71	к
-0.09%	35.26M -0.09% (-30.33K)	4 Midwest	4.96M	4.88M	4 Red Bank	313.79K	314.17	к
		5 Southeast	4.73M	4.66M	5 Albany	292.21K	293.58	к
		6 Southwest	4.33M	4.25M	6 Oklahoma City	268.76K	265.38	к
		7 Northeast	3.93M	3.90M	7 Rockford	256.97K	249.57	к
		Total	35.26M	34.72M	8 Clermont	255.82K	247.24	к
					9 St Louis Metro	East 251.77K	241.91	к
2022-01-01 - 05-06 TRx					10 Portland	250.73K	236.05	к
2.1M					11 New Orleans	242.29K	235.46	к
214			< >		12 Kalamazoo	240.81K	236.13	к
₫ 19M					13 Sarasota	239.55K	234.22	к
1.8M Declining tree	nd				14 Utah	239.49K	237.17	к
1.714		to so so so	20 2	a Sa	15 New Haven	238.50K	230.73	к
Charlos, Brand, 20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	an are and a substantial and a substantial and a	Dr. Butter Dr. Ortor Dr. Ortor Dr.	-bhat BL -Share	SO Hat Die	Total	35.26M	34.72M	4

Follow the steps to find the explanation for this decline:

1. On the trendline, right-click the data point. The Period Over Period and Year Over Year options are displayed.

whiz.ai Explorer Pinb	oards Alerts Explain Admin						0	
My Product Dashboard ~	<u>۵</u>						Hide Filters	()
Growth TRx 2022-01-01 – 05-06 TRx Growth	TRx [PoP] 2022-01-01 - 05-06 / 2021-01-02 - 05-07 TRx	Top Regions by TRx, 2022-01-01 - 05-06 TR	NRx bx, NRx		Tc 20	p Territories by TRx 22-01-01 - 05-06 TRx,1	, NRx NRx	
		Region	TRx ψ	NRx		Territory	TRx ↓	NRx
		1 Mid-Atlantic	5.58M	5.47M	1	Springfield	489.43K	490.83
		2 Mid-Central	5.50M	5.41M	2	Columbia	453.56K	459.37
	25.2414	3 West	5.00M	4.92M	з	Charleston	359.56K	350.71
-0.09%	35.26M	4 Midwest	4.96M	4.88M	4	Red Bank	313.79K	314.17
	a -0.09% (-30.33K)	5 Southeast	4.73M	4.66M	5	Albany	292.21K	293.58
		6 Southwest	4.33M	4.25M	6	Oklahoma City	268.76K	265.38
		7 Northeast	3.93M	3.90M	7	Rockford	256.97K	249.57
		IOLAI	33.20M	34.72M	8	Clermont	255.82K	247.24
TRx [Weekly]					9	St Louis Metro East	251.77K	241.91
2022-01-01-05-06 TRx					10	Portland	250.73K	236.05
2.1M	Period-over-period				11	New Orleans	242.29K	235.46
24	Year-over-year				12	Kalamazoo	240.81K	236.13
É 1944 Create Alert					13	Sarasota	239.55K	234.22
184 💞 🚺 14 Utah						Utah	239.49K	237.17
1.700	we the we	or water water water	AND AND	the state	15	New Haven	238.50K	230.73
10-1 10.1 1010 1010 100 P	- STAT STAT STATE STATE STATE STATES	F WAY WAY WAY	10 V 10 10	WM TP				



2. Click Period Over Period or Year Over Year options, as required. You see a pop-up at the bottom of the window.

whiz.ai Explorer Pinboard	Alerts Explain Admin					0	9 s
My Product Dashboard ∽ ☆ Recent Add Filters						Hide Filters	i :
Growth TRx 2022-01-01 – 05-06 TRx Growth	TRx [PoP] 2022-01-01 - 05-06/2021-01-02 - 05-07 TRx	Top Regions by TRx, 2022-01-01 - 05-06 TR	NRx bx, NRx		Top Territories by TR 2022-01-01 05-06 TR	x, NRx c, NRx	
		Region	TRx ↓	NRx	Territory	TRx ↓	NRx
		1 Mid-Atlantic	5.58M	5.47M	1 Springfield	489.43K	490.83K
				5.41M	2 Columbia	453.56K	459.37K
		3 West	5.00M	4.92M	3 Charleston	359.56K	350.71K
-0.09%	35.26M -0.09% (-30.33K)	4 Midwest	4.96M	4.88M	4 Red Bank	313.79K	314.17K
		5 Southeast	4.73M	4.66M	5 Albany	292.21K	293.58K
		6 Southwest	4.33M	4.25M	6 Oklahoma City	268.76K	265.38K
		7 Northeast	3.93M	3.90M	7 Rockford	256.97K	249.57K
		Total	35.26M	34.72M	8 Clermont	255.82K	247.24K
					9 St Louis Metro East	251.77K	241.91K
TRx [Weekly] 2022-01-01-05-06 TRx					10 Portland	250.73K	236.05K
21M 21M 21M 15M 15M 15M 15M 15M 15M 15M 1	and Shart Shit	Expline cham Scope: 2022-01 Results are av Sume from the notifications a	ge in TRx 29 – 02-04 ailable. ccess the rea.	en Analysis			

3. Click the Open Analysis button. The result for the period-over-period analysis opens in a new tab. In this example, WhizAI compares the data from 19th February 2022 to February 25th 2022, as compared to data from 12th February 2022 to February 18th 2022 to figure out what is different. It looks at the impact of different dimensions combined to see what might be contributing to the change.

whiz.ai Explorer Pinboards Alerts Explain Admin		0 4
Explitin change in TRx in January 29 2022 to February 4 2022 as compared to January 22 2022 to Janu	ary 28 2022	1.81M
 It was found that change in NRx contributes 98.17% of the TRx changes. This impact can be either positive or negati The TRx for the Customer Tier Tier 2 is 510.86K for the period Jan 29 2022 - Feb 04 2022, it has declined by -102.89 	re on TRx. (as compared to Jan 22 2022 - Jan 28 2022, contributing 45.52% to t	he total decline in the TRx.
Causal Factors	Explanation Key Contributors	Statistics
The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors.	→ Top 10 + Underperformers	All * Flat View *
	< (10) Combination	Abs Diff ↑ % Diff
	Region: Mid-Atlantic	-102.80K -16.75
	Region : Mid-Atlantic	-91.20K -25.98
NRx 98.17% → (-225.84k)	Product : Plabenil	-89.87K -15.73
NBRx	Target Status : Target Customer Tier : Tie	r 2 -72.53K -21.27
	Target Status : Non-Target Customer Tie	r: Tier 1 -58.22K -14.73
Others	Target Status : Non-Target Region : Mid-	Atlantic -57.46K -32.74
	Customer Tier : Tier 1 Product : Plabenil	-55.36K -22.01
	Product : Plabenil Region : Mid-Atlantic	-47.58K -46.47
Note: The percentages shown may not add up to 100% since the impact of some drivers could not be determined conclusively.	The second	45.498 -14.04

4. You can further drill down the combination types. For example, you can drill down Product: Arobi and Customer Type: Practitioner to know which customers and products contributed to the decline.

TRx Change Contributors - Top 10 by Customer Tier, Product [PoP] Image: Date: 2022-05-06 Period: 2022-01-29 - 2022-01-28 Metric: TRx							
The TRx for the Customer Tier Tier 2 an decline in the TRx.	The TRx for the Customer Tier Tier 2 and Product Plabenil is 140.99K for the period Jan 29 2022 - Feb 04 2022. it has declined by -30.79K as compared to Jan 22 2022 - Jan 28 2022. contributing 13.63% to the total decline in the TRx.						
Customer Tier	Product	2022-01-29 - 2022-02-04	Prior Week	Abs Diff	% Diff		
Tier 1	Plabenil	196.13K	251.49K	-55.36K	-22.01		
Tier 2	Plabenil	140.99K	171.77K	-30.79K	-17.92		
Tier 2	Trexine	133.17K	158.97K	-25.80K	-16.23		
Tier 2	Arobi	165.53K	190.39K	-24.86K	-13.06		
Tier 3	Emarun	24.03K	25.52K	-1.49К	-5.84		
Tier 1	Arobi	233.58K	234.66K	-1.08K	-0.46		
Tier 4	Trexine	61.40K	61.64K	-239.16	-0.39		
Tier 1	Ofasan	61.67K	60.52K	1.15K	1.90		
Tier 1	Emarun	54.65K	52.24K	2.41K	4.61		
Tier 3	Plabenil	99.75K	95.94K	3.81K	3.97		
Total	÷	1.81M	2.04M	-225.84K	-11.10		
				4	며 Bridge # Variance		

- 5. Click X to close the window. WhizAI navigates you back to the list of contributors.
- 6. From the top-right corner, click the Statistics icon (as shown in the following figure) to view the statistical information about the KDA analysis.

Whiz.ai Explorer Pinboards Alerts Explain Admin			l)	0 4	s
Explinin change in TRx in January 29 2022 to February 4 2022 as compared to January 22 2022 to January 28 2022			e	1.81M	1
Key Insights - It was found that change in NRx contributes 98.17% of the TRx changes. This impact can be either positive or negative on TRx. The TRx for the Customer Tier Tier 2 is 510.86K for the period Jan 29 2022 - Feb 04 2022, it has declined by -102.8K as compared to Jan 22 2022 - Jac	n 28 2022. contributing 45.	52% to the tota	al decline in the TR	x.	
Key Contributors				Statistic	5
All (34) All All All Flat View (34) Combination Customer (ke); (ke) (Product: An out [Region: Mile-Centum	2022-01- 29 - 2022- 02-04 3 L 23 D	Prior Week	Abs Diff &	% Diff ~6.7.74	
Product: Ofasan	144.70K	158.08K	-13.38K	-8.46	
Customer Tier : Tier 1 Product : Plabenll Region : Mid-Central	24.74K	38.47K	-13.73K	-35.69	
Customer Tier : Tier 3	362.41K	383.45K	-21.04K	-5.49	
Customer Tier : Tier 1 Product : Plabenil Region : Mid-Atlantic	21.67K	45.91K	-24.24K	-52.80	Ĩ
Customer Tier : Tier 2 Product : Trexine	133.17K	158.97K	-25.80K	-16.23	l
Customer Tier : Tier 2 Product : Plabenil	140.99K	171.77K	-30.79K	-17.92	1
Target Status : Target Region : Mid-Atlantic	141.86K	175.60K	-33.74K	-19.21	
Customer Tier : Tier 2 Region : Mid-Atlantic	73.40K	108.41K	-35.01K	-32.29	
CALL TO TRACK AND AND CALL	07.0497	101.001	97.000	00.41	

7. From the Statistics window, you can view the Z-score threshold criteria that are applied based on the cardinality. For each of the combinations, you can view the cardinality identified by the system and the Z-score calculated by the system along with the standard deviation and average contribution of the system.

	Sta	tistics			
Z-Score Threshold Criteria					
Cardinality Lower Bound	Cardinality Upper Bound		Z-Score Threshold		
1.00	30.00		1.00		
31.00	250.00		2.00		
251.00	500.00		5.00		₽.
501.00	2,000.00		7.00		
2,001.00			10.00		
Algorithm Parameters					
Dimension		Cardinality		Z-Score Threshold	
Customer Tier		4.00		1.00	
Customer Tier, Product Name		20.00		1.00	
Customer Tier, Product Name, Region		160.00		2.00	
Customer Tier,Region		32.00		2.00	
Customer Tier,Target Status		8.00		1.00	
Product Name		5.00		1.00	
Product Name, Region		40.00		2.00	
Product Name,Target Status		10.00		1.00	
					Close

8. Click Close.

Note! You can create a template from the ExplAIn Workbench.

KDA from Response in Explorer

From a response, you have the option to conduct period-over-period (POP) and year-over-year (YOY) analyses. Additionally, you can also perform selected period analysis (labeled as Key Drivers analysis) from the ExplAIn menu of the response view.

Period Over Period (POP) and Year Over Year (YOY) analysis:



For example, when you ask, 'Show me TRx weekly trend,' then you receive a response as shown in the following figure:



1. On the trendline, hover the cursor on any of the data points and right-click to select Period Over Period or Year Over Year options.



You can see a pop-up at the bottom right of the window as shown in the following figure:



2. Click Open Analysis, the result for the Period over-period analysis opens in a new tab as shown in the following figure:

whiz.ai Explorer Pinboards Alerts Explain Admin	Ø 4
Explinin change in TRx in January 29 2022 to February 4 2022 as compared to January 22 2022 to January 28 2022 Key Insights - • It was found that change in NRx contributes 98.21% of the TRx changes. This impact can be either positive or negative on TRx.	1.81M 4-11.100 (225.1418) *
The TRx for the Customer Tier Tier 2 is 510.86K for the period Jan 29 2022 - Feb 04 2022, it has declined by -102.8K as compared to a second sec	to Jan 22 2022 - Jan 28 2022, contributing 45.52% to the total decline in the TRx.
Causal Factors Explanation	Key Contributors Statistic
The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors.	Top 10 * Underperformers * All * Flat View *
	< (10) Combination Abs Diff ↑ % Diff
	Customer Tier : Tier 2 -102.80K -16.75
	Region : Mid-Atlantic -91.20K -25.98
NRx 9821%	Product: Plabenil -89.87K -15.73
NBRx	Target Status : Target Customer Tier : Tier 2 -72.53K -21.27
	Target Status : Non-Target Customer Tier : Tier 1 -58.22K -14.73
Others	Target Status : Non-Target Region : Mid-Atlantic -57.46K -32.74
	Customer Tier : Tier 1 Product : Plabenii -55.36K -22.01
	Product: Plabenil Region : Mid-Atlantic -47.58K -46.47
Note: The percentages shown may not add up to 100% since the impact of some drivers could not be determined conclusively.	

Also, you can access the result from the notification area.

Results are available a minute ago	Open Analysis
a minute ago	
Expl ^M n change in TRx	
scope: 2022-01-29 — 02-04	
Results are available	Open Analysis
17 minutes ago	
Key Driver Analysis on TRx	
Scope: 2022-01-01 - 05-06	
Results are available	Open Analysis
an hour ago	
	Explimn change in TRx Scope: 2022-01-29 – 02-04 Results are available 17 minutes ago Key Driver Analysis on TRx Scope: 2022-01-01 – 05-06 Results are available an hour ago

If you want to add more factors or delete the existing key driving factors to be analyzed, you can do that from the ExplAIn Workbench.

Follow the steps below to navigate to ExplAIn Workbench for Key Driver Analysis (KDA) analysis through WhizAI response:

- 1. Ask a query to WhizAI. For example, if you ask, 'Show me what is the TRx trend in the southwest region for Plabenil product for past 6 months', then, you can see the ExplAIn option in the response.
- 2. Click the ExplAIn option, and the window opens, as shown in the following figure.

C

- 3. Click Workbench . You are navigated to the ExplAInWorkbench, by default, the Anomalies module opens.
- 4. Click the Key Drivers > Analyze button. For example, you can select the Metric TRx and select the Template new template.

Note! Based on the selected metric and template, a recommended list of factors is pre-populated in the Key Drivers module. You can update the list in this section if required.

🎎 whiz.ai	Explorer Pinboards Alerts Explain Admin	0	2 ∕s
Workbench -	Key Drivers Analyze		
Anomalies	General Advanced		
Key Drivers	Metric ① Factors ③ Click on + to add a factor Filter ④		
Knowledge Graph	Data model Add + FAS - Automation Dimensions Period		Edit 🗶
	Data model containing the target metric. Customer X Customer Tier X Product X Last 6 months		\sim
	TRX Region X Target Status X Click on x to delete a factor		
	Metric to be used for the analysis. Template		
	TRx new template v		
	Context to Availyze Period over period change		
		Cancel	Analyze

9. Click Analyze. You can see the top driving factors for the metric under **Causal Factors** and **Key Contributorss.**

🕼 whiz.a	a Explorer Pinboards Alerts Explain Admin	3 🔮 s
Ð	← Key Drivers Analyze	
	Explinin change in TRx in October 30 2021 to April 29 2022 as compared to May 1 2021 to October 2	: 29 2021 51.23M ↓ a86%(454.290)
	Key Insights - It was found that change in NRx contributes 86.93% of the TRx changes. This impact can be either positive or neg The TRx for the Region Southwest is 6.25M for the period Oct 30 2021 - Apr 29 2022. It has declined by -274.660 TRx.	ative on TRx. K as compared to May 01 2021 - Oct 29 2021. contributing 60.46% to the total decline in the
	Causal Factors Explanatio	n Key Contributors Statistics
	The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors.	Top 10 • Underperformers • All • Flat View •
	NRx 86.93% ● TRx ↓ (454.29K)	(10) Combination Abs Diff ↑ % Diff
	NBRx	Customer Tier : Tier 2 -230.15K -1.48
	Others 1120	Target Status : Target Product : Ofasan ier : Tier 2 -158.65K -2.16
	Note: The percentages shown may not add up to 100% since the impact of some drivers could not be determined conclusively.	Target Status : Target Product : Ofasan : -157.64K -7.23
		Target Status: Non-Target LRegion : Southwest -142.00K -4.59

From response having time comparison

You can perform key driver contribution analysis on absolute change and percentage (%) change values for time comparison queries. If there is an increase in the absolute change value or percentage change (%), the ExplAIn option shows Explain the Increase. Whereas, if there is a decrease in the absolute change or percentage (%) change, then the ExplAIn option shows Explain the Decrease.

S	Scot Shov	t Wednesday Nov 27, w me PoP of Trx by pr	2024 16:13 roduct for July 2021			
Ø# \	whia	z.ai Wednesday Nov 2	7,202416:13			
	Tc Ju	Products by TR	2x		Explíin 4	$i \not\prec \Leftrightarrow \equiv$
	E	🛱 Data Controls				Ø Search
	:	Product	Jul 2021 vs Prior Month			
		Froduct	Jul 2021	Prior Month	Abs Chg ↓	% Chg [%]
	1	Trexine	2.24M	2.20M	+36.59K	+1.66%
	2	Ofasan	583.29K	551.85K	+31.43K	+5.70%
	3	Emarun	546.65K	573.08K	-26.43K	-4.61%
	4	Plabenil	2.09M	2.13M	-36.99К	-1.74%
	5	Arobi	2.46M	2.50M	-37.50K	-1.50%
		Total	7.92M	7.96M	-32.90K	-0.41%

For more information refer to the following examples:

Example query 1: When you ask, "Show me PoP of Trx by product for July 2021", you see the TRx comparison between June 2021 and July 2021 for different products.

Columns 👻				Ø Search
Product	TRx			
Floduct	Curr	Prev	Abs Chg $ \downarrow $	% Chg [%]
Ofasan	583,285.83	712,449.33	-129,163.49	-18.13%
Emarun	546,654.14	725,055.49	-178,401.36	-24.61%
Plabenil	2,093,239.11	2,639,158.90	-545,919.79	-20.69%
Trexine	2,237,871.98	2,787,460.63	-549,588.65	-19.72%
Arobi	2,461,984.01	3,111,221.12	-649,237.10	-20.87%
Total	7,923,035.07	9,975,345.47	-2,052,310.39	-20,57%

To perform the KDA on this response:

1. Right click the data point -545.92 K > click the $\frac{1}{2}$ ellipse icon > Explain Decrease.

Data Controls				© Sear
Deadurat	Jul 2021 vs Prior Month			
Product	Jul 2021	Prior Month	Abs Chg 🕹	% Chg [%]
Trexine	2,237,871.98	2,201,284.08	+36,587.90	+1.66%
2 Ofasan	583,285.83	551,854.29	+31,431.54	+5.70%
3 Emarun	546,654.14	573,082.34	-26,428.21	-4.61%
Plabenil	2,093,239.11	2,130,231.56	-36,992.45 Explain Decreas	ie -1.74%
Arobi	2,461,984.01	2,499,487.06	-37,503.05 Create Alert	-1.50%
Total	7,923,035.07	7,955,939.34	-32,904.27	-0.41%

2. When the analysis is complete, you see a notification at the bottom-right side of the screen.

5		Jul 2021 vs Prior Month	Jul 2021 vs Prior Month							
-	Product	Jul 2021	Prior Month	Abs Chg 🔸	% Chg [%]					
	1. Trexine	2,237,871.98	2,201,284.08	+36,587.90	+1,66%					
	9 Ofasan	583,285.83	551,854.29	+31,431.54	+5.70%					
	9 Emarun	546,654.14	573,082.34	-26,428.21	-4.61%					
	4 Plabenil	2,093,239.11	2,130,231.56	-36,992.45	-1.74%					
	1 Arobi	2,461,984.01	2,499,487.06	-37,503.05	-1.50%					
	Total	7,923,035.07	7,955,939.34	-32,904,27	-0.41%					
	Data: TBy as of 2022-08-05				Explifin change in TRx Scope: 2021 07 01 – 07-0 Results are available.	ti Emarun				

3. Click Open Analysis. The result for period-over-period analysis opens in a new tab. You see the significant contribution analysis for that data point.

👺 Whiz.ai Explorer Pinboards Alerts Explain Admin			8	0 4	s
Explifin change in TRx for the Emarun product in July 1 2021 to July 31 2021 as compared to June 1 20 Key Insights - It was found that change in NRx contributes 58.01% of the TRx changes. This impact can be either positive or negation changes. This impact can be either positive or negation on TRx. The TRx for the Region Southeast is 63.46K for the period Jul 2021. it has declined by -17.45K as compared to June	021 to June 30 2021 ive on TRx. During the sar 2021, contributing 66.05	ne period, It was found that change in NBRx contribute & to the total decline in the TRx.	s 10.93% of the	546.6	5K 43K)
Causal Factors The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher level factors. NRx 58.013 NBRx 10.93% Others 31.07%	Explanation	Key Contributors All (7) * Underperformers * All (7) Combination Region : Southeast Target Status : Non-Target Customer Tier : Tier 3 Customer Tier : Tier 3 Target Status : Non-Target Region : West Target Status : Non-Target Region : Southeast Target Status : Non-Target Region : Southeast Target Status : Non-Target Region : Southeast	 Fac Vi Abs Diff 17.45K 17.45K 10.71K 11.01K 11.16K 8.74K 	Star * DHf -21.57 -28.37 -13.41 -37.14 -37.14 -9.53 -21.35 -21.35	tistics
(4)					

Support for Computed Metrics

WhizAI supports the key driver analysis on selected period, period over period, and year over year on computed or derived metrics. If you right-click any data point from the visualization of computed metrics, you can perform the period over period (PoP) and year over year (YoY) Key Driver Analysis (KDA).

My Product Dashboa			plain Adn	nin			0				
Filters +	ard ∽ ☆					Summarize This Board »	Hide Filters	i			
rowth TRx [PoP]	X :	Top Regions by TRx , 2022-01-01 = 05-06 178	NRx		TRx [PoP] 2022-01-01-05-06 / 2021-01-02-05-02 Rx	Top Territories by T	Rx, NRx				
		Region	TRx ↓	NRx		Territory	TRx ↓	NRx			
Growth TRx YTD: -0.09%		1 Mid-Atlantic	5.58M	5.47M		1 Springfield	489.43K	490.83	к		
Prior YTD: -2.25% Abs Chg: +2.17%		2 Mid-Central	5.50M	5.41M		2 Columbia	453.56K	459.37	к		
36 Crig: +30.1336		3 West	5.00M	4.92M		3 Charleston	359.56K	350.71	ĸ		
-0.09%	Evalain Increase	Explain Increase 4 Midwest 4.96M 4.88M 35.26M 5 Southeast 4.73M 4.66M > -0.09% (-30.33K)	4 Red Bank	313.79K	314.17	ĸ					
↗ +96.19% (+2.17%)	Explain Increase		≥ -0.09% (-30.33K)	5 Albany	292.21K	293.58	ĸ				
	Create Alert	Create Alert	Create Alert	6 Southwest	4.33M	4.25M	1	6 Oklahoma City	268.76K	265.38	к
		7 Northeast	3.93M	3.90M		7 Rockford	256.97K	249.57	ĸ		
		Total	35.26M	34.72M		8 Clermont	255.82K	247.24	ĸ		
						9 St Louis Metro East	251.77K	241.91	к		
tx [Weekly] 22-01-01 05-06 TRx						10 Portland	250.73K	236.05	к		
2.1M						11 New Orleans	242.29K	235.46	ĸ		
214			-	-		12 Kalamazoo	240.81K	236.13	ĸ		
1.914						13 Sarasota	239.55K	234.22	ĸ		
1.8M	¥					14 Utah	239.49K	237.17	к		
1.7M . In In .	9 a - 3 a - 3	a da da	8 A 8 A	2 a 2 a	So So So So So	15 New Haven	238.50K	230.73	ĸ		
- Linton 201 - Linton 18 201 - Sinton 2 201 - Linton	Burner all of the	2	the Dir Strate Dir s	Land Die Berning Tole	ENTRATO STRATE STRATE STRATE	Total	25 2454	24 724			

For example, consider Growth TRx (PoP) visualization pinned to the dashboard.

Follow the steps to perform the KDA on this response as follows:

1. From the above figure if you hover on value 298.1% (-35.28), you see the ellipse icon. Click the ellipse icon and then click Explain Decrease. You will see a pop-up at the bottom right of the window.

My	To Re	pp Regions by TRx, NRx ference Date: 2022-05-06 Period: 2022-01-01 - 2022-05-06 Metrics : TRx, N	Rx	Explifiln 4 i Shov	C = × Filters	ī
d Filter:	-	🛱 Data Controls		Q	Search	
		Region	TRx ↓	NRx		
rowth [*]	1	Mid-Atlantic	5,579,978.50	5,469,737.45800		
22-01-01	2	Mid-Central	5,502,699.06	5,414,233.99740		JRx
	3	West	4,998,216.63	4,920,422.46640		-90.83K
	4	Midwest	4,960,737.09	4,884,701.26250		59.37K
	5	Southeast	4,726,744.04	4,662,036.96360		50.71K
	6	Southwest	4,334,003.28	4,248,634.20990	>	14.17K
	7	Northeast	3,926,407.92	3,900,851.83100		93.58K
	8	South Central	1,231,693.83	1,214,889.22590		:65.38K
		Total	35,260,480.34	34,715,50		
		Show notes		# Table & Column 25	TRx 05-06 Mid-Att le. s the Op) Iantic en Analysis

2. Click Open Analysis. The result for the Period over period analysis opens in a new tab. In this example, WhizAI compares the data from Jan 1 2021 to 5th May 2021 as compared to February 1st 2021 to May 5th1 2022 to figure out what is different. It looks at the impact of different dimensions combined to see what might be contributing to the change. In this example, there are no significant contributors.

8) 2	whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin			6		la la	5
	Explíid n change	n TRx in January :	1 2022 to May ó	5 2022 as con	npared to Au	gust 28 2021 to D	Dec	ember 31 2021	•	35.2	2 6M 18.70K)	:
	Key Insights - • It was found that changes. This im	change in NRx contr pact can be either po	ributes 63.2% of ti sitive or negative	he TRx change: on TRx.	s. This impact c	an be either positive	veor	negative on TRs. During the same period, It was found that change in NBRx contributes 12.16%	of the TR	×	×	
	We could not find a	ny significant Contril	butor ×									
									-	₽)(•	
8	🕞 whiz.ai	Replorer	🖆 Pinbo	ards 🤇) Alerts	∭ Explain		& Admin	(i)	Help	1	5

Support for Non-aggregable Metric

WhizAl supports the Period over Period (PoP) or Year over Year (YoY) Key Driver Analysis (KDA) for multidimensional analysis on non-aggregable metrics like Market share, Growth etc. This functionality helps identify the key contributors that are driving significant changes in non-aggregable metrics.

Tip! Non-aggregable metric is a quantitative value that cannot be summed.

Note! To get the correct output, you must set aggregable = true, for non-aggregable metrics from the data modeler. For more information refer to the section Defining the metric type for the KDA contribution analysis.

By using the Z-Score method, the system aims to identify statistically significant market share changes, highlighting key contributors who have had a notable impact on the overall increase. This analysis provides valuable insights for decision-making and understanding the factors driving the market share growth without specifying individual contribution percentages.

Since the involved metrics are percentages and not aggregable, the system cannot calculate the '% contribution' of each significant contributor towards the total change. Consequently, the response will only display the PoP and YoY change information, omitting specific '% contribution' details.

Example query: TRx Market Share by Amard by Arobi



Follow the below steps for KDA PoP analysis:

1. As shown in the figure below, if you hover the cursor on the value against TRx Market Share, you see a vertical ellipses icon. Click the vertical ellipses icon and then click Period-over-period.

TRx Market Share 2021-07-03 – 07-30 TRx M	larket Share AMARD Arob	expli ^{Mn}	¢ i	\$ €	Ξ
TRx Market Share	31.07%		ì		
	Peri	iod-over-period			
	Yea	r-over-year			
Data: TRx Market Share as of 2022-05	5-06	ate Alert		#	th =

- 2. When the analysis is complete, you see a notification at the bottom-right side of the page. Click Open Analysis. The result for the period-over-period analysis opens in a new tab.
- 3. The Key Driver Analysis has multi-combination contributors with Abs Chg and % Chg values are displayed in a separate window.

Ex So Pe 2r	xplilin Period-over-period Change Analysis on TRx MarketShare : ope: 2022-01-01 – 05-01/2021-01-02 – 05-02 AMARD Arobi eriod-over-period TRx MarketShare for the Arobi product and AMARD market declined by -0.88% in the nd 2021 to May 2nd 2021.	period January 1st 2022	to May 1st 2022 as	compared to Januai	ry (1) -0	31.09
-	CONTRIBUTORS ()					Lili
((10) Combination	Current	Previous	Abs Chg	% Chg	
S	itate: Iowa Region: Mid-Atlantic :	-	100	-100	-100%	
SI	itate: Iowa Territory: Wilmington Region: Mid-Atlantic District: Raleigh	-	100	-100	-100%	Since it is a non-
S	itate: Alabama Region: Southeast Customer Type: Pharmacist	ors	100	-100	-100%	aggrega ble metric
S	itate: Indiana Region: Mid-Central Customer Type: Nurse	-	100	-100	-100%	there is no impact
SI	itate: Iowa Region: Mid-Atlantic Customer Type: Mid-Level Practitioner :	-	100	-100	-100%	column
SI	itate: Iowa Region: Mid-Atlantic District: Raleigh :	-	100	-100	-100%	

4. Click the Statistics icon. The Statistics page is displayed with Z-Score Threshold Criteria and Algorithm Parameters mentioned.

		Statistics			×
Z-Score Threshold Criteria					
Cardinality Lower Bound	Cardinality Upper Bo	und	Z-Score T	hreshold	
1.00	30.00		1.00		
31.00	250.00		2.00		
251.00	500.00		5.00		
501.00	2,000.00		7.00		
2,001.00			10.00		
Algorithm Parameters					
Dimension		Cardinality		Z-Score Threshold	
Region,District,State		202.00		2.00	
Region,District		80.00		2.00	
Region,District,State,Territory Name		464.00		5.00	
Region,Age Group,Customer Type		224.00		2.00	
State,Market Decile Group		150.00		2.00 Close	

					514							
1.04						14.29						
Contribution Analysis for Region And District And State Members												
Region	District	State	Current	Previous	% Chg	Abs Chg	Z-Score	X-Score	Normalise d Weight	Rank Score	Positive Contributo r Toward Delta	Significan t Member Flag
Mid-Central	Nashville	Texas	100.00		0.00	100.00	6.93	95.80	9,380.80	64,964.74	false	true
Mid-Atlantic	Raleigh	West Virginia	100.00		0.00	100.00	6.93	95.80	9,380.80	64,964.74	false	true
West	Seattle	Texas	60.96	0.00	0.00	60.96	4.19	58.40	3,438.94	14,419.68	false	true
West	Seattle	Kansas	35.71	10.07	254.55	25.63	1.72	24.56	579.30	996.95	false	false
West	Seattle	Louisiana	40.25	16.84	138.96	23.41	1.56	22.42	479.04	749.67	false	false
Mid-Atlantic	Raleigh	Indiana	100.00	77.02	29.83	22.98	1.54	22.01	460.88	707.47	false	false
Northeast	Hudson Valley	Massachusetts	60.25	39.27	53.40	20.97	1.39	20.09	380.41	530.51	false	false
Mid-Atlantic	Raleigh	Louisiana	28.43	11.80	140.94	16.63	1.09	15.93	232.80	253.98	false	false
Mid-Atlantic	Baltimore	New Jersey	49.93	33.98	46.93	15.95	1.04	15.28	212.74	221.87	false	false
												Close

Trigger Key Driver Analysis (KDA) from an NLQ

You can now use the natural language query interface to generate the output of KDA analysis.

For example, what is driving the TRx performance in the year 2021



You will receive this message until KDA runs in the background for the given scope.

Once the analysis is complete and the results are ready, you will receive the message that the results are available to access.



You can click Open Analysis from the response, notification pop-up at the bottom of the screen or from the bell notification area from the top-right corner of the window.

- Click Open Analysis to view the KDA report in a new tab.
- 14. Based on the intent, the system performs the following different types of analysis:
 - Selected period
 - Period over period
 - Year over year

Based on the intent of the query, the system performs Selected period analysis or PoP/YoY analysis.

Let us have a look at some additional scenarios:

• In case you have requested KDA using one of the below NLQs and if the required template is not available then you get an appropriate message in the workspace as a response to the question.

AB	Monday Nov 27, 2023 10:50 KDA on TRX for the year 2021		
	Whiz Monday Nov 27, 2023 10:50		
	Sorry, this query can not be answered because the Key Drivers feature is not enabled for ⁻	FRx.]
	Was this helpful?	Yes	No

"Sorry, this query cannot be answered because the Key Drivers feature is not enabled for <TRx>."

• In case you have requested KDA using one of the below NLQ and if KDA is not enabled on the model then you should get the following



Working with the KDA Result Screen

Toggle the opening of KDA results within the same browser tab

WhizAI now allows you to configure how you want to view KDA results. To display the KDA results in the same browser tab, follow the steps below:

- Go to Admin -> Content Manager-> Configurations to display the Configurations page.
- Disable the Global Configuration setting 'Open ExplAIn result on the new browser tab.'

	whiz.ai	Explorer Pinboards Alerts Explain Admin	0	4	5
(Å	Performance Monitor Dashboard	Configurations			
	User Logs Audit Logs	Application Data Model Reset		Save	
÷	User & Security	₽ open		Collaps	e all
	Data Modeler	Explain V			
1	Content Manager Branding	Open ExplAIn result on the new browser tab Tick to open the period-over-period and other ExplAin analysis results always on the new browser tab.			
	Configurations Service Configuration				
	Utilities				
8	NLP Workbench				

• Re-login and ask an analysis query on the explorer

S	Scott Thursday Nov 28, 2024 17:55 What is driving TRx performance in year 2022?
	whiz.ai Thursday Nov 28, 2024 17:55
	✓ Data has been analyzed. The findings from the period-over-period change analysis on TRx is available. Open Analysis 🗹
	Scope: 2022-01-01 - 12-30 / 2021-01-02 - 12-31
	Was this helpful? Yes No

• Click on Open Analysis. KDA results display the results in the same browser window.

()‡	whiz.ai Explorer Pinboards Alerts Explain Admin			0	4	5
•	Explinin change in TRx for the Plabenil product and Southwest region in January 1 2022 to May 6 202	22 as compared to Jar	nuary 2 2021 to December 31 2021	¥ -6	1.10 6.72%(-2.21	: M M)
	Key Insights - It was found that change in NRx contributes 72.05% of the TRx changes. This impact can be either positive or neg The TRx for the Target Status Target is 595.53K for the period Jan 01 2022 - May 06 2022, it has declined by -1.1	ative on TRx. 1M as compared to Jan (02 2021 - Dec 31 2021. contributing 50.19% to the total decline in the	TRx.		×
	Causal Factors	Explanation	Key Contributors		Statis	itics
	The impact percentage shows how each metric affects the outcome independently, without considering the influence of higher-level factors.		All (7) • Underperformers • All • Fla	t View	Ŧ	
			< (7) Combination Abs Diff 1	> %	Diff	
	NRx 72.05%		Target Status : Target -1.11M	4	65.09	
	TRx ↓ (-2.21M)		Customer Tier : Tier 1 -887.29K	-	66.74	
	NBRx		Target Status : Target Customer Tier : Tier 1 -453.66K	4	64.62	
			Target Status : Non-Target Customer Tier : Tier 1 -433.64K	4	69.12	
	Others 27.96%		Customer Tier : Tier 4 -221.14K	4	66.96	
			Target Status : Non-Target Customer Tier : Tier 4 -118.23K	-3	71.77	
		(₽) (₽)				

Tip! If the global configuration setting Open ExplAIn result on the new browser tab is enabled,' WhizAI opens the KDA results in the new browser tab.

Working with Cohorts - Anomalies and Key Driver Analysis

You can perform anomaly detection and key driver analysis using previously created cohorts. You can run a query with the cohort name directly on the explorer.

Details about Explain support with cohorts are as below:

- You can set anomaly detection through cards generated using cohorts.
- You can set an alert on cohort result conditions for anomaly detection with cohorts
- You can select a cohort as a filter criteria in the workbench analysis and run the anomaly detection from the workbench

Explain Analysis (Selected period/ PoP/YoY/Custom)

You can trigger Explain analysis (PoP, YoY, selected period) from a card generated using Cohort as shown in the figure below.

Cohort name is included in the title of the analysis and narratives.

Cohort based explain analysis remains static and is saved with the timestamp. The analysis will not change even when cohort members or conditions change.



You can set alert on cohort result condition for anomaly detection with cohorts as shown below.



Recipi			Delivery Method		dd Conditions
					cope
				For Period	or Metric
				Current week	TRx
					ilter By
				Cohorts	egion
			~ (+	Customer From West	West
Add Condition	+	Value Metric		Operator	Metric
	-	TRy (Experted Pange)	-	- Lower than	TPy
		Hot (Expected range)		Edwei unan	TRA .
Add	+	Value Metric. TRx (Expected Range)	Ť	Operator V Lower than	Metric TRx

Working with Cohorts - Anomalies and Key Driver Analysis

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- You can select a cohort as a filter criteria in the workbench analysis and run the anomaly detection from the workbench

Explain Analysis (Selected period/ PoP/YoY/Custom)

- 15. You can trigger Explain analysis (PoP, YoY, selected period) from a card generated using Cohort as shown in the figure below.
- 16. Cohort name is included in the title of the analysis and narratives.
- 17. Cohort based explain analysis remains static and is saved with the timestamp. The analysis will not change even when cohort members or conditions change.



18. You can set alert on cohort result condition for anomaly detection with cohorts as shown below.



AnomalyAlert_cohort			FAS - Automatio
dd Conditions		Delivery Method	Recipien
cope			
or Metric	For Period		
TRx	- Current week	\sim	
ilter By			
egion	Cohorts		
Mid-Atlantic	 CustomerCohort 	$\sim $ (+)	
Condition OScript			
Condition Script	Operator	Value Metric	+ Add Condition
Condition Script	Operator Cover than	Value Metric TRx (Expected Range)	+ Add Condition
Condition Script	Operator Lower than	Value Metric TRx (Expected Range)	+ Add Condition
Condition Script	Operator	Value Metric TRx (Expected Range)	+ Add Condition

Understanding ExplAIn Results screen

ExplAIn results screen provides details about PoP, YoY, and selected period analysis. It includes below details:

Explain icon is displayed on title bar.

PoP and YoY analysis text is displayed as by change in <Metric name> for <scope> for the <period1> as compared to <period2>.

Selected period analysis text is displayed as <Metric name> drivers for the <scope> for the <period>.

Impact is displayed in number and percentage format and is aligned to the right.

Key insights from the analysis

The analysis is further drilled down to Causal Factors and Key Contributors

Causal Graph Interface - Key Drivers Analysis

A State State Pinb	oards Alerts Explain Admin		Ø 4 5
Expline change in TRx in January 1 202	22 to May 6 2022 as compared to August 28 2021 to December	31 2021	: 35.26M (+ -1.81%(-648.70K)
It was found that change in Call Goal contr TRx changes. This impact can be either por The TRx for the Customer Tier Tier 2 is 10	ibutes 7.87% of the TRx changes. This impact can be either positive or ne sitive or negative on TRx. .53M for the period Jan 01 2022 - May 06 2022. it has declined by -386.1	gative on TRx. During the same period, It was found that change in Naive Volume 19K as compared to Aug 28 2021 - Dec 31 2021. contributing 59.53% to the tota	e contributes 3.22% of the 🔍
Causal Factors Naive Volume 44.96K 2021-12-04 - 2022-04-08/07-31 ↓ -17.54(-7.88K)	affects the outcome independently, without considering the influence	Explanation Key Contributors	Statistics Flat View + Abs Diff + % Diff
It was found that change in Naive Volume contributes 3.22% of the TRx changes. This impact can be either positive or negative on TRx. Lag : Naive Volume shifted back 28 days for	NRx 4.80%	Target Status : Non-Target Product : Ofasan Target Status : Non-Target Customer : William Sm	-2.53K -0.22 ti -17.62K -73.70
analysis Find Top Contributors	NBRx 758%	Customer Tier : Tier 2 Product : Arobi Region : S Customer Tier : Tier 1 Product : Ofasan Region :	or -50.00K -12.13 V -50.21K -29.60
Naive Volume 3.22%	Others 68,34%	Customer Tier : Tier 1 Product : Trexine Region :	N-51.91K -11.14
Note: The percentages shown may not add up to 3	UUD's since the impact of some drivers could not be determined conclusively.	E Customer Tier : Tier 2 Product : Trexine Region :	52.98K -11.72

Note! In causal analysis outcome, there may be instances where the total outcome percentages do not add up to 100% due to undetermined impacts from certain factors. When this happens, a note will be displayed to explain that the impact of some drivers cannot be determined conclusively.

Lag adjustment in causal analysis

You can now improve the accuracy of causal analysis by adding a lag duration between a driver and its impacting metric. This feature helps define the right data scope for each impacted node and derives a more precise impact percentage. As a domain expert, you can set this lag information when building the knowledge graph. The results will be reflected in the causal analysis with a clear explanation.

For example, if Call Volume impacts your sales with a 4 week lag, you can specify this in the knowledge graph. During the analysis, the system will use calls made 4 weeks ago to analyze its effect on current period sales. The tooltips and narrative texts will be updated to include this lag information and the relevant period.

Set lag duration in the knowledge graph:

1. Open an existing knowledge graph or create one by clicking on Explain->Knowledge Graph-> Select Data Model -> New Graph

🥡 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				0 4	5
Workbench – Anomalies Key Drivers	Knowledge Grap Select Data Model FAS - Automation Data Model	ph Name	Created By	Created At	Last Modified By	Last Modified At 🤳	New Graph Enabled	
Knowledge Graph	FAS - Automation	new_test	partments of	11/18/2024 12:14 PM	and comparison	11/29/2024 11:39 AM	•	Ō
	FAS - Automation	321	#1011001(1111.1	11/28/2024 16:06 PM	gardarijstika	11/28/2024 16:06 PM		
	FAS - Automation	Demo	antenakontuk	11/28/2024 15:10 PM	and taken to a	11/28/2024 15:13 PM		
	FAS - Automation	new_test_1	statulation in a	11/28/2024 12:32 PM	winterwice	11/28/2024 12:32 PM		
	FAS - Automation	TRx Average graph	double selected at	11/28/2024 11:52 AM	director policients of	11/28/2024 11:52 AM		
	FAS - Automation	IntrinsicTest_1	and the balle (build as	11/27/2024 17:26 PM	amenalogianus	11/27/2024 17:28 PM		
	Select all	🛎 Import 🏦 Export			Page size: 🔍	1 To 6 from 30 K	Page 1 from 5 > 3	ы

2. In the knowledge graph, click on the connecting line between two nodes to open the lag entry dialog box.

🎊 whiz.ai	Explorer Pinboards Alerts Explain Admin		?	4	5
Workbench – Anomalies Key Drivers Knowledge Graph	Knowledge Graph Computation1	8	Auto arr	ange	ò
	Call Goal Call Volume TRx NRx TRx Average TRx Contribution				
	Click on the edge connecting the two nodes in order to input the lag. E Cancel Save As New Graph	h		Save	

3. Add a lag value based on granularity of the data (daily, weekly, monthly) for one or more nodes and click Save.

🍿 whiz.ai	Explorer Pinboards Alerts Explain Admin	0 🦛 5
🔄 Workbench –	Knowledge Graph Computation1	
Anomalies		😣 Auto arrange 🛛 🔅
Key Drivers		
Knowledge Graph		
	Call Goal Set Lag Period:	
	Call Volume 4 W	
	TRx	
	NRx	
	TRx Average	
	TRx Contribution	
	Click on the edge connecting the two nodes in order to input the lag.	
	E Cancel Save As New Graph	Save

Check your entries - validation messages:

Ensure Consistent Path Lag - The total lag value between two nodes must be the same across all possible paths. If there is a difference in lag, you get a validation error as shown below. You can correct the lag values and save the knowledge graph.



Analysis results (with lag setup)

When there's a lag between nodes in the knowledge graph, the system automatically adjusts and analyzes the data based on that lag. In causal analysis results, if you click on a node with a lag, you can see the corresponding time period along with a tooltip providing the lag details. For example, if there is a 6 week lag between Call Volume and Trx, you can see the lag details in the narratives as shown below:



Intrinsic causal analysis

WhizAI supports an alternative analysis method to generate the causal analysis. You can configure this method by selecting Intrinsic Analysis option in the knowledge graph. In the causal graph, you will see all impacted nodes in neutral color along with the impact%. You will also see updated narratives for root and non-root nodes. This new feature enables you to analyze the smallest impact and get actionable insights.

Limitation! The new algorithm can identify only the impact% on the drivers and will not identify whether the impact is positive or negative.

Refer to Understanding Knowledge Graph for information on setting up instrinic causal analysis method.

Causal analysis outcome for intrinsic causal analysis:

1. When you run causal analysis based on the intrinsic causal analysis method, your result shows the individual impact on each node in the parentage. All nodes will be displayed in a neutral color.

2. Click on each node to view narratives as shown in the examples below:

Non-root node - narrative example:



Root node - narrative example:

🅼 whiz.ai	Explorer Pinboards Alerts Explain	Admin	0	4	s
€ Key	Drivers Analyze	pared to April 9 2022 to April 22 2022 68.890 as impact can be either positive or negative on TRs. During the same period, it was found that change in Smi	3. Total	.90M	1
Cau	Reven found that change in Call Good control is. Is. Start the Rig is. Is. IF Factors pact percentage Call Volume 4.42%	ubes 06 2022. It has grew by 40.73K as compared to Apr 09 2022 - Apr 22 2022, contributing 278.46K to the to nis adbout considering the influence of higher level factors. NBx 9.55K TBx + (54.600) Others 25.57K	Explan	ution)

Inconclusive drivers in key drivers analysis

During key driver analysis, sometimes, the system is unable to generate a conclusive impact for one or more drivers. Such drivers are displayed in the disabled state in the causal graph and with no value in the Impact% column in the tabular view.

There can be multiple challenges in deriving the impact. Some of them are stated below:

- 1. Granularity mismatch
- 2. Low confidence
- 3. Limited or no data availability required for the analysis

In such cases, the system provides the reason behind why it is unable to derive the driver impact.

In the causal graph, if you hover on the inconclusive driver, you can see the reason. You can view information about the driver and run Find Top Contributors.



Highlight edges of linked nodes

In a Causal graph, if you hover on any node, you can see highlighted edges to the linked connections. This helps in quickly identifying node connections.

For example, if you click the NBRx metric as shown below, edges for all impacted notes are highlighted.



Performing Explain Increase or Decrease Analysis on Contributor Analysis

WhizAI offers the ability to perform Explain Increase or Explain Decrease analysis on year-over-year (YoY) and period-over-period (PoP) results to further drill down into drivers and contributors for a specific result.

For example, if you enter a query 'Explain the change in Trx for last 2 weeks', WhizAI runs the analysis and shows the result as below:

whiz.ai Explorer	Pinboards Alerts Explain Ad	min	0 4
Explift n change in TRx in Febru Key Insights -	Jary 5 2022 to February 11 2022 as compared to Jar	uary 29 2022 to February 4 2022	2.04M 12.51% (22628R)
 The rise in the TRx Growth had a resulting in a decrease of 105.83 The TRx for the Product Plabeni TRx. 	similar impact on the TRx, resulting in an increase of 141.45 K (equivalent to 46.77% of 226.28K). However, the total TR and Region Mid-Atlantic is 98K\$ for the period Feb 05 202	K (equivalent to 62.53% of 226.28K). During the same period, The drop in the Call Volu c change is positive due to the combined impact of other drivers. 2 - Feb 11 2022. It has grew by 43K\$ as compared to Jan 29 2022 - Feb 04 2022. contril	ne had a similar impact on the TRx, uting 19.02% to the total growth in the
Causal Factors		Explanation Key Contributors	Statistics
		(10) Combination	Abs Chg ↓ % Chg
Call Goal 27%	TRx Growth 63%	Product : Plabenil Region : Mid-At	antic +43K : +79%
	> TRx Average 24% •	TRx * (22628k) State : Texas Region : Southwest	+38K Explain Increase
Call Volume 47%	NBRx 5%	State : Texas	+36K +32%
	NRx Growth PY	Age Group : 51-60 Region : Mid-At	lantic +35K +105%
	NRx Contribution	Product : Plabenil Age Group : 41-	50 +32K +45%
	Others 37%	Product : Plabenil Age Group : 60 a	and above +32K +19%
		State : Pennsylvania Region : Mid-	Atlantic +30K +29%

Click Explain Increase to trigger PoP analysis, on absolute change (Abs Chg) or % change (% Chg) values for the Southwest region.

whiz.ai Explorer Pinboards Alerts Explain Admin	0 4
Period-over-period Change Analysis 2022-04-23 - 05-06/04-09 - 04-22 TRx TRx grew by 0.38% in the period April 23rd 2022 to May 6th 2022 as compared to April 9th 2022 to April 9th	pril 22nd 2022. 1.038% (14.62K)
Switch Volume decreased by -2.73% (-59.68) between Apr 23 2022 to May 06 2022 and Apr 09 2022 to Apr 22 2022. This has caused 144.94K (991.57% of 14.62K) increase in the TRx.	Top Contributors The TRx for the Southwest Region is 499.32K for the period Apr 23 2022 to May 06 2022. It has grew by 40.73K as compared to Apr 09 2022 to Apr 22 Top 10 All Impact
Bush-Cite. Jol Na Name, Spec. +105300 Name S	(10) Combination Abs Chg % Chg Impact ↓ Region : Southwest +40.73K +8.88% 278.66%
	State : Texas +29.15K +11.1% 199.41% State : Texas Region : X
	State : Wisconsin Period-over-period Change Analysis on TRx Southwest Product : Arobi Analyzing data to find Insights. You will be notified once it ready.

After the analysis, WhizAI displays the Top Drivers and Contributors for TRx increase in the Southwest region as shown in the figure below:
	whiz.ai Explorer Pinboards Alerts Explain Admin				6		\$
•	Explision change in TRx for the Plabenil product and Mid-Atlantic region in February 5 2022 to Fe Key Insights - • The drop in the Switch Volume had an inverse impact on the TRx, resulting in an increase of 59.12K (equivale in a decrease of 46K (equivalent to 106.74% of 43K). However, the total TRx change is positive due to the co • The TRx for the Decile Group High Decile is 32K\$ for the period Feb 05 2022 - Feb 11 2022. It has grew by 2	bruary 11 2022 as compa ant to 137.36% of 43.04K). Du mbined impact of other drive 2 3K\$ as compared to Jan 29 2	uring th rs. 2022 - F	D January 29 2022 to February 4 2022 he same period, The drop in the NBRx had a similar impac Feb 04 2022. contributing 54.21% to the total growth in 1	t on the TRx, the TRx,	97.851	K
	Causal Factors	Explanation	•	Key Contributors	Flat View	Statisti	C5
	Sample quantity Nalve Volume 70% Switch Volume 137% Call Volume 16% Others 56%			(10) Combination	Abs Chg ↓	% Chg	
				Decile Group : High Decile	+23K	+281%	
		TRx 1 (43.04K)		Customer Tier : Tier 1	+18K	+84%	1
				Decile Group : High Decile Customer Tier : Tier 2	+10K	+607%	
				Decile Group : Medium Decile Customer Tier : Tier 1	+10K	+137%	
				Decile Group : Low decile	+6K	+20%	
				City : Haysi	+2K		1
				Decile Group : High Decile City : Lancaster	+2K		
				Customer : Jose Smith	+2K		
		-4					

Tip! Similar behavior is visible for the Top 5 Contributor and follow-up cards.

Follow-up on Top KDA Contributors

To enhance the KDA (Key Driver Analysis) contributors, WhizAI has implemented an additional follow-up feature. This allows you to delve deep into the analysis of the key contributors identified through KDA.

For each significant contributor, you can explore detailed information about the specific factors that contribute and their associated attributes or dimensions. Also, you can compare various groups within each contributor to gain insights into variances and patterns.

Let us see the contributors for KDA with the following example.

1. For significant contributors' combination: Product: Arobi | Region: Southwest, hover on the vertical ellipsis icon and click Other contributors.

whiz.ai Explorer	Pinboards Alerts Explain Admin	0 4
Seneral Advanced	Period-over-period Change Analysis Period-over-per	35.26M
Metric 🛈 🔺	TRx declined by -0.09% in the period January 1st 2022 to May 6th 2022 as compared	1 to January 2nd 2021 to May 7th 2021.
Data model FAS - Field Analytics	Top Drivers	Top Contributors
ata model containing the target metric.	Switch Volume decreased by -22.94% (-5.56K) between Jan 01 2022 to May 06 2022 and Jan 02 2021 to May 07 2021. This has caused -899.49K (2965.59% of -30.33K) decline in the	The TRx for the Northeast Region is 3.93M for the period Jan 01 2022 to May 06 2022. it has declined by -127.35K as compared to Jan 02 2021 to May 07
TRx ~	TRx	Top 10 👻 All 👻 Impact 👻
letric to be used for the analysis.	Default 💌	(10) Combination Abs Chg % Chg Impact
Template V V TRx template V V	Switch Volume +2.97K% Call Volume +1.90K%	Customer Type : Academic : -88.32K -6.41% 291.17%
Context to Analyze Period over period change v	Average Total Presc +1.33K%	Customer Type: Mid-Level Practitioner : -125.05K -2.52% 412.27%
Factors 🛈 🔺	Unknown -141.76%	Product: Arobi : -106.98K -0.97% 352.71%
Add +	Speaker Program ALL330.75%	Product : Arobi Customer Type : Mid-Level -123.57K -7.63% 407.39%
Customer Type × District ×	Cal Frequency -1.32K%	Practitioner Other Contributors Product: Arobi Region : Northeast : -80.01K -6.03% 263.79%
Territory ×	Naève Volume -3K -2K -1K 0 1K 2K 3K 4K Immart 161	Product: Trexine : -102.71K -1.04% 338.62%
Save As Template Analyze	mbachal	Dendunta Teorine I

2. WhizAI shows the top 10 contributors. The TRx for the Product Arobi and Region Southwest is 47K\$ for the period Feb 05 2022 - Feb 11 2022. it has grew by 14K\$ as compared to Jan 29 2022 - Feb 04 2022. contributing 40.27% to the total growth in the TRx.

The TRx for the Product Ard TRx.	bl and Region Southwest is 47K\$ for the	: period Feb 05 2022 - Feb 11 20	22. it has grew by 14K\$ as compared	i to Jan 29 2022 - Feb 04 2022. cont	ributing 40.27% to the total growth in the
Product	Region	Current [5]	Previous [5]	Abs Chg [5]	% Chg [%]
Arobi	Southwest	46.96K	32.63K	14.32K	+44%
Emarun	Southwest	17.12K	4.63K	12.49K	+270%
Ofasan	Southwest	11.44K	6.17K	5.27K	+85%
Plabenil	Southwest	33.55K	30.85K	2.70K	+9%
Plabenil	South Central	201		201	-
Arobi	South Central	914	784	130	+17%
Emarun	South Central	955	856	99	+12%
Trexine	Mid-Atlantic		284	-284	-100%
Trexine	South Central		974	-974	-100%
Ofasan	Mid-Atlantic		1.86K	-1.86K	-100%
Total		148.29K	112.72K	35.57K	+32%
					Pf Bridge # Variance

3. Hover on the vertical ellipsis [‡] icon over the dimension you want to follow up and click Follow up. For example, if you follow up on the product Arobi, the significant contributors to the product Arobi are displayed.

Top 8 Contributors by Product St Reference Date: 2022-05-06 Period: 2022	rength 2-02-05 – 2022-02-11/2022-01-29 – 2022-02-	04 Metric:TRx State:Texas Product:	Arobi Region: Southwest	ů	Back
🗮 Data Controls				ρ	Search
Product Strength	Current [\$]	Previous [\$]	Abs Chg [\$]	% Chg [%]	
Arobi (20mg.)	9.80K	459	9.35K	+2.04K%	
Arobi (500mg.)	7.11K	1.79K	5.32K	+298%	
Arobi (155mg.)	7.30K	3.69K	3.60K	+98%	it.
Arobi (15mg/0.4mL)*	4.99K	3.45K	1.54K	+45%	
Arobi (200mg.)	3.11K	5.09K	-1.98K	-39%	
Arobi (750mg.)	7.49K	8.90K	-1.40K	-16%	
Arobi (10mg/0.4mL)*	2.85K	4.12K	-1.28K	-31%	
Arobi (100mg.)	4.31K	5.14K	-824	-16%	
Total	46.96K	32.63K	14.32K	+44%	
				r4 Bridge =	* Variance

Identify performance influencers

Key contributor analysis is improved with new features as below:

1. Ability to view contributor combinations as underperformers, outperformers, and All

When you perform key drivers analysis, you get top contributors that positively or negatively impact the result.

For positive results (inclined performance), contributors responsible for incline (Outperformers) are shown by default. Now, in addition, you can view contributors that impact the result negatively (Underperformers). This feature will help to drill down to the problem areas to improve overall performance.

Similarly, for negative results (declined performance), you can view contributors causing the decline (Underperformers) by default. You can also view contributors that impact the result positively (Outperformers). This provides insight into areas where you can expand your focus to enhance overall performance.

2. Other contributors view

For any contributor combination, you can view other contributors in a pop-up window. This view includes both, the Underperformers and the Outperformers based on absolute change, in the form of a bridge chart. The Top 10 contributors are displayed as rising or falling bars while the remaining contributors are grouped in the Other category.

Underperformers

- In the case of PoP/YoY analysis, underperformer combinations are those with a negative PoP/YoY change in the result.
- For the selected period, underperformer combinations are those whose performance is significantly below average.

Outperformers

- In the case of PoP/YoY analysis, outperformer combinations are those with a positive PoP/YoY change in the result.
- For the selected period, outperformer combinations are those whose performance is significantly above average.

Refer to examples below:

Perform PoP analysis on Trx, you will get a response as shown below.



As the result is positive (inclined performance), key contributor analysis will display outperformers by default. Click the drop-down button and select Underperformers to display contributors impacting the performance negatively. Click All to display all contributors impacting the performance.

🔋 whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin								
Explinin change in TF	Rx in Februar	y 5 2022 to Febr	uary 11 202	2 as compared	f to January 29	022 to February	4 2022						
Key Insights - • The rise in the TRx Gr resulting in a docrease	rowth had a sin e of 105.83K (r	silar impact on the equivalent to 46.77	TRx, resulting	In an increase of I. However, the t	f 141.49K (equiva otal TRx change is	ent to 62.53% of 22 positive due to the	6.28K). Duri combined im	ing the same pe npact of other d	iod, The drop rivers.	in the Call Vo	lume had a	similar leng	act on the
 The TRx for the Produ TRx. 	uct Plabenil an	d Region Mid-Atla	ntic is 98K\$ fo	r the period Feb	05 2022 - Feb 11	2022. It has grew by	43K\$ as cor	mpared to Jan 2	9 2022 - Feb	04 2022. cont	ributing 19	02% to th	total grow
Causal Factors						Expla	anation	Key	Contribut	ors			
								(10) C	lop 10 +	Underperfo	rmers +	All ¥	Flat V Abs Chg
Call Goal 27%			TR	Growth 62%				Produ	ct : Ofasan /	Outperform	ners		эк
			TRa	Average 246	\rightarrow	TIG: 1 024-290		Produ	ct : Plabenil	Age Group : 5	1-60		-4K
Call Volume 47%)~		NB	kx 58) ←<				Produ	ct : Trexine /	ige Group : 31	L-40 Regio	on : South	-8K
		NRs Grow	th PY) +		1	NRx		Produ	ct : Plabenil	Age Group : 5	1-60 Regio	on : West	-8K
		New Companyou	(m)					State	Michigan (A	ge Group : 19-	30		-9K
			Con	es une				State	New Jersey	Product : Aro	ide		-10K
Cother contr	ibutor	s on any	comb lerts D	ination	to view	contribu	tors (outper	forme	rs or u	nder	perfo	
COther contr whizai Exp Explifin change in TRx	ibutor plorer P	S ON ANY inboards A 2022 to Februar	comb lerts Ex	ination plain Ad	to view min nuary 29 2022 t	contribu	tors (outper	forme	rs or u	nder	perfo	2.04
COther contr whiz.ai Exp Explifin change in TRX Key Insights - • The rise in the TRX Grow resulting in a docrase of resulting in a docrase of	in February 5 of the da similar of 105.83K (equil and R	S ON ANY inboards A 2022 to Februar rimpact on the TRoc region Mid-Atlantic	comb lerts E y 11 2022 as w resulting in an 226.28K, for the	ination plain Ad compared to Ja increase of 141.4 wever, the total Ti period Feb 05 20	to view min nuary 29 2022 t 9K (equivalent to d 2c change is positiv 22 - Feb 11 2022 i	contribu February 4 2022 2.53% of 226.28(4). D e due to the combined has grew by 43K\$ as	tors (During the same d impact of or a compared to	me period, The d ther drivers. o Jan 29 2022 - F	Mississippi (forme	Product : Arol rS OT U folume had a si	nder	ct on the TR	-10K Drme 2.04
COther contr whiz.ai Exp Explifin change in TRX Key Insights - • The rise in the TRX Grow resulting in a docrase • The TRX for the Product TRX. Causal Factors	ibutor plorer P in February 5 in February 5 with had a similar t 105.83K (equi Plabenil and R	S ON ANY inboards A 2022 to Februar impact on the TRo, valent to 46.77% of ogion Mid-Atlantic i	comb lerts E y 11 2022 as o resulting in an 226 28KJ. How is 98K\$ for the	ination plain Ad compared to Ja increase of 141.4 wever, the total TK period Feb 05 20	to view min nuary 29 2022 t 9K (equivalent to 6 bx change is positiv 22 - Feb 11 2022 i	contribu February 4 2022 2.53% of 226.28K0, D e due to the combined has grew by 43K\$ as Explanation	tors (d	me period, The d ther drivers. to Jan 29 2022 - F	Mississippi (forme op in the Call eb 04 2022.cc utors	Froduct : Arel	imilar impac	ct on the TR	2.04
Cother contr whiz.ai Exp Explifin change in TRx Key Insights - • The rise in the TRx Grow resulting in a decrease o • The TRx for the Product TRx. Causal Factors	in February 5 with had a similar of 105.83% (equi Plabenil and R	S ON ANY inboards A 2022 to Februari rimpact on the TRx, valent to 45.7% of egion Mid-Atlantic i	COMD lerts E y 11 2022 as u resulting in an (226.28KJ. How is 98K\$ for the	ination plain Ad compared to Ja increase of 141.4 wever, the total TF period Feb 05 20	to view min nuary 29 2022 t % (equivalent to 6 % change is positiv 22 - Feb 11 2022, i	Contribu Pebruary 4 2022 2.53% of 226.28KQ, D due to the combined has grew by 43K\$ as Explanation	tors (d	me period, The d ther drivers. o Jan 29 2022 - F Key Contrib T Top 10 ~	Mississippi (forme rop in the Call eb:04 2022.cc utors Outperfo	Froduct : Arel FS OT U Folume had a si intributing 19.0 mers *	Imilar impact 2256 to the to	ct on the TR otal growth Flat View Abs Chg	10K 2.04 2.04 in the Statis
Conter contr whiz.ai Exp Explifin change in TRX Key Insights- . The rise in the TRX Grow resulting in a decrease of . The TRX for the Product TRX. Causal Factors	ributor: plorer P in February 5 with had a similar of 105.83K (equi Plabenil and R	S ON ANY inboards A 2022 to Februar rimpact on the TRx, valent to 46.7% of egion Mid-Atlantic	COMD lerts D y 11 2022 as resulting in an 226.28KJ. How is 99K\$ for the	ination plain Ad compared to Ja increase of 1414 wever, the total TS period Feb 05 20	to view min nuary 29 2022 t 9K (equivalent to d 2x change is positiv 22 - Feb 11 2022 i	Contribu February 4 2022 2.53% of 226.28K). D edue to the combined has grew by 43K\$ as Explanation	Auring the sam	me period, The d ther drivers. o Jan 29 2022 - F Key Contrik Top 10 * (10) Combinatio Product: Plaber	Mississippi forme rop in the Call eb 04 2022.cc utors Outperfo n	Froduct : Arel rS OT U Kolume had a si ntributing 19.0 H-Atlantic	imilar impac 2294 to the to All ~	eperfo	10K Drme 2.04 10K 10K 10K 10K 10K 10K 10K 10K
Content control whiz.ai Exp Explifin change in TRX Explifin change in TRX Key Insights - . The rise in the TRX Grow resulting in a decrease of . The TRX for the Product TRX. Causal Factors	ributor plorer P in February 5 th had a similar th had a similar	S ON ANY inboards A 2022 to Februar rimpact on the TRo, valent to 46.77% of ogion Mid-Atlantic	COMD lerts E y 11 2022 as (y 11 2022 as (resulting in an (226 28K). Holo is 98K\$ for the 	ination plain Ad compared to Ja increase of 141.4 wever, the total TI period Feb 05 20	to view min nuary 29 2022 t 9K (equivalent to d bx change is positiv 22 - Feb 11 2022 i	contribu • February 4 2022 2.53% of 226.28K). D e due to the combined has grew by 43K\$ as Explanation	tors (d	State OUTPER outper me period, The d ther drivers. o Jan 29 2022 - F Key Contrib T Top 10 ~ (10) Combinatio Product : Plaber State : Texas Re	Mississippi forme op in the Call eb 04 2022.cc Outperfo n II Region : Mil gion : Southwa	Froduct : Arol rS OT U folume had a si httributing 19.0 mers * st	Inder	ct on the TR otal growth Flat View Abs Chg +45K ributors	-10K -10K
Cattoring of the Product TRX.	ributor. Plorer P In February 5 with had a similar of 105.83K (equi Plabenil and R	S ON ANY inboards A 2022 to Februari rimpact on the TRx, rimpact on the TRX, rigion Mid-Atlantic i	COMD lerts E y 11 2022 as v resulting in an (226.28K). Hov is 98K\$ for the TRc Great TRc Auren (NBRc 5)	ination plain Ad compared to Ja increase of 141.4 increase of 141.4 period Feb 05 20	to view min nuary 29 2022 t 8x change is positiv 22 - Feb 11 2022 i	Contribu • February 4 2022 2.53% of 226.28K, D due to the combined has grew by 43K\$ as Explanation	tors (d	State OUTPET me period, The d ther drivers. o Jan 29 2022 - F Key Contrib Top 10 * (10) Combinatio Product : Plaben State : Texas Re State : Texas	Mississippi forme rop in the Call eb 04 2022.cc Outperfo n II Region : Mi gion : Southw	Volume had a si mers * I-Atlantic	Imiter impact 22% to the to All *	ct on the TR otal growth Flat View Abs Chg +43K ributors	-10K -10K
Cother contr whiz.ai Exp Explifin change in Titx Key Insights - • The rise in the TRX Grow resulting in a decrease of • The TRX for the Product TRX. Causal Factors	ributor. plorer P in February 5 with had a similar of 105.83K (equi Plabenil and R	S ON ANY inboards A 2022 to Februar rimpact on the TRa, valent to 46.7% of ngion Mid-Atlantic	COMD lerts D y 11 2022 as resulting in an 226.28KJ. How is 99K\$ for the TRx Creat TRx Away MBR 5 +	ination plain Ad compared to Ja increase of 1414 wever, the total TS period Feb 05 20	to view min nuary 29 2022 t 9K (equivalent to d be change is positiv 22 - Feb 11 2022 i	Contribu February 4 2022 2.53% of 226.2810, D e due to the combined has grew by 43K\$ as Explanation	Auring the sam	State Outper outper the drivers. o Jan 29 2022 - F Key Contrib Top 10 * (10) Combinatio Product : Plaben State : Texas Re State : Texas Age Group : 51-6	Mississippi forme forme utors Outperfo n II Region : Mi gion : Southwa	Product : Arel rS OT U Kolume had a si ntributing 19.0 I-Atlantic st d-Atlantic	imilar impac 2294 to the to All *	Pperfc	-10K -10K
Cat Volume 476	ributor. plorer P in February 5 with had a similar ti 105.83K (equi (Plabenil and R	S ON ANY inboards A 2022 to Februar impact on the TRx, valent to 46.77% of ogion Mid-Atlantic i ogion Mid-Atlantic i	COMB lerts E y 11 2022 as 4 y 11 2022 as 4	ination plain Ad compared to Ja increase of 141.4 period Feb 05 20 a 435 a 245 a 245	to view min nuary 29 2022 t 9K (equivalent to d bx change is positiv 22 - Feb 11 2022 i	Contribu February 4 2022 2.53% of 226.28K). D e due to the combined has grew by 43K\$ as Explanation + 0243080	tors (d	State OUTDET me period, The d ther drivers. o Jan 29 2022 - F Key Contrib T Top 10 ~ (10) Combinatio Product : Plaber State : Texas Age Group : 51-4 Product : Plaber	Mississippi forme forme utors Outperfo n II Region : Mi gion : Southwn (0) Region : M B Age Group	Allowee had a since it is a since it it is a since it it it it	imilar impac 22% to the b	Pperfc	-10K -10K
Control of the product whiz.ai Exp Expliftent change in TRx Key Insights - The rise in the TRx Grow resulting in a decrease of the TRx for the Product TRx. Causal Factors	ributor. Plorer P In February 5 with had a similar of 105.83K (equi Plabenil and R	S ON ANY inboards A 2022 to Februari rimpact on the TRx valent to 46.77% of egion Mid-Atlantic i egion Mid-Atlantic i NRx Growth PV NRx Contribution *	COMB lerts E resulting in an (226.28%). Hove resulting in an (226.28%). Hove (226.28%). Hove (226.28%	ination plain Ad compared to Ja increase of 141.4 increase of 141.4 period Feb 05 20	to view min nuary 29 2022 t 8x change is positiv 22 - Feb 11 2022 i	Contribu	tors (State Outper outper the period, The d ther drivers. o Jan 29 2022 - F Key Contrib Top 10 * (10) Combinatio Product : Plaben State : Texas Age Group : 51-0 Product : Plaben	Mississippi forme rop in the Call eb 04 2022.cc Outperfo n II Region : Mi gion : Southwo 0 Region : M II Age Group	Product : Arol rS OT U folume had a si ntributing 19.0 mers = st d-Atlantic d-Atlantic 41-50 60 and above	Inder	rperfc	-10K 2.04 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.04 100 2.05 100 100 100 100 100 100 100 1

It is displayed in the form of a bridge chart visualization with the top 10 named contributors. The remaining contributors are grouped in the Other category.

Explain Guide v2024.77



Understanding Filter and Sort Options for KDA Result

You can see a filter panel under CONTRIBUTORS of the KDA result. This panel contains options to sort and filter the data. The panel contains four different options as follows:

- Filter
- Top
- View
- Sort by

Filters

Filters the contributors by the factors considered for the analysis.

	whiz.ai Explorer Pinboards Alerts Explain Admin					0 4	\$
	Explifin Period-over-period Change Analysis on TRx : Scope: 2022-01-01 – 05-06/2021-08-28 – 12-31 Mid-Atlantic					E EOM	
Ý.	Period-over-period 1 KX for the Mid-Atlantic region grew by 0.45% in the period January 1st 2022 to 2021.	May 6th 2022 as o	ompared to Augus	t 28th 2021 to De	ecember 31st	1 0.45% (25.08K)	
	CONTRIBUTORS ()						
	Top: 10 20 All View: Summary Detail All Sort by: Impact Hierarchy V					11	
	(10) Combination	Current	Previous	Abs Chg	% Chg	Impact ↓	
	Decile Group: Medium Decile :	2.05M	1.97M	+84.4K	+4.29%	336.54	
	Decile Group: Medium Decile Product: Arobi	703.24K	630.14K	+73.1K	+11.6%	291.48	
	Decile Group: Medium Decile Customer Tier: Tier 2	645.29K	583.28K	+62.01K	+10.63%	247.27	
	District: Delaware	323.09K	267.45K	+55.64K	+20.8%	221.87	
	Product: Arobi	1.74M	1.69M	+54.62K	+3.24%	217.81	
	Decile Group: Medium Decile Customer Tier: Tier 3 Product: Arobi	146.7K	101.22K	+45.48K	+44.93%	181.33	

When you select factors as shown in the figure below, the system applies these selections to filter the list of contributors and shows the records containing any of the factors selected as the filter condition.

For example, if you select Product: Arobi and Product Strength: Arobi (750 mg) then the result shows all contributors that have Arobi and Arobi (750 mg) in their combinations.

Note! The filtering process considers all levels of the hierarchy to find matching combinations. This means considering not just the selected members but also their parent or child members if they are part of a combination.

whiz.ai Explorer	Pinboards Alerts Explain Admin					0 4	
Metric ① Advanced Metric ① Control Advanced Metric to De used for the analysis. Template TRx template	Explift Period-over-period Change Analysis on TRx : Scope: 2022-01-01 – 05-06 / 2021-08-28 – 12-31 Mid-Atlantic Period-over-period TRx for the Mid-Atlantic region grew by 0.45% in the period August 28th 2021 to December 31st 2021. CONTRIBUTORS ()	January 1st 2022	to May 6th 202	2 as compared t	0	5.58M 0.45% (25.08K)	
Context to Analyze	Top: 10 20 All View: Summary Detail All Sort by: Impact	Hierarchy 🔻					
Period over period change v	Decile Group	Current	Previous	Abs Chg	% Chg	Impact ↓	
Filter 🛈 👻	Customer Tier > trobi :	703.24K	630.14K	+73.1K	+11.6%	291.48	
Factors ()	Product Select All Selected (1) Product Strength	645.29K	583.28K	+62.01K	+10.63%	247.27	
mensions Country × Customer Tier ×	District > Ofasan	323.09K	267.45K	+55.64K	+20.8%	221.87	
Decile Group × District ×	Cancel Apply Tier: Tier 3 Product: Arobi :	146.7K	101.22K	+45.48K	+44.93%	181.33	
Product ×	Product: Plabenil Product Strength: Plabenil bs (1000mg.)	189.74K	146.91K	+42.83K	+29.16%	170.8	
Analyze	Product Strength: Plabenil bs (1000mg.)	189.74K	146.91K	+42.83K	+29.16%	170.8	

Applying filters

- 1. Click the filter icon on the left side of the screen below the CONTRIBUTORS tab.
- 2. Select the dimension filters you want to apply.
- 3. Select the cascaded values for the selected dimension filters.
- 4. Using the filters applied, you will be able to find the desired values within groups.

Top: 10 20 All View:	Summary Detail All Sort by:
Decile Group	> Select All Selected (1)
Product Decile	Low decile
Product Decile Group	> Medium Decile
Age Group	> Ie: Not Available
Primary Specialty	>
Gender	> Ie: Not Available Gender: Male
Cancel Apply	le: Not Available Product Deci

Resetting filters

When a filter is applied, a tick mark icon appears beside the filter icon. If you hover the cursor over it, it turns into a cross icon with a tooltip Reset Filters. Click the cross icon to reset the filter.

Reset Filters						
Top: 10 20	All View:	Summary	Detail All	Sort by:	Impact	Hierarchy 🔻

Тор

Use this option to view the top 10, top 20, or all the contributors.

- 10: By default, the system shows 10 contributors.
 If the system shows more than 10 contributors by the analysis, then you can see by clicking on 20 or all options.
- 20: To see the top 20 contributors, click on 20 and the system will show you those 20 contributors.
- All: To see all the contributors, click on all options and the system will show you all the contributors.

Note! This filter of top 10, 20, all is not going to make a fresh analysis of top 20 or 30 records. Based on the original analysis, it will only show the additional records if they are part of the main analysis.

Tip! Suppose the analysis has returned less than 11 records, in that case, 20 and all options will be disabled. Similarly, if the system returns less than 21 records then all options will be disabled. On mouse hover on the active option (for example, 10 option), will show you the tooltip with total records. (For example, 10 of 16 records)

View

You can filter the records, based on the number of members available in each combination. Use the below options for this:

- Summary: When you click on the summary view, WhizAI filters the records and shows only those records where only one dimension member is participating.
- Details: It shows all the combinations where there is more than one member.
- All: All records show you both the combinations, that is, single-dimensional and multi-dimensional. By default, the option is All.

Sort By

By default, the results are sorted based on the descending order of the Abs Chg. Alternatively, you can also sort this entire view hierarchically.

Sorting by Hierarchy

 Click Flat View drop-down and choose the specific hierarchy you wish to apply for sorting. For instance, if your result includes members from multiple hierarchical groups such as region, product, or customer, clicking the Flat View drop-down allows you to arrange the outcome either by region hierarchy, product hierarchy or customer hierarchy.

After you select the required option, the result is organized in a hierarchical manner where any combination forming part of the chosen hierarchy is displayed at the top, while other combinations are shown subsequently.

	🗦 whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin			
?	E 2022-01-0	01-05-06 ×	TRx × Ø				P Search for Region	Model In	nfo
	FAS - Field Analytic	cs 🗸 Floric	Іа Тор					Q	⊳
			Did you n	nean:		×	This suggestion dynamically expanded		
	s Scott Thursday I	Dec 12, 2024 17:05	Tops Sur	gical Special	lty Hospital	Customer	autoexpansion box for the entity Flora Top		



Note! The hierarchy structure should be present in the Info tab. (The hierarchy should be defined in the data model)

Trigger Key Driver Analysis from different responses

The ability to perform the Period-over-period or year-over-year key driver analysis is now extended to additional visualizations as follows:

- We support KDA for PoP and YoY comparisons for the following visualizations:
 - Single trend line
 - Multiple-trend line
 - Table visualization
 - Pie chart visualization
 - Bar graph

Note! Each of the data points on these visuals must represent a single metric and a single time period.

Support Causal graph view for PoP/YoY Key Driver Analysis

WhizAI displays PoP/YoY key driver analysis in a causal graph view. When you click on Open analysis, PoP change analysis opens in causal graph format. You can switch to a bar or tabular format if required.



How to read causal graph

- Each node displays the name of the driver and % impact information.
- Green color depicts driver with positive impact and red color depicts driver with negative impact.
- Each node is filled with the respective color in proportion to their impact on the change in the target metric.
- When you hover or click on any node, the cause for incline or decline is displayed in a tooltip as shown below.
- Click the Find Top Contributors button to view the top contributors for the cause.

whiz.ai Explorer Pinboards Alerts Explain	Admin	9 4
Explilin change in TRx in April 23 2022 to May 6 2022 as compared to	April 9 2022 to April 22 2022	3.90M
 Key Insights - The rise in the Name_Speaker Program Count had a similar impact on the TRx, resulting on the TRx, resulting in a decrease of 23.82K (equivalent to 162.96% of 14.62K). Howeveing The TRx for the Tier 2 Customer Tier and Practitioner Customer Type is 901K for the p growth in the TRx. 	; in an increase of 26.5K (equivalent to 181.3% of 14.62K). During the same period, The drop in the Switch Volume had a simila wer, the total TRx change is positive due to the combined impact of other drivers. eriod Apr 23 2022 to May 06 2022. it has grew by 47K as compared to Apr 09 2022 to Apr 22 2022. contributing 319.74% to	r impact
Causal Factors	Explanation Key Contributors	Statistics
	Top 10 • All • Flat View •	
Naive Volume 3.95K 2022-04-23 – 05-06 / 04-09 – 04-22 U -3% (-110.83)	(10) Combination Abs Chg	% Chg
The drop in the Naive Volume had an inverse	Customer Tier : Tier 2 Customer Type : Practition +47K	+5%
impact on the TRx, resulting in an increase of 8.78K (equivalent to 60.09% of 14.62K).	Customer Tier : Tier 4 Customer Type : Practition +37K	+13%
Find Ten Contributors	TRo + (14420) Customer Tier : Tier 2 Region : Southwest +36K	+27%
(Nalve Volume 60%)	Region : Southwest Customer Type : Practitioner +36K	+10%
Name, Speaker Program Count 181%	Decile Group : Low decile Region : Southwest C +31K	+24%
Others 10%	Decile Group : Low decile Region : Southwest +29K	+18%
	Decile Group : Low decile Customer Tier : Tier 2 +29K	+9%

Explanation of Causal Analysis Outcome

WhizAI now provides a statistical summary for the Top Drivers view similar to the statistical summary for the Top Contributors view. Click the Explanation link to display metrics-related statistics.

Whiz.ai Explorer Pinboards Alerts Explain Admin		6		
Explinin change in TRx for the West region and Ofasan product in April 23 2022 to May 6 2022 as compared	l to April 9 2022 to April 22 2022	G	54.73K	
 Key Insights - The rise in the NRx had a similar impact on the TRx, resulting in an increase of 15K (equivalent to 76.95% of 19K). During the same period decrease of 6.98K (equivalent to 36.23% of 19.27K). However, the total TRx change is positive due to the combined impact of other drive. The TRx for the Practitioner Customer Type is 37.95K for the period Apr 23.2022 to May 06.2022. It has grew by 10.09K as compared 	ad, The rise in the Switch Volume had an inverse impact on the T rers. to Apr 09 2022 to Apr 22 2022. contributing 52.35% to the tota	Rx, resulting in	TRoc X	
Causal Factors Explanation	Key Contributors		Statistics	
	(10) Combination	Abs Chg	% Chg	
Name_Speaker Program Count 0	Customer Type : Practitioner	+10.09K	+36.21%	
	Customer Tier : Tier 1	+9.44K	(93.54%	
Switch Volume 36,23%	Decile Group : Low decile Customer Type : Practi	+8.22K	+67.99%	
Sample quantity	District : Rocky Mountain	+6.85K	+94.79%	
	Customer Tier : Tier 1 District : Rocky Mountain	+5.76K	+406.01%	l
Naive Volume 32.89% Others 17.05%	Decile Group : High Decile Customer Type : Mid	+4.89K	+380.33%	l
	Decile Group : Low decile Customer Tier : Tier 3	+4,78K	+320.68%	
A (P) (8)	Customer Tier : Tier 1 Customer Type : Practition	+4.69K	+73 31%	

Explanation includes:

4. Root Node, Non- root level 's Statistical Summary for start and end periods,

- 5. Causal Model Evaluation Summary
- 6. Confidence Interval Summary

Note ! Statistical summary is visible for PoP, YoY, and selected period analysis.

			Explanation					
Root Node's Statistic	cal Summary (Start Period)							
Root Node		Mod	fel Name	Mea	in .	Standard Deviation		
NRx		Stoc	hasticModel	4,40	01.41	2,830.40		
Naive Volume		Stoc	hasticModel	3.15	5	1.76		
Switch Volume		Stoc	hasticModel	1.70		0.95		
Non-root Node's Sta	tistical Summary (Start Period)				4			
Non-root Node	Algorithm name		R-Square		Mean Squared Error	MAPE		
NBRX	LinearRegression		1.00		0.01	0.01		
TRx	LinearRegression		0.43		1,464,239.35	31.73		
Root Node's Statistic	cal Summary (End Period)							
Root Node		Mod	lel Name	Mea	in .	Standard Deviation		
NRx		Stoc	hasticModel	4,40	01.41	2,830.40		
Naive Volume		Stoc	hasticModel	3.15	5	1.76		
Switch Volume		Stoc	hasticModel	1.70		0.95		
Non-root Node's Statistical Summary (End Period)								
Non-root Node	Algorithm name		R-Square		Mean Squared Error	MAPE		
							Close	

- We support KDA for PoP and YoY comparisons for the following intents:
 - Data Point "TRx for Jan 2021"
 - Time Series "TRx trend for past 6 months"
 - Top N "Show TRx by Districts for 2021"
 - Bottom N "Show TRx for worst Districts"
 - Top N TimeSeries "Show TRx trend by Districts"
 - Bottom N Time Series "Show bottom 10 Districts by past 6 months"
 - Multidimensional "Show Regions by products "
 - Multidimensional Time Series "Show Disticts by products by past 6 months"
 - Time Comparison "show PoP for Jan 2021 to Feb 2021"
 - Time Series Time Comparison "show sos last two years by NRx, NBRx"
 - Top N Time Comparison "pop for top 5 product strength for last three months"
 - Bottom N Time Comparison -"Show monthly trend of worst 100 customers for ytd"
 - Multidimensional Time Comparison "YoY for top products by regions by district for last 5 weeks"
 - MultiSeries Time Comparison "Show me sales trend for 2022 vs 2021 vs 2020 by months"
 - Trend Queries "Show TRx by months for last year"
 - Multidimensional Trend Queries "show Trx by brand by region by months"
 - Single dimensional trend queries "Show Trx by product by weeks"

Sharing of ExplAIn analysis with other users

You can share the KDA analysis with other users who have access to the metrics and entities in the report. You can add your comments when sharing the report. Receivers can use the report to further analyze and make informed decisions.

Follow the steps as below to share the report.

Assumption: Explain Analysis is already generated and available.

Sender's interface

• Click Share menu link on results screen



- Select user names from the list.
- Add comments, if required

🛞 whiz.ai 🖧 Explorer 🗈 Pinboards 🛙)) Alerts 🏢 Explain 🔗 Adr	nin	-	() Help	4
Expliftin change in TRx in April 23 2022 to May 6 2022 as c	Share response	e with			3.90M
Key Insights - • The rise in the Name, Speaker Program Count had a similar impo- on the TRX, resulting in a decrease of 23,82% (equivalent to 162, • The TRX for the Tier 2 Customer Tier and Practitioner Customer	Users Ø Search by name Select all	Groups	ame period. The drop in the Switch Volume or drivers. • Apr 09 2022 to Apr 22 2022, contributing	had a similar im	pact x
Causal Factors	Au Analyst User	+ 1	ributors		
Californi III.	Analyst Sagar	+	ation or : Tier 2 Customer Type : Practitioner	Abs Chg St	Chg 15%
Sergie santh, 1015	AB Ankit Barsainya	•	er : Tier 4 Customer Type : Practitioner	+37K	
(Notes Values 1975) +	Anna Add comment_	•	Invest Customer Type Practitioner	+36K	
New Speaker Proper Caset 1818			Low decile Region : Southwest C., Low decile Region : Southwest	+31K +	
	Cancel	Share	: Low decile Customer Tier : Tier 2 Cu	+29K	

- Click Share
- If some user/users do not have access to the analysis, you will get a warning message as shown below:

Share respo	nse with	×
Some or all of the data from the ana users listed below. Proceed withou	alysis is not accessible to the them.	
ana um)	limited access	
Cancel	Next	

• If user/users have access, the KDA analysis is shared.

Receiver interface

Receiver gets a notification along with the comments (if available). Once you click on the shared report, it will open in the new window. You can see the name of the sender and all menu options as per your access level. You can view the shared report as long as you have required access.

	i Help 🌧
	Notifications
Ν	NS has shared an analysis explaining change in TRx Scope: 2022-01-01 – 05-06 / 2021-01-02 – 05-07 Open Analysis
	3 minutes ago

Data security for Explain analysis

Key driver and contributor analysis is based on your access level in three categories as below:

- 1. Scope within the main context
- 2. Access to metrics participating in key driver analysis
- 3. Access to dimensions in contributor analysis
- For causal analysis, it is mandatory that you have access to all metrics participating in the analysis. If you do not have access to any one metric also, analysis is not performed.
- For contributor analysis, if you do not access the data for one of the dimensions(set as factors), those dimensions are excluded, and analysis is performed on the rest of the factors.

Key drivers and Contributor analysis are based on your access to scope, dimension, and metrics.

For causal analysis, it is mandatory that you have access to all metrics participating in the analysis. If you do not have access to any one metric also, analysis is not performed.

For contributor analysis, if you do not access the data for one of the dimensions(set as factors), those dimensions are excluded, and analysis is performed on the rest of the factors.

Some examples are as below:

1. If you are performing analysis for the entire scope but have access to only midwest and southeast regions, you will be able to view analysis for those two regions only. Furthermore, if you do not have access to view territory level analysis, you cannot see territory level numbers under those regions.

😫 whiz.ai	Explorer P	inboards Alerts	Explain	Admin					(2	4	s
← Key[Drivers Analyze	е										
Expl	n change in TRx in A	spril 23 2022 to May 6 20	22 as compar	ed to April 9 20	022 to April 22 202	22				1.	07N	1
Key In	sights -									1 5.73%	(58.14K)	
The theThe	e rise in the NRx Average TRx, resulting in a decrea e TRx for the Product Arc	had a similar impact on the T ase of 1.1BK (equivalent to 8, bi is 329K for the period Apr	Rx, resulting in 08% of 14.62K 23 2022 - May	an increase of 10). However, the to 06 2022, it has g).25K (equivalent to 7 otal TRx change is pos grew by 29K as compa	0.09% of sitive due t ared to Ap	14.62K). During the same period, The drop in the Call Vo to the combined impact of other drivers. r 09 2022 - Apr 22 2022, contributing 50.62% to the tot	olume ha tal growt	d a similar in h in the TRx	npact o	n	
Caus	al Factors				Explanation		Key Contributors			S	Statistic	C5
	Call Goal 31%	-				0	Top 10 • All • Flat View • (10) Combination	Curr	Abs Chg	% CI	hg	
(Call Volume and .		70%		D-203.140		Product : Arobi	329K	+29K	+10	3%	
	Emails - Clicked 9%				1 Contraction		Decile Group : Low decile Region : Southwest	194K	+29K	+18	3%	L
		Status					Decile Group : High Decile Region : Southwest	153K	+27K	+21	1%	1
		Oth	ers 2% %				Decile Group : Low decile Product : Arobi	131K	+18K	+16	5%	
				-			Decile Group : Low decile Product : Arobi Region :	65K	+17K	+35	5%	

If you are performing PoP/YoY analysis on a metric, let us say TRx which is driven by multiple metrics. One of them is Sample Quantity for which you do not have access. In this case, key driver analysis (causal graph) and corresponding key insights will not be visible to you. You will get a notification as below:

🅞 whiz.ai	Explorer Pinboards Alerts Explain Admin			6	4	s
, + I	Key Drivers Analyze					
	Explinin change in TRx in April 23 2022 to May 6 2022 as compared to April 9 2022 to April 22 2022				3.90	: M
0	Key Insights - • The TRx for the Customer Tier Tier 2 is 1M for the period Apr 23 2022 - May 06 2022. it has grew by 58K as compared to Apr 09 2022 - Apr 22 2	2022. contributing 395.2	9% to the tota	I growth in th	e TRx.	×
	Top Drivers: Since you do not have access to the data pertaining to one or more drivers connected to the target metric, you are not permitted to car	ry out the analysis. $ imes$				
	Key Contributors				Statis	stics
	Top 10 • All • Flat View •					
	(10) Combination	Current	Previous	Abs Chg	% Chg	
	Customer Tier : Tier 2	1M	1M	+58K	+5%	
	Decile Group : Low decile Customer Tier : Tier 2	459K	423K	+36K	+9%	
	Customer Tier : Tier 4 Product : Arobi	154K	124K	+30K	+24%	1
	Customer Tier : Tier 2 Product : Plabenil	345K	318K	+28K	+9%	
	Customer Tier : Tier 2 Product : Arobi	379K	353K	+27K	+8%	

You can still view key contributor analysis as per your authorization level.

2. If you are performing PoP/YoY analysis on a metric, let us say TRx which is driven by multiple metrics and you have access to all metrics, you will be able to view causal analysis.

()))	whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin				6) (\$
•	Explinin change	in TRx in April 23	3 2022 to May 6	6 2022 as comp	pared to April	l 9 2022 to April 22 20	22				3.9 ↑ 0.38% (1	: 0M 4.62K)
	Key Insights - • The rise in the Erresulting in an in • The TRx for the C	mails - Clicked had hcrease of 409.28 (e Customer Tier Tier	a similar impact o equivalent to 2.8% 2 is 1M for the pr	n the TRx, result 6 of 14.62K). eriod Apr 23 202	ing in an increa 12 - May 06 202	ise of 7.9K (equivalent to 5 22. it has grew by 58K as co	i4.06% of 14.62K). During ompared to Apr 09 2022 -	the sa Apr 2	rme period, The drop in the Call Volume had an inverse in 2 2022. contributing 395.29% to the total growth in the	npact on the T TRx.	Rx,	×
	Causal Factor	s					Explanation		Key Contributors		Sta	tistics
		Activity Call Goal 16%						•	Top 10 • All • Flat View • (10) Combination	Abs Chg	% Chg	
	Activity			Sale					Customer Tier : Tier 2	+58K	+5%	
	Call Volur	me 3%	/	NF	8x 36%		↑ (14.62K)		Decile Group : Low decile Customer Tier : Tier 2	+36K	+9%	
	Emails - C	Clicked 54%	\swarrow	Status					Customer Tier : Tier 4 Product : Arobi	+30K	+24%	
				E al a					Customer Tier : Tier 2 Product : Plabenil	+28K	+9%	
				Ot	hers 9%	o'			Customer Tier : Tier 2 Product : Arobi	+27K	+8%	
						(4 P 8		Product : Arobi	+26K	+2%	

Understanding Knowledge Graph

About Knowledge Graph

WhizAI now provides an intuitive interface to build and manage dynamic knowledge graphs. With a knowledge graph, you can define the relationship between various drivers and target metrics. This information is used during the causal analysis.

Click ExplAIn -> Knowledge Graph to create a new knowledge graph or edit the existing one.

irkbench -	Knowledge Grap	bh					
	Select Data Model						
omalies	FAS - Automation	~					New Graph
/ Drivers	Data Model	Name	Created By	Created At	Last Modified By	Last Modified At	Enabled
owiedge Graph	FAS - Automation	new_test	ghandram@attin.el	11/18/2024 12:14 PM	and the second second	11/27/2024 17:29 PM	
	FAS - Automation	IntrinsicTest_1	entrisk hader@ettis.al	11/27/2024 17:26 PM	an conservation of	11/27/2024 17:28 PM	
	FAS - Automation	ItrinsicTest	schiel halossehit si	11/27/2024 17:18 PM	annangana	11/27/2024 17:18 PM	
	FAS - Automation	Computation1	action trademonts or	11/22/2024 15:00 PM	with the part of	11/22/2024 15:00 PM	
	FAS - Automation	Test765	androide Analteripperhits and	11/19/2024 16:51 PM	protospatical	11/22/2024 12:32 PM	
	FAS - Automation	new_test (imported_1d83	and take balling periods at	11/20/2024 15:47 PM	united spaces	11/20/2024 15:47 PM	
	FAS - Automation	12345 (imported_1d83a1	10103-00608-0023	11/20/2024 15:47 PM	annangana	11/20/2024 15:47 PM	
	FAS - Automation	Test765 (imported_388b8	actain tolographic of	11/20/2024 12:58 PM	annakeatos	11/20/2024 12:58 PM	

Knowledge graph interface provides a list of functions given below:

- 1. Select metrics as nodes and connect them with edges. You can select metric or computation of metric. Selected metrics are marked with a checkmark in the metric selection panel. If you uncheck a metric in metric selection panel, it will be automatically removed from the knowledge graph.
- 2. Customize the layout by the positioning of nodes and edges. The layout can also be auto arranged.
- 3. Prevent circular references (e.g., $A \rightarrow B \rightarrow C \rightarrow A$) of nodes. Each node in the graph is connected to another node.
- 4. Multiple disjoint views are creatable within a graph. During analysis using the same graph, only the relevant graph connected to the target metric is displayed.
- 5. For managing created graphs, deletion operations function similarly to those in the workbench template module.
- 6. Only one graph per data model can be enabled at a time.
- 7. You can replace the existing node with the new node.
- 8. You can delete a node or edge.

9. Once the graph is built and enabled, the same layout and relationship information is used for the causal analysis.

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin		Ø 4 5
Workbench – Anomalies Key Drivers Knowledge Graph	← Knowledge Graph TRx Average graph		Se Auto arrange
	Select all Sales (6) NRx Switch Volume TRx TRx Average Contribution Contribution T Growth Market Share Growth Market Volume Change Market Volume Growth Update Graph	NRx Market Volume NRx TRx Average TRx Market Volume TRx	
	8	Cance	Save

Limitation! Currently, the knowledge graph supports aggregable metrics only.

Setting advanced parameters in Knowledge Graph

You can set advanced-level parameters for your Knowledge Graph. This helps to finetune the outcome of causal analysis as per your requirements.

These parameters include,

- 1. Graph Display settings show business category, Unlinked drivers flag
- 2. Hyperparameters Causal models, Confidence Interval (%), Sample Size, Number of Iterations.

Knowledge graph is a prerequisite to run the causal analysis. The Domain expert creates the knowledge graph once, so that the system can use it to run analysis. You can now finetune key driver analysis by providing some advanced parameters. Those options we have added to the knowledge graph. Click settings

🖉 whiz.ai	Explorer Pinboards Alerts Explain Admin	Ø 4 5
Workbench – Anomalies Key Drivers Knowledge Graph	Knowledge Graph TRx Average graph NRx Market Volume NRx TRx Market Volume TRx	Auto arrange
	Click on the edge connecting the two nodes in order to input the lag. Click on the edge connecting the two nodes in order to input the lag. Cancel Save As New Graph	Save

There are two categories in Advanced Parameters - Graph display option and Hyperparameters.

🧶 whiz.ai	Explorer Pinboards Alerts Explain Admin	04.
Workbench - Anomalies - Key Drivers - Knowledge Graph -	Explore Pinboards Alerts Explain Admin	Advanced Parameters × Graph Display Options × Show Business Category • Show Business Category • Unilraked Drivers • Show as disabled • Analysis Method • Intrinsic Causal Analysis • Hyperparameter • Causal Models • Good • You Solow • You Solow • On Solow • Show Solow • On Solow • You Solow • You Solow • You Solow • Causal Models • On Solow • You Solow <t< th=""></t<>
	Click on the edge connecting the two nodes in order to input the log.	Sample Size (i) 100000
	E Cancel Save As New Graph Save	Number of Iterations (i)

Display level parameters

- 1. Show Business Category
 - If you want business category names to be shown, enable the show business category option.

Note! To define a business category, go to Admin->Data Modeler-> Data Models.

Limitation! If the business category information in the data model is updated after the knowledge graph creation, the knowledge graph is not automatically refreshed. You must manually update the knowledge graph to ensure it reflects the latest business category information.

2. Unlinked Drivers

If you do not want non-participating drivers to be seen on the graph, choose the hide option from the dropdown. If you select Show as disabled option, those drivers are shown on the graph but will be disabled.

Hyperparameters

Hyperparameters are related to machine learning(ML) model settings.

1. Causal Models

You get 2 options in the dropdown: Good and Better.

• Good:

Compares a linear, polynomial, and gradient boost model on small test-training split of the data. The best performing model is then selected.

2. Model selection speed: Fast

- 3. Model training speed: Fast
- 4. Model inference speed: Fast
- 5. Model accuracy: Medium
 - Better:

Compares multiple model types and uses the one with the best Performance averaged over multiple splits of the training data. By default, the model with the smallest root mean squared error is selected for regression problems, and the model with the highest F1 score is selected for classification problems.

- 6. Model selection speed: Medium
- 7. Model training speed: Fast
- 8. Model inference speed: Fast
- 9. Model accuracy: Good
- 10. Confidence Interval(%)

Confidence Interval determines the level of certainty in the Causal Analysis Outcome. Higher Confidence Interval yields more Statistically Significant Results

11. Sample Size

Number of samples used for estimating Shapley values. This can have a significant influence on runtime and accuracy.

12. Number of Iterations

Number of samples generated by Estimation Function, i.e., number of times it is called. The higher the number, the more accurate the results and intervals, but the slower the Runtime.

Save As New Knowledge Graph

1. You can change the existing template and click Save As New Graph to open a new graph pop-up window.

🍓 whiz.ai	Explorer Pinboards Alerts Explain Admin	🕜 🦺 SE
Workbench – Anomalies Key Drivers Knowledge Graph	← Knowledge Graph Graph_1	Auto arrange
	NRx NBRx Naive Volume	4
	Click on the edge connecting the two nodes in order to input the lag. Cancel Save As New Grap	h Save

2. Enter Graph Name, change Enabled flag settings (if required), and click Save to save the new template.

🥡 whiz.ai	Explorer Pinboards Alerts Explain Admin	0 4 38
Workbench - Anomalies - Key Drivers - Knowledge Graph -	Knowledge Graph Graph_1 Save As New Graph Graph Name NewTrx KnowledgeGraph Enabled Cancel	Auto arrange
	Click on the edge connecting the two nodes in order to input the lag. Cancel Save As New Gra	ph Save

Template Import/Export: Anomalies, Key Drivers, and Knowledge Graphs

You can transfer templates for anomalies, key drivers, and knowledge graphs across various environments like Dev, QA, UAT, and Production. The below process explains how to export and import templates, making it easier to replicate your work across environments.

Requirements:

- Access: To use the import/export functionality, you must have access to the Explain Workbench.
- **Environment** Compatibility: Import actions are supported only between environments with the same data model.

Exporting Templates

Follow the steps below to export templates from the current environment.

- 1. Go to Explain Workbench and click Anomalies.
- 2. Select a Data Model to view the list of templates.
- 3. Select the template you want to export by clicking the checkboxes against the templates, as shown below.

Note! You can select multiple templates or all templates to export.

🧶 whiz.ai	Explorer Pinboards	Alerts Explain	Admin				04	SE
Workbench -	Anomalies: Tem Data Model FAS - Automation	plates	v			Analyze	+ Create new	
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at \downarrow	Enabled	
	Template_1	TRx	withhelphical	10/30/2024 12:19 PM	additional regentional	10/30/2024 12:19 PM		
	Sample_quantity	Sample quantity	with the second se	10/30/2024 12:19 PM	which and which	10/30/2024 12:19 PM		
	TRx_Test_Autom	TRx	amoutopara	10/30/2024 12:19 PM	MINUMPLICA.	10/30/2024 12:19 PM		
	Call Volume_Test	Call Volume	announgerical	10/30/2024 12:19 PM	and the state of t	10/30/2024 12:19 PM		
	NBRx_Test_Auto	NBRx	anonalistical	10/30/2024 12:19 PM	and the state of t	10/30/2024 12:19 PM		L2
	NRx_Test_Autom	NRx	with the second	10/30/2024 12:19 PM	setisticalisettical	10/30/2024 12:19 PM		
	Select all	ن Import ک Export (2)]		Page size:	▼ 1 To 6 from 6 K	< Page 1 from 1 >	21

4. Click Export to export the templates to your local drive. The templates are saved in the downloads folder in JSON format. , For example, Anomalies_Templates_Nov_06_2024_113804.json

Note! Steps 2-4 also apply to exporting Key Driver and Knowledge Graph templates.

Importing Templates

Follow the steps below to import templates in the current environment.

- 1. Go to Explain Workbench and click Anomalies.
- 2. Select the data model for which you want to import a template or templates.
- 3. Click the Import link to open the Import pop-up window.

၍∰ whiz.ai	Explorer Pinboards Alerts	Explain Admir	1				0		SE
Workbench -	Anomalies: Templates Tetra Model FAS - Automation	ic				Analyze	+ Crea	te new	
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at $\qquad \downarrow$	Enabled		
	TRx_Test_Automation	TRx	and the second s	10/30/2024 12:19 PM	and shakes a	11/06/2024 12:40 PM			
	Call Volume_Test_Automation	Call Volume	annoningensa	10/30/2024 12:19 PM	white during balance	11/06/2024 12:40 PM			
	Template_1	TRx	serence and a series of the se	10/30/2024 12:19 PM	antendadepartoal	10/30/2024 12:19 PM			
	Sample_quantity_Test_Automation	Sample quantity	artech/withogen/co.ar	10/30/2024 12:19 PM	shir/skewics	10/30/2024 12:19 PM			
	NBRx_Test_Automation	NBRx	annoningenerat	10/30/2024 12:19 PM	which is a final set of the	10/30/2024 12:19 PM			
	NRx_Test_Automation	NRx	and the particular	10/30/2024 12:19 PM	additional and the Quality of	10/30/2024 12:19 PM			
	Select all	1 Export			Page size:	1 To 6 from 6 K	< Page 1 from 1	L > >I	

4. In the Import pop-up window, click the Browse Files button and select .JSON file to import. You can select multiple JSON files

🛱 whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin		0 4	
Workbench - Anonalies Key Drivers Knowledge Graph	Anoma Data Mada FAS - Aut Name Call trx: Call Call Call Call	lies: Templ	ates		Import Anomalies Templates You can move ison file here	× ± ± ± ± ± ± ± ± ± ±	+ Create ne	~
		-						

5. Click the Import button to import the files in the current environment.

Import Anomalies Templates	×
Selected file: Anomalies_Templates_Nov_06_2024_113804.json (3.55kB)	
	-
Cancel	Import

Validations for the import feature are as below:

- 1. If your import file includes more than one template, none of the templates are created until all issues are fixed.
- 2. If you try to import a template with a name that already exists, a warning message will appear, as shown below.

<

You can ignore the warning and continue importing the template. In these cases, a new template with the same name is created with the suffix imported added to it, as shown below.

) whiz.ai	Explorer Pinboards Alerts Explain	Admin					0	4
Workbench -	Anomalies: Templates							
Anomalies	FAS - Automation	Ψ.				Analyze	+ Crea	ite new
Key Drivers Knowledge Graph	Name	Metric Name	Created by	Created At	Last modified by	Last modified at 🥠	Enabled	
	Call Volume_Test_Automation (Imported_d2608e50)	Call Volume	domen adding	11/14/304 (31/6)	daturatija.	11/2018/04 12:06		
	() and 20	204	ghandham@ahlinal	11/1/200112/26	sharia masin() u	111103041201.	•	
	D Wa.Roz.Automation	10	inghactact.	11140040014.	ingtuerte-h.	11/19/09/11:21.		
	Call Volume_Test_Automation	Call Volume	Indefinition (Spart).	NAMES OF A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTIONO	Internet Specie	1111000-0124	08	
	C Septer, Departe (258818	-	(hereit and (hereit and	1110-003-008-	phankan (patrical	11/10/02/11/16		
	C Templon, 1.Drawnat, Milerki Mi	34	protocolorisa	10 W 2004 (2016	protocolistical	31980-0000-00004		
							-	

- 3. If an imported template is marked as enabled in the JSON file, it will remain enabled in the target environment after the import. Since only one template can be enabled for a specific metric at a time, any other template for the same metric will be disabled automatically.
- 4. If the data model in the imported file does not exist in the target environment, you will get the below warning message. You can select the target data model and import the template.

← → σ 12 2024.0	17.mhizai/workbe	nch/insights/anom	alies									A incognito	Relaunch	lo update	
🎲 whiz.ai	Explorer	Pinboards	Alerts	Explain	Admin								0 4	AM	
💷 Warkbench -	Anoma	lies: Templa	ates												
Anomalies	FAS - Au				Import A	allemon	s Templates			×			Create n	104	
Key Drivers Knowledge Graph	Name	🔺 Missi	ing Data N	Model	mportz	aromaire	stemplates				hedat	↓ Ended			
	PO PO	The data mo the target da	del with the s ata model from	pecified code m the list to c	'sales_automationtinue with the	ion1' mentic r Import.	med in the templa	ate is not pr	esent in this system. Select		24 12:1	0	C		
	i in	Target Data Mor Choose item	M								24 16 5	• a			
	NR	FAS - Auto FAS - Auto	mation mation-LLM								24 16 5	C	>		
	E Ton	FAS - Field FAS - Mult	Analytics ical								24 16:1	- 0			
	_ 1er	Test MVD Test Snow	flake Live Hie	rarchy							24 15:3	. a			
		TestConn					Cancel		Continue Import		24 15 3	7			
	C) Seta	ct all de	Import d	Export(4)					Page size: • 17	10 from	30	H K Page	1ton1 >	34	

5. If any metric in the imported template file does not exist in the target environment, you will get the below error message as shown below and the file can not be imported.

← → α (\$ 884	77.whit.al/workbench/Insights/anomalies	\$	± (A 1100	alo 🛛	Relationsch htt	uptine
🕞 whizai	Explorer Pinboards Alerts Explain Admin				0	-4	(40
🗊 Workbench -	Anomalies: Templates						
	FAS-Au Import Anomalies Templates	×		IC	+0	reate nev	,
Kany Drivers Kanwinsign Graph	New Missing Metric		dfield	1 I BA	044E (
	Following metrics specified in the template are missing in the data model sales, automation, import is not allowed.		1094 12	3.			
	Metric Name: TRx, Metric Code:TRx1 Metric Name: NRx, Metric Code:NRx1		1024 36	ă.,			
			1024 14	a_			
			1024 15	a			
	— 10-		1024 15	a.			
	Cancel		1024 11	a.			
	Selectad & Inport & Louis) 1540	ion B	н ()	ape 1.10	m1 2	.ət

6. For Key Drivers templates, some dimension or metric factors may not exist in the target data model. To continue, you need to confirm whether these unavailable factors can be removed before the import, as shown below. Once confirmed, the template will be imported.

+ -> 0 5 2024-1	TaeNizal/workbench/insight/key-drivers	🟠 🛓 🖨 Incognitis – Relearch to update 👔
🌐 whizai	Explorer Pinboards Alerts Explain Admin	04
Workborch - Aromalies Key Drivers Krowkadje Graph	Key Drivers: Templates Province PAS: Au Import Key Drivers Templates Missing Factors Policy Policy Missing Factors Policy Policy <tr< th=""><th>×</th></tr<>	×
	Cancel Proceed	Ahun 4 ii C Page1burn1 3 ii

7. For knowledge graphs, The system blocks the import of knowledge graphs if any metric in the graph is missing from the target system, as shown below.



Capturing Audit Log for ExplAIn features

WhizAI maintains an audit trail for ExplAIn feature usage. Each time you use the ExplAIn Workbench (Anomalies and KDA) and invoke anomalies or KDA from cards or pinboards, the system captures audit parameters. This feature is used to understand ExplAIn feature usage across the platform.

WhizAI captures audit logs for user activities on ExplAIn Workbench as well as the analysis from Explorer.

- 1. Audit log for ExplAIn Workbench activities: The audit log is captured for Anomalies, KDA and knowledge graph activities like create, edit, and delete. Template Information captured in the audit log is as below:
- Template id
- Template name
- Created by
- Last modified by
- Creation timestamp
- Last modified timestamp
- Type of operation (Create/Update/Delete)
- Algorithm name
- Training period
- Advance parameters
- Factors
- 2. Audit log for analysis from NLQs, workbench, and cards: The audit log is captured when you trigger a PoP or YOY analysis query from explorer or cards. Information captured in the audit log is as below:
- Request id

- NLQ (if applicable)
- User details
- Request timestamp
- Trigger point Workbench, Card, NLQ, Alert
- Response Success or failure
- Time taken to generate the response
- Algorithm name
- Training period
- Advance parameters
- Factors
- Request object with the scope details, analysis type, and template used

Considerations and Limitations

- In the Data Model dropdown, all the data models can be seen in the dropdown list, even if insights are not configured for those models.
- The Key Driver Analysis Report cannot be exported or shared to other users.
- For non-aggregable metrics, it is mandatory to set them as non-aggregable via the metric configuration. In the absence of that the system may not generate accurate results.
- For non-aggregable metrics, the analysis will not show the '% impact' value.
- Key driver analysis is not supported when any of the data points are involved in the analysis as partial data.
- When you navigate to the Key Drivers Analysis (KDA) module from the Explorer's response, the visualization context does not auto-populate on the KDA screen.
- Computations such as CAGR, Contribution, Previous volume, and Average throw an 'Internal server error' for the Key Drivers Analysis (KDA) analysis.