

Commonly Used Formulas in Alchemer Dashboard

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Formulas in **Alchemer Dashboard** help you transform raw survey responses into meaningful metrics. With formulas, you can calculate values like percentages, loyalty scores, and satisfaction metrics that power dashboards, charts, and executive KPIs.

This article walks through three commonly used formulas you can create in the **Chart builder**:

- Percentage of responses
- Net Promoter Score (NPS)
- Customer Satisfaction Score (CSAT)

These formulas help you better compare segments, track trends over time, and surface insights that drive decisions.

Important: Formulas must be created for each chart within a dataset. If you create a custom formula for a single-survey dataset, that custom formula will need to be recreated for any charts you build on that dataset.

Percentage of responses

When to use percentage calculations

Percentages often provide more meaningful insights than raw response counts. They normalize your data so you can compare results across groups or time periods.

Use percentages when you want to:

- Compare groups of different sizes, such as regions, products, or customer segments
- Track trends when the total number of responses changes over time
- Display executive KPIs that are easier to interpret as percentages
- Avoid misleading conclusions caused by changes in response volume

For example, **50 satisfied respondents** may sound positive. But if that represents **25% of respondents vs. 75%**, the insight changes dramatically.

How percentage calculations work

The standard percentage formula is:

Percentage = (Subset of responses ÷ Total responses) × 100

Where:

- **Subset of responses** represents responses that meet a specific condition (for example, respondents selecting a specific answer)
- **Total responses** includes all valid responses to the question

This calculation always produces a value between **0% and 100%**.

Add a percentage formula in Dashboard

You can display percentages automatically in some charts. However, creating a formula allows you to reuse the calculation across multiple visualizations.

To add a percentage formula:

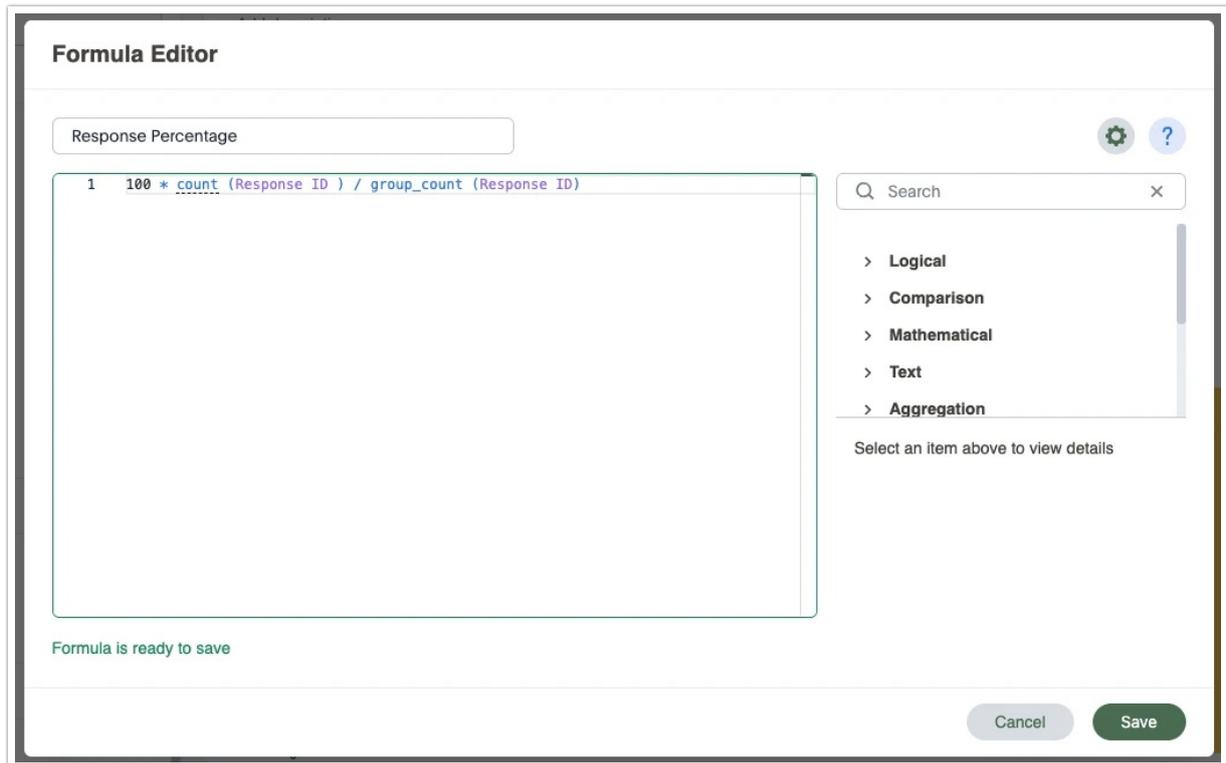
1. Open your dashboard and navigate to the **Chart builder**.
2. In the left panel, click **+ Add > Formula**.
3. In the **Formula Editor**, enter a name for your formula (for example, **Response Percent**).
4. Enter the following formula (be sure to update **your dataset name** in place of the example shown):

```
100 * count(Response ID) / group_count(Response ID)
```

5. Click **Save**.

Your new formula will appear in the **Formulas** section of the Chart builder.

Tip: Percentage formulas are commonly used in **bar charts, pie charts, and KPI visualizations**.



Net Promoter Score (NPS)

What is Net Promoter Score?

Net Promoter Score (NPS) measures customer loyalty by asking respondents how likely they are to recommend your product or service on a 0–10 scale.

Responses are grouped into three categories:

Category	Score Range
Promoters	9–10
Passives	7–8
Detractors	0–6

NPS is commonly used to:

- Track overall brand health
- Compare customer loyalty across segments
- Report a high-level KPI to leadership

The final NPS score ranges from **–100 to +100**.

How the NPS calculation works

NPS is calculated using the following formula:

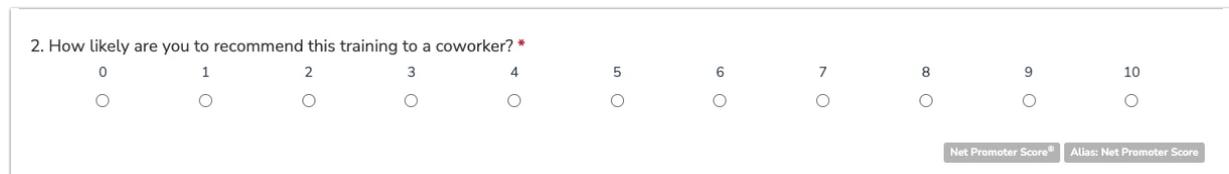
$NPS = \% \text{ Promoters} - \% \text{ Detractors}$

Where:

- **Promoters** are respondents who selected **9 or 10**
- **Detractors** are respondents who selected **0–6**
- **Passives (7–8)** are not included in the calculation

Before you begin

To use this formula in Dashboard, your survey must include an **NPS question using a 0–10 scale**.



2. How likely are you to recommend this training to a coworker? *

0 1 2 3 4 5 6 7 8 9 10

Net Promoter Score® Alias: Net Promoter Score

Add an NPS formula in Dashboard

To calculate NPS in a chart:

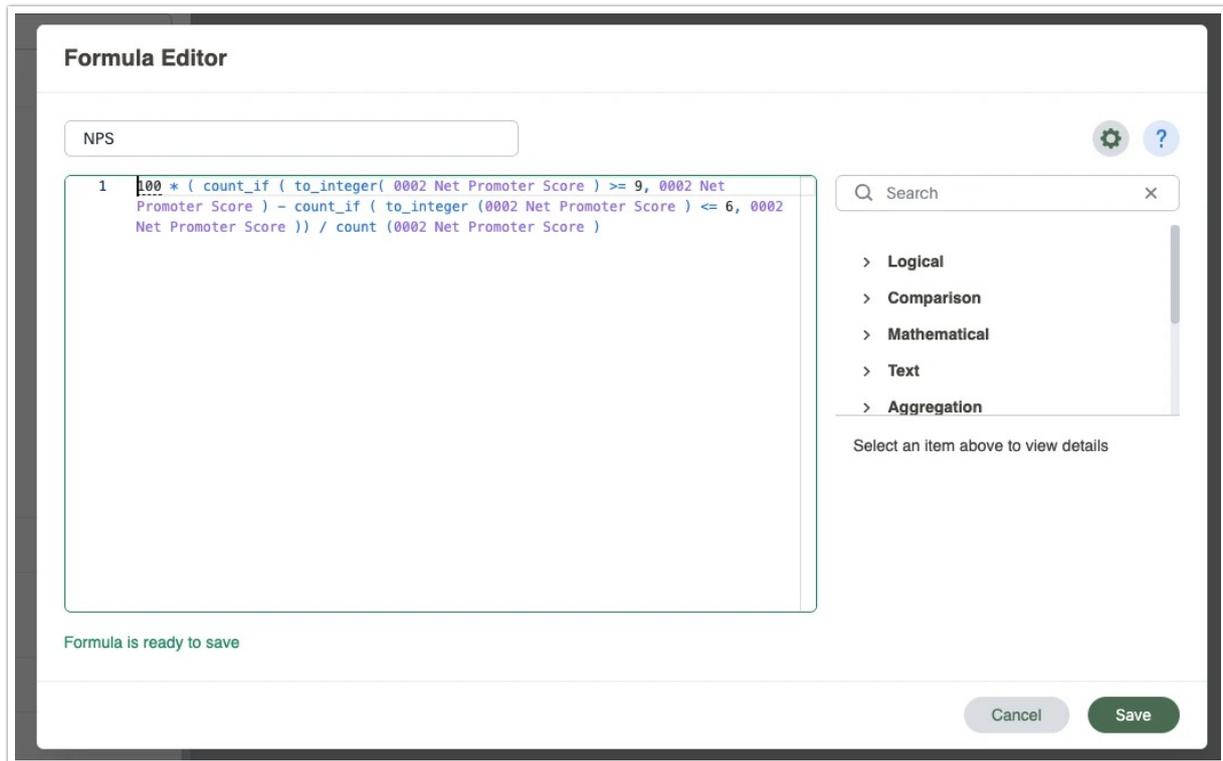
1. Open the **Chart builder**.
2. Click **+ Add > Formula** in the left panel.
3. Name your formula (for example, **NPS Score**).
4. Enter the following formula (be sure to update **your dataset name** in place of the example shown):

```
100 * ( count_if ( to_integer( 0002 Net Promoter Score ) >= 9, 0002 Net Promoter Score ) -  
count_if ( to_integer( 0002 Net Promoter Score ) <= 6, 0002 Net Promoter Score ))  
/ count (0002 Net Promoter Score )
```

5. Replace **0002 Net Promoter Score** with the column name for your NPS survey question.
6. Click **Save**.

Your NPS formula will now appear in the **Formulas** section of the Chart builder.

Tip: KPI charts are a great way to display **overall NPS** or **NPS trends over time**.



Customer Satisfaction Score (CSAT)

What is CSAT?

Customer Satisfaction Score (CSAT) measures short-term satisfaction with a specific interaction, product, or experience.

CSAT questions typically use a **1–5 rating scale**, though other scales may be used. Results are reported as the **percentage of satisfied customers**.

CSAT is often used to:

- Evaluate specific touchpoints such as support cases, onboarding, or purchases
- Identify operational issues quickly
- Track improvements after process changes

How the CSAT calculation works

CSAT measures the percentage of respondents who selected the **highest satisfaction ratings**.

For a 1–5 scale, satisfied responses usually include:

- 4 – Satisfied
- 5 – Very satisfied

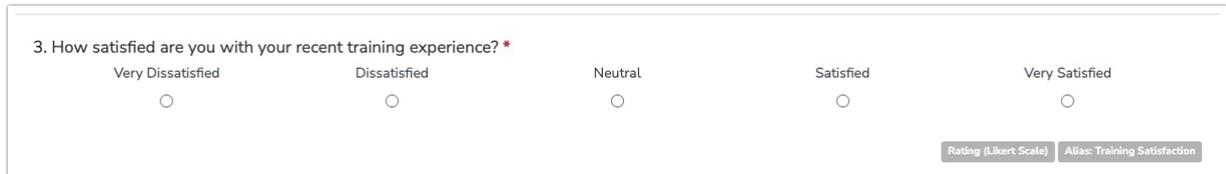
The formula is:

$$\text{CSAT} = (\text{Number of satisfied responses} \div \text{Total responses}) \times 100$$

This produces a percentage between **0%** and **100%**.

Before you begin

To calculate CSAT in Dashboard, your survey must include a **Rating (Likert)** question, typically using a five-point satisfaction scale.



3. How satisfied are you with your recent training experience? *

Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

Rating (Likert Scale) Alias: Training Satisfaction

Add a CSAT formula in Dashboard

To create a CSAT formula:

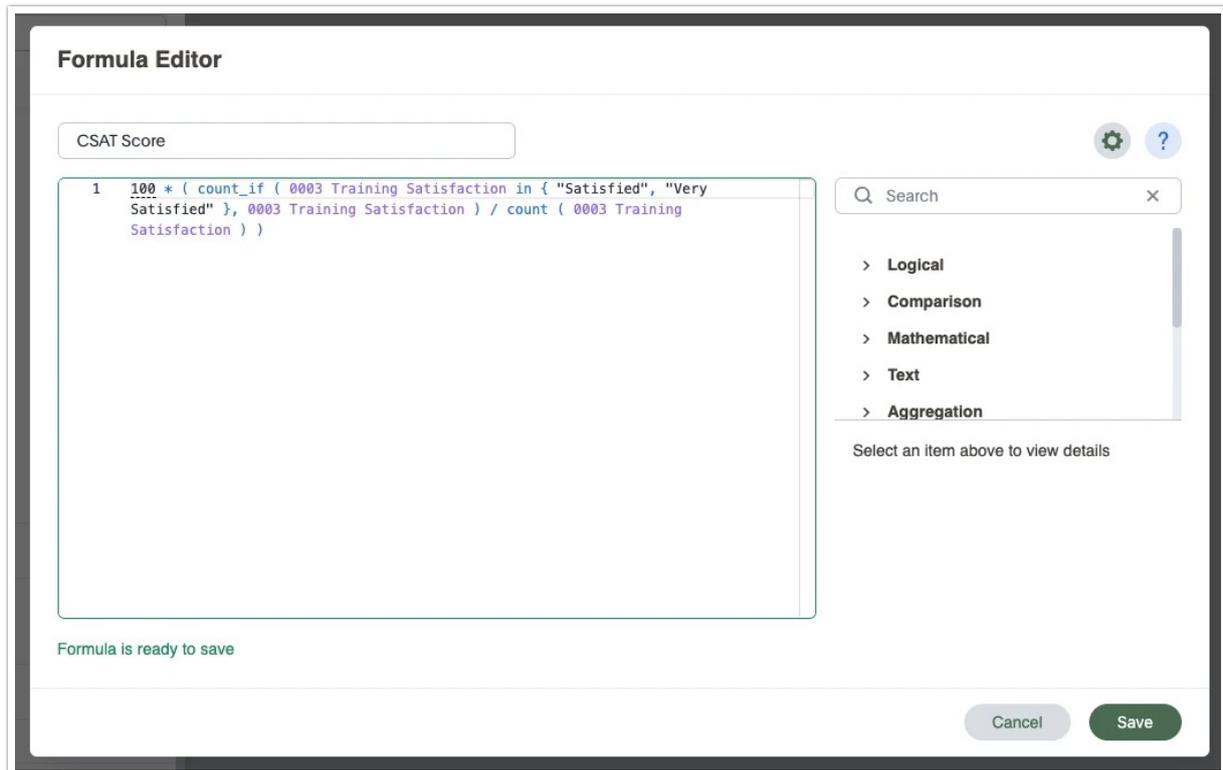
1. Open the **Chart builder**.
2. Click **+ Add > Formula** in the left panel.
3. Enter a name such as **CSAT Score**.
4. Enter the following formula (be sure to update **your dataset name** in place of the example shown):

```
100 * ( count_if ( 0003 Training Satisfaction in { "Satisfied", "Very Satisfied" }, 0003 Training Satisfaction )  
/ count ( 0003 Training Satisfaction ) )
```

5. Replace **0003 Training Satisfaction** with the column name of your CSAT survey question.
6. Replace **Satisfied** and **Very Satisfied** with the **two highest answer options** in your survey.
7. Click **Save**.

Your CSAT formula will now appear in the **Formulas** section of the Chart builder.

Tip: Use **KPI charts** to highlight CSAT scores or track satisfaction changes over time.



Next steps

Formulas need to be created for each chart within a dataset. Use them across charts and dashboards to track key metrics and monitor feedback trends.

These calculated values make it easier to:

- Monitor performance over time
- Compare customer segments
- Share clear KPIs across your organization

Formulas help turn survey responses into **actionable insights**, giving your team the clarity needed to move from feedback to decisions.

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