

## Mastering Stacked Bar Charts: The Power of Composition and Comparison

Data visualization is about clarity and impact, and stacked bar charts uniquely present complex information. They combine total and subcategory data in a single view, making it easier to analyze overall trends and component breakdowns.

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### What Are Stacked Bar Charts?

Stacked bar charts visualize two categorical variables:

- **Total Category:** Represented by the full length of each bar.
- **Subcategories:** Shown as segments within the bar.

For instance, imagine total device production segmented by tablets, phones, and laptops. This design allows you to see both the grand total and the individual contributions.

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### When to Use Stacked Bar Charts

Stacked bar charts are ideal for:

- Showing **composition within totals**.
- Comparing data **within a single category**.

However, they aren't perfect for precise subcategory comparisons since the stacked segments lack a consistent baseline. For granular comparisons, consider separate bar charts or line graphs.

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### Types of Stacked Bar Charts

#### Standard Stacked Bar Chart

Displays absolute values, such as production numbers or survey responses.

#### 100% Stacked Bar Chart

Highlights proportions within each category. For example, it can show the percentage of satisfaction levels across different products, making relative distributions clearer.

#### Horizontal Stacked Bar Chart

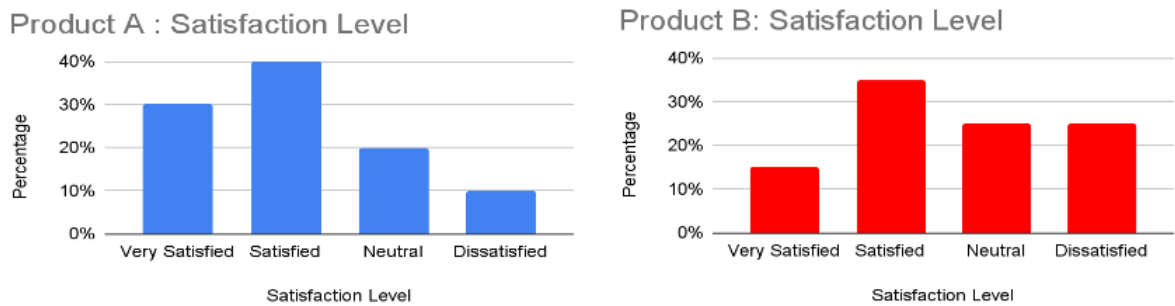
Perfect for categories with long labels, improving readability and space efficiency.

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## Transformations with Stacked Bar Charts

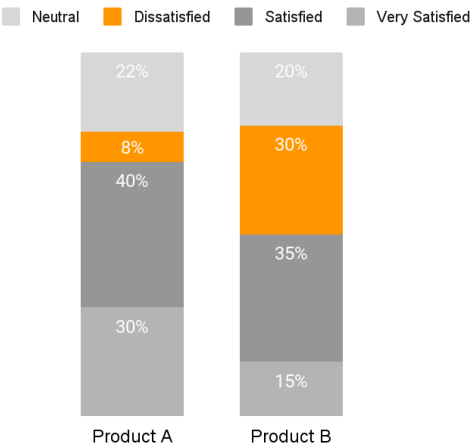
### Example 1: Customer Satisfaction Levels

**Before:** Two separate bar charts showing satisfaction levels for two products.



**After:** A single stacked bar chart combining both products.

**Customer Satisfaction Levels: Product B Faces Higher Dissatisfaction Compared to Product A**



#### Why it works:

- Reduces clutter.
  - Enables side-by-side comparison in one view.
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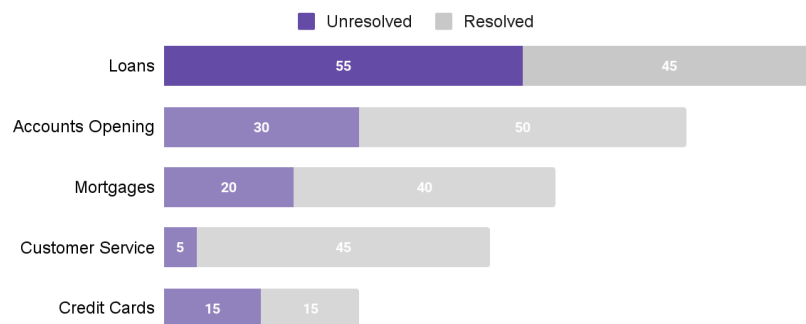
### Example 2: Resolved vs. Unresolved Complaints

**Before:** Two pie charts showing complaint statuses across categories.



**After:** A stacked bar chart displays resolved and unresolved complaints.

**Customer Complaints Analysis: Loans Category Dominates with High Unresolved Issues**



**Why it works:**

- Simplifies analysis.
- Instantly highlights problem areas, such as unresolved complaints in a category like Loans.

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## Why Choose Stacked Bar Charts?

When used thoughtfully, stacked bar charts:

- Save space by consolidating data.
- Highlight trends at a glance.
- Provide a balance between composition and comparison.