

# Functions in Excel & Pivot Table Analysis

## Project Overview

This project demonstrates the application of core Excel functions and data Analysis techniques to transform a raw data into a structured, insightful report. The workflow involves data cleaning, conditional calculations, and multi-dimensional analysis using Pivot Tables to understand customer behavior and regional sales performance.

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## Excel Skills & Functions Demonstrated

### 1. Advanced Data Retrieval

- **VLOOKUP/XLOOKUP:** Used to populate the "Customer Name" and "Tax Status" columns in the Raw Data sheet by fetching records from reference tables.
- **Data Integration:** Successfully linked multiple sheets (Product Category, Customer Store ID) to create a unified database.

### 2. Conditional Math & Logic

- **IF Statements:** Implemented logic to calculate tax amounts; applying a **10% tax for PKP status and 0% for PTKP**.
- **SUMIF/SUMIFS:** Aggregated "Total Quantity of Boxes" and "Total Weight" based on specific customer codes and area criteria.
- **Discount Logic:** Applied a **7% discount** for orders exceeding **Rp. 7,000,000**, demonstrating proficiency in nested logic and financial modeling.

### 3. Data Summarization with Pivot Tables

- **Regional Performance:** Generated summaries of the "Total Quantity of Box purchased in each Area," identifying top regions like **Pekanbaru**.
  - **Customer Insights:** Analyzed total product purchases per store, highlighting high-volume clients such as **Hartono Sidoarjo**.
  - **Product Categorization:** Grouped sales by categories (e.g., Kitchen Appliances, Beauty, Garment Care) to identify high-performing product lines.
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## Key Insights from the Analysis

- **Volume Leaders:** Large-scale customers like **Hartono Sidoarjo** and **Mutiara Super Kitchen** are major contributors to total box quantity.
  - **Tax Distribution:** A significant portion of the customer base operates under the **PTKP (non-taxable)** status, impacting the net total amount calculations.
  - **Regional Peaks:** The **Pekanbaru** area shows a high concentration of product sales compared to other regions like Denpasar or Jambi.
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## Conclusion

This project showcases my ability to use advanced formulas and data summarization techniques to process raw business data and drawing out insights that improves business decisions .