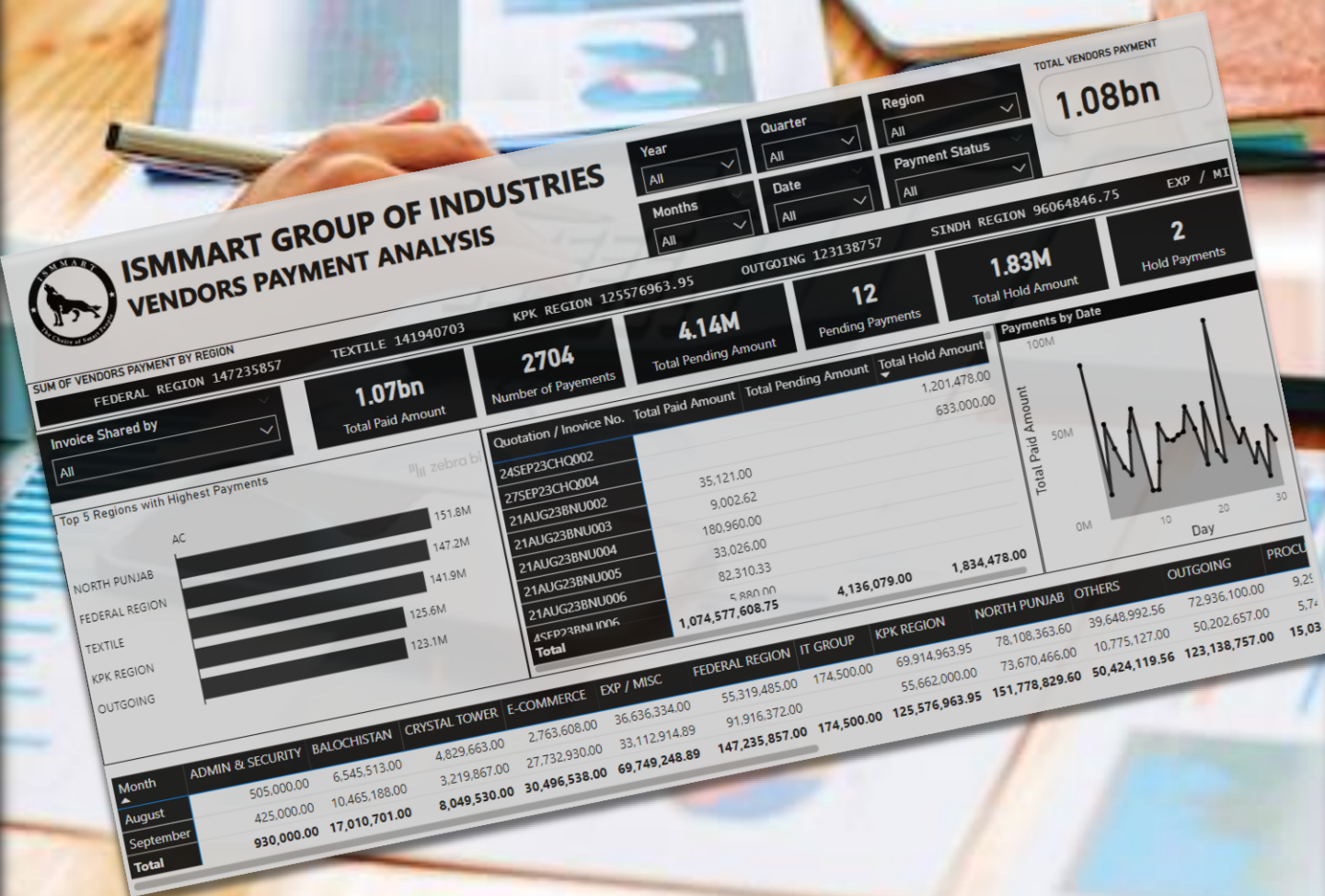


POWER BI

Real-Time Vendor Payment Tracking and Analysis

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Project Overview: Vendors Payment Analysis Dashboard

Problem Statement

Ismmart Group of Industries faced significant challenges in managing and analyzing vendor payments across multiple regions and departments. The primary issues included:

- Difficulty in tracking total payments and pending amounts.
- Lack of visibility into payment distribution across different regions and departments.
- Inefficiencies in identifying high-value payments and pending invoices.
- Need for real-time insights to make informed financial decisions.

Solution: Vendors Payment Analysis Dashboard

To address these challenges, we developed a Vendors Payment Analysis Dashboard using Power BI. This dashboard centralizes payment data, provides clear visual insights, and facilitates data-driven decision-making to optimize financial operations.

Data Cleaning and Transformation

Before creating the dashboard, we undertook a comprehensive process of cleaning and transforming the raw data to ensure accuracy and consistency. This involved:

- **Data Integration:** Merging data from various financial systems and sources into a unified dataset.
- **Data Cleaning:** Removing duplicates, handling missing values, and standardizing data formats.
- **Data Transformation:** Structuring data into a format suitable for analysis, including converting date formats, categorizing payments by region and department, and calculating relevant metrics.

Reasons for Creating This Project in Power BI

- **Centralized Data Management:** Power BI integrates data from multiple sources, providing a single platform for comprehensive payment analysis.
- **Interactive Visualizations:** Power BI's interactive charts and dashboards enable users to explore data dynamically, filter specific details, and gain deeper insights.

- **Real-Time Analytics:** Connecting to real-time data sources ensures the dashboard is always up-to-date, offering the most current information for decision-making.
- **User-Friendly Interface:** Power BI offers a customizable interface tailored to meet the needs of different stakeholders, from financial analysts to top management.
- **Enhanced Reporting:** Automated and customizable reporting capabilities ensure that relevant financial information is easily accessible and shareable across the organization.

Dashboard Components and Measures

1. Total Paid Amount:

- **Measure:** Sum of all payments made to vendors.
- **DAX Formula:** Total Paid Amount = SUM(Payments[PaidAmount])

2. Number of Payments:

- **Measure:** Count of all payment transactions.
- **DAX Formula:** Number of Payments = COUNT(Payments[PaymentID])

3. Total Pending Amount:

- **Measure:** Sum of all pending payments.
- **DAX Formula:** Total Pending Amount = SUM(Payments[PendingAmount])

4. Pending Payments:

- **Measure:** Count of all pending payment transactions.
- **DAX Formula:** Pending Payments =
CALCULATE(COUNT(Payments[PaymentID]), Payments[Status] = "Pending")

5. Total Hold Amount:

- **Measure:** Sum of all payments on hold.
- **DAX Formula:** Total Hold Amount = SUM(Payments[HoldAmount])

6. Hold Payments:

- **Measure:** Count of all payments on hold.
- **DAX Formula:** Hold Payments =
CALCULATE(COUNT(Payments[PaymentID]), Payments[Status] = "Hold")

7. Total Vendors Payment:

- **Visualization:** Displaying the sum of payments across all vendors and regions.
- **DAX Formula:** `Total Vendors Payment = SUM(Payments[PaidAmount])`

8. Payments by Date:

- **Visualization:** Line chart showing the trend of payments over time.
- **DAX Formula:** `Payments by Date = SUM(Payments[PaidAmount])`

9. Top 5 Regions with Highest Payments:

- **Visualization:** Bar chart displaying the regions with the highest total payments.

10. Payment Details:

- **Visualization:** Table listing detailed payment information including quotation/invoice number, total paid amount, total pending amount, and total hold amount.

Slicers Used for Dynamic Analysis

- **Year:** Allows filtering the data by specific years.
- **Quarter:** Enables filtering by quarters to analyze quarterly payments.
- **Month:** Allows month-wise analysis of payments.
- **Date:** Filters data by specific dates to analyze daily payments.
- **Region:** Filters payments data based on different regions, allowing for regional financial performance analysis.
- **Payment Status:** Filters payments based on their status (e.g., Paid, Pending, Hold), helping to quickly identify and focus on pending or on-hold payments.
- **Invoice Shared by:** Allows filtering by the person or department who shared the invoice, providing insights into the source of payment requests.

Detailed Explanation of Measures and Visualizations

- **Total Paid Amount and Number of Payments:** Provides an overview of the total financial outflow and the number of transactions, helping stakeholders understand the scale of vendor payments.
- **Pending and Hold Amounts:** Highlights amounts that are pending or on hold, crucial for managing cash flow and prioritizing payments.

- **Payments by Region:** Identifies regions with the highest payments, which helps in resource allocation and regional financial planning.
- **Payments by Date:** Visualizing payments over time assists in identifying trends, peak payment periods, and forecasting future payments.
- **Detailed Payment Table:** Offers granular details of each payment, enabling users to track specific transactions and their statuses.

Graphs and Charts Used in the Dashboard

1. **Bar Chart:** Displaying the top 5 regions with the highest payments.
2. **Line Chart:** Showing the trend of payments over time.
3. **Table:** Listing detailed payment information including quotation/invoice number, total paid amount, total pending amount, and total hold amount.
4. **KPI Cards:** Highlighting key metrics such as total paid amount, number of payments, total pending amount, pending payments, total hold amount, and hold payments.
5. **Slicers:** For dynamic analysis by year, quarter, month, date, region, payment status, and invoice shared by.

By combining these visual elements, the dashboard provides a comprehensive, interactive, and user-friendly platform for managing and analyzing vendor payments.

Conclusion

The Vendors Payment Analysis Dashboard developed in Power BI effectively addresses the need for comprehensive, real-time monitoring and management of vendor payments at Ismmart Group of Industries. By leveraging interactive visualizations and advanced data analytics, the dashboard provides actionable insights that enhance financial decision-making and optimize overall payment operations.