

Power BI Dashboard Analytics_Summary

Purpose of the Dashboard

The goal of this dashboard is to provide a convenient tool for monitoring key financial and operational metrics to assess business performance and identify potential issues.

The dashboard enables users to:

- evaluate financial health based on core metrics (revenue, profit, margin)
- compare store performance to identify best practices and underperforming locations
- analyze operational indicators (average receipt value, purchase count, channel activity) to optimize processes
- generate hypotheses for business growth based on detected patterns and disproportions

Dashboard Structure

The dashboard consists of three pages:

1. Financial Metrics — financial performance of the pharmacy chain
2. Checkout Analytics — receipt-level analysis, sales channels, and customer behavior
3. Purchase Activity — time-of-day activity and purchase dynamics

The analyzed business is a pharmacy chain of 10 stores (data for 2 stores is missing for the reporting period, but they are included in the model for future automation).

The reporting period: 01.05.2022 – 09.06.2022.

Dashboard Pages

1. Financial Metrics

This page contains the key aggregated indicators that provide an instant assessment of business performance: Revenue, Profit and Margin. These three indicators are the basis of financial analysis.

A **Margin of 21%** indicates a healthy and profitable business.

Average Receipt Value (ARV - across all sales channels (offline + online)) is used as an indicator of pricing strategy and customer purchasing power. Combined with other metrics, it helps determine whether revenue growth is driven by purchase volume or receipt size. Conditional formatting highlights stores with below-average receipt values.

Daily Revenue & Profit Trend A line chart visualizing daily trends helps identify seasonality, promotional effects or operational disruptions. For example, the decline observed in early June requires further investigation. A line chart is ideally suited for displaying changes over time.

Profit & Revenue by Store A sorted bar chart highlights top and bottom performers.

Top 3 Stores by Profit Key insight: the top three stores generate **54% of total profit**. Placing these visuals side by side enables comparative analysis. Comparing revenue and profit bars for each store helps visually assess margin levels. The "Top 3" block focuses on growth areas.

2. Checkout Analytics

This page explains how financial results are formed at the transaction level.

Total Receipt - the base metric for further calculations.

Profit per Receipt - a critical operational KPI showing efficiency per customer interaction.

Average Item per Receipt an indicator cross-sell and upsell potential. Low levels suggest a potential growth lever: increasing the number of items per transaction.

Receipt Count by Channel (Online vs In-store)

A pie chart reveals a striking imbalance: online sales account for only **3%**.

This is not just a metric - it is a strategic signal to strengthen the e-commerce channel.

Average Receipt by Store & Receipt Count by Store

Placed side by side to reveal correlations (or lack thereof). A high number of receipts does not guarantee a high average receipt - Store 11 is a clear example.

3. Purchase Activity

This page helps understand customer behavior and the effectiveness of marketing tools.

Loyalty Card Count - one of the indicators of the effectiveness of the main marketing tool in retail. With a total number of 21,008 receipts, the number of loyalty cards is 1,736, which means that the prevalence of the loyalty program is only **8%**. This is a critically low indicator, pointing either to the unattractiveness of the program's conditions or to the lack of its active promotion. It is likely that this also indirectly affects low online sales. This is a direct loss of customer data and a lever for repeat sales.

Assortment Count by Store - the histogram reveals a colossal gap in the size of the assortment between the stores in the chain (the leader can exceed the laggard by 2 times). A wide assortment attracts traffic and makes it possible to generate larger receipts. This is an explanation for the differences in revenue.

Purchase Activity by Time of the Day - the activity allows for optimal allocation of labor resources (work schedules, number of cash registers) throughout the day, focusing on peak periods (morning, daytime). Most purchases are made in the morning (26.6%), and the second place is shared by daytime and evening (24.6% each).

 **Main insight:** By combining the data from all pages, we see the phenomenon of Store No. 3. It demonstrates paradoxically high profit (top-3), having an average assortment level and not using the loyalty program.

The hypothesis: this Store achieved high efficiency due to specialization in high-margin product categories or working with a specific customer group. This makes it a key candidate for analyzing best practices with the goal of replicating the experience across other stores in the chain.

Final insights and recommendations:

- Low online sales share (~3%) → develop the e-commerce channel
- Low engagement in the loyalty program (8%) → it is necessary to revise the mechanics and communication
- Stores 2 and 11 are key profit drivers → their practices should be applied to other locations
- High assortment variability → negatively affects sales and average receipt; to scale up the assortment practices of leading stores.
- Store 3 is an anomalous outperformer → investigate pricing policy, demand or local factors
- Customer activity peaks in the first half of the day → adjust staffing and scheduling accordingly