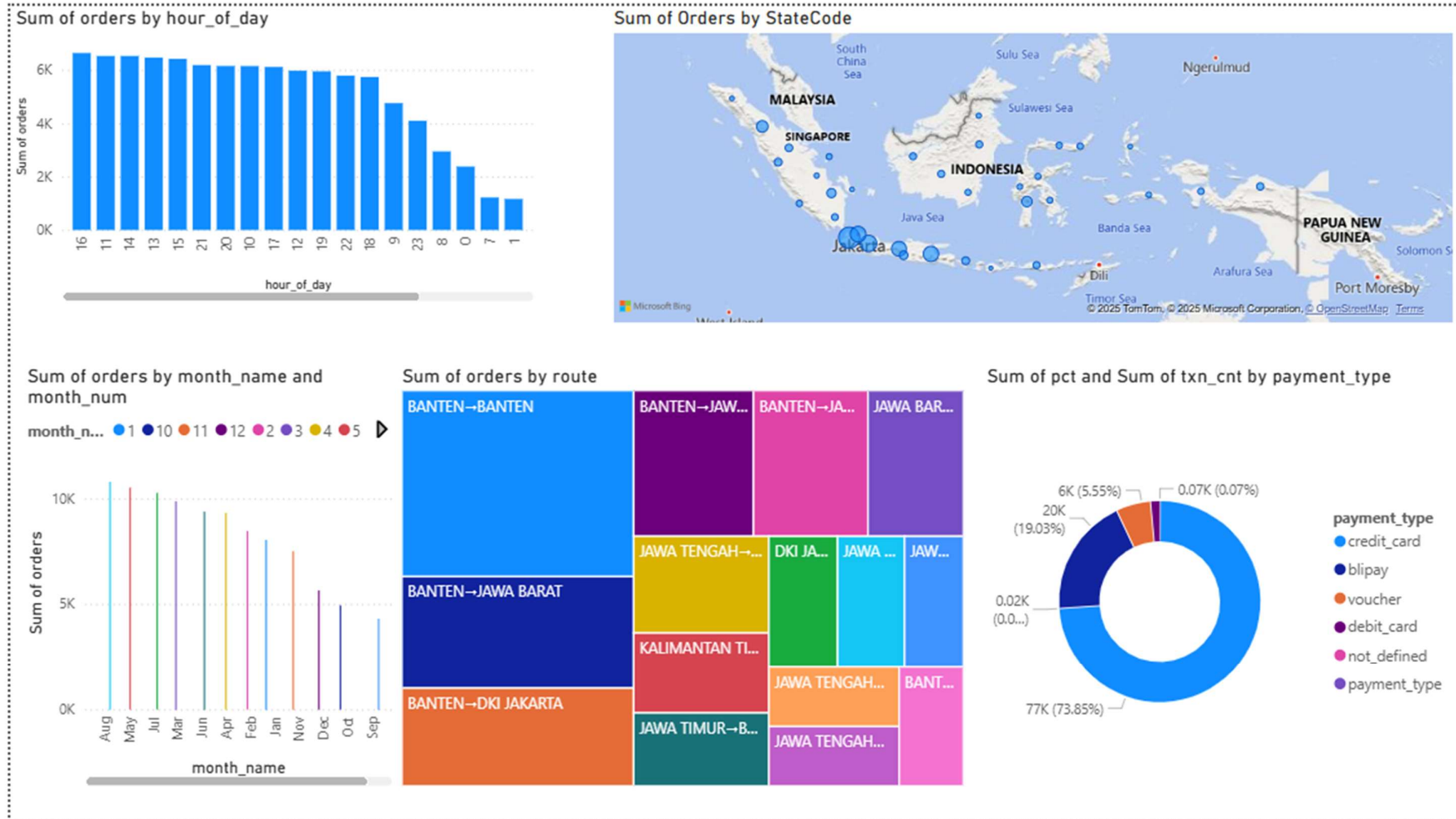# Dashboard (Power BI):

**Why the dashboard looks this way (design)**

- I put the big questions up front: when people order (by hour and month), where orders happen (place-map), how they pay (donut), and how goods move (routes tree-map).
- Each chart focuses on one thing, so it is easy to read and filter.
- Colours and labels are kept simple so trends pop without noise.

**What I learned**

- Peak times: Late afternoon to evening (around 4PM–10PM) is busiest. Early morning is quiet.
- Seasonality: Late Q3 and early Q4 are stronger than early-year months.
- Payments: Credit cards dominate, Blipay is second, vouchers are small but visible.
- Where orders come from: Highest volumes cluster around Banten, Jakarta, and West Java.

**Challenges (and how I fixed it)**

- Big files over SFTP sometimes crashed: So, loaded in chunks and added retries.
- Could not truncate tables because of links between tables: used safe upserts (update if the row exists).
- Duplicate rows tried to re-insert: sent them to a duplicate archive and ignored repeats.
- Old Python typing issue: used compatible types so the DAG loads cleanly.

**Recommendations for business improvement:**

- Operations: Keep an eye on the busiest routes (Banten, Jakarta, West Java). Set alerts so you know right away when a delivery is running late.
- Marketing: Send promos and push messages in the late afternoon and evening (about 4–10 PM) when people order the most.
- Customer care: If an order arrives late and the feedback is low, automatically flag it for a quick follow-up