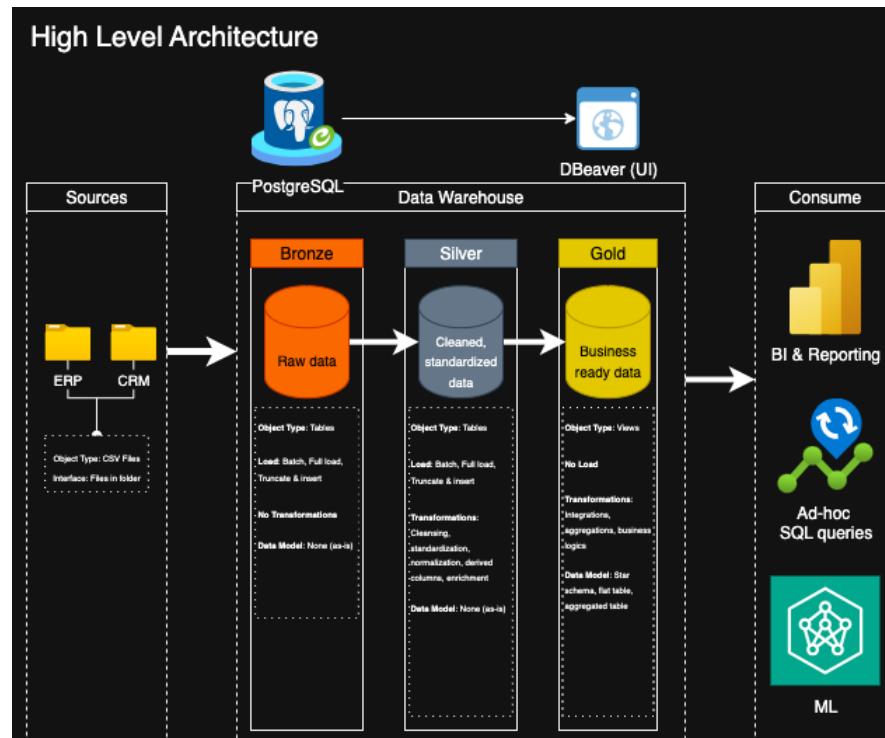


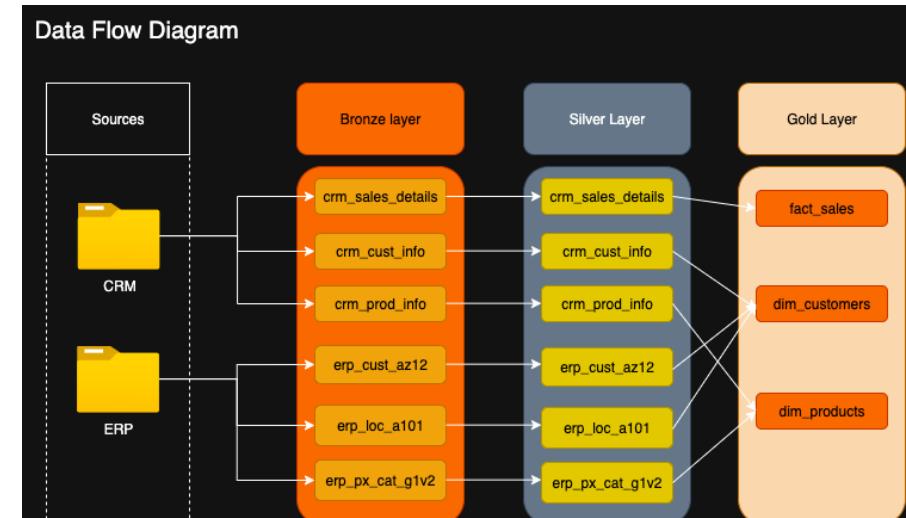
PostgreSQL Data Warehouse (Bronze–Silver–Gold)

End-to-end pipeline built in PostgreSQL with DBeaver; curated Gold layer consumed in Looker Studio.

- Goal: standardize CRM + ERP data into a scalable warehouse for BI and ad-hoc analysis.
- Bronze: raw extracts; Silver: cleaned & conformed; Gold: analytics-ready marts (star schema).
- Outcome: repeatable SQL transformations and a BI dashboard powered by Gold views/tables.



High-level architecture (layers and consumers).



Data flow from sources to curated marts.

BI Output and Design Notes

Gold layer powers self-serve reporting and consistent metrics.

- Gold layer modeled for performance and clarity: fact_sales + dim_customers + dim_products.
- Silver layer applies cleaning, standardization, conformed keys, and derived business metrics.
- Next: data quality tests, incremental loads, orchestration, and SQL migrations.

The screenshot shows a Looker Studio dashboard titled "Customer Profile Report". The dashboard includes the following components:

- Customer Segment and Age Group filters:** Located at the top, these dropdowns allow users to filter data by Customer Segment (New, VIP, Regular) and Age Group (50 and above, 40-49, 30-39).
- Summary Metrics:** Total Customers (18 482), Total Sales (\$29 350 580), Average Monthly Spend (458), and Average Monthly Lifespan (5).
- Sales by Customer Segment:** A bar chart showing sales for New, VIP, and Regular segments. The Y-axis ranges from 0 to 15 milj.
- Customer Count by Segment:** A bar chart showing the number of customers for New, Regular, and VIP segments. The Y-axis ranges from 0 to 15 t.
- Age Group vs Segment:** A stacked bar chart showing the breakdown of segments by age group. The Y-axis ranges from 0 to 15 t.
- Table:** A data table listing the top 8 segments with their corresponding age groups, sales, and average monthly spend. The table is paginated at the bottom.

Segment	Age Group	Sales	Avg Monthly Spend
1. New	50 and above	7 860 951	511,73
2. VIP	50 and above	7 179 157	328,36
3. Regular	50 and above	4 360 812	196,96
4. New	40-49	3 824 945	504,94
5. VIP	40-49	3 301 195	313,89
6. Regular	40-49	2 538 428	191,01
7. Regular	30-39	108 661	183,55
8. New	30-39	107 634	450,17

Looker Studio dashboard example (powered by Gold layer).