

Domain Knowledge

Table 1: Orders

Field	Knowledge from Data
Order ID	Tells us how many orders exist , identifies unique deliveries, and helps detect duplicates or missing records.
Actual Delivery Date	Shows when the delivery actually happened ; lets us know if shipments are late, on-time, or early.
Delay Reason	Explains why an order was delayed (e.g., driver issue, vehicle breakdown, hub bottleneck, weather); helps identify operational problems.
Driver ID / Driver Name	Indicates who delivered the order ; lets us analyze driver performance, experience, and contribution to delays.
Hub Name	Indicates where the order was processed or dispatched ; helps identify hub efficiency, bottlenecks, and workload distribution.
Is Delayed	Simple indicator of whether the delivery was late ; gives insight into operational efficiency.
Is On Time	Simple indicator of whether the delivery met the promised time ; insight into SLA adherence and customer experience.
Order Date	Shows when the order was placed ; helps analyze demand trends, seasonal patterns, and order volumes over time.
Order Status	Tells the current outcome of the order — Delivered, Delayed, Cancelled; provides knowledge about fulfillment success and operational issues.
Vehicle Name / Vehicle Type	Indicates which vehicle was used and its category; helps understand fleet usage, suitability of vehicle type for orders, and potential cause of delays.
Customer Satisfaction Score	Captures customer feedback ; reflects the perceived quality of delivery, speed, and overall service.
Delivery Time Hours	Shows how long it took to deliver the order ; insight into delivery efficiency and route optimization.
Hub Processing Time Hours	Indicates how long the hub took to process the order ; shows hub efficiency and operational delays before dispatch.

Table 2: Hubs

Field	Knowledge from Data
Hub ID	Unique identifier for each hub. Allows us to link orders to specific hubs , track hub-specific performance, and analyze which hubs are handling more or fewer orders.
Hub Name	Human-readable name of the hub. Helps identify locations on dashboards, reports, or maps and compare performance between hubs.
Hub Capacity	Maximum number of orders the hub can process in a given period. Provides insight into hub utilization , potential bottlenecks, and whether a hub is overloaded or underused .

Table 3: Drivers

Field	Knowledge from Data
DriverID	Unique identifier for each driver. Helps link orders to drivers , track individual performance, and prevent duplicate records.
DriverName	Human-readable name of the driver. Used in dashboards/reports to show individual driver performance , assign tasks, or rank drivers.
Employment Type	Indicates if the driver is full-time, part-time, or contract . Insight into workforce structure, staffing needs, and operational planning.
Experience Filter	Usually a derived field to group drivers by experience (e.g., 0–2 yrs, 2–5 yrs, 5+ yrs). Helps analyze performance vs experience , identify skill gaps, and training needs.
Hire Date	Date the driver joined the company. Knowledge gained includes tenure , workforce age, and allows calculation of experience over time.
Experience Years	Number of years the driver has been driving. Useful to correlate experience with delivery efficiency, delays, and performance ratings .
Performance Rating	Metric or score representing driver quality (could be based on delays, customer feedback, or internal assessment). Insight into high/low performers , helps in incentives, training, or allocation .

Table 4: Vehicles

Field	Meaning / Knowledge from Data
Purchase Date	Date the vehicle was acquired. Provides insight into vehicle age , depreciation, and planning for replacement or upgrade.
Vehicle ID / Vehicle Code	Unique identifier for each vehicle. Used to link orders to vehicles , track usage, and prevent duplicates.
Vehicle Model	Model or make of the vehicle. Helps analyze vehicle performance , reliability by model, and suitability for certain deliveries.
Vehicle Status	Indicates whether the vehicle is Active, Inactive, or Under Maintenance . Insight into fleet availability and operational readiness.
Breakdown	Number of breakdowns recorded for the vehicle. Provides insight into vehicle reliability , causes of delivery delays, and need for replacement or repair.
Maintenance Count / Alert	Tracks how many maintenance events have occurred or when maintenance is due. Insight into fleet health, planning, and reducing unexpected delays.