Case Study for Amir

Part 1

The central data source of the Data Warehouse (DWH) is our internally developed ERP system (SBP). SBP stores its data in a MySQL database. Through replication, the on-premise DWH receives a 1:1 copy of the live SBP database. SBP is managed by a dedicated team in our department Operations at Shopware and hosted in a separate Virtual Private Cloud (VPC). The database is only accessible from within this VPC.

Sketch an example architecture showing how you would integrate SBP into a cloud environment such as Microsoft Fabric.

Part 2

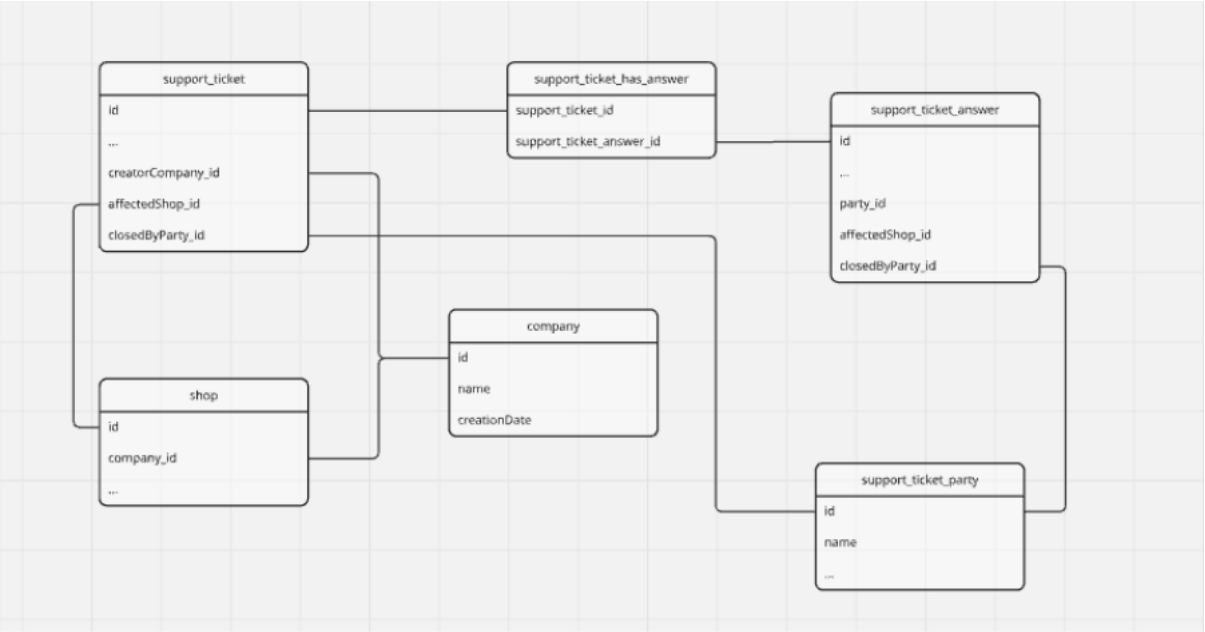
A core part of our business model is providing customer support. Our customers — shop owners who have signed a contract with us and pay a recurring fee to use our product — can open support tickets whenever they have questions about the product. The level of support they receive depends on the type of contract they have. All tickets are processed by Shopware employees.

Your task is to review the provided data and then design a simple example of a layered data architecture. The final output should include fact and dimension tables that Data Analysts can use for further analysis.

One important question that analysts should later be able to answer is how to plan staffing for our support team — for example, whether introducing a night shift would make sense. Analyzing the data and developing ideas for workforce planning is NOT part of this case study.

Note about the data:
The table support_ticket_answers includes all messages related to a ticket — both from the customer and from the support agent. The field party_id indicates who wrote each message. Our customer meta data is shown in the company table. One company can have several shops.

Here you can find the data mapping:


support_ticket
id
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creatorCompany_id
affectedShop_id
closedByParty_id
support_ticket_has_answer
support_ticket_id
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