Activity Exemplar: Evaluate a schema using a validation checklist

Here is a completed exemplar of an ideal version of the schema you evaluated in this activity, as well as an explanation of why it is ideal.

Completed Exemplar

To review the exemplar for this course item, click the following link and select *Use Template*.

Link to exemplar: Database schema exemplar

OR

If you don't have a Google account, you can download the exemplar directly from the following attachment.

Activity Exemplar_ Database schema
PPTX File

Assessment of Exemplar

Compare the exemplar to your completed activity. Review your work using each of the criteria in the exemplar. What did you do well? Where can you improve? Use your answers to these questions to guide you as you continue to progress through the course.

In the schema you evaluated in this activity, the *Sales Fact* table is a central table that contains key figures from the transactions. It also contains an internal key to the dimension it's linked to. This is a common schema structure in BI data warehouse systems.

The original schema contains eight tables: *Sales Fact, Shipments, Billing, Order Items, Product, Product Price, Order Details*, and *Customer*, which are connected via keys.

The central table is *Sales Fact*. The foreign keys in the *Sales Fact* table link to the other tables as follows:

"order_sid" key links to the *Order Items,Order Details*, *Shipments*, and *Billing* tables

"customer_sid" links to *Order Details*; "order_item_sid" links to *Order Items*, *Shipments*, and *Billing*

"shipment_sid" links to *Shipments*; and "billing_sid" links to *Billing*

"product_id" from the *Product* table links to *Order Items* and *Product Price*

The *Customer* table currently doesn't have any links to other tables. It contains the following columns: "customer_sid," "customer_name," and "customer_type."

This schema chart includes the following problems:

The Customer table is not linked to any other tables. It should be linked to *Sales Facts* and *Order Details* tables. This violates the "Keys are still valid" and Table relationships have been preserved" checks.

The *Shipments* table should be connected to the *Order Items* table through the "order_sid" dimension. This violates the "Keys are still valid" and Table relationships have been preserved" checks.

The exemplar in this reading is an example of the schema you evaluated, but with its errors fixed. It links the *Customer* table to the *Sales Facts* and *Order Details* tables through the customer_sid dimension. It has a connection between the *Shipment* and *Order Items* tables. It also has consistent naming conventions for "product_sid." Consistent naming for column titles is not mandatory, but it is a best practice to keep titles as consistent as possible.

The important dimensions that are connections in this schema are order_sid, order_item_sid, customer_sid, product_sid, shipment_sid, and billing_sid.

Order_sid is present in the *Sales Facts, Order Items, Shipments, Billing*, and *Order Details* tables.

Order_item_sid is present in the *Sales Facts, Order Items, Shipments*, and *Billing* tables.

Customer_sid is present in the *Sales Facts, Order Details*, and *Customer tables.*

Product_sid is present in the *Order Items, Product*, and *Product Price* tables.

Shipment_sid is present in the *Sales Facts* and *Shipment* tables.

Billing_sid is present in the *Sales Facts* and *Billing* tables.

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