

Data Dictionary

The following data dictionary provides a detailed description of each entity and attribute in the TelcoCorp data model:

Date

- **date_id** (Primary Key): Unique identifier for the date
- **date**: Date value

Product

- **product_id** (Primary Key): Unique identifier for the product
- **name**: Product name
- **description**: Product description
- **price**: Product price

Customer

- **customer_id** (Primary Key): Unique identifier for the customer
- **name**: Customer name
- **email**: Customer email address
- **phone_number**: Customer phone number

Marketing_Campaign

- **campaign_id** (Primary Key): Unique identifier for the marketing campaign
- **name**: Campaign name
- **start_date**: Start date of the campaign
- **end_date**: End date of the campaign
- **budget**: Campaign budget

Network_Traffic

- **traffic_id** (Primary Key): Unique identifier for the network traffic
- **date_id** (Foreign Key): References the date of the traffic
- **product_id** (Foreign Key): References the product related to the traffic
- **customer_id** (Foreign Key): References the customer who generated the traffic
- **traffic_volume**: Volume of network traffic

Transactions

- **transaction_id** (Primary Key): Unique identifier for the transaction
- **date_id** (Foreign Key): References the date of the transaction
- **product_id** (Foreign Key): References the product related to the transaction
- **customer_id** (Foreign Key): References the customer who made the transaction
- **transaction_amount**: Amount of the transaction

Product_Sales

- **sales_id** (Primary Key): Unique identifier for the product sales
- **date_id** (Foreign Key): References the date of the sales
- **product_id** (Foreign Key): References the product related to the sales
- **customer_id** (Foreign Key): References the customer who made the sales
- **sales_amount**: Amount of the sales

Table Creation:

```
create database telecom;
```

```
use telecom;
```

```
CREATE TABLE Date (  

    date_id INT PRIMARY KEY,  

    date DATE NOT NULL  

);
```

```
CREATE TABLE Product (  

    product_id INT PRIMARY KEY,  

    name VARCHAR(255) NOT NULL,  

    description VARCHAR(255) NOT NULL,  

    price DECIMAL(10, 2) NOT NULL  

);
```

```
CREATE TABLE Customer (  
    customer_id INT PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    email VARCHAR(255) NOT NULL,  
    phone_number VARCHAR(20) NOT NULL  
);
```

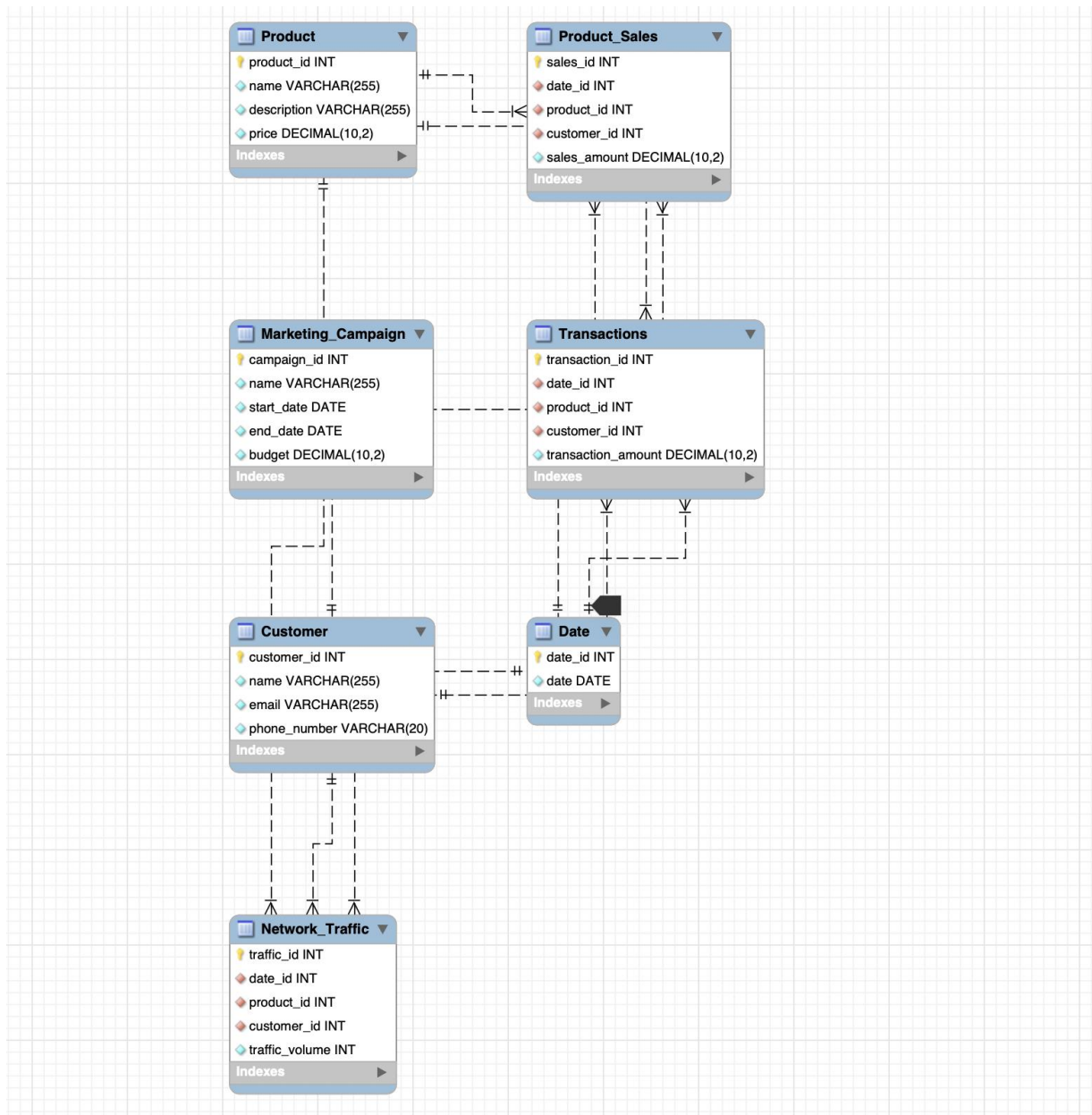
```
CREATE TABLE Marketing_Campaign (  
    campaign_id INT PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    start_date DATE NOT NULL,  
    end_date DATE NOT NULL,  
    budget DECIMAL(10, 2) NOT NULL  
);
```

```
CREATE TABLE Network_Traffic (  
    traffic_id INT PRIMARY KEY,  
    date_id INT NOT NULL,  
    product_id INT NOT NULL,  
    customer_id INT NOT NULL,  
    traffic_volume INT NOT NULL,  
    FOREIGN KEY (date_id) REFERENCES Date(date_id),  
    FOREIGN KEY (product_id) REFERENCES Product(product_id),  
    FOREIGN KEY (customer_id) REFERENCES Customer(customer_id)  
);
```

```
CREATE TABLE Transactions (  
    transaction_id INT PRIMARY KEY,  
    date_id INT NOT NULL,
```

```
product_id INT NOT NULL,  
customer_id INT NOT NULL,  
transaction_amount DECIMAL(10, 2) NOT NULL,  
FOREIGN KEY (date_id) REFERENCES Date(date_id),  
FOREIGN KEY (product_id) REFERENCES Product(product_id),  
FOREIGN KEY (customer_id) REFERENCES Customer(customer_id)  
);
```

```
CREATE TABLE Product_Sales (  
sales_id INT PRIMARY KEY,  
date_id INT NOT NULL,  
product_id INT NOT NULL,  
customer_id INT NOT NULL,  
sales_amount DECIMAL(10, 2) NOT NULL,  
FOREIGN KEY (date_id) REFERENCES Date(date_id),  
FOREIGN KEY (product_id) REFERENCES Product(product_id),  
FOREIGN KEY (customer_id) REFERENCES Customer(customer_id)  
);
```



ER Diagram