# **Data Mapping Document**

## **Section 1 – SRC → LND (Landing)**

* All columns from **S1** and **S2** are copied **1:1** into Landing.
* Data type in Landing = VARCHAR(256) for every column.
* No transformations, only raw ingestion.

## **Section 2 – LND → DWH**

### **DWH\_CLIENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Column** | **Data Type** | **Nullable** | **PK/FK** | **Default/Rule** |
| CLIENT\_ID | INT | NOT NULL | PK | Auto-generated surrogate key |
| CLIENT\_SRC\_ID | VARCHAR(50) | NOT NULL |  | From source CLIENT\_ID |
| FIRST\_NAME | VARCHAR(50) | NOT NULL |  | Direct copy |
| LAST\_NAME | VARCHAR(50) | NOT NULL |  | Direct copy |
| MIDDLE\_NAME | VARCHAR(50) | YES |  | S1: direct; S2: 'N/A' |
| EMAIL | VARCHAR(100) | NOT NULL |  | Direct copy |
| PHONE\_NUMBER | VARCHAR(30) | YES |  | S1: direct; S2: `PHONE\_CODE |
| VALID\_FROM | DATE | NOT NULL |  | S1: '2000-01-01'; S2: take from source |
| VALID\_TO | DATE | NOT NULL |  | S1: '2100-01-01'; S2: take from source |
| IS\_VALID | CHAR(1) | NOT NULL |  | 'Y' if VALID\_TO > 2021-01-20, else 'N' |
| FIRST\_PURCHASE\_DATE | DATE | YES |  | From source FIRST\_PURCHASE |

### **DWH\_PRODUCTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Column** | **Data Type** | **Nullable** | **PK/FK** | **Default/Rule** |
| PRODUCT\_ID | INT | NOT NULL | PK | Auto-generated |
| PRODUCT\_SRC\_ID | VARCHAR(50) | NOT NULL |  | Source PRODUCT\_ID |
| PRODUCT\_NAME | VARCHAR(100) | NOT NULL |  | Direct copy |
| PRODUCT\_COST | DECIMAL(10,2) | NOT NULL |  | S1: from COST; S2: from PRODUCT\_PRICE |
| CATEGORY | VARCHAR(50) | YES |  | Direct copy |

### **DWH\_LOCATIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Column** | **Data Type** | **Nullable** | **PK/FK** | **Default/Rule** |
| LOCATION\_ID | INT | NOT NULL | PK | Auto-generated |
| LOCATION\_SRC\_ID | VARCHAR(50) | NOT NULL |  | S1: 'N/A'; S2: from LOCATION\_ID |
| COUNTRY | VARCHAR(50) | NOT NULL |  | Direct copy |
| CITY | VARCHAR(50) | YES |  | Direct copy |

### **DWH\_CHANNELS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Column** | **Data Type** | **Nullable** | **PK/FK** | **Default/Rule** |
| CHANNEL\_ID | INT | NOT NULL | PK | Auto-generated |
| CHANNEL\_NAME | VARCHAR(50) | NOT NULL |  | Direct copy |

### **DWH\_SALES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Target Column** | **Data Type** | **Nullable** | **PK/FK** | **Default/Rule** |
| SALE\_ID | INT | NOT NULL | PK | Auto-generated |
| CLIENT\_ID | INT | NOT NULL | FK | From DWH\_CLIENTS.CLIENT\_ID |
| PRODUCT\_ID | INT | NOT NULL | FK | From DWH\_PRODUCTS.PRODUCT\_ID |
| LOCATION\_ID | INT | YES | FK | From DWH\_LOCATIONS.LOCATION\_ID |
| CHANNEL\_ID | INT | YES | FK | From DWH\_CHANNELS.CHANNEL\_ID |
| SALE\_DATE | DATE | NOT NULL |  | Unified from S1: sale\_date; S2: saled\_at/sold\_date |
| QUANTITY | INT | NOT NULL |  | Unified from S1: units; S2: product\_amount |
| AMOUNT | DECIMAL(12,2) | NOT NULL |  | Direct copy |

## **Section 3 – DWH → DM**

### **DM\_MAIN\_DASHBOARD**

|  |  |  |
| --- | --- | --- |
| **Target Column** | **Data Type** | **Rule / Source** |
| CLIENT\_NAME | VARCHAR(150) | CONCAT(FIRST\_NAME |
| PRODUCT\_NAME | VARCHAR(100) | From DWH\_PRODUCTS |
| CATEGORY | VARCHAR(50) | From DWH\_PRODUCTS |
| COUNTRY | VARCHAR(50) | From DWH\_LOCATIONS |
| CITY | VARCHAR(50) | From DWH\_LOCATIONS |
| CHANNEL\_NAME | VARCHAR(50) | From DWH\_CHANNELS |
| SALE\_DATE | DATE | From DWH\_SALES |
| QUANTITY | INT | From DWH\_SALES |
| PRODUCT\_COST | DECIMAL(10,2) | From DWH\_PRODUCTS |
| AMOUNT | DECIMAL(12,2) | From DWH\_SALES |
| TOTAL\_COST | DECIMAL(12,2) | QUANTITY \* PRODUCT\_COST |

# **Conclusion**

This mapping document defines how each source field flows into the Landing, DWH, and finally the Data Mart, with all defaults, transformations, and business rules applied. It ensures **traceability, consistency, and readiness for analytics**.