**DATA MAPPING DOCUMENT**

Data mapping is the process of matching fields from one database to another. It is important to the success of many data processes. One incorrect data in data mapping can ripple throughout the project, can lead to errors and inaccurate analysis. Take note that as the amount of data and source increase, the process of data mapping will become more complex.

Steps on how to create Data Mapping Document

1. Define Data Structure needed
* Know the data to be moved, including the tables, fields within each table and format of the field after it is moved.
1. Map the Data
* Create a Source field and Destination fields.
* Match the source field to destination fields.
1. Transformation of data
* If a field requires transformation, the transformation formula or rule is coded.
1. Test it in system
* Run a test in a system with a sample data from the source and see how it works when transferred to the destination.
* If there would be error found while testing, make the necessary amendment.

1. Review with the Team
* After running a test in the system and it works, present it first within the team to make sure that it is accurate.
* If there would be any comments/suggestions from the team, make the necessary amendment.
1. Deploy
* Once the data transformation is working as planned, schedule a migration on integration go live event.
1. Maintain and update
* For on-going data integration, Data mapping will require updates and changes as new data sources will be added.
* If there will be a change in data source, requirements or destination change then data mapping needs to be updated.

**ELEMENTS OF DATA MAPPING DOCUMENT**

1. Source 🡪 This is where the data come from.
2. Destination 🡪 This is where the data will be transferred.
3. Field Name 🡪 Name of the fields that will be transferred or transform
4. Data Type 🡪 Type of the Field
5. Nullable 🡪 If the Field is not required
6. Description 🡪 Detail description of the field.

Some Data Mapping Document also includes the following:

* Transformation/ Aggregation 🡪 If there would be an Enrichment, this field should have the description rules for each field that is affected.
* Error Types and Error Handling 🡪 This field should have a description of error type and how to handle it when being encounter.
* Primary / foreign key 🡪 This is an indicator if the field is a primary key, if it is a primary key then it means that source records are unique
* Version 🡪 This should have a version log entries to describe additions and changes to the mappings if there is a change in the document.

**SAMPLE TEMPLATE OF DATA MAPPING**

**Note: Since in our project we will use an open-source ticketing system (FreshDesk) then we are not able to fill up the details for the SOURCE Fields. But if we create a system from scratch then we will be able to get the details for the SOURCE fields.**

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| --- | --- |
| **SOURCE** | **DESTINATION** |
|  | **Ticketing System (FreshDesk)** |
| **Field name** | **Data Type** | **Nullable** | **Description** | **Field name** | **Data Type** | **Nullable**  | **Description** |
|   |   |   |   | Contact |  String |   | Name of the client who created the ticket |
|   |   |   |   | Subject |  String |   | Summary of the ticket created |
|   |   |   |   | Date |  Date |   | Date when the ticket is created |
|   |   |   |   | Type |  String |   ✔️ | Type of the ticket created. List of Types can be seen in drop-down includes Question, Incident, Problem, Feature Request, Refund. |
|   |   |   |   | Status |  String |   | Condition of the ticket. List of Status can be seen in drop-down includes Open, Pending, Resolved, Closed, Waiting on Customer, Waiting on Third Party |
|   |   |   |   | Priority |  String |   | States how should the agent handle the ticket. List of Priority can be seen in drop-down includes Low, Medium, High, Urgent. The following list have an SLA’s to be met.**Urgent - 2 - 3 Business Hours****High - 4 - 8 Business Hours/ 1 Business Day****Medium - 8 - 16 Business Hours/ 1 - 2 Business Days****Low - 16 - 32 Business Hours/ 2 - 4 Business Days** |
|   |   |   |   | Group |  String |   ✔️ | Group of the client who created the ticket. List of Group can be seen in drop-down includes Account Managers, Billing, Escalations, Product Management, QA, Replacements, Sales, Shipping and delivery |
|   |   |   |   | Agent |  String |   ✔️ |  Name of Agent who will work on and resolve the ticket  |
|   |   |   |   | Description |  String |   |  Detailed description of the ticket created. |
|   |   |   |   | Tags |  String |   ✔️ |  It can be a keyword of the ticket. Sample if the ticket is about refund, then Refund can be put in the tag. |