

## Data Dictionary

A data dictionary is a file that helps to define the organization of a particular database. The data dictionary acts as a description of the data objects or items in a model and is used for the benefit of the programmer or other people who may need to access it.

A data dictionary does **not** contain the actual data from the database; it contains only information for how to describe/manage the data; this is called **metadata**\*. Building a data dictionary provides the ability to know the kind of field, where it is located in a database, what it means, etc. It typically consists of a table with multiple columns that describe relationships as well as labels for data.

### A data dictionary often contains the following information about fields:

- Default values
- Constraint information
- Definitions (example: functions, sequence, etc.)
- The amount of space allocated for the object/field
- Auditing information

### What is the data dictionary used for?

1. It can also be used as a read-only reference in order to obtain information about the database
2. A data dictionary can be of use when developing programs that use a data model
3. The data dictionary acts as a way to describe data in “real-world” terms

### Why is a data dictionary needed?

One of the main reasons a data dictionary is necessary is to provide better accuracy, organization, and reliability in regards to data management and user/administrator understanding and training.

### Benefits of using a data dictionary:

1. Improved data quality
2. Consistency in data use
3. Improved documentation and control of data
4. Faster and easier data analysis
5. Easier programming
6. Better trust in data integrity
7. Increased efficiency

### Creating a data dictionary:

Below is an example of how a simple data dictionary appears. Notice how the table does not contain any actual data (numbers, calculations, etc.) but only contains descriptive information about the data that is being collected.

	A	B	C	D	E	F	G	H
1	Field Name	Field Type	Object Location	API Name	Visibility Level	Formulas/Calculations	Read-Only	Description
2	Account Name	Name	Account	Name	All			Name of company or subsidiary company
3	Phone	Phone	Lead	Phone	All			Primary phone number of Lead record. Can be of the contact or company since all data is on one record when a Lead.
4	Phone	Phone	Contact	Phone	All			Primary phone number of Contact record.
5	Phone	Phone	Account	Phone	All			Primary phone number of company/Account record.
6	Name	Name	Contact	Name	All			First and last name of individual person on Contact record.
7	Email	Email	Contact	Email	All			Email address of person on Contact record.
8	Email	Email	Lead	Email	All			Email address of person on Lead record.
9	Client Team	Picklist	Account	Client_Team_c	All			Internal Fathom client vertical team for udner which the company/Account would fall.
10	Annual Revenue	Currency(18, 0)	Account	AnnualRevenue	All			Annual Revenue of company on Account record.

### Structure of the data dictionary:

The data dictionary has 3 main structural elements: (1) base table, (2) user accessible views, (3) owner of the data dictionary. The base tables are the underlying tables that store the information about the database. Users will rarely access these.

### Definitions:

- **Database Configuration Assistant-** A utility used for creating, configuring, and removing oracle databases.
- **Metadata-** Data about data. Provides information for another objects content.

