# **Data Dictionary**

#### Fact\_ChannelMetrics

Column	Type	Description
id	integer	Primary key for channel metrics fact table
channel_id	integer (NN)	Foreign key to Dim_Channel
date_key	date (NN)	Foreign key to Dim_Date for time-series tracking
subscribers	integer	Number of subscribers on this date
views	integer	Total channel views on this date
videos	integer	Number of videos published on this date

#### Fact\_VideoPerformance

Column	Type	Description
id	integer	Primary key for video performance fact table
video_id	varchar (NN)	Foreign key to Dim_Video
channel_id	integer (NN)	Foreign key to Dim_Channel
date_key	date (NN)	Foreign key to Dim_Date for tracking performance over time
view_count	float	Number of views recorded on this date
like_count	float	Number of likes recorded on this date
comment_count	float	Number of comments recorded on this date

#### Dim\_Channel

Column	Type	Description
channel_id	integer	Primary key, unique channel identifier
natural_channel_id	varchar (NN)	YouTube's original channel ID string
title	varchar	Channel name/title
description	text	Channel description
custom_url	varchar	Custom YouTube handle/URL
hidden_subscribers	boolean	Whether subscriber count is hidden
published_at	datetime	Channel creation date
country	varchar	Channel's declared country
default_language	varchar	Default language setting
uploads_playlist_id	varchar	ID of the channel's uploads playlist
topics	text	Associated topics/genres (Wikipedia URLs)
valid_from	datetime	Start date for this version of channel data (SCD Type 2)
valid_to	datetime	End date for this version of channel data (SCD Type 2)
is_current	boolean	Flag indicating if this is the current active record

## Dim\_Video

Column	Type	Description
video_id	varchar	Primary key, unique YouTube video ID
title	varchar	Video title
published_at	datetime	Video publish date and time
category_id	integer	Foreign key to Dim_Category
duration	varchar	Video duration in ISO 8601 format (e.g., PT1H2M3S)
definition	varchar	Video quality (sd or hd)
caption	boolean	Whether captions are available
licensed_content	boolean	Whether video is licensed content
privacy_status	varchar	Video privacy setting (public, private, unlisted)
license	varchar	License type (youtube or creativeCommon)
region_restriction	text	Region restriction information if applicable
topic_categories	text	Associated topics (Wikipedia URLs)
valid_from	datetime	Start date for this version of video data (SCD Type 2)
valid_to	datetime	End date for this version of video data (SCD Type 2)
is_current	boolean	Flag indicating if this is the current active record

## **Dim\_Category**

Column	Type	Description
category_id	integer	Primary key, YouTube category numeric identifier
category_name	varchar	Human-readable category name

#### Dim\_Date

Column	Type	Description
date_key	date	Primary key, calendar date
year	integer	Year component
quarter	integer	Quarter of year (1-4)
month	integer	Month of year (1-12)
day	integer	Day of month (1-31)

## Dim\_Tag

Column	Type	Description
tag_id	integer	Primary key, unique tag identifier
tag_name	varchar (NN)	Tag text/name

## Dim\_Keyword

Column	Type	Description
keyword_id	integer	Primary key, unique keyword identifier
keyword	varchar (NN)	Keyword text

## ${\bf Bridge\_VideoTag}$

Column	Type	Description
video_id	varchar (NN)	Foreign key to Dim_Video
tag_id	integer (NN)	Foreign key to Dim_Tag

## ${\bf Bridge\_Channel Keyword}$

Column	Type	Description
channel_id	integer (NN)	Foreign key to Dim_Channel
keyword_id	integer (NN)	Foreign key to Dim_Keyword