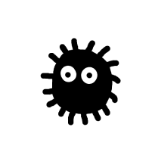
**Studio Ghibli Dashboard Technical Manual**

**Table of Contents**

[**1. Document Purpose** 1](#_Toc202181135)

[**2. Solution Architecture** 1](#_Toc202181136)

[**3. Data Sources** 1](#_Toc202181137)

[**Introduction** 1](#_Toc202181138)

[**Description of Main Datasets** 2](#_Toc202181139)

[**Data Quality Considerations** 3](#_Toc202181140)

[**4. Data Model** 3](#_Toc202181141)

[**Introduction** 3](#_Toc202181142)

[**Relationship 1: Review\_Final → Master** 3](#_Toc202181143)

[**Relationship 2: descrizione → Master** 4](#_Toc202181144)

[**Relationship 3: Poster → Master** 4](#_Toc202181145)

[**Relationship 4: incassi → Master** 4](#_Toc202181146)

[**Relationship 5: soundtracks → Master** 4](#_Toc202181147)

[**Final Considerations** 4](#_Toc202181148)

[**5. DAX Measures** 4](#_Toc202181149)

[**6. Updates and Maintenance** 7](#_Toc202181150)

[**7. Troubleshooting** 7](#_Toc202181151)

**1. Document Purpose**

This technical manual describes the structure, logic, and components of the Power BI dashboard dedicated to the Studio Ghibli universe.

**2. Solution Architecture**

The dashboard consists of a Power BI semantic model, interactive visualizations, and a data flow from external sources. The architecture includes Power BI Desktop, Power BI Service, and local or cloud data sources.

**3. Data Sources**

**Introduction**

Data reliability and quality represent the foundation upon which the entire analysis and visualization project is built. This chapter describes the origins of the data used in the dashboard, with the objective of ensuring transparency, traceability, and understanding of the information context.

The data used comes from heterogeneous sources, both internal and external, and covers a variety of aspects related to the Studio Ghibli project, including:

* **User feedback** collected through digital forms or evaluation platforms
* **Analytical results** derived from automatic or manual processing
* **Descriptive metadata** related to films, characters, settings, and themes
* **Geographic or demographic information** for territorial analysis
* **Support datasets** such as classifications, dictionaries, or mapping tables

Each data source was selected based on criteria of:

* **Relevance** to analytical objectives
* **Reliability** of the provider or collection process
* **Compatibility** with the dashboard data model

Throughout the chapter, the following will be presented:

* The main datasets used
* Acquisition and update methods
* Transformations applied to raw data
* Relationships between datasets and Power BI model tables

****This section is fundamental for understanding the meaning and value of the visualizations present in the dashboard, as well as ensuring the replicability and future maintenance of the project.

**Description of Main Datasets**

****Below are the datasets used. It is necessary to double-click on the file icon you wish to view.

**RegionSelect**

* **Content**: Selectors for the "Overview" page filter on locations
* **Main fields**: Region
* **Origin**: Created manually

**Ghibli\_Reviews\_Scores**

* **Content**: Qualitative and quantitative user feedback
* **Main fields**: ID, Title, Score MAL, Score JP, Avg WW Score, RT Critic score
* **Origin**:
  + For critic scores: [All Studio Ghibli Movies Ranked by Tomatometer | Rotten Tomatoes](https://editorial.rottentomatoes.com/guide/all-studio-ghibli-movies-ranked-by-tomatometer/)
  + For Western fan scores: [Studio Ghibli - Companies - MyAnimeList.net](https://myanimelist.net/anime/producer/21/Studio_Ghibli)
  + For Japanese fan scores: [保存版！歴代おすすめスタジオジブリアニメ映画一覧おすすめTOP24【あにこれβ】](https://www.anikore.jp/tag/%E3%82%B9%E3%82%BF%E3%82%B8%E3%82%AA%E3%82%B8%E3%83%96%E3%83%AA/all/ac:movie/)
* **Transformations**: Text cleaning, score normalization

**Dataset finanziarioGhibliv3**

* **Content**: Financial data
* **Origin**:
  + For Japanese box office: [過去興行収入上位作品 一般社団法人日本映画製作者連盟](https://www.eiren.org/toukei/1986.html)
  + For international and worldwide box office: [Brand: Studio Ghibli - Box Office Mojo](https://www.boxofficemojo.com/brand/bn4084398594/?sortDir=asc)
* **Transformations**: Text cleaning, amount normalization

**Soundtrack\_table**

* **Content**: Soundtracks matched to each film
* **Main fields**: Index, Film Title, Soundtrack Title, Composer
* **Origin**: https://ghibli.fandom.com/wiki/Category:Soundtracks
* **Transformations**: Text cleaning

**poster ghibli fix**

* **Content**: Links to each film's poster
* **Main fields**: Title, poster links
* **Origin**: Various sources
* **Transformations**: Data cleaning

**Descrizione2 (1)**

* **Content**: Film descriptions
* **Main fields**: Index, Description
* **Origin**: Various sources
* **Transformations**: Text cleaning

**Ghibli\_Master**

* **Content**: Main film information
* **Main fields**: Index, English, Director, Year, Genre, Duration(minutes)
* **Origin**: Various sources
* **Transformations**: Data cleaning

**Data Quality Considerations**

To ensure the principles of relevance, reliability, and data compatibility, the data has gone through several data cleaning and validation steps.

The collected data was compared with data from various sources to ensure general alignment. During the initial table cleaning phase, various redundancies due to web acquisition were eliminated; some information, coming from Japanese sites, was readjusted and translated to make it understandable. To ensure compatibility of all data, unique indexes were established to be used for relationship setup.

Several calculated columns were created, using the starting data to derive new information.

****The vertical nature of the subject highlighted various gaps in the quantity and consistency of collected data, which therefore required additional precautions to achieve a better quality standard. Missing values were filled through integration of new datasets, or through manual input where necessary. Once the total lack of some information was identified, substitutions were compiled by collecting estimates from various web sources, subsequently aggregated into new worksheets, then used for creating the data model.

**4. Data Model**

**Introduction**

The Power BI dashboard data model is based on a series of relationships between tables that enable consistent integration, analysis, and visualization of information. Each relationship is defined by cardinality, filter direction, and functional meaning that justifies its existence in the project context.

**Relationship 1: Review\_Final → Master**

* **Type**: One to One (1:1)
* **Cardinality**: One record in Review\_Final is associated with one record in Master
* **Filter Direction**: From Index (Review\_Final) to Index (Master)
* **Functional Meaning**: Links user scores with main data. Serves to analyze how user opinions or evaluations are distributed relative to the main project content

**Relationship 2: descrizione → Master**

* **Type**: Many to One (N:1)
* **Cardinality**: Each element in Master can have multiple associated results
* **Filter Direction**: From Index (descrizione) to Index (Master)
* **Functional Meaning**: Allows displaying film synopses on the "In-Depth" page

**Relationship 3: Poster → Master**

* **Type**: One to One (1:1)
* **Cardinality**: Each Poster is linked to one record in the Master table
* **Filter Direction**: From Index (Poster) to Index (Master)
* **Functional Meaning**: Enables obtaining the official poster of each film. Used on "Overview" and "In-Depth" pages to make visualization more appealing

**Relationship 4: incassi → Master**

* **Type**: One to One (1:1)
* **Cardinality**: Each incassi element corresponds to one and only one Master record
* **Filter Direction**: From Index (Incassi) to Index (Master)
* **Functional Meaning**: Enables obtaining box office information for each film, used on "Overview" and "Financial" pages for financial analysis

**Relationship 5: soundtracks → Master**

* **Type**: One to One (1:1)
* **Cardinality**: Each element in soundtracks corresponds to one and only one Master record
* **Filter Direction**: From ID (soundtracks) to Index (Master)
* **Functional Meaning**: Allows obtaining soundtrack information for each film to be used on the "In-Depth" page

**Final Considerations**

The relationships are structured to ensure:

* **Data integrity** between tables
* **Semantic navigability** for the end user
* **Analytical efficiency** for filters, measures, and visualizations

**5. DAX Measures**

Returns the total number of films:

measure 'Number of films' = COUNT(Master[English])

Returns the average critic score calculated across all films:

measure 'Critic Score' = (AVERAGE('Review\_Final'[RT Critic Score]))

Returns the average Japanese fan score calculated across all films:

measure 'Japanese Fans Score' = AVERAGE(Review\_Final[Score JP])

****Returns the average score of each film according to all metrics (Japanese average score, Western, critics):

measure 'Total Average For Each Movie' =

AVERAGEX(

'Review\_Final',

DIVIDE(

'Review\_Final'[Score MAL] +

'Review\_Final'[RT User Score] +

'Review\_Final'[Score JP] +

'Review\_Final'[RT Critic Score],

4

)

)

Returns the average Western fan score calculated across all films:

measure 'Western Fans Score' = AVERAGE(Review\_Final[Avg West Score])

Measure for the Overview page, designed to react to the Region selector. Returns the current box office earnings for each region. By default, returns the Worldwide value:

****measure 'OVW.BoxOffice' =

VAR \_\_Region = SELECTEDVALUE(region[Region], "Worldwide")

RETURN

SWITCH(

\_\_Region,

"Japan", SUM(incassi[Incassi ad oggi (JP) ]),

"International", SUM(incassi[Incassi ad oggi (Internazionale)]),

SUM(incassi[Totale (Ad oggi)]))

Measure for the Overview page, designed to react to the Region selector. Returns the average scores for each region calculated across all films. By default, returns the Worldwide value (the "Total Average for Each Movie" measure):

****measure 'OVW.Score' =

SWITCH(

SELECTEDVALUE(region[Region], "Worldwide"),

"Japan", AVERAGE(Review\_Final[Score JP]),

"International", AVERAGE(Review\_Final[Avg WEST Score]),

**** [Total Average For Each Movie])

****Measure for the Overview page, designed to react to the Region selector. Returns the highest-scoring films for each region. By default, returns the Worldwide value:

measure 'OVW.TopScore' =

SWITCH(

SELECTEDVALUE(region[Region], "Worldwide"),

"Japan", MAX(Review\_Final[Score JP]),

"International", MAX(Review\_Final[Avg WEST Score]),

MAX(Review\_Final[WW Score]))

Selector that determines the top 1, 3, 5, 10 films based on score:

measure SelectedTopN = SELECTEDVALUE(TopNTable[N], 3)

****Returns critic scores based on the SelectedTopN selector:

measure 'Critic Score Top' =

VAR SelectedN = [SelectedTopN]

VAR Rank2 =

RANKX(

ALL(Master[English]),

CALCULATE(SUM(Review\_Final[RT Critic Score])),

, DESC, Skip

)

RETURN

IF(Rank2 <= SelectedN, SUM(Review\_Final[RT Critic Score]), BLANK())

Returns Japanese scores based on the SelectedTopN selector:

measure 'Japanese Score Top' =

VAR SelectedN = [SelectedTopN]

VAR Rank2 =

RANKX(

ALL(Master[English]),

CALCULATE(SUM(Review\_Final[Score JP])),

, DESC, Skip

)

RETURN

IF(Rank2 <= SelectedN, SUM(Review\_Final[Score JP]), BLANK())

Returns Western scores based on the SelectedTopN selector:

measure 'Western Score Top' =

VAR SelectedN = [SelectedTopN]

VAR Rank2 =

RANKX(

ALL(Master[English]),

CALCULATE(SUM(Review\_Final[Avg WEST Score])),

, DESC, Skip

)

RETURN

IF(Rank2 <= SelectedN, SUM(Review\_Final[Avg WEST Score]), BLANK())

****Modifies the title of the multi-row card visual object dedicated to critic scores based on the SelectedTopN selector:

measure 'TopN Title Critic' = "Top " & [SelectedTopN] & " movie(s) (Critic)"

Modifies the title of the multi-row card visual object dedicated to Japanese scores based on the SelectedTopN selector:

measure 'TopN Title Japan' = "Top " & [SelectedTopN] & " movie(s) (Japan)"

Modifies the title of the multi-row card visual object dedicated to Western scores based on the SelectedTopN selector:

measure 'TopN Title West' = "Top " & [SelectedTopN] & " movie(s) (West)"

****Calculated table used for the SelectedTopN selector filter:

partition TopNTable = calculated

source = DATATABLE("N", INTEGER, {{1}, {3}, {5}, {10}})

**6. Updates and Maintenance**

To update the dashboard, it is necessary to update the data sources and republish the report to Power BI Service. Measures can be modified through Tabular Editor or directly in Power BI Desktop.

**7. Troubleshooting**

In case of errors in calculations or displayed data, verify the DAX measures, the correctness of relationships between tables, and the integrity of data sources.

