

# Dashboard: FIFA World Cup History

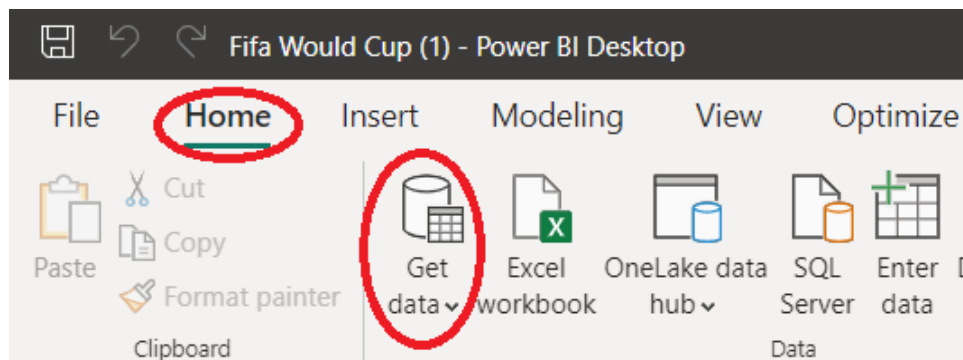
## 1. Introduction.

Football is a king sport loved by everyone. Every year, there are many football tournaments around the world, but the most notable are the world cups that take place every 4 years. Every world cup, we have a lot to say about the world cup. So in this project, we will summarize the world cups from 1930 to 2022 through the dashboard. From there, it will help you have a deeper look at the past world cups and look forward to the FIFA WORLD CUP 2026 in Canada, Mexico, USA.

## 2. Data preprocessing.

We have 22 datasets corresponding to the 22 FIFA World Cups that have been played in history, besides there is a dataset that summarizes the results of all 22 world cups above. We will need to load these datasets into the power bi following these steps:

Step 1: Start the Power BI, select Home on the toolbar and click Get Data



Step 2: We can choose many data formats to match the type of dataset we have, Power BI supports many file formats like excel, csv, ... Here we choose to load data based on folder and after selecting the folder, the following window will appear. We just need to press Combine and Load. Note that we must upload the 22 datasets of the 22 world cups first and then upload the aggregate file of the 22 periods, because uploading them all at once can lead to errors due to the number of columns and the contents of the columns of the first 22 datasets and the summarize dataset are completely different.

C:\Users\Admin\Desktop\FIFA

Content	Name	Extension	Date accessed	Date modified	Date created	Attributes	Folder Path
Binary	FIFA - 1930.xlsx	.xlsx	7/2/2023 9:55:28 PM	7/2/2023 2:25:52 PM	7/2/2023 2:25:52 PM	Record	C:\Users\Admin\Desktop\FIFA\
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Binary	FIFA - 1950.xlsx	.xlsx	7/2/2023 9:55:28 PM	7/2/2023 2:25:55 PM	7/2/2023 2:25:54 PM	Record	C:\Users\Admin\Desktop\FIFA\
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Binary	FIFA - 1958.xlsx	.xlsx	7/2/2023 9:55:28 PM	7/2/2023 2:25:57 PM	7/2/2023 2:25:57 PM	Record	C:\Users\Admin\Desktop\FIFA\
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Binary	FIFA - 1982.xlsx	.xlsx	7/3/2023 10:29:35 AM	7/2/2023 2:26:02 PM	7/2/2023 2:26:01 PM	Record	C:\Users\Admin\Desktop\FIFA\
Binary	FIFA - 1986.xlsx	.xlsx	7/2/2023 9:55:29 PM	7/2/2023 2:10:42 PM	7/2/2023 2:10:42 PM	Record	C:\Users\Admin\Desktop\FIFA\
Binary	FIFA - 1990.xlsx	.xlsx	7/2/2023 9:55:29 PM	7/2/2023 2:10:44 PM	7/2/2023 2:10:44 PM	Record	C:\Users\Admin\Desktop\FIFA\
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Binary	FIFA - 2010.xlsx	.xlsx	7/2/2023 9:55:29 PM	7/2/2023 2:10:49 PM	7/2/2023 2:10:49 PM	Record	C:\Users\Admin\Desktop\FIFA\
Binary	FIFA - 2014.xlsx	.xlsx	7/2/2023 9:55:29 PM	7/2/2023 2:10:51 PM	7/2/2023 2:10:50 PM	Record	C:\Users\Admin\Desktop\FIFA\

The data in the preview has been truncated due to size limits.

Combine

Load

Transform Data

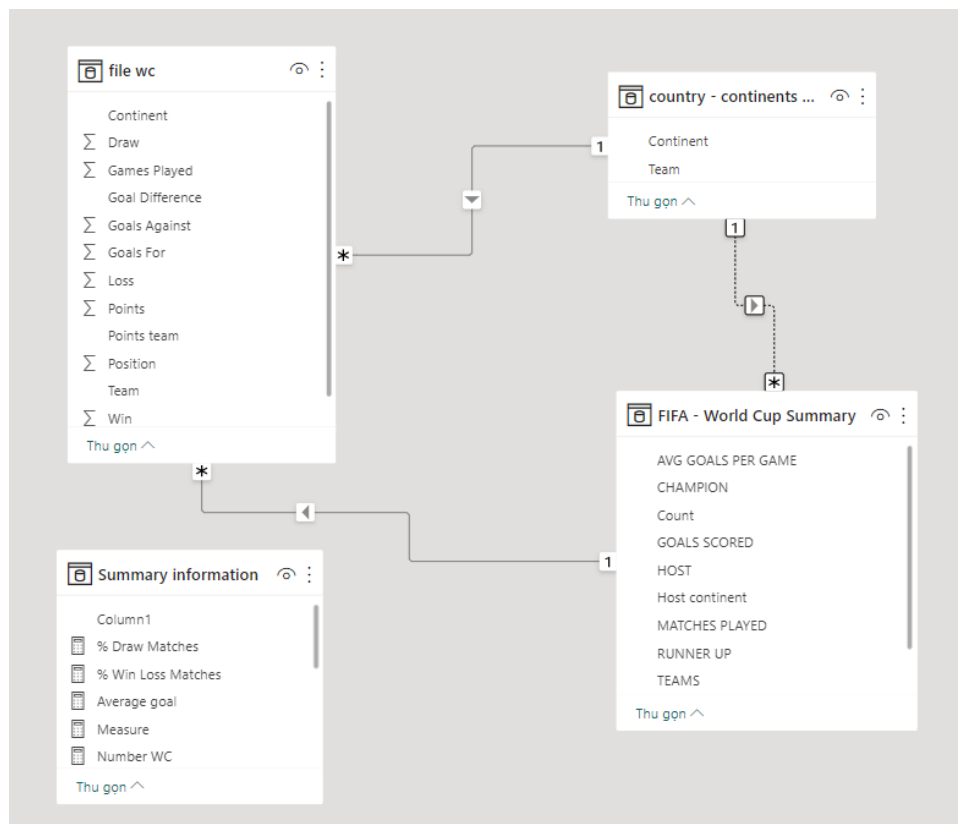
Cancel

Step 3: We have combined data from 22 FIFA World Cup dataset. We also add 1 column with name is year to distinguish the years of 22 FIFA World Cup. This column also acts as a foreign key to match the year column in the FIFA World Cup summary data.

Step 4: We connect the combined data with the FIFA World Cup Summary data. Here, column year in FIFA World Cup Summary acts as primary key, column year in combined data acts as foreign key.

Step 5: We connect the combined data and World Cup summary data with country - continent dataset. The country column in the country-continent dataset acts as the primary key and the country column in the combine dataset acts as the foreign key.

Finally, we get each relationship between the tables as shown in the following figure:



### 3. Dashboard

#### a. Overview

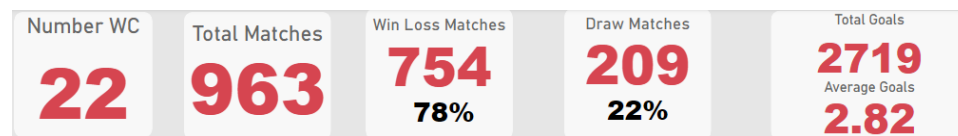
The World Cup has been held 22 times, with 963 matches including 743 win-loss matches (78 %) and 209 draw matches (22%). The total 2719 goals have been scored in all World Cup with an average of 2.82 goals per game.

We also have 5 detailed charts on each aspect of the topic.



## b. General information

General information consists of Number WC, Total Matches, Win Loss Matches and Draw Match we will count and sum the result of 22 FIFA World Cup in FIFA – World Cup Summary.



To create general information, we will follow up some step below:

Step 1: Click on Visualization and Add data to your visual and choose “Card”

Step 2: Drag and drop field that you will choose in table to “Field”

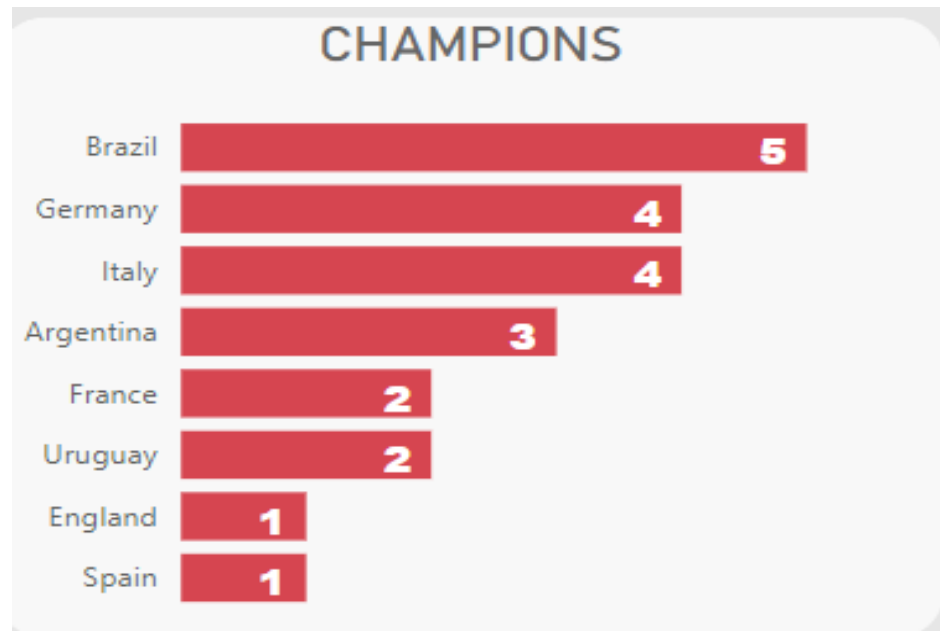
Step 3: To edit information about the card, click on Format your visual You will have 2 options Visual and General, General consists of all attribute to show your card such as Properties, Title, Effect, ... meanwhile Visual will help you show the color, font size of number that you want to determine.

## c. Bar chart

From the bar chart, there are only 8 teams that have won the world cup. Brazil is the most successful team with 5 championship trophies. That is an achievement that proves that Brazil will always be a strong candidate for the championship in the next world cups.

Germany and Italy are next. These two teams have completely different playing styles, but they both won the same 4 championship trophies. This proves that there are many effective football tactics to compete in the World Cup such as counter-attacking defense, total attack, etc. And their effectiveness is equivalent.

All champion teams are from Europe or South America. It proves that the qualification difference between continents is large.



#### d. Table

From the table, we can see top 10 teams with highest total point, the total point is calculated using the following formula:

$$\text{Total point} = 3 * \text{win matches} + 1 * \text{draw matches}$$

Based on the table chart, we can see that Brazil and Germany are two teams that perform exceptionally well in the World Cup Tournaments. Both Brazil and Germany are known for their attractive and attacking style of play, resulting in a high number of goals scored. They have a rich footballing history and a tradition of producing talented players who excel in offensive tactics. This has contributed to their success and their reputation for entertaining and high-scoring matches in the World Cup.

Additionally, all the teams that have previously won the championship are also included in the tournament table. Thus, we can conclude that: the championship of these teams year by year is completely deserved, not a miracle. Of course, there will also be luck in their championship journey but their level is unquestionable.

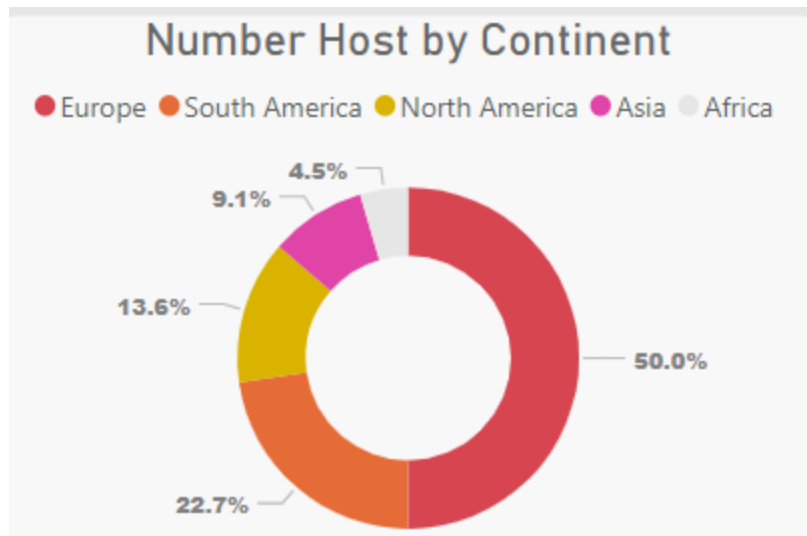
Top 10 teams				
Team	Matches	Total goal	Rate win	Total point
Brazil	114	237	0.67	246
Germany	112	232	0.61	225
Argentina	88	152	0.56	162
Italy	82	127	0.54	153
France	73	136	0.53	130
England	74	104	0.43	118
Spain	66	108	0.47	109
Netherlands	55	96	0.55	103
Uruguay	59	89	0.42	88
Belgium	51	69	0.41	73
<b>Tổng</b>	<b>774</b>	<b>1350</b>	<b>0.54</b>	<b>1407</b>

e. Donut chart

From the Donut chart, we can observe that a majority of the World Cup tournaments have been organized in Europe and the Americas, while Asia and Africa have had very few instances of hosting the World Cup. There are several reasons that can explain this.

- + Firstly, in Africa, the economy is less developed, resulting in limited investment in football and underdeveloped football infrastructure, including a lower number of stadiums that meet the required standards.

- + Secondly, the hot climate in Africa is not conducive to hosting World Cup tournaments. Similarly, in Asia, the overall quality of players may be lower compared to other regions, making it less suitable to host a World Cup in a country with a less developed football landscape.



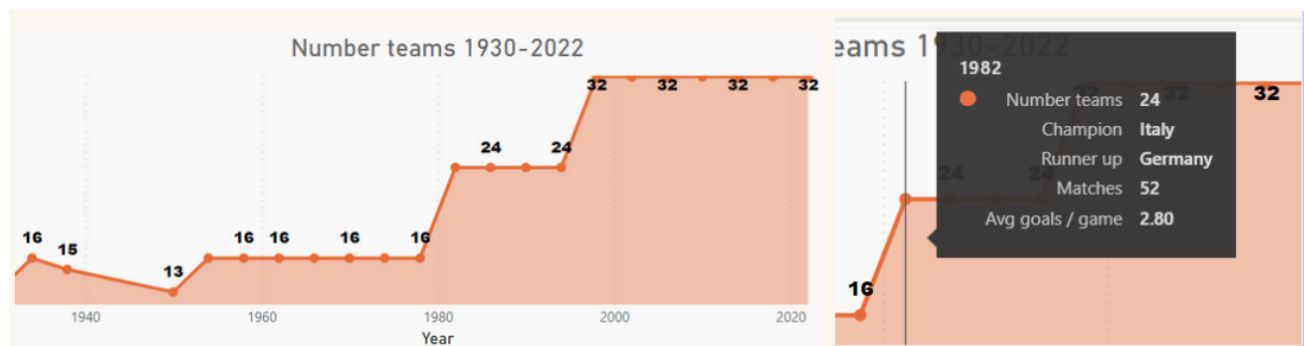
#### f. Line chart

Line chart showing the number of teams participating in the world cup by year.

As we can see, there is a trend of increasing in terms of the number of teams participating. The more the world economy develops, the more invested in sports like football. That leads to the level between the teams getting smaller and smaller. For example, in the past, Asian teams beating strong teams like Germany, Brazil, Argentina is unprecedented. However, right at the 2022 World Cup, Japan overcame Germany with a score of 2-1 or Saudi Arabia defeated the champion Argentina.

From this chart, we can forecast that the number of teams participating in the World Cup will increase in the future. Indeed, at the 2026 World Cup taking place in Canada, USA and Mexico, the number of teams has been increased to 48.

Also, clicking on any point gives you some information: champions, runners-up, total matches and average goals per game.

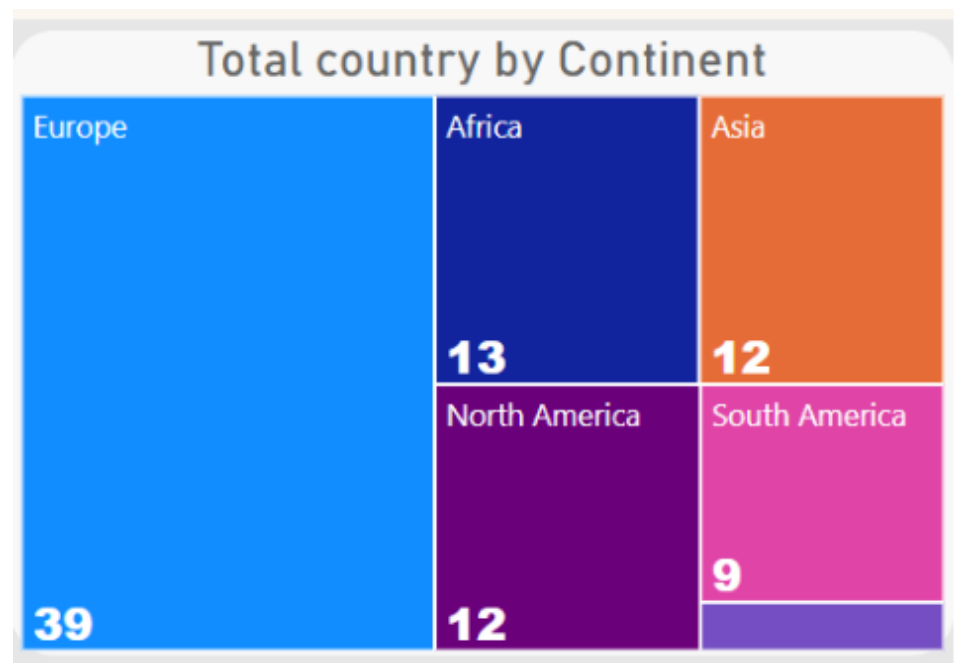


#### g. Treemap

Treemap shows the number of teams that have participated in the world cup by continent.

- In Europe, the number of teams participating is large (39) , proving that this area is extremely competitive. It is possible to mention the case of Italy to prove this, although Italy is the champion of Euro 2020 with beautiful attacking football and tight defense, but they were unable to qualify for the world cup 2022.

- Meanwhile, in other regions, the level of competition is low. In Oceania, there are very few teams from this continent who reach the world cup. In Asia, the level of competition is quite low, the teams participating in the world cup recently revolved around a few familiar names such as Japan, Korea, Saudi Arabia, and Iran.



#### 4. Conclusion.

The dashboard has displayed a lot of interesting information about the 22 world cups. From the dashboard, we have a comprehensive view of the FIFA world cup.

Really, there is a lot of other information that we can analyze further in this project. However, I think the information that we want to convey through the above charts is enough to give you a better insight into the world cups and will



have a certain knowledge to discuss the next world cup tournaments in Canada, USA and Mexico in 2026.