Digital Objects and Research Practices

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Work Group 2

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Research Project 6 – Data Visualization

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Introduction

The gaming industry has always been a competitive scene. When it comes to comparing consoles, the competition between PS4, Switch and Xbox One comes to mind. These consoles try to differentiate themselves from each other by publishing different games. A part of this discussion is whether the one game distributor is more preferred than the other. For example, Xbox and PlayStation are known for their fierce competitive relation to one another, since they are compared by the users.

Consequently, the games of the game distributors are being criticized and judged by reviewers or platforms, such platform is https://www.metacritic.com/game. Metacritic gives their own rating to the specific game. However, they display also the ratings given by users. Therefore, this research will examine and explore the data of Metacritic's users rather than the ratings given by Metacritic themselves, since this can be biased as to a cooperation between gaming businesses and the platform. The research will base which gaming console is more popular, based on the ratings of the games displayed on Metacritic.

Methodology

As to examine Metacritic, the research will utilize the dataset of the platform that is extracted through the software of Dataminer. The software transformed the data into a dataset in excel in three different sheets that separate the three consoles. To visualize the data, the research used the site RAWgraph, where the datasets are transformed into figures to make the data comprehensible for the human eye.

	A	B
1	Column 1	Column 2
2	Red Dead Re	7.6
3	Grand Theft	7.8
4	Metal Gear S	7.4
5	Celeste	6.8
6	The Witcher	8.7
7	Resident Evil	8.4
8	INSIDE	8.3
9	Forza Horizo	7.8
10	Divinity: Orig	7.9
11	What Remai	7.5
12	The Swappe	7.5
13	The Witcher	9.2
14	Rayman Lege	8.0
15	Sekiro: Shad	8.0
16	Overwatch	5.9
17	Forza Horizo	8.0
18	Dead Cells	8.2
19	Monster Hun	8.7
20	Hollow Knigh	8.9
21	NieR: Autom	9.1
22	The Witcher	9.3
23	Monster Hun	7.1
24	Pinball FX3: I	7.5
25	NBA 2K17	5.9
26	Call of Duty:	6.0
27	F1 2019	6.7
28	Dark Souls II:	7.7
29	Zen Pinball 2	tbd
30	Stardew Vall	7.8
31	Destiny: The	5.2
32	Iniustice 2	8.2

Figure 1: Ratings Xbox One Games

	A	B
1	Column 1	Column 2
2	Red Dead Re	8.1
3	Grand Theft	8.3
4	The Last of U	9.1
5	God of War	9.1
6	XCOM 2: Wa	6.5
7	Persona 5	8.7
8	Metal Gear S	8.2
9	Uncharted 4:	8.4
10	Journey	8.4
11	Bloodborne	8.9
12	Undertale	6.7
13	The Witcher	9.2
14	Divinity: Orig	7.8
15	Final Fantasy	8.3
16	Shadow of th	7.9
17	The Witcher	9.0
18	Celeste	6.8
19	INSIDE	8.3
20	NieR: Autom	8.4
21	Resident Evil	8.8
22	flower	7.2
23	Diablo III: Ult	7.9
24	Overwatch	6.4
25	Shovel Knigh	7.7
26	Rayman Lege	8.4
27	Fez	6.4
28	Monster Hun	7.7
29	Tales From T	8.0
30	The Witcher	8.9
31	Sekiro: Shad	8.0

Figure 2: Ratings PS4 Games

	A	B
1	Column 1	Column 2
2	The Legend	8.6
3	Super Mario	8.9
4	Divinity: Orig	8.6
5	Undertale	7.8
6	Super Smash	8.7
7	Celeste	8.4
8	Bayonetta 2	8.5
9	Mario Kart 8	8.6
10	INSIDE	8.4
11	Retro City Ra	7.8
12	Sonic Mania	8.8
13	Dragon Ques	8.4
14	SteamWorld	8.6
15	Shovel Knigh	8.1
16	Bastion	8.0
17	Hollow Knigh	8.8
18	Bayonetta +	8.7
19	Ori and the B	8.8
20	Dead Cells	8.5
21	Into the Brea	7.8
22	Fire Emblem	8.7
23	Okami HD	8.6
24	Mark of the I	8.2
25	TowerFall	8.8
26	Nuclear Thro	8.7
27	FAR: Lone Sa	7.7
28	Dream Dadd	7.1
29	Hyper Light D	7.9
30	What Remai	7.7
31	Gone Home	6.1

Figure 3: Ratings Switch Games

The type of data visualization, that is divided in three forms; from data to image, from world to data and from image to eye (Gray et al. 2016), the latter will be implemented within a quantitative dataset, since the focus is on ratings the graphs will provide a comparison of the preferences by the user. The visualization utilizes the design choices into a graphical form that allow the data to be seen within a social, cultural and historical contingent. It will make the large number of ratings more pleasant to perceive than in the first three figures mentioned above.

Moreover, the elements that are used are the user ratings and for the labels the research used the specific names of the games. A sun burst graph is chosen, as it conveys the differences in

the patterns of the ratings. Therefore, the citation made by Alberto Cairo; “the visual brain is a device to detect patterns” (Cairo 2013, 114) is implied as a means to use this type of visualization.

Analysis

The following figures display the ratings of the game distributors. The width of the arch's shows the presence of a certain rating overall in the dataset. The wider the width, the more the certain rating is presented in the dataset. This will allow to assess which console type has an overall more positive rating of games.

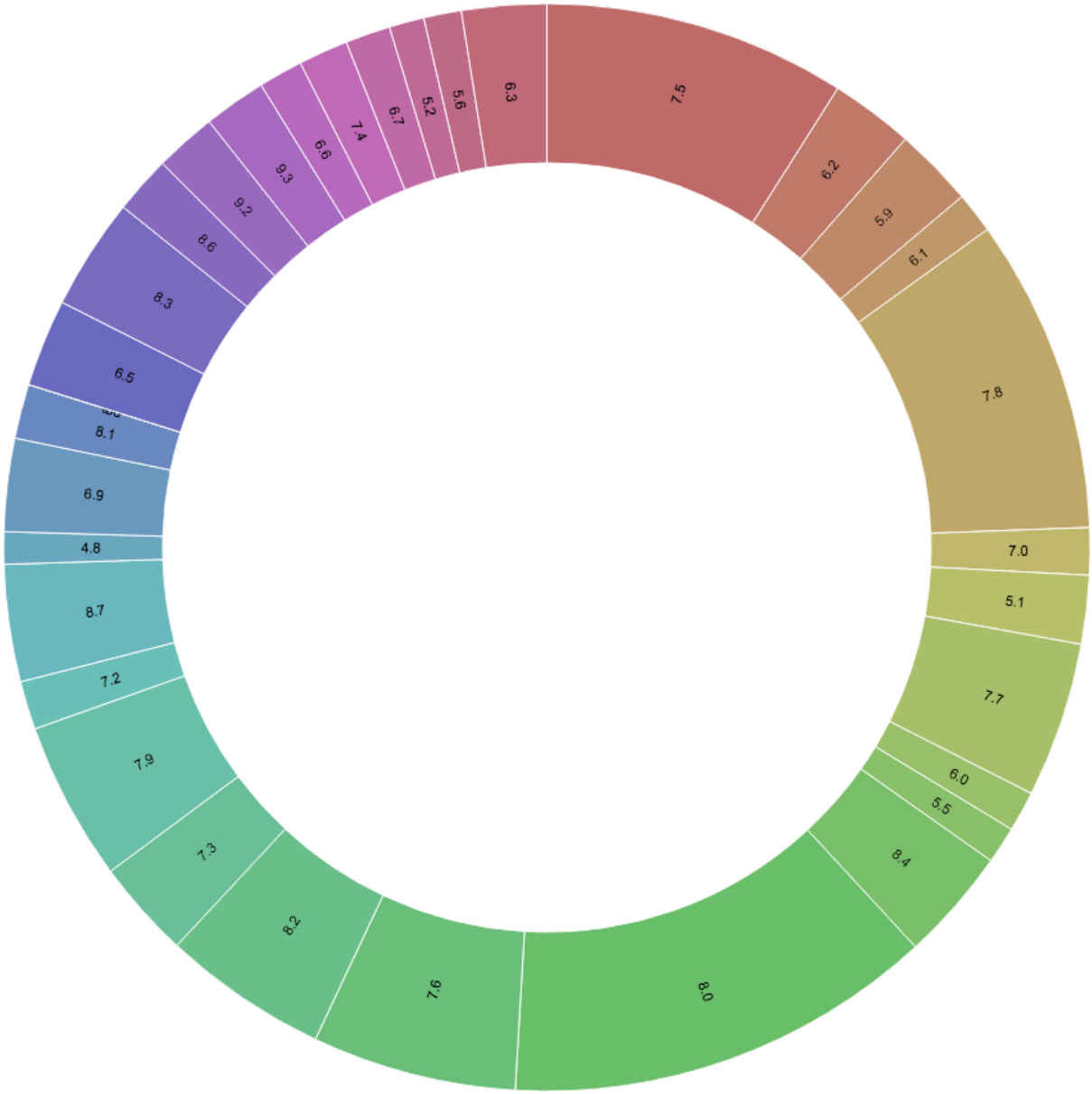

Figure 4: Representation of Xbox One Games Ratings

As figure 4 displays, the biggest representation of game ratings is 8.0, 7.8 and 7.5. The lower and higher ratings are scattered and show that these ratings are less represented in the data. This is visualized by the smaller arch's.

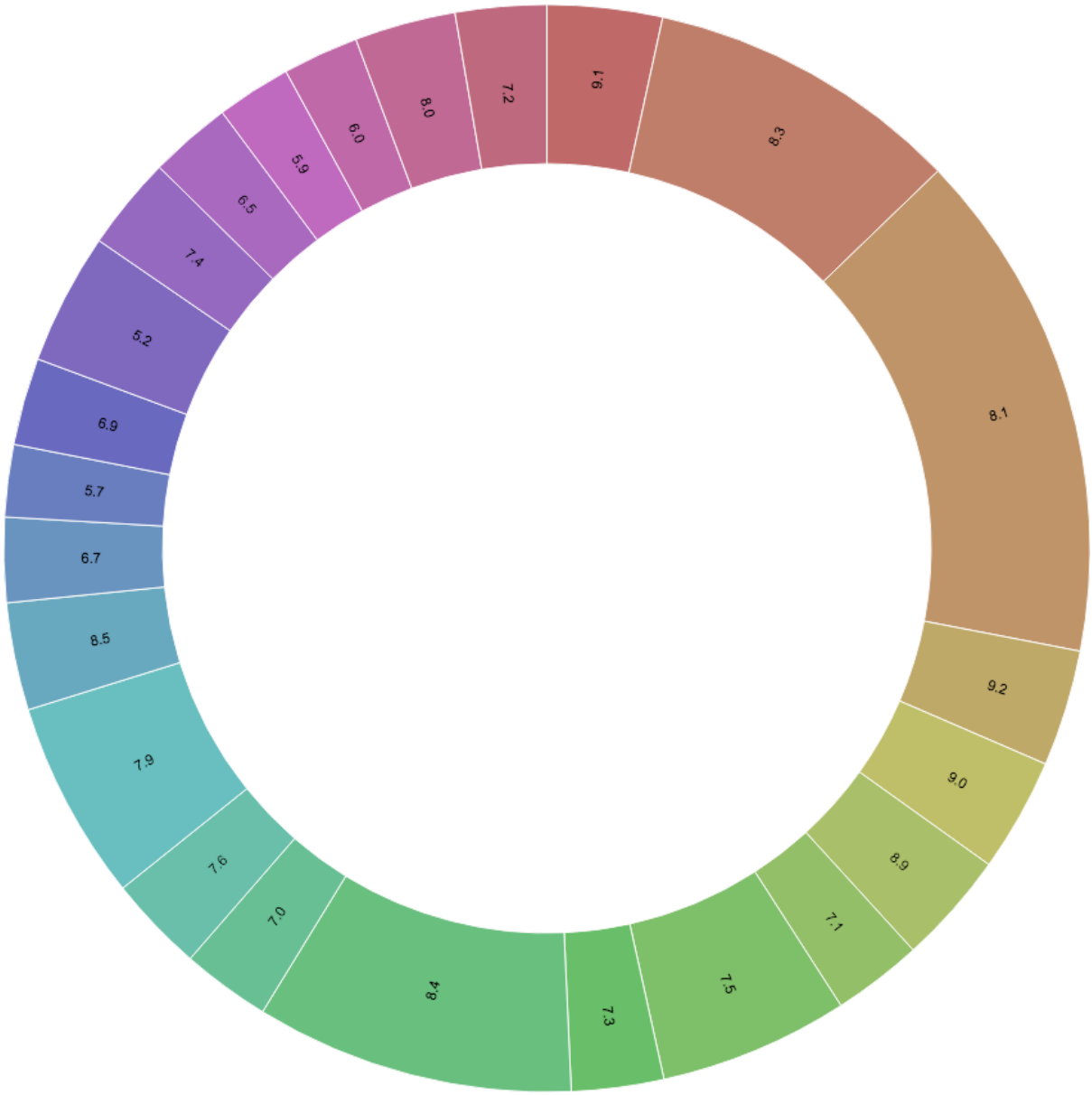

Figure 5: Representation of PS4 Games Ratings

Figure 5 portrays that the games are represented mostly by the following ratings: 8.4, 8.3 and 8.1. In comparison with the averages displayed in figure 4, the PS4 games seem to have a preference advantage by the user. The difference between the ratings of both the graphs are rather surprising, since the PS4 and Xbox One publish similar games as well. This might imply different preferences of the user based solely on the console itself, rather than the game. For example, the PS4 is able to distribute a more pleasant gaming experience since it has better graphics or the controls are more suitable for a certain game.

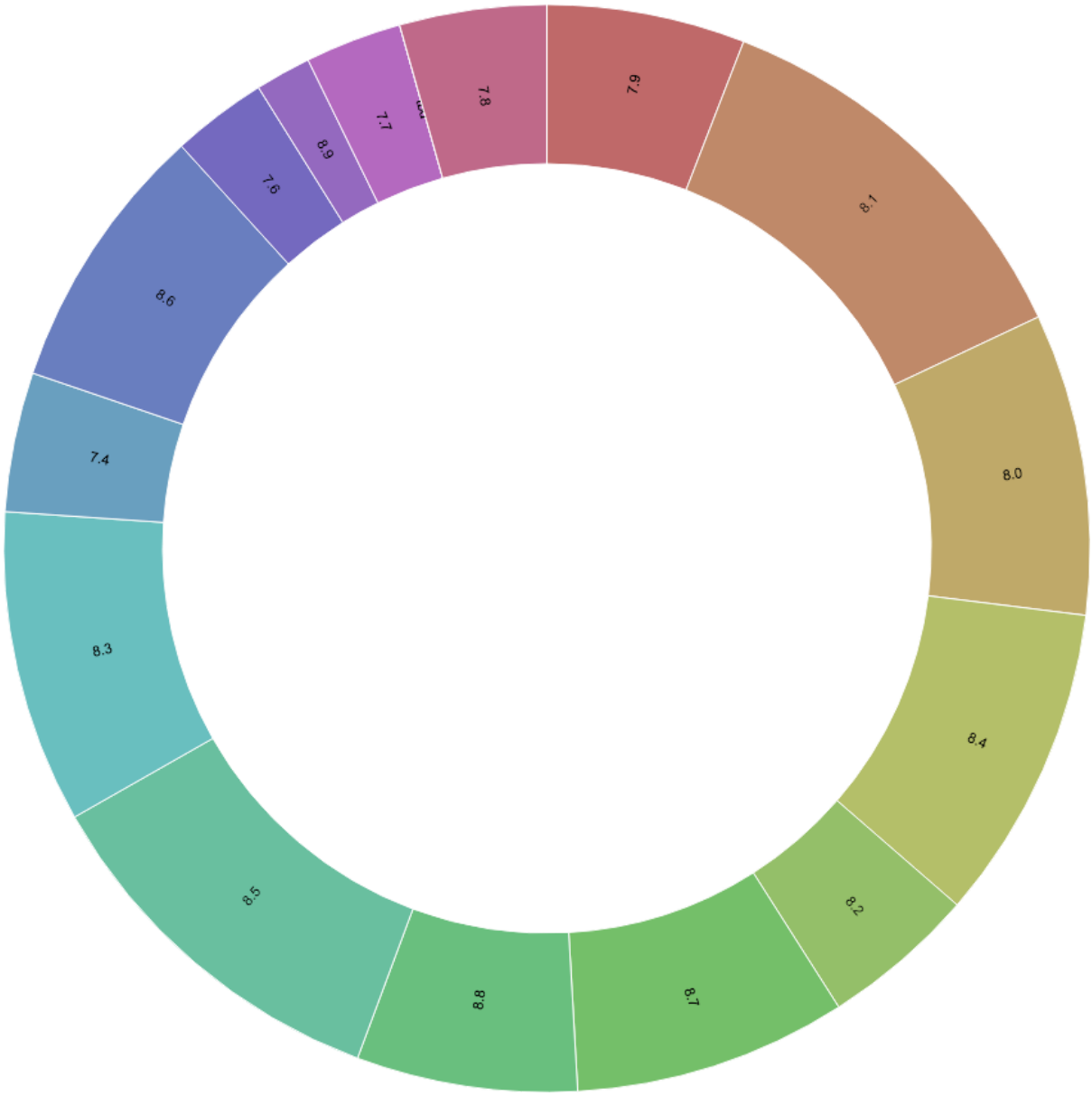

Figure 6: Representation of Switch Games Ratings

The Switch games show that the range of the ratings goes from 8.0 to 8.8. This seems to be similar to the ratings displayed in the PS4 games, yet the overall representation of the archs show that the majority of the games have such a high rating. Whereas with the representation of the PS4 games, the arch surpasses barely the quarter of the whole sun burst graph.

Conclusion

In conclusion, the research is too limited to be conducted within 1000 words. This research tried to make it more in depth and tried to make more datasets and bring in different perceptions of the ratings. However, the dataset itself was not sufficient to make decisive conclusions on the ratings of the users of Metacritic. A problem with the dataset was, for instance, the large amount of games that were taken into account. For the visualization it would have been easier to assess around 20 games, but this would affect the representability of the data, since it does not take a considerable number of all the published games by the different distributors.

However, the visualization from image to eye was a good choice for this kind of research. Since the large dataset is reduced to simple figures and therefore making it less challenging to perceive quantitative data. Moreover, it was the best method to examine quantitative data. Furthermore, the minimalistic graph of the sun burst allowed for primary color palettes that made the graph more aesthetically pleasing to read.

While using RAWgraph, the software of the site was pleasant to utilize, yet the data was too limited and should have considered implementing the data of the Metacritic ratings as to assess the difference between the ratings rather than comparing the differences between the ratings of the three types of consoles through the games.

References

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