The following is a capstone project for the Google Data Analyst Professional Certificate on Coursera.

It is a fictional company that creates mobile games and wants to create a new department to create games for a platform different from mobile and ask a data analyst to find out which platform and game genre is best suited for the ongoing times.

NC GAMING

ANALYTICS REPORT

MARCH 22, 2022

EVALUATION BEFORE DEVELOPMENT OF NEW GAMING DIVISION

CAPSTONE/PORTFOLIO PROJECT

CESAR L. ARACENA | HTTPS://GITHUB.COM/CLARACENA/DATA-ANALYTICS

OBJECTIVE

GATHER DATA ON RELEASE OF GAMES ON DIFFERENT PLATFORMS FROM LAST DECADE AND ANALYZE IT TO DISCOVER THE FOLLOWING:

- MOST USED PLATFORM BETWEEN PC, XBOX AND PLAYSTATION
- BEST CATEGORIES BETWEEN <u>SPORTS</u>, <u>ACTION</u> AND <u>DRIVING SIMULATION</u>
 GAMES, BASED ON BOTH METASCORE AND USERS SCORE
- FIND HOW MULTIPLAYER GAMES COMPARE TO SINGLE PLAYER GAMES

OBJECTIVE (CONTINUED)

THE GOAL IS TO DETERMINE WHAT A NEW DIVISION OF NC GAMING SHOULD BE FOCUSED ON.

DATA SOURCE

DATA WAS ACQUIRED AS A DATASET FROM www.kaggle.com. IT IS CALLED METACRITIC VIDEO-GAMES DATA PROVIDED BY THE USER BRUNOVR AND HAS DATA FROM 1995 TO 2020. IT IS LICENSED AS CCO: PUBLIC DOMAIN.

MORE INFORMATION AT

HTTPS://WWW.KAGGLE.COM/DATASETS/BRUNOVR/METACRITIC-VIDEOGAMES-DATA.

DATA TREATMENT

WHILE CLEANING AND TRANSFORMING THE DATA, THE FOLLOWING STEPS WERE TAKEN:

- CHECK FOR DATASET VALIDITY BY HAND (20 RANDOM ENTRIES)
- DELETE ENTRIES WITH NO RELEASE DATE AND NO USER SCORE
- DELETE ENTRIES WITH MALFORMED DATA
- NORMALIZE META SCORE WITH THE USERS SCORING SYSTEM (1 TO 10)
- ALL DATA WAS CLEANED, TRANSFORMED AND ANALYZED USING MS EXCEL.

ANALYSIS: SCORE PER CATEGORY

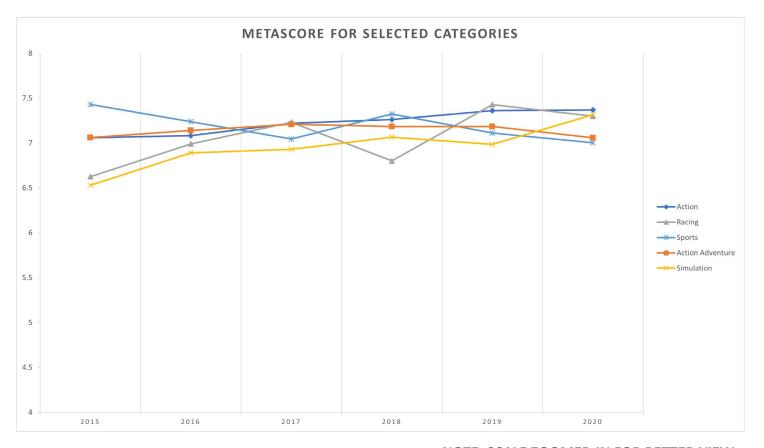
WHILE METASCORE INDICATES THAT THE BEST CATEGORIES ARE <u>ACTION</u>
(GROWING SLOWLY), <u>SIMULATION</u> (GROWING FAST) AND <u>RACING</u>
(DECREASING), USERS SCORE SHOW THAT <u>ACTION ADVENTURE</u> IS TIED WITH <u>ACTION</u> AS THE BEST TWO CATEGORIES, BOTH HAVING A VERY STABLE SCORES FOR THE PAST YEARS.

IN AVERAGE, <u>ACTION</u> IS THE BEST CATEGORY FOLLOWED VERY CLOSE BY <u>ACTION ADVENTURE</u>.

ANALYSIS: SCORE PER CATEGORY

(METASCORE | ALL PLATFORMS | LAST 5 YEARS)

THE BEST CATEGORIES PER
METASCORE FROM 2015
TO 2020 ARE ACTION,
SIMULATION AND RACING



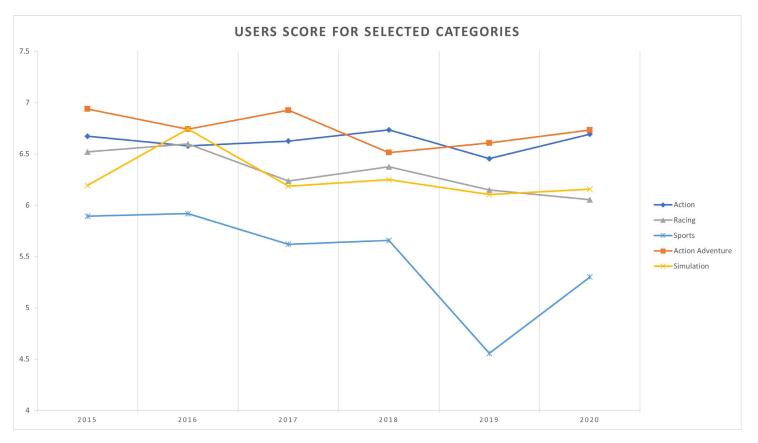
NOTE: SCALE ZOOMED IN FOR BETTER VIEW



ANALYSIS: SCORE PER CATEGORY

(USERS SCORE | ALL PLATFORMS | LAST 5 YEARS)

THE BEST CATEGORIES PER
USERS SCORE FROM 2015
TO 2020 ARE <u>ACTION</u> AND
ACTION ADVENTURE



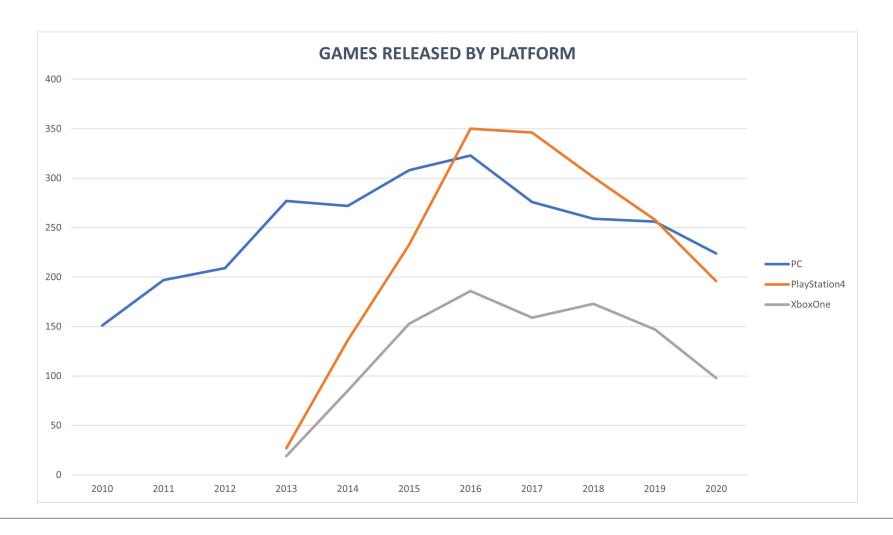
NOTE: SCALE ZOOMED IN FOR BETTER VIEW

ANALYSIS: GAMES RELEASED BY PLATFORM

DURING THE 2015 – 2017 PERIOD, THERE WAS A BOOM IN CONSOLE USERS BUT BY THE END OF THE DECADE, MANY DEVELOPERS OF COMPUTER GAMES BEGAN PORTING MORE GAMES TO PC AND DEVELOPING CROSS-PLATFORM GAMES.

IN THE LAST YEARS, FOCUS TURNED INTO MAKING MORE <u>REALISTIC GAMES</u>
WITH <u>LONGER STORIES</u>, RESULTING IN LESS GAMES RELEASED PER YEAR.

ANALYSIS: GAMES RELEASED BY PLATFORM



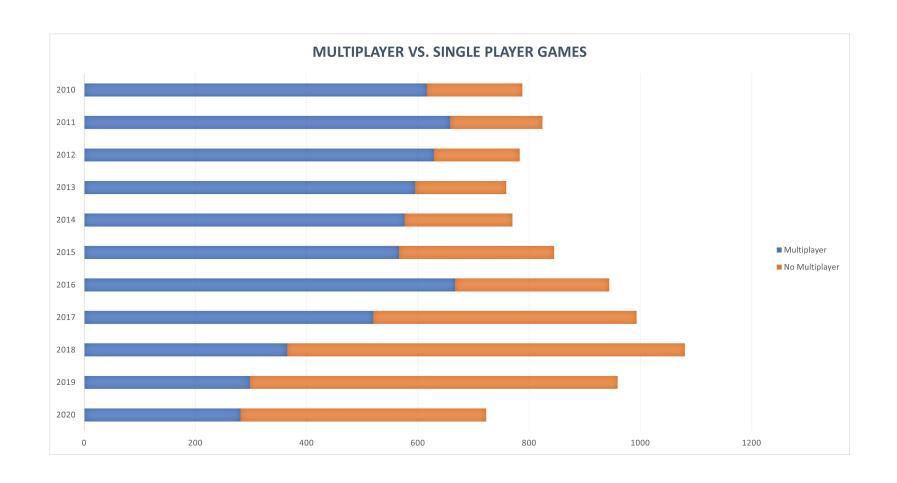


ANALYSIS: MULTIPLAYER vs. SINGLE PLAYER GAMES

CONTRARY TO INTUITION, DEVELOPERS ARE RELEASING MORE <u>SINGLE</u>
PLAYER GAMES THAN <u>MULTIPLAYER GAMES</u>.

NOTE: SINGLE PLAYER GAMES INCLUDE BOTH ONLINE SINGLE PLAYER AND OFFLINE SINGLE PLAYER GAMES.

ANALYSIS: MULTIPLAYER vs. SINGLE PLAYER GAMES





KEY INSIGHTS AND CONCLUSION

BASED ON THE DATA ANALYZED, THE NEW GAME DEVELOPMENT DIVISION AT NC GAMING SHOULD AIM TO CREATE <u>ACTION</u> OR <u>ACTION/ADVENTURE</u>

GAMES FOR <u>PC</u>, FOCUSED ON <u>SINGLE PLAYER</u> STYLE GAMES WITH, IF POSSIBLE, ONLINE ACCOUNTS.

MULTIPLAYER SUPPORT AND CROSS-PLATFORM MULTIPLAYER WOULD BE SIGNIFICANTLY BETTER.

NEXT STEPS

TO HAVE MORE AND BETTER RESULTS, IT WOULD BE MY RECOMMENDATION
TO ALSO DO THE FOLLOWING ANALYSIS:

- BEST PUBLISHERS FOR FUTURE GAME RELEASES (FROM DATABASE)
- A DEEP ANALYSIS ON PLAYERS CHARACTERISTICS TODAY (FROM SURVEY)