

Free to Play Vs Pay to Play Video Game Case Study

Jaidev Menon

Objective:

Examine the deviations and similarities between high grossing free to play (FTP) and pay to play (paid) video games and determine what factors increase revenue

Dataset

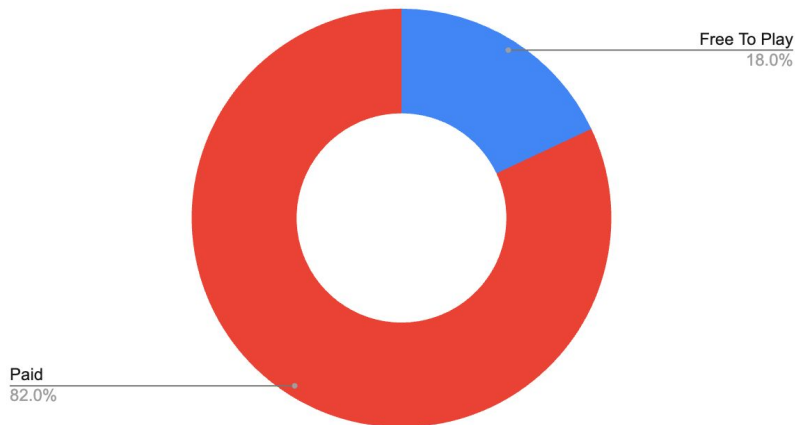
- Data taken from Gamalytic website
- Top 100 Steam games based on revenue taken from the dataset as a representative sample of the “Top 100” most popular video games
- Includes Video Game Name, Genre, Release Date and Year, Copies Sold, Price, Type, Revenue, Review Score and Publisher Class
- Genre based on google searches
- Release Date: Date where game was officially released on Steam
- Copies Sold: games purchased directly on Steam
- Publisher Class: Indie, AA, AAA
- Type: Free to Play, Paid
- Steam Revenue: revenue earned before Steam payout. Includes base game sales for paid games and all revenue sources for FTP games

Name	Genre(s)	Release Date	Year	Copies Sold	Price	Type	Steam Revenue	Steam Review Score	Publisher Class
Apex Legends™	Shooter, Battle Royale	11/3/2020	2020	65128124	\$0.00	Free To Play	\$1,367,923,745.00	67	AAA
Black Myth: Wukong	Action, Adventure, RPG	8/18/2024	2024	21960747	\$60.00	Paid	\$956,905,215.00	97	AAA
Baldur's Gate 3	RPG, Adventure, Strategy	10/5/2020	2020	14599917	\$60.00	Paid	\$732,575,965.00	97	AAA
ELDEN RING	Action, Adventure, RPG, Platformer	2/23/2022	2022	14015901	\$60.00	Paid	\$569,796,307.00	93	AAA
Cyberpunk 2077	Shooter, Action, Adventure, RPG	12/8/2020	2020	14504493	\$60.00	Paid	\$548,768,129.00	84	AAA
Call of Duty®	Shooter, Battle Royale	10/26/2022	2022	37573497	\$0.00	Free To Play	\$456,763,597.00	59	AAA
Palworld	Survival, Shooter, Action, Adventure, Strategy	1/17/2024	2024	18718399	\$30.00	Paid	\$439,073,030.00	94	AA
HELLDIVERS™ 2	Shooter	2/7/2024	2024	12184262	\$40.00	Paid	\$435,615,896.00	75	AAA
Lost Ark	Action, RPG, Adventure	6/10/2021	2021	15228374	\$0.00	Free To Play	\$391,660,276.00	71	AAA
Hogwarts Legacy	Action, Adventure, Puzzle	2/9/2023	2023	7615646	\$60.00	Paid	\$321,234,033.00	91	AAA
NARAKA: BLADEPOINT	Battle Royale, Shooter, Platformer, Action, Adventure	8/10/2021	2021	15843247	\$0.00	Free To Play	\$316,835,857.00	75	AA
Sons Of The Forest	Survival, Simulation, Horror, Shooter, Action, Adventure	2/22/2023	2023	9509562	\$30.00	Paid	\$227,397,007.00	87	AA
Sea of Thieves: 2024 Edition	Action, Adventure	6/2/2020	2020	8781937	\$40.00	Paid	\$198,294,716.00	89	AAA
Forza Horizon 5	Racing	11/7/2021	2021	5791422	\$60.00	Paid	\$183,826,489.00	89	AAA
Yu-Gi-Oh! Master Duel	Strategy, Simulation	1/17/2022	2022	6284102	\$0.00	Free To Play	\$175,043,907.00	75	AA
Phasmophobia	Horror, Survival, Puzzle, Adventure	9/17/2020	2020	14566313	\$20.00	Paid	\$162,924,573.00	96	AA
Valheim	Survival, Action, Adventure, RPG	2/1/2021	2021	11185225	\$20.00	Paid	\$148,006,492.00	94	AA
New World: Aeternum	Action, Adventure, RPG	9/27/2021	2021	5556794	\$60.00	Paid	\$145,021,006.00	69	AAA
Ready or Not	Shooter, Strategy, Simulation, Adventure	12/16/2021	2021	4869087	\$50.00	Paid	\$143,460,246.00	89	AA
Starfield	RPG, Shooter, Adventure, Action	9/4/2023	2023	2233509	\$70.00	Paid	\$139,774,221.00	57	AAA
Total War: WARHAMMER III	Strategy, Action	2/15/2022	2022	3479915	\$60.00	Paid	\$136,840,576.00	72	AAA
Warhammer 40,000: Space Marine 2	Shooter, Action, Adventure	9/8/2024	2024	2559522	\$60.00	Paid	\$134,719,813.00	83	AA
Mount & Blade II: Bannerlord	Strategy, Action, RPG, Simulation	3/29/2020	2020	3800215	\$50.00	Paid	\$134,576,569.00	88	AA
It Takes Two	Platformer, Action, Adventure, Puzzle	3/24/2021	2021	7877015	\$40.00	Paid	\$134,387,172.00	95	AAA
Battlefield™ 2042	Shooter, Adventure	11/18/2021	2021	6647435	\$60.00	Paid	\$127,899,648.00	46	AAA
Satisfactory	Simulation, Strategy, Adventure	6/7/2020	2020	5622170	\$40.00	Paid	\$126,951,395.00	97	AA
Path of Exile 2	Action, Adventure, RPG	12/5/2024	2024	4666936	\$30.00	Paid	\$125,965,269.00	81	AA
EA SPORTS FC™ 24	Sports, Simulation	9/27/2023	2023	4169497	\$70.00	Paid	\$124,814,040.00	57	AAA
Lethal Company	Survival, Horror, Adventure	11/22/2023	2023	13365248	\$10.00	Paid	\$114,993,458.00	97	AA

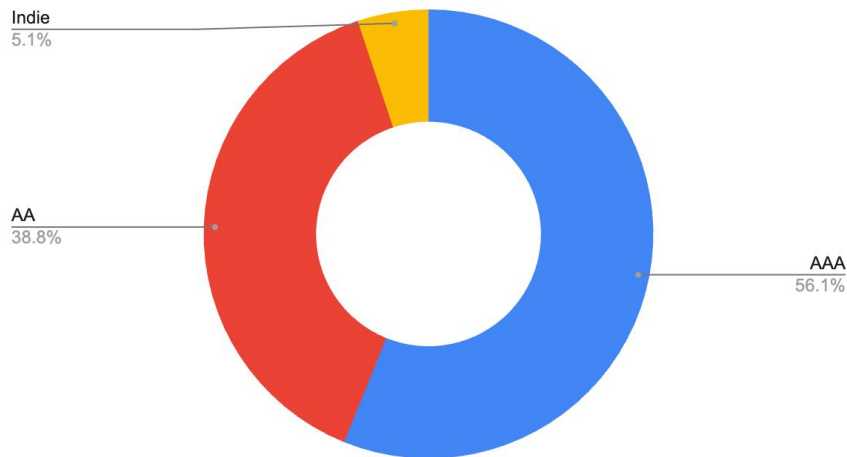
Distribution of Top 100 Steam Games

- Free to Play: any video game with a purchase price of \$0
- Paid: any video game with a purchase price above \$0
- Paid>Free to Play
- Low sample size of FTP games may lead to inaccurate analyses
- **Indie:** Publishers who made \$10k to \$50m total from Steam
- **AA:** Publishers w/ at least 2 games, made \$50m-\$500m total on Steam.
- **AAA:** Publishers w/ at least 2 games, made more than \$500m total on Steam and at least \$10m average revenue per game
- AAA>AA>Indie

Distribution of FTP to Paid Among Top 100 Steam Games



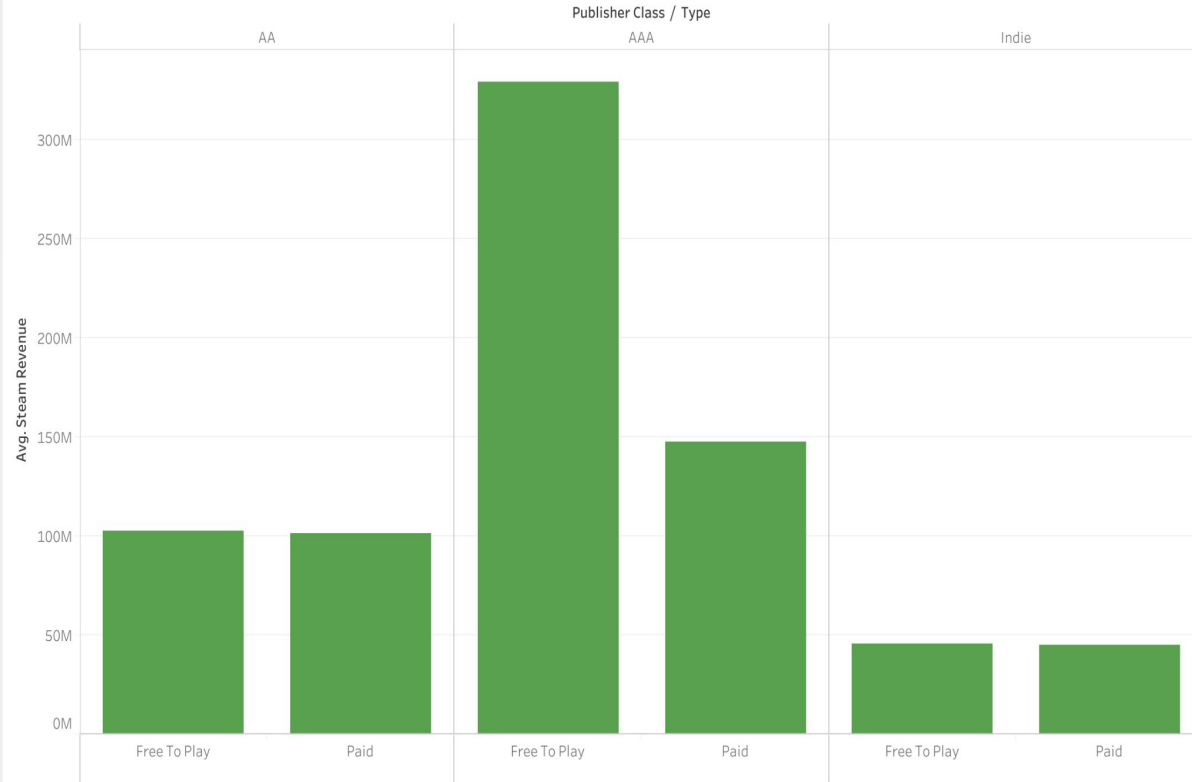
Distribution of Publisher Classes Among Top 100 Steam Games



Revenue Based on Publisher Class and FTP vs Paid

- AAA > AA > Indie in revenue
- FTP = Paid revenue for AA and Indie games
- FTP >> Paid revenue for AAA

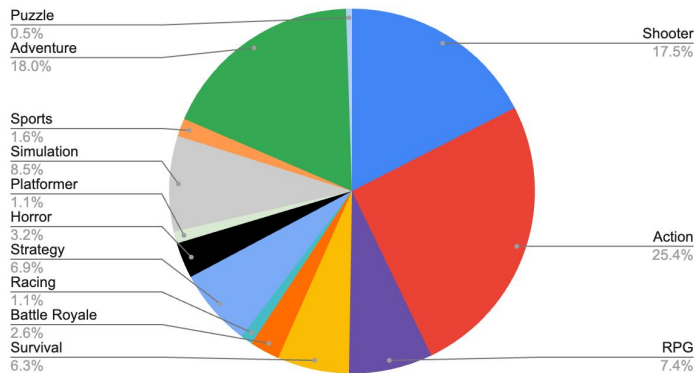
Steam Revenue Based on Publisher Class and FTP vs Paid



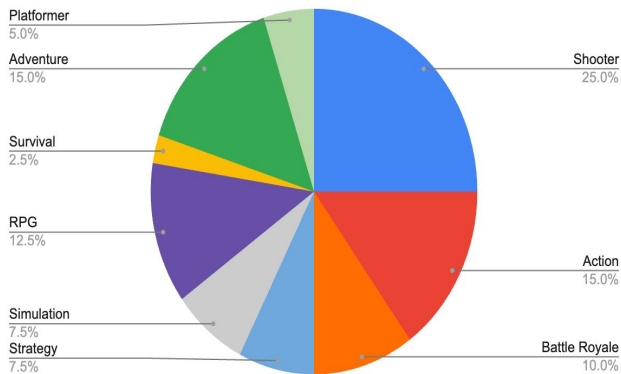
Distribution of Top 100 Games Based on Genre

- Top 5 Steam Genres: Action, Shooter, Adventure, Simulation, RPG
- Top 5 FTP Genres: Shooter, Action/Adventure, RPG, Battle Royale
- Top 5 Paid Genres: Adventure, Action, Strategy, Simulation, RPG

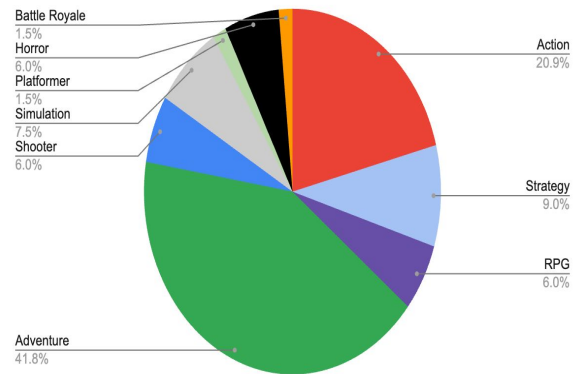
Distribution of Genres Among Top 100 Popular Steam Games



Distribution of FTP Genres Among Top 100 Steam Games



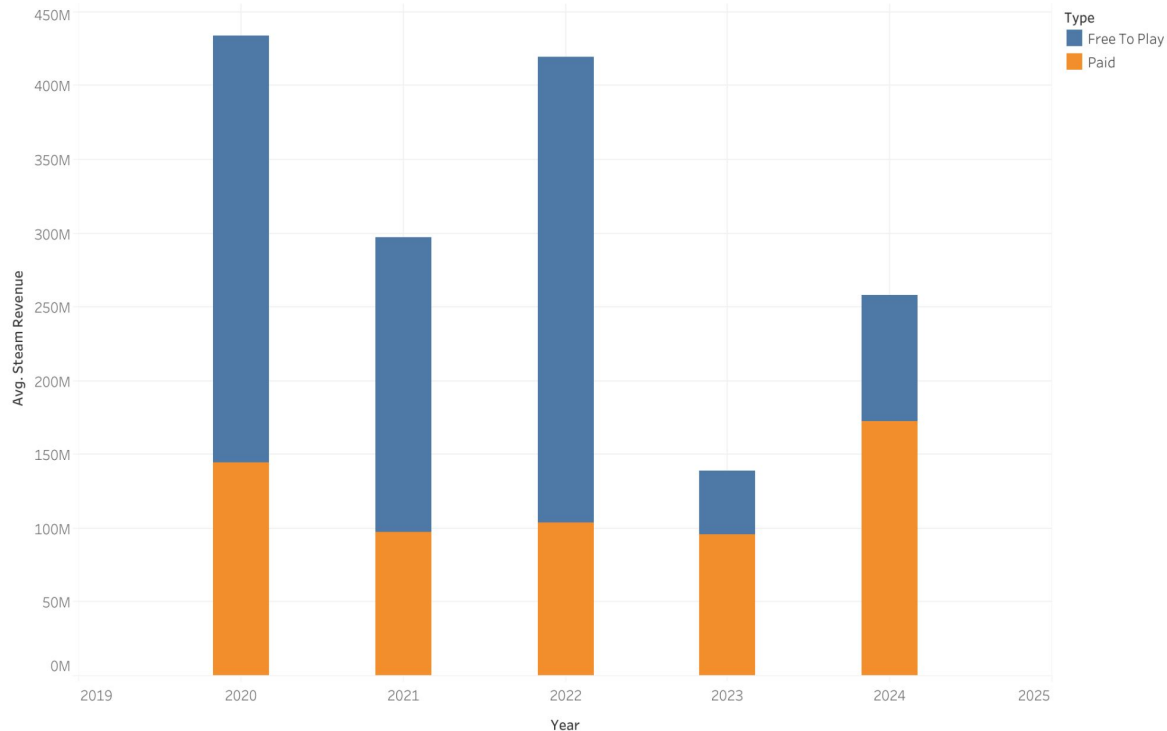
Distribution of Paid Genres Among Top 100 Steam Games



Revenue vs Release Year

- FTP games produced most revenue in the years 2020-2022 and peaked in 2022
- Paid games produced consistent revenue from 2020-2024 and peaked in 2024
- Highest average revenue in the years 2020 and 2022

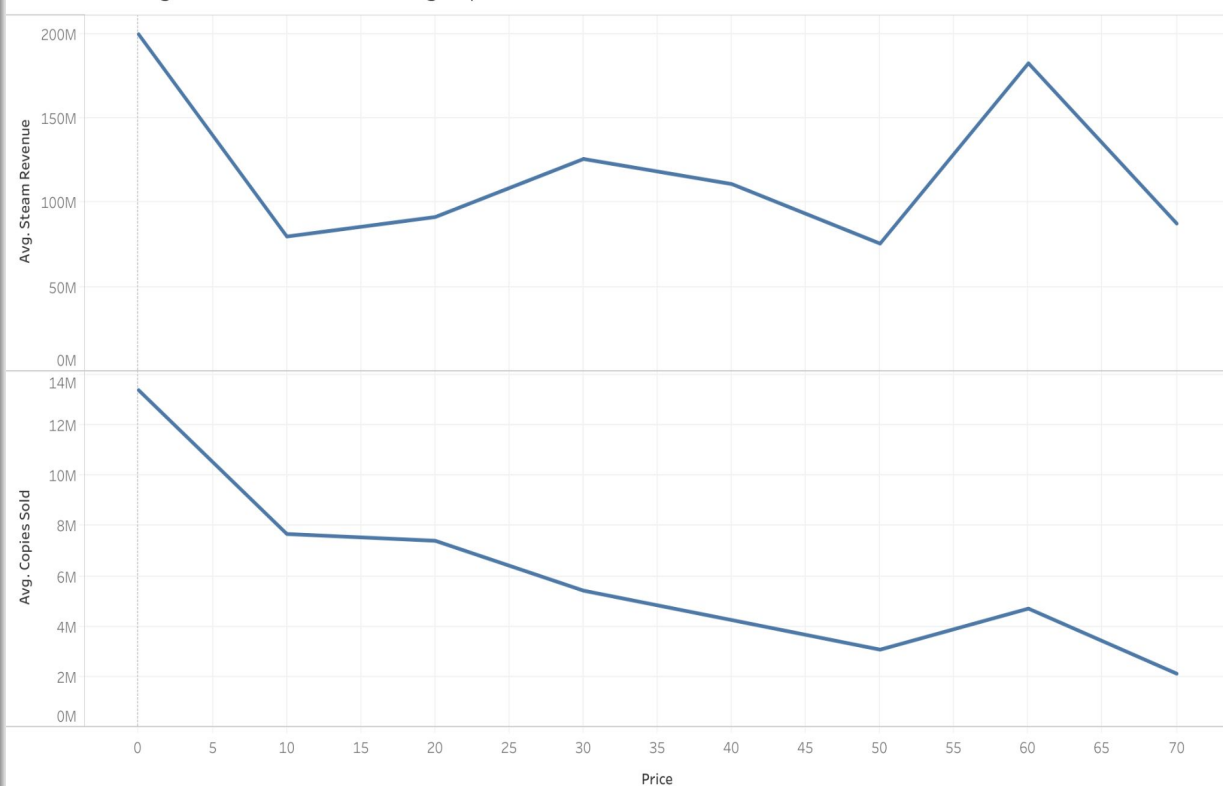
Average Steam Revenue Based on Year



Steam Revenue and Copies Sold Based on Game Price

- Video games w/ unique price points removed from data viz to prevent skewing of data
- FTP and \$60 paid games had highest average revenue
- There is a proportional downtrend in average copies sold as game price increases
- Average copies sold of FTP games is 13.4 million, around 3x higher than the 4.36 million average copies sold of paid games
- Average steam revenue of FTP games is \$200 million, whereas average steam revenue of paid games is \$125 million

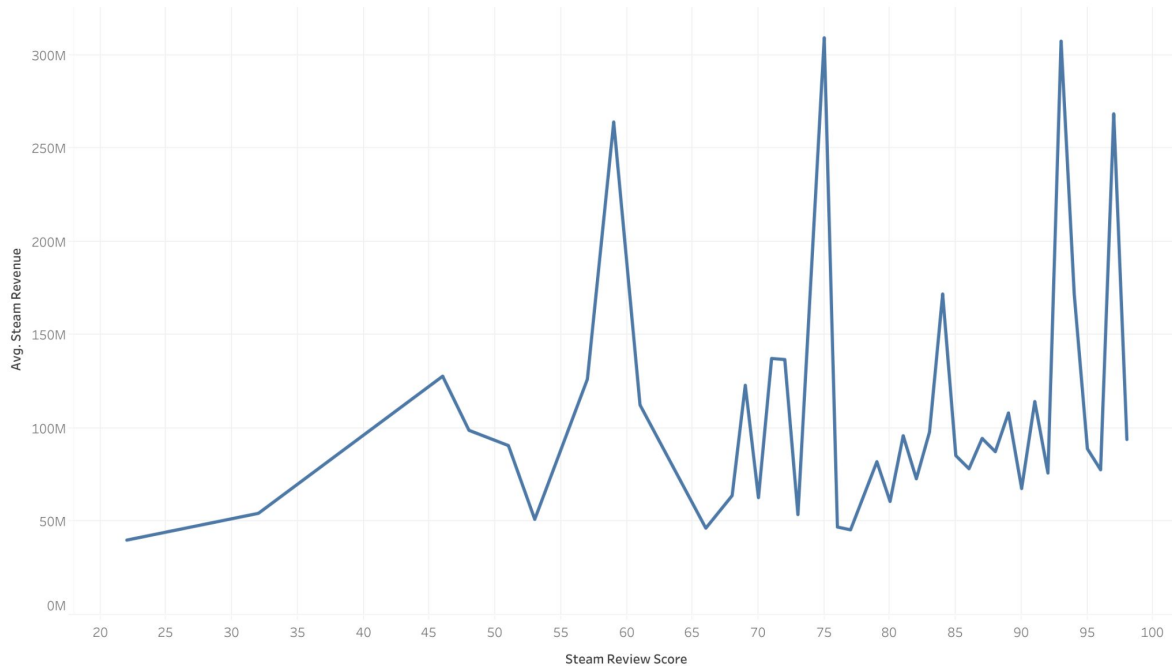
Price Vs Average Steam Revenue and Avg Copies Sold



Review Score Impact on Popularity

- Apex Legends, with a review score of 67, removed from chart due to its abnormally high revenue
- Review Score has very little relation to Revenue
- Revenues only peak at review scores higher than 50-55

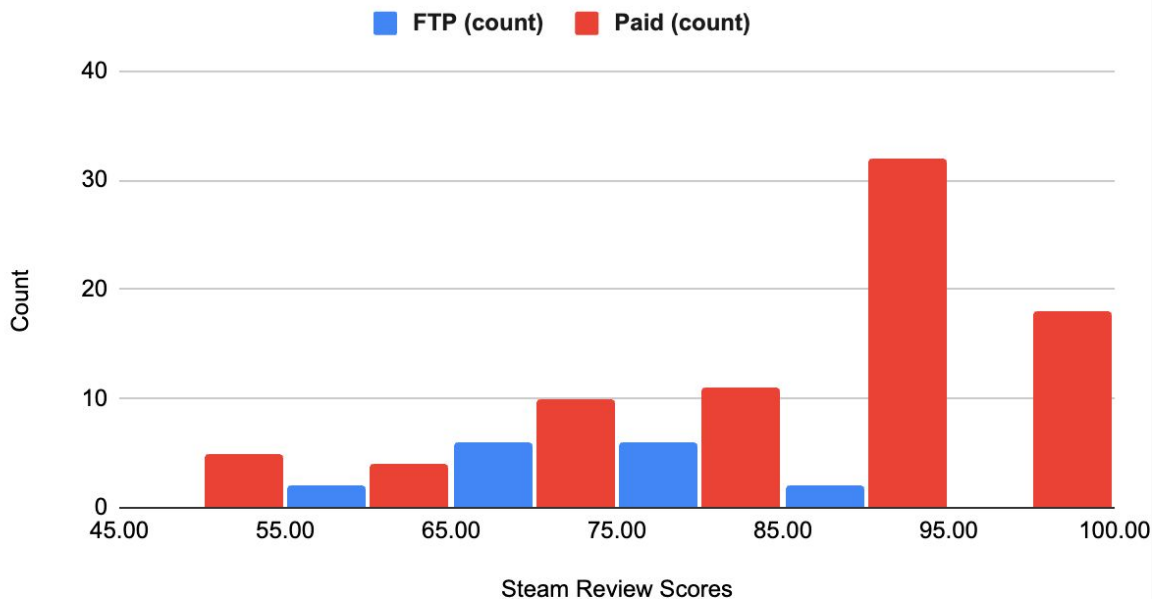
Steam Review Score vs Average Revenue



Review Score Based on FTP vs Paid

- Overwatch 2 (FTP) and COD MW III (Paid) removed due to their abnormally low review scores of 22 and 32
- Average review score of Paid games is 83, which is significantly higher than average review score of 72 for FTP games
- Popular paid games tend to have higher steam review scores compared to FTP games

Distribution of Review Scores Based on FTP Vs Paid



Conclusions

- Popular free to play games tend to generate more revenue than popular pay to play games, however the amount of popular pay to play games significantly trump the number of popular free to play games
- The most successful pay to play games involve the action, adventure, strategy, simulation and RPG genres and require massively positive player reception
- The most successful free to play games are AAA titles released from 2020-2022 that involve the shooter, action, adventure, RPG and Battle Royale genres with varying neutral to positive player reception.

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References

Games list. Gamalytic. (n.d.). <https://gamalytic.com/game-list>

Marnab, R. (2023, March 23). *Popular video games 1980 - 2023* . Kaggle. <https://www.kaggle.com/datasets/arnabchaki/popular-video-games-1980-2023/data>