



STEAM®

GAME RECOMMENDATIONS

PROBLEM STATEMENT

- ▶ Derive insights for marketing team
- ▶ Build a game recommendation system for users
- ▶ Build an “item-to-item” similar games recommendation system

PROJECT VALUE

- ▶ Increase advertising revenue
- ▶ Boost sales
- ▶ Improve user experience

METHODOLOGY

1. Gather and preprocess data
2. Explore and visualise data
3. Build models
4. Evaluate and interpret models

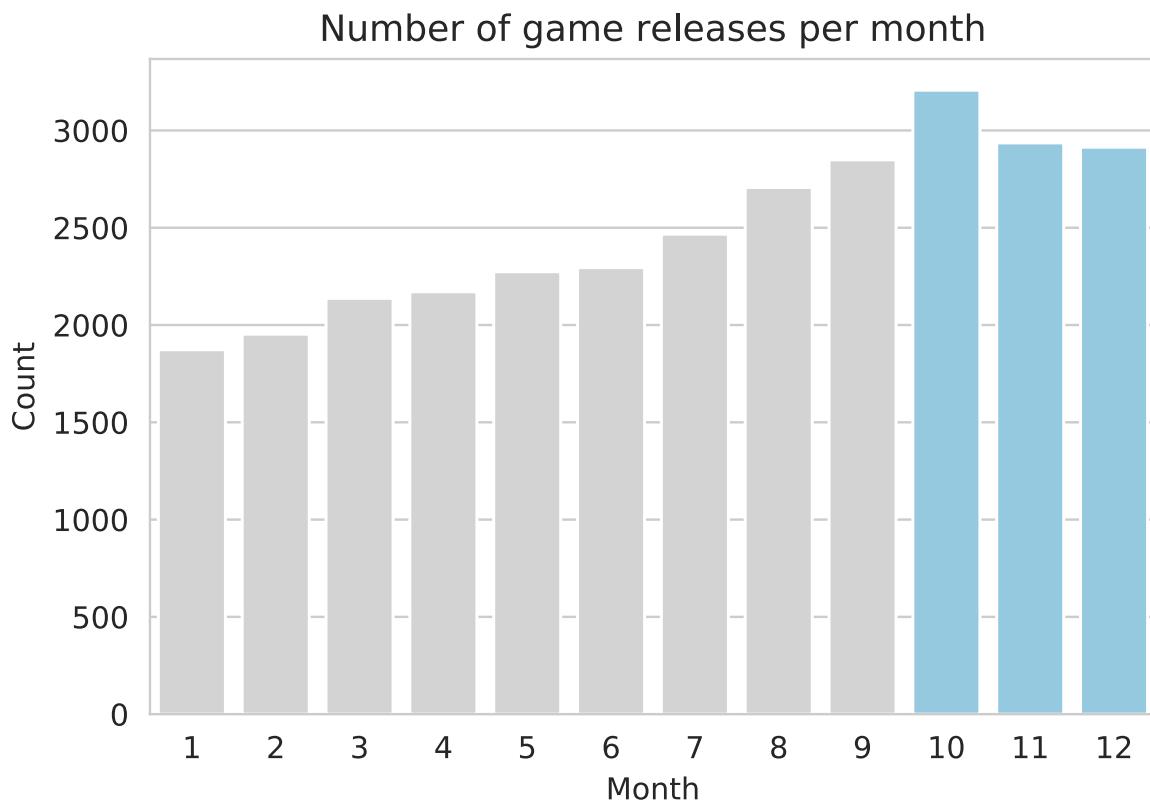


THE DATA

- ▶ 69,277 unique users
- ▶ 8,791 unique games
- ▶ Over 4 million user-item pairs
- ▶ Games released between 1983 and 2018

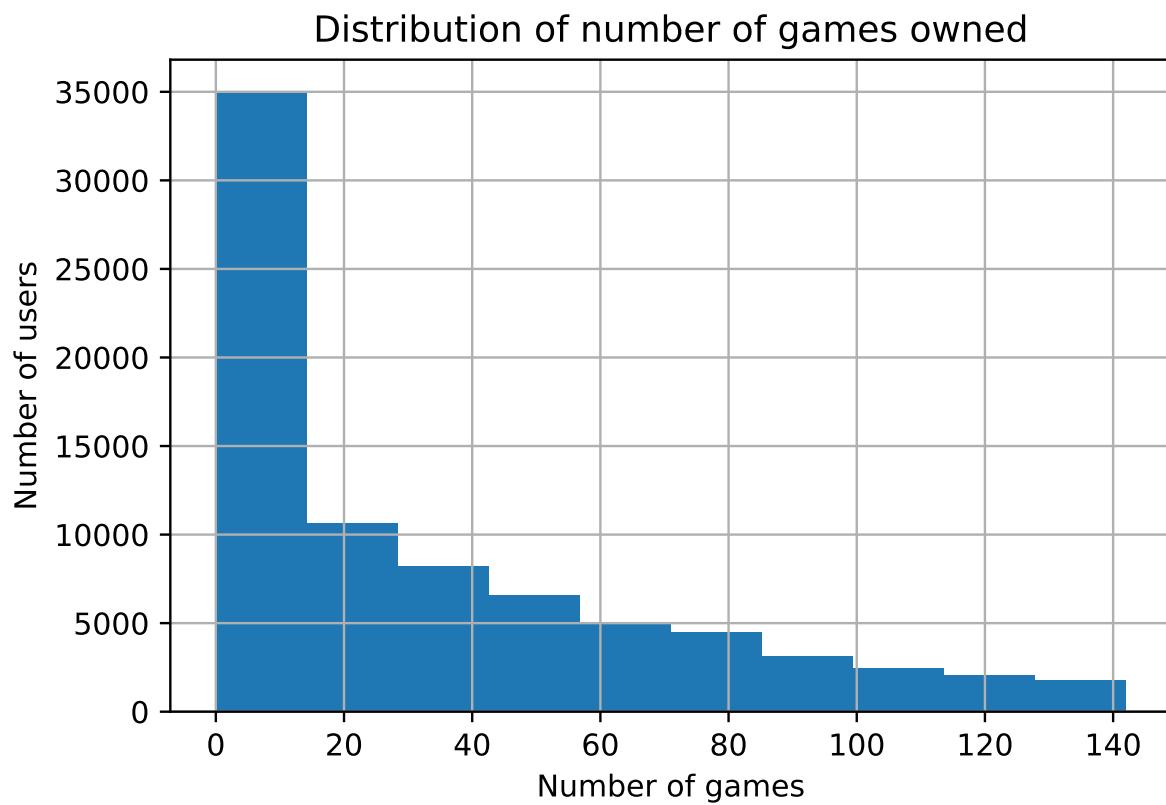


GAME RELEASE DATE



Business Recommendation:
Charge premium for
advertising in Q4

NUMBER OF GAMES



Business Recommendation:

Targeted campaign for users
who own below the average
number of games (58 games)

USER RECOMMENDATIONS

Interactions Table

	id	uid	owned
0	10	0	1.0
1	10	1	1.0
2	10	3	1.0
3	10	4	1.0
4	10	10	1.0

User ID: 5000



Number of recommendations: 5

Recommended Items:

- 1- Portal 2
- 2- Warframe
- 3- Terraria
- 4- Borderlands 2
- 5- PlanetSide 2



ITEM TO ITEM RECOMMENDATIONS



Item of interest: Counter-Strike
Similar items:
1- Counter-Strike: Condition Zero
2- Day of Defeat
3- Ricochet
4- Deathmatch Classic
5- Counter-Strike: Source



Item of interest: American Truck Simulator
Similar items:
1- Farming Simulator 15
2- Bus Simulator 16
3- Automation - The Car Company Tycoon Game
4- OMSI 2: Steam Edition
5- BeamNG.drive



Item of interest: The Witness
Similar items:
1- Headlander
2- Quadrilateral Cowboy
3- Overcooked
4- The Deadly Tower of Monsters
5- Oxenfree

BUSINESS RECOMMENDATIONS

- ▶ Model performs well based on qualitative assessment
- ▶ Integrate with Steam API to get user data
- ▶ Conduct A/B testing to compare with existing recommendation systems
- ▶ Gather user feedback

FUTURE WORK

- ▶ Data exploration
 - ▶ User reviews
 - ▶ Embedding space
- ▶ Model improvements
 - ▶ Account for playtime
 - ▶ Account for features - hybrid model
 - ▶ Account for thumb up/down ratings



THANK YOU

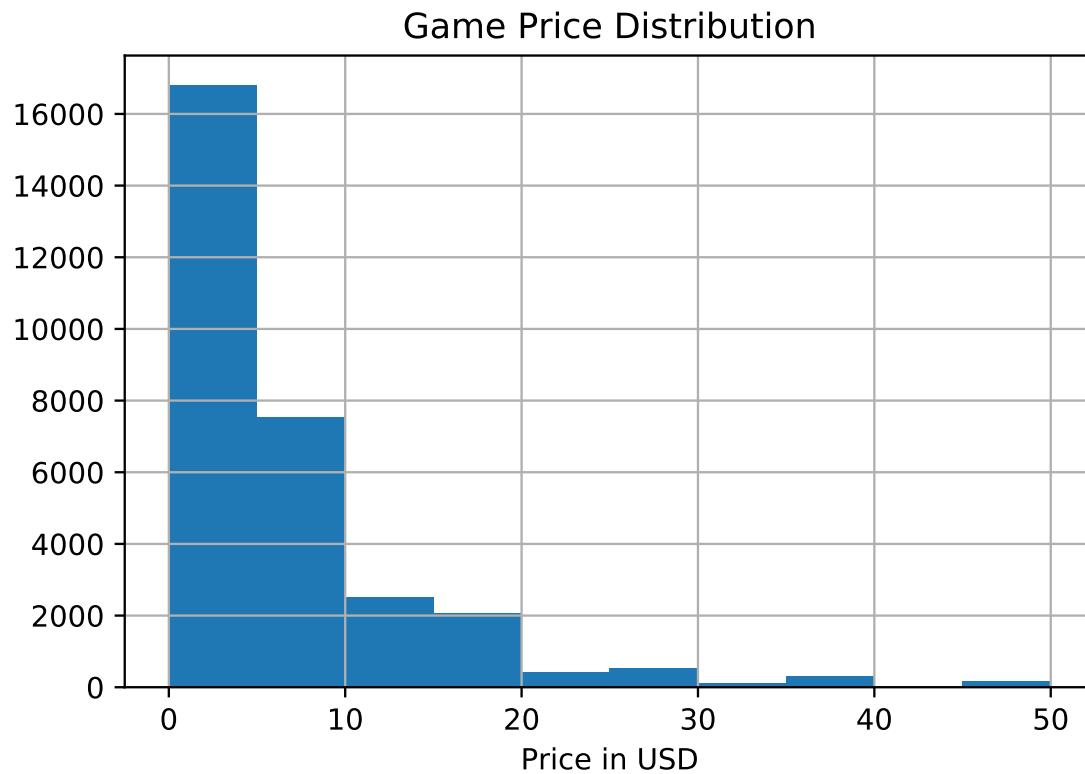
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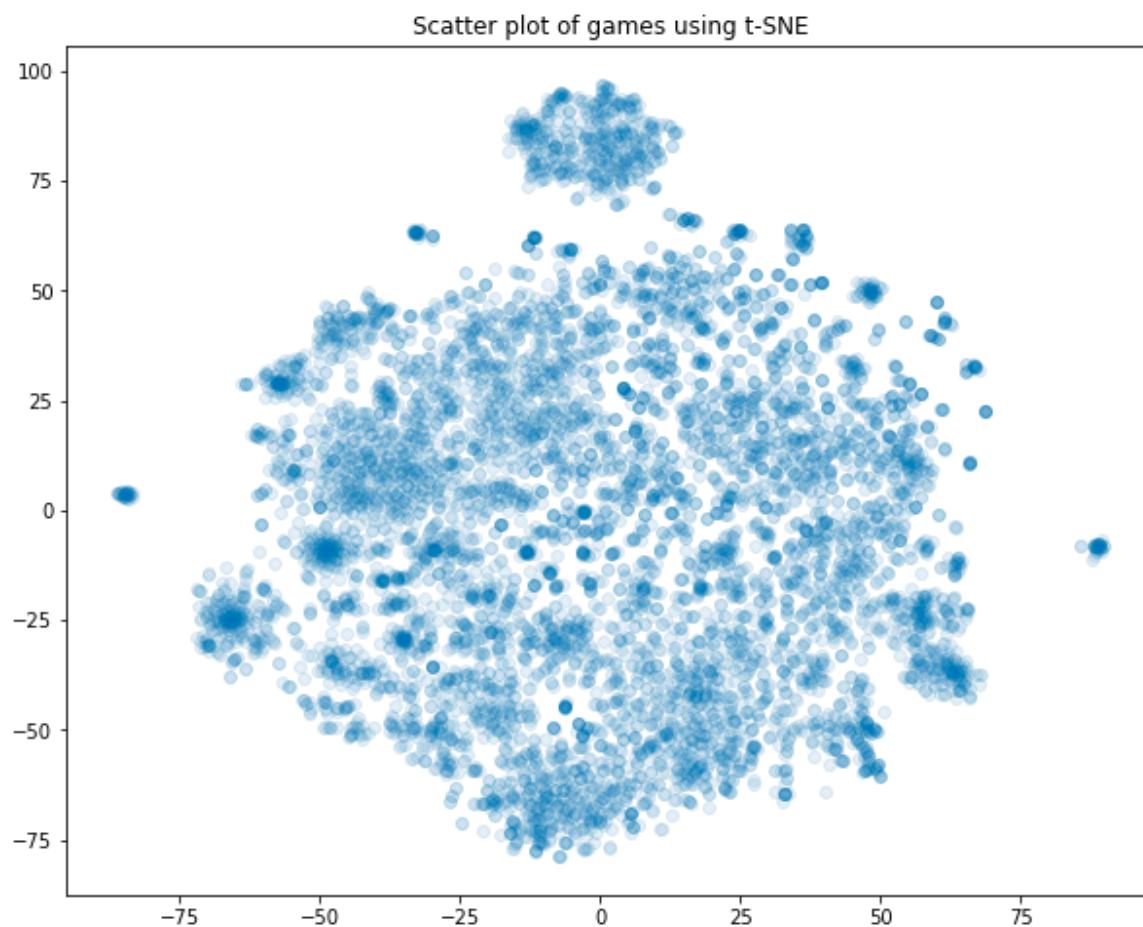
APPENDIX - PRICE OF GAMES



Recommendation:

Importance of volume/
creating bundles

APPENDIX - GAME EMBEDDINGS



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