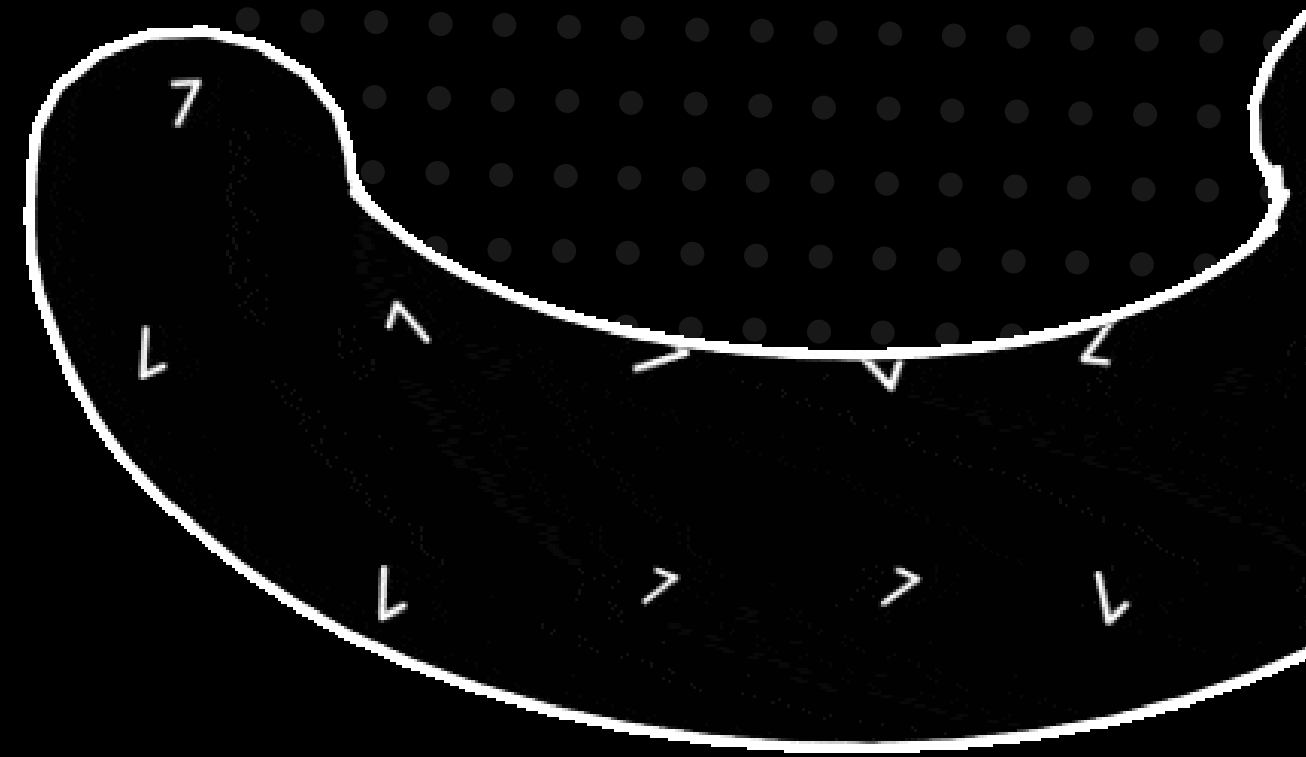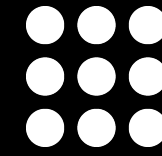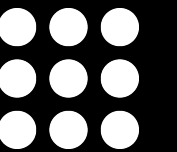Group 1
Wenbin Chen, Zeming Zhang
Zihua Ma, Huiyi He, Geon Yoo，
Emily Mu

Final Presentation

Table of Content
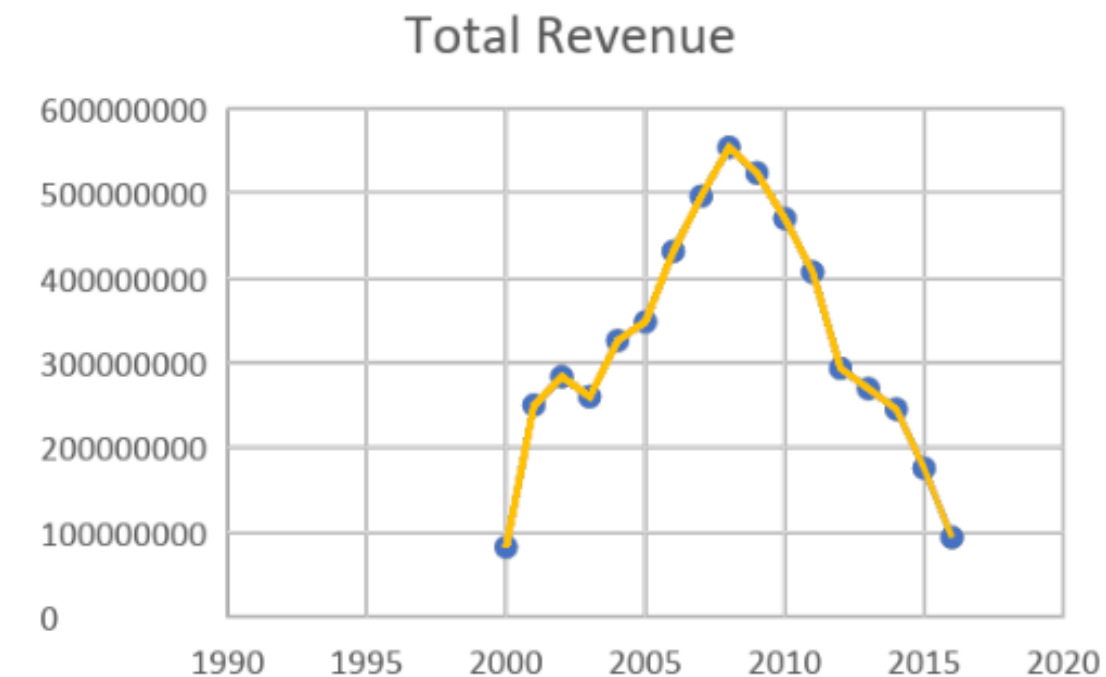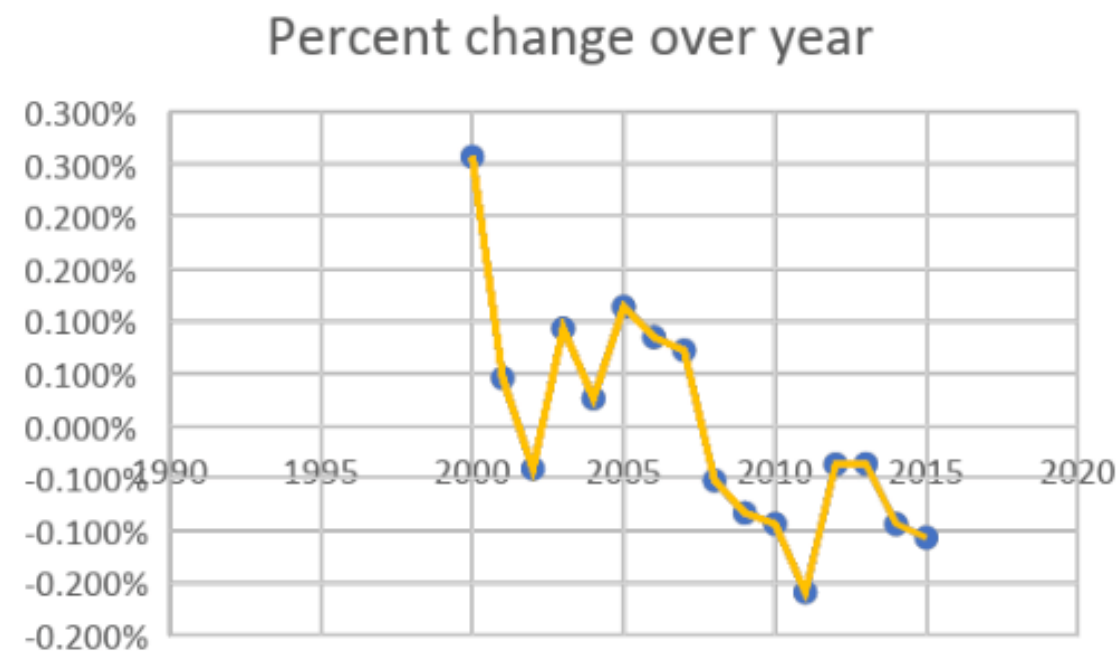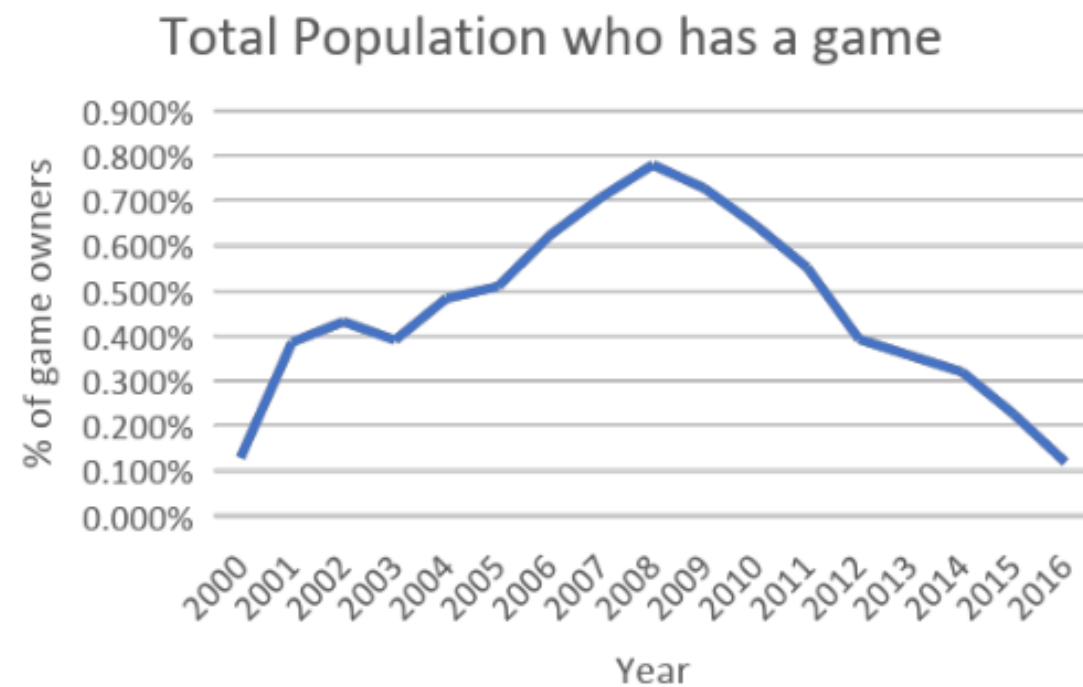
How should ER Games ensure they are in line with the trends of the industry?

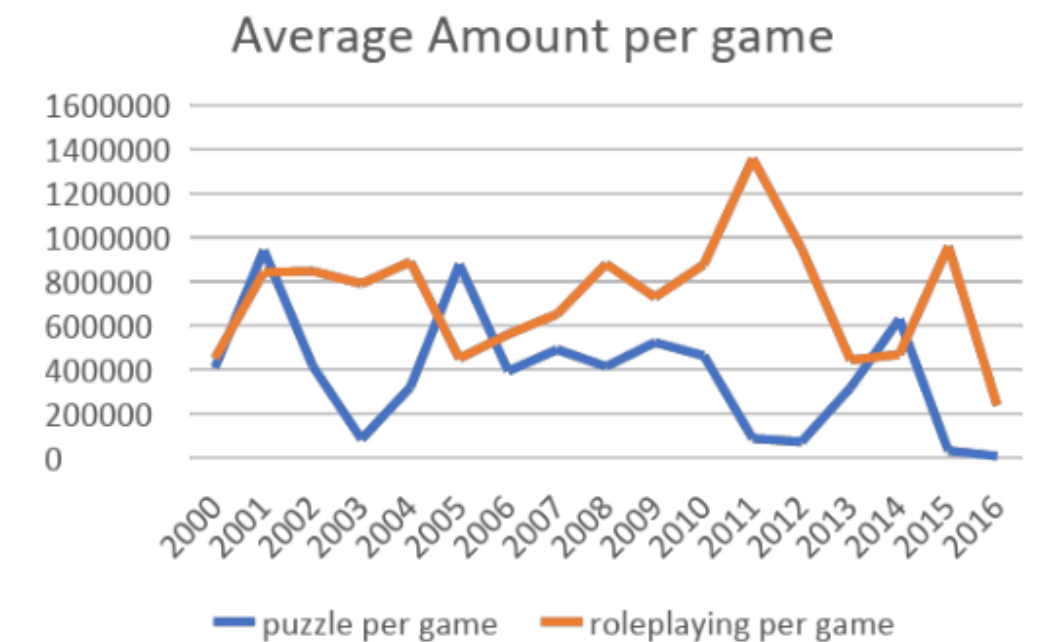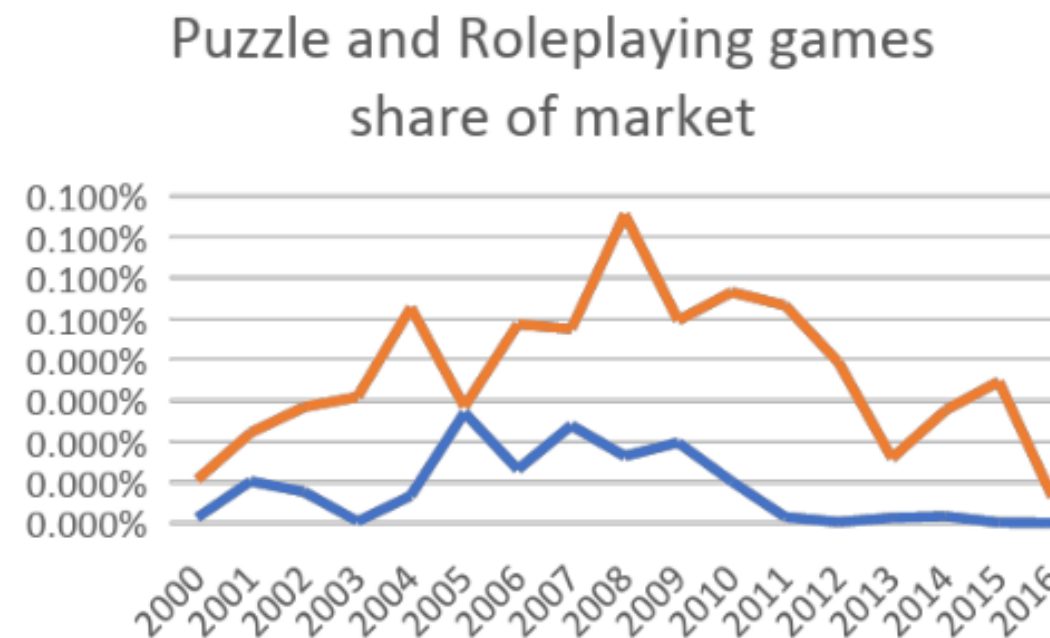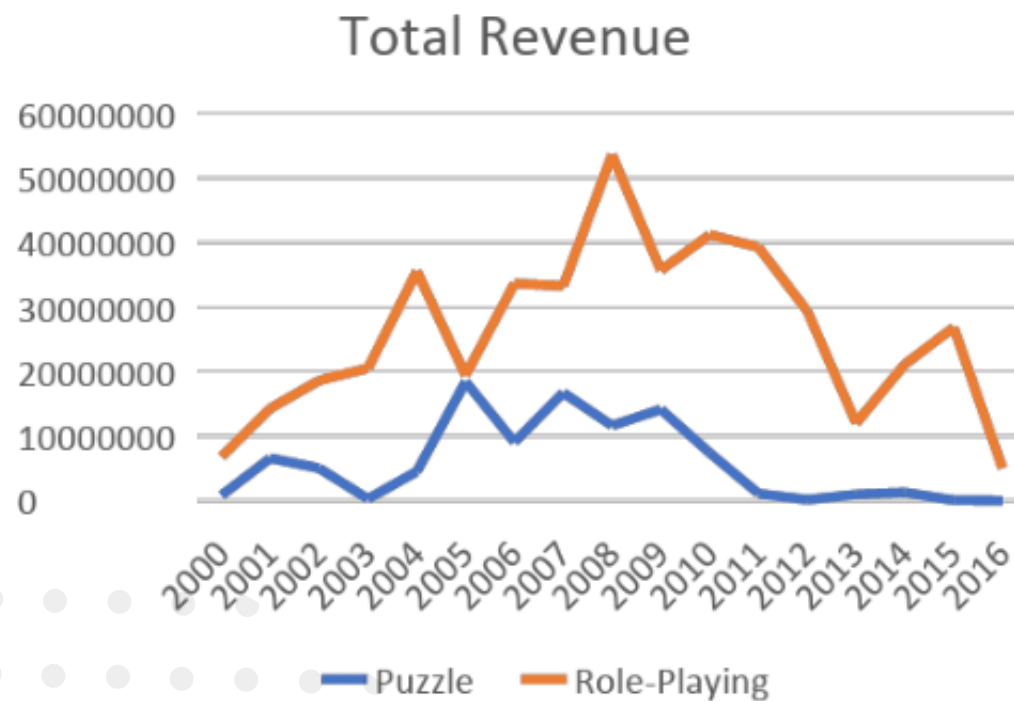- WHAT IS THE TREND OF THE INDUSTRY?
- GAMING INDUSTRY AS A WHOLE.

Total Population who has a game

Percent change over year

Total Revenue

How should ER Games ensure they are in line with the trends of the industry?

Specifically focused on trend of puzzle and role-playing game genre.

Total Revenue

60000000	
50000000	
40000000	
30000000	
20000000	
10000000	
0	

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

— Puzzle   — Role-Playing

Puzzle and Roleplaying games share of market

0.100%
0.100%
0.100%
0.100%
0.100%
0.000%
0.000%
0.000%
0.000%
0.000%

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Average Amount per game

1600000
1400000
1200000
1000000
800000
600000
400000
200000
0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

— puzzle per game   — roleplaying per game

Trends of the Industry

- Critics and player base

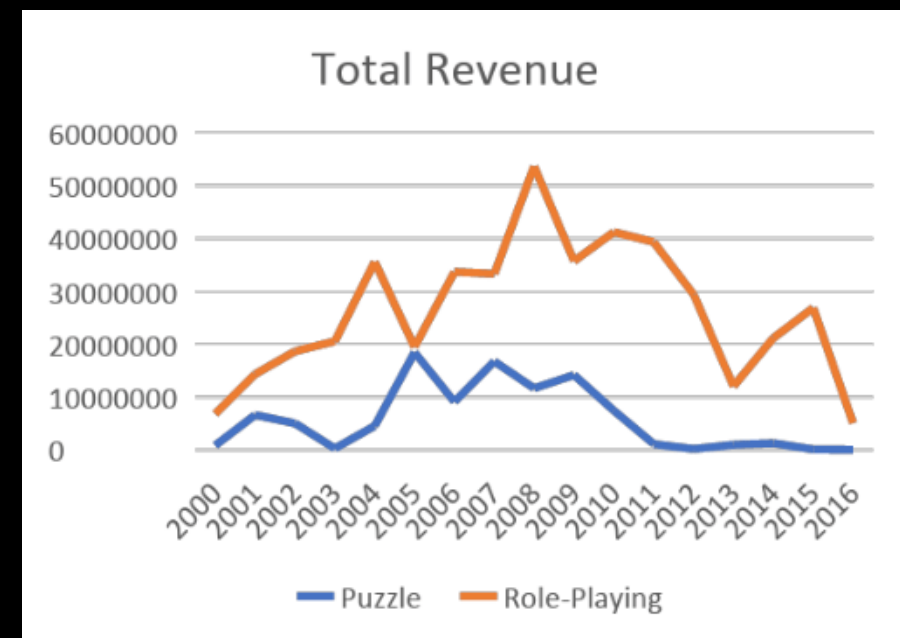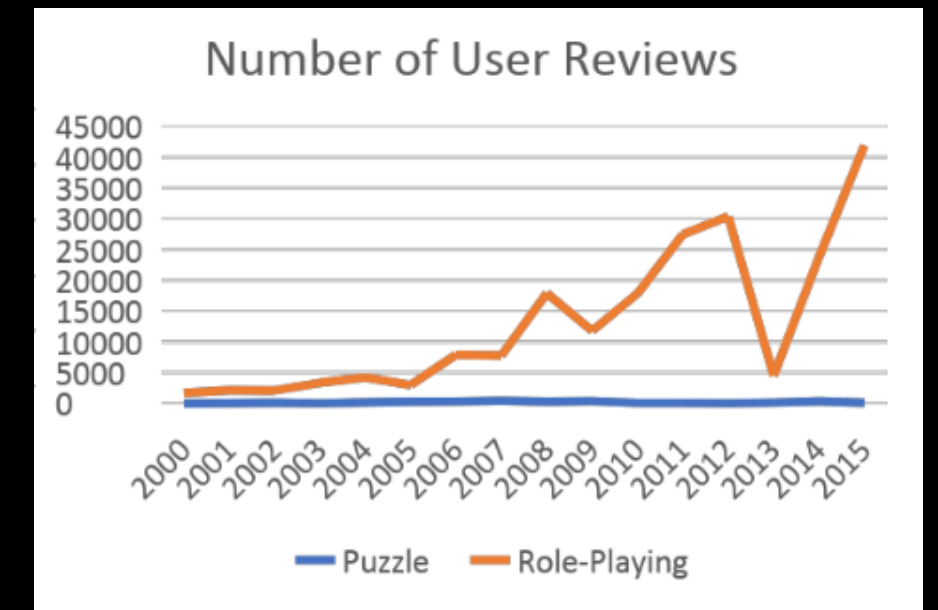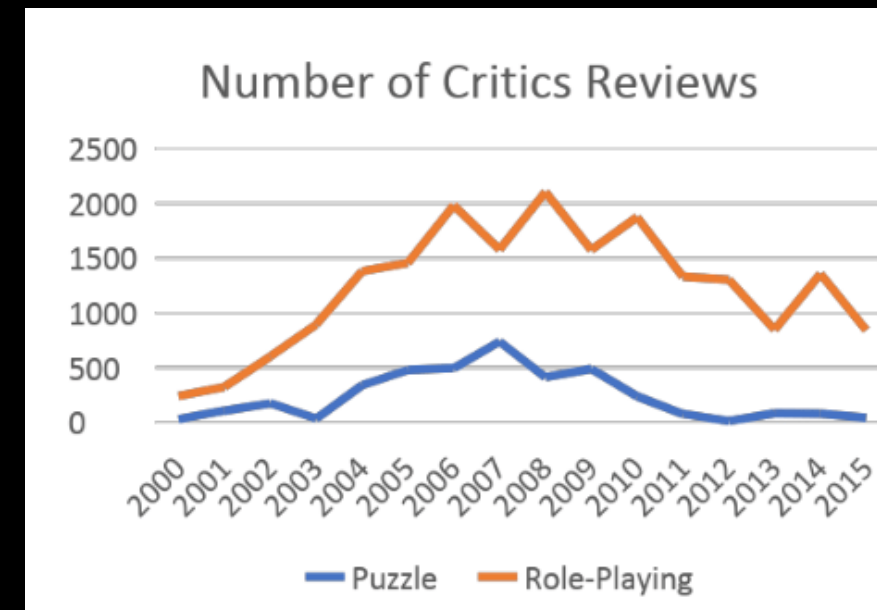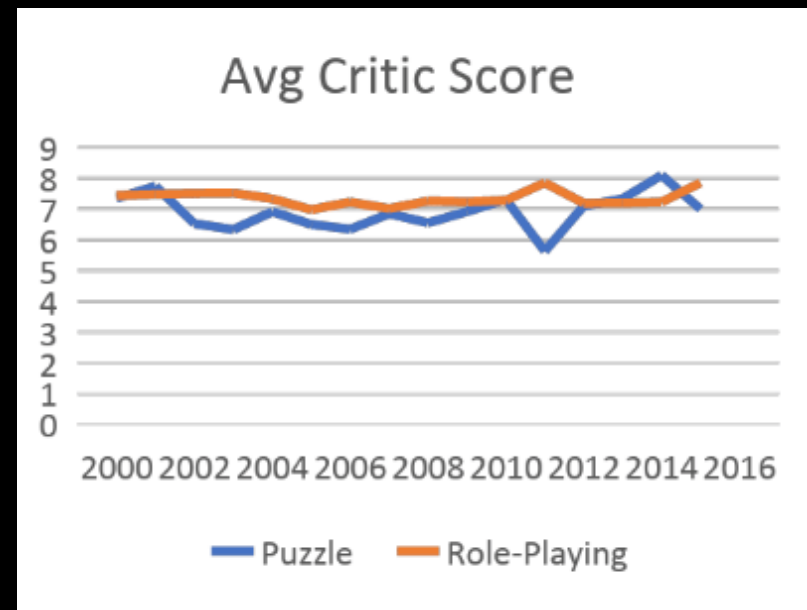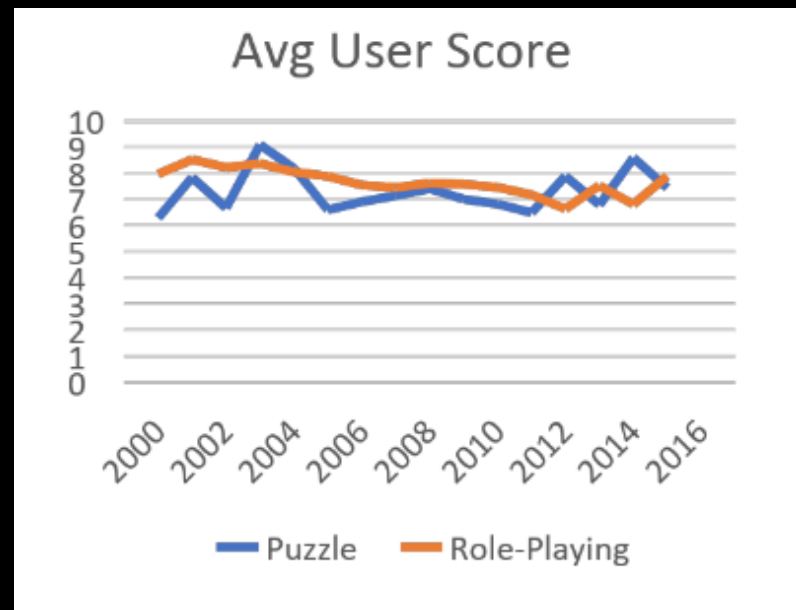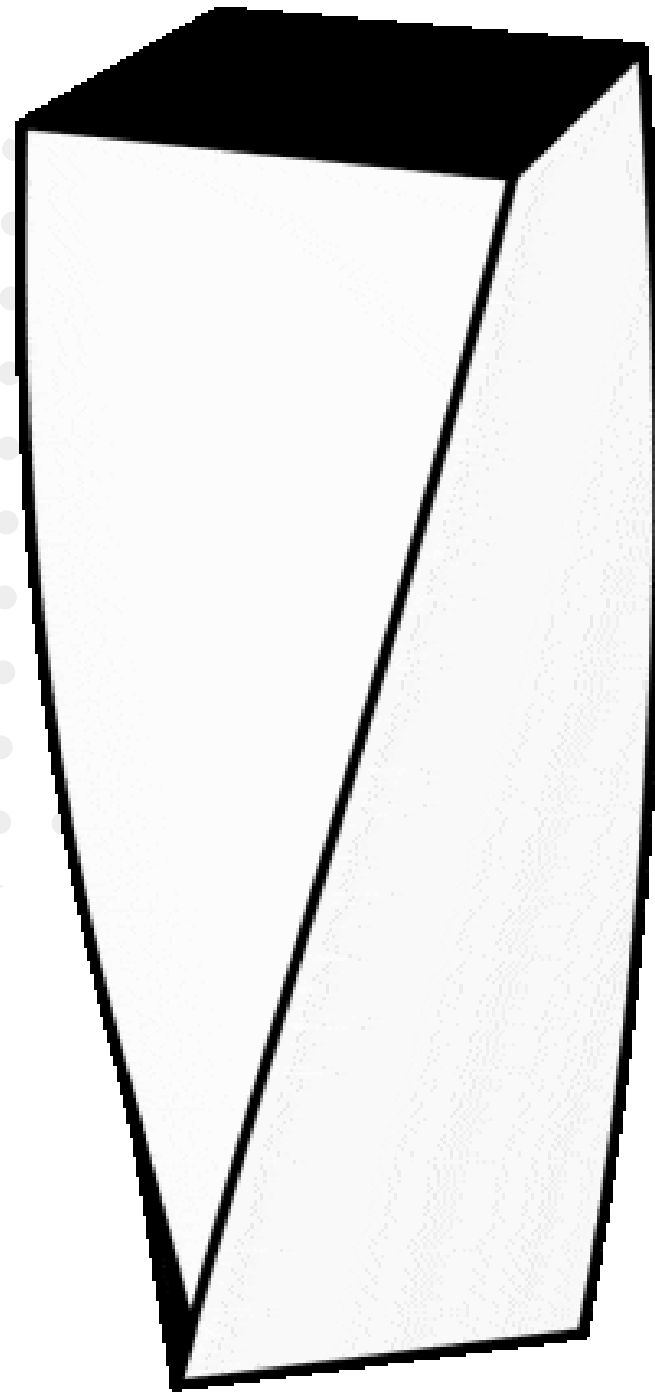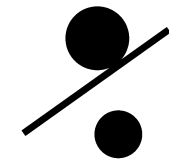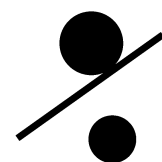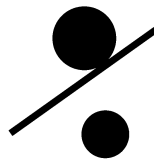# How should ER Games ensure they are in line with the trends of the industry?

Using Critics Score and User Score we see the future whether that helps with sale of games.

|	RSquare	RASE	N	Number of Splits	AICc
Training	0.118	0.4077687	5991	12	6281.28
Validation	0.312	0.3274506	2071		

Result: it is not a good indicator with a r^2 of 0.118

year_of_release	genre	critic_score	user_score	total sales	Likely to buy or not	critic score	player score	percentpop
2008	Racing	8.2	8.3	35520000	1	7.6	8	0.05%
2009	Sports	8	8	32770000	1	8.2	8.3	0.05%
2006	Platform	8.9	8.5	29800000	1	8	8	0.04%
2006	Misc	5.8	6.6	28910000	1	8.9	8.5	0.04%
2009	Platform	8.7	8.4	28320000	1	5.8	6.6	0.04%
2005	Racing	9.1	8.6	23210000	1	8.7	8.4	0.03%
2007	Sports	8	7.7	22700000	1	9.1	8.6	0.03%
2010	Misc	6.1	6.3	21820000	1	8	7.7	0.03%
2009	Sports	8	7.4	21800000	1	6.1	6.3	0.03%
2013	Action	9.7	8.2	21050000	1	8	7.4	0.03%
2004	Action	9.5	9	20810000	1	9.7	8.2	0.03%
2005	Misc	7.7	7.9	20140000	1	9.5	9	0.03%
2013	Action	9.7	8.1	16270000	1	7.7	7.9	0.02%
2002	Action	9.5	8.7	16150000	1	9.7	8.1	0.03%
2005	Puzzle	7.7	7.1	15280000	1	9.5	8.7	0.02%
2001	Racing	9.5	8.4	14970000	1	7.7	7.1	0.02%
2011	Shooter	8.8	3.4	14730000	1	9.5	8.4	0.02%
2010	Shooter	8.7	6.3	14620000	1	8.8	3.4	0.02%
2012	Shooter	8.3	5.3	13790000	1	8.7	6.3	0.02%
2012	Shooter	8.3	4.8	13680000	1	8.3	5.3	0.02%
2009	Shooter	9.4	6.3	13470000	1	8.3	4.8	0.02%
2011	Shooter	8.8	3.2	13330000	1	9.4	6.3	0.02%
2001	Action	9.7	8.5	13100000	1	8.8	3.2	0.02%
2008	Fighting	9.3	8.9	12840000	1	9.7	8.5	0.02%
2011	Racing	8.5	8.2	12650000	1	9.3	8.9	0.02%

year_of_rele	genre	publisher	na_sales	eu_sales	jp_sales	other_sales	critic_score	critic_count	user_score	user_count	developer	rating	total sales	populationye	percentpop	percent inter	ratingdiff	p...
2006	Sports	Ninti	41360000	28960000	3770000	8450000	7.6	51	8	322	Ninti	E	82540000	6.9222E+10	0.119%	9.6923E-08	1	
2008	Racing	Ninti	15680000	12760000	3790000	3290000	8.2	73	8.3	709	Ninti	E	35520000	7.1037E+10	0.050%	2.3367E-07	1	
2009	Sports	Ninti	15610000	10930000	3280000	2950000	8	73	8	192	Ninti	E	32770000	7.196E+10	0.046%	2.4413E-07	1	
2006	Platform	Ninti	11280000	9140000	6500000	2880000	8.9	65	8.5	431	Ninti	E	29800000	6.9222E+10	0.043%	2.8524E-07	1	
2006	Misc	Ninti	13960000	9180000	2930000	2840000	5.8	41	6.6	129	Ninti	E	28910000	6.9222E+10	0.042%	2.283E-07	1	
2009	Platform	Ninti	14440000	6940000	4700000	2240000	8.7	80	8.4	594	Ninti	E	28320000	7.196E+10	0.039%	2.9661E-07	1	
2005	Racing	Ninti	9710000	7470000	4130000	1900000	9.1	64	8.6	464	Ninti	E	23210000	6.8327E+10	0.034%	3.7053E-07	1	
2007	Sports	Ninti	8920000	8030000	3600000	2150000	8	63	7.7	146	Ninti	E	22700000	7.0123E+10	0.032%	3.3921E-07	1	
2010	Misc	Microsoft Ga	15000000	4890000	240000	1690000	6.1	45	6.3	106	Good Science	E	21820000	7.2889E+10	0.030%	2.8873E-07	1	
2009	Sports	Ninti	9010000	8490000	2530000	1770000	8	33	7.4	52	Ninti	E	21800000	7.196E+10	0.030%	3.3945E-07	1	
2013	Action	Take-Two int	7020000	9090000	980000	3960000	9.7	50	8.2	3994	Rockstar Nor	M	21050000	7.5722E+10	0.028%	3.8955E-07	3	
2004	Action	Take-Two int	9430000	400000	410000	10570000	9.5	80	9	1588	Rockstar Nor	M	20810000	6.7438E+10	0.031%	4.3248E-07	3	
2005	Misc	Ninti	4740000	9200000	4160000	2040000	7.7	58	7.9	50	Ninti	E	20140000	6.8327E+10	0.029%	3.9225E-07	1	
2013	Action	Take-Two int	9660000	5140000	60000	1410000	9.7	58	8.1	3711	Rockstar Nor	M	16270000	7.5722E+10	0.021%	4.9785E-07	3	
2002	Action	Take-Two int	8410000	5490000	470000	1780000	9.5	62	8.7	730	Rockstar Nor	M	16150000	6.5678E+10	0.025%	5.387E-07	3	
2005	Puzzle	Ninti	3430000	5350000	5320000	1180000	7.7	37	7.1	19	Ninti	E	15280000	6.8327E+10	0.022%	4.6466E-07	1	
2001	Racing	Sony Comput	6850000	5090000	1870000	1160000	9.5	54	8.4	314	Polyphony Di	E	14970000	6.4806E+10	0.023%	5.6112E-07	1	
2011	Shooter	Activision	9040000	4240000	130000	1320000	8.8	81	3.4	8713	Infinity Ward	M	14730000	7.3814E+10	0.020%	2.3082E-07	3	
2010	Shooter	Activision	9700000	3680000	110000	1130000	8.7	89	6.3	1454	Treyarch	M	14620000	7.2889E+10	0.020%	4.3092E-07	3	
2012	Shooter	Activision	4990000	5730000	650000	2420000	8.3	21	5.3	922	Treyarch	M	13790000	7.4759E+10	0.018%	3.8434E-07	3	
2012	Shooter	Activision	8250000	4240000	70000	1120000	8.3	73	4.8	2256	Treyarch	M	13680000	7.4759E+10	0.018%	3.5088E-07	3	
2009	Shooter	Activision	8520000	3590000	80000	1280000	9.4	100	6.3	2698	Infinity Ward	M	13470000	7.196E+10	0.019%	4.6771E-07	3	
2011	Shooter	Activision	5540000	5730000	490000	1570000	8.8	39	3.2	5234	Infinity Ward	M	13330000	7.3814E+10	0.018%	2.4006E-07	3	

Result: it is not a good indicator with a r^2 of 0.118
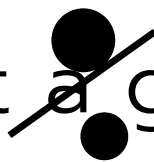
So how do they ensure they are with the trends or how do they break out of this trend?
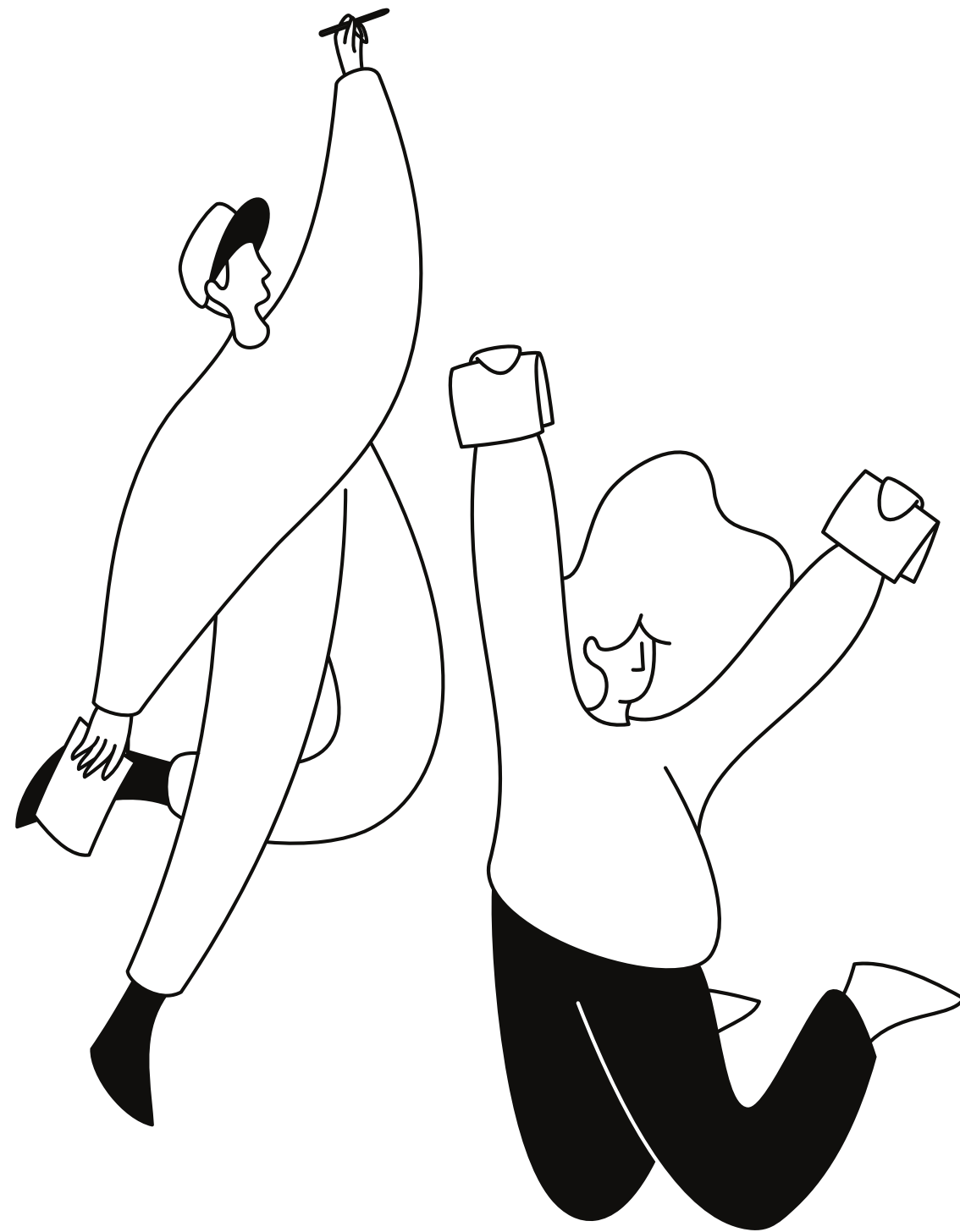
01

Realistically realizing their market potential.

02

In 2016 Puzzle made $10,000 and Role playing made $5,040,000 in total with Puzzle averaging $10,000 per game and $240,000 per game so at a 0.107% decrease in money going in, the company has to make realistic goals.

03

And based on the decision tree critic and player base feedback does not have a big influence on sales.

Which market besides the US should ER Games target when releasing the game?

- Total Sales: **Puzzle + Role-playing**
- Sales Per Capita = **Sales / Population**

**We calculate the popultions in these four different areas each year

NA Population	NA Sales per Perso	EU Population	EU Sales per Pe	JP Population	JP Sales per Pe	Other Population	Other Sales per Person
516818555	8.003%	455424684	6.359%	127854000	2.949%	68122293636	0.012%
528816311	2.965%	457909685	2.787%	128063000	2.959%	69922655834	0.005%
534740514	2.919%	459123683	2.381%	128047000	2.562%	70838285980	0.004%

genre	Puzzle+Role Playing ⏷T		

Average of NA Sales per Pe	Average of EU Sales per Pe	Average of JP Sales per Pe	Average of Other Sales per Peron
0.000562753	0.000364128	0.00114669	7.79091E-07

genre	Puzzle+Role Playing ⏷T		

Var of NA Sales per Person	Var of EU Sales per Person	Var of JP Sales per Person	Var of Other Sales per Person
1.02693E-06	9.19047E-07	1.09037E-05	3.40653E-12

genre	Puzzle+Role Playing ⏷T		

Count of na_sales	Count of eu_sales	Count of jp_sales	Count of other_sales
821	821	821	821

WHICH MARKET BESIDES THE US SHOULD ER GAMES TARGET WHEN RELEASING THE GAME?

AB Testing!

# Which market besides the US should ER Games target when releasing the game?

5% threshold

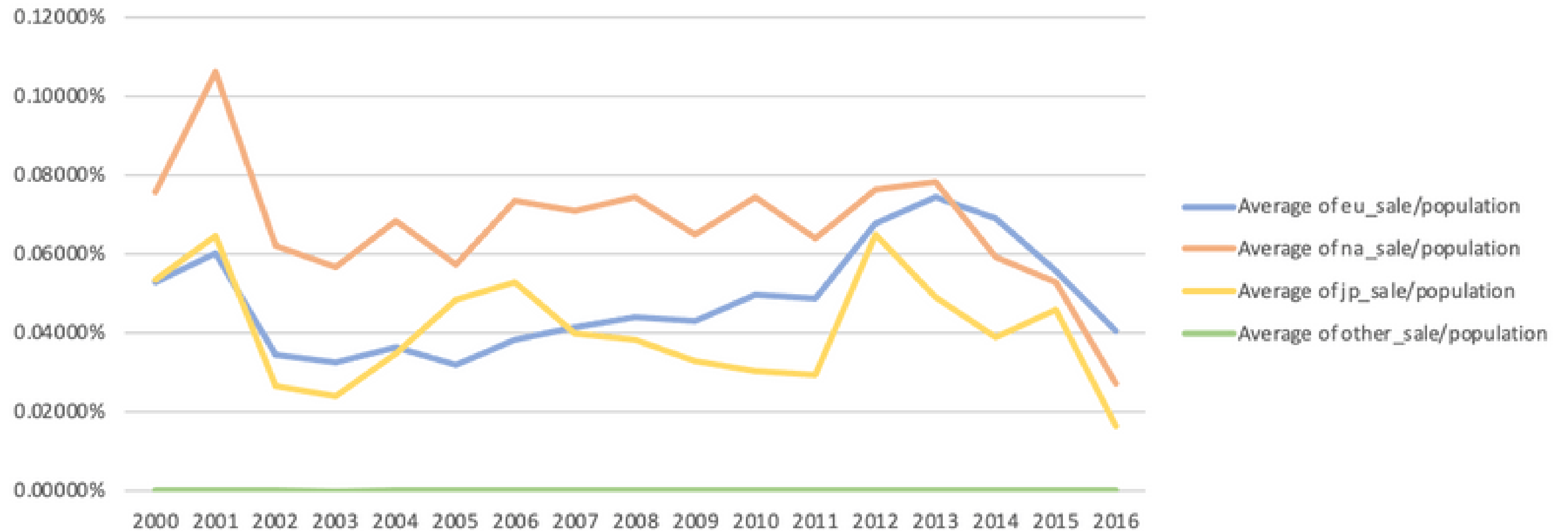|	NA vs EU	NA vs JP	NA vs Other
diff	-0.000198624	0.000583938	-0.000561973
z-score	-4.079760308	4.844023243	-15.88970763
p-value	99.9977%	0.0001%	100.0000%

Result: Japanese market

lowest p-value

Future Market Analysis

WHAT IMPACT DOES THE CHANGING PREFERENCES AND DEMOGRAPHICS OF THE TYPICAL CONSUMER HAVE ON THE FOCUS OF ER GAMES?
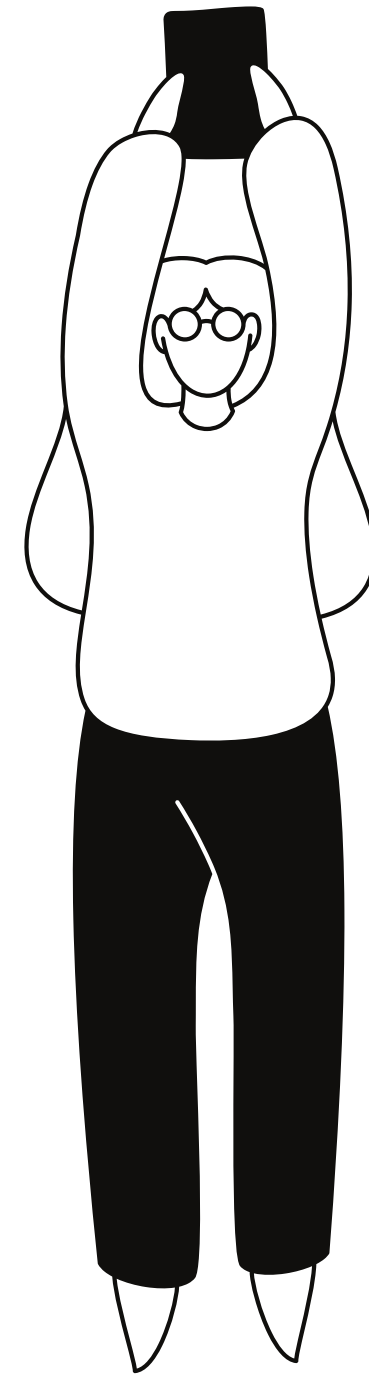
REGIONAL ANALYSIS
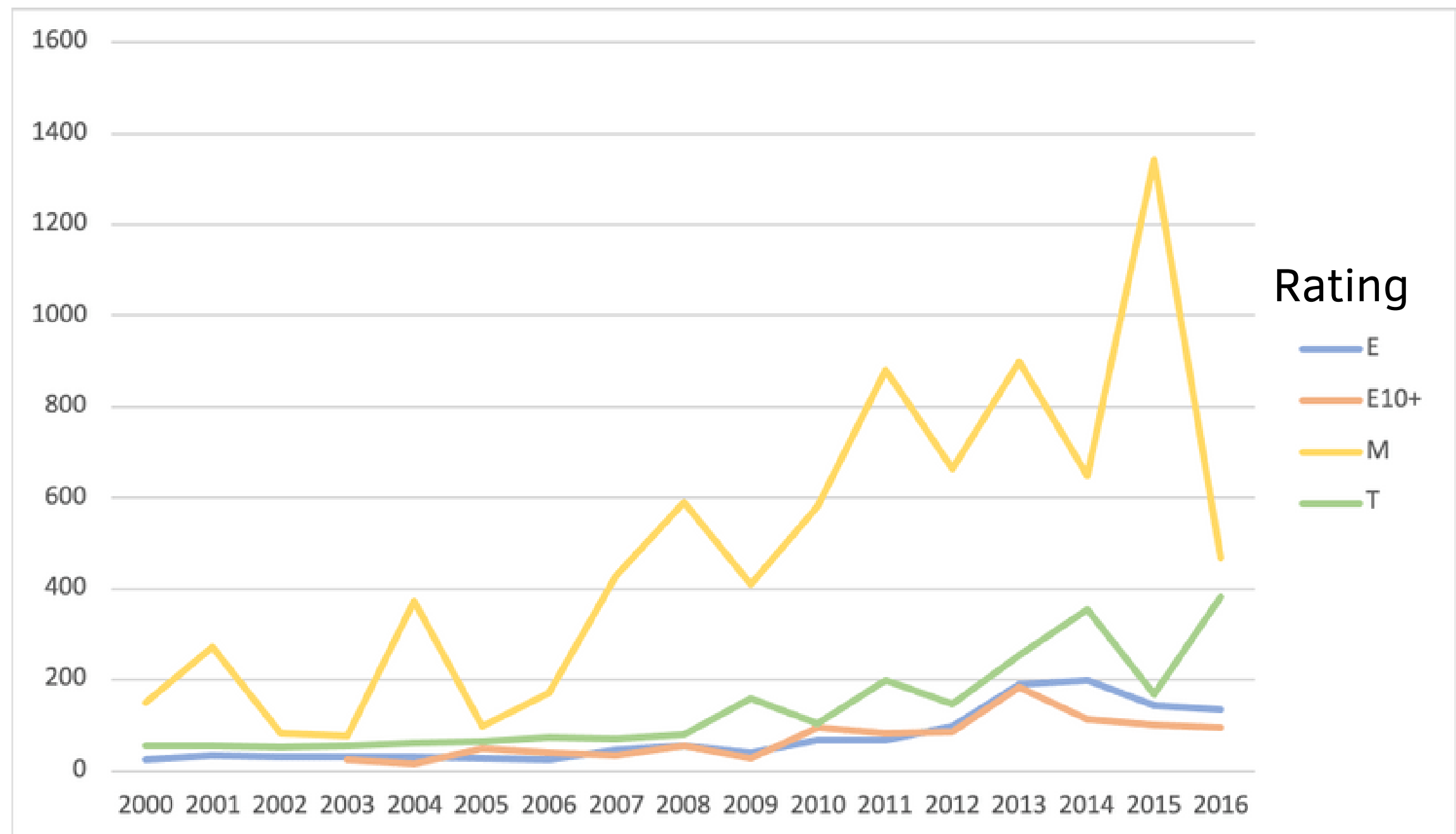
Popularity of Each Region

DEMOGRAPHICS ANALYSIS

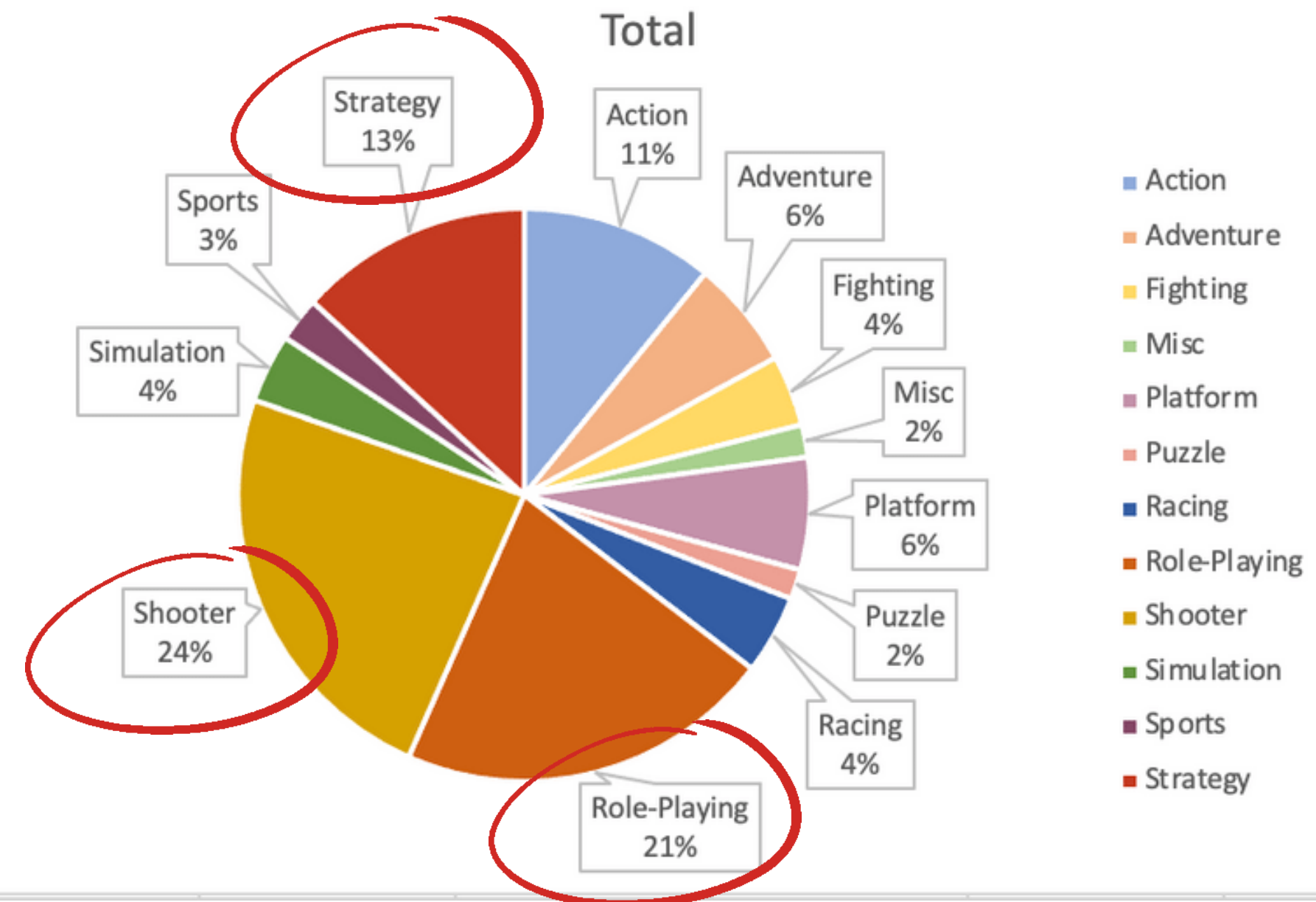Adult only (M) games have the highest user counts but dropped dramatically
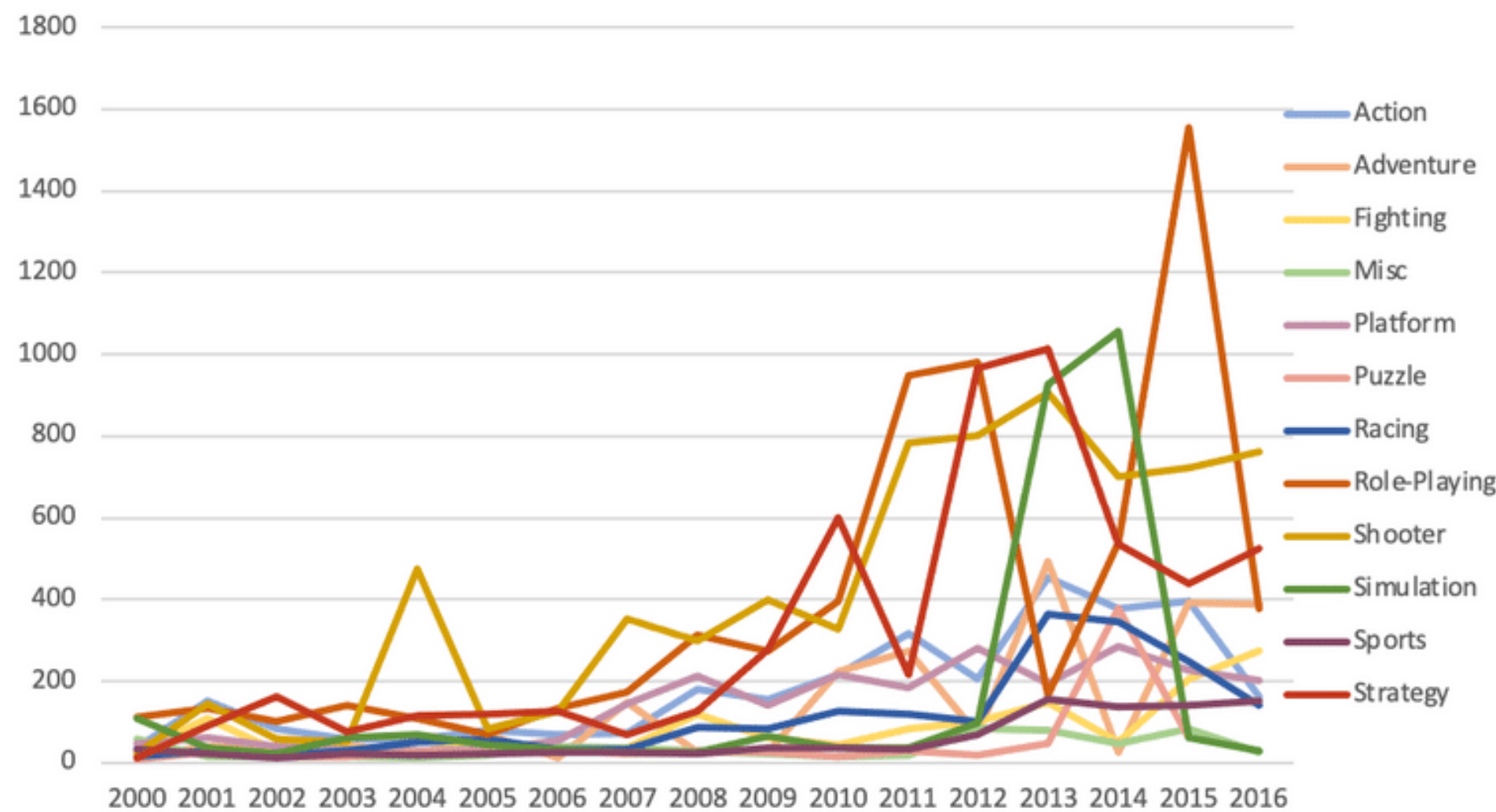
Teenagers & older (T) is increasing (Greatest Potentials)
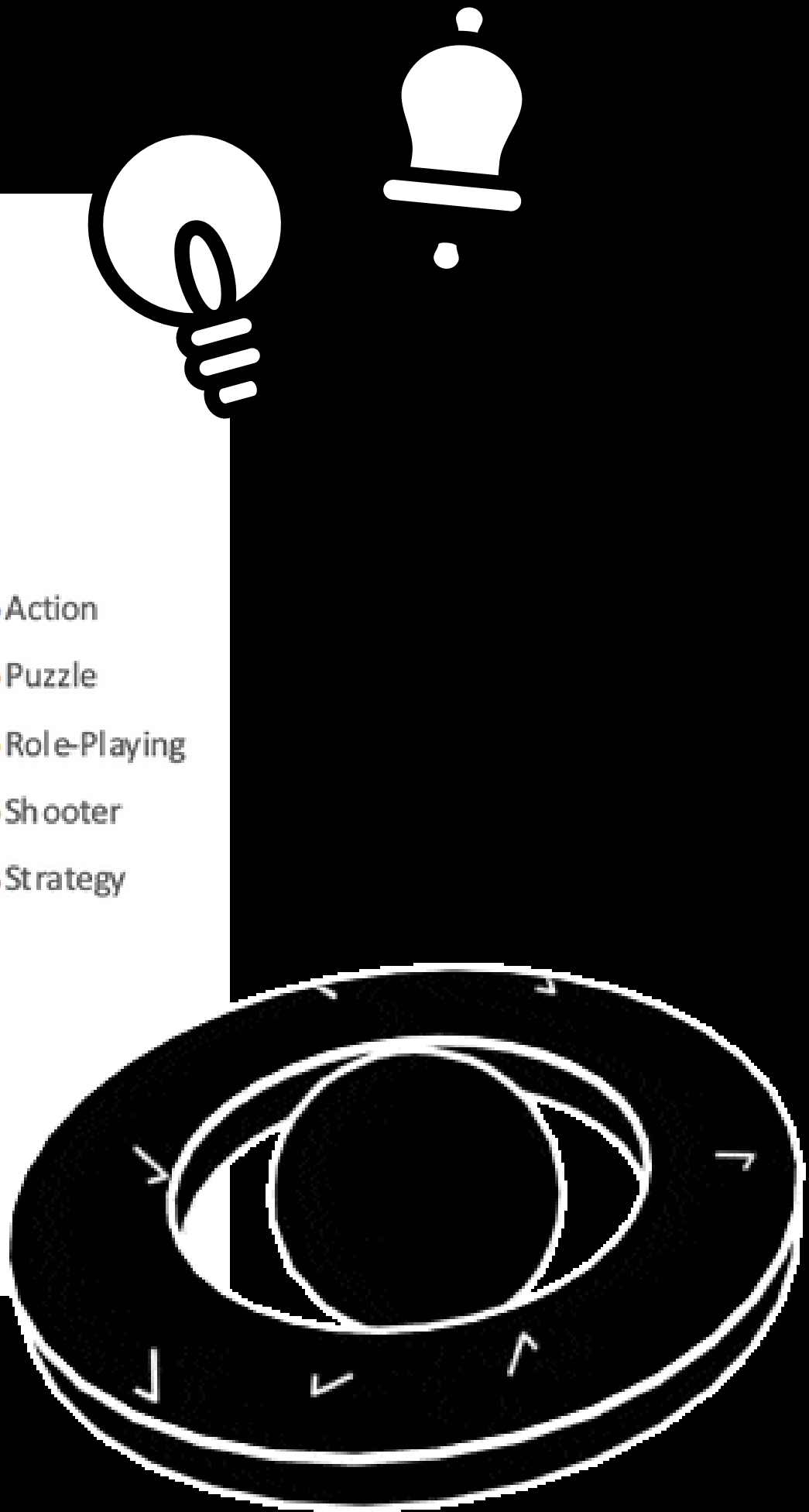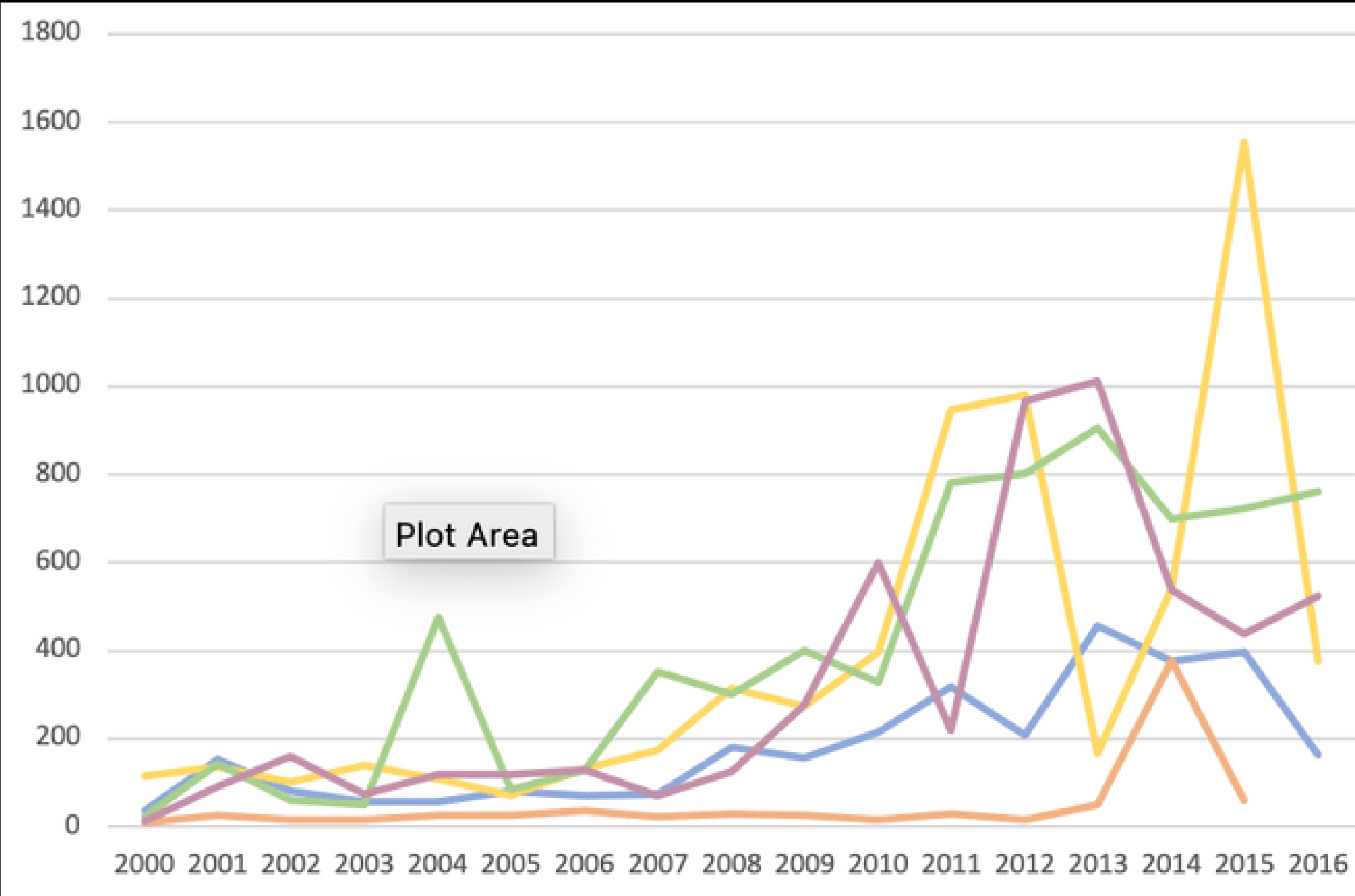
Average User counts

PREFERENCE ANALYSIS

Average User counts to measure
popularity of games

Average User counts

KEY TAKEAWAYS

01

Tracking
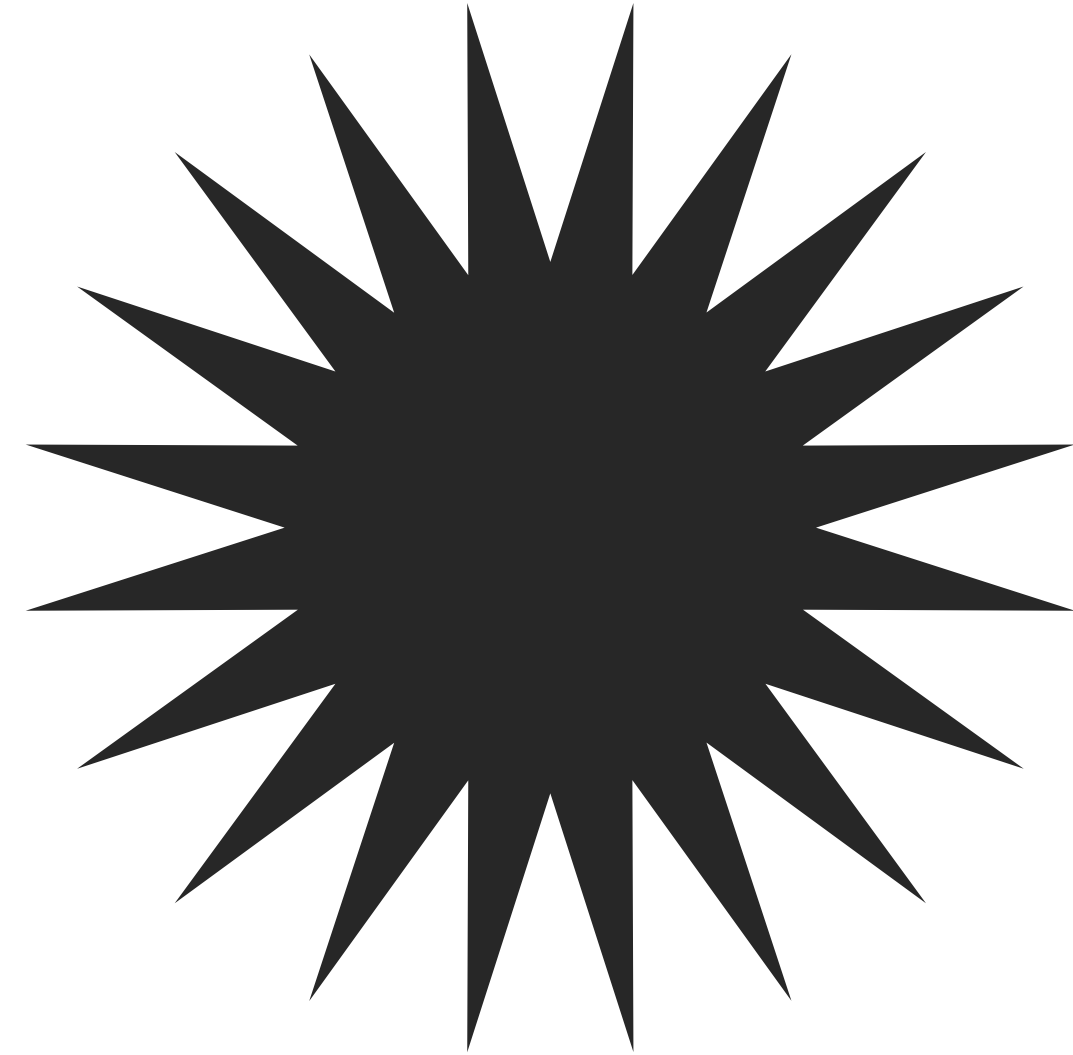Real-time tracking of market trends

02

Adjustment
Timely adjustment of development direction

03

Survey
Fully understand user characteristics

THANKS FOR LISTENSING

MGT153 Group 1

Wenbin Chen, Zeming Zhang
Zihua Ma, Huiyi He, Geon Yoo