Game Genre Sales for the PS4 Gaming Console

MICHELLE A. CALER
10 FEBRUARY 2021

Premise

These slides, created for a mock presentation, are aimed at a hypothetical video game developing company/studio that wants to break into the PlayStation gaming console market. This hypothetical game developer is interested in knowing what genre their video game should fall into in order to ensure profitability. They aim to release their video game in the North American market only.

Outline

- ▶ Broad trends in video game sales from 1980—2020
- ▶ Best-selling video game genres in North America
- ▶ Sales of best-selling video game genres on the PlayStation 4 (PS4) console

Broad Sales Trends 1980—2020*

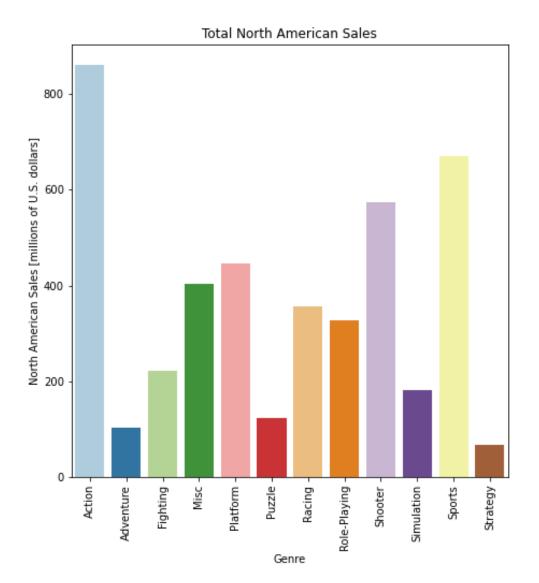
SALES BY GENRE

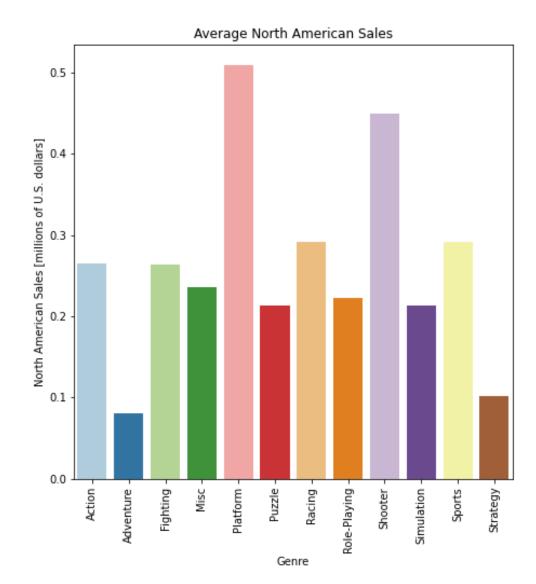
SALES BY PLATFORM

SALES PER YEAR

^{*:} Data from 2017 and 2020 are incomplete; data from 2018 and 2019 are absent.

Total and Average N.A. Sales by Genre (1980—2020*)





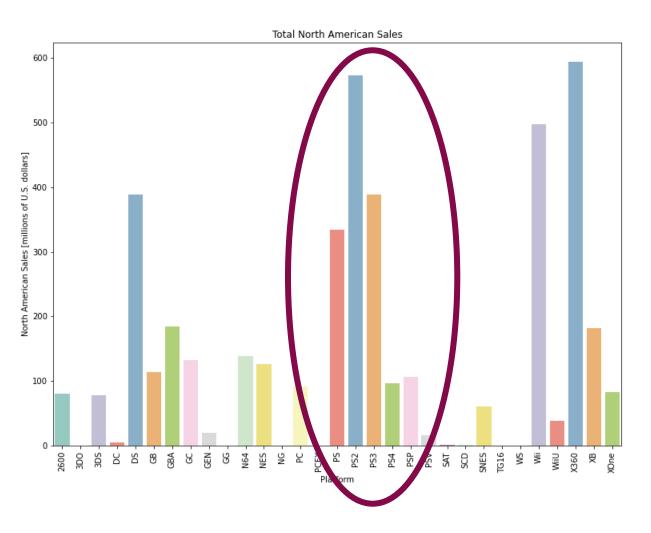
*: Data from 2017 and 2020 are incomplete; data from 2018 and 2019 are absent.

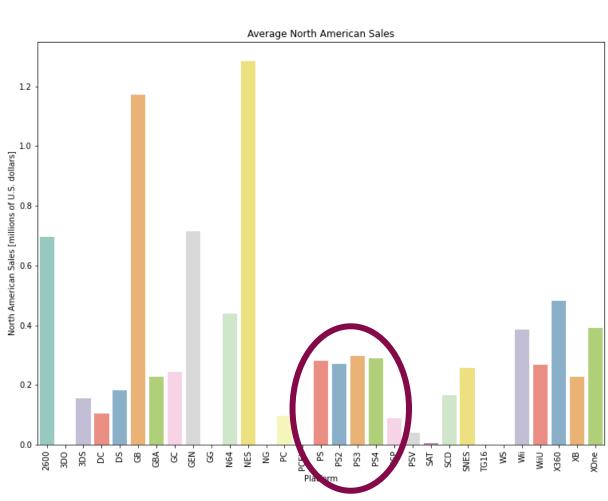
Total and Average N.A. Sales by Genre (1980—2020*)

Takeaways:

- While platformer games do not have the highest total sales, they do have the highest average sales.
- First-person shooter games and sports games have strong total sales and high average sales.
- While action games have the highest total sales, their average sales are at about the middle of the pack.

Total and Average N.A. Sales by Platform (1980—2020*)





^{*:} Data from 2017 and 2020 are incomplete; data from 2018 and 2019 are absent.

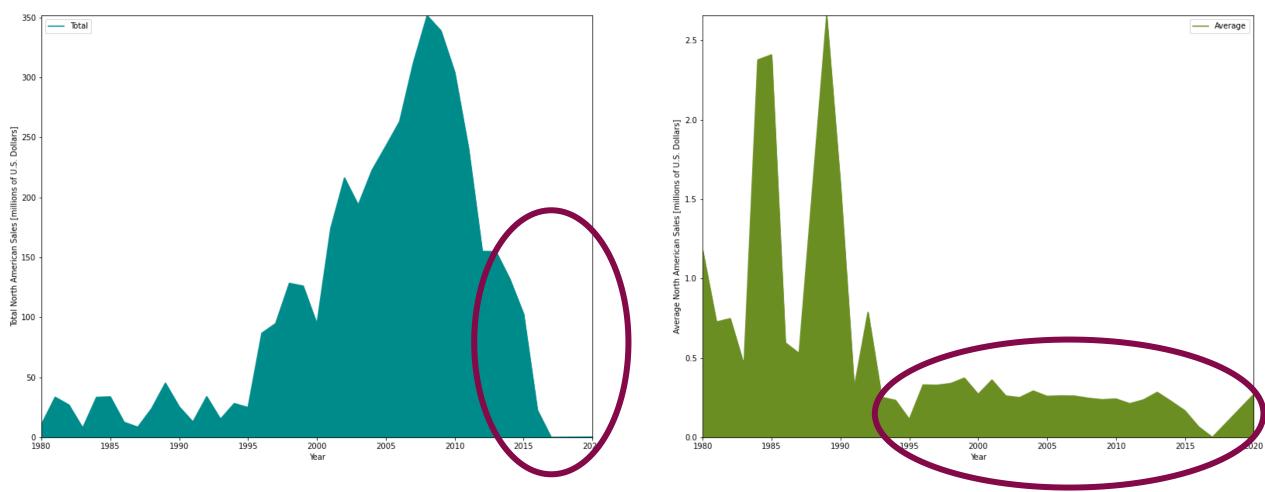
Total and Average N.A. Sales by Platform (1980—2020*)

Takeaways:

- ▶ The longer a game platform's effective "lifetime," the higher its total sales.
- ▶ The earliest gaming consoles netted the highest average sales.
 - Very little competition
 - ▶ Limited game releases
 - Long effective lifetimes
- All major PlayStation consoles netted about the same average sales over the entire time period considered.

Total and Average N.A. Sales by Year (1980—2020*)





^{*:} Data from 2017 and 2020 are incomplete; data from 2018 and 2019 are absent.

Total and Average N.A. Sales by Year (1980—2020*)

Takeaways:

- Average video game sales plummeted around 1995 and have remained relatively low (but steady) since.
 - Increased competition more developers, more platforms
- ▶ While average yearly sales have been roughly steady from 1995 to 2015, total sales grew dramatically from 1995 to 2015, at which point they plummeted sharply.
 - More demand for games as video gaming grew more popular
 - More platforms to own and buy games for
 - 2015 mobile gaming changes the playing field for video gaming

Broad Sales Trends Section Summary

- First-person shooter games and sports games combine strong overall sales with high average sales.
- Average sales of games released on major PlayStation consoles are about 350,000
 U.S. Dollars (USD), roughly steady across all major PlayStation consoles.
- ▶ While total video game sales grew dramatically between 1995 and 2015, average game sales stayed fairly steady at ~400,000 USD.

Best-Selling Video Game Genres

HISTORICAL

MOST RECENT 5 YEARS

MOST RECENT YEAR (2016)

Questions Asked

What were the top 5 best-selling (total sales) video game genres in North America in a particular year?

Over the span of more than 1 year, how many times did a game genre make the top 5 best-selling genres list?

Historical Top 5 Top 5s

Genre	Times in Top 5
Action	34
Sports	31
Shooter	28
Platform	25
Racing	17

These 5 video game genres appeared most often in the list of top 5 best-selling genres per year over the entire time frame spanned by the dataset.

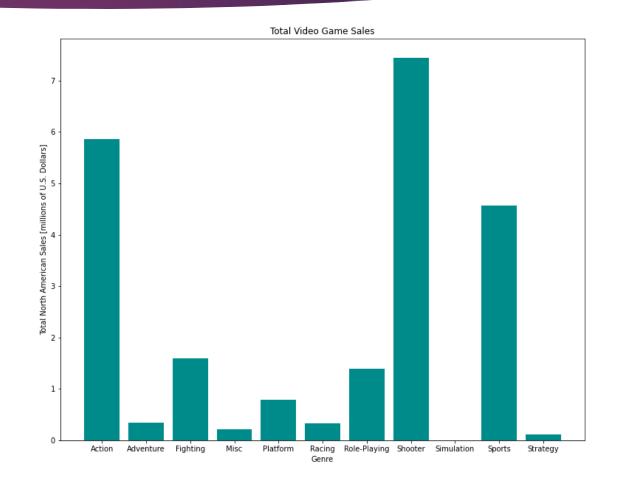
2012—2016 Top 5 Top 5s

Genre	Times in Top 5
Shooter	5
Action	5
Sports	5
Role-Playing	5
Miscellaneous	4

These 5 game genres appeared most often in the list of top 5 best-selling genres per year over time period 2012—2016.

2016* Top 5s





^{*: 2016} is the most recent year for which full data is available.

Section Takeaways

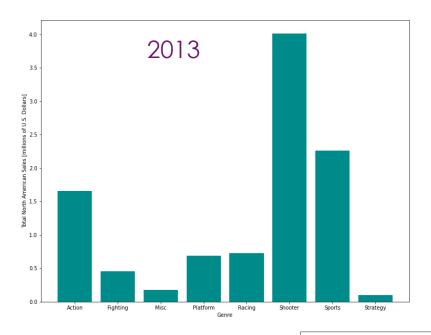
- ▶ In North America, across all gaming platforms, action games, sports games, and first-person shooter games have consistently been the most "popular" game genres as judged by total sales.
- ► Historically, platformer games and racing games have been "popular," but more recently fighting and role-playing games have been "popular" (again judging by total sales).

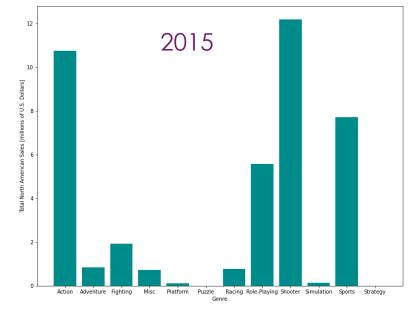
PS4 Sales of Top 5 Best-Selling Video Game Genres

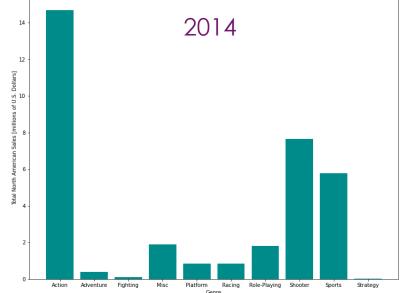
GENRE SALES PER YEAR

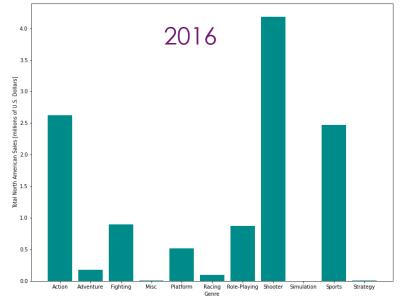
YEARLY SALES OF GENRES

Total PS4 Sales by Genre

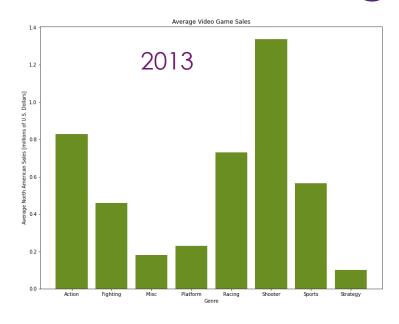


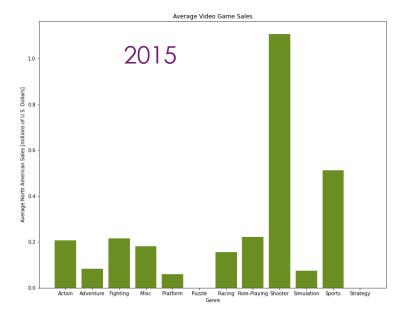


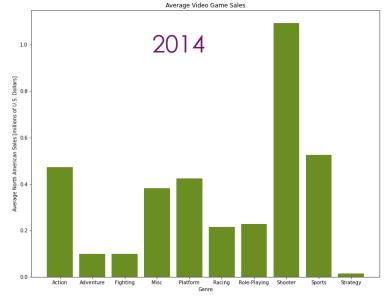


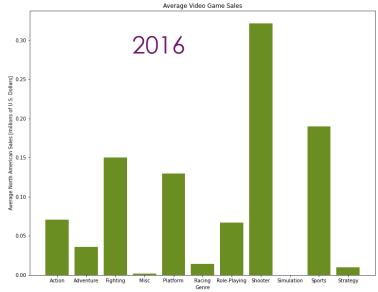


Average PS4 Sales by Genre







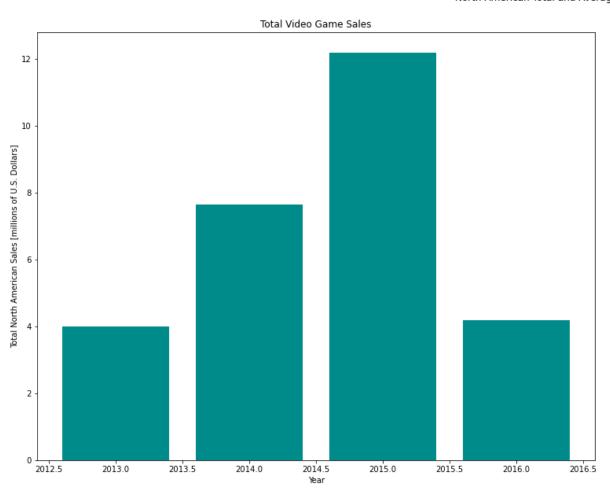


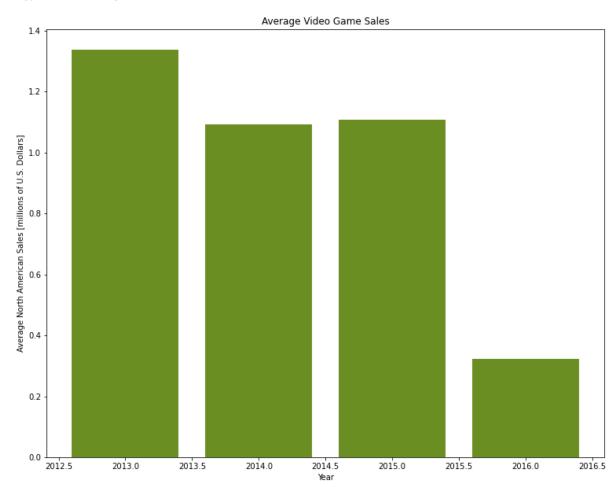
PS4 Game Genre Sales per Year Takeaways

- First-person shooter games had consistently high total sales and average sales; sports games also had fairly high total and average sales.
- ▶ While action games had very big total sales in 2014 and 2015, average sales those years were fairly low.
- ▶ Total sales of role-playing games were very high in 2015, but average sales were not high.
- While total sales of fighting games are not especially high, average sales of fighting games are fairly consistent.

PS4 First-Person Shooter Game Sales (2013—2016)

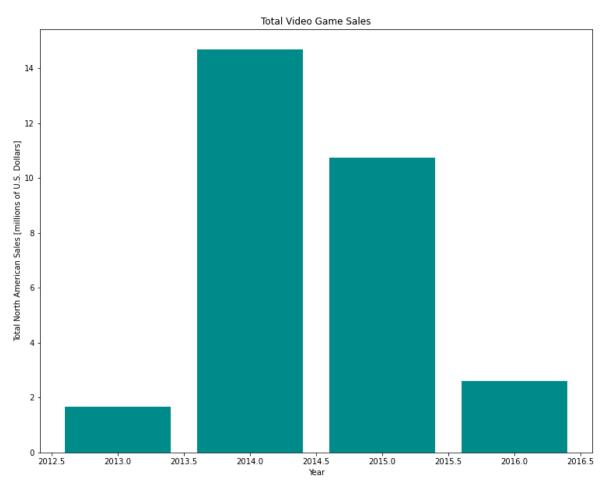
North American Total and Average PS4 Shooter-type Game Sales (By Year)

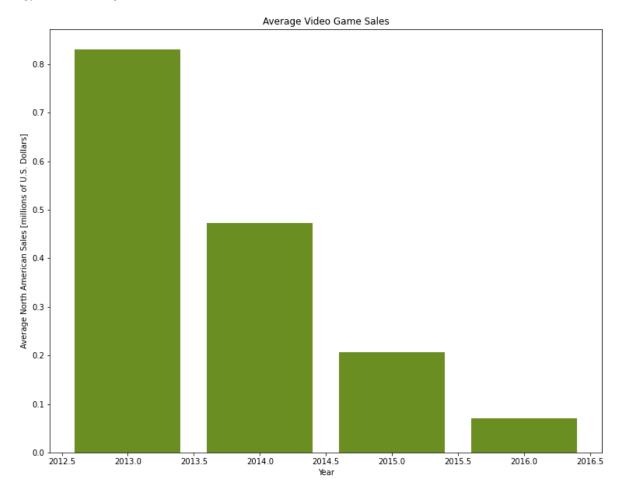




PS4 Action Game Sales (2013—2016)

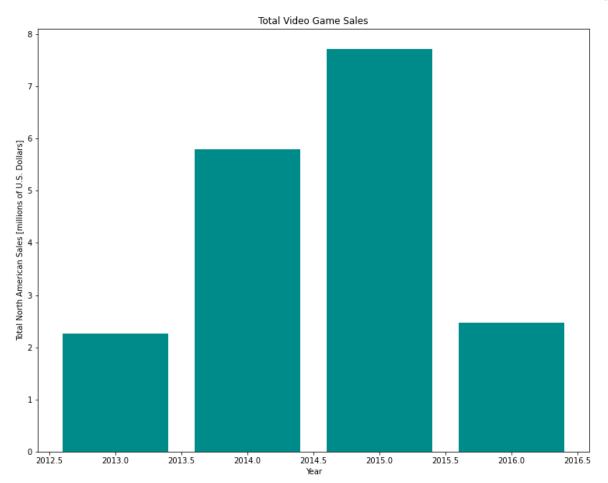


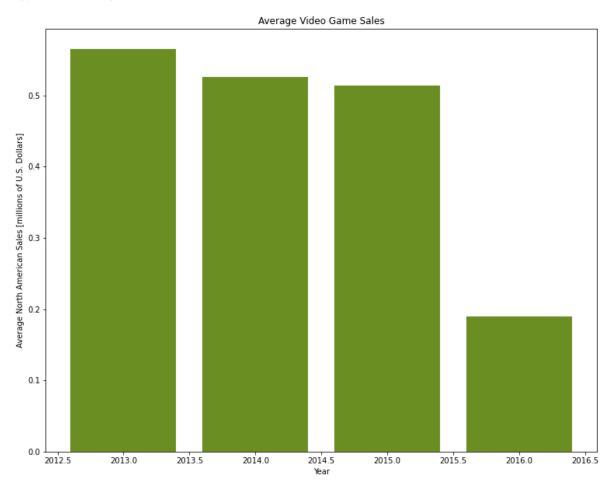




PS4 Sports Game Sales (2013—2016)

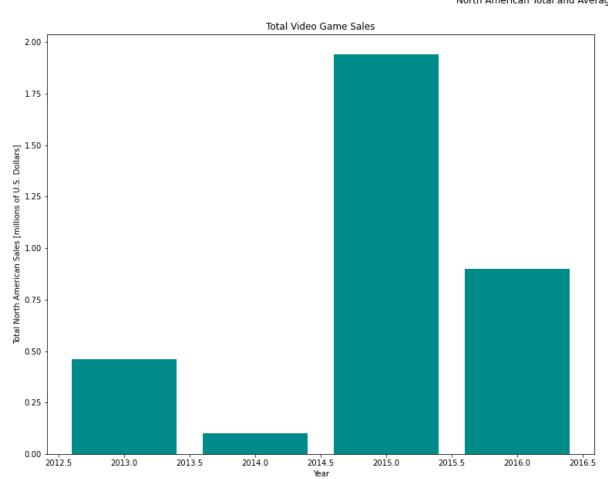


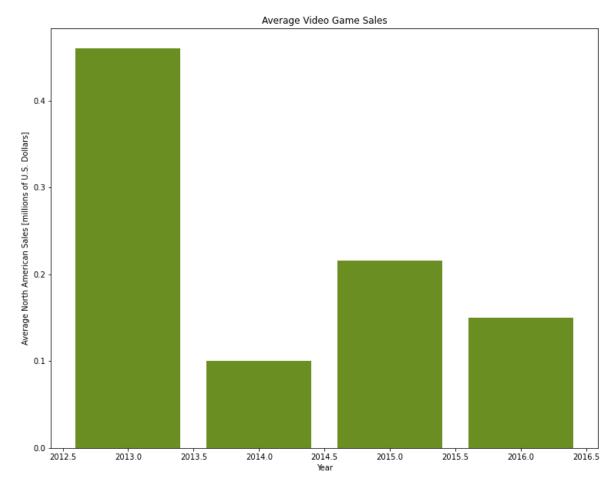




PS4 Fighting Game Sales (2013—2016)

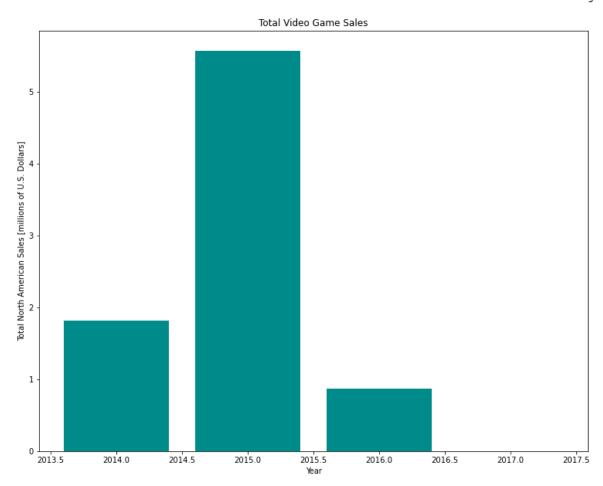
North American Total and Average PS4 Fighting-type Game Sales (By Year)

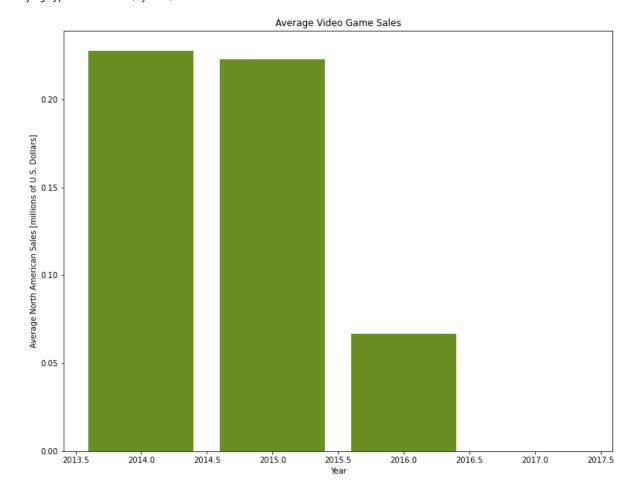




PS4 Role-Playing Game Sales (2013—2016)

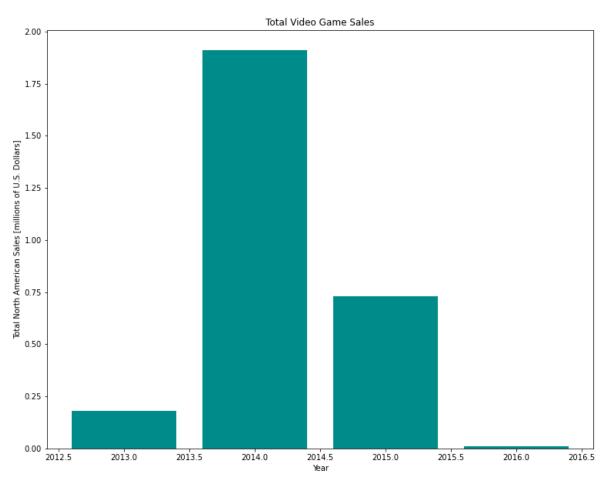


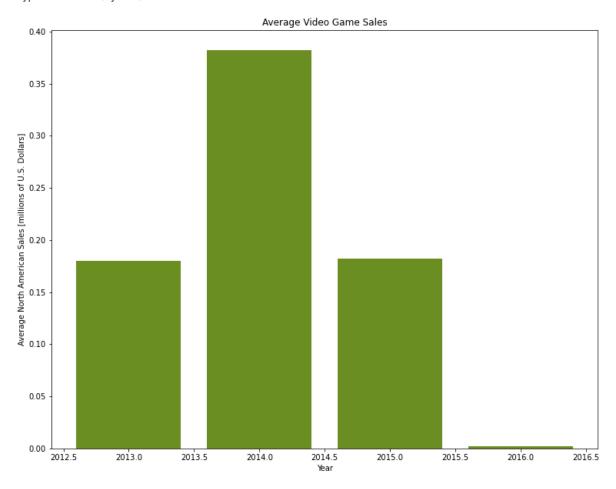




PS4 Miscellaneous Game Sales (2013—2016)







Average PS4 Game Genre Sales (2013—2016)

Genre	Avg. Sales (USD)
Shooter	824,000
Action	243,000
Sports	424,000
Fighting	473,000
Role-Playing	200,000
Miscellaneous	189,000

Average PS4 Game Genre Sales Takeaways

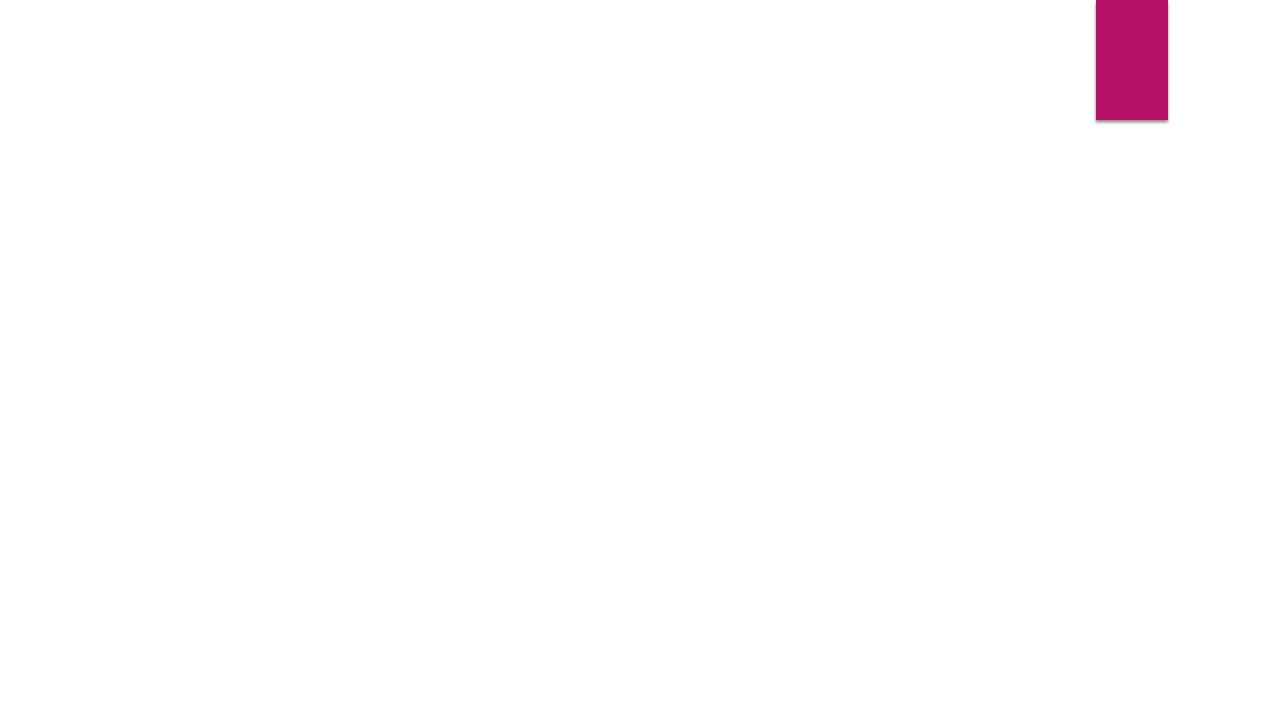
- ▶ Both first-person shooter and sports PS4 games had high overall average sales and fairly consistent average sales over the 4-year period studied.
- ▶ While overall average sales of PS4 action games were high, yearly average sales declined over the 4-year period studied.
- Average sales for PS4 fighting games peaked in 2013 and fell to a smaller but consistent average after that.
- Role-playing and miscellaneous games had similar overall average sales, but showed a fair amount of variability in average sales from year to year.

Overall Conclusions

- First-person shooter games and sports games seem to show the most promise for profitability.
 - ▶ High total sales but also consistent average sales games in these genres do well overall
- Fighting games are worth considering.
 - ► Lower total sales than first-person shooters and/or sports games, but fairly consistent average sales
- Other game genres are significantly more "hit-or-miss."
- The action game genre is not recommended.

Caveats and Cautions

- ▶ The high total sales of sports games are due in part to well-established, licensed franchises
 - ▶ FIFA, NFL Madden, MLB The Show, NBA, etc.
- Given the limited amount of data in the dataset for the PS4 gaming console, averages could be skewed by releases of games in well-established genre franchises
 - ▶ Persona, Final Fantasy, The Elder Scrolls, Dark Souls, Dragon Quest, Street Fighter, etc.
- Mobile gaming has become an increasingly important share of the video gaming market, cutting into sales of gaming console games and PC games



Supplemental Slide: N.A. Total Sales of all Game Genres per Year

Game Genre	1980	1981	1982 198	3 1984	1985	1986	1987	1988	1989	1990	1991	1992 1	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 2	2020
Action	0.320	13.860	6.070 2.67	0.800	1.640	6.520	1.040	1.150	3.830	4.270	3.470	2.210	0.640	0.570	1.730	10.650	14.400	20.150	14.910	17.790	29.810	47.810	37.740	39.080	49.620	38.370	58.900	72.390	71.610	60.320	53.730	52.510	53.790	38.730	22.830	5.870	0.000	
Adventure			0.38	0			2.190				0.850	6.170	0.000	0.060	0.020	0.860	2.360	3.170	3.320	1.010	3.920	4.720	0.960	4.960	5.100	5.160	13.060	13.010	10.140	6.300	5.890	1.780	1.630	1.940	2.760	0.340		
Fighting	0.720				0.000)	2.800				0.000	6.880 2	2.000	2.850	4.390	7.120	6.030	18.430	8.510	9.690	9.190	14.000	13.320	9.940	10.330	12.480	7.330	18.230	17.550	7.460	11.880	4.340	3.180	6.890	3.600	1.600		
Misc	2.530		0.810 0.01	0.000					0.000		0.000	2.300	0.000	1.490	2.310	4.080	3.280	5.530	11.950	7.140	9.960	8.490	10.710	17.150	26.800	26.050	47.900	47.630	41.100	54.970	32.310	10.990	12.530	9.430	4.810	0.220		
Platform		6.470	4.690 2.80	0.000	29.930	1.070	0.900	16.340	12.140	14.140	4.360	8.230 9	9.660	14.880	6.610	13.810	10.810	17.050	13.000	7.870	21.610	26.730	25.310	26.350	15.580	23.320	19.020	17.570	20.270	17.160	13.060	7.320	11.620	3.020	2.500	0.790		
Puzzle		2.090	9.350 0.72	0.690	1.330)		2.970	26.540	3.130	0.860	1.560).620	0.000	0.210	2.180	1.340	2.580	0.810	1.730	5.220	3.410	0.930	3.840	6.560	4.400	10.030	8.180	11.340	6.550	1.680	0.300	0.190	0.620	0.050			
Racing		0.450	1.470	2.300		1.130		1.470		3.100	0.580	3.540	0.000	0.000	2.270	16.940	15.520	14.630	21.150	11.000	29.400	18.490	27.650	22.190	30.750	20.280	18.460	33.500	15.040	14.260	14.610	4.380	4.210	5.860	1.970	0.330		
Role-Playing						0.490	0.470	0.100	0.000	0.080	0.240	0.000).250	0.860	0.710	12.780	5.310	9.160	17.290	7.200	7.460	20.430	13.800	21.550	12.260	24.380	19.800	25.250	19.060	28.550	19.780	17.850	13.090	13.560	13.350	1.390	0.000	
Shooter	6.560	9.370	3.550 0.45	0 27.790	0.650	0.940	0.660	0.470	0.400		1.060	0.020 1	.610	3.710	0.700	3.280	15.000	5.610	7.770	4.000	15.110	28.690	16.120	30.330	27.820	23.040	38.880	34.950	38.990	43.100	49.820	35.060	30.700	30.720	30.790	7.440		
Simulation		0.420			0.000)		0.000		0.460	0.930	1.200	0.000	0.340	1.360	5.420	1.900	2.790	3.410	1.110	10.300	6.010	12.060	5.750	19.270	10.660	27.070	26.970	17.660	11.230	7.490	3.090	2.260	1.220	1.130	0.000	(0.270
Sports	0.460	0.740	0.980 0.73	0 1.700	0.180	2.350	0.400	1.370	2.240	0.280	0.410	1.750	0.040	2.500	2.560	7.780	15.550	24.700	15.090	22.750	28.800	35.170	31.450	38.520	36.060	72.910	47.790	48.920	71.470	48.560	27.450	16.400	19.180	19.820	18.460	4.570		
Strategy											0.000	0.010	0.300	0.890	1.950	1.860	3.250	4.560	8.850	3.200	3.200	2.240	3.540	2.930	2.460	2.070	3.810	4.840	4.620	5.780	3.360	0.940	2.390	0.160	0.570	0.110		

Total sales values are reported in millions of USD.

Total North American Video Game Sales by Genre (By Year)

Supplemental Slide: N.A. Average Sales of all Game Genres per Year

Game Genre	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2020
Action	0.320	0.554	0.337	0.381	0.800	0.820	1.087	0.520	0.575	1.915	1.423	0.694	2.210	0.107	0.143	0.216	0.533	0.465	0.458	0.373	0.404	0.445	0.382	0.262	0.313	0.258	0.209	0.279	0.328	0.263	0.267	0.225	0.197	0.363	0.208	0.090	0.049	0.000	
Adventure		-		0.380		1	-	2.190				0.425	1.543	0.000	0.015	0.002	0.051	0.169	0.138	0.175	0.063	0.187	0.112	0.080	0.127	0.121	0.073	0.155	0.078	0.072	0.041	0.055	0.031	0.027	0.026	0.051	0.010		
Fighting	0.720					0.000		1.400				0.000	0.983	0.182	0.130	0.151	0.237	0.215	0.450	0.355	0.334	0.511	0.259	0.303	0.255	0.240	0.227	0.147	0.320	0.331	0.187	0.238	0.150	0.159	0.300	0.171	0.114		
Misc	0.633	-	0.810	0.010	0.000	-				0.000		0.000	1.150	0.000	0.248	0.105	0.177	0.273	0.251	0.478	0.357	0.383	0.189	0.202	0.202	0.233	0.239	0.317	0.225	0.199	0.273	0.176	0.289	0.298	0.230	0.123	0.012		
Platform		2.157	0.938	0.560	0.000	7.483	0.178	0.450	4.085	4.047	4.713	0.727	1.372	0.878	1.353	0.508	0.986	0.601	0.682	0.722	0.328	0.503	0.347	0.291	0.399	0.188	0.432	0.453	0.283	0.699	0.554	0.353	0.610	0.314	0.302	0.179	0.079		
Puzzle		1.045	3.117	0.720	0.230	0.332	-		2.970	5.308	1.565	0.215	0.312	0.207	0.000	0.017	0.242	0.096	0.198	0.135	0.144	0.348	0.170	0.116	0.154	0.199	0.102	0.152	0.128	0.144	0.146	0.039	0.027	0.063	0.078	0.008			
Racing		0.450	0.735		0.767	-	1.130		1.470		1.550	0.580	1.770	0.000	0.000	0.189	0.770	0.431	0.299	0.432	0.256	0.414	0.180	0.254	0.313	0.399	0.270	0.215	0.409	0.179	0.250	0.225	0.146	0.263	0.217	0.104	0.017		
Role-Playing		-				-	0.490	0.157	0.033	0.000	0.040	0.048	0.000	0.028	0.051	0.030	0.456	0.231	0.352	0.524	0.248	0.182	0.371	0.288	0.359	0.173	0.222	0.192	0.225	0.185	0.277	0.208	0.229	0.184	0.149	0.171	0.035	0.000	
Shooter	3.280	0.937	0.710	0.450	9.263	0.650	0.235	0.330	0.470	0.400		0.353	0.007	0.805	0.337	0.024	0.143	0.556	0.244	0.486	0.200	0.420	0.363	0.221	0.345	0.290	0.334	0.457	0.421	0.428	0.532	0.530	0.730	0.520	0.654	0.906	0.233		
Simulation		0.420				0.000			0.000		0.460	0.465	1.200	0.000	0.049	0.097	0.417	0.100	0.349	0.170	0.074	0.368	0.316	0.345	0.213	0.507	0.184	0.301	0.227	0.144	0.137	0.134	0.172	0.126	0.111	0.075	0.000		0.270
Sports	0.460	0.185	0.490	0.730	0.850	0.180	0.783	0.100	0.685	0.747	0.093	0.059	0.438	0.004	0.114	0.088	0.150	0.338	0.353	0.243	0.281	0.300	0.187	0.252	0.363	0.296	0.528	0.286	0.245	0.388	0.261	0.225	0.304	0.362	0.360	0.298	0.120		
Strategy						-	-					0.000	0.003	0.150	0.148	0.139	0.155	0.155	0.130	0.340	0.200	0.160	0.102	0.096	0.092	0.085	0.049	0.057	0.097	0.071	0.109	0.073	0.063	0.126	0.020	0.034	0.011		

Total sales values are reported in millions of USD.

Average North American Video Game Sales by Genre (By Year)