➢ *Analytical Approach*

Nathan Evans

GameCo Marketing Budget 2017

GameCo's Understanding

GameCo's assumption is that game sales have been steady and do not fluctuate over time across regions.

Utilize data analytics to examine variables and develop insights.

Adapt GameCo's marketing budget strategy to reflect its revised understanding.

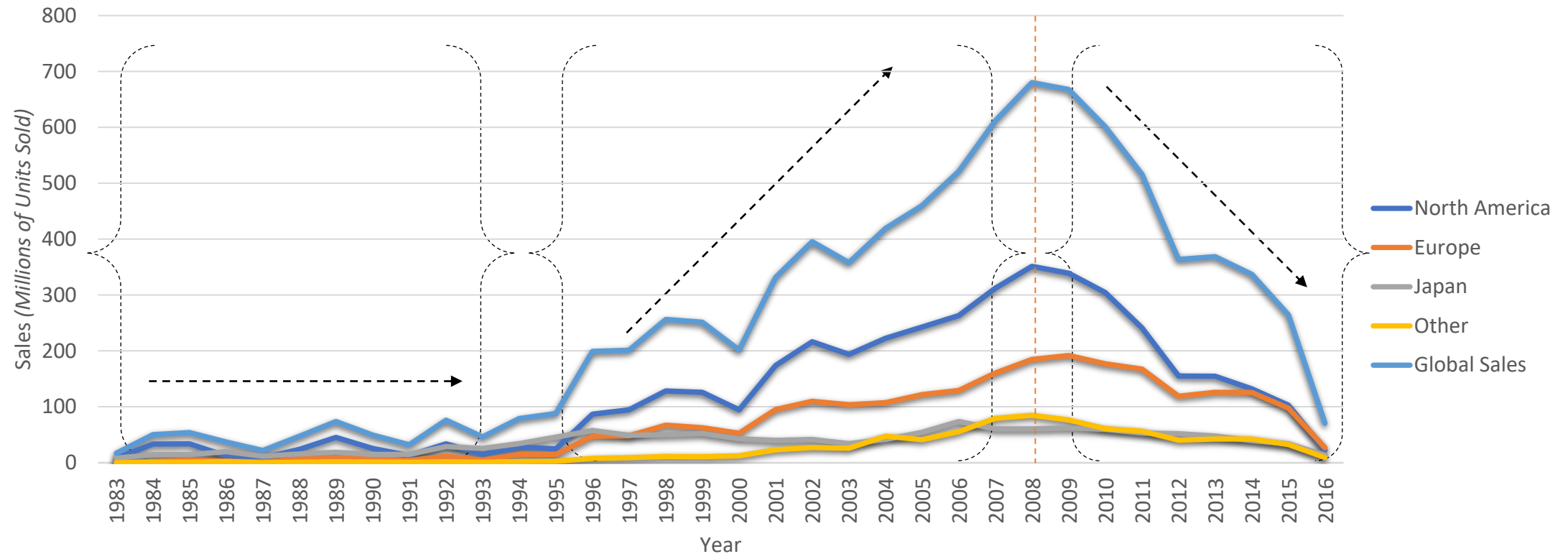Make recommendations focusing on four key variables:

Region *Platform* *Genre* *Publisher*
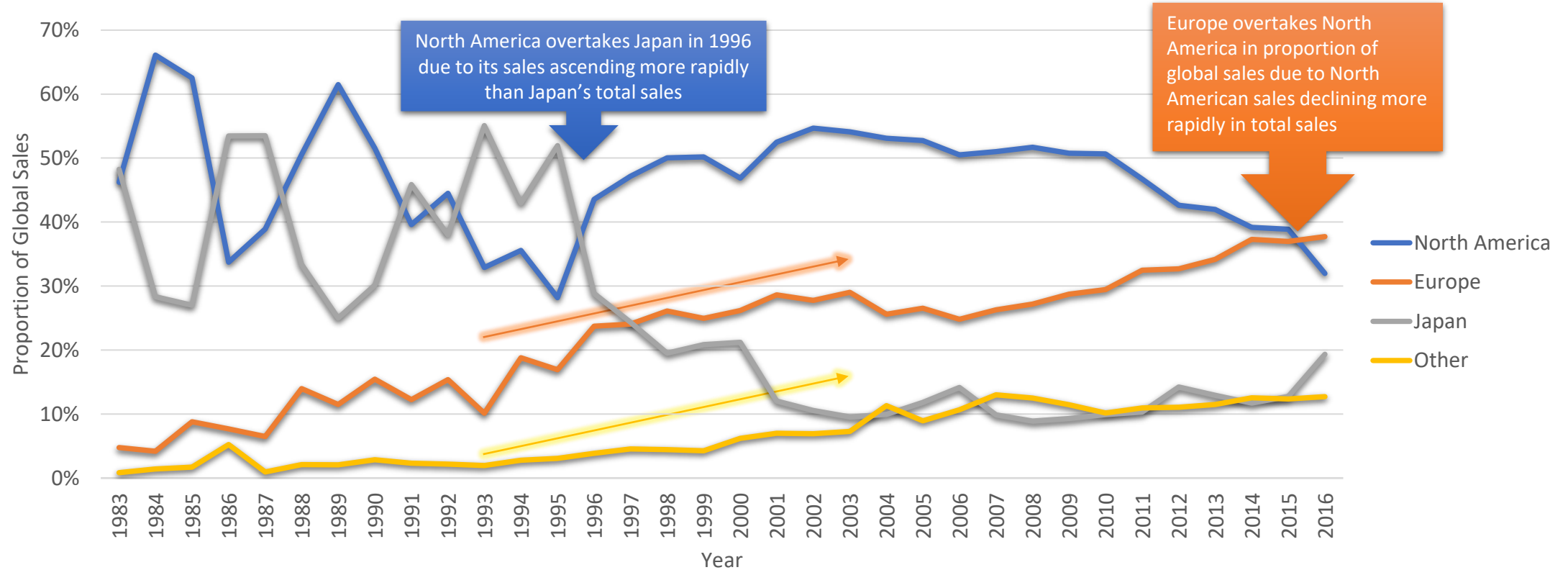
Game Sales Over Time

Figure 1. Sales Over Time by Region (1983-2016)

- ➤ Game sales from 1983 to the early-mid 1990s were steady.
- ➤ Game sales from the mid-1990s to 2008 increased.
- ➤ In 2008, game sales peaked and declined until present time.

Proportional Sales

Figure 2. Proportion of Global Sales by Region Over Time (1983-2016)

North America overtakes Japan in 1996 due to its sales ascending more rapidly than Japan's total sales

Europe overtakes North America in proportion of global sales due to North American sales declining more rapidly in total sales

Legend: North America, Europe, Japan, Other

- North America and Japan traded back and forth struggling for dominance in proportional sales from 1983-1996.
- North America pulled ahead and was the leader in proportional sales until 2015.
- Europe became the leader of all regions in proportional sales in 2015.
- From 1983-2016, both Europe and Other region showed a slow, steady increase of proportional sales.

Upper Bound Outliers

Figure 3. Global Sales Per Game (1983-2016)
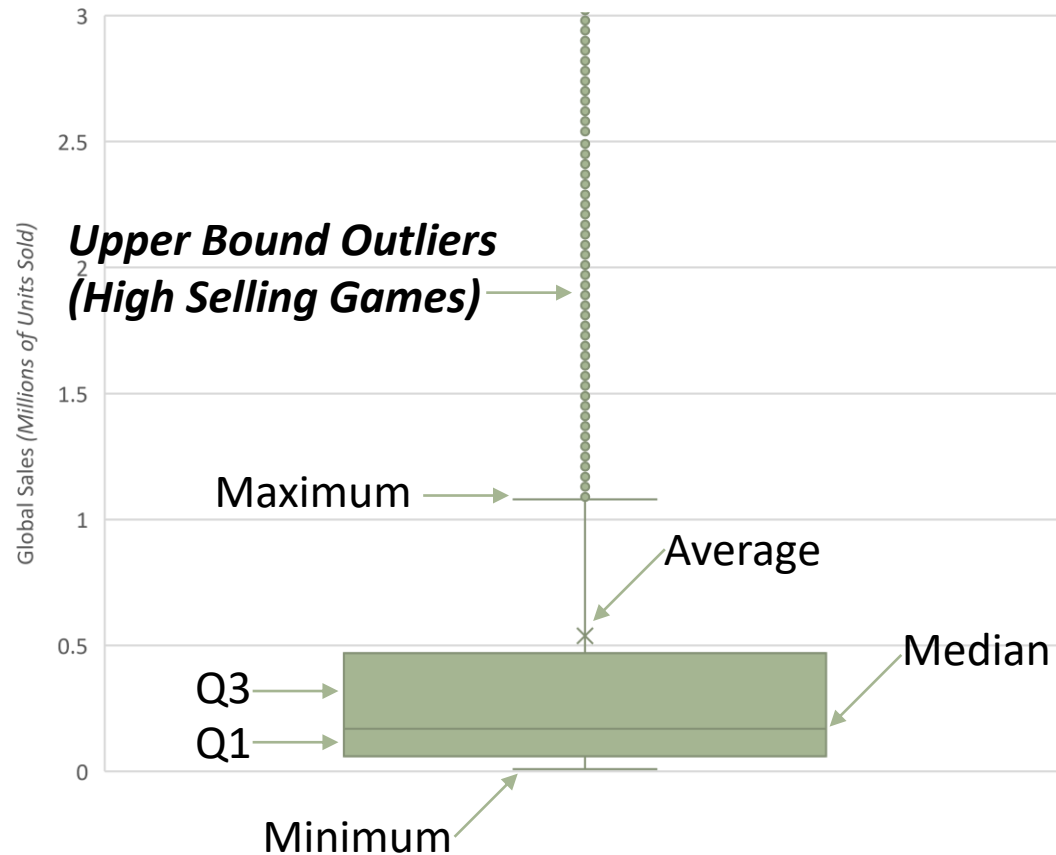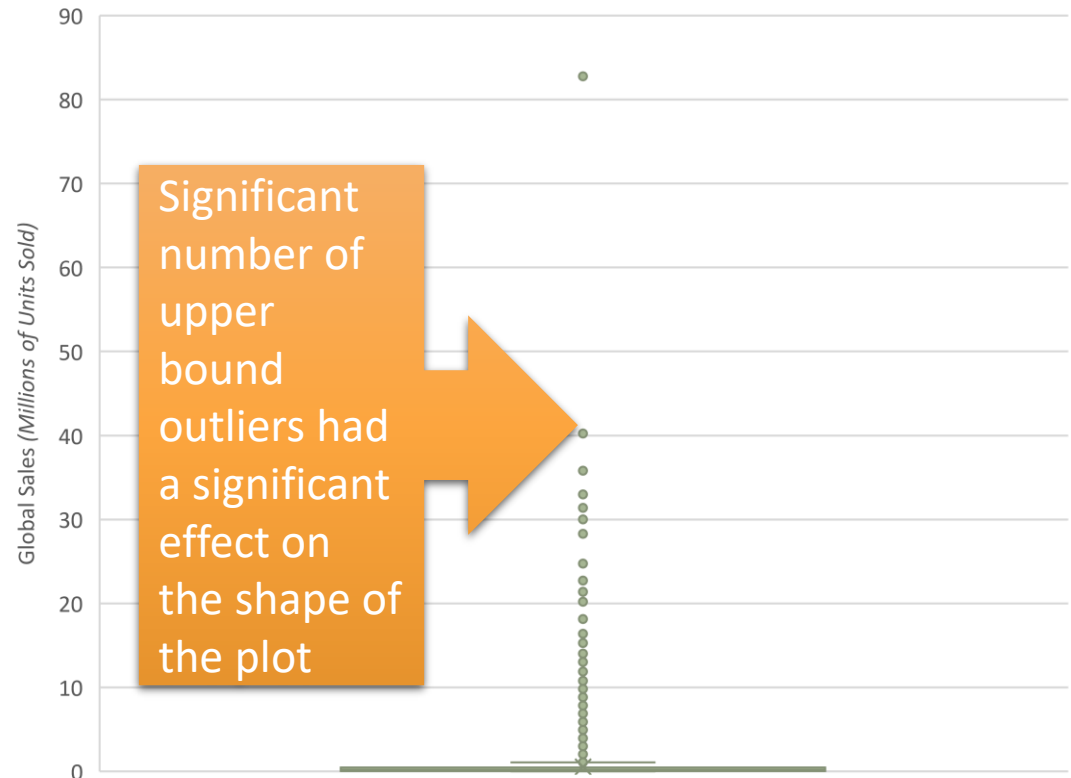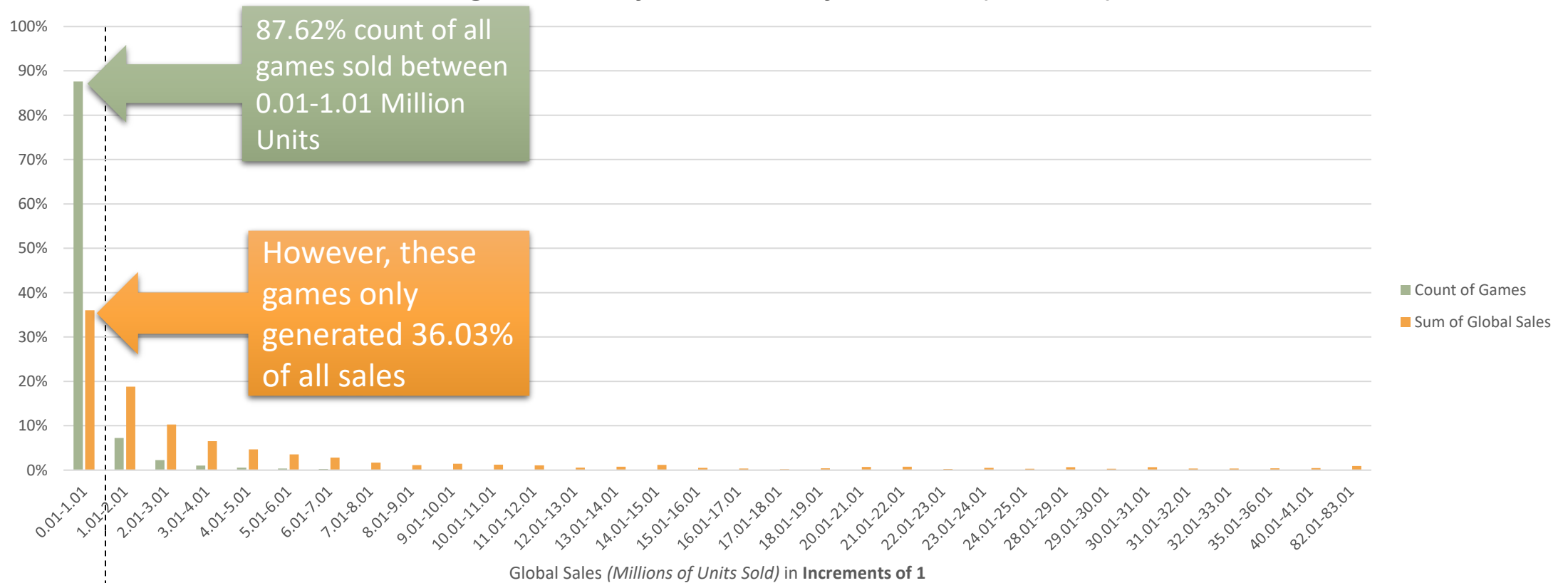[Scaled In to See Details]

Figure 4. Global Sales Per Game (1983-2016)
[Full Scale]

**Upper Bound Outliers
(High Selling Games)**

Maximum

Average

Median

Q3

Q1

Minimum

Global Sales (Millions of Units Sold)

Significant number of upper bound outliers had a significant effect on the shape of the plot

Global Sales (Millions of Units Sold)

➢**GameCo should focus its marketing and advertising budget on the upper bound outliers (high selling games).**
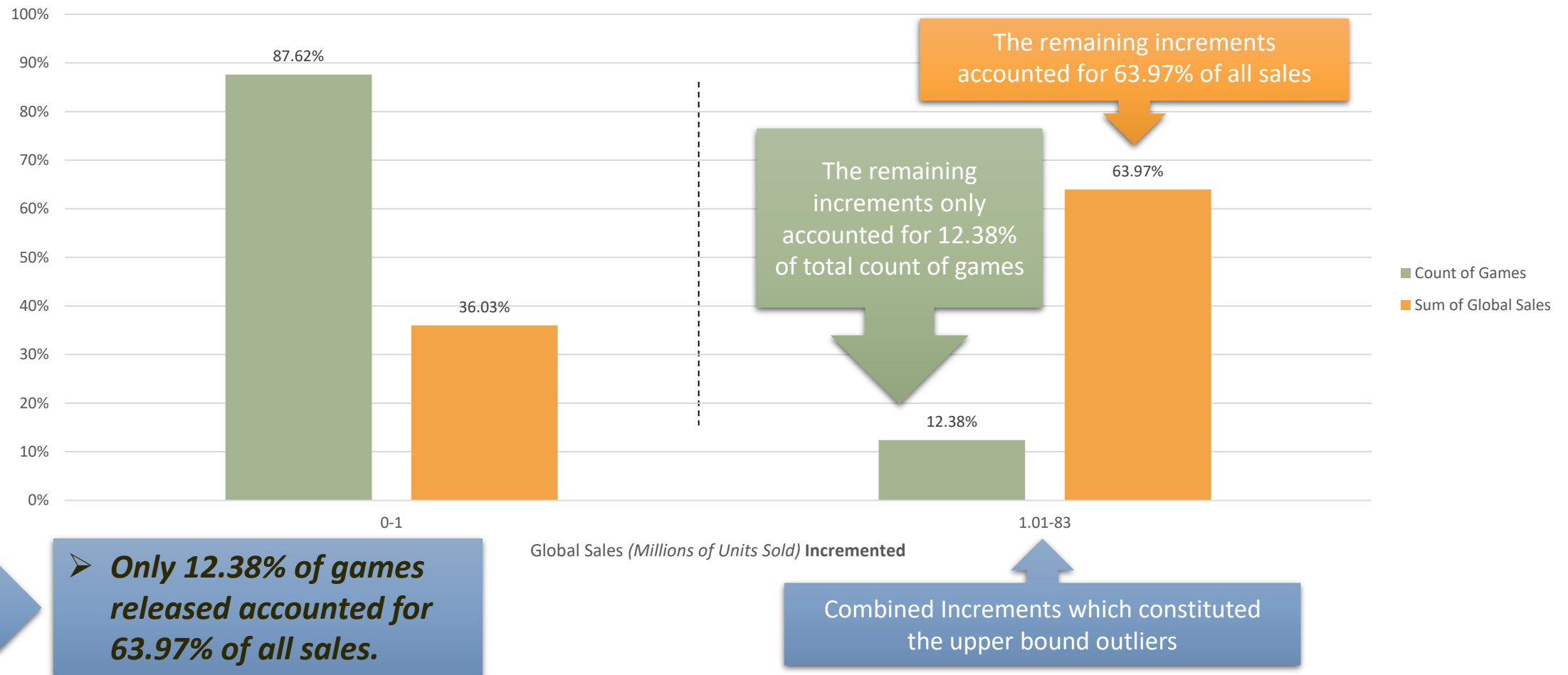
Distribution of Game Sales

Figure 5. Count of Games & Sum of Global Sales (1983-2016)

87.62% count of all games sold between 0.01-1.01 Million Units

However, these games only generated 36.03% of all sales

Count of Games
Sum of Global Sales

Global Sales *(Millions of Units Sold)* in **Increments of 1**

➤ *How do the remaining increments (upper bound outliers) compare?*

Distribution of Game Sales

Figure 6. Count of Games & Sum of Global Sales (1983-2016)

The remaining increments accounted for 63.97% of all sales

The remaining increments only accounted for 12.38% of total count of games

➤ **Only 12.38% of games released accounted for 63.97% of all sales.**

Combined Increments which constituted the upper bound outliers

Global Sales *(Millions of Units Sold)* **Incremented**

Count of Games
Sum of Global Sales

87.62%
36.03%
63.97%
12.38%

0-1
1.01-83

Regional Sales by **Platform**

Figure 7. Platform Sales Per Region (2016)
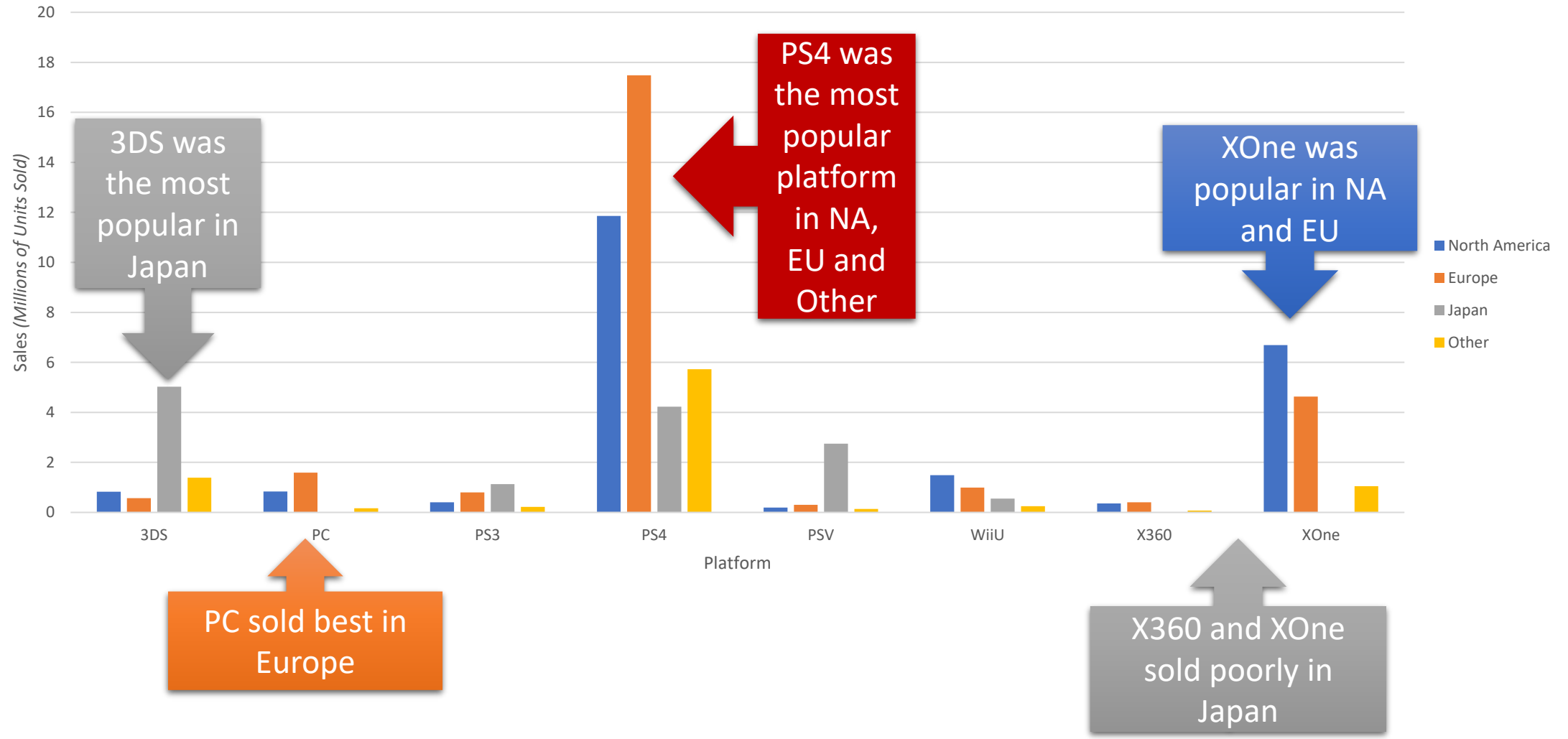
Best Selling **Genres** *(2012-2016)*

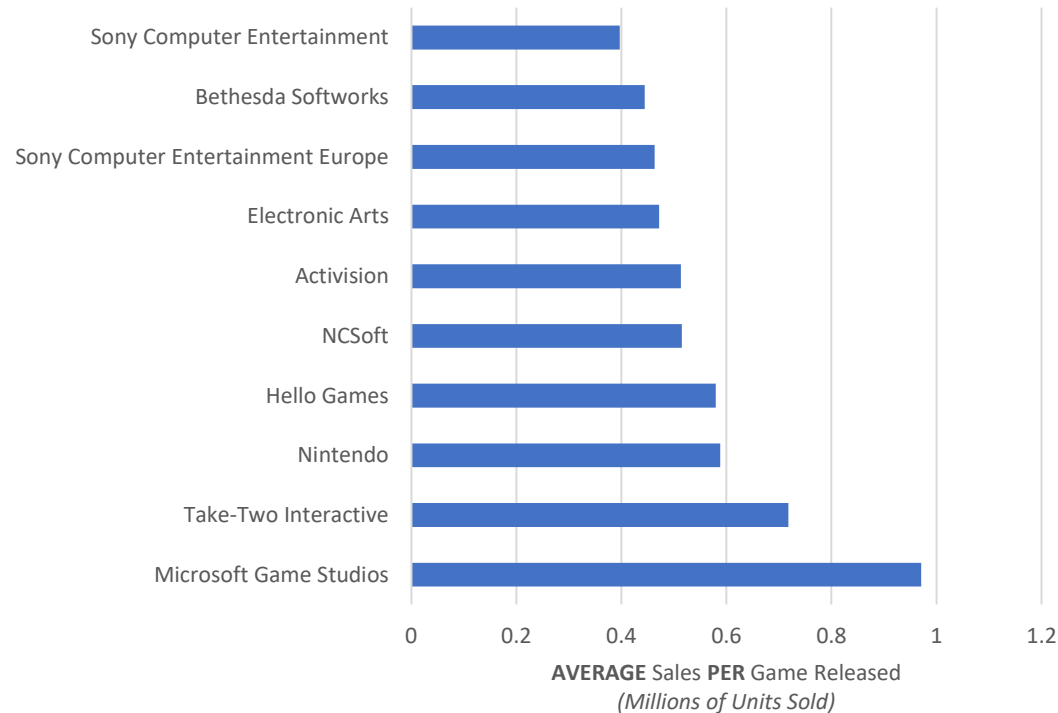Figure 8. North America

Figure 9. Europe

Figure 10. Japan

Figure 11. Other

➢ **Action**, **Shooter** and **Sports** were the 3 most popular *genres* in **North America**, **Europe** and **Other**.

➢ **Role-Playing**, **Action** and **Misc.** were the 3 most popular *genres* in **Japan**.

Best Selling **Publishers** *(2012-2016)*

Figure 12. North America

Sony Computer Entertainment
Bethesda Softworks
Sony Computer Entertainment Europe
Electronic Arts
Activision
NCSoft
Hello Games
Nintendo
Take-Two Interactive
Microsoft Game Studios

AVERAGE Sales **PER** Game Released
(Millions of Units Sold)
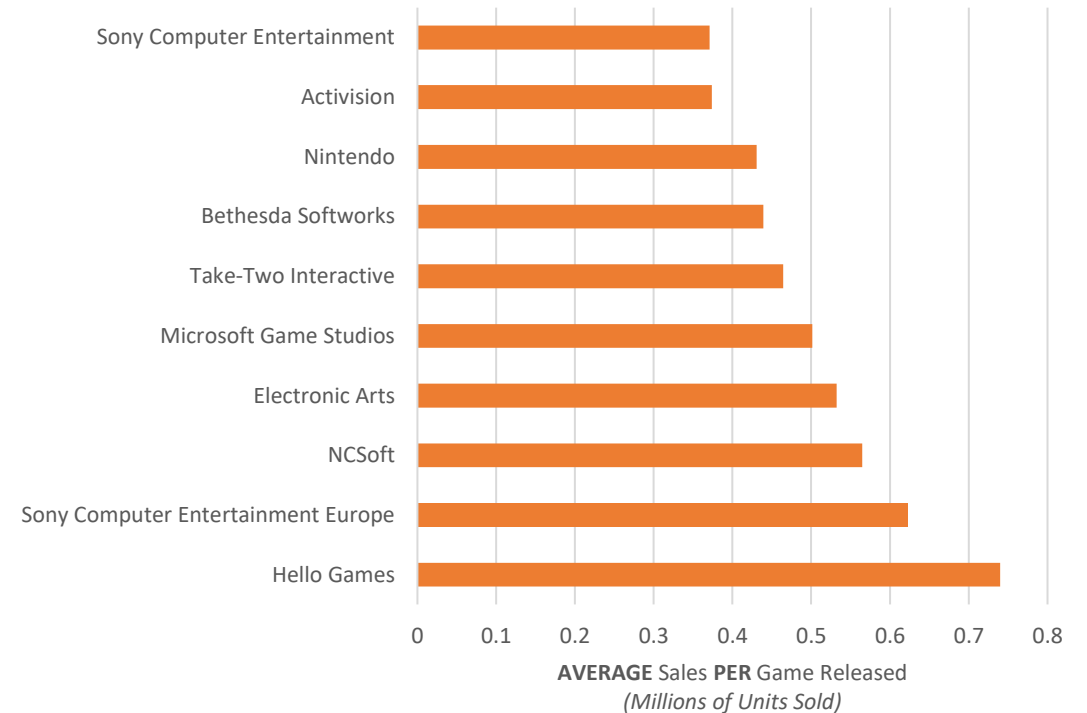
In **North America** from 2012-2016 the top 3 Publishers
based on AVERAGE Sales PER Game were:
- ➤ *Microsoft Game Studios*
- ➤ *Take-Two Interactive*
- ➤ *Nintendo*

Figure 13. Europe

Sony Computer Entertainment
Activision
Nintendo
Bethesda Softworks
Take-Two Interactive
Microsoft Game Studios
Electronic Arts
NCSoft
Sony Computer Entertainment Europe
Hello Games

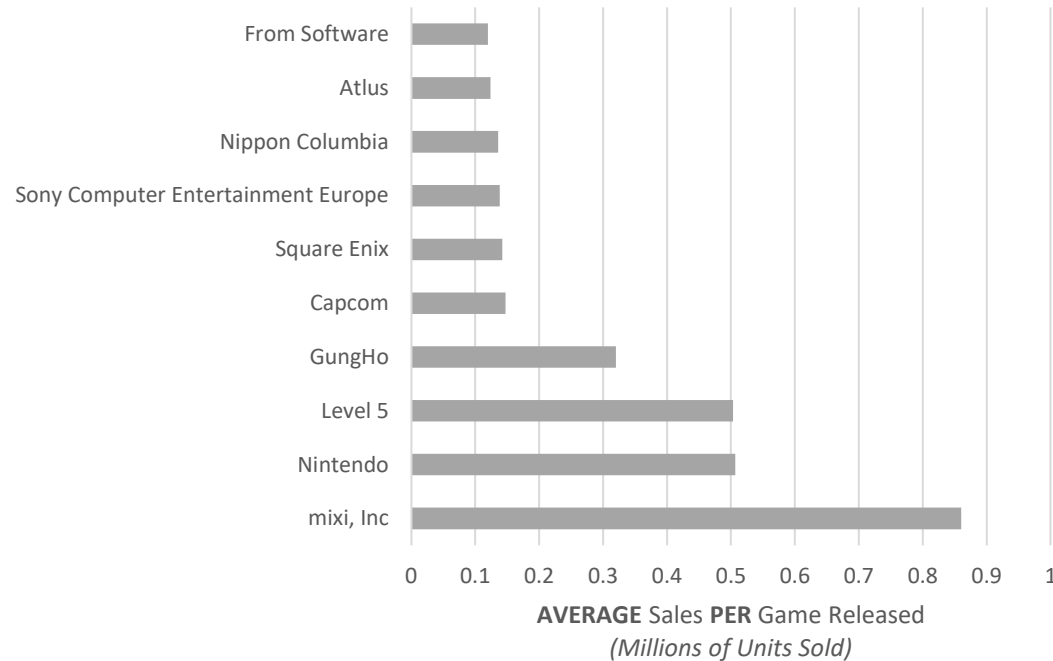**AVERAGE** Sales **PER** Game Released
(Millions of Units Sold)

In **Europe** from 2012-2016 the top 3 Publishers
based on AVERAGE Sales PER Game were:
- ➤ *Hello Games*
- ➤ *Sony Computer Entertainment Europe*
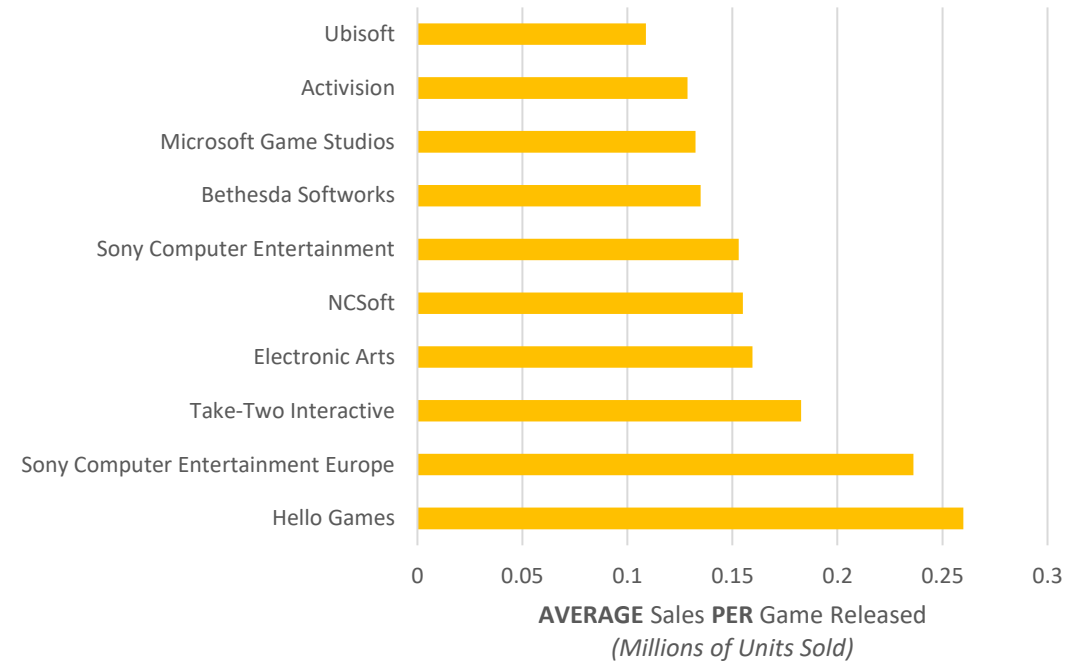- ➤ *NCSoft*

Best Selling Publishers (2012-2016)

Figure 14. Japan

Figure 15. Other

In **Japan** from 2012-2016 the top 3 *Publishers* based on AVERAGE Sales PER Game were:
➤ *mixi, Inc*
➤ *Nintendo*
➤ *Level 5*

In **Other** from 2012-2016 the top 3 *Publishers* based on AVERAGE Sales PER Game were:
➤ *Hello Games*
➤ *Sony Computer Entertainment Europe*
➤ *Take-Two Interactive*

Recommendations

➢ **North America** – focus on the **PS4** and **Xbox One** platforms and **Action, Shooter** and **Sports** genres. Focus on games published by the top 10 publishers for North America.

➢ **Europe** – focus on **PS4** and **Xbox One** platforms and **Action, Shooter** and **Sports** genres. Shift PC platform marketing primarily to Europe as it has the most PC sales. Europe has overtaken North America as the top region in proportional sales; therefore, shift marketing towards this region. Focus on games published by the top 10 publishers for Europe.

➢ **Japan** – focus on **3DS, PS4** and **PSV** platforms and **Role-playing, Action** and **Misc.** genres. **PC and Xbox** is **nearly zero,** reduce marketing for these platforms. Focus on games published by the top 10 publishers for Japan.

➢ **Other Regions** – focus on **PS4, 3DS** and **Xbox One** platforms and **Action, Shooter** and **Sports** genres. Focus on games published by the top 10 publishers for Other. This region's proportional sales have been steadily increasing over time. Consider gathering more data to differentiate these regions as they become a higher proportion of global sales in the future.