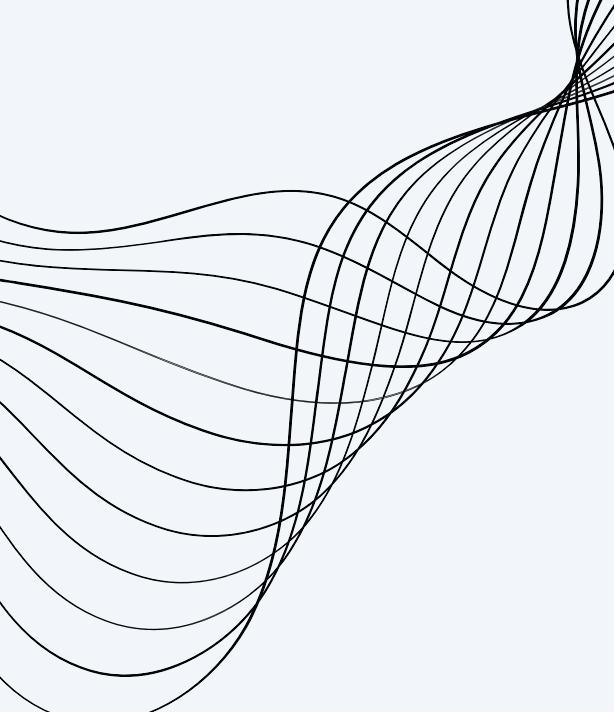


 PS5

PlayStation®5



**Team 4
Sony Interactive
Entertainment
(SIE)**



How do we understand the factors that affect our profitability?

Methodology - with Descriptive Statistics & Predictive Modelling

The analysis was conducted using correlation and regression analysis, a statistical technique that examines the relationship between one or more independent variables and a dependent variable.

Internal Variables:

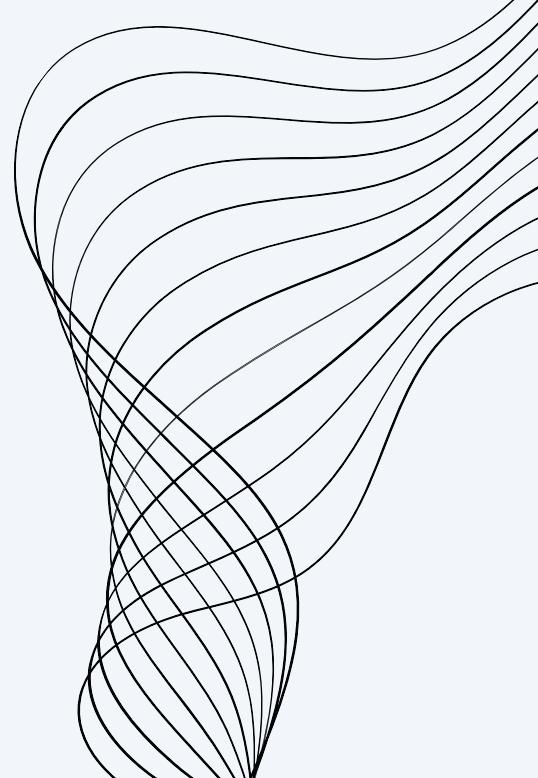
- Total Revenue (Net Sales) of Sony
- Operating Expenses of Sony
- Unit Sales of PS5
- R&D Expenses

External Variables:

- Global Market Revenue -
- Global Revenue Growth of the Market -
- Global Average Revenue Per Capita -
- Unit Sales of PS5 -



Product price can affect profitability surely but we couldn't add price as a variable because PS5 prices are the same as during launch time.



Correlation

Is there a Correlation Between Total Revenue of Sony Game&Network Services Revenue?

After analyzing the correlation between Sony's total revenue and the Game & Network Services industry revenue we found a strong positive correlation between both variables.

Is there a Correlation Between R&D Expense of Sony and Net Sales of Sony?

A strong positive correlation was also found between the R&D expense and the Game & Network Services Net sales of Sony.

	Total Revenue of Sony (\$)	Game & Network Services Revenue (mio \$)
Total Revenue of Sony (\$)	1	
Game & Network Services Revenue (mio \$)	0.746413018	1

	Game & Network Services Revenue (mio \$)	R&D Expense (billion \$)
Game & Network Services Revenue (mio \$)	1	
R&D Expense (billion \$)	0.78956524	1

Regression Analysis for Internal Variables which might affect profitability

Year	Total Sony Revenue (bn \$)	R&D Expense (mio \$)	Operating Expenses of Sony (mio \$)	Unit Sales of PS5 (mio unit)
2017	\$80	\$4,220	\$1,766	9,18
2018	\$80	\$4,430	\$1,999	9,18
2019	\$78	\$4,590	\$1,739	7,8
2020	\$83	\$5,140	\$2,314	11,5
2021	\$90	\$5,510	\$2,393	19,1
2022	\$82	\$5,240	\$3,621	17,9

Discussion

The results suggest that Total Sony Revenue and Operating Expenses of Sony are statistically significant predictors of Sony's profitability. Specifically, an increase in Total Sony Revenue is associated with an increase in profitability, while an increase in Operating Expenses of Sony is associated with a decrease in profitability.

However, the p-values for R&D Expense and the Intercept are not statistically significant, indicating that these variables are not significant predictors of Sony's profitability.

As a result, We can increase profitability by offering more innovative products, R&D costs are not a major factor in reducing our profits.

Regression Statistics	
Adjusted R Square	0,785

The Adjusted R-squared corrects for this by penalizing the addition of unnecessary variables.

	P-value
Intercept	0.08592807
Total Sony Revenue	0.02697767
R&D Expense	0.097549901
Operating Expenses of Sony	0.020553002

A low p-value (typically less than 0.05) indicates that the relationship between the independent and dependent variables is statistically significant.

Regression Analysis for External Variables which might affect profitability

Year	Global Market Revenue (mio \$)	Global Revenue Growth of the Market	Global Average Revenue Per Capita	Unit Sales of PS5 (mio units)
2018	\$1,635	5.40%	2.23	9,18
2019	\$1,686	-7.8%	2.28	9,18
2020	\$2,010	20%	2.69	7,8
2021	\$2,134	5.40%	2.83	11,5
2022	\$2,327	1.60%	3.06	19,1
2023	\$2,371	4.30%	3.09	17,9

Discussion

The results suggest that Global Market Revenue, Global Revenue Growth of the Market, and Global Average Revenue Per Capita are statistically significant predictors of Sony's profitability.

Specifically, an increase in these external factors is associated with an increase in Sony's profitability. The p-values for these variables are all less than 0.05, indicating that the relationships between these variables and Sony's profitability are statistically significant.

Regression Statistics	
Adjusted R Square	0,890

The Adjusted R-squared corrects for this by penalizing the addition of unnecessary variables.

	P-value
Intercept	0.021255247
Total Sony Revenue	0.022073362
R&D Expense	0.049926014
Operating Expenses of Sony	0.02206611

A low p-value (typically less than 0.05) indicates that the relationship between the independent and dependent variables is statistically significant.

Recommendations



**Remain Competitive, Increase
Eco-Friendliness and
efficiency**

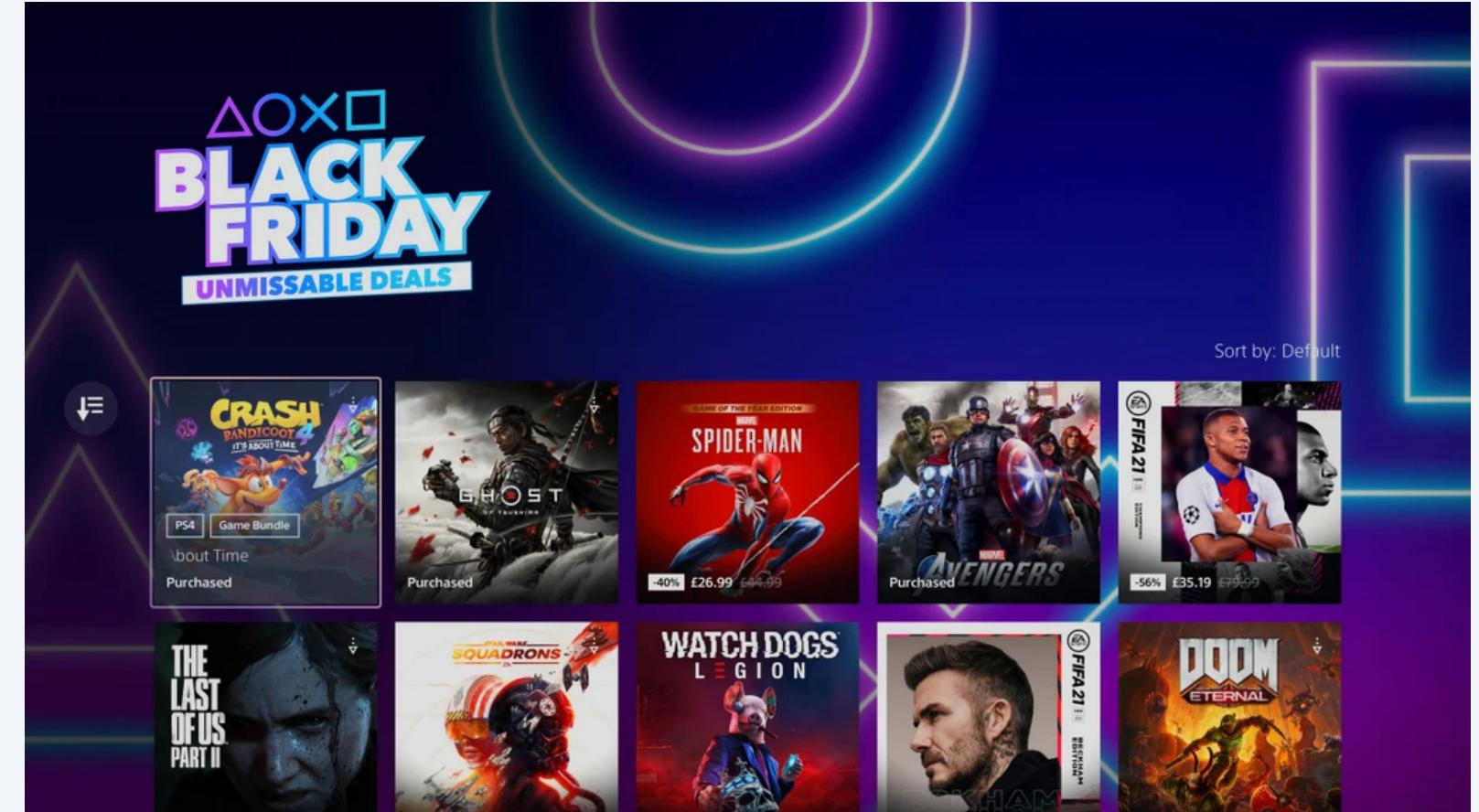


**Promote PS+
Subscription**

Recommendations



1st Party Development to
push sales through compelling
software



Adaptive Sales Strategies to
consumer behavior and market
trends

References

- 1) Sony Announces PS5 Sales Numbers, Says Putting MLB On Xbox Was A Good Move. (2023). GameSpot.
<https://www.gamespot.com/articles/sony-announces-ps5-sales-numbers-says-putting-mlb-on-xbox-was-a-good-move/1100-6494758/>
- 2) D'Angelo, W. (2023, October 1). PS5 vs Xbox Series X|S vs Switch Launch Sales Comparison Through Month 34. VGChartz. <https://www.vgchartz.com/article/458530/ps5-vs-xbox-series-xs-vs-switch-launch-sales-comparison-through-month-34/>
- 3) Shibboleth Authentication Request. (2023)
<https://www-statista-com.hult.idm.oclc.org/statistics/1124784/unit-sales-ps5-worldwide/>
- 4) Shibboleth Authentication Request. (2023)
<https://www-statista-com.hult.idm.oclc.org/statistics/272639/number-of-registered-accounts-of-playstation-network/>
- 5) Statista, and Sony. “PlayStation, Sony.” Statista, Dec. 2023.



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