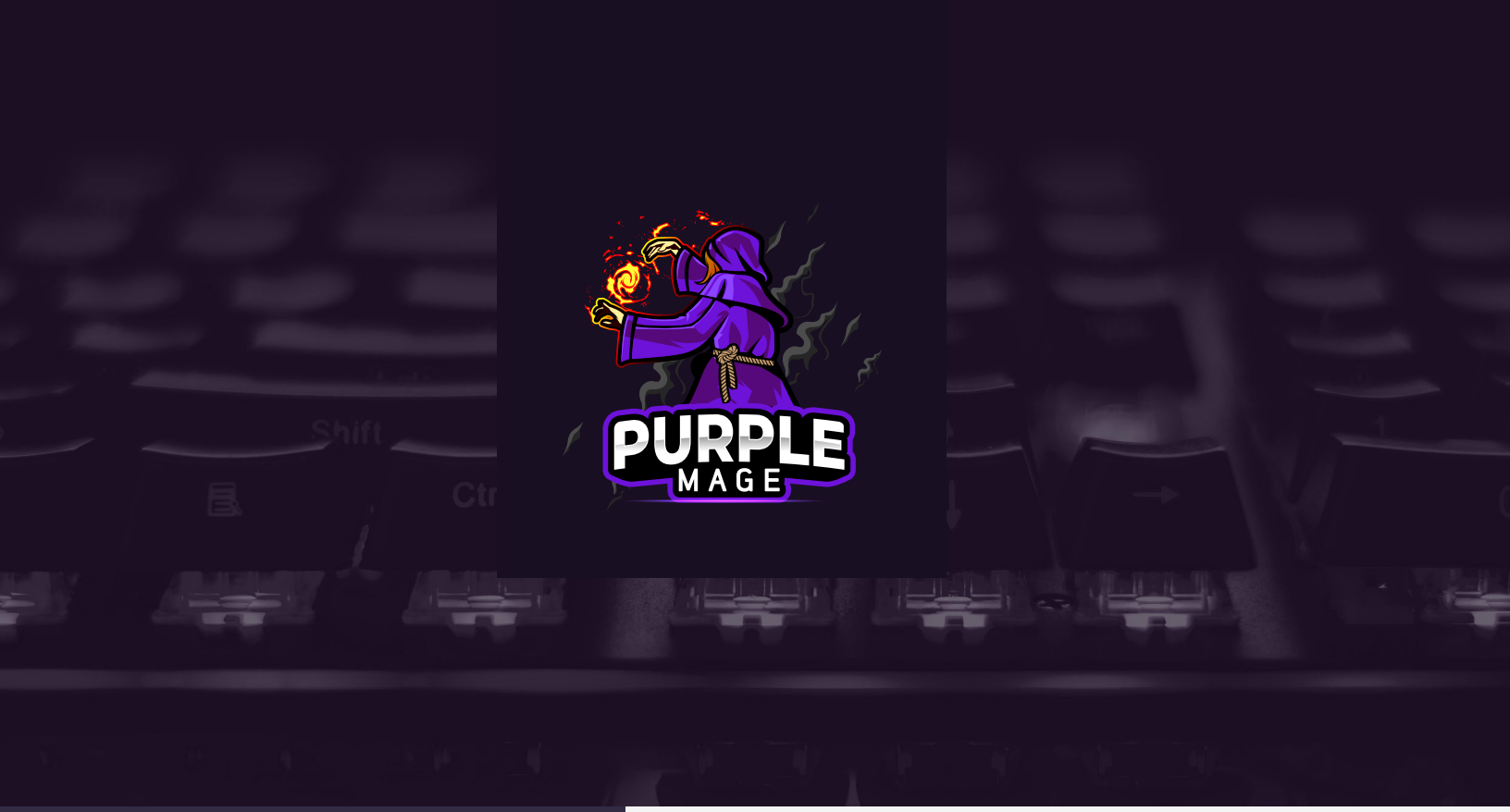
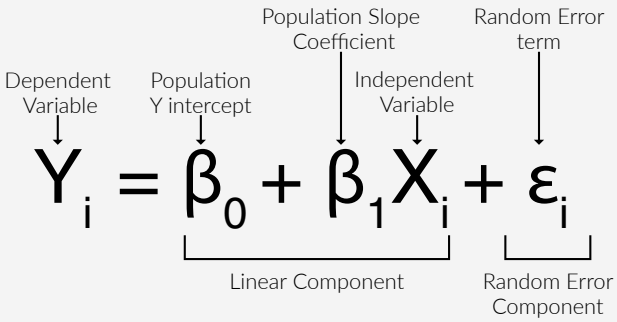


How it Works

Purple Mage uses statistical and regression analysis to sort and analyse data that can help enhance performance of businesses in any industry. Data is run through several equations with complicated formulas to produce a series of relationships between certain variables. The relationship between dependent and independent variables can help predict future growth, streamline operations, and improve recruitment processes. Purple Mage collects or purchases available data and sorts this data so it can be processed using statistical methods; such as, linear regression models, standard deviation, variance, mean and more. The collected data is run through a software to produce a series of findings that are interpreted by our econometrics experts and made into a report. Businesses can use these reports to improve their overall position in the industry, enhance sales, and grow their operations.

Single Regression Analysis Formula



Multiple Regression Analysis Formula

$$Y_i = b_0 + b_1 X_{1i} + b_2 X_{2i} \ldots b_k X_{ki} + \varepsilon_i$$

Where:

Y_i = *i*th observation of the dependent variable Y, i = 1, 2, ..., n
X_j = independent variables, j, = 1, 2, ..., k
X_{ji} = *i*th observation of the *j*th independent variable
b_0 = intercept term
b_j = slope coefficient for each of the independent variables
ε_i = error term for the *i*th observation
n = number of observations
k = number of independent variables

Purple mage collects data from hundreds of esports players and other professional gamers in a survey style questionnaire in which players and paid to complete. Each player who completes the survey is given a 'skill level' out of 100 based on a criteria made by industry experts. The 'skill level' of the professional gamers becomes the dependant variable, the variable we are testing. The survey asks the gamers certain questions, which will become the independent variables; such as, 'how many hours do you play video games a week', 'what size (in inches) monitor do you play on', 'what is your age', 'what system do you prefer to play on' and other questions related to their skill as a professional gamer. The results of the survey are quantified, and the unquantifiable questions are put into categorical variables (1 for Xbox, 2 for PlayStation, 3 for PC etc.).

The survey results are sorted in an excel file and then exported into the regression analysis software. The data is again formatted to maximize accuracy and minimize any user error. Advanced regression calculations are preformed, and results are given in the formula shown above: Y = B0 +BageX1 + BhoursX2... + e). Additionally, the software provides any correlation between independent variables, the standard error of each variable, the R-Squared value, t-score values, p-values and other important statistical measures.

Our financial and econometric analysts interpret the findings and determine if the independent variables have a statistically significant relationship to the tested dependent variable at a 95% confidence level. The independent variables with a tested relationship to our dependent variable can then be used as metrics to recruit players. For example, our regression analysis might determine the gamers with the highest 'skill level' are individuals who spend 50-60 hours a week playing video games, using a PC as a console, that are aged 17-20 and are playing on a 36" monitor. These are not official results and are only given as an example of how we measure relationships between independent and dependent variables.

All the data from our findings are put into a report that is easy to understand and provides clear recommendations based on quantifiable results. Our clients can use the report to improve their overall business, increase operations, and recruit the best talent. This is just one example of how Purple Mage can use regression analysis and other statistical measures to improve performance. This method can be applied to a multitude of different variables to measure a variety of industry benchmarks.