

Factors Affecting Slot Machine Performance in an Electronic Gaming Machine Facility

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Abstract : A facility exploiting only electronic gambling machines (EGMs) opened in 2007 in Quebec City, Canada under the name of Salons de Jeux du Québec (SdjQ). This facility is one of the first worldwide to rely on that business model. This paper models the performance of such EGMs. The interest from a managerial point of view is to identify the variables that can be controlled or influenced so that a comprehensive model can help improve the overall performance of the business. The EGM individual performance model contains eight different variables under study (Game Title, Progressive jackpot, Bonus Round, Minimum Coin-in, Maximum Coin-in, Denomination, Slant Top and Position). Using data from Quebec City’s SdjQ, a linear regression analysis explains 90.80% of the EGM performance. Moreover, results show a behavior slightly different than that of a casino. The addition of GameTitle as a factor to predict the EGM performance is one of the main contributions of this paper. The choice of the game (GameTitle) is very important. Games having better position do not have significantly better performance than games located elsewhere on the gaming floor. Progressive jackpots have a positive and significant effect on the individual performance of EGMs. The impact of BonusRound on the dependent variable is significant but negative. The effect of Denomination is significant but weakly negative. As expected, the Language of an EGMS does not impact its individual performance. This paper highlights some possible improvements by indicating which features are performing well. Recommendations are given to increase the performance of the EGMs performance.

Keywords : EGM, linear regression, model prediction, slot operations

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