





The Pick 10 design team has contracted an independent audit of its playing experience to a consulting group. As part of the audit, the group assesses the player's fairness perception and playing experience versus the viability of odds within the playing numbers and other factors. The preliminary analysis conducted through Power BI (PBI) briefly analyses the win patterns of numbers according to the day and month when the win occurred, which assesses (over the large time period) whether the fairness factor holds across time periods. Data were included for all lotteries but Pick 10 is the focus of the analysis.

The findings are presented in a PBI report with modular filtering and drill-through capabilities available. The data are showcased in a number of simply-defined visuals, some with multiple axes to display the relationship between fields. Small multiples and groupings are employed to showcase field performance over multiple categories. Given the timeline of the analysis, the full capability of the data model isn't exploited, but enough is present to guide initial conversations with the Pick 10 design team while the auditing group continues its analytical work. Ethically, the consulting group owes a product to the consumer before the termination of the contract, since the quality of work delivered depends upon interactivity with the domain experts and constant feedback on processes.

The analysis concludes (in brief) that there are some disparities over time for the Pick 10 group: namely that more draws occur in the later part of the year, leading to more lottery winners. Furthermore, the first half of the week sees more players and draws than the latter half, leading to a different playing experience for participants. Lastly, the number of wins differs across years, which presents a confusing trend for the player and Pick 10 host that should be further analyzed.

The audit group concludes that while the Pick 10 experience has some volatility, it's performance and stability exceed the same from the Mega Millions and PowerBall lotteries. While the Pick 10 appears to have the "most fair" playing experience, further investigation into player behavior is required, and the representation of the odds in publications should be compared to the historical reality of odds to ensure legal compliance and protection against potential lawsuits.