**Most Relevant New Metrics and How to Use Them**

**Excitement Index and Excitement Average**: The primary use for these metrics is in determining how exciting a match is, either in real time or after the fact, for fan engagement purposes, including being the underlying metric that drives our email service. However, that is not the only use case for our match excitement metrics. What these metrics, especially Excitement Average, tell us is how close the games of a match are. So, they can be separated by server and used to tell the true competitiveness of a matchup. For this reason, Excitement Average by server is incorporated into the Win Probability model to help it learn about how the players match up as the match goes on.

**Point to game, game to set, and point to set Point Value (Including Tiebreakers)**: These are three of the types of Clutch Factor. In this case, we are using the calculated value of the point or game without applying it to which player won it. Each of these metrics assign a value to the situation that measures its place within the set. So, a coaching team can use them to help their player control the flow of the match. By using the point and game values as a guide, a coach can ensure that their player is using the points and games with lower leverage to set up plays or introduce new tactics while paying that off with their best plays and favorite shots in higher-leverage situations. If a player is injured or trying to regulate their energy usage, they can also use lower-leverage situations to take an extra rest, allowing them to give up a point while their opponent gains the smallest possible advantage.

**Clutch Factor**: This is any of the point-based Clutch Factors – point to game, point to set, and point to match – applied to the winner of the point. Essentially, it is the player’s “score” for the match, similar to points in basketball. It can be used by a coach or other internal evaluator in the context of who the opponent is and who won the match as a measurement of progress and an indicator for where to look to find lessons to learn from a given tournament.

**Match or Tournament Clutch Factor Over Expected**: Over a match or tournament, this is the conversion of Expected Points Added to tennis. It is a player rating for the match or tournament. It is almost always zero-sum, with the CFOE rating of a typical victory sitting around 2 in most tournaments. Any rating that is far from that is notable and may be a candidate for regression to the mean in the next round.

**Season-Long Weighted Performance Rating**: This is Clutch Factor Over Expected weighted by the lengths of tournament runs. It is a method of evaluating a player’s performance over a full season.

**Serve and Return CFOE**: Due to the nature of the server’s advantage, tennis matches have two completely different sets of dynamics depending on who is serving. Therefore, CFOE metrics are divided into serve and return to further describe the way a player influences those dynamics.

**Serve and Return Excitement Average**: Excitement Average is the measure of how much pressure is on a given point relative to the game that it is in. Excitement Average split between a player’s serve and return games help to determine the way a given matchup flows through a match. A player with a lower Serve Excitement Average tends to serve more dominant service games, while a high Return Excitement Average shows a player who creates a lot of looks at breaking their opponent’s serve. Since conversion of opportunities is the expectation on serve, Serve Excitement Average could be contextualized with a player’s hold percentage.

**For a single match or tournament, Overall CFOE Rating, Serve CFOE, Return CFOE, Serve Excitement Average, and Return Excitement Average combine to paint a picture of how well each player controlled the match.**

**Win Probability**: Currently, Win Probability is used as a fan engagement tool. Because it learns more about the players as a match goes on, additional development would be required for Win Probability to be used effectively as a player evaluation tool.