

We analyzed each player’s every shift to compute new metrics and gain a better understanding of their impact

Given our knowledge of location and context for any shot taken or given to the opponent while a player is on the ice, we can calculate expected contribution of said player. This allows us to see if there are discrepancies between expected and actual offensive production, but also gain insight into a player’s defensive liability.

Details on new player evaluation metrics

Metric	Explanation	Interpretation
<div>A</div> Expected goals contributed to per 60 minutes played	Expected goals scored for team by 60 minutes of play for player X (based on location and context of each shot taken while player X is on ice)	A high expected goal created number indicates that a player generates a high number of scoring chances
Expected goals given per 60 minutes played	Expected goals scored by opposing team by 60 minutes of play for player X (based on location and context of shots by opposing team while player X is on the ice)	A high expected goal given number indicates that the player gives up many chances to opponents
<div>B</div> Expected goals contributed to over expected goals given	This is the ratio of expected goals contributed to and expected goals given	A number above 1 indicates that the player generates more offensive chances than he gives up (positive contributor to the team)
<div>C</div> Clutch Factor	Actual points produced (goals + assists) divided by expected goals contributed to	A high number can indicate “clutch” play, an ability to perform under pressure, or pure luck (leading to higher conversion)

Example of player profiles produced by the tool

Name: **Patrice Bergeron**

Team Name: **Brad Marchand**

Games Played: **70**

Expected Goals Contributed: **3.610**

Expected Goals Given: **1.917**

Clutch Factor: **0.934**

Team Name: **David Pastrnak**

Team: **Chicago** | Age: **32**

Games: **70** | Goals: **33** | Assists: **51** | Hits: **24**

Exp. goals cont. per 60: **3.610**

A

Exp. goals cont. / Exp. goals given: **1.917**

B

Clutch factor: **0.934**

C

Traditional statistics

New metrics

671 unique player profiles (one for each 2019-2020 skater) were created