Corr is basically in aggregate how close you come to solving the problem in its entirety. Corr can be trained for, and is actually a truly objective assessment for rightness of a model. This "rightness" principle was actually first implemented by using logloss. logloss had a strange numeric result, but it was strictly win vs lose at the time and that was fine. Corr came in a little later to represent the same rightness, and due to its range of -1 to +1 it could map easily to an earn or burn percentage. It is quite elegant.

TC represents whatever the hedge fund does to execute on the information. In real life, execution matters more than overall rightness, so TC is more heavily incentivized, to have us find answers that benefit the overall system more. In terms of how to train for TC, that's an interesting conversation with no shortage of theories.