

MICHAEL R. DILIBERTO, ESQ.



Negotiate Like A Computer

In April, I conducted mediation seminars for judges and lawyers in Macedonia, and consulted with Macedonian government agencies about the use of mediation in their judicial system. During one of my lectures, I was asked whether any particular negotiating style was more successful than others.

Robert Axelrod at the University of Michigan presented this same question, which was solved in a famous contest in 1980. Axelrod asked scholars around the world to write computer programs that would play repeated versions of "Prisoner's Dilemma," a game theory used to study bargaining behavior. ¹

The winning computer program was called Tit for Tat (TFT). Here are the features that make TFT successful:

- 1. It is "**nice**," which means that it is never the first to defect. It gives its opponents the benefit of the doubt. It cooperates on the first move and continues to cooperate as long as its opponent does.
- 2. It is **provocable**. It is not naïve. It doesn't continue to cooperate when its cooperation is not reciprocated. It punishes defectors immediately. But it punishes them proportionately. If an opponent defects once, TFT defects once. If an opponent defects twice, TFT defects twice. It doesn't try to add extra punishment. Overdoing the punishment risks escalation, and can lead to an unending exchange of alternating defections that depresses the scores of both players.

In the same way that it is instantly provocable, it is instantly **forgiving**. As soon as TFT sees cooperation, it responds with cooperation.

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¹ In prisoner's dilemma, two criminals have been arrested and placed in separate cells. If convicted, they face life in prison, but the only way the prosecutor can convict them of more than a minor offense with a two year sentence, is for one of them to testify against the other in exchange for freedom. If they both sit tight, each gets two years in prison. If one sits tight and the other defects, the informer goes free while the other gets life in prison. If both confess, both get 20-year sentences. Thus, the options are to cooperate or not cooperate (defect), illustrating the tension of cooperation versus competition present in every negotiation.

- 3. It is not **envious**. It doesn't concern itself with the fact that its opponent may be slightly ahead. It doesn't care about its opponent's score. It is concerned only with its own score. It is fair with its opponent.
- 4. TFT is **simple** to understand. Against TFT, one can do no better than to simply cooperate. Axelrod calls this clarity, or don't be too clever.

Tit for Tat shows how we can navigate the central tension in negotiation: What is the appropriate mix of cooperation and competition? How can we find the zone of possible agreement, if there is one, and waste as little time as possible if there isn't? How can we share sufficient information to enable the parties to identify and explore solutions, and protect information that could be exploited by an opponent?

The answer: Be nice, provocable, forgiving, not envious, and simple.