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USING TWO TQM PHILOSOPHIES WHEN PLAYING BLACKJACK

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ABSTRACT

If the game of Blackjack were considered a profit center, interest would focus on the quality of operation to include inbound raw materials (shuffled deck), work center environment (casino/table rules), quality of workmanship (session play), and finished product (customer satisfaction). This brief paper looks at Blackjack from a business standpoint, adopts two Total Quality Management (TQM) ideas from the Japanese, and offers suggestions on game play.

INTRODUCTION

Stuelpnagel (1988), the former president and CEO of Hughes Helicopters, begins his article on TQM by claiming that "Survival is the greatest motivator." If the game of Blackjack is to be taken seriously, and not as a form of generally expensive entertainment, then this same philosophy should be applied here as well. Many texts have been written on the topic of Quality Control, but as expected, none have included a chapter on Blackjack. The Japanese have offered many terms, which relate to Quality Control, but two could specifically be applied to Blackjack.

Kaizen

The term 'kaizen' means a gradual and unending improvement by doing the little things better. In the business world it applies to the way we answer the phone, package our product, or present our invoice. In Blackjack it applies to choosing the casino/table, knowing where to sit, and knowing when to quit. Using the concept of gradual improvement, the player would learn more and more about the game at a relatively slow pace and recognize that vast improvement overnight for that occasional trip to Vegas is unlikely. Understanding the rules of the game is a given, but knowing that more than one 'basic philosophy exists is a higher level of maturity.

Jadahka

The term "jadahka" relates to machines that are designed to stop automatically whenever a problem occurs. From a quality control standpoint in a typical business, the use of sampling theory is a form of jadahka, but is not as automated as it should be. From the standpoint of the casino where players are betting significantly higher than usual (and winning), the deck is changed, thus changing the process parameters. Very rarely does the player have any stopping rule except to say that he will quit when all of his money is gone. But, if the dealer wins four hands in a row, the player should shut down the process and move on to another assembly line; if the deck seems "jagged" and the player wins two, loses two, wins one, loses two, etc., never really getting ahead or behind, the process should be shut down and another process chosen. In a losing session the player should never lose more than 20% of his session bankroll. And, more importantly, on those occasions where the player is winning, he should never give back more than one-third of his winnings.

THE SIMULATION

For the study at hand a software package entitled Blackjack by ShareData, Inc. was utilized. The software was verified and validated prior to its use, and found to replicate actual play. A simulation experiment of 200 sessions each with 100 hands was performed. The results suggest that the player can expect to a) receive one blackjack in every 21 hands; b) be beaten by a dealer blackjack in every 18 hands; c) have an average winning streak of six; d) have an average losing streak of seven; e) win an average of 43 hands; and f) lose an average of 50 hands. More importantly, the player can expect to not double his session bankroll, nor lose it all as long as he plays by a basic strategy and bets flat.

It was also noted that in every winning case the player at one time was behind and that in every losing case the player at one time was ahead. This implies that if the losses are cut short, and if the winnings are allowed to run, the player has a tactful advantage over the house.

Three stopping rules might be 1) in a winning session, quit before you give back one-third of your winnings; 2) in a jagged break-even session, quit as soon as you have a one-unit win; 3) in a losing session, quit as soon as you reach your session loss limit. Finally, never exceed your session time limit, because fatigue is also your enemy.

CONCLUSIONS

The player should treat Blackjack as a process that is either "in control" or "out of control." It is a fact that the casinos consider it as such because it is their business to do so. From the standpoint of the customer, the game is rarely recognized as a process with a stochastic mean. The terms of kaizen and jadahka have been borrowed from the Japanese and offered here as suggestive aids in the playing of the game. Kaizen suggests that we should be satisfied with an unending gradual improvement of the understanding of the process. Jadahka suggests that we should act as a machine that makes decisions based on established policies, not emotion. The ability to walk away from the table when the process is out of control and utilize the most important tool that the player has (shutting down the process) is an ability that does not come easy. Combining these first-learn-the-game and then-play-it-wisely terms with the observation that the casinos never bring money to the table should help the player reach a higher level of Blackjack understanding.

REFERENCES

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