Impact Of Technologies In Cricket And Advantages Of Cricket

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Abstract
Cricket is a bat-and-ball game played between two teams of eleven players on a field at the centre of which is a 20-metre (22-yard) pitch with a wicket at each end, each comprising two bails balanced on three stumps. The batting side scores runs by striking the ball bowled at the wicket with the bat, while the bowling and fielding side tries to prevent this and dismiss each player (so they are ‘out’). Means of dismissal include being bowled, when the ball hits the stumps and dislodges the bails, and by the fielding side catching the ball after it is hit by the bat, but before it hits the ground.

Introduction
Cricket is a sport which is played between two teams of eleven players each who score runs (points). This is done by hitting the ball across the boundary, or by running between two sets of three small, wooden posts called wickets. The wickets are at each end of a rectangle of short grass called ‘the pitch’. There are various formats ranging from Twenty20, played over a few hours with each team batting for a single innings of 20 overs, to Test matches, played over five days with unlimited overs and the teams each batting for two innings of unlimited length. Traditionally cricketers play in all-white kit, but in limited overs cricket they wear club or team colours. In addition to the basic kit, some players wear protective gear to prevent injury caused by the ball, which is a hard, solid spheroid made of compressed leather with a slightly raised sewn seam enclosing a cork core which is layered with tightly wound string.

Origin of Cricket
The sport of cricket has a known history beginning in the late 16th century. Having originated in south-east England, it became the country’s national sport in the 18th century and has developed globally in the 19th and 20th centuries. International matches have been played since 1844 and Test cricket began, retrospectively recognised, in 1877. Cricket is the world's second most popular spectator sport after association football (soccer). Governance is by the International Cricket Council (ICC) which has over one hundred countries and territories in membership although only twelve currently play Test cricket.

Methodology of Cricket
- Cricket is played between two teams each made up of eleven players. (Sometimes in junior competitions you will find 8 player teams).
- Games comprise of at least one innings where each team will take turns in batting and fielding/bowling.
- The fielding team will have a bowler bowl the ball to the batsman who tries to hit the ball with their bat.
- The fielding team tries to get the batsmen out by...
  - Hitting the wickets with the ball when bowling
  - Catching a batsman’s shot on the full
  - Hitting the batsman’s leg in front of the wicket (LBW)
  - Or hitting the wickets before the batsmen can run to the other end of the pitch
- The batsmen try to score as many runs as possible before getting out by...
  - Hitting the ball and running between the wickets and making it to the other end before the fielders can hit the wickets with the ball. Each time you run one full length of the pitch it equals 1 run.
  - Hitting the ball to the boundary along the ground is 4 runs.
  - Hitting the ball over the boundary on the full equals 6 runs.
  - The fielding team must get 10 batsmen out before they can change over and start batting.
  - The aim of the game is to score as many runs as possible before the fielding team takes 10 wickets. The team with the most runs wins.

Technologies in Cricket
Hot Spot
The Snicko was not considered as accurate enough, hence the Hot Spot was introduced to Cricket. It is an infra-red imaging system used to
determine where the ball has struck before going to the fielder. The infra-red image shows a bright spot where contact friction from the ball has elevated the local temperature.

Where referrals to an off-field third umpire are permitted, the technology is used to enhance the on-field umpire's decision-making accuracy. Where referrals are not permitted, the technology is used primarily as an analysis aid for televised coverage.

**Hawk Eye (UDSC)**

This technology is widely used among popular sports like Cricket, Tennis, Soccer, Hurling and more for visually tracking the ball and display a record of its statistical path through movie image. Developed by Dr Paul Hawkins from the UK, the system was originally implemented in 2001 for making the television broadcast more interactive.

The technology works via six or seven powerful cameras, normally positioned on the underside of the stadium roof, which track the ball from different angles. The video from the six cameras is then triangulated and combined to create a three-dimensional representation of the trajectory of the ball. Hawk-Eye is not infallible and is accurate to within 5mm (0.19-inch) but is generally trusted as an impartial second opinion in Cricket.

**PitchVision**

Developed by miSprot, a UK-based company, the technology has been widely used in the Cricket training system. The PitchVision is designed to be used by the full spectrum of Cricket users to provide players key performance feedback.

Priced almost 2/3rd of a bowling machine, the technology helps bowlers to measure and record bowlers pace, line, length, deviation, bounce and foot position on bowling crease ball by ball. The technology is able to show the map of bowler's line and length.

**Benefits of Cricket**

- Increased Stamina and Endurance: the constant running across the field helps to increase stamina.
- Balance: balance is also something one can improve through this sport because of the utmost concentration required while playing cricket.
- Flexibility: learning to move freely is something that comes with practice in cricket, thus improving on flexibility of an individual.
- Coordination: when catching or throwing the ball, a cricket player improves his hand eye coordination
- Cardio: Cricket includes a lot of throwing and sprinting across the field, which is a great cardiovascular activity.
- Improved Motor Skills: Bowling, batting and catching the ball require gross motor skills. These are such activities that make the large body muscles to work.
- Social Skills: it’s a great way to interact with people and its also a great way to learn to cope with winning or losing. Cricket matches can last several hours, and within that time one must work with the team in a cooperative manner to develop and initiate game strategies and win the match.
- Muscle Toning: like any other sport, cricket also helps with gaining and toning your muscles.
- Physical Fitness: all the sprinting and bowling requires you to be constantly up and running, which increases your physical activity level.

**Conclusion**

Cricket is a thrill both to play the game and to watch it and its importance is no less than any sporting event. The game also encourages team spirit, fosters discipline, helps build up character and brings out the quality of leadership. It fosters team-spirit. Cricket involves sprinting between wickets and running to stop balls, as well as bowling and throwing. Health benefits include: Endurance and stamina Balance and coordination Physical fitness Improving hand-eye coordination.

**Reference**

