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## USE OF ICT IN PHYSICAL EDUCATION & SPORTS

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### ABSTRACT

*In the present study, we examine that how to use the technology in officiating, players and coaches to determine whether performance has increased due to present techniques, derived from models of human growth, for assessing the impact of technological and technical innovation over time. Advances in sport technology are part of the growing global sports and recreation industry. At the individual level, technology innovation is changing the way that we practice and connect with sport. For instance, innovative uses of technology can help spread expert knowledge about best practice coaching through IPods and Smartphone apps thereby addressing the needs of recreational sport participants for more interactive experiences. Further, media and information technologies (e.g., high speed and infrared cameras) address the entertainment needs of the viewing public and provide vital information to coaches and officials. At individual level of elite sport, technology innovation is applied to sports science, sports medicine, sports surgery, sports rehabilitation, and sports coaching and is integral to athlete development and performance. For instance, wireless tracking and wearable sensors provide quality feedback for*

*performance analysis and monitoring, and enhance training and competition outcomes.*

**KEYWORDS:** *Technology, sports, health, heart rate monitor, computer, Smartphone, global sport.*

### INTRODUCTION

Technology, in various forms, has been utilized in sport for many years and plays a particularly vital role in elite sport. Some of the thematic applications of technology include, sporting equipment; clothing and wearable's; facilities; competition adjudication and formats; media broadcasting and communications;

and performance analytics. A major trend in sports technology is toward real-time application of devices that provide athletes, coaches, and analysts with immediate feedback across a wide range of performance factors. Another trend is toward devices that are smaller, lighter, more powerful and easier to use. Technology has, and continues to shape the way we develop and monitor an athlete's capabilities (physical, mental, technical and tactical), administer sporting contests, and market sport to mainstream consumers.

### SPORTS TECHNOLOGY

The purposeful application of information in the design, production, and utilization of goods and services, and in the



organization of human activities

The world of sport is continually changing over the years, and the use of technology is just one of those areas that have made an impact on many sports in the modern day. One criticism of the use of technology is that it can slow down the speed of the game. Sports performance is determined by a number of factors. Some originate from the human element of the sport, such as the physiological and psychological state of the competitor, while others originate from the equipment used by the athlete, which includes the design and materials used in the production of the item. The growth of technology in sports sector as a whole is in accordance with increased participation in sporting activity and this has significant financial implications for society.

### MODERN ICT IN PHYSICAL EDUCATION & SPORTS

- + Computer
- + Internet
- + High speed video and motion analysis
- + Hart rate Monitor

### COMPUTER

Computer is an electronic device that is designed to work with Information. The term computer is derived from the Latin term 'computare', this means to calculate or programmable machine. Computer cannot do anything without a Program. It represents the decimal numbers through a string of binary digits. The Word 'Computer' usually refers to the Centre Processor Unit plus Internal memory. Computer is useful to store information of various sports events organized by Sport department of school, college and university. It is also useful to calculate accurate results, performance and prediction with the help of statistical tools. Furthermore now a day it is useful to store information of athletes over number of years.

### INTERNET

A global computer network is providing a variety of information and communication facilities consisting of interconnected networks using standardized communication protocols. Now a day's most of the peoples are using internet. as far as sports department is concern, internet is useful to transfer sports related information from one place to another place. Due to internet we can easily watch live matches of various sport events held at any place of the world. By using mobile application like Cricbuzz, we can easily gets score updates of cricket match held at any corner of the world. Due to internet we can access any sports related information at any time. Internet is also useful to send entries of athletes online for sports events held at different places.

### HIGH SPEED VIDEO & MOTION

Motion Capture Technologies (MCT) is the Southeast's largest supplier of Digital High Speed Video cameras and systems. In addition to camera sales we offer a full line of rentals and on-site high speed imaging services. High speed imaging enables the user to perform detailed visual and/or computerized motion analysis of machinery, projectiles, and wildlife and human motions. Our cameras have been applied in a wide variety of areas including the military, industrial, research, education and broadcasting markets. MCT can also provide hardware and on-site services for infra red imaging and high speed film applications.

### HEART RATE MONITORS

Based completely on the student ability level and current level of fitness, the heart rate monitor makes learning more student centered. It also provides immediate feedback that can make students work harder (Bian, Partridge, King, Andon, Boyer, 2007). As fitness level increases, student feel that their cardiovascular system is working and can set individualized goal to work more effectively. The Heart rate monitor will also provide real time data that will allow students to see how different exercises and activities affect the heart rate. Hence the heart rate monitor is a convenient apparatus that allows students to use up to date technology (Kirkwood,

Manon 2002). Charts of maximum heart rate can be made for each student and track increase or decrease in their heart rate.

### **BENEFITS OF TECHNOLOGY**

Sport is all forms of physical activity which, through casual or organised participation, aim to use, maintain or improve physical fitness and provide entertainment to participants. Sport may be competitive, where a winner or winners can be identified by objective means, and may require a degree of skill, especially at higher levels. Hundreds of sports exist, including those for a single participant, through to those with hundreds of simultaneous participants, either in teams or competing as individuals.

- Increase in performance
- Accurate result
- Time Save & Time Management
- It helps to analyze the performance of each athlete stage by stage

### **CONCLUSION**

“We should adopt all the recent technologies, and train people with the advanced equipments from Grass Hood level”.

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