Application of Modern Technology in Sports

Dr. Tanvi Tarpara[1]* Dr. Nisith Kumar Datta[2]

[1]Assistant Professor, Laxmi Institute of Commerce and Computer Application (BBA-BCA-BSc) Sarigam

[2]Assistant Professor & Head Department of Physical Education, Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat)

Abstract – Technology is part of everyday life, and some of this technology has a place within a sport. Technology in sports is a technical means by which sports attempt to improve their training and competitive surroundings in order to enhance their overall athletic performance. It is the knowledge and application of using specialized equipment and the latest modern technologies to perform tasks more efficiently. This paper studies about efficient technologies that will help in enhancing the performance and application of modern technology in sports.

Keywords – Technology, Sports, Players, Skills

-------------------------◆---------------------------

I. INTRODUCTION

Technology in sport ensures competitiveness in sport and has indicated their support of the new major in Sports. This new major delivers many benefits –

► The development of new ideas,

► Increase products efficiency and technology-based services

► Enlargements with entrepreneurs and businesses

► To get fighting sills and develop their skills internationally

Sportsman is able to enhance a range of practical exposure, increase their soundness in technical and scientific proof skills that is suited to the diverse willingness to win as well as employment opportunities that exist in this exhilarating area of improvement.

Sports technology- is part of the applied science programme; it is an incredibly diverse, interdisciplinary field. Teaching and research in technologies associated with sport already occur in a number of disciplines including Applied Sciences, Human Nutrition, Physical Education, Physics, Physiology, Physiotherapy and Psychology – leading research into fields such as artificial intelligence and the modelling of movement, measuring and assessment of balance, performance-enhancing clothing and equipment, brain-blood flow neurophysiology, eye movement registration, and the broadcasting of sporting events (e.g., 3D animation, computational modelling).

II. REVIEW OF LITERATURES

Through advance training, the sportsman of current time period is becoming stronger and skilful. Existing sports records are constantly bust and new ones set. The vast majority of achievements are improved; improvement in sports technology has played a remarkable role.

Heidegger (1998) noticed that more basic reactions of technology as belief system where technology, a long way from being the hand-lady of man, turns up at ground zero to be its lord, where technology is here and there observed to command its clients by making reliance and contorting human relations. In this way, the hypotheses include: instrumentalist, determinist, substantivist, basic and progression.

Levinson (1996) they see the development of technology as a transformative procedure, not as a progression of upheavals or mechanical jumps. In this manner, see social conditions and human goal as the essential drivers of progress. The instrumentalist hypothesis sees technology as a nonpartisan device, something whose closures and means are particular.

Glazier, Davis and Bartlett, (2002) dynamical frameworks hypothesis could give an applicable hypothetical structure to execution situated games biomechanics examine, as it offers an interdisciplinary way to deal with the procedures of co-appointment and control in the human engine framework.

Haisma, vanDerwoude, Slam, Bergen and Bussmann,; Pasquina, Bryant, Huang, Roberts, Nelson and Flood, 2006) and (Brodtkorb, Henriksson, Johanesen-munk and Thidell, 2008)

technology is morally impartial. It is neither great nor awful in itself. Or maybe, what makes a difference is the end or reason to which the technology is just the methods. While gear, for example, a prosthesis or a wheelchair are basic for a few people with an inability to complete their everyday living, progresses in this technology, for example, a vitality putting away prosthetic foot, make a lower appendage amputee's walk speedier and more effective.

Warburton and associates (2009) revealed that intelligent computer game cycling fundamentally expanded relentless state heart rate and vitality consumption contrasted with conventional cycling at steady, sub maximal workloads; the two types of cycling (customary and intuitive computer game cycling) brought about comparable appraisals of saw effort.

Barr (2016) expressing that off camera are various things that go into that triumph and at the best is technology. Technology has been used in don for a long time in different structures and assumes especially imperative part particularly for the first class brandish.

Surrender and Miller (2015), states that technology assumes an expanding part in helping proficient competitors, beginner sprinters and easy chair fans to take part in the game.

Philip Osamende Omoregie (2016) Sport and exercise science like most territories of life have been influenced enormously by innovative headways. It is hard to envision current games and different sub-controls of activity science without technologies.

III. APPLICATION OF MODERN TECHNOLOGY IN SPORTS

Current improvement in sport technologies has made an assortment of items went for enhancing and expanding athletic execution. Athletic wellbeing can be present day wearing innovations, for example, heart rate, screens, pedometers and muscle to fat ratio screens, through this a, more noteworthy depended information of the human body and its potential has been perceived, enabling competitors to prepare finish in games to substantially more seasoned age. Member security consistently has likewise been made conceivable through the improvement of certain brandishing gear, for example, caps and body insurance which are utilized as a part of boxing and ice hockey to help avoid wounds. Present day brandishing technologies have additionally made rivalry judging less demanding and more exact, and observer intrigue and fervor is improved by communicating and in-stadium shows

IV. MODERN INFORMATION TECHNOLOGY IN SPORTS

Development modern and education through video conferences, email, electronic conferences, group applications and utilization of electronic sessions, encourage training of remote email. Access to the enormous volume of archives and references, and encourage the execution of aggregate undertakings paying little respect to geographic and physical separation amongst people and gatherings. After articulation of criteria give status proficient games associations as to the correlation and assessment put.

► Computer and its assistants to an adequate number of new improvements and organize with.

► There are diverse applications that perform exercises of day by day, week after week, month to month and yearly association used to be.

► Having a total and refreshed site data by the system overseer and under specialists and directors can change and be refreshed.

V. VIDEO INFORMATION IN TRAINING

In typical conditions amid training, sportsman is dynamic in remedying errors. Be that as it may, on a few events, mentors utilize elective guides to give outward (outer) visual input, for instance, recorded replays of the execution. In this unique circumstance, video innovation has fundamentally affected training strategies. In spite of the fact that video innovation began in the 1950s, its utilization in instructing is a development under two decades old. Its attractions for use in training are it's moderately ease, availability, and compactness. It is reasonable for most field labourers and, maybe, as of now the most mainstream innovation utilized as a part of game

VI. TRAINING IN THREE-DIMENSIONAL VIRTUAL ENVIRONMENTS

Visual feedback inalienably conveys data about the perceived connection between the individual and required environment. Self-movement with respect to the surroundings starts view of the moving condition as a forerunner to activity. To abuse the connection amongst recognition and activity, PC applications make virtual conditions by utilizing distinctive visual effects. This relationship is verifiable in recreation mentors that are joined by three-dimensional showcases. Stereovision is a typical procedure used to make such a three-dimensional impact, in light of the rule that each eye gets a somewhat unique perspective of the same visual object.

CONCLUSION

Sports as a social phenomenon, has become a modern technology. The modernization of sport has

Dr. Tanvi Tarpara[1]* Dr. Nisith Kumar Datta[2]

changed because of technology, as technology plays a vital role in daily lives and impacts our body positively. The technology maintain to change the way of sports are run like identify the causes quickly, how injuries are treated, how sports are played to enhances performance. Sport technologies are artificial to develop human interests or in a particular sport.

REFERENCES:

Barr G. (2016). How artificial intelligence plays into the future of sports technology. Sport Techie

Brodtkorb, T., M. Henriksson, Johannesen-Munk, K. & Thidell, F. (2008). Cost-effectiveness of c-leg compared with non-microprocessor-controlled knees: A modeling approach. Archives of Physical Medicine and Rehabilitation, 89, pp. 24–30.

Cave, A. & Miller, A. (2015). Technology in sport: the speed of science. The Telegraph.

Glazier PS, Davids K & Bartlett, R. M (2002). Grip force dynamics in cricket batting. In K. Davids, G. Savelsbergh, S. J. Bennett, and K. Van der Kamp (Eds.), Interceptive Actions in Sport: Information and Movement, (pp. 311-325), London: Taylor and Francis

Haisma, J., Van Der Woude, L., Stam, H., Bergen, M., Sluis, T., & Bussmann, J. (2006). Physical capacity in wheelchair-dependent persons with a spinal cord injury: A critical review of the literature. Spinal Cord, 44, pp. 642 – 52.

Heidegger, M. (1998). The question concerning technology and other essays. Chicago: University of Chicago press

Levinson, P. (1996). On behalf of humanity: the technological edge. The World & I., pp. 301-313.

Philip Osamende Omoregie, the impact of technology on sport performance, University of Education, Winneba GHANA, Proceedings of INCEDI 2016 Conference 29th-31st August 2016, Accra, Ghana, ISBN: 978-9988-2-3994-7

Corresponding Author

Dr. Tanvi Tarpara*

Assistant Professor, Laxmi Institute of Commerce and Computer Application (BBA-BCA-BSc) Sarigam

E-Mail – tanvi.tarpara85@gmail.com

Dr. Tanvi Tarpara[1]* Dr. Nisith Kumar Datta[2]