

Involvement of Technological Innovation in Sports

Gjulio Zefi¹, Aigars Andersons², Jozef Bushati¹

¹Faculty of Education Sciences, University of Shkodra "Luigj Gurakuqi"

²Faculty of Society and Science, Vidzeme University of Applied Sciences

INTRODUCTION

The complexity of the tools used in sports requires constant technological change and improvement. In this paper we will highlight how technological innovations have influenced the development of sports.

Is it true that technology has intervened in improving results in all sports?

Many authors (Tidd et al., 1997; Tidd and Bessant, 2009; Hakansson and Snehota, 1995) have attempted to highlight the complex relationships between the innovation process and the incentives that lead to various sport-related inventions.

MATERIALS AND METHODS

In this paper we will use the method of analysis and description to show how technological innovation has influenced the development of sport. The complexity of the tools used in sports constantly requires technological changes and improvements. For example, gymnastics equipment, athletic vaulting poles, tennis rackets, bikes, roller skates and ice skates, etc. are constantly undergoing technological evolution.

We will analyse how innovations such as: the use of rubber suits in swimming (2008), the increase in cycling speed by the invention of the mechanism that regulates the ratio of wheel speed (1935) or the use of light rubber and very resilient marathon running shoes (2013) have improved results, helping to achieve times at the maximum limits of human ability.

RESULTS

Comparing the results drawn from the analysis of scientific works of different authors gives us the opportunity to reach conclusions, which open new avenues of perspective in the sports sector in terms of the design and implementation of technology. The inclusion of technology in sports gives human society greater opportunities to reap its benefits for a more active life.

DISCUSSION

Data provided by various authors show that: the use of rubber suits in swimming (2008), increasing the speed in cycling by inventing the mechanism that regulates the ratio of wheel speed (1935) or the use of rubber lightweight and very resilient marathon running shoes (2013) have improved results, helping to achieve times at the maximum limits of human ability.

In order for innovation to have the greatest impact on sports, cooperation and exchange of experiences is required between sports companies and large manufacturers of sports equipment in improving the technical aspects of the equipment they produce.

CONCLUSIONS

The involvement of innovation and technology at different levels have has unquestionably influenced the discovery of high-tech materials as well as the modification and improvement of various techniques. Consequently, these inclusions have made sports performance achieve unimaginable results, pushing the limits of human ability.

KEYWORDS: Innovation, Technology, Sports, Sports equipment