**(Introduction)**

Nowadays everyone knows that the development of technology has completely changed the dynamics of human life, and in sports, it's no different, so Im Leonardo Pedro and im here today to talk you about the impact of technology on elite sports.

First off keep in mind that im going to talking about technology specifically on the elite sports environment, where winning a race or winning a competition can be distinguished in a matter of seconds or in having those small edges that make a difference.

For example, an athlete who swims in a 100-meter streak in the Olympics can reduce his best time by means of the simple use of clothes designed to reduce the friction of the water.

But here doesn't feel that important because we are talking about little things, right?

Where you really see the difference is when the modality depends even more on the technological resources than on the abilities of the sportsman.

For example, in an auto racing event, the diferences between some brands of cars that always compete for the title in a competition are evident of those who just try to escape from lower settings.

However, the advantages of technology are not restricted only to equipment and accessories.

We can also improve the athlete's performance and prevent their injuries, using it.

So how do they use technology in order to do so?

Let's take a look at the first one. Use of biofeedback for motion corrections.

**(Use of biofeedback for motion corrections)**

The biofeedback most used in sports is the recording of heart rate and the use of breathing techniques because they have a simple application and low cost of measurement instruments.

As there is a relation between the frequency of hurt beats and exercise intensity, online access to beat frequency allows the athlete and coach to control the intensity of the exercise together with the respiratory record, that enables the athletes to develop a breathing technique to optimize their oxygen uptake and so his performance.

A good example for this is rifle shooting, where the breathing technique is crucial to stabilize his posture before taking the shot.

**(Virtual Reality)**

Ok then we jump onto Virtual Reality

So! Simulation Reality

This VR system is the oldest, originated in flight simulators for military applications and it basically seeks to reproduce the interior of a car, airplane, jet, etc., so that the subject can interact with the controls.

This is mostly used in motor racing practice, training of serve in tennis and batting in basketball where they have direct feedback from the computer.

And the second one, is Artificial Reality

So in this one the athlete get instantaneous information such as graphics, visual effects or sound effects provided by the computer and in sports, this system can be used to simulate virtual environments to interact with the subject while running or walking.

Also the use of coaches and virtual environments in cycling has shown results such as increased motivation and reduced accumulated stress during the practise, as well as increasing exercise time on target intensity, distance travelled, and the energy consumption .

**(Conclusion)**

So that’s it, to conclude my work I think athletes should seek to know and enjoy these resources since science and technology can be a great divide between winner and athletes who still aim for victory.