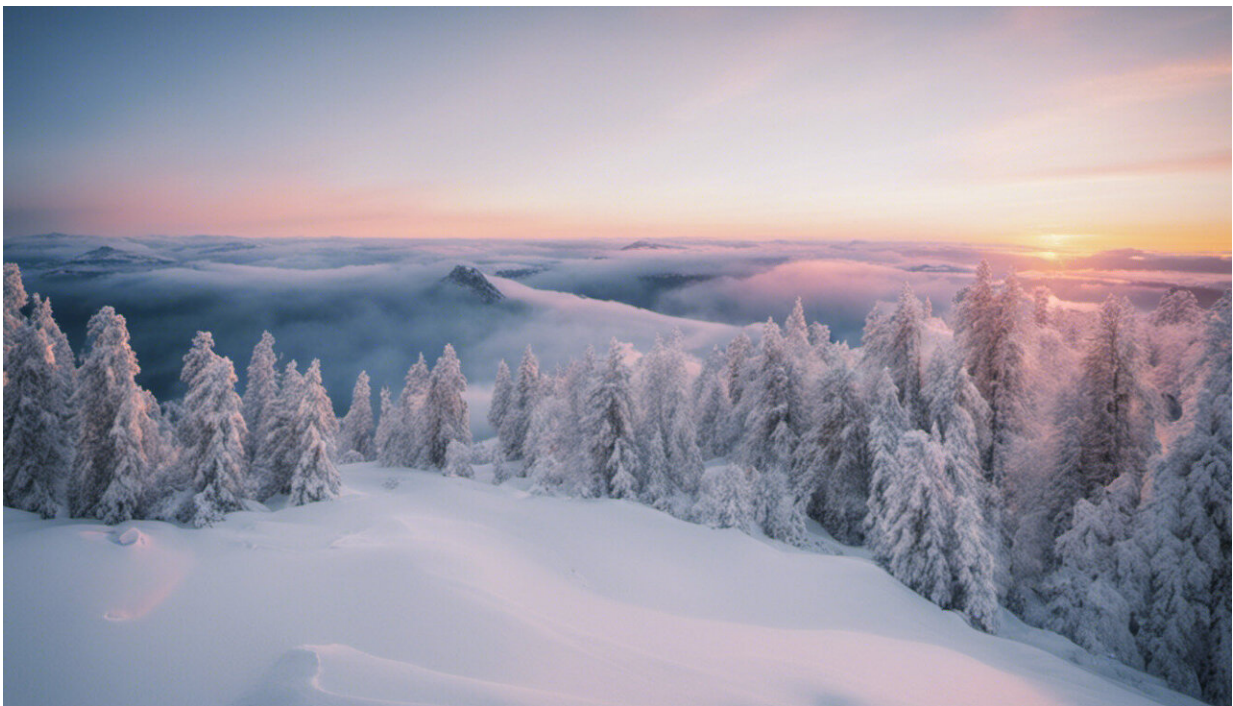


COVID-19 has crippled the winter sports industry—but a digital revolution will help it recover

February 19 2021, by Sascha L. Schmidt and Nicolas Frevel



Credit: AI-generated image ([disclaimer](#))

It was all going so well. When China sparked the greatest winter sports boom in history by trying to inspire 300m people ahead of the Olympics in Beijing in 2022, the forecast for the industry was great. The 2018/2019 season was the most successful for 20 years, as the American

and European markets were thriving too.

Then the pandemic hit, and [winter sports](#), like many other industries, [were severely affected](#). But our recent research suggests the technological developments the pandemic has also ushered in could help secure its future by changing the way elite sportspeople and amateurs approach the sports they love.

The pandemic's impact has been widespread. Ski resorts, hotels, bars and tourism operators have all been affected, as have a whole range of suppliers who depend on demand from these organizations.

While some venues can at least remain open and maintain operations, others have had to shut down entirely [for the time being](#). Equipment manufacturers and retailers will be worrying about full warehouses that are [waiting for buying customers](#).

[Many businesses](#) will not have the financial stamina and resilience to carry on. It is clear the industry will have to adapt to survive.

We investigated the future of [winter](#) sports by soliciting opinions from a diverse panel of experts from 15 countries. They included industry officials, former elite athletes, managing directors of [ski resorts](#), technology experts, equipment manufacturers, esports video game developers and media representatives. Our [report](#) aimed to nurture a discussion on the future of the sector.

The experts, surveyed in November 2020, believe that winter sports will take at least two to three years to reach pre-COVID-19 levels (for example, in terms of live attendance at ski events). But, perhaps surprisingly, a clear majority of 30 out of 53 said they thought the pandemic would change the industry slightly for the better. And this was despite the severe, short-term challenges.

This positive development related mainly to rapidly advancing digitisation. In fact, our experts told us that COVID-19 may have forced the industry to improve its digital offering.

According to [data](#) gathered during the pandemic, digitisation has been catapulted forwards in many industries and businesses, with five years' worth of adoption of new technology happening within a couple of weeks. The most obvious examples include using the internet to work, teach or study, buy groceries or consult health professionals from home.



Our survey showed a range of benefits that technology will have on the future of winter sports. Credit: Mastercard

High-tech impact

Our experts emphasized that technology could also change winter sports for the better as they become increasingly high-tech. In particular, [advanced materials](#) and [sensors](#) are due to have have a big impact over the next five years.

For example, in alpine skiing there are systems known as inertial measurement units which use accelerometers, gyroscopes and magnetometers to measures the body's specific force, angular rate and orientation. This all helps to calculate and capture data about a skier's pose and movements.

Our research found that such technology could have a big impact on the performance of elite athletes. For example, integrated measuring systems could allow the verification of feedback from professional skiers during training when they report issues with their skis, like when they become shaky or unstable.

For amateurs, sensor-based technology could help make improvements by providing on-slope feedback and [coaching](#) on skiing technique for issues like skidding in turns (and how to avoid it). [Smart wearable sensors](#) measuring skiers' movement and body position could further increase both safety (by measuring fatigue) and overall experience (by improving skills).

Beyond performance, our experts felt the biggest impact of technology on skiers in resorts would be from smart tracking systems for live information on how busy lifts, routes and restaurants are. Contactless features, such as cashless payments, will also become the norm by 2025. In fact, many resorts might be able to provide almost entirely contactless

experiences by then.

Another area of major technical advancement that experts predict to see by 2025 comes in the form of [esports and gaming](#). Although video games are unlikely to become one of the main drivers of the success of winter sports by 2025, online offers and activities will play a major role in reaching [younger generations](#) and people in areas lacking the necessary winter facilities.

In areas like this, simulations will have a significant impact on overall accessibility, according to 43% of our experts. They said that virtual technology will also give people with disabilities a chance to experience the sport.

So digitisation and new technology are providing some reasons for hope in the winter sports industry. There is still a long way to go but our experts believe that if the sector can adapt and innovate, then it will survive and perhaps even prosper in the future.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: COVID-19 has crippled the winter sports industry—but a digital revolution will help it recover (2021, February 19) retrieved 16 July 2024 from <https://phys.org/news/2021-02-covid-crippled-winter-sports-industrybut.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.