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# Technology, innovation and leisure: Leisure engagement in new and unexpected ways

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## ABSTRACT

The interweaving of technology and leisure has become an integral part of leisure choice, access, engagement, management, and product development. This interweaving has resulted in new and innovative ways people can access leisure, created leisure opportunities for marginalized groups, and improved efficiencies and effectiveness in management. However, challenges have also resulted, such as the blurring of work/leisure time, raising quality of life issues. The intent of this special issue is to bring attention to ways in which technology and leisure influence each other. The articles in this issue explore various types of technology used to experience leisure, leisure constraints to technology, and aspects of identity related to technology, and leisure. This special issue can extend the body of knowledge of leisure and technology thus contributing to innovations in leisure and better quality of life.

## KEYWORDS

leisure; technology;  
innovation; quality of life

## Challenges

*“Technology . . . is a queer thing. It brings you great gifts with one hand and stabs you in the back with the other.”* Carrie Snow (2020)

Technology and innovations are often viewed as a two-sided entity, one side brings ease, increased access, and convenience; the other side brings privacy uncertainties, confusion, and complexities. Whatever side one finds oneself on, the reality is that leisure business, practices, research, and opportunities will involve a thread of technology and innovation. According to Spencer Schultz, and McKeown (2018), developments in technology have had a significant impact on leisure including products, practices, communities, and personal lifestyles. The question is, to what end? How is leisure compromised, challenged, or out of reach for some when technology is a part of access, experience, or satisfaction?

Technology has been the target of blurred lines between work and leisure, with each domain encroaching on the other. For instance, Sintas et al. (2015) explored boundaries intruded upon by technology such as social media. They challenged us to consider the ways in which traditional work/leisure borders are disrupted by technologies. The use of cellular smartphones can be tools for experiencing leisure (e.g., audio tours of museums, playing games, socializing) but can also keep us connected to our work life

(e.g., checking email, work-related messages via social media). This blurring of work/leisure demarcations can lead to lower productivity in the workplace as well as decreased satisfaction in leisure time (Duke & Montag, 2017).

The use of technology in leisure has also been the subject of issues related to quality of life. Many studies have reported on the positive relationship between leisure and quality of life (Harari et al., 2016; Kuykendall et al., 2015; Walker et al., 2019; Wiese, 2018). If we assume that there is a strong relationship between engaging in leisure activities and benefits for one's quality of life, then it is also legitimate to assume that the use of technology for leisure activities could lead to outcomes related with quality of life (Gabor & Mikloušić, 2022). However, some technologies, such as smart devices, provide unprecedented access to people's social interactions, daily activities, and mobility patterns. These devices can track users' leisure related geographic locations (e.g., restaurants, parks, sports, theaters), communication patterns (e.g., with whom, frequency, duration) which could lead to assumptions about quality of life which may or may not be a true picture of this construct. For instance, some studies point to the negative aspects of hyper connectivity via smart devices including bullying, reducing in-person contact, imposing aggrandized views of others' lives, unrealistic notions of happiness, and hyper-distractedness (Arad et al., 2017; Harari et al., 2016; Tromholt, 2016). The conclusion from these and other studies are the ways in which technology can take away from enjoyment experienced in real-world interactions and prevent people from fully engaging in their leisure environments. Clearly, a balance needs to be struck between quality-of-life experiences and the use of technology to address the double-edged sword metaphor.

## Benefits

*"Technology has the power to blend reality and imagination."* Bilawai Sidhu (2023)

Technology has extended our leisure lifestyles by diversifying how we spend our free time, making access to and engagement in leisure more affordable, accessible, and universally designed (Dratsiou et al., 2021; Spencer Schultz & McKeown, 2018). According to the American Time Use Survey (2022), nearly all persons aged 15 and over engage in leisure daily. Most survey respondents spent approximately 50% of their leisure time using technology such as watching television, playing computer games, and socializing. While most technology users responding to the survey were 15–19 years old, the use of technology in leisure has increased across all age spans.

One quite noticeable way in which technology usage can be seen by a variety of users is in the ways in which we use various platforms to socialize and engage in leisure. Our social world has become entwined with the use of technology, including using it to socialize with others in real time as well as asynchronously. The worldwide usage of social media platforms has grown exponentially over the past decade. Media sites such as Facebook, Twitter/X, TikTok, You Tube are available in 77% of countries with hundreds of millions of users across age ranges and the globe (Gabor & Mikloušić, 2022). This demonstrates a global practice in spending leisure time using technology to access social media. During the COVID-19 pandemic, people gathered socially using on-line and virtual platforms. These platforms kept friends, family, neighbors, and colleagues

connected as well as provided opportunities to socially engage with others across the globe. People who have particular leisure interests gathered using technology to dance, garden, do yoga, play card games, exercise, discuss books, to name a few (Gabor & Mikloušić, 2022).

Technology has also become more universally designed for use by all people. Individuals with disabilities have been using technology for decades to seek, engage in, and gain satisfaction in leisure. From Paralympic athletes who use the latest technological devices to compete on the world stage, to wheelchair users who want to use virtual reality to visit museums, technology has made leisure more accessible to and usable by persons with disabilities. Technology has aided people with communication difficulties to express their leisure choices, access their leisure preferences, and increase their ability to socialize with others (Lancioni et al., 2022). Persons with disabilities have increased their independence in leisure using assistive technology such as screen readers, assistive listening devices, robotic and virtual reality options, and all-terrain mobility devices. For instance, the U.S. National Park Service uses UbiDuo devices to communicate face-to-face with people who are deaf or have communication limitations. Museums across the globe use telepresence robots for guests with significant mobility or medical conditions who may be unable to visit a gallery in person. People with intellectual disabilities use pictorial images of preferred leisure activities on their tablets or smartphones to communicate their leisure choices. These same technologies have been used with promoting digital heritage tourism, accessing museum exhibits, experiencing the thrills of amusement parks, and exploring the beauty of natural areas (Navarrete, 2019; Stasolla et al., 2022).

## Current practices

*“Technology should improve your life, not become your life.” Billy Cox (2019)*

There can be no doubt that technology has changed leisure culturally, socially, and personally. We can purchase theater tickets online, visit a museum without stepping a foot in the door, experience the thrill of a roller coaster ride from our living room couch, and socialize face to face with friends who live anywhere on the planet from the comfort of our homes. The opportunity to experience leisure using technology will only increase.

While much of the leisure literature has focused on technology and leisure engagement, the use of technology is evident in leisure management, therapeutic recreation practices, governance, products, and service innovation. Marques and Pimentel Biscaia (2019) offered a taxonomy of innovation and leisure to illustrate the use of technology across leisure service sectors. This taxonomy underscores the ways in which technology is woven through leisure and has influenced product development, service delivery, policy making, and funding. In particular, the COVID-19 pandemic presented an opportunity for service delivery innovation, thus placing an increased importance on and demand for the use of technology. For instance, a special recreation association in Illinois began using live virtual platforms to deliver their daytime leisure services for adults with intellectual disabilities. This technology proved vital in maintaining social connections, leisure, skills, and quality of life. It is now common practice for recreation agencies to use organizational systems that provide multiple ways consumers can sign-up and pay for, as well as evaluate their leisure options. Because technology is being used to promote quality of life and wellbeing as well as being an integral part of

management and organizational practices, it is important to be studied and understood from various levels (Marques & Pimentel Biscaia, 2019).

Over the past five years, the intersection of leisure and technology has received noteworthy attention in several leisure journals (see Leisure Sciences, Journal of Leisure Research, World Leisure Journal) illustrating the progress creating a foundation for the study of leisure and technology. Overall, some studies have learned how technology influences leisure cultures such as sport (Carnicelli et al., 2017), and the ways in which technology can be used to negotiate leisure constraints such as with immigrants, women, and persons with disabilities (Lancioni et al., 2022; Valtchanov et al., 2016; Valtchanov & Parry, 2017). Thus, the aim of this special issue on *Technology, Innovation, and Leisure* is to demonstrate several ways technology is influencing leisure and leisure is influencing technology.

### Summary of contributions to this Special Issue

*“The real problem of leisure time is how to keep others from using yours.”* Lynn Zubernis (2021)

This Special Issue is a contribution to the advancement of understanding the dual influence of technology, innovation, and leisure. Our aim is to highlight these contributions and bring attention to future research priorities for examining ways in which technology, innovation, and leisure influence each other (see Gale & Devine, 2023). The seven special issue articles enrich our perspective of this duality, supporting Vigo’s (2019) observation about the radical changes and profound effects that new technologies have brought about for leisure, culture, health, and experience. Berberka et al. (2023) surveyed tourism and recreation studies college majors across five Polish public universities ( $n = 457$ ), to improve understanding of the role of mobile app use during leisure. Harmon and Duffy (2023) provided critical reflections on smartphone use in leisure, arguing for improved understanding about how smartphone use affects personal and community well-being. Ho (2023) explored the online and offline leisure activities of 20 young married mothers in Taiwan through Oldenburg’s (1999) idea of third places, to conceptualize the complexity and structure of the digital connection. Lamberti et al. (2023) employed a causal model to examine online and in-person leisure activity for youth within the Catalonia autonomous community, in Spain. Building on the Hierarchical model of Leisure Constraints (Crawford et al., 1991), Pizzo et al. (2023) surveyed 201 male and 201 South Korean female esports players to assist understanding of the influence of leisure constraints in a digital domain. Sharaievska and Mirehie’s (2023) qualitative study of 18 U.S. adult family members explored how social media is used during family travel and how social media use influences the travel experience. Lastly, Joo and Nam (2023) surveyed 300 Korean Over-The-Top video on demand service users to better understand this form of digital leisure activity during and after the COVID-19 pandemic.

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