









Behind the smart - The hidden costs of tourism technology optimism

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Smart tourism

Smart tourism is a prevalent discourse in tourism theory and practice that creates a positive outlook on the future of tourism as a more accessible, sustainable and resilient industry.

Smart tourism refers to the application of information and communication technology (ICT), mobile communication, cloud computing, artificial intelligence, and virtual reality, for developing innovative tools and approaches to improve tourism.



Smart tourism

Smart tourism reguires integration of many factors and components such as:

- high-level physical and information technology infrastructure services,
- well-trained human resources,
- effective management understanding and leadership spirit,
- effective promotion and marketing practices,
- cooperation between stakeholders and
- environmental awareness.



Much of this optimism for smart tourism developement stems from the belief that new technological solutions benefit tourists, tourism destinations, and the tourism ecosystem as a whole.

To a certain extent, this phenomenon can be explained by the idea of technology optimisms stating that people who are constantly exposed to technological advancements develop an association between technology and success.



Technology optimisim

The traditional concept of technology optimism is fueled by the fact that technological successes often come with game-changing results, such as revolutionizing industries, boosting sustainablity, and improving the quality of life of many.

Such events are highly notable, while on the other side, technology failures often go quietly, as they usually do not change the current state of affairs, and affect only a few.

This phenomenon implies that continuous exposure to technical breakthroughs would drive decisionmakers to be overconfident in technology's ability to produce favorable outcomes, as that confidence builds an unconscious link between technology and success.



Technology optimisim

Indeed, the implicit assumption that the technological innovations of smart tourism work better for tourists has already become commonplace in the tourism domain.

In essence, the technology effect has the concept of over-optimism at its core, and as such it could be viewed as a bias toward optimism in technology.

Let's explore this idea in the context of crisis management!



Technology optimisim and crisi management !?

In several industries, including tourism and hospitality ICTs have become a vital instrument for crisis management.

Here, ICT is not considered solely as a tactical tool, but also it serves as a strategic one. It is currently a critical component of all phases of tourism crisis management, as it is used to forecast (before), save or mitigate (during), and assist in recovery (after).

Virtualization technologies applied to tourism have also been used to monitor, educate, and prepare mitigation strategies in the face of global climate change, even including tourists as citizen scientists to increase participation and adaptation.



Technology optimisim and crisi management !?

Apart from the anticipated use of ICT solutions in crisis management scenarios, smart environments and the ubiquitous presence of technology enable unique, unscripted, and creative applications.

Except for vaccine development and medicine, the COVID-19 pandemic has revealed numerous exciting technology solutions in the fields of robotics, the IoT, and AI, but also in consumer electronics and everyday Internet apps that are geared toward actively addressing newly emerging challenges.

As a result, the tourism industry and society as a whole, have gained confidence and optimism in their ability to deal with future crises through increased dependence on sophisticated technology solutions.



Case 1: COVID-19, technology and tourism industy

The COVID-19 crisis demonstrated how destabilizing an abrupt drop in demand or the loss of traditional markets can be to the global tourism industry.

While the majority of countries exercised caution in order to protect public health at the expense of profit, certain Mediterranean countries lacked this luxury and had to open their borders.

While predictions on how quickly tourism will recover were diffent, the following course of event showed it will be quicker than initially anticipated.



Case 1: COVID-19, technology and tourism industy



For example, Dubai has served as a beacon of a different approach, by proactively applying new safety regulations and newest technological solutions in sanitation and visitors management that help the city to a relatively quick return on track and even to successfully organize the biggest world event since the pandemic - Dubai EXPO.



Case 1: COVID-19, technology and tourism industy

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In essence, new solutions are at the disposal of tourism managers for the recovery that can become more feasible with technology, thus justifying technology optimism.

For example, using digital channels for approaching and engaging consumer niches who are willing to participate in tourism even with some risk.

Decorative

More innovative solutions keep the game going even without the need for physical travels (virtual tours, phygital

social media campaigns, online support, self-improvement, preparatory initiatives, etc).

These approaches can also be adapted to respond to the various emergent crises associated with climate change

that will dramatically alter tourist landscapes.



Case 2: Ukraine, technology and tourism industy

After the main hit of COVID-19, the optimistic view on tourism recovery (has been suddenly threatened by the recent outburst of the war in Ukraine in February 2022.

Instead of whining and lamenting on the dark future scenarios, the tourism sector has got together to actively help endangered people. Solidarity of Western countires has emerged from the tourism domain as well.

Solidarity in tourism now has effective digital tools and systems to quickly organize, raise awareness and, if necessary, create ad-hoc measures that will actively involve tourism in future crises.



Case 2: Ukraine, technology and tourism industy



For example, Airbnb has provided the most comprehensive program for helping refugees. They have committed to hosting up to 100.000 refugees. On the other hand, a grass-root social-media campaign has urged Airbnb users to start booking accommodation without the intent to actually show up at sites, as a way to financially support Ukraine Airbnb hosts.



Overoptimism?

Although there are currently few formal proofs of the effectiveness of these actions, they could serve as examples in the ongoing crisis of the digital supply chain ability in tourism to quickly adapt and reorient, giving this industry a new role that shifts it from a passive observer to a more active participant during the crisis.

It must be noted that technology optimism has downsides of its own.







Overoptimism?

For example, it could be problematic if technology optimism is viewed as a doctrine stating that the increasing number of technological advancements will sustain life as the human population grows.

Many critical voices emerge in this case, such as the rising cost of pollution, the greenwashing of tech billionaires who contribute significantly to pollution, to name a few.







Humancentred experience



Human-centred experience: distracting effect

Smart tourism systems can take away from touristic experiences and therefore limit the pursuit of experience goals.

If the use of a smart tourism system consumes too much of a tourist's attention by needing them to focus on the system (e.g., too many tasks, complex equipment, unfamiliar or unresponsive user interfaces) rather than the enjoyment of a tourist experience, it produces a distracting effect. For example, a voice interface at a busy airport or the need to download various phone applications could frustrate users and move attention away from the touristic experience. Similarly, while the use of drones in tourism settings is becoming more frequent, the visual and auditory pollution they produce may distract tourists from the ambiance.

Green Digital Accessibility

Human-centred experience: damaging effect

When the use of an interactive system is perceived to harm a user's health and overall wellbeing, we refer to it as a damaging effect.

For example, the employment of VR goggles in the provision of tourist experiences can be perceived as damaging due to concerns that blue light could harm tourists' eyes. Worries about visually induced motion sickness (VR sickness) or lack of social self-consciousness are additional damaging effects that emerge from VR use.

Human-centred experience: damaging effect

Similarly, one of the major concerns regarding the use of wearable gadgets is the exposure to radio frequencies (RF) and resulting biological damage, especially in the context of the coming 5G network.

Besides, concerns about the IT sector's energy footprint can be added (e.g. concerns about the carbon footprint of streaming service data centers).

Here, the usefulness of an interactive system becomes irrelevant since tourist experience goals and the desire for well-being are seriously compromised.

Concluding remarks

Thus, there is always a lingering question about the true purpose of technology employment or the manner in which technology is provided.

These issues and concerns continue to be critical even in the context of crisis management.

This is particularly significant in the case of tourism technology optimism, which must always be viewed through a broader socio-economic lens.

Concluding remarks

This presentation investigated the primary costs of the smart tourism agenda, often overlooked by tourism literature, beginning with the positive and negative ideas of technology optimism, and concluding with the detrimental effects of technology-driven tourism experiences.

The purpose of highlighting hidden costs of technolgy use is to aid in the discovery of a more balanced strategy for advancing smart tourism development that will truly contribute to the goals of sustainable development.

Thank you for the optimism!

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