Residents' Perceptions of the Transition towards Digital Transformation in the Tourism Industry. The Case of the Chania Prefecture

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Abstract
Crete is an archetypal summer tourism destination in the Mediterranean. It "suffers" from strong seasonality during the summer months, while the tourist season shrinks on an annual basis. As a strategy to address these problems, the literature suggests digital transformation of the local tourism industry and a greater emphasis to be devoted on technology and the opportunities it offers to entrepreneurs and local communities. This study explores the views of the residents of the prefecture of Chania, Crete, on how they perceive concepts such as technologically advanced tourism industry, digital transformation and transition factors towards a technologically advanced tourism industry. Chania prefecture suffers tremendously from increased tourism activity during the summer months and technology is perceived as a solution to the resulting problems. The semi-structured interview technique was chosen to collect information from the participants. The results of the survey revealed numerous and diverse concerns of residents in different areas of the county. Therefore, it could be concluded that the assumption that technological innovation is a panacea for tourism development does not apply equally to everyone.
Keywords: Qualitative research, Chania, Digital Transformation, Local Tourism Economy, Benefits and Risks.

Introduction

The Covid-19 pandemic adversely affected the global tourism industry and caused successive social upheavals, resulting in a change in the tourism narrative and a sharp shift towards the technologically savvy solutions in the tourism industry (Jang, 2023). Undoubtedly, technology has paved the way for solutions to the challenges brought about by the pandemic (Barykin et. al. 2021). An alternative approach to improving the tourism industry (whose weak points were strongly highlighted during the pandemic) lies in enhancing sustainability and resilience (Traskevich & Fontanari, 2021).

Climate change, over-tourism, the preservation of environmental and cultural diversity, the safety and security of tourists, the problem of workforce shortages and the possibility of new pandemics, are some of the challenges that the tourism industry is now facing in the anthropocene era (Holden & Jamal & Burini, 2022). Digital transformation and the use of technologies such as the Internet of Things, artificial intelligence, augmented and virtual reality, will bring about multidimensional positive effects to achieve the much desired sustainability and resilience of the industry. Some of these, include an attractive tourism offer, the development of smart travel formalities in tourist travel, efficient use and management of resources, the creation of smart destinations as well as the creation of a new tourist profile. Greece is making significant progress for the digital transformation of the tourism sector, with the aim of improving the visitor experience and upgrading the tourism product https://digitalstrategy.gov.gr/sector/tourismos). Tourism is an integral part of the Greek economy, contributing significantly to the Gross Domestic Product (GDP), which in 2023 stood at 220,303 million euros, an increase of 6.6% compared to 2022 (INSETE, 2024). As part of these efforts, in November 2024 the Greek Ministry of Tourism announced a series of initiatives and tools to promote digital transformation. Among these initiatives were the:

- Creation of a digital platform for the promotion of various forms of tourism, such as mountain agritourism, marine and diving tourism;
- Development of an agri-food, gastronomy and tourism interface network;

- a support application for wellness tourism travellers, with information on areas and points of interest; development of the digital application "mAiGreece" for mobile devices; and creation of an innovative information system for travellers (upgrade of "visitgreece.gr").

These initiatives indicate the government's commitment to promote a digital and sustainable tourism, thus enhancing the tourism experience and the country's position in the international tourism market.

Study Aims and Objectives

The problem that was formulated and seeks a solution in the present research effort is the chronic negative impact of mass tourism on the environment, society and culture of the island of Crete. This study aims to investigate whether technology and its innovative applications, can serve as solutions to the negative impacts of mass tourism focusing on various research environments in the Chania prefecture.

In particular, the aim of the research is to review the perceptions and attitudes of local residents in Chania, regarding the impact of technology and its applications on the local tourism industry. To achieve this purpose, an open qualitative approach will be adopted, which will allow the correlation of the participants' responses with the existing issues and the prospects of the tourism sector in the region. Through this process, the research team anticipates to highlight the potential of technology in supporting sustainable practices and managing the impact of mass tourism.

Accordingly, the objectives of the study are formulated as follows:
- Analysis of general and spatial differences regarding perceptions of technology in tourism in the Chania prefecture.
- Examination of the perceived benefits resulting from the use of technology in tourism and its impact on the local tourism economy.
- Assessment and analysis of perceived risks and threats related to the use of technology in the tourism sector, with the aim of understanding the potential challenges.
- Investigate the factors that will determine the transition process towards a technology-enhanced tourism industry with a focus on sustainability and adaptability.

Research methodology

In order to gain an in-depth understanding of people's perception of the concept of the technologically developed tourism industry and the factors that determine it, qualitative research was chosen. The thirty interviews, on which this article was based, were conducted between February and April 2024, just before the start of the tourist season in Crete. Considering the prevalence of the mass tourism pattern in Crete and the "seasonality" factor, the only difficulty faced by the researcher was the intensive preparations for the start of the tourist activity. Some participants were employees of tourism companies and others were active in the tourism industry themselves. Nevertheless, the response was generally positive.

The interview started with the introduction of the two parties and questions about the participant's age and relationship with the tourism industry. The participants were then asked to name the three most prevalent technological tools currently used in the tourism industry in Crete. Then the concept "technologically advanced tourism industry" was introduced and they were asked to mention the first three words that come to mind when they hear this concept. The brainstorming technique was used for both questions. In the discussion that followed, the participants were asked to express their personal opinion regarding the perceived benefits of the technologically developed tourism industry for the local community (Chania) in order to open a dialogue between the researcher and the participant. The same was the case for the question concerning the perceived risks of a technologically developed tourism industry for the local community.

The next question concerned the factors that would, in the opinion of the resident, influence the transition to a technologically developed tourism industry, where both there the answer was given in a climate of exchange of views and expression of the personal opinion of the resident.

The tourism industry is an important recipient of technological developments and is heavily influenced by them. New technologies and applications (social media, online booking platforms, trip advisor, Airbnb) are changing the relationship between consumers and producers of tourism products, supporting co-creation and facilitating the more specialised

experiences sought by visitors (OECD, 2016). Four photos depicting the dominant technologies were provided to the residents and served as a stimulus and preparation for further discussion with them (OECD, 2018, Insete, 2021, Ivanov 2023). The concept of technology is on the one hand very broad and on the other hand it has a wide use - application in the tourism industry. In this context, biometric technology, Internet of Things, information stands and artificial intelligence were selected (Buhalis & Amaranggana, 2015, Xiang, 2018, Wahab, 2017, Buhalis, 2019).

Study population - Research environment
Thirty (30) semi-structured face-to-face interviews were conducted between February and April 2024. The units of analysis are the residents of the prefecture of Chania, who are the main recipients of the negative impacts of the mass tourism phenomenon (Sarantakou & Terkenli, 2019). The residents were informed by telephone about the interview's topic and its usefulness. Before the interview began, the participating resident signed a written consent for the interview. The sample of thirty participants and the resulting information did not result in data saturation and there was no duplication of information (Table 2). In retrospect, it was determined that the choice of sample size was reasonable because, as it turned out, there were no additional issues or ideas. Interview participants were selected by the researcher, initially through convenience sampling and subsequently through snowball sampling. The main criteria were: age, gender, education, place of residence (rural, urban, and coastal).
Of the sample of thirty residents, seventeen are not related to tourism activity, while the remaining thirteen are entrepreneurs in the tourism sector. Ten were from the urban centre of the county, ten from the mainland, six from the northern coastal part of the county and four from the southern coastal part (Figure 1). This differentiation in terms of where the residents came from, was used because the degree of tourism development differs in these areas. Spatial segmentation of the participant sample has been identified as a good research practice in the literature (Macht et al. 2022; Karagoz et al., 2022; Hall 2011; Ning F., & Sheng-Jung, 2021).

Figure 1. Interview map

The northern coastal area of the county, concentrates most of the total population while some southern municipalities, have very low population density levels. The northern coastal part, is dominated by mass tourism, with established large hotels with seasonal operation with a large number of tourists. There is easy access to the city, port and airport (Proust & Angelakis & Drakos, 2009). The mainland of the prefecture is characterized by high mountain ranges (White Mountains) and the beaches of the north and west coast (Andriotis, 2004, 2005). The landscape is changing, access is more difficult, mountain ranges are interfering, tourism development is poor, with few small tourism units trying to participate in the landscape of tourism development. The southern coast does not have the same level of infrastructure as the northern part where there is a high concentration of infrastructure. In the southern part of the area there are small hotels and rooming house businesses, which are owned and managed by family businesses with a seasonal character. Finally, the urban centre is an attraction both for visitors from the northern coast due to the Venetian harbor and the cultural

resources of the old town and for visitors motivated by culture and history (Nodaraki et al., 2017).

The heterogeneity of tourism growth rate within the prefecture of Chania, is expected to lead to differentiated research results. The sample for this research comes from heterogeneous research settings and locations within the prefecture. The selection of residents from different geographical areas is shaped by the observation that there is uneven and diverse tourism development between north and south. This differentiation not only provides a vibrant field of study but also broadens our understanding of the structural factors that influence tourism management practices and perceptions of residents in the county.

Table 1. Demographics of participants

Genus	Number	Percentage%
Male	16	53.33
Woman	14	46.67
Age		
21-35	6	20.00
36-45	10	33.33
46-60	11	36.67
Over 60	3	10.00
Research environment		
Urban center	10	33.33
Northern coastal part of Chania prefecture	6	20.00
Southern coastal part of Chania prefecture	4	13.33
Mainland	10	33.33
Education		
Basic education	4	13.33
Degree	18	60.00
Postgraduate	6	20.00
PhD	2	6.67

Results

Perceptions of the technologically advanced tourism industry.

Based on the brainstorming technique used for this question, the responses gathered a large number of words, which were then grouped into five groups based on word associations. The verbal correlations are further summarized in a word cloud (Figure 2). More specifically, participants as a whole were not familiar with the concept of a technologically advanced tourism industry. A small number of participants responded with one or two words, several needed clarification and explanation in order to provide a response, and few participants appeared to have heard the concept before. Participants created a mixture of terms which were structured into five different concepts.

In general, different ideas have emerged about the term 'technologically advanced tourism industry'. The diversity and relevance of the answers was directly related to the status/profession of the participant, his/her educational level, but also his/her personal view of things. According to Happ & Horváth (2018), the concept of digital tourism is associated with connecting the tourism experience with digital tools, responding to the needs of tourists and improving the competitiveness of its organizations and businesses. Complementarily, the digital transformation of the tourism economy, is taking place in numerous and different aspects of the tourism industry (visitors, businesses, infrastructure, employees).

Some examples of new and innovative technologies are the use of artificial intelligence, blockchain technology, sharing economy platforms, the use of Internet of Things, virtual and augmented reality, voice search, experience marketing, etc. (Konstantinova, 2019). The integration of new and innovative technologies, (developed every day), make the tourism

industry more adventurous and exciting, inclusive socially and environmentally sustainable (Shoaib, 2019).

According to the results of the interviews and Figure 2, the concept of a technologically advanced tourism industry, was associated with cyber security and the characteristic of transparency, which ensures transparency in electronic transactions, whether carried out by a tourist or a tourism entrepreneur. At the same time, the concept was also associated with the specialised knowledge-skills required for its implementation, as well as the growth potential it may give to a destination region. One participant associated the concept as being environmentally friendly because of its intangible (electronic) nature.

Several participants, however, referred to specific applications such as "booking", or "trip advisor" and more abstract applications that they were aware of, or had used. Such examples were electronic - virtual tours, social networks, information systems and applications used for hotel organization and management. In addition, there were few references to benchmarks of the technologically advanced tourism industry, such as robots and artificial intelligence. These responses indicate that a large number of participants have little, or no prior knowledge of the concept of the technologically advanced tourism industry.

Instead, the concept was understood in terms of its benefits and qualities and on this point participants provided numerous responses. In particular, they identified positive aspects of its use, such as time saving, service automation, service upgrading, attracting specialized clientele, direct communication and the differentiation of the tourism product offered. These concepts were grouped under the 'economy-business' framework. It is worth noting that in this question, participants did not point out any negative attributes. However, there were also more abstract answers here, such as: "electronic ordering" "innovation", "evaluations", while it was expressed by a few participants that an advanced digitally developed tourism industry also requires qualified work force. Overall, it turned out that the concept examined, does not have a uniform understanding. The lack of knowledge led participants to associate the term, with what they have heard or used in their personal or professional lives. Without the presentation of concrete examples, the topic was difficult for people to understand and specific concepts could not be formulated. The fact that they also mostly focus on positive characteristics and qualities of the digitally developed tourism industry, without knowing exactly what it is, also poses a risk of differentiating their answers - opinions at a later stage of the qualitative research.

Image 2.Answers through word association
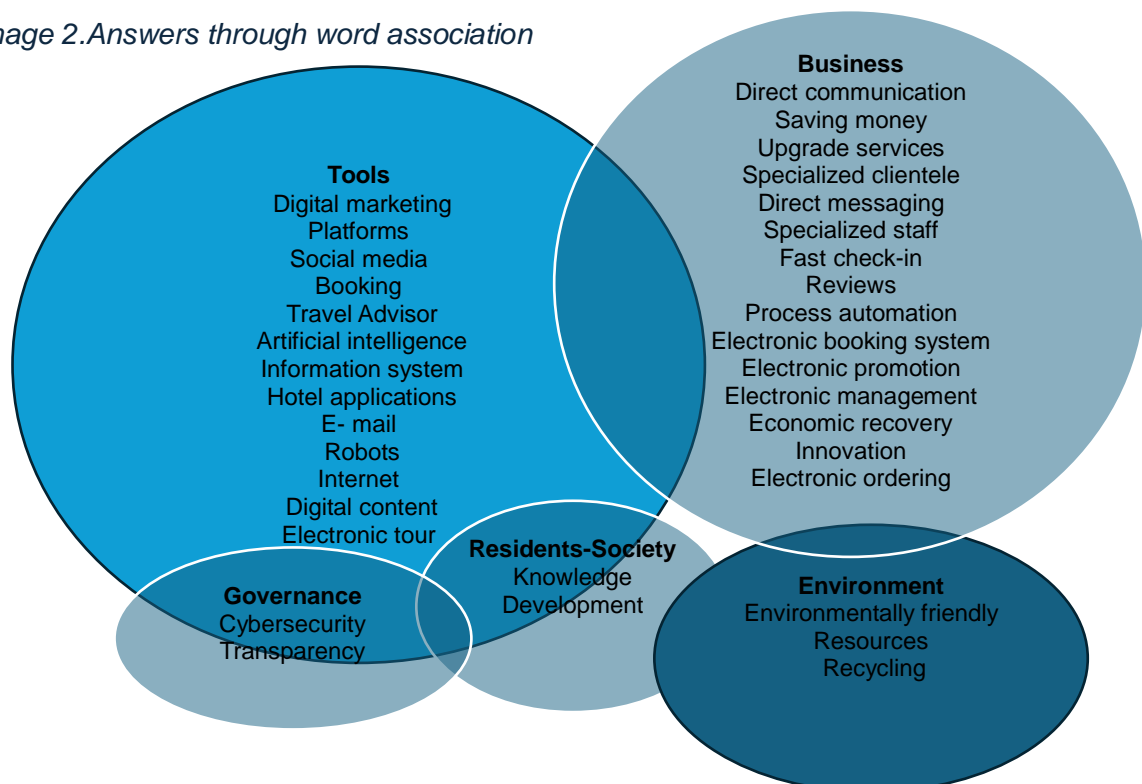
Perceived benefits of a technologically advanced tourism industry

The concept of a technologically advanced tourism industry was positively expressed by the participants. The automation and upgrading of the process of tourism services, the immediacy in the offer and distribution of tourism services, the attraction of a new type of tourist, with a profile different from the usual, were seen as concepts identical to the concept of a digitally developed tourism industry by the participants.

In the question concerning the benefits of a digitally developed tourism industry in the Chania regional unit, the participants expressed their personal opinion. The answers were varied and focused on different aspects of the tourism industry. They were derived from the personal view of things and the greater or lesser involvement of the participants in the tourism business of the place where they live, which was also the research environment. The responses were grouped into five groups based on the relevance of the responses.

More specifically, residents from the four different geographical areas, argued that the destination itself reaps the most benefits, regardless of its geographical location and the level of tourism development it is currently experiencing. In particular, they highlighted as benefits the increase in visitor flows to a region as a consequence of the visibility, through numerous online applications and the immediacy that technology offers. The immediacy of technology, also makes a positive contribution to the promotion of localness and its specificities, according to them, even in a particular geographical area.

Table 2. Benefits and risks of a technologically advanced tourism industry

Benefits	Northern coastal area	Southern coastal area	Urban Centre	Mainland
Business	5	4	6	9
Visitors		2	7	1
Residents	3		4	9
Environment	1			2
Destination	12	11	15	17
Risks	Northern coastal area	Southern coastal area	Urban Centre	Mainland
Business	1		3	1
Visitors	2	2	7	2
Residents	3	3	6	3
Environment			3	3
Destination	5	2	12	13

The use of technology in the tourism sector in the northern coastal part of the county, offers a number of important benefits as noted in the responses of residents. Firstly, optimizing bookings can lead to an increase in turnover for local businesses, while also facilitating their promotion. This contributes to revenue inflow and the economic viability of the area. Strengthening local businesses promotes not only revenue growth but also the provision of improved destination services, meeting the increasing demands of modern tourists.

It is also worth highlighting, that technology broadens the intellectual horizons of entrepreneurs and promotes the development of ecological awareness, which enhances sustainability and sustainable tourism development. In addition to this, product differentiation and advertising-promotion on digital platforms can help increase footfall, attracting visitors with an improved tourism profile who are interested in unique and differentiated experiences.

The benefits are not only limited to the region's economy, but also extend to society. The qualitative upgrading of the tourism product results in the spiritual upgrading of residents and the development of their living standards. This results in the social development and evolution of the residents, highlighting the importance of using technology as a catalyst for the development process of the region. As can be seen from the above, the use and integration of

technology n tourism industry, it appears that there are various and multidimensional benefits for local communities and their economies.

The risks of the technologically advanced tourism industry for the local community
In the question regarding the risks of a digitally developed tourism industry in the regional unit of Chania, the participants expressed their personal opinion. It is worth underlining that most of the risks were related to society and the destination (Table 3). The disappearance of jobs and, thus, unemployment, which is caused by the application of technology, was mentioned as a risk for all four geographical areas.

The excessive electronic promotion - advertising of a destination has as a consequence the ever- increasing number of visitor and the emergence of phenomena of over tourism in urban centers, resulting in the degradation of residents' quality of life. Exceeding the limits of visitors in the urban environment of a city and the degradation of the life of residents, which is also emphasized by Hristov et al., (2021), Dragan & Camara, (2021), and Celata & Romano (2020).

Fears have been expressed about the homogenization of societies and their transformation into homogeneous tourist societies, societies where few will receive the benefits (revenues), but all will suffer the consequences. In the mainland, fears of overdevelopment and massification of the destination emerged, resulting in the loss of local architecture "*large flows of visitors require large accommodations,*" and the disappearance of professions linked to cultural and folkloric features of the rural areas.

Additionally, another significant risk that lurks and harms a destination from the use of technology, regardless of its geographical location, is the distorted presentation of a destination and its tourism services. This negative testimony is also highlighted by Zhou, Lu and Wang (2023), who, in their research, state that doctored and altered photos of destinations, on social media is not just a matter of bloggers but a more complex process involving commercial forces, the nature of the social media platform, and audience preferences. Within this context, authenticity becomes a fluid, and negotiated and contested concept, constantly shaped by interacting elements.

Modern marketing and the use of social media create a significant discrepancy between the projected image and the actual image experienced by the visitor. Enhanced and unrealistic images on social media, blogs, and videos create a gap between expectations and reality (Butler R., 2017).

Social media platforms have the ability to exert significant influence on the decision-making process of tourists, as they contribute to the formation and communication of the image of a destination (Rahman A. et al., 2020). This dynamic arises from the way information and experiences shared on these platforms affect the perceptions and choices of potential visitors.

The risks also include the lack of tourist awareness, through the deliberate distorted presentation of tourist services on websites by providers, with incalculable consequences for the destination (negative visitor reviews, defamation of the destination, decreased visitation).

But the main risk that has been raised and is related to visitors is the leakage and loss of their sensitive personal data. The use of technology in the leisure industry requires personal information of the guest in a multitude systems and applications (hotel bookings, personalized messages, electronic payments) at all phases of the travel experience (before, during, and after).

The impersonal and contactless communication of visitors with computers instead of local people, is a secondary risk expressed, thus highlighting the importance of communication and interaction with locals when travelling in Crete. More specifically, several residents stressed that the hospitality and character of Cretans, are building blocks of the Cretan tourist product, an added value, where an imminent replacement by impersonal machines would have a devastating impact on the loss of local identity. Additional risks that threaten the residents of this destination, include the possible disappearance of small and medium-sized tourism

businesses. These businesses, unable to compete with the large enterprises in the industry, may face serious challenges to their viability. The inadequate level of existing digital infrastructure is an additional risk factor, which limits the potential for growth and renewal of their business models.

The cultural assimilation of the inhabitants of the county, into western social models is a concern for the participants, as well as the alteration and break-up of social relations between the family (in cases where a family home change use and becomes an Airbnb), the commercialization of tradition due to the tendency to make profit. Public servants and teachers are displaced from rented houses during the summer months, transforming the use of the houses from urban to tourist use, degrading the quality of public services and public education to the county's residents. This phenomenon is directly related to the "tourism paradox" in tourist destinations, where the tourism industry and its prevalence have a dominant role in the economic and social structure of a place, and consequently unsustainable tourism (Arikan & Unsever, 2018).

The immediacy of technology and its potential (outreach to targeted audiences, rapid dissemination of information) is capable of threatening destinations with fragile ecosystems, or mild tourism development. In the mountainous mainland and the lush White Mountains, there are phenomena of increased building, construction of Airbnb houses with swimming pools, with the few inhabitants concerned about the imminent alteration of the natural landscape and a possible over-concentration of visitors that technology is capable of bringing about. In the same landscape, residents point to the existence of hiking trails, an activity compatible with the landscape and the rich flora and fauna that technology could help, reaching a niche market segment of tourists.

At the same time, a bad management practice of a protected area in the prefecture (Balos Lagoon, Lafonisi) and the sharing of it by visitors on social networks, fosters a "cancel culture", targeting the whole population of the destination (in this case the population of Chania prefecture) and not only the local authority that managed it. The power of cancel culture (intolerance to views of ideas contrary to those dominant on social platforms) is not limited to individuals or organizations, but also to ideas or values and can have devastating effects on someone's life or future (Simmon, 2021).

The factors will influence the transition of the local economy towards a technologically advanced tourism industry

Living permanently in a tourist prefecture such as Chania, and the direct or indirect involvement of the participants in the tourism activity, determined the responses regarding the factors that will influence the transition of the tourism economy. Several older participants and tourism business owners considered their generation to be "mature" and not so digitally literate with the use of technology in managing their businesses.

The age gap in the digital skills of the tourism workforce, has been highlighted by Carlisle et al, (2020). This finding is consistent with the findings of the survey conducted by Minor et al. (2024) in the four countries of the UK, which focuses on the gaps in digital skills and digital training in tourism businesses. Particular emphasis is placed on emerging technologies such as artificial intelligence and robotics, as well as areas of online marketing and social media (Zaragoza-Saez et. al. 2020). The interaction of these factors, becomes crucial for the development of a competitive and innovative tourism sector.

Table 3, classifies the factors into categories (intergenerational, competition, government policy, destination infrastructure, environmental awareness, tourism demand) offering a structured approach to the analysis. It compares four different geographical areas of Chania (North coastal area, South coastal area, Urban Centre, Mainland) allowing the identification of spatial differences in the impact of factors by area.

Table 3. Factors affecting the transition to a technologically advanced tourism industry

	Northern coastal area	Southern coastal area	Urban centre	Mainland
Intergenerational factors	4	4	7	8
Competition	1	1	2	1
Government directive (national - regional policy)	5	1	10	5
Infrastructure - network (destination infrastructure)	1	2	1	3
Environmentally aware society.				1
Tourism Demand			1	1

Study participants identified the factor of intergenerational occupational mobility, which is observed both in the mainland and in the northern and southern coastal regions. This factor refers to the continuation of family occupational activity from parents to offspring, with the last generation demonstrating greater familiarity with technology than the previous generation.

One of the participants, a resident and entrepreneur in the north coastal area aged over 60, pointed out emphatically: "*My generation of entrepreneurs is leaving. The younger generation is taking over and they are far more familiar with technology than the older generations*."

The above observation highlights the importance of education in the context of entrepreneurship and professional development in coastal communities.

As a consequence, the new generation of entrepreneurs, uses digital tools more modern and shapes a completely new tourism product in the family business, adapted to new needs, which in turn attracts a completely new type of tourist. Older generations of residents (both entrepreneurs and employees) find it difficult to make the digital transition, because they do not have sufficient digital literacy to keep up with the digital era. They testify, that many young people are leaving the mountainous mainland of the county, because of the lack of training programmes in new technologies, migrating to urban centers in search of opportunities.

Thus, intergenerational factors and factors related to education, digital skills, the degree of familiarity of the current generation with technology, compared to the previous generation, and the digital awareness of the current generation, constitute an important transition factor. However, residents in the northern coastal part of the prefecture of Chania, where the mass tourism model dominates, consider the digital infrastructure of the destination an important factor in modernising the tourism economy.

In addition, they argue that the current level of internet services is inadequate and express the urgent need to modernize the destination's information systems. It should not be forgotten, that the existing digital infrastructure is shared by both residents and visitors during the summer months. Therefore, living with tourists influences the perceptions of residents (Kim & Kang, 2020; Dirksmeier & Helbrecht, 2015; Carneiro & Eusebio, 2015; Segota Mihalic & Perdue, 2022; Figueiredo & Kastenholz & Pinho 2014; Moyle & Croy & Weiler, 2010).

Special mention is made by the participants of the government initiative - will (national - regional - local level), either in the form of training programmes (seminars to acquire or upgrade skills), or through incentives (grants, funds) focusing on the introduction and integration of new technologies in tourism businesses.

Greece's competition with other tourist destinations in the Mediterranean, as well as the continuously changing needs of visitors, play a crucial role in determining the pace of transition of a society or destination that is economically dependent on the tourism sector. Inevitably, these developments affect the development and adaptation strategy of the tourism sector. Furthermore, alignment with competitive destinations and the utilization of best practice examples from destinations that have succeeded through technological applications, are emerging as key factors for enhancing the competitiveness and sustainability of the tourism product. Reporting on these practices offers valuable insights and suggestions for further development of the region.

Conclusion

The present research effort investigated how the residents of Chania regional unit, perceive the concept of a technologically developed tourism industry, its benefits and risks. At the same time, their views on the factors of transition of the tourism economy of Crete to a technologically developed one were explored. While previous studies focused on the effects of tourism on the lives of residents, the research here focuses on perceptions of digital transformation of the tourism economy of Crete and the prefecture of Chania in particular, as a key topic of discussion. The research used specific technology applications used in the tourism industry and focused on four different areas of the prefecture, with varying degrees of tourism development. This helps to gain deeper and diverse insights into people's perceptions.

The analysis of the technologically developed tourism industry confirmed the importance of digital development as a key factor in enhancing the tourism experience and local tourism development. Participants coming from different geographical regions, acknowledged that the application of technological tools such as artificial intelligence, virtual reality, Internet of Things, offers a variety of benefits such as increased footfall, improved service and process efficiency.

The automation of services is directly linked to visitor satisfaction and improved security, while promoting the modernization of infrastructure. The electronic promotion of small local businesses and agricultural products, enhances localism and promotes specific forms of tourism, contributing to the diffusion and dispersion of visitors to less developed tourist areas.

Technology offers the opportunity to implement strategies that enhance the extroversion of the destination, so its integration in tourism policy and in the design and development of tourism services, contributes to the sustainable development of tourism in a place. The use of biometric technology, enhances the visitor's sense of security and experience, while the importance of training staff and familiarizing residents with the new technologies is underlined for their effective use. From all of the above, the need for strategic investment in the digital infrastructure of the tourism industry is evident, in order to maximise the benefits to the tourism sector and the local economy.

The analysis of the risks associated with the technologically advanced tourism industry, demonstrates that despite the positive outcomes of digital automation, there are significant challenges that need to be addressed. Participants identified job disappearance and unemployment, as the main risk resulting from the replacement of human labour, with automated systems and technologies. Excessive and uncontrolled e-promotion, can lead to phenomena of over-tourism, with negative impacts on the quality of life of residents and degradation of the natural and built environment. There is considerable concern about the homogenisation of host societies, which risk becoming tourist societies without real benefits for all residents. The installation of wider infrastructure such as interactive information stands, offers the opportunity to provide information on local features, but may imply a loss of human contact, which is a key factor in the Cretan tourist experience. In addition, the risks arising from the application of technology, such as loss of personal data and privacy breaches, reshape the visitor's relationship with technology.

The analysis of the factors influencing the transition of the local tourism economy in the prefecture of Chania, presents a multidimensional picture, where technological developments and social dynamics interact in many aspects - dimensions of social life. Older participants distinguished the digital challenges they face, recognizing the need for education and training in new technologies. The absence of adequate training programmes leads not only to difficulties in adopting digital tools, but also to the movement of young people to urban centers, affecting the sustainability of rural communities. Intergenerational mobility promotes the creation of modern tourism products by the younger generation, which seems more familiar with technology and the needs of the modern tourist. However, the inability of older generations to adapt, creates inequalities in the labour market and in the tourism experience.

It is also necessary to note the recognition by residents of the need to modernise the destination's infrastructure and digital services.

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