



Metaverse in Tourism and Hospitality: Empirical Evidence on Generation Z from Italy

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Abstract

The paper intends to analyze the change taking place in tourism marketing due to the metaverse. The tastes and needs of today's new generations of tourists, especially Generation Z, are becoming more and more in line with new technologies. Tourism marketing requires a change in the way of promoting and telling a product and a brand. The objective of the paper will be to analyze the digital tools of the Metaverse and of the “immersive” technologies. The results of a survey that investigates people's propensity to use digital tools and new technologies will also be presented. Further objectives will be to understand the role these technologies will have in the world of travel and to provide a “guide” for tourism-related businesses, trying to help them face and understand a highly dynamic sector.

Keywords: Metaverse, tourism marketing, Generation Z

Introduction

The digitization of the tourism and hospitality market has now a great diffusion for several years: tourists book and collect information on the web to find the best travel offers. Innovations of the last few years have revolutionized traditional tourism experience purchase models. Marketers in the industry have had to rethink how they sell and sponsor tourism products and services. Nowadays, almost all tourism marketing strategies are linked to conventional and digital marketing tools and strategies. The metaverse is

now starting to be familiar to the Z generations in several countries. In the future, tourism and hospitality businesses will have to earn the trust of the tourists of the future through innovative choices that are increasingly linked to technology.

The main objective of the paper is to understand what recent tourism digital marketing techniques the tourism businesses can implement and how to interface with future technologies such as artificial intelligence, robotics, augmented reality, virtual reality and blockchain.

The research questions are the following:

1. What are the digital marketing tools and strategies that a tourism company must implement to be competitive in a dynamic market?
2. Will the new technologies related to tourism completely change the way tourists travel?
3. What are the experiences that tourists live in the digital world?
4. What is the propensity of people towards new technologies such as augmented reality, virtual reality and the metaverse?

In order to answer the research questions, the paper aims to study the literature about digital marketing and its most current frameworks to explore digital marketing strategies and immersive technologies. In addition, a survey was conducted using a questionnaire to investigate the tourist's approach to online digital tools and the knowledge and degree of appreciation of immersive tourism.

Literature review

A new form of the internet where augmented reality, virtual reality, blockchain, 5G and gaming platforms converge is the metaverse. The primary objective of the metaverse is to make users interact virtually, overcome the limitations of devices and immerse themselves in a new world where the boundaries between what is physical and what is digital are increasingly blurred (Buhalis et al., 2022). One could therefore think of a set of interconnected virtual and real worlds, populated by avatars, with spaces in which to meet, work, have fun with people who are elsewhere. To access this new environment, you will wear a viewer or a pair of glasses such as augmented reality glasses or even just a PC for some applications. It is a transformation that will completely change the world of tourism: the Internet is about to leave its three-dimensional derivation to the metaverse (Capannari L, 2022). Privacy, legislative security regulation and the need to be an integral part of the metaverse.

The concept of synthetic travel is not new and with the advent of metaverse, this way of "virtually traveling" will certainly be accentuated. Metaverse tourism and metaverse travel technology help alter the relationship between companies and their customers by bridging physical

distances and offering new experiences. In particular, the concept of metaverse offers opportunities to inspire the customer and provide valuable information that cannot be accurately provided in other ways, assisting them in a more informed choice, improving the booking experience.

View the environments of a hotel in the metaverse before buying it for a "real" trip, to get an idea of how big the rooms are and what services are offered, explore the destination in advance before booking it, get to know the avatar of the guide who will physically meet once you arrive at the facility, or enter a museum from the comfort of the sofa at home. In this way, the intangibility of the service that characterizes above all the world of travel (the fact therefore of not being able to evaluate performance before a purchase) would almost completely disappear. Ultimately, the true value of metaverse tourism offers during a booking process is their ability to increase overall booking volumes (Chulmo et al., 2022). Furthermore, the metaverse can be used as a tool to live the travel experience: you can visit cities, take a holiday in a resort village, participate in fairs, exhibitions, conferences, concerts, live the experience of worldly life, discos, festivals, etc., you will have the opportunity to interact with the local community, to visit a zoo to discover extinct animals or to relive a past travel experience. The metaverse can hardly replace the journey but it could play a very important and supportive role. Just as social networks have become essential for marketing in a few years and just as the website has evolved from a simple online showcase to an extension of the structure itself, the metaverse could potentially be the next innovation in the hospitality sector (Kim, 2021).

Methodologies

Sample characteristics

The study sample was a national sample. The respondents consisted in individuals who contacted by interviewers between the ages 20 and 28, approximately trained in data collection procedures and used as interviewers. This approach has been successfully used in previous research (Jones and Reynolds, 2006; Reisenwitz and Fowler, 2009).

Interviewers administered questionnaires and were instructed to screen potential respondents with three qualifying questions on the cover page of the questionnaire: a) an age range that categorized the respondent as a member of Generation Z; b) an acknowledgement that the respondent had known almost one of the four Italian travel blogger and c) confirmation that the respondents love travel.

An introduction to the questionnaire was just below the seven questions on the cover page, including an assurance to respondents that their responses would be kept confidential.

The estimated time for compilation is about 6 minutes. It was also chosen to exploit a logical and coherent structure to ensure sequentially to the interviews.

The questionnaire has four macro-sections and thirty questions. The first section included demographics questions (see Table 1). Another section asked respondents to report their travel habits in a series of dichotomous questions and frequency level questions (see Table 1). The remainder of the questionnaire focused on the general knowledge of digital tourism, synthetic tourism and metaverse.

Multiple choice answers were done. Within the second and third section concerning digital tourism and synthetic tourism, two questions were asked. The first question includes 5 items with a 7-point Likert scale answer, aimed at investigating the importance of some digital tools in the management of the trip (choice, booking, experience). The second question uses a semantic differential, aimed at investigating the interest in using physical or digital tools to experience the journey. The last section about metaverse has been structured into four subsections and it focused on the metaverse: three questions were asked with answers on a 7-point Likert scale. Three items about the interviewee's interest in using the metaverse as a tool for organizing trip (choice, booking, purchase) were given, following by 9 items about the interest in using it as a tool to live the travel experience in different situations. In the last subsection three further questions were asked about the propensity to use a similar technology for travel to investigate the price expectations of a trip to the metaverse compared to a real trip. The last open-ended question tries to understand if, according to the respondents, there could be other advantages in traveling in the metaverse.

The questionnaire was written in Italian because all respondents are Italian. We required participants to be born between 1997 and 2012 to be part of Generation Z (Combi, 2015). To facilitate interviews, we required participants to live in Italy and used smart phone apps or at least had experience and knowledge of using smart devices. we collect this sample through face to face interview. To limit nationality and social influence, we required participants to be Italian or have lived in Italy since childhood. Our sample frame is also greater than comparable studies (Fedrina et al. 2021; Benasso, 2021). This survey was carried out over a five-month period from September 2022 to October 2022.

Table 1. Descriptive information of sample

Item		Generation Z per cent (n) 100 (455)
SOCIODEMOGRAPHIC CHARACTERISTICS		
Gender	Male	19,7 (90)
	Female	80,3 (365)
Age (18-25)	20-25	88 (400)
	18-20	12 (55)
Nationality	Italian	100 (455)
Origin	Milan	91,9 (418)
	Milan suburbs	8,1 (37)
Marital	Single	87,9 (400)
	Living with another	12,1 (55)
	Married	0
	Widowed	0
	Separated	0
	Divorced	0
Education completed	High School	4,40 (20)
	Undergraduate	54,94 (250)
	Graduate	39,56 (180)
	Other	1,1 (5)
Occupation	Not employed	2 (17)
	Student	79,78 (363)
	Self-employed	1,76 (8)
	Professional	6,59 (30)
	Work in a firm	4,84 (22)
	Other	3,29 (15)
VACATION CHARACTERISTICS		
Vacation destinatio	Instate	92 (420)
	Out of State	4,84 (25)
	international	3,16 (10)
Travel time (days to and from destination)	0	1,3 (6)
	1-5 days per year	84,4 (382)
	6-10 days per year	10,8 (49)
	More than 10 days per year	3,5 (18)
Lenght of stay (without night per year)	Never	9,3 (42)
	1-5 trips per year	50,3 (229)
	6-10 trips per year	22,7 (103)
	More than 10 trips per year	17,7 (81)
Preference to stay overnight	House	1,6 (7)
	Hostel	1,8 (8)
	Cruise	1,2 (5)
	Touristic village	7 (31)
	Caravan/camping	2 (9)
	Holiday flat	55,6 (252)
	B&B	16 (75)

	Hotel	14,8 (68)
Principal means of transport	Ferries and boats	5,4 (25)
	Plane	7,2 (33)
	Train	13,7 (62)
	Rental car	5 (23)
	Peronal car and motorbike	68,7 (312)
Motivations	Scout	0,4 (2)
	Family	38,2 (174)
	Sport	8 (36)
	Religion	1,7 (8)
	Business	4,1 (19)
	Education	28,7 (131)
	Culture and leisure	18,9 (85)
INTERNET CHARACTERISTICS		
Do the respondents use online social network for travel purposes	Yes	85 (387)
	No	15 (68)
How often do the respondents use online social network for travel purpose?	Always	64,2 (292)
	Usually	9,6 (44)
	Frequently	13,7 (62)
	Often	9 (41)
	Sometimes	2 (9)
	Occasionally	1,5 (7)
	Seldom	0 (0)
	Rarely	0 (0)
Do the respondents use online social network to collect information about future travels	No, I never use social network, but I collect informations through different marketing channels	4,4 (20)
	Yes, I watch online advertising/promotion on my social network profiles	19 (86)
	Yes, I love storytelling and photos of my followers and travel bloggers	40,9 (186)
	Yes, I do research by myself using hashtag or I look for travel account and they inspire me	35,7 (163)

Data collection

A ten-page questionnaire was used as the survey instrument and it was developed with four main constructs including scale items. Further, to collect required information from many respondents, we used a face to face survey method.

Three pretests were conducted to test the questionnaire among the students and professional friends from other generation. Validity of the

research instrument can be appraised by a panel of able professionals whose expertise can judge whether the scale measures what it intends to measure and the questions are clear (Zikmund et al., 2013). The first pretest (n = 24) were conducted with a high school class of traditional students (Generation Z). Some basic formatting issues were addressed as a result of the pretest. A second pretest (n = 12) was conducted with an undergraduate marketing class of traditional students (Generation Z). Modifications and reviews, including a radical change of two questions, were made as a result of this second test. A third test (n = 3) was conducted with marketers participating to a conference in the exposition „TTG Travel Experience“ hold in Rimini from 11 to 13 October 2022.

Based on the input received, modifications, including a cancellation of few items in the questionnaire, which were considered unnecessary, were done and wordings change to enhance understandability.

The data for the main study were collected, coded and entered into the SPSS (Statistical Product and Service Solutions) program.

Data were collected among the face to face interview individual aged between 18 and 25 (Generation Z), including high school and college students. Finally, we obtained 455 complete and useable responses in Generation Z sample set from the face to face survey from the total of 475 collected surveys. Respondents were explicitly asked to reflect on metaverse when filling out the responses to the questionnaire items. We have eliminated thirty responses due to their non-random missing value. The non-response biasness was tested and compared the “early” and “late” respondents’ responses, based on the date of the received replies to the questionnaire (Armstrong and Overton 1977).

Data analysis

The study’s one-round survey combines qualitative approaches.

In order to improve the indicators’ validity, convergence, consensus and concordance we verify the representation of the sample compared to the population.

We apply the t-test (sample mean comparison), the first 30 per cent of responses was compared with last 30 per cent and thus, the independent sample of t-test displayed an insignificant difference between these two groups, implying no case of unit non-response bias with the collected. Moreover, we provided a sticky to each respondent when they began to fill up the questionnaire to elicit the honest and true responses from the chosen sample. Offering gifts (such as coupons, cash incentives and samples) in face-to-face interview is widely practice among the researchers to motivate survey respondents and it improves the completion rate (Chen et al., 2015).

Results

After investigating the socio-demographic characteristics of the respondents and analyzing the section relating to digital innovations in tourism, the questionnaire aims to answer the second research question analyzing the section of synthetic tourism. First, the knowledge of augmented reality, virtual reality and metaverse of the respondents was examined: most of the respondents (78%) say they know augmented reality. About virtual reality, almost all of the respondents (92%) say they know it and most of the respondents (82%) say they know the metaverse. Several questions were asked to analyse how respondents wish be in using the metaverse as a tool for organizing their trip (choice, booking, purchase). The items proposed are the following: metaverse can suggest purchasing a tourist experience in a travel agency (72%), it can review the rooms of the hotel for next travels (8%) and, using it, respondents can know the avatar of your companion (15%).

Some questions ask the respondents indicate the level of interest in using the metaverse as a tool to increase experience in the trip: sightseeing the cities, vacation in a resort village, visit a zoo to discover extinct animals, live a past travel experience, participation in exhibitions, fairs and conferences, attendance some concerts, live the experience of discos, festivals, etc., interact with the local community.

Another question aims to know if respondents would use similar technology for their travels if they had the opportunity: 461 answered affirmatively. Most of the respondents (93%) argue that a trip into the metaverse should cost less than a real trip, 6% say that a trip to the metaverse should cost the same as a real trip. Only 1% of respondents think that a trip to the metaverse should cost more than a real trip. A further question was asked about the advantages of being able to travel into the metaverse. In particular, four possible items were presented. Metaverse can test an experience or an attraction that is on the other side of the world, can improve the booking experience, allows people that don't have the possibility to travel or it is an escape from real life.

The variable that has obtained a higher score is "allow those who do not have the possibility to travel", following "testing an experience or an attraction that is on the other side of the world"; then "temporarily escape from reality".

At the end of the questionnaire, researchers put the following open-ended question: "in your opinion, could there be other benefits to travel to the metaverse?". 127 responses were collected. One of the advantages of the metaverse is the inclusion of those who may experience difficulties in dealing with a trip such as people with disabilities, elderly people.

Discussion

The paper investigated the knowledge and the degree of appreciation towards synthetic tourism and the metaverse. The analysis of the data collected shows that the tourist shows that only a little part of the sample has never heard of the metaverse. Once this reality and its functioning were explained, it was possible to deepen their opinion on the metaverse and its use for travel. The fields of application are endless: choice, booking and travel organization. The metaverse turns out to be a useful and supportive technology for the tourism industry. The possibility to preview the destination or the rooms of the accommodation facility is a big opportunity that most respondents consider absolutely innovative and challenging. Concerning the travel experience, the analysis shows that most respondents would use the metaverse as a tool to live a past experience. The metaverse can also focus on the dimension of emotions to attract more and more people. Furthermore, most respondents would use similar technology to travel. About the price expectation of a trip into the metaverse, the perception by the sample is that it should cost less than a real trip.

Finally, conflicting opinions emerged: some respondents believe the metaverse loses authenticity and someone else describes advantages: inclusiveness thanks to the reduction of prices, architectural barriers and the possibility of shortening distances.

Conclusion

The advent of the Internet and technology has revolutionized the tourism sector by making important changes and influencing trends in the market. Through the digital tools, tourists have become more and more demanding and independent: they communicate directly via web platforms with basic service providers, bypassing traditional intermediaries and using new online travel intermediaries. Not only have people been conditioned by this change, but also companies have had to adapt to new methods, no longer linked only to traditional marketing but also to digital marketing.

The paper argues that marketing 5.0 will be the marketing of the future in the metaverse. Those technologies imitate the human to create, communicate, offer and increase value along the customer journey. The Z generations, digital experts, will be the tourists of the future who will require immersive experiences increasingly linked to technology. For this reason, companies will be competitive approaching the metaverse that will hardly replace the journey, completely eliminating the intangibility of the service. The results obtained from the survey show that the tourist of generation Z in most cases takes advantage of digitization. The analysis shows that only a little part of the sample has never heard of the Metaverse and that it appears to be a useful and supportive technology for the tourism industry: it attracts

above all the possibility of being able to preview the rooms of the accommodation facility. Once again, therefore, the essence of the metaverse emerges: offering opportunities to tourists by improving their customer journey, the path that each customer takes before making a purchase. Most respondents would use similar technology to travel; in particular, not to live an experience of worldly life but rather as a tool to relive a past experience. Hence the conclusion that the emotional dimension wins: the possibility of being able to relive a past experience will involve more and more people in the metaverse, where it will be possible to immerse yourself in experiences already lived. Finally, conflicting opinions emerged in the open responses: for some it could be a unique and inclusive opportunity; for others, a loss of authenticity. In conclusion, it is important to get in touch with these technological realities because their use represents one of the main levers of development and efficiency increase in the travel sector.

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