

Youth Generations, New Technologies, and a New Kind of Tourism—Trends and Challenges

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Abstract

This investigation is based on the trilogy of Youth generations, technologies and tourism, and its objective is to carry out a theoretical reflection on the theme, bringing together scientific information from different countries, which allows for a characterization of the new trends in tourism that is increasingly manifested digitally, requiring a close intrinsic relationship with technologies and implying new tourist experiences on the part of individuals, namely the youth generation. The methodology used is a literature review covering themes on the evolution of mass tourism toward a New Tourism or Post-Tourism, the use and impact of new technologies in the context of the offer of tourist experiences, in the research and publication of information in social media by new tourists, with a focus on the Youth generations. A characterization of the generations of Millennials and Post-Millennials is made, tracing their respective profiles, taking into account their way of acting in social media in the current tourist context. The User-Generated Content (UGC) is highlighted, whose information is related to the tourism experiences lived by young people and shared by them on social networks, information, and communication channels with growing impact and alternatives to those that disseminate paid information and published on the net. In the final considerations, some of the most important conclusions of the research are taken up again. Some recommendations are reinforced in these matters collected in the research and which can serve as a reflection and alert so that the stakeholders involved in this new tourism can obtain better performance and results.

Keywords

Youth generations

Technologies

Tourism

45.1.

Introduction

At a time when all over the world, most citizens have a lifestyle in which technologies are a sign of progress and are part of their daily lives, strongly conditioning them (for better or for worse), we think it is opportune to reflect on them, from the perspective of their use by the youth generations in the context of current tourism.

Thus, the objective of this investigation is to make a theoretical reflection based on investigations carried out in different countries and that explore the subject under analysis.

As for the adopted methodology, it consists of reviewing the literature, integrating a theoretical approach that bridges empirical studies on various types of practical realities, in a close theoretical-practical relationship that is stimulating from a scientific point of view.

Regarding the structure of this work, after the introduction, a theoretical framework is made that will initially address the evolution of Tourism toward a New Tourism or Post-Tourism, in which new technologies play a crucial role in a new and creative experience of new tourists and the success of tour operators and other agents related to them. Next, the generations of Millennials and Post-Millennials are characterized, focusing on their behavior and expectations in relation to social media in the tourist context. Following this subject, the impact of User-Generated Content (UGC) is emphasized in the context of youth tourist experiences.

Finally, the final considerations reinforce some of the most important conclusions arising from the investigation. Through the selection of some results of the analyzed research and that correspond to good practices in the field, we seek to gather and reinforce recommendations that serve as inspiration for improving the performance of the different stakeholders involved in the current international tourism scenario, reconfigured and dependent on technologies to get more success. Finally, for all this, we think we have contributed to the characterization of a new kind of tourism, close to e-tourism, which requires, on the part of all stakeholders involved—travel agencies, tourist content editors, and official bodies linked to tourism—awareness and change.

45.2.

Theoretical Framework

45.2.1.

New Tourism and New Technologies

Thanks to the information and knowledge society in which we live, the ways of living, working and enjoying leisure time have been changing due to several factors, including technologies.

Technological evolution has allowed tourism companies to restructure their operations and processes in order to take advantage of emerging technologies such as Virtual Reality, Augmented Reality, and QRcode. These technologies made it possible to help tourists find parking, navigate public transport, find accommodation, restaurants, and tourist attractions, serving as an aid to providing information and favoring interactivity [12]. Monaco [3] states that in the context of the evolution of society in general, in the western world, tourism has also evolved, with new realities and tourism practices due to globalization, progress in transport, and due to the impact of the constant presence of communication tools.

Dujmović and Vitasović [4] reflect on the transformations that tourism has undergone, since its emergence, following the Industrial Revolution and industrialization. They refer that tourism, with the democratization of travel and leisure, has become fundamental to the economy, conditioning social and political aspects and highlighting the changes that have taken place from modern to post-modern culture. Based on concepts proposed and developed by other authors, they reflect on “post-tourism” and “post-tourists” who are opposed to “mass tourists”, who are passive consumers of tourist products, while post-modernity tourists are active participants in creating the tourist experience. What characterizes post-tourism is the valorization of the individual role of the tourists, their motivations, and various experiences.

Through technologies, individuals can experience a new type of tourism, which, in some cases, does not require physical travel to nearby or distant locations through physical travel. This situation allows people to enjoy the attractions comfortably, free of charge, and, in certain situations, with greater security, through videos and virtual reality, in the time and space chosen to view the desired tourist products. Since these experiences can be done in everyday life, the boundaries between daily routines and tourist activities are blurred. Thus, this is a process designated as “dedifferentiation”, according to the post-modern view, in contrast to the concept of “differentiation”—difference, distance between everyday and tourism experiences—that characterized the modern, standardized and inflexible tourism. In short, people, in the post-modern era, can have tourist experiences, wherever they want, whenever they want, as long as they have access to the internet and technological devices that enable them to access the digital content made available.

A concrete situation that shows the impact of this new technological reality and that contributes to the development of new cultural and creative products in tourism takes place in China, in Forbidden City. In a research conducted by [5], several case studies of virtual artistic installations

exhibited in an exhibition hall that allow interaction with the public through the so-called new generation of information technology are presented. Focusing on mobile technology, the authors analyze the suitability of this technology for the development of these products and how to use them in the best way for a better development of the cultural and creative tourist product. Several examples illustrate very well how these new technologies are exploited, such as the GIF (Graphics Interchange Format) that give dynamism to the figure of the Emperor Yongzheng, or the mini-programs based on Wechat—Rap of Emperor Yongle, in which through the H5 it is possible to lock a competition held by both the Forbidden City and Tencent. And an app based on both iPhone and Android platforms, which is used to virtualize the online exhibition hall. There are still iPhone apps and iPad apps used to display painting collections, allowing the public to get a glimpse of the elegant life of a palace of the Qing Dynasty. Also, iPhone and Android platforms allow visitors to view the digitalizing of famous paintings or the architecture of the Forbidden City.

In summary, in the scope of theory and good practices explained here, some ideas should be taken from this innovative case study whose authors highlight the great advantages of mobile technology and its mobility, which allows overcoming spatio-temporal limitations and becoming part of the daily lives of individuals. Of note are other potentials such as increased access or interfaces for the consumption of cultural and creative products by consumers, as well as the possibility of enriching the promotion of cultural and creative contents thanks to the growing deployment of installed advanced technologies on mobile platforms. The new tourism industry must therefore invest in varied, creative, and dynamic digital products, actively involving post-tourists and motivating them to consume this new kind of products.

45.2.2.

Millennials and Post-Millennials and Their Involvement in Social Media Within Tourism

Having made this general framework on the new characteristics of contemporary tourism and its strong relationship with technologies, we intend, then, to analyze the behavior of certain age groups of the young population in front of this new tourist reality shaped by technologies and the challenges it presupposes. Thus, we will start from the results of a comparative study among young Italian web users from two different generations—Millennials or Generation Y (individuals born in the period 1980–1995, approximately) and Post-Millennials or Generation Z (individuals born between 1996 and 2010, approximately) (Monaco [3]). It

is interesting to note that some results obtained from the two groups are similar, while others diverge.

Starting by highlighting some of the differences found in this research, Generation Z youth base their decision-making for purchases and reservations on information researched on the net, they consult online friends and use social media contacts in plenty for sharing information about personal experiences. The way they communicate is mainly through instant messaging and chat apps and mobile devices such as smartphones and tablets are almost exclusively used. As for Millennials, in addition to mobile devices, they make greater use of personal computers and, for information research and decision-making on purchases, they both use the internet and communicate through more traditional means such as the telephone or magazines. Although they have great confidence in information retrieved online, face-to-face communication still weighs heavily on their choices and they rely more on friends or family than on information from websites [3].

Another difference pointed out by the author concerns the UGC, as Millennials, despite reading comments online, are less likely to produce their own comments, while post-Millennials are more likely to leave comments, revealing a way to be proactive. As prosumers (consumers and producers of information), they even become part of the tourism sector, as they convey information that is often recognized as more reliable than that disclosed by tour operators or suppliers of goods and services.

We will now highlight some of the similarities found between the two generations under study, one of which is the care that all these young people have, when they get information in advance on the internet, by consulting review sites about accommodation or restaurants, like Booking or TripAdvisor, and it is worth noting that they even change their plans when they read negative comments. Another common aspect between Generation Y and Z is the growing trend in the tourism sector to promote collaborative consumption, such as on the AirBnB portal, which aggregates information on the demand and supply of short-term stays, allowing interactions between its customers. Likewise, through new technologies, both groups have the opportunity to experience a customization of their tourist experiences, according to their tastes, requirements, and expectations of getting to know something different from mass tourism.

Also in the research conducted by Hysa [6] in Poland, the frequency with which different generations use social media is analyzed, as well as the importance of including it in a tourism marketing strategy, influencing people to visit certain locations. Four generations are analyzed—Baby Boomers as well as Generations X, Y, and Z, but here we will highlight some general results but especially those that characterize the behavior of Generations Y and Z. These are the ones that most identify with this reality of proximity with technologies, being the ones that most use social media,

as it will occur in the society called Society 5.0, the one that will use social media in everyday life, in general. Thus, new challenges for a new type of tourism arise, as the collection of information about the activity on social networks allows knowing the preferences and behaviors of different generations, creating personalized and innovative solutions that can contribute to sustainable tourism.

Focusing now on some of the results of this study, it is noteworthy that there are no differences in social media behavior between the four generations, in the vacation planning phase, with regard to the following objectives: (i) trip planning, (ii) knowledge of the history and culture of tourist sites, (iii) information about obstacles in the intended tourist sites, and (iv) establishing relationships with the local community.

We will then select different results only between Youth generations. Thus, Generation Y young people claim to use social portals a few times a day, content communities once a day, and cooperation networks once a week. As for Generation Z youth, they also claim to use social portals a few times a day, as well as content communities (more than Generation Y); as for cooperation networks, they claim to use them a few times a week (more than Generation Y).

Generation Y clearly differs from Generation Z regarding the behavior related to decision-making based on positive and negative comments, these comments being more important for Generation Z and there is also a higher frequency in the rental of short-term apartments (eg. Airbnb) by Generation Z.

Also, regarding Generation Z, two Portuguese empirical studies applied to tourists of this generation and led by [78] focuses on the influence that technological resources have on the degree of satisfaction of this generation with the destination tourism, in the phases prior to the trip and during the trip toward a certain destination. Here, too, it is proven that technologies are an integral part of Generation Z's life and that they, as well as the use of the internet, are decisive in researching travel information, bookings, and payments during its preparation.

Below, we highlight some results of the study carried out by the aforementioned authors [7]. As for hypothesis 1—"technological resources influence the degree of satisfaction in the pre-trip phase", there is a statistically significant positive relationship between the dimension "Global importance of online information" and the dimension "Relatively Global Satisfaction to the destination", meaning the results that individuals with greater global satisfaction with the destination attribute more importance to the dimension "Global importance of online information". Detailing some results, there are statistically significant positive relationships between the variables "Importance of information about destination sites", "I have a positive opinion", "I recommend", "I intend to

visit the destination in the next 2 years” and “I will consider the destination in my next trips”.

Regarding hypothesis 2 - “technological resources influence the degree of satisfaction in the phase during the trip”, relationships are analyzed between “Evaluation of overall satisfaction with the destination”, “Assessment of the use of the following types of applications and/or available information on the internet during your tourist experience in Porto” and the “Assessment of the use of proximity device technology”. The statistically significant differences found prove that overall satisfaction with the destination depends on applications and/or information on the internet during the tourist experience, as well as on payment services to consume at the destination. Therefore, these results corroborate what is said by other authors—online information is an essential element for tourists and contributes to their satisfaction in relation to the destination. According to the results obtained, the authors of this study draw some recommendations that point to necessary changes to be adopted by the tourism sector, among which we highlight the role of DMO’s Destination Marketing Organizations (OMD). In order to ensure the satisfaction of consumers/tourists, these organizations must ensure the constant updating of online information and the updating of technologies in the tourist destination, in various sectors such as accommodation, transport, restaurants, and attractions in general, since post-millennials show more satisfaction before the trip and during the trip, the more information available through the technologies.

45.2.3.

The Importance of the UGC in the Context of Youth Tourism

Taking into account the importance that social media has for young people, we will focus our attention on the impact of UGC in today’s tourism, a kind of word-of-mouth that occurs mainly in the digital environment. To this end, we start from the definition of UGC made by [9], as being the Media content generated by common users of information—the general public—and not by professionals paid for the purpose and whose distribution is mainly done on the Internet. It should be noted that, with the advent of Web 2.0, the role of the common consumer changes, becoming an active publisher of informational content and having the power to communicate with a mass audience, being able to influence it. The authors refer to examples of UGC creation and consumption sites, among others, YouTube, MySpace, Facebook, Wikipedia.

We now highlight the importance of the UGC in the context of youth tourism in an investigation carried out with young Indonesian millennials, domestic users of ecotourism sites. Kaihatu et al. [10] propose an

investigation model based on three hypotheses—universalism value, horizontal collectivism, and UGC—which positively condition the sample under study, in the context of its adherence to ecotourism experiences. The results point to a positive relationship between universalism and predisposition to ecotourism. As for the combinations of UGC/horizontal collectivism, they are significant, concluding that higher levels of UGC and horizontal collectivism increase the effect of universalism on the predisposition to ecotourism.

For the tourism sector, some important changes and challenges to be retained come from this research regarding the promotion of tourist products among these young people who value universalism and horizontal collectivism. Thus, (i) aspects related to novelty, ethics, nature and cultural awareness should be emphasized (ii) there should be an investment in the education of eco-tourists, (iii) there should be recourse to the use of hashtags on social networks or the media paid/sponsored social network to identify and attract these young people, (iv) content managers should be aware that young people of this generation like to search for information, seek advice and encouragement on social networks, communicating with their peers, homophiles, that is, colleagues like them and who they believe are the ones who transmit the most reliable information (v) managers should work with public influencers, followed by millennials, through the sponsorship of influencers who would visit ecotourism destinations to share their experiences and photos in the social networks, (vi) managers must motivate millennials to resort to social networks to share their tourist experiences, through incentives such as discounts, vouchers and prizes [10].

Another investigation conducted in Korea by Bae and Han [11] considers the substantial influence of Generation Y in the hospitality and tourism sectors to predict that this generation accepts UGC sites as trustworthy, a situation supported by the validity of one of the main hypotheses of this study—that these young people accept an agreed-upon cultural model of online hotel review. A practical implication that should be drawn from the results of this study is that it is important to take into account the need to increase the reliability of UGC sites, an effort that must be made by the teams that manage them, which can administer a regular assessment of the factors of reliability perceived by the group participants.

Still on the UGC and although there is no specific focus on young people thinking that youth generations are also covered in the conclusions drawn from a pioneering research carried out in China by Han et al. [12] on the role of social media in activating pro-environmental norms among tourists, we will now emphasize some of its most important points. We refer the proposal of a hypothetical model that advocates that the pro-environmental social norms of tourists, personal norms, and the pro-environmental travel UGC engagement directly affect the pro-

environmental behavioral intentions of tourists, with environmental awareness and environmental responsibility being two antecedents of personal norms, pro-environmental travel UGC engagement, and social norms.

It is important, first of all, to define what the authors understand by “pro-environmental travel UGC” as environmental dialogues generated by users of social tourism networks and that is part of a communication aimed at persuading users of these social networks, influencing their attitudes and behaviors. Taking into account the current context of social media, the passive consumption model of information, through static web pages, is no longer practiced and gives way to the positive commitment of users in online conversations with friends, family, other travelers, contributing to what some authors call collective intelligence and knowledge communities.

One of the conclusions reached in this study is that UGC engagement, in addition to providing useful information, has the advantage of creating an online community, and the more tourists involved in pro-environmental UGC, the more likely is to be associated with pro-environmental social groups that will contribute to spread this type of content on their own networks. The authors also concluded that environmental awareness and environmental responsibility are two motivating factors for UGC pro-environmental engagement, that is, people with more concern for the environment and those with greater personal responsibility tend to participate actively in online activities. Another conclusion that we wish to highlight, based on the results obtained, is that when individuals perceive that they have greater responsibility for the environment, in addition to consuming pro-environmental information online, they actively generate UGC with the aim of exerting influence together others in relation to pro-environmental intentions.

This study rethinks tourism management, as encouraging active participation in tourism-related social media to discuss pro-environmental issues will enrich pro-environmental travel UGC, further activating tourists' environmental norms and increasing their intentions to act more pro-environmentally.

45.3.

Final Considerations

From this research, it is important to emphasize that in the current information and knowledge society, in which the digital paradigm prevails, tourism does not escape the inevitability of dealing with new technologies, which, when properly used, are crucial for the success and competitiveness of the hotel sector. They are undoubtedly ubiquitous in current trends in tourism today or Post-Tourism, representing an opportunity for tour

operators and other related agents, as well as a challenge within the scope of adopting new and appropriate digital marketing practices in the tourist context.

If, in the past, the time and space in which tourist experiences were lived were distinct from the time and space of individuals' daily lives, nowadays, through technologies, these borders are blurred, allowing those who open themselves to new consumption experiences tourists take virtual trips and enjoy, inspiring tourist experiences in everyday space and time, without having to travel.

Next-generation mobile technology is increasingly used for the presentation and promotion of tourist realities, allowing enormous flexibility in its use and generating interactivity with users. As such is usually a motivating factor for them, tourism and creative industries should explore this reality, seeing it not as an obstacle but as an opportunity to expand and be more competitive, thus facing new challenges.

Having selected a certain segment of the population—youth generation—as the object of our study, its characteristics—similarities and differences—and the way they behave according to new tourist realities of which technologies are an integral part stand out.

Through the presentation of empirical studies in different countries, the importance of social media and UGC in tourism is highlighted, a form of word-of-mouth that appears on the net and which is based on the empowerment that is given to information users in cyberspace, with the emergence of Web 2.0. Thus, since they are no longer passive consumers of the information present on the net and have the possibility of being consumers and producers of it (the so-called prosumers) they start to edit the contents of their tourist experiences, through texts, photos, videos on social media, working as a kind of marketers. They not only share the aforementioned contents but, as consumers of information, they also tend to prefer to consult the referred social networks, in which information is shared from their peers, whom they often tend to trust more than in the content managers websites of tour operators. Thus, it is noteworthy that, for this reason, the latter should pay attention to the quality and timeliness of the digital information they publish, and should be governed by standards of transparency and meeting the tastes and expectations of these young people linked to social media, as their satisfaction with the tourist experience seems to be related to the quality of information available on the net. And also because millennials like to use social networks, content managers should not ignore this reality and should encourage them to share their tourist testimonials, through financial and other incentives.

It should be noted that the power of persuasion that the UGC conveys, insofar as the young people who use them are influenced by each other,

can serve important causes such as the defense and practice of sustainable tourism. On the other hand, content managers can take advantage of this permeability that young people have to be influenced, sponsoring, for example, influencers followed by them, so that they could share their testimonies of ecotourism experiences on social networks.

In conclusion, there are new ways to experience the current tourism, which is no longer massified and implies several challenges that involve offering products, services, and information in a much more customized, flexible, creative, and interactive way, through new technologies, serving best individual interests and expectations. It is a tourism that coexists with and depends on social media, which presupposes new strategies to assert itself and requires different consumption behaviors. It is a tourism that must be aware of the different profiles of tourists, in this case, young people who, in their daily lives, increasingly depend on technologies for everything, who interact, communicate, influence and are influenced by their peers on social networks. Therefore, people and institutions linked to tourism today must use the same “weapons” to win over their young customers and succeed. Finally, for all this, we think we have contributed a little to the characterization of a new kind of tourism, close to e-tourism, which requires, on the part of all stakeholders involved—travel agencies, tourist content editors, and official bodies linked to tourism—awareness, and changes to achieve better results.

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References

1.

Rocha, A., Abreu, A., Carvalho, J.V., Liberato, D., González, E.A., Liberato, P. (eds.): Advances in tourism, technology and smart systems. In: Proceedings of ICOTTS 2019, vol. 171. Springer International Publishing, Singapore (2019)

2.

Abreu, A., Liberato, D., González, E.A., Ojeda, J.C.G. (eds.): Advances in tourism, technology and smart systems. In: Selected Papers From ICOTTS20, vol. 2. Springer International Publishing, Singapore (2020)

3.

Monaco, S.: Tourism and the new generations: emerging trends and social implications in Italy. *J. Tourism Futures* 4(1), 7–15 (2018)

4.
Dujmović, M., Vitasović, A.: Postmodern society and tourism. *J. Tourism Hospitality Manage* **3**(9–10), 192–203 (2015)
5.
Zhang, L., Zhang, C., Shi, M.: Applying mobile technology for developing cultural and creative products in tourism: a case study on the forbidden city. In: *IEEE 20th International Conference on Software Quality, Reliability and Security Companion (QRS-C)*, pp. 542–549. Macau (2020)
6.
Hysa, B.: Social media usage by different generations as a tool for sustainable tourism marketing in society 5.0 idea. *Sustainability* **13**(3), 1–27 (2021)
7.
Liberato, P., Aires, C., Liberato, D.: Uso da tecnologia e avaliação da satisfação relativamente ao destino turístico pela Geração Z. *RISTI* **E36**(10), 556–576 (2020)
8.
Liberato, P., Abreu, A., Alén, E., Liberato, D.: A Geração Y no turismo: influência da tecnologia digital. In: *Proceedings IX Congreso Internacional de Computación y Telecomunicaciones (COMTEL2017)*, pp. 11–13. Universidad Inca Garcilaso de la Vega, Perú (2017)
9.
Daugherty, T., Eastin, M.S., Bright, L.: Exploring consumer motivations for creating user-generated content. *J. Interactive Adv.* **8**(2), 16–25 (2008)
10.
Kaihatu, T.S., Spence, M.T., Kasimc, A.I., Satrya, D.G., Budidharmanto, L.P.: Millennials' predisposition toward ecotourism: the influence of universalism value, horizontal collectivism and user generated content. *J. Ecotourism* **20**(2), 145–164 (2021)
11.
Bae, S.Y., Han, J.H.: Considering cultural consonance in trustworthiness of online hotel reviews among generation Y for sustainable tourism: an extended TAM model. *Sustainability* **12**(7), (2020)

12.

Han, W., McCabe, S., Wang, Y., Chong, A.Y.L.: Evaluating user-generated content in social media: an effective approach to encourage greater pro-environmental behavior in tourism? *J. Sustainable Tourism* **26**(4), 600–614 (2018)