Abstract
The aim of this paper is to examine how new technologies shape the experience of the tourist. This is to further the understanding of tourism’s place in a technologically-driven age. The methodology of the study includes an analysis, comparison and evaluation of elements and factors involved in contributing to a quality tourist experience. The experience of the tourist is a personal and individualistic occurrence and can be improved with the help of both new technologies and the tourist guide. The finding that is made is that both the personal touch of the tourist guide as well as the interactive features of technology have a place in the provision of quality tourism experiences. This in turn implies that both tourist guides and new technologies should be included in the tourism experience. Only then can a quality tourism experience be provided for the 21st century tourist. There are many papers examining the experience of the tourist. However, few have looked at the implications of the development of new technologies on the experience of the tourist. This article suggests a scale on which the tourist experience can be based on, in relation to both tourist guides and new technologies.

Keywords
Tourist guide • New technologies • Experience • Interactivity • Quality

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Introduction

The experience of the tourist has not been addressed by a great number of scholars in the field. Yet, the experience of the tourist is becoming a prominent issue when tourism operators decide how to cater to tourist needs and wants. The role of both new technologies and tourist guides play a prominent part in examining how the experience of the tourist should be addressed.

The purpose of this article is to examine what the impact of new technologies and tourist guides have on the experience of the tourist. In order to achieve this, the definition of experience and how it relates to the tourism industry will have to be looked at. When it comes to defining experience, quality, and what constitutes a quality experience, should also be examined. One also has to look at the way in which knowledge is transferred in the process that tourism companies undergo to develop new technologies. The impact that tourist guides have on the experience of the tourist, and also the impact that new technologies can have on the experience of tourists, can then be fully examined.

The argument of this article is that both tourist guides and new technologies can have an impact on the experience of the tourist. However, tourism experiences can be seen as personal and dependent on the specific tourist’s needs. The use of tourist guides and new technologies to aid the experience of the tourist is therefore personal and individually-based.

There are a few concepts that are used throughout this article. These include tourist guide, new technologies, experience, interactivity and quality. These will need further clarification to understand the context the concepts are used in.

There have been many attempts at defining tourist guide. The Oxford dictionary (1933: 490), defines a tourist guide as: “One who leads or shows the way, especially to a traveller in a strange country; spec. one who is hired to conduct a traveller or tourist.” The definition given by the World Federation of Tourist Guide Associations is as follows “[a] person who guides visitors in the language of their choice and interprets the cultural and natural heritage of an area of which each person normally possesses an area-specific qualification usually issued and/or recognised by the appropriate authority.” (World Federation of Tourist Guide Associations, 2012).

New Technologies has to do with advances made in computer technology. New technology, for the purpose of this article, is used in connection with information technology and the use of technological devices specifically in the tourism industry.

Experience is defined by the Oxford dictionary as “practical contact with and observation of facts or events”. In the context of this article, the concept will refer
to the practical contact the tourists have with tourist guides and new technologies on their trip. It also includes the observation of information provided to them and the observation of the event of tourism that they are engaged in. All these factors make up the experience of the tourist (Oxford English Dictionary, 2017).

Interactivity is comprised of two parts. The prefix inter- refers to a reciprocated action, and activity refers to that particular action. Interactivity in this article, therefore, refers to a mutual and reciprocated activity between tourists, between tourists and the tourist guide, as well as between tourists and new technologies (Oxford English Dictionary, 2017).

Quality in this article can be seen as “general excellence of standard or level” as per the dictionary definition. However, the term quality is also used in a much deeper sense, including individual perceptions of tourists of what constitutes a quality experience (Oxford English Dictionary, 2017).

Expectations of tourists

The expectations of the visitor

The question concerning the transfer of information to tourists in a museum is not only a question of which media to use to convey the information, but also a question of what different expectations and needs tourists visiting the museum may have. Offering a personalised experience for each tourist may not always be possible through conventional methods of conveying information, found in a traditional museum. Virtual museums can, however, provide visitors with personalised experiences. One such virtual museum program is the ‘Actua’ system, found at the Metropolis Science Centre in Amsterdam, in the Netherlands (Bandelli, 2010: 150-151).

The fact that each tourist experiences attractions and museums individually links with the perception of the ‘tourist gaze’. Experiences are naturally personal and introspective. Tourists experience, or ‘gaze’, at tourist sites in their own personal and subjective way. The viewpoints that tourists have also depend on their motivations for travel. The touristic experience, therefore, is inseparable from the tourist’s emotional and psychological state. The attitude that tourists have is also a great determining factor of whether or not their expectations will be met (Sheng & Chen, 2012: 54; Wang et al., 2014: 4).

Museums, as part of the tourism industry, became less museum-focused and more visitor-focused over the last few decades. It is therefore necessary to evaluate the needs of tourists, not just in the museum context, but in a larger tourism context as well. Museums and other tourism organisations can gain visitor information from demographic data, attitudinal information and developmental situations. It is also
suggested that tourist participation in a museum is not necessarily passive. The experience that the tourist has is indeed dynamic, and can include pre- and post-factors as well. Therefore, it is important to examine what the tourist expected before the trip (Sheng & Chen, 2012: 53).

**The tourism experience**

The tourism experience is made up of various interconnected aspects. It is the interaction between these aspects that construct the tourism experience. These aspects include the interaction between tourists, the host community, the tourism provider, the governing body and the environment. The visitor experience can be made up out of their opinions of services such as food and transport; the stimulation of their senses, like the architectural attraction; and their emotions, which could include feelings of finding the tourism site boring or interesting (Rabotic, 2010: 7; Sheng & Chen, 2012: 53).

It is true that tourism is an ‘event’, a big happening, since it opposes the daily life of the tourist. However, tourism can also be seen as a personal and inward experience. This makes it impossible to describe it generally, and therefore will also make it difficult for interactive technological devices to have one general model that will suit all types of tourists (Rabotic, 2010: 7).

Stamboulis and Skayannis (2003: 38) have argued that ‘experience’ should be the new framework in tourism. Previously, tourism has been preoccupied with the tourist visiting and seeing a different way of life to their own way of life. The recent rise in tourists expecting an ‘experience’ have added a new dimension to tourism. Experience can be seen as everything, including the experience of mass tourism, but the way of looking at experience is changing. Experience is now calculated, planned for, and advertised to tourists (Stamboulis & Skayannis, 2003: 38).

This experience that tourists are seeking can be active or passive. Stamboulis and Skayannis (2003: 38) provided four quadrants according to which experience can be categorised, as originally found in Pine & Gilmore (1999). The first quadrant is entertainment, and involves a passive participation by the tourist. The second is education and involves an active participation by the tourist. An escapist experience is also active, while an aesthetic experience involves a passive response from tourists. Entertainment experiences can include tourist attractions such as music festivals, while education experiences can include seminars, escapist experiences can be the travel for religious events, and aesthetic experiences can be sightseeing or hiking for example. With an experience, the tourist is involved in a multi-dimensional interaction, not only with various actors at the destination, but also with the destination itself (Stamboulis & Skayannis, 2003: 38).
Stamboulis and Skayannis (2003: 38) provide a table to better show the four quadrants. This can be seen in Figure 1:

<table>
<thead>
<tr>
<th>Absorption</th>
<th>Passive</th>
<th>Participation</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entertainment (music festivals)</td>
<td>Sweet Spot (rafting, museums)</td>
<td></td>
</tr>
<tr>
<td>Immersion</td>
<td>Aesthetic (trekking)</td>
<td>Escapist (working holidays, Agio Oros)</td>
<td></td>
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</tbody>
</table>

**Figure 1**: The four quadrants of the experience of the tourist.

The question can then be asked whether technology alone can provide all of the above factors of the tourism experience, or even just a tourist guide for that matter.

Sheng and Chen (2012: 58) made a few comments on the topic of visitor experience, after examining their results from a questionnaire given to museum visitors. They concluded that visitor experience is a mix between emotional and spiritual aspects. They categorised their findings on what tourists expect when visiting a museum in five categories: Escapism, historical reminiscence, personal identification, cultural entertainment, easiness and fun. Education also plays a part in the expectations of the tourist. The researchers have also found there to be a difference between the expectations of visitors at different life stages (Sheng & Chen, 2012: 58).

The tourist experience are also not limited to what the tourists themselves make of it. Various stakeholders in the tourism industry impacts the way in which tourism is experienced. Karayilan and Cetin (2016) argues that stakeholders are one of the foremost groups that shape the experience of the tourist. It is therefore paramount that the decision makers in the tourism industry are made aware of what constitutes quality tourism experiences.

*Providing quality tourism experiences*

Defining what exactly is meant by ‘quality tourism experiences’ can be just as complex and multi-dimensional as the phenomenon of tourism itself. Quality experiences for tourists can change over time. What was considered quality experiences in the past, does not necessarily pass as quality today. Therefore, quality in tourism should be considered in its context and according to the agents involved. This may be applied to the use of technological devices in tourism as well. To facilitate whether or not the devices are providing quality experience, one should examine it in its context, as well as the tourists that are involved (Jennings, 2006: 1).
Jennings (2006: 6) has conducted an online study to evaluate the perceptions of what quality tourism experiences are. There are a few aspects that have been highlighted as being associated with quality experiences. These aspects include the interaction between the tourists and the host based on the views of both the host community and the tourist; the type of tourism product involved; the different perspectives of tourists; and the idea of a system that is integrated. Further aspects associated with quality experiences include positive social impacts; economic benefits; the preservation of the environment; the policy formulation of the governing body; the differentiation between products developed for the tourism market; and issues relating to sustainability (Jennings, 2006: 6).

Quality tourism experiences have also been linked to authentic tourism experiences. However, much has been written on what exactly is ‘authenticity’, and whether or not tourism can indeed be authentic. This is a particular problematic term when it comes to cultural tourism and ‘authentic’ experiences of other cultures. It depends on what the tourist, host community and host government interpret ‘authentic’ to be. (Jennings, 2006: 1, 8)

There are certain issues that can impact the experience of tourists negatively at a destination, such as poor weather conditions, or traffic and road-related problems. It has been suggested that the use of mobile devices which are GPS-enabled can be used to solve these problems. The Internet can also greatly help since tourism companies can update the weather or traffic conditions on their website which tourists can access through mobile devices. (Andereck et al., 2006: 95)

It can be argued that aspects such as host-tourist interactions can be best served by a local tourist guide, who serves as a mediator between the tourist and the host community. However, technology can assist with the planning of tours and traffic-related problems which tourist guides are not able to do. It is therefore already becoming clear that both tourist guides and the use of technologies can be used to deliver quality tourism experiences to tourists.

Methods of knowledge transfer and management

From the point of view of Information Technology (IT), IT can be very advantageous in compiling data, collected from the users (or tourists, in this case). The difference between data, information and knowledge, simply put, is the following: Data is the raw facts that systems collect and store in a database. This can for example be ratings that tourists have given to certain tourism sites. Information is an organised set of multiple integrated forms of data. Knowledge, on the other hand, is the meaningful information that can be derived from data and the organised information thereof. Knowledge, for example, is knowing that certain services at a tourism destination are
rated poorly, and therefore these services will need to be improved. However, when data is collected from databases, it is not necessarily converted into knowledge that tourism companies can use in improving their business. This is where social actors come in. Social actors can convert data that IT collected, and convert it into usable information and meaningful knowledge. In this conversion of data and information into meaningful knowledge where a social actor, such as a tourist guide, can have a great part to play. It can be said that tourist guides can play an active role in transferring meaningful knowledge to tourists so that they understand (brain) and empathise (emotion), while technological devices on their own may only provide tourists with information (Bhatt, 2001: 68-69).

Therefore, it is argued that the correct application of knowledge management can be useful in organisations, including tourism-oriented ones. This will, however, require a change in philosophy of the organisation so that the correct and most-effective methods of using both IT and social actors, such as tourist guides, can be implemented (Bhatt, 2001: 73).

Other scholars too have argued for the usefulness of knowledge management and how it can be used as a tool for learning and innovation of new techniques of transferring knowledge to tourists. The use of knowledge management can even provide the tourism organisation with a competitive advantage (Weidenfeld et al., 2010: 605).

Four mechanisms of knowledge transfer can be identified. The first is learning by observation/demonstration or imitation. The second is labour mobility. The third mechanism is described as inter-firm exchanges and the final mechanism is knowledge brokers. Tourist attractions can improve the transfer of knowledge to tourists by observing how other successful attractions manage it. A second way of improving the attraction is by making use of the knowledge that employees may have from previous experience at other attractions. Different tourism companies may also cooperate to ensure a better understanding of knowledge transfer to tourists, while in the last instance, tourism attractions can improve their knowledge transfer by making use of individuals from the community who may possess the skill set of transferring knowledge to tourists (Weidenfeld et al., 2010: 609-610).

The social-emotional factor of tourist guiding: The tourist guide and the experience of the tourist

Here it is important to note the importance that the field of psychology has on the examination of the interaction between tourist guides and tourists. This can include insights into the meanings and emotions that people, and in this case tourists specifically, attach to their experiences or interactions with others. It can also provide
insights into their reasons or behaviour, and the mental changes that occur with the actions that people take (Holloway, 1981: 130).

Weiler and Black (2014: 162) stated that there are in many cases a direct correlation between the use of tourist guiding services and the satisfaction of tourists. This satisfaction that tourists have can also relate to their satisfaction of the overall tourism services, such as transport. Tourist guides can also influence the return of tourists to the tourist attraction. Some studies suggest that satisfaction of the tourist with the tourist guide can also lead to economic benefits, such as the tourist being more willing to do shopping at the tourism site and its environs post-tour (Weiler & Black, 2014: 162).

On the other hand, poor experiences relating to the tourist guide can also lead to the dissatisfaction of tourists. Certain behaviour of tourist guides can lead to this dissatisfaction. These include the tourist guide being unable to deal effectively with emergencies; bad manners and language of the tourist guide; and unethical and dishonest practices by the tourist guide (Weiler & Black, 2014: 163).

**New technologies and the experience of the tourist**

*New type of tourism emerging*

It is very obvious that the tourism sector has changed significantly in the last twenty years. There exists now the possibility of a fast movement of resources, due to globalisation and advances in technology. There are scholars who argue for a new model, or ‘mobilities paradigm’, in tourism to show the new world that tourism finds itself in, with new types of travels. If technology does indeed have such a profound impact on the tourism industry, then it should be apparent that there is a need to rethink what exactly the tourism experience is, and how it has changed in the last decades (Gretzel & Jamal, 2009: 1-2).

Stamboulis and Skayannis (2003: 36-37) have also pointed out that the conventional form of tourism is decreasing in size and significance. This change can be found on the side of the tourist, who develops new tastes, as well as on the side of the service providers and attractions. Tourism is also changing due to an increase in ‘alternative’ types of tourism. These alternative types of tourism include individual travelling. Other smaller niche tourisms are also expanding. These are for example ecotourism, combined with some sort of physical activity — this can be seen in the example of the expanding bicycle tourism in New Zealand. The free and independent traveller’s niche tourism sector is also expanding in tourism. Mass tourism is still in the majority, with most tourists still traveling for sun, sea and sand. However, the numbers in the other alternative types of tourism are growing (Stamboulis & Skayannis, 2003: 36-37).
There are three main philosophical viewpoints on the question of technology. The first is that it is a *tool* (or artefact) for the use by humans to achieve a desired outcome. The second view states that technology itself is an *outcome*, an outcome of complex social/technological activities. The third view states that technology and society co-constitute each other. The third view sees technology then not as just a tool, but that it is the *product of a technological outlook* on the world (Gretzel & Jamal, 2009: 5).

**Interactivity**

To determine whether new technologies are effective in enhancing the experience of the tourist, one should evaluate the concepts that are used to argue for the effectiveness of the new technologies. Concepts such as ‘interactivity’ could be examined to place the concepts in context of the tourism industry. What exactly is interactivity and what is the objective of interactivity? Rossou (2010: 248) provides a definition for interactivity: “To interact is to act reciprocally, to act on each other, to act together or toward others or with others. Reciprocity can take place between people, people and machines, people and software, or even machines and machines.”

An interactive experience will involve the tourist on different levels. These includes the social, physical, emotional and intellectual levels. An interactive medium can significantly widen the experience for the tourist. Interactivity can also be found in play and games around the topic. Especially for educational purposes, the use of interactive devices can have a significant impact. In one study, it has been found that people retain only twenty percent of what they hear. However, they can retain forty percent of things that they see and hear, and seventy-five percent of what they see, hear, as well as do. This links to the much-quoted statement of P.R Halmos: “I hear, I forget; I see, I remember; I do, I understand”. (Rossou, 2010: 249) It has been found that, especially with the education of children, interactivity and learning through playing is a powerful educational tool. Museums would do well to modify their exhibits to be interactive spaces (Rossou, 2010: 249, 251).

**The creative class tourist**

Global mobility and the use of new technologies have led to the emergence of a new type of tourist group — the creative-class tourist. The experiences these tourists differ significantly from other types, because of the way in which they creatively use new types of technologies, and because of their greater mobility. The way in which this class experiences tourism may be a significant factor in determining the problems that tourism is facing in the 21st century (Gretzel & Jamal, 2010: 2).

The creative class tourists are also seen as neo-nomads, because they frequently change locations, and because of the general trend of traditional workplaces changing
into creative landscapes. The experiences of this new creative group strongly rely on aspects such as play, empathy and aesthetics. To entertain this ‘creative class’, one needs to provide various stimuli. This is an area were new technologies can have a profound impact in engaging creative minds. The creative class seeks out experiences that are multidimensional, meaningful and authentic. The term ‘authentic’ is here used to refer to objects and experiences that are not generic but ‘special’ and ‘unique’ (Gretzel & Jamal, 2010: 3-4).

These types of tourists are seeking experiences that are engaging, either physical or intellectual. They also want to modify their own experiences to suit their needs and are moving away from the ‘Disneyfication’ of mass tourism. Mediation between these types of tourists and the tourism environment is very much shaped by emerging new technologies. Virtual tourism is a recent tool for enhancing tourism. Although virtual tourism can have benefits including the protection of cultural and natural heritage sites, some would argue that it does lack a certain human touch when it comes to tourist engaging with the environment. Kulakoğlu-Dilek and other authors (2018) list the lack of cultural interaction as one of the threats of virtual tourism. Virtual realities are not replacing real-life experiences in any sense, but the creative class of tourists are looking for ‘real’ experiences. New technologies, in a sense, shape their meanings and shift the boundaries of their actions. It is therefore imperative to understand how this new class of tourist views and uses new technologies. The creative class sees technology as a tool, to achieve a certain outcome, as an instrument, as an increasingly accepted reality. The new technologies that are emerging nurture this creative way of life of the creative class (Gretzel and Jamal, 2010: 4, 6).

The acceptance of technology in older tourists

If the traditional type of tourism is diminishing, one can then start to wonder how the traditional tourist, who still exists, will respond to the new tourism, especially older tourists. There are some studies that suggest that the information processes of older people have an impact on the way that they use new technologies that are introduced. Although these studies focus on general workplaces of organisations, it can be applied to the tourism industry as it links to the way in which tourists will engage with technology (Morris & Venkatesh, 2000: 375-376).

There is some evidence that suggest that older people have difficulty completing complex tasks, as well as adapting to changes. This can also be applied to the tourism industry. Older people will be more likely to select methods of information transference that may be familiar to them. This may include opting for tourist guides, whereas they will be less likely to choose new technological devices to receive information. This may be because of the results that some studies have found pertaining to the adoption of technology. These studies found that the likelihood of individuals adopting new
technology is linked to the individual’s perception of the usefulness of technology (Morris & Venkatesh, 2000: 380).

One of the results of aging in people that further complicates the use of technology is the loss of determining power of the visual sense. Younger tourists may find it easier to distinguish between closely transpiring visual stimuli. However, computer systems can be designed in a specific manner to assist older tourists. By designing systems that will not put as much strain on the working memory of people, people of all ages can make easy use of the computer interfaces and other new technologies applied at museums and other tourist sites. This is something that should be kept in mind when designing computer interfaces for the use by tourists (Morris & Venkatesh, 2002: 382).

The experience of the tourist in relation to both technology and the tourist guide

In Figure 2, the experience of the tourist is shown in relation to the use of technology and tourist guides. This diagram can be seen as a scale or continuum, with the experience of the tourist lying somewhere on the scale between the use of technology and tourist guides. The tourist may prefer tourist guides more than technology, or prefer the use of technology over that of the tourist guide. They can also be found somewhere in the hybrid centre, making use of both technology and tourist guides.

When tourist guides, and other tourism companies, make use of technology to improve the interactivity of their tours, then the experience of the tourist moves to the hybrid centre, away from the general, and sometimes boring, tours of conventional tourism. However, when technology is modified, and used in conjunction with tourist guides to connect with the local community, then the experience of the tourist moves away from sterile and lifeless technological devices, to the hybrid centre.

The creative class of tourists, who prefer the use of technology, will then lean towards technology on the scale, while making use of some personal connections.
with the host community to deepen their experience. Older tourists, who have difficulty adapting to new technologies and prefer the conventional tours led by a tourist guide, will lean towards the tourist guide side of the scale. They may still make use of technology to enhance their experience, albeit to a lesser degree. Individuals, or groups of tourists, will have different places on the scale, depending on their expectations and the type of tourism. Wherever a tourist is placed on the scale, that position is then the experience of the tourist. This links to the fact that tourist experiences are individual and personal.

The categories that Sheng and Chen (2012: 58) use to arrange the different aspects of the tourist experience can be placed on the scale. The use of technology can provide the easiness and fun components of the tourist experience, while tourist guides can provide personal identification and cultural entertainment. There is also an overlap between categories, that can be placed somewhere between technology and tourist guides. Technology can also provide personalised experiences, while tourist guides can also contribute to the easiness and fun components of the experience. The fifth category that Sheng and Chen (2012: 58) mention, historical reminisce, can also be placed somewhere on the scale between technology and tourist guides. While technology can provide information to tourists regarding facts and locations of historical sites, tourist guides can transfer this information into knowledge that is personalised and meaningful. Tourist guides can provide emotional narratives and interesting stories to enhance factual information.

Technology may be useful in the planning of tours, as argued earlier in the article, while tourist guides can aid greatly to the overall satisfaction of the tourist. Therefore, it is argued that the ideal tourism experience will be in the hybrid centre, where the experience is personalised, connected to ‘real’ people, while also being interactive. The tourist can then enjoy the effectiveness of technology in the planning of his/her experience, while also having a satisfactory experience that is deepened and made meaningful through the mediation of the tourist guide.

Conclusion

In this article, it has been established that in order to provide quality tourism services to tourists, one has to examine what constitutes as a quality tourism experience. This can be complicated due to changing perceptions of tourists, regarding both the ‘quality’ and ‘experience’ factor of their travels. It has been stated that tourism experiences can be personal, and differs for each individual. One has to examine what the tourist wants from his/her experience, to effectively transfer knowledge at tourist attractions, such as museums. The transfer of knowledge to tourists can be optimised by the use of new technologies, but a social actor is needed
to convert information to knowledge. Tourist guides can serve as these social actors, transferring information to tourists in a manner which they can understand and relate to emotionally. It is important for these tourist guides to remember that both good and bad service provided to tourists can have an impact on how tourists perceive their tourism experience. Advances in technology can have a positive impact on the tourism experience, by introducing aspects such as the interactive participation of the tourist. This is an important need for the emerging, and growing, creative tourist class, who is more mobile than their antecedents, and who requires various forms of stimuli. While catering for these new needs of tourists, tourism managers should keep in mind that more traditional tourists still exist, and will interact with these new technologies in a different manner. The suggestion made by the article is that by making use of both technology and tourist guides, to varying degrees, tourists will in all probability move closer to the elusive ‘quality/real/special/authentic’ tourism experience where information and emotion are in harmony. The future of tourist guiding will depend on its relation to technology. This article provided largely theoretical suggestions for understanding the experience of the tourist in relation to tourist guiding. Further studies into the practical implications of using technology in the field of tourist guiding will be needed to help guide tourist guides in the 21st century.

References


