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THE NEED FOR A TOUR GUIDE WHILE THE CITIES GET SMARTER¹

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Abstract

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Nowadays one can easily understand that day by day we are becoming a part of the age of technology. In certain countries, artificial intelligence and robots started to appear in daily life and before anyone realizes, they will become a part of our daily routine. Some day we will only need to click a button and everything will happen for us. But clicking a button without seeing a face or hearing a voice is something totally different for us. We see technology is getting used more often in tour guiding also. The question is, do we like to get things done as quickly as possible, or do we still look for communication. This study aims to solve this problem. The new trend in the tourism sector is the "Smart Tourism and Smart Destinations" which starts with giving you an idea of how and where to plan your holiday and travel. It also helps you with all other aspects throughout your vacation. These might be smart device applications like audio guidance, translation services, direction guidance, making reservations, or augmented realities like pointing your phone towards the scene of the theatre and watch a gladiator fight. Tour guides, who we call the ambassadors of tourism, may experience problems with the rate of technological development. Although, taking advantage of technology such as navigator, smartphones, kindles, headsets, cameras, altimeters and many more makes the job easier for guides. So, if the evolution of technology continues will there be any need for a tour guide?

This study aims to determine if the job of the tour guide can survive the technological improvements or even get better and still be preferred by the tourists who are traveling to new places and new cultures. The methodology of the study is qualitative. A structured interview has been carried out. The sample of the group only includes tour guides over the age of 50. This is because they are near retirement and don't expect to earn their living by guiding people anymore. So, their opinions will be more appropriate compared to young guides who are at the beginning of their tour guiding lives and need this job for many years to come and would not like to lose the battle against technological improvements. As a result of the research, data has been reached that smart city technologies cannot replace tourist guides. Also, the study will add some suggestions based on the results obtained from the analysis.

¹ This study was presented in the 4th International Tourism Congress and the abstract is published in the congress book.



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

1. INTRODUCTION

Professional tour guiding always has been in a relationship with technological improvements. A lot has changed since the primitive tours till the present day. Cities have changed, transportations have changed and a lot more. One can understand that no matter what changes, the need for a tour guide remains stable.

It is known that tour guiding was popular since antiquity. And also, it is fairly well known that people were traveling for different needs long before. The ancestors of the tour guides are the Cicerones who were named because of the Roman historian Cicero who lived in the 8th century B.C. They were known as the most reputable people of the time. At the same time, young guys with speaking talents were also called Cicerones. The first organized tours are the ones in Ancient Greek societies by the name of the Olympic Games and the enormous festivals. During the medieval ages, the peak traveling point was the Crusades. Traveling at that time included wars, religious journeys, migration, and educational trips. In the following years, Grand Tour popped up in Europe. The Industrial Revolution took tourism to the next step because it improved the technology and made vital changes in accommodation and transport facilities. Even though tour guiding had started two thousand five hundred years ago; the first actual modern tourism movement was the one that Thomas Cook organized in 1841 (Eser, Meslek Olarak Turist Rehberliği, 2018).

Tourism and tour guiding received support from technology for years and years. Better transport, better communication, using less time, getting better information and a lot more like this came with technological development.

Research in robotics is increasing and creating better applications every day. Current things they can do were not even thought about decades ago. Hospitality and touristic destinations became smart and advanced every day (Tung & Law, 2017: 2498).

Before all the technological improvements, people had to work a lot harder. Day by day people started to have more free time which gave them a chance to travel and to be a part of tourism (Yıldız, 2019: 166). People firstly needed someone to guide them but this slowly changed over time. While there are people who think it's better to have a human guide, some others think that it's much easier and cheaper to travel with some info books, smart apps, and things.

There are certain skills, features, and information that tour guides must have. For example, presentation skills, ability to attract attention, timing, managing extraordinary situations, group management, a good knowledge of foreign languages, and have good communication, motivation and leadership skills, empathy, and much more.



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

Some people like discovering places by themselves but on the other hand, there are a huge number of tourists who prefer professional tour guides. Al-Wazzan (2016: 1) in his study explains about a robot tour guide that can follow the group or the person and when the tourist gives the command, starts to give information about the destination.

Before, people were discovering places with a guidebook if they had not chosen a guide. Now with the improvements, they have better devices to see new places and the devices even have features with which they can take photographs and videos (Yıldız, 2018: 4688).

The study aims to figure out if there will still be a need for a tour guide in the future. During the research, not only cities but actually, the world gets smarter every day. So, will all these improvements take the place of a human? Or will people still need real smiling faces and the personal touch of their tour guides?

2. LITERATURE REVIEW

Even though there are a lot of studies to point out how cities get smarter and how technology has benefits on tourism, there are not a lot of studies to include tour guides in these analyses. Smart and touristic destinations are very popular and they are one of the favorite topics for researchers. The book called "Information and Communication Technologies in Tourism 2014" is a basic resource for a researcher who wants to create a new study on this subject (Buharis & Ahamarranga, 2014). Also, the studies combining the recently developing robot technology with tourist guidance have increased considerably (Burgard et al., 1999; Lai, 2015; Chuang, 2019). The scope of the research is the relationship between tourist guidance and technology, plus whether cities that are getting smarter can take on the duties of tourist guides. For a person to understand the situation better, these definitions are needed.

2.1. Tour Guiding

There are a few definitions of the tour guiding profession. One of the most accepted definition is made by the World Federation of Tourist Guide Associations (WTFGA) which says; "A person who guides visitors in the language of their choice and interprets the cultural and natural heritage of an area which person normally possesses an area-specific qualification usually issued and/or recognized by the appropriate authority." One other definition claims that tour guides are people who guide people abroad or in their own country. Leading, showing and explaining about museums, monuments, archaeological sites of a city or a region in the language which the tourist/tourists prefer (Ap & Wong, 2001: 551). According to



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

Cohen, the initial task in tourist guidance is pathfinding and mentoring. Also, it is well known that tourist guides increase the attraction of the destination (Cohen, 1985).

2.3. Robot Tour Guides

After the Czech writer Karel Čapek mentioned the term robot in his novels, humans started to imagine about them. The first thought was to make them do the works human had to do. To take it a step further we have seen a robot called rhino which started guiding and entertaining people in a museum (Burgard et al., 1998: 4). Since then robot use in different locations and departments rises. Boboc, Horatio and Talaba in their study listed the robot guides in use as it is in the table below;

Table 1. Tour Guide Robots

Where It	Name	Location where it has been installed
Operates		
Museum	Rhino (Burgard et al., 1998)	Deutsches Museum Bonn
	Minerva (Thrun et al., 1999)	Smithsonian's National Museum of American History
	Sage (Nourbakhsh et al., 1999)	Carnegie Museum of Natural History in Pittsburgh
	Chips (Willeke, Kunz, & Nourbakhsh, 2001)	Carnegie Museum of Natural History
	Care-o-bot (Schraft, Graf, Traub, & John, 2001)	
	Hermes (Bischoff & Graefe, 2002)	Heinz Nixdorf Museums Forum
	Jinny (Gunhee et al., 2004)	National Science Museum of Korea
	Robovie (Shiomi, Kanda, Ishiguro, & Hagita, 2006)	Osaka Science Museum
	Enon (Frontech, 2007)	Kyotaro Nishimura Museum
	Cicerobot (Chella & Macaluso, 2009)	Archaeological Museum of Agrigento
	Urbano (Rodriguez-Losada et al., 2008)	Principe Felipe Museum
	Indigo (Vogiatzis et al., 2008)	Cultural institute
Exhibition hall	RoboX (Siegwart et al., 2003)	Swiss National Exposition Expo.02
	Mona, Oskar (IPA, 2009)	Opel exposition Berlin
	Toyota (McKeegan, 2007)	Toyota Kaikan Exhibition Hall
University	Virgil (Thrapp, Westbrook, & Subramanian, 2001)	Rice University
	Bryn Mawr (Chiu, 2004)	Bryn Mawr College
	NTU-I (Kuo-Hung et al., 2008)	National Taiwan University
	GOAT (LeBlanc, 2012)	Worcester Polytechnic Institute Campus
Other building	Grace (Simmons et al., 2003)	AAAI Robot Challenge
	Biron (Haasch et al., 2004)	Home-tour guide
	Robotinho (Faber et al., 2009)	The 12 Cellists of the Berlin Philharmonic
	Toomas (Gross et al., 2009)	Germany stores
	Sancho (Gonzalez et al., 2009)	TV shows
	Konrad, Suse (Stricker et al., 2012)	Konrad Zuse building
	Cate (Beckwith, Sherbrook, Lefief, Williams, & Yelamarthi, 2012)	
	Tawabo (Mogg, 2012)	Tokyo Tower

Source:Boboc, Horatiu, & Talaba, 2014, p. 426.



Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

2.3. Smart Cities

The term smart city is defined as cities that can use improved information and communication technology (ICT) to streamline consumption of the products (Gretzel, Werthner, Koo & Carlos, 2015: 559). As a result of cities becoming smart, smart destinations and smart tourism have appeared. Marketers are starting to use technology more to attract customer interest (Jeong & Shin, 2019: 2). This may hold up to use mechanized tour guide systems instead of humans.

Tourism is the second largest sector, accounting for 18.5% of all services offered in smart cities. Therefore, a city can mostly support tourism activities and smart technologies can no longer be considered separate from tourism (Um & Chung, 2019). Being a smart city is a dynamic process and it is a kind of transition from traditional development to technological development. The smart city idea is a set of rules that prioritize proper use of resources and environmental protection (Zhang, 2020).

3. METHODOLOGY

This study was carried out using a qualitative research method. To gather up some information and to discuss the situation between smart cities and if there is an end to the job called tour guiding, the tour guides were chosen and the method was an interview. The main reason why this method is chosen is to understand a phenomenon and other than questionnaires, you have the chance to learn the feelings of the people, and also it gives an option to add new questions to get the clearest people thoughts.

The study adopted purposeful sampling. The sample was taken from a group of professional tour guides who were economically comfortable and who had no need for the job to continue in the future. All were over fifty years old and very near to retirement. As Chain declared in 1981, choosing your sample for a study is like inviting the best doctors for the best result at the surgery (p. 440). The reason that the study has an age limit is that young guides will need this job for the future and they might not give very candid answers to the questions. From long readings and surveys, ten questions were prepared. To decide for the best questions similar studies (Giammona, 2004; Yuan & Chee, 2005; Kahn et al., 2015) were examined carefully. These ten questions have been asked to all the tour guides by email which gave them the time to think without any rush. No one came up against different questions, all were asked the exact same. The interview questions were sent to over 20 guides via email but because of it being high season, 7 replies were received. All the answers which were given got analyzed and the data was starting to reply so the collecting part of the study had to stop.



Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

According to Lincoln and Guba (1985) in an interview there cannot be a certain amount of participants, the data collection ends when the answers start to repeat and there is nothing else to hear (p. 222). The interview was done with people who had sufficient time to give thought to the questions and give carefully considered answers and had voluntarily agreed to carry out the interview. This survey, and the questions which were asked, required specialist knowledge.

4. FINDINGS

The questions were asked in the same way to all participants. No time limit was given to the participants because of the importance of the subject. The interview started with a simple question that was aimed at learning if they were using any technological devices throughout their professional tour guiding career. They all agreed the same idea saying that they used several technological devices such as "smartphones, tablets, microphones, websites like trip advisor, online live sports competition broadcast, PowerPoint presentations, navigator, headsets"

The next question asked if this technological development changed the satisfaction of their clients both positive and negative. In the past literature, tourist guides have opinions that technological developments had positive effects (Eser, Çakıcı, Babat, & Kızılırmak, 2019). In this study, while four participants directly answered yes to this question, one left it blank, one wasn't sure and one person's answer was no. The reason why participant 5 said no was that before technological improvements, even when the buses didn't have air conditioning, people were happier on their tours. Even though there are a lot of opportunities now to get more comfortable, it is harder to find people who won't complain. On the other hand, if we check the yes answers, which means they found a difference in the level of satisfaction of the clients. One says:

"Yes, the tourism sector is a sector which changes and develops every day. During your career, you start to bring people to newly discovered places or to places you've never been (hotel, restaurant exc.). From this point of view finding your way, hotels, restaurants will be easier with technology and as a result, the satisfaction level will increase positively." (Participant 2)

One of the other positive answers put forward was that professional tourist guides can forget the information they were planning to give and during the tour thanks to technology they can easily search via Google and solve the problem (P3). The participant who didn't say either yes or no commented on the improvements of technology not actually changing the



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

satisfaction of the tourist but more than that made things go faster and easier. But the feedback of this wasn't that decisive and intensive (P6).

The third question was about the audio guides. "In touristic destinations, the tourists have an opportunity to take an audio guide instead of a tour guide but what do you think is the reason that the clients still need a professional tour guide?" was the question. One of the participants said that the tour guides use five sensory organs to serve their clients (P7). The next answer was aimed at the need for communication and asking questions to the guide. One other answer that was put forward was that "An audio guide is non-interactive. The information it can give is constant. The tourists who are visiting the place for the first time can also have problems finding their way but with a guide, this possibility disappears." (P2). The next participant puts forward that "A mechanical sound and a professional tour guide who makes you live that moment makes a huge difference. Mutual questions and answers will give a higher opportunity to learn more about the place" (P3).

The next question also included smart cities this time and gave some of their features such as easy transportation, communication, and information opportunities. We asked: "If these smart cities keep on making everything this easy will people be insistent on hiring a guide?". 6 participants out of 7 answered yes directly but one thought the things smart cities can do are the job of a tourism agency or a tour operator (P5). The other participants thought these are improvements but the need for a guide will always remain. One thinks that "Smart cities can only handle some jobs of the tour guide such as showing the way, giving information, but on the other hand tour guides can cheer up clients, ask how they are feeling but smart cities can't." (P6).

The following question was a tricky one describing an ancient theatre. Saying that: "In a theatre, there are gladiator fights and if we split a group into two and show one a fight via artificial intelligence and to the other by a tour guide explanation do you think there would be a difference in the level of satisfaction?" The experienced guides who were asked our questions all gave the same answer to this. No matter how well artificial intelligence is, ancient theatres are much more than this. They all pointed out the same fact. Tour guides can describe the fight, the ceremonies, and other aspects about theatres. And also guides can change their style by checking the group's reactions. 7 participants all think that the level of satisfaction would be far greater with a tour guide leading.

The sixth question of the interview was aimed at understanding if they think the new robot guides which are being used in several destinations can take the place of a tour guide.



Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

Because this is a new thing, most of the participants do not have enough information about it. But one guide put forward that:

"During tours, an emergency can happen, for example, a broken leg or an ankle sprain, and a guide can easily help and do something but we can't say the same for a robot. Robots are uniformed, programmed, and they can't react against unexpected situations. That's why nearly all participants voted for the guides on this subject." (P2).

The next question was aimed for the guides to empathize and put themselves in the place of tourists. The question was asked in this way: "In a tour which you are a client, would you like a robot that performs nearly one hundred percent and produces services to you including information, directions, language, etc. Or would you rather have a human tour guide who could possibly be error-prone?" One hundred percent of the participants gave their opinions definitely in favor of tour guides services. The reason they gave was that tours or the tour guiding job are not something you can carry out robotically. This is a spontaneous job and if a robot serves the group, they think that at any unexpected moment the tour would not proceed as desired. One pointed out that tourism requires personal communication and knowing new cultures so learning about places and traditions from robots is not appropriate (P6). Another example was the use of the navigator. Even when a human uses it, they can come up against problems, so giving a robot the full responsibility of a tour is not a good idea (P2). One other answer was about departure times. If there was a robot it could leave a few visitors at every stop but with a guide, there is always a possibility to delay departures for a few minutes to wait for latecomers (P7).

Number eight was asking about emotional labor. We all know that tour guiding needs a lot of this but the question was "Do you think artificial intelligence can handle emotional problems as a human does?" The answer to this was no for six of the participants. The one who didn't say no was because he thought that emotion is not always a part of this job. For most of the participants, tour guiding is full of emotional labor and there is no way it can be done without a human. An example was given by a participant about being a guide in Canakkale which is one of the places where Turkish tourists get emotional. Making that atmosphere, telling the stories, talking about martyrs without any emotions would not give the right effect (p2).

The next question in the interview was "When you think about the financial business you were only able to sort out by going to the bank and later you could contact the bank from your smart devices. Maybe one day there will not be a bank building to visit. Do you think this



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

is similar to the progress of tour guiding in cities?" One of the answers was: "Banks have cash dispensers but they still have banks and humans working." One other thought was, guiding is transferring information but banking is transferring money so it will not go the same way (P4). One of the participants gave an example to better explain his answer: "For example, when you go to a bank if your debt is 141.55 you have to pay all of it so putting this into rules and technologies might sound good but guiding is all about emotions." (P2).

The final question of the interview was "You, as a person who doesn't have job apprehension, and that you are near to retirement, do you think that the tour guiding job can survive against the technological improvements, smarter cities with smarter apps and robots or will people easily accept the new fast and faultless smart trend?". This question was almost the answer to all our questions and the study. The answers given to this question is decisive. Some participants simply said yes, the job "professional tour guiding" will survive forever. But some of them wanted to explain why. One of the participants said: "Technology has no expressions but humans have. What makes the tourists happy is firstly seeing a smiling face, this makes a tour joyful". And other answers were "Any of these technological improvements won't weaken the job on the contrary it will make it stronger. No matter what age the guides are, they must always be a part of technology and be aware of anything new" (P2), and "Penny-pinching agencies will always need a guide to bring the customers to do the shopping and sell stuff to get the commission. So according to this, they will not ask for robot guides and this will always ensure the guides have a job." (P5)

According to a different participant, the tour guiding job will not end but also will increase day by day because some job groups can be done automatically but guiding is an interactive job and it will always need humans to get the job done (P6). The last opinion about this question was:

"For hundreds and hundreds of years, this job has continued. In the last few years, it has been even better with new specialist guides. The guides started by being better educated and therefore a specialist in tour guiding. Religious tourism, eco-tourism, gastronomy, climbing, and health tourism are the new trends that special tour guides carry out." (P1).

5. CONCLUSSION, DISCUSSION AND RECCOMENDATION

According to the literature review and the interviews that were made with professional tour guides over the age of 50, we sort of understand what the situation is and what is waiting for us in the future. Unfortunately, there are not many studies about the future of tour guiding



Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

and robotic tour guides which are now in use. We aimed to find out where this is going. The main reason the interview was done with older guides was to get objective answers. It's well known that in any job today if you ask a young, new employee you often don't get accurate answers. The new employees will need this job for their future, but with guides who are near to retirement, they take a different view. According to the answers, everyone uses technological devices. There was no one saying they don't. But their explanation is that technology is a supplement for them. Even though finding a solution is something that can be done with only the press a button according to some studies, at the same time you still need someone to push the button.

Tourism is a result of people sightseeing, discovering, getting to know new people's needs says (Kozak, 2012). Even when the question made them empathize, they still asked for someone to communicate. That's what people need. In a university even though you can learn a math problem in the library or by searching on Scholar Google, students always keep in mind that they learn personally from their professor. Think about an online course that you can watch and learn a language and the other option that you go to the class and listen directly to the teacher. The online course is much cheaper and no matter what improvements there are; in reality, people still fill the classes.

In the interview, there was an interesting example saying that at dinner when you're choosing your wine you take suggestions from your waiter or waitress. Taking advice from a human or a robot, which one would make you feel better? We can always add more examples to this.

One other and maybe the most talked about the reason why humans would be better is to get answers to the questions on a tour. A tour guide will always try to give enough information about the place but he or she will have more than that to give. For example, if the guide is talking about the clock tower in London and the question is about the clock tower in Izmir the guide can give some information about that to. But for a mechanical, robotic mind which is aimed to give information about the London clock tower, it would hover at that moment. Just like this example, humans can react spontaneously, and if there is some missing information the guide can search, ask other experienced guides or find the answer by using the technology.

Some guides in the interviews pointed out that if it is thought that technology can take the place of a guide, why don't people sit at home and put on some virtual reality goggles? It is clear from this that being on a tour, traveling, discovering, seeing, hearing, touching, satisfy curiosity was the claim at the beginning and it is still the same. So, we can easily say that



Year (Y11): 2020 Volume (Cilt): 3 Issue (Say1): 1 Pages (Sayfa): 72/84

robots or artificial intelligence can only make the job easier for the guide but cannot take their job from them. Technology is seemingly the end of some jobs but tour guiding is not one of them.

Someone can understand from this study that professional tour guiding will not only survive against technological improvement but also increase. These interpretations are the thoughts we received from the experienced tour guides but not enough to answer the unsolved questions. But for now, from this study it is safe to recommend for the future of the profession that; every guide (young/old) has to chase the technological improvements and adapt them to their own tours and must keep and increase the human interaction because this looks likely to be the most important issue to keep them in the profession.

The suggestions for the future studies are, taking a larger sample by asking the visitors both from a human tour guided tour and from one where technology serves them. In this way it can be understood what the threats are and how people think about being in technological, non-human tours.

It would be good to finish with a quote by Charles Chaplin about humanity and mechanization:

"Machine men, with machine minds and machine hearts! You are not machines, you are not cattle, you are men! You have the love of humanity in your hearts. You don't hate only the unloved hate, the unloved and the unnatural. Soldiers, don't fight for slavery, fight for liberty! You the people have the power, the power to create machines, the power to create happiness! You the people have the power to make this life free and beautiful, to make this life a wonderful adventure! Then, in the name of democracy, let us use that power. Let us all unite! Let us fight for a new world, a decent world..." (Chaplin).

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Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

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Year (Yıl): 2020 Volume (Cilt): 3 Issue (Sayı): 1 Pages (Sayfa): 72/84

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