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GRADUATE SCHOOL OF SOCIAL SCIENCES  
NEW MEDIA DISCIPLINE AREA

**THE ROLE OF SOCIAL MEDIA  
ON CULTURAL HERITAGE CONSCIOUSNESS:  
A CASE STUDY OF HAGIA SOPHIA AND FOURSQUARE**

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SUPERVISOR: ASSOC. PROF. DR. ÇIĞDEM BOZDAĞ

MASTER'S THESIS

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Submitted to the Graduate School of Social Sciences of Kadir Has University in partial fulfillment of the requirements for the degree of Master's in the Discipline Area of New Media under the Program of New Media.

ISTANBUL, JANUARY, 2018

I, MUSTAFA ÇETİNKAYA;

Hereby declare that this Master's Thesis is my own original work and that due references have been appropriately provided on all supporting literature and resources.

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## TABLE OF CONTENTS

<b>TABLES LIST</b> .....	iv
<b>FIGURES LIST</b> .....	v
<b>ABSTRACT</b> .....	vii
<b>ÖZET</b> .....	viii
<b>INTRODUCTION</b> .....	1
<b>1. TECHNICAL AND THEORETICAL FRAMEWORK</b> .....	3
1.1. New Media.....	3
1.2. Technical Infrastructure.....	4
1.2.1. Global navigation satellite systems .....	4
1.2.2. Geographical information systems.....	6
1.2.3. Software as a service model.....	7
1.3. Location-Based Social Media Applications .....	8
1.4. Cultural Heritage, UNESCO and New Media.....	10
<b>2. METHODOLOGY AND RESEARCH DESIGN</b> .....	15
2.1. Purpose of Research, Research Question, and Hypothesis .....	15
2.2. Research Design.....	15
2.2.1. Analysis of Foursquare data.....	16
2.2.2. Survey about Hagia Sophia.....	17
2.2.3. Expert interviews.....	19
<b>3. ANALYSIS OF RESEARCH FINDINGS</b> .....	21
3.1. Foursquare Comments Analysis of Hagia Sofia.....	21
3.2. Survey Results .....	22
3.3. Expert Interviews .....	25
<b>4. DISCUSSION</b> .....	30
<b>CONCLUSION</b> .....	32
<b>SOURCES</b> .....	34

## TABLES LIST

Table 2.1. Data Dictionary

16



## FIGURES LIST

Figure 3.1.	Location-Based Services Usage of the Visitors	22
Figure 3.2.	Purpose of Foursquare Usage	23
Figure 3.3.	Effects of Internet Comments (Likert Scale)	23
Figure 3.4.	Locations on the World Heritage List in Turkey Except Hagia Sophia (Visitors Perceptions)	24
Figure 3.5.	Hagia Sophia is in the World Heritage List	25



## ABSTRACT

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The widespread cultural heritage consciousness is important for the protection and promotion of cultural assets. This study aims to examine the influence of social media tools on the widespread awareness of cultural heritage. The Hagia Sophia Museum was chosen as the sample place, and Foursquare was selected as the sample social media tool. After examining the technical and theoretical background, a triple research was designed. Foursquare interpretations of 2016 were transformed into a data set, a survey was conducted for visitors at the Hagia Sophia Museum, and expert opinions were sought. The results of the research have been analyzed within the framework of the knowledge and views gained in the technical and theoretical background. It has been seen that the development of social media technologies and tools has positive effects on the widespread of cultural heritage consciousness.

**Keywords:** culture, heritage, UNESCO, Hagia Sophia, new media, social media, location-based services, Foursquare



## ÖZET

ÇETİNKAYA, MUSTAFA. *SOSYAL MEDYANIN KÜLTÜREL MİRAS BİLİNCİ ÜZERİNDEKİ ROLÜ: AYASOFYA VE FOURSQUARE ÖRNEK OLAY ÇALIŞMASI*, YÜKSEK LİSANS TEZİ, İstanbul, 2018.

Kültürel miras bilincinin yaygınlaşması kültür varlıklarının korunması ve tanıtılması için önem arz etmektedir. Bu çalışmanın amacı, sosyal medya araçlarının kültürel miras bilincinin yaygınlaşması üzerine etkisini incelemektir. Örnek mekân olarak Ayasofya Müzesi, örnek sosyal medya aracı olarak ise Foursquare seçilmiştir. Teknik ve teorik altyapı incelendikten sonra, üçlü bir araştırma tasarlanmıştır. 2016 yılına ait Foursquare yorumları veri seti haline getirilip incelenmiştir, Ayasofya Müzesinde ziyaretçilere yönelik anket çalışması yapılmıştır ve uzman görüşlerine başvurulmuştur. Araştırmanın sonuçları, teknik ve teorik altyapıda elde edilen bilgi ve görüşler çerçevesinde analiz edilmiştir. Sosyal medya teknolojileri ve araçlarının gelişiminin kültürel miras bilincinin yaygınlaşması üzerinde olumlu etkileri olduğu görülmüştür.

**Anahtar Sözcükler:** kültür, miras, UNESCO, Ayasofya, yeni medya, sosyal medya, lokasyon-bazlı servisler, Foursquare

## INTRODUCTION

The emergence of new media tools in the technological infrastructure has begun to present modern means of communication. The transition from Web 2.0 to Web 3.0 enriches new media environments. With the increase in the number of participants in the network, the amount of data on the internet is also growing. Some of this data belongs to cultural items. The expansion of communication channels has also been an opportunity for the democratization of the culture. Cultural issues and places have been able to reach broad masses.

The primary factor forming cultural heritage is educated individuals. New media tools offer many opportunities for individuals to become aware of information, to spread this awareness, and for those with a conscious understanding to communicate and develop collaborations. Organizations are working on cultural heritage consciousness, such as UNESCO, are also aiming to reach large masses using new media tools.

Real environments are being transferred to virtual with the new media opportunities. Sometimes this transfer can be an OCR technology as scanning of a document, or sometimes a simulation of a museum. These contents reach broad masses through the internet, and new media tools; economy, culture, tourism, art are directly affected by this.

Interpretations on the internet are the voice of the crowd. The researchers pay attention to this fact but do not accept any information on the internet. New media tools are also being developed to test the authenticity of information spread over the internet. Analyzing the internet data is vital for institutions. Due to Internet-based searches, the perception of institutions is directly affected by the data on the internet. For this reason, organizations need to manage online reputation management well.

Location-based services are used for scientific research, marketing for businesses, location, navigation and so on. Foursquare is a mobile and location-based social media application that allows you to write reviews about places that are checked in. Foursquare gives essential clues about areas of interest. Cultural venues are also included in the application of Foursquare, and it is stated that comments about these places may be directive. Hagia Sophia is one of the places in the Foursquare application. Hagia Sophia

is on World Heritage List and 1500 years old history is crucial for civilizations and religions. Conservation of Hagia Sophia and other cultural heritage sites will be possible with awareness of cultural heritage. New media tools are used for the formation and dissemination of cultural heritage awareness. The impact of new media tools on cultural heritage consciousness constitutes the central theme of this study.

The aim of this study is to examine the impact of social media applications on the spread of cultural heritage consciousness through a sample place and application. Hagia Sophia was selected as a cultural venue on the World Heritage List of UNESCO, and Foursquare as a social media application. Mixed method has been used in the study. Literature review and research were conducted with this method. In the literature review, the relationship between cultural heritage and UNESCO's studies related to new media, as well as the technical background, has been examined.

“How can the social media contribute to awareness about cultural heritage?” is the research question of this study. Three research were carried out in the framework of the research question. The comments written in Foursquare in 2016 were classified and reviewed, a survey was conducted with 300 visitors in Hagia Sophia, and opinions received from experts. The literature review and the results obtained from the research were evaluated.

# **CHAPTER 1**

## **TECHNICAL AND THEORETICAL FRAMEWORK**

### **1.1. NEW MEDIA**

The development of communication technologies led to the emergence of new means of communication. Since the establishment of Bell Laboratories, the expanded use of computers for communication purposes and the development of mobile technologies have strengthened communication networks. Societies have become closer, and the boundaries within the framework of globalization have begun to be invisible. While Manuel Castells concentrates on the social dimension of these developments with a sociologist's view on *The Rise of the Network Society*, Walter Isaacson brings together all the technological developments as a process with *The Innovators* book.

Lev Manovich focused on transforming media from traditional to new and described five basic principles as numerical representation, modularity, automation, variability, and transcoding (Manovich, 2001). Main transformation area is medium from traditional to new media, the sender and receiver sometimes also change. McLuhan emphasizes the importance of communication tools as “the medium is the message” (McLuhan and Fiore, 1967). New tools replace traditional tools. For instance, newspapers and magazines are replaced by news sites and blogs, radio and television took their place to mobile applications, YouTube and Netflix. All these applications point to the concept of convergence.

Digital convergence can be thought as the gathering of the functions of many technological products into one. İsmail Hakkı Polat has reviewed the convergence explanations of Lev Manovich, Henry Jenkins, and Trevor Barr in the new media framework and made a further evaluation of the triple convergence approach. The updated Barr triple convergence diagram contains data, net, and content (Polat, 2016). As a result of the convergence of these, new media tools including these three parts are expected to emerge.

Towards the end of the 1990s, the transition of the internet to a new stage began to be debated. In January 1999, DiNucci talked about the concept of Web 2.0 in his *Fragmented*

Future article first time (DiNucci, 1999). However, the concept of Web 2.0 began to be widely discussed with the Web 2.0 Summit organized by O'Reilly in 2004. Tim O'Reilly has debated the web 2.0 concept on the internet and has revised his definition of interpretation as follows, “Web 2.0 is the business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them” (*Web 2.0 Compact Definition: Trying Again - O'Reilly Radar*, no date). Web 2.0 is a process and is moving towards Web 3.0. In Web 1.0, the primary goal was to share information that became socialized in Web 2.0 and semantics in Web 3.0. Developments such as collective (corporate and user-generated) content production, emerging of three and four-dimensional media, virtual world, virtual assistants and internet of things will be useful in the Web 3.0 stage. Developments in web technologies have affected mobile computing practices, and the Software as a Service (SaaS) model has become one of the most important features of Web 2.0, and mashup applications have become commonplace.

## **1.2. TECHNICAL INFRASTRUCTURE**

Mashup as a term comes from the pop music means that combination of the different forms. Similarly, the mashup in new media is a combination of two or more components, technologies, or systems to produce something new. New media tools are composed of different technologies and techniques. For instance, Foursquare use Global Positioning System (GPS), Geographical Information Systems (GIS), mobile developments technologies, and Software as a Service (SaaS) model. In subfields, using these technologies as a mashup to widespread of cultural heritage consciousness has examined.

### **1.2.1. Global Navigation Satellite Systems**

Global Navigation Satellite Systems (GNSS) is a general term to describe space-based satellite navigation systems. Although GNSS' are developed for security purposes, they are used in many civil and scientific studies and applications. The working logic of GNSS' are as follows the areas seen by the three satellites are determined by distance, the intersection of these three fields gives the position. Mathematically, three dimensions (x, y, z) are sufficient to determine the location, but the fourth satellite (for t dimension) is

also needed to remove clock faults (Carl Carter, 2012). Therefore, satellite systems of GNSS' are designed to be able to see at least four satellites.

The foundation of Global Positioning System (GPS, also called Navstar GPS), the first GNSS, is the most well-known GNSS system that was launched in 1973 by the United States Department of Defense with the experience gained from previous research (Slater, 2011; Stotts, Karp and Aein, 2014). It provides users with real-time positioning, navigation, and timing (PNT) services all around the world (*GPS.gov: GPS Overview*, no date). GPS is a system of positioning with the help of radio signals broadcasted by GPS satellites without any inter-point visibility in all kinds of weather conditions, day and night. GPS may not give accurate results due to access problems in underground and underwater operations, high-rise buildings, thick and impervious materials.

Other GNSS projects besides GPS are being developed. The Russian GLONASS constellation has been working in full capacity orbit with 24 satellites since October 2011 (*Constellation Status - GLONASS*, no date). The European Union is working on the Galileo (also known European GPS) project, which is supposed to be complete in 2020 (*Galileo GPS*, no date). China's BeiDou, India's IRNSS and Japan's QZSS are other GNSS constellations (Li *et al.*, 2015).

GNSS constellations are generally using in mapping, coordinate determination, surface measurements, navigation, speed measurements, tracking, search and rescue and military activities. Some of these features are also used in the development of location-based social media applications. Before to the widespread use of GNSS, it was difficult to develop location-based applications, location data could not be captured automatically, but was left to the user's definition. So, GNSSs are the basis for these types of applications with the combined use of different technologies. It would not be possible to develop location-based applications without GNSS and integrating them into social media applications. The increase in the number of GNSS' will open up new location-based social media applications. Because applications will not be monopolized by GPS and new creative ideas will be revealed. New location-based social media applications will develop and can serve for cultural heritage consciousness.

### **1.2.2. Geographical Information Systems**

Information systems enable data to be transformed into meaningful information that can be used for business purposes. Business processes such as production, marketing, sales, human resources, accounting, finance are transferred to information systems. Similarly, geographic data and business processes are transferred to information systems for geography studies. Spatial information is obtained by processing these data in geographic information systems (GIS). “GIS is a computer-based system used to aid in the collection, maintenance, storage, analysis, output, and distribution of spatial and non-spatial data and information” (Boldstad, 2012). Ronald Abler stated that “GISs are simultaneously the telescope, the microscope, the computer, and the Xerox machine of regional analysis and synthesis of spatial data” (Abler, 1988).

Geographical information systems have made it possible to transfer the world's unique shape to the map after being determined by GNSS' with WMS. GIS software converts spatial data and maps to numbers for computers. With the transfer of this information, geographic information systems have begun to support the production of location-based services. As a result of transferring data from different sources to the systems via machine learning, high-resolution maps and reduction of error in locating have been achieved.

Geographic information systems are used in scientific researches, telecommunication, urban planning, transportation and navigation services, location-based marketing, asset management, health services, defense systems, and emergencies such as accidents and natural disasters. It is also used for analysis and protection of limited sources as museums and archaeological studies. Studies in these areas focus on transforming real cultural assets into virtual formats as audio, video, two (scanning) or three-dimensional (drawing with layers) data formats.

Florian Petrescu examined the use of geographic information systems in cultural heritage studies of 22 countries. He indicates that “GIS technology became a usual tool for heritage managers, conservators, restorers, architects, archaeologists, painters and all other categories of experts involved in cultural heritage activities” (Petrescu, 2007). Geographic information systems can be also used for regional tourism planning by using geographical data (Vallone and Moscatelli, 2013). These data are transformed into user

interfaces through desktop and mobile applications. Work in the field of geographic information systems is directly or indirectly associated with cultural heritage.

### **1.2.3. Software as a Service Model**

Communication, information and service provision over the internet is becoming commonplace with the widespread use of the internet and the inclusion of more machines into the network. Client-server architecture works as follows one side, computers serve data in different formats (server), on the other hand, computers try to access those data (client) via the internet. Cloud computing is using this architecture to provide different services over different servers.

National Institute of Standards and Technology (NIST, standard institute of the United States) defines cloud computing as it is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction (Mell and Grance, 2011). The cloud applications are accessible with username and password. It is working with leasing logic; the service provider provides all the infrastructure needed to establish and operate. The use of cloud computing is becoming widespread as the use of information systems becomes widespread and data sharing moves to the cloud. With the extensive use of information systems and the transfer of data to the cloud, investments in these technologies are also increasing. Cloud computing gives an opportunity to people and businesses that doing business independently from time and space. For instance, Salesforce serves their products and solutions with cloud computing. Applications such as Netflix, Spotify, Steam, and Adobe Cloud have brought entertainment (movies, music, games) and software sectors to the cloud. This situation leads to the end of the compact disc industry, and the server industry is enlivened with hardware and software areas.

“There are three cloud delivery models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS), deployed as public, private, community, and hybrid clouds” (Marinescu, 2013). SaaS refers to the provision of software applications in the cloud (IT, 2012). Many applications such as Microsoft Office 365, Google Apps, Amazon Web Services, Dropbox, Slack are designed according to the



SaaS model. Apart from the mobile versions of these applications, there are also mobile applications directly configured as SaaS.

Mobile applications can be divided into those set up to perform a function (standalone applications) and those set up to receive a service (mobile SaaS). The standalone application development logic prevented the development of service-based social applications. Location-based social media applications have also begun to develop with the developments in cloud technologies and the widespread use of software as a service model. Foursquare is a social networking application that uses SaaS logic allows users to see places in the vicinity and make check-ins using the GPS technology on mobile devices. Users can comment upon check-in and share photos. These shares build up a backlog on the internet about the places. Cultural places are also added on Foursquare; interpretation and sharing of these areas are being made. These comments create communities that may have an impressive and directing role on the users.

### **1.3. LOCATION-BASED SOCIAL MEDIA APPLICATIONS**

Location-based applications can be defined as services that depend on and are enhanced by positional information of the mobile device (Schiller and Voisard, 2004; Hirsch, Kemp and Ilkka, 2007). The aware context definition of Dey is that when a system uses the background to provide relevant information or services to the user, where relevancy depends on the user's task (Dey, 2001). According to Gao and Liu, there are three different layers of the information make-up of a location-based social networks, and they include the geographical layer, the social layer, and the content layer (Gao and Liu, 2014). In the context of these layers, many applications have been developed that facilitate the life of the inhabitants and provide various possibilities for the companies.

Location-based social media applications are used to access social and cultural activities such as cinema, theater, cultural center, restaurants, shopping centers, ATMs via geo-filter. It creates social networking environments with location-based friendship applications. Location-based, mobile social media applications have started with Dodgeball. It was founded in 2000 by Dennis Crowley and Alex Rainert and was acquired by Google in 2005. Dodgeball was turned off by Google in 2009 and turned into Google Latitude. Latitude was recording real-time movements of people via devices. It was

turned off by being integrated into Google+. Dennis Crowley and Naveen Selvadurai established Foursquare using their experiences in location-based services in 2009 with check-in logic. Recognition of cultural attractions has been accelerated with the development of Google Map and Foursquare. Foursquare also added users to this process as content creator and editor. Foursquare offers many advantages for cultural heritage researchers as locating easily and quickly, narrowing search results, submitting place suggestions, reaching the target groups with place-based comments.

There are many location-based websites and applications that cultural heritage researchers can use. Geofeedia application deals with social media platforms and receives location-based data about users. For instance, comments about Hagia Sophia can be compiled in different social media platforms in the Sultanahmet region. Locations can be filtered as words, time, date, user name and the like. Regional cultural heritage research and web analytics can be done through location-based applications such as WeLink, Sysomos, MomentFeed, Venuelabs, and Local Measure. In this way, location-based communities are sometimes derived from the design of the application being used, and sometimes by geographic filtering.

Location-based applications are essential for emergencies that provides road, search and rescue assistance, and ambulance access. It also used for tracking and navigation. People can get dynamic navigation, locate their children, friends, and pets, reach the stolen goods. The applications developed with the purpose of corporate social responsibility started to spread. For instance, İhtiyaç Haritası (The Needs Map) shows the needs in different locations, where members can meet these requirements. Projects like Cities Unlocked and WeWALK use location-based services to make it easier to access disabled. The entertainment industry, especially the games, is being designed to be based on location and augmented reality as Mario Run and Pokemon Go.

Enterprises using location-based applications have a competitive advantage over other businesses. Companies are doing location-based marketing. For this reason, they try to reach customers' location data with different methods. Sometimes this location data is obtained from mobile applications; sometimes GSM operators provide this facility. These data are used for location-based marketing. Besides, companies use location data to choose their investment location such as corporations to transfers the positions of

businesses to geographical information systems for doing regional needs analysis with customer segmentation. Companies can control business processes as logistics and supply chain management using location-based services. The evolution of location-based services has opened the way for the emergence of new generation platform businesses as UBER and Airbnb. These applications also provide efficient use of resources at the same time.

In summary, location-based social media applications have begun to affect every aspect of our lives. Literature, culture, and art are also positively influenced by the development of that because of the announcement of activities and the facilitation of information access to places.

#### **1.4. CULTURAL HERITAGE, UNESCO AND NEW MEDIA**

The protection of cultural items is essential not only because of their economic value but also because of their belonging, emotions, and lifestyles they have created. Some of these works, they may be tangible or intangible things, have a cultural significance that means aesthetic, historic, scientific, social or spiritual value for past, present or future generations (ICOMOS, 2013). They might be objects that can be held and buildings that can be explored, or songs that can be sung and stories that can be told (UNESCO, 2011).

Cultural heritage is the value people have given to items and places through their association with those items and places (Jackson, 2004). Cultural heritage allows us to establish historical, cultural and social ties between past and future (Ivey, 2008). Unfortunately, on a global scale, cultural heritage objects and sites face a multitude of threats (Sullivan, 2015). Cultural heritage sites all over the world face rapid decline due to aggressive urban expansion, speculative development, wars, and general neglect (Kalay, Kvan and Affleck, 2008). Individuals and institutions are fighting against these threats. UNESCO is an institution that plays an essential role in informing and spreading the awareness of cultural heritage.

UNESCO defines mission as the building peace in the minds of humanity through education, natural sciences, social and human sciences, culture and information and communication (*Introducing UNESCO*, no date). One of the central themes of UNESCO

is “Protecting Our Heritage and Fostering Creativity”. In this context, protecting, promoting and transmitting heritage has been identified as one of the strategic objectives in Medium-term Strategic Plan of UNESCO (UNESCO, 2014).

The World Heritage List, prepared by UNESCO for the protection of heritage, the widespread awareness of cultural heritage and the promotion of cultural heritage places. As of 2017, there are 1073 cultural and natural assets registered worldwide in the UNESCO World Heritage List, of which 832 are cultural, 206 are natural and 35 are mixed (cultural/natural) assets (*World Heritage List Statistics*, no date).

Looking at the Seven Wonders of the World, which lasted in 2nd century BC, these wonders were on the line of Egypt, Mesopotamia, and the Aegean. Turkey is at the intersection of this line and has hosted great civilizations and the cultural heritage that these civilizations left behind. Although the Wonders of the World within the borders of Turkey are not reachable nowadays, efforts are being made for the survival of existing cultural assets. 17 places in Turkey, including Hagia Sophia, are on the World Heritage List.

Technological developments provide new platforms for interaction on a global scale, creating new opportunities for reaching new and broader masses for cultural institutions. Alonso Addison states that the development of digital technologies is a renaissance for the documentation, analysis and presentation of heritage. He describes virtual heritage in this context as use of digital technologies to record, model, visualize and communicate cultural and natural heritage. (Addison, 2007). Cultural content creation through scanning, modeling, and archiving via new media technologies, content management and sharing through databases and search engines have been created opportunities (Dave, 2007). The benefits of using the new media for cultural heritage are as follows heightened understanding; cross-cultural collaboration; promotion and relevance to broader audiences; provocation of new media forms in the additional expression, understanding, and collaboration with and among cultural heritage stakeholders (Sullivan, 2015).

It is possible to shorten the distance between cultural spaces and their visitors using innovative technological applications and location-based services (Chianese, Piccialli and Valente, 2015). The new media have significant impacts on cultural heritage by serving

the widespread consciousness of cultural heritage. Jeff Malpas summarized this as follows:

“While the transformative possibilities of new media have a significance that encompasses the entire breadth of contemporary life and culture, they have a special significance in relation to issues of cultural heritage new media offers enormous potential for the recording, documenting and archiving of culturally significant - and often highly vulnerable - sites and materials, it can enable forms of analysis and reconstruction that could not even be envisaged previously, it can also allow access to sites and materials, as well as making possible new modes of communicating and presenting information about them, that would not otherwise be possible” (Malpas, 2008).

Erik Champion suggests five features of new heritage that may help increase engagement, memory recall, and more appropriate learning as explorative space, shadow embodiment, social realms, uncertainty, and meaningful historical and heritage-based learning (Champion, 2007).

Everyone is responsible for the preservation of cultural heritage. Therefore, participation of all stakeholders in cultural heritage studies should be ensured. Participation creates a public opinion for the protection of cultural heritage, opens up economic and technical competences and interdisciplinary studies. New media tools increase interactivity and digital visibility with Web 2.0. Campaigns made in new media environments generate data, knowledge and visibility. Interpretations, shared photos or videos have become an important means of action for cultural heritage consciousness. For instance, the attacks on the ancient city of Palmira by the ISIS terrorist organization have been heard through new media tools and reactions have been voiced (Euronews, no date). New media tools serve the sustainable existence of cultural heritage sites.

UNESCO has set three goals with the aim of ensuring that the culture is involved in developing strategies and processes. One aspect of these approaches is to encourage the participation of communities through the empowerment of creative industries. New media is one of the areas that make up the creative industries.

One of the ways to increase participation is online open access to cultural heritage. New media provide the tools for open access to cultural heritage sites. Open access allows

individuals and organizations without access to cultural heritage to recognize cultural heritage. It is also a source for cultural heritage researchers.

Yehuda E. Kalay (Kalay, Kvan and Affleck, 2008) asks two related questions about the role of the new media on the cultural heritage. It deals with practices and guidelines to expand and redefine the scope and nature of the new media in the service of cultural heritage.

1. What is the “appropriate” way of utilizing digital media in the service of preserving cultural heritage?
2. What is the impact of digital media themselves on the content they purport to preserve and to communicate? (Kalay, Kvan and Affleck, 2008)

These two questions are very comprehensive and require specific answers to each case. This thesis study responds to both questions in the context of location-based services and its content.

In addition to social networking sites, other new media technologies, systems, and tools also play a role in the protection and promotion of cultural heritage. Cultural places are simulated in 3D with virtual, augmented, mixed reality applications. Written resources are archived as the digital environment with OCR technologies. Gamification provides cultivation. The display and control of the cultural spaces are ensured with the help of the drones.

New media tools improve access and participation opportunities to cultural heritage. It enables democratization of the cult by improving the participation habits. People at different points in the world can be informed about cultural heritage and places on World Heritage List via new media tools. This affects inter-country relations and tourism positively. But sometimes the voice of the crowds on the internet can be directing. Kalay emphasizes neutrality as well as this like every medium ever used to preserve cultural heritage, digital media is not neutral: it impacts the represented information and the ways society interprets it. Although digital forms offer various possibilities for dissemination, digital media presents viewers with the unique problems of authenticity, interpretability, guidance, and contextuality – or rather, lack thereof (Kalay, Kvan and Affleck, 2008).

UNESCO campaigns are made, applicants are accepted, and publications are shared online. UNESCO is training people to use and development of new media tools such as YouthMobile project. There are some mobile applications related to World Heritage List that are not officially linked to UNESCO on Google Play. UNESCO aims to create awareness for their studies using social networking sites. It has a website in six languages, Facebook, Twitter, Instagram, Google+, YouTube, VK, LinkedIn, and iTunes accounts that provide different types of contents.



## **CHAPTER 2**

### **METHODOLOGY AND RESEARCH DESIGN**

#### **2.1. PURPOSE OF RESEARCH, RESEARCH QUESTION, AND HYPOTHESIS**

In this thesis, the influence of social media tools on the cultural heritage consciousness is addressed with a case study of Hagia Sophia and Foursquare. This study aims to raise awareness about the cultural heritage. Within the methodology outlined in the Research Design section, data analysis, survey and expert opinion have been identified to examine the current situation and to design the future. These three studies have been preferred because of the weakness of the literature that brings new media and cultural heritage together to practice. Establishing a point of reference and bringing scientific awareness to this position will be the scientific contribution of the study.

In this context, the research question should be as follows:

- How can the social media contribute to awareness about cultural heritage?

#### **2.2. RESEARCH DESIGN**

In the research of the thesis, the mixed (qualitative and quantitative) method is used. Because induction is used in the research with statistics, in this context, different variables and arguments are discussed. Behaviorally, social issues are identified, discovered, and revealed. Although objective interpretation is noticeable, personal and social issues to be addressed can be evaluated differently from the results obtained. As a method of data collection, face-to-face survey, internet data analysis, and expert interviews are used.

The primary sources of the thesis research are face to face surveying in the Hagia Sophia Museum and obtaining opinions from experts. In this way, it is aimed to reach the current and necessary data. Getting information with these two techniques will be longer than the secondary source. A review of Foursquare comments for 2016 is planned as a secondary resource. The use of the year 2016 data was preferred to limit and access current data. Although it is easy to reach the data regarding secondary sources, it is thought that it will take time to create a data dictionary and examine the comments one by one. The statistics



that will emerge on the basis of the research will be used for qualitative interpretation, not for quantitative proof.

### 2.2.1. Analysis of Foursquare Data

Comments written about Hagia Sophia location on Foursquare in 2016 were transferred to Excel spreadsheet. 160 comments have been written in different languages from the beginning of 2016 to the end of 2016. Comments that were not written in Turkish or English were translated into English. Comments not written in the Latin alphabet have been translated into the Latin alphabet. Due to translation process, textual or semantic losses may be experienced.

The reason for selection of the period, it was up to date and last available yearly period data. It is aimed at this data that are examining of users' perceptions about cultural heritage and related items and complaining subjects about the museum.

The data dictionary is a computing term that a set of information describing the contents, format, and structure of a database and the relationship between its elements, used to control access to and manipulation of the database (McDaniel and International Business Machines Corporation, 1994). Comments were categorized using the following data dictionary in Excel as a database. Then the data are marked and analyzed according to the relevant fields.

**Table 2.1. Data Dictionary**

Column	Content	Type	Explanation
A	# (Number)	Number	Number from 1 to 160.
B	Date	Text	The date the comments were written.
C	Comment Text	Text	Comment text, except photography.
D	Picture	Text	Does the comment contain photo?
E	Language	Text	Language that the comment is written.
F	Gender	Text	Gender of the commenters.
G	Emoji	Text	Using emoji in comments.
H	TWFL	Text	Turks who write in foreign languages.
I	History	Text	The comments mention to history.
J	Religion	Text	The comments mention to religion.
K	Culture	Text	The comments mention to culture directly.
L	Heritage	Text	The comments mention to heritage directly.
M	Architecture	Text	The comments mention to architecture.
N	Museum	Text	The comments mention to museum.
O	Recommendation	Text	Interpretations and criticisms.

### 2.2.2. Survey about Hagia Sophia

Application for permission was applied to Kadir Has University for the survey study. Hagia Sophia Museum Directorate allowed the survey to be conducted in the museum with the document taken from Kadir Has University. The survey was planned to gain insight into cultural heritage and new media use of Hagia Sophia Museum visitors.

In 2014 and 2015, approximately 3.5 million people visited the Hagia Sophia Museum. In 2016, this figure dropped to 1.436.577 due to the terror attacks (*İstatistikler | Ayasofya Müzesi*, no date; *Istanbul Explosion | The Independent*, no date). Visitor statistics of 2017 are not published yet, the universe of this year cannot be determined. Random sampling for purpose was used. In this sampling method, reaching people in the sample is easy, and everyone has a chance to be selected. Otherwise, the universe is so large, because of that choose and list the sample that reflects the universe is complicated. A sample of 300 people was selected as neutral and representative. Properties of these people such as age, gender, and education are included in the next section.

The study was conducted on Thursday, November 23, 2017, and on Saturday, November 25, 2017. A total of 300 face-to-face surveys were held in the Hagia Sophia Museum in two days. The survey was conducted on the basis of 15 questions both Turkish and English and the results were analyzed in Excel and all the statistics covered are included in the Appendix. The following conditions were set for the survey, and the survey study was conducted within these terms.

- The survey is conducted face to face in Hagia Sophia.
- A maximum of two people from a group of visitors can respond to the survey.
- The questions are short and accurate.
- Survey duration is less than two minutes.
- The number of questions does not exceed 15.
- Personal information is not requested in the survey.
- Confidentiality is considered when the questions are answered.
- The survey is conducted for at least two days (one weekday and one weekend).
- Three researchers make survey at different points of the museum.

- The questionnaire is tested with ten people (five of them are a visitor in the museum) before it is done for pilot implementation.
- The questions are directed at one goal.
- The questionnaire is only available in Turkish and English. It is necessary for those who perform the survey to know these two languages.

Collect information about the following areas with three parts of questions is aimed. Questions are multiple-choice, open-ended or Likert scale.

#### Part I

- Gender
- Educational Status
- Visit Type
- Visit Reason
- Internet Access with Mobile Phone

#### Part II

Part II was made for those who use the internet from a mobile phone.

- Location-Based Services are Used
- Foursquare & Swarm Usage Frequency
- Foursquare & Swarm Usage Reason
- Commenting on Location Based Services

#### Part III

- Researching Destinations via the Internet
- Impact of Opinions on Internet Reviews
- Getting Information about the Cultural Heritage from the Internet
- UNESCO World Heritage List Awareness
- Know a Place in the UNESCO Cultural Heritage List in Turkey
- Knowing whether Hagia Sophia is on the Cultural Heritage List

### 2.2.3. Expert Interviews

The aim of the expert interviews is to receive information and interpretations from the experts in their fields that cannot be obtained from the questionnaire, internet data and other sources. The expert interviews were designed as a semi-structured; questions were prepared in advance. In addition to general, common views to experts, specific questions about the fields were also asked.

Expert opinions were taken from names that are expert in the field of thesis study as new media, Hagia Sophia, UNESCO and World Heritage List, and Foursquare. Expert interviews were conducted in English or Turkish, written or written approval of face-to-face or Skype interview.

Expert interviews were made for the following persons and purposes:

- Sercan Çalbak, New Media Lecturer at Bahçeşehir University, has worked in the traditional media and has experienced the media's transformation from traditional to new, and has managed the processes in this regard. He has also made new media initiatives. The aim of Çalbak's selection for the interview is to have both theory and practical knowledge. The missing parts in these matters were asked to himself.
- Hayrullah Cengiz, Director of the Hagia Sophia Museum, graduated in the field of history and is an experienced person in museology. The aim why Cengiz was chosen for the interview is that he has specialized knowledge about Hagia Sophia. Exclusive information about the comments and perception of the museum on the internet are also taken.
- Assoc. Prof. Dr. Yonca Erkan, UNESCO Chair of Management and Promotion of World Heritage Sites: New Media and Community Involvement, is an expert in architecture and restoration. She has been working in the areas of management and preservation of World Heritage Sites and preservation of cultural assets. The purpose of the interview with her is to have knowledge about cultural heritage and UNESCO studies.
- Hakan Tozcan, Founder of Foursquare Turkey and SU9 Level User, is a sectoral experience in the field of new media. Foursquare has no official office in Turkey. Tozcan and his friends have established Foursquare Turkey as a civil organization

and thanks to user rating, they have had special authorities as location address and tag edits, delete, and merge. Tozcan's reason to be interviewed is that he has detailed knowledge on the management side of the location-based Foursquare mobile application.

Expert interviews, dataset and survey results were analyzed to complement each other in the context of the topics discussed in the literature. Even though statistical data are obtained with various measurement methods, the research contains qualitative and quantitative items together. The data are obtained at specific time intervals, they constitute a point to which future research can refer. Similar research has not been done in terms of location and application before, because of that analytical induction has been done instead of comparison. Inter-variable links have been analyzed with this approach. The obtained data were not transferred directly as descriptive, content analysis and interpretation were made.

## **CHAPTER 3**

### **ANALYSIS OF RESEARCH FINDINGS**

#### **3.1. FOURSQUARE COMMENTS ANALYSIS OF HAGIA SOFIA**

A yearly data of 2016 was selected for the analysis of Foursquare reviews. All the comments were transferred to an Excel file. This file is included in Appendix as a table. Analyzed 160 reviews sorted by date and they were numbered. Twelve areas were created to recognize the author profile and classify the comments. These fields can be accessed from data dictionaries in the methodology.

When the interpretations are classified, the following conclusions are reached. 50 of the comments were written with photographs, and 110 of them includes only text types of input. 15 of the comments contain emoji as a new media expression type. Comments are written in the following languages as Turkish (87 people), English (47), Arabic (11), Russian (6), Spanish (4), French (1), Greek (1), Indonesian (1), Italian (1), and Korean (1). The nine Turkish people identified have written their comments in English instead of Turkish. Some tourists may have used other languages instead of their own, but it will be difficult to locate it from the comments. According to the profile of the authors, 92 are male, 53 are females, and 15 are non-available.

When the contents of comments are examined, the most emphasized area is the architecture. 54 reviews are directly related to the architecture. After the structure, some interpretations include history (43) and religious (39) emphasis. Twelve people commented on Hagia Sophia's museum role. All these areas are related to the cultural heritage. There are also direct interpretations of culture (4) and heritage (8). The number of comments with no content related to these areas is 58; it also means that 63.75% of the comments have content about architecture, history, religion, museum, culture, and heritage.

The complaints in the comments are about ongoing restorations (12), entrance fee (7), security (1) and entry of disabled citizens (1). We have observed in the process of surveying that there is no security problem in the museum. The low rate in the comments

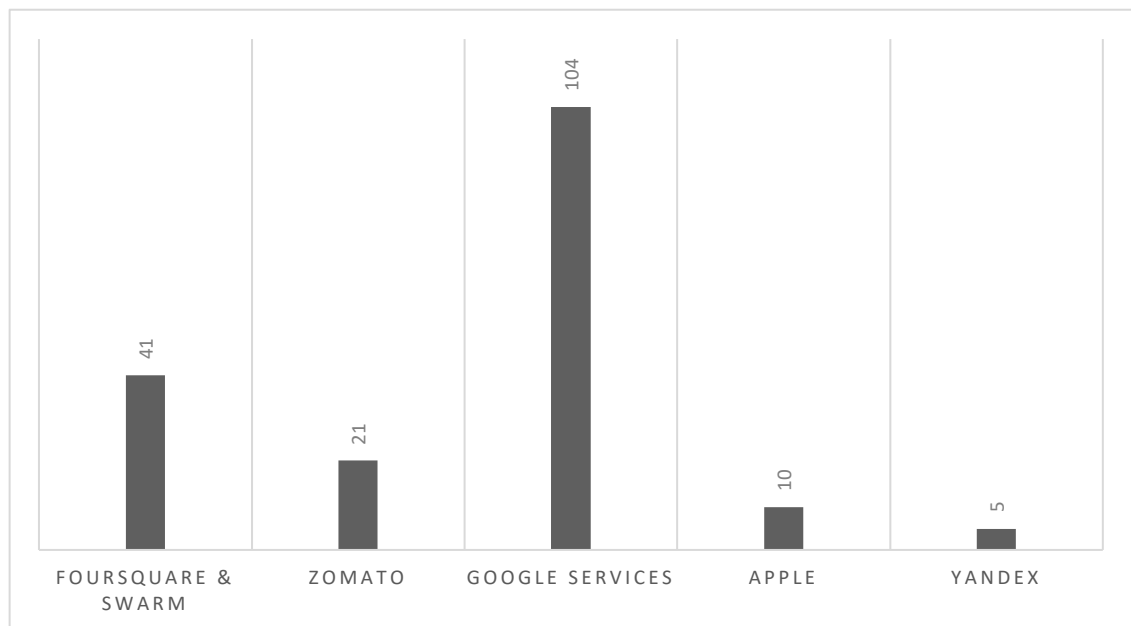
can indicate a particular issue. Hagia Sophia Museum Travel Route Project for Disabled Visitors was completed in 2015 (*Restorations | Hagia Sophia Museum*, no date).

The data analysis results show that interpretations are conscious and guiding about cultural heritage and Foursquare creates public opinion through the expression of opinions, suggestions, and complaints.

### 3.2. SURVEY RESULTS

The first part includes gender, educational status, type of visit, reasons for visit types of questions. The last question is of this section about using the internet connection on the mobile phone. If people said yes to this item, we did the second part of this survey. Otherwise, the second part was excepted, and the third part was taken.

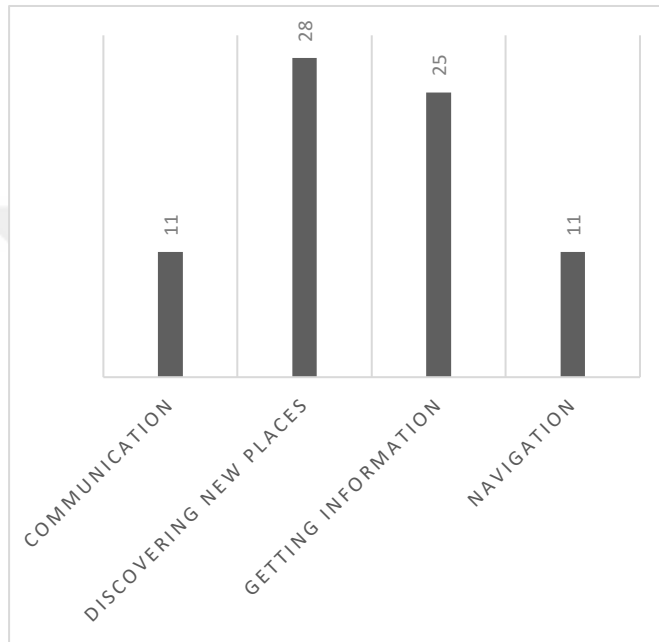
People who took the survey, 54.33% are from males, and 45.67% are from females. When the education level of these people is examined, 0.66% has the primary school, 4.67% has the secondary school, 32% has the high school, 41.33% has the university, and 21.33% has the master or doctorate degree. When asked the reasons to visit which can be answered more than once, 56.33% of them visited due to tourism, and 52.33% of them visited due to culture are the most common answer options. The other visit reasons are religion (6%), attendant (2.67%), curiosity (2.33%), research (1.33%) and photography (1.33%).



**Figure 3.1. Location-Based Services Usage of the Visitors**

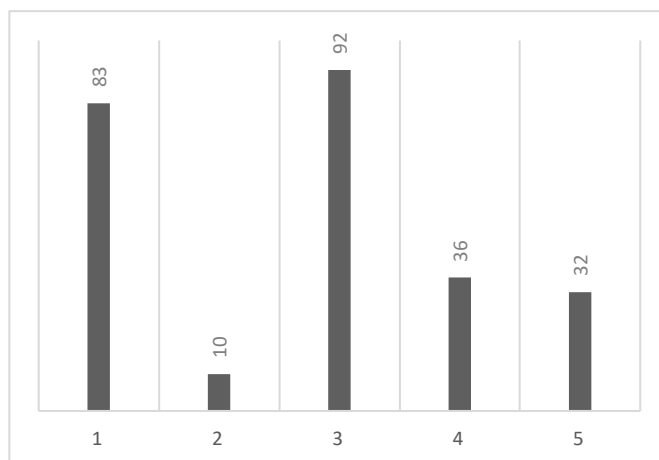
277 of the 300 people who participated in the survey use a mobile phone with internet access. The second part of the survey was answered only by them.

41 of these people use Foursquare & Swarm, and this is 14,8% of those who use the internet from a mobile phone. 181 responses were given in multiple selections for this question, and other answers are Zomato (7%), Google Services (34.67%), Apple (3.33%) and Yandex (1.67%). Although Google does not have an application like Foursquare and



**Figure 3.2. Purpose of Foursquare Usage**

(68.29%) and getting information about the areas (60.98%) took the first two orders. At the same time, people are also using the application for communication or navigation (26.83%). The rate of commenting on location-based services is 28.28% among the 145



**Figure 3.3. Effects of Internet Comments (Likert Scale)**

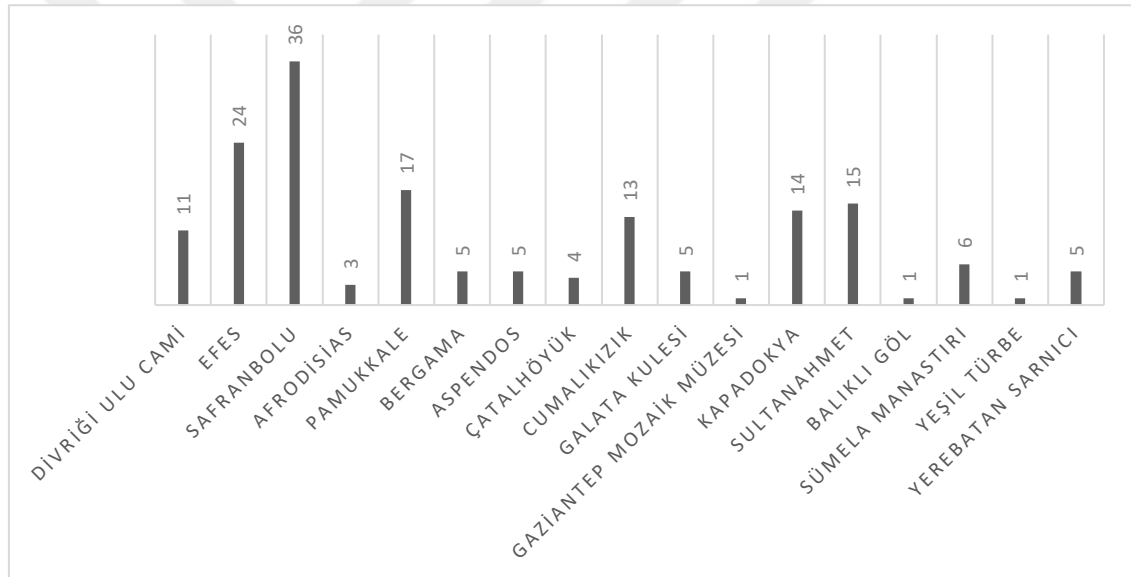
Zomato, in the other option, Google found the most place. The results of the usage frequency asked 41 people using Foursquare & Swarm are as follows in 1-5 scale: 1 (2 people), 2 (4), 3 (11), 4 (9), 5 (15). 85.37% of users of Foursquare use the application at the medium and high-level frequency. In the question asked for the reason for using the application, 41 people give 75 answers. Discovering new places (68.29%) and getting information about the areas (60.98%) took the first two orders. At the same time, people are also using the application for communication or navigation (26.83%). The rate of commenting on location-based services is 28.28% among the 145 respondents who answered the question. 71.72% of those who do not write comments indicate that the majority of users use the application for information rather than writing comments.

The third part was asked to all people who participated in the survey. 84.33 percent of them (253



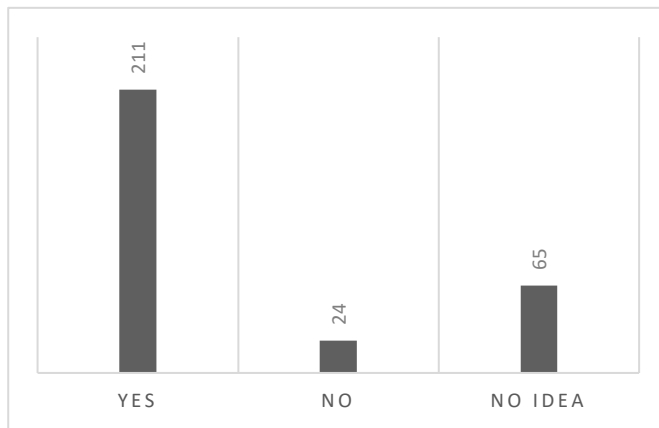
people) investigate places on the internet. Comments on the internet were asked which affect the opinions of that people. The average impact ratio is below the average with 2.7 points from 5. Those who are very affected by the comments are just 12.64% of 253 people. When people who do not research places on the internet are added, this rate drops to 10.67%.

297 people answered the question about getting information about cultural heritage from the internet, the average ratio from the 1-5 scale is 3.34. 61 out of 300 people (20.33%) said that they have no information about the UNESCO World Heritage List. Besides, 94 people (31.33%) have less knowledge, 61 people (20.33%) have an intermediate level knowledge, and 84 people have good level knowledge about that. When we ask a place on the UNESCO Cultural Heritage List in Turkey, 44.67% of the participants said that



**Figure 3.4. Locations on the World Heritage List in Turkey Except Hagia Sophia (Visitors Perceptions)**

they did not know a place. The most frequent response of the participants who know a place was Safranbolu with 36 people. Safranbolu is the sixth place added to the list as a cultural heritage in Turkey (*Safranbolu Şehri (Karabük)*, no date). Other places such as Divriği Great Mosque and Hospital (Sivas), Efes (İzmir), Afrodissias (Aydın), Pergamon Multi-Layered Cultural Landscape (İzmir), Neolithic Site of Çatalhöyük (Konya), and Bursa and Cumalıkızık: The Birth of the Ottoman Empire (Bursa), which the participants mentioned, are listed as cultural. Göreme National Park and the Rock Sites of Cappadocia (Nevşehir) and Pamukkale-Hierapolis (Denizli) are listed as both cultural and natural



**Figure 3.5. Hagia Sophia is in the World Heritage List**

listed by UNESCO. 70.33% of the participants think that Hagia Sophia is one of the places on the World Heritage List. %21,67 have no idea, and %8 of the participants think that Hagia Sophia is not the part of World Heritage List.

### 3.3. EXPERT INTERVIEWS

Interviews were conducted with four experts in the fields designated as new media, cultural heritage, Hagia Sophia, Foursquare, and the studies of UNESCO. The intent of the interviews is not only to obtain general information but also to collect data that cannot be obtained from other sources. Because of that interview questions sometimes refer to similar areas, sometimes refer to different unique issues. Literature, survey and data set topics were also included in the interviews. Thus, some questions in these sources were answered.

Technological developments have provided new media environments as new mediums for expressing the opinions of individuals and communities. Çalbak stated that new media created by the significant contribution of technology naturally benefit from this freedom and it can create many different areas itself. It creates a role that breaks the rogue, creates a devastating effect, and often makes it more open to those who want to be repressed. The development of new media tools, as he has indicated, has to take essential roles sharing and access to views, cultural sharing, and recognition of cultures with the areas of freedom created. So, we can foresee that cultural awareness will increase in parallel with the development of new media tools. In addition, Cengiz expressed that Turkey should

heritage. The Theatre and Aqueducts of the Ancient City of Aspendos (Antalya) and Sumela Monastery (Trabzon) are in UNESCO Temporary List of World Heritage. Galata Tower, Blue Mosque, Pool of Abraham, Green Shrine, Basilica Cistern, Zeugma Mosaic Museum which the users think are listed, are not

have a focused perspective for the widespread of cultural heritage consciousness, not only new media. He emphasizes on education from pre-school to begin. Because he thinks that conscious generations who will protect Turkey's cultural assets can only grow up this way. New media tools can be used in educational logic.

The amount of data generated by different platforms is exponentially increasing (Reinsel, Gantz and Rydning, 2017). Çalbak mentioned that the accumulated data in new media can turn into meaningful content for cultural heritage. This issue included two things as the processing of the accumulated data about cultural heritage may play a role in the dissemination of cultural heritage consciousness, and this data will be a part of the human inheritance in future. Foursquare is one of the social media applications that generate location-based data. According to the Foursquare blog, Turkey is the most checked country that has 25% of available global check-ins with 2.5B check-ins (*Foursquare Blog — Thanks a (10) Billion*, no date). Location-based data is examined by institutions. The Hagia Sophia Museum follows the contents that are shared or written in digital media with an expert. When the comments written about Hagia Sophia on Foursquare in 2016 are examined, complaints are concentrated on ticket cost, ongoing renovations, and current debates. When we asked these questions, Cengiz responded gradually. For instance, Cengiz does not agree with the criticism that the Museum is expensive. He emphasized the application of Museum Card for Turkish citizens and many groups can enter the museum free of charge (*Visiting Information | Hagia Sophia Museum*, no date). For foreigners, Cengiz thinks that museum entrance ticket price is affordable enough to compare with museum entrance ticket prices in the world. When we look at the comments about the museum on the internet, we see that the current debates continue about the institutional entity of the museum. Christians want to see the museum as a church, Muslims want to see it as a mosque. There are those who want to see it as a museum among Christians, Muslims, other members of the religion or non-believers. Cengiz believes that debates are usual, The Republic of Turkey is an independent state, and the government is the decision maker in fulfilling these demands.

Tozcan expresses that local users usually create comments, the primary aim of the recommendations is to take action, so it has the guiding feature. Foursquare is actively used in Turkey, for this reason, Tozcan believes that Foursquare is vital for brands in

Turkey. Just as it is on many other social media platforms, Foursquare also features follower. Therefore, he thinks that the experience of sharing a large number of followers or phenomenon is significant because it is taken into consideration by many users. Çalbak considers this issue as follows, he believes that influencer marketing in the new media affects people beyond what is expected. Positive comments made in the new media are positively affecting brands regarding marketing. He described this as experience advertising. Although we will not be able to mention marketing literally for cultural heritage sites, influencer marketing plays an essential role in awareness. In his view, this area will develop and satiate in time. Cengiz thinks that the views on the social media platforms are influencing and directing the public opinion positively or negatively. They are getting a return to what was shared in the Museum's accounts. Besides, they are getting feedbacks from writings at blogs and news sites. When asked the comments are instructive or directive, he states that everyone looks at own frame. He believes that it is necessary to look at historical facts and scientific logic. Because he recommends readings about Hagia Sophia and review of information for the views to be influenced positively.

UNESCO is a global brand in terms of protection of cultural heritage and dissemination of cultural heritage awareness. One of the interviews was made with Assoc. Prof. Dr. Yonca Erkan (UNESCO Chair, Management and Promotion of World Heritage Sites: New Media and Community Involvement). Erkan state that as of October 2017, there are a total of 702 UNESCO Chairs all over the world, these chairs aim to bring UNESCO's work issues and ideals to the fields of research and education in the field of education, science and culture. According to Erkan, the chair of Kadir Has University focuses on new media and cultural heritage, aims to solve the problems of World Heritage Sites through social participation and digital media tools. At the same time, Kadir Has University has master programs about these areas as Preservation of Cultural Heritage and New Media (*Preservation of Cultural Heritage*, no date; *New Media*, no date). According to Erkan, UNESCO's new media studies consist of international campaigns, and also ways of using the new media for educational purposes are being investigated. She indicates that the new media are regarded as a tool for the immediate protection of artifacts destructed as a result of disasters and catastrophic consequences of terrorist activities. Erkan thinks that the new media has a fundamental role in the creation of cultural heritage consciousness. UNESCO gave support to Hagia Sophia during the repair

of the dome as sending a team for 2-3 months per year. At the moment, the renovations of the museum are being made by the Museum's staff. There is also a Science Committee composed of Turkish scientists. Hagia Sophia does not have a UNESCO logo. When we asked, he said that the UNESCO logo does not gain or lose anything to Hagia Sophia, the presence of Hagia Sophia in the World Heritage List brings a lot to the World Heritage List.

Criticisms about the restoration done in recent years in Turkey are organizing through social media. The before and after comparisons about restorations have attracted many news sites and social content platforms (*'Restorasyon' Konusunda Adeta Bir Dünya Markası Olduğumuzun İspatı 15 Mimari Facia*, no date; Şermin Terzi, no date). The criticisms of the restoration work at the Hagia Sophia Museum are about timing, not the quality of the works. There is an ongoing restoration process in the museum, and it is also interested in those who are sensitive about cultural heritage. They are writing reviews on the internet, especially on Foursquare. At the same time, the Director of the Museum have complaints about restorations. Cengiz complained that those who did not know why the restoration took so long. The pier that was built while repairing the dome mosaics remained in the museum for 17 years. Cengiz explains this situation as follows, UNESCO sent specialists for 2-3 months a year, and these restorations were conducted under the guidance of these experts. Piers remained there for 17 years; it could be disassembled difficulty for three months. In 2010, the piers were dismantled, but they were relocated now. According to Cengiz's statement, the interior surface is being restored. It is expected that the restoration will continue because it was built in a short period, due to earthquakes and the old age of construction about 1500 years old. The new restorations include all of the modern restoration processes. Cengiz expresses that everything that is seen is transferred to projects and the restoration team is reviewing that. After the Scientific Committee examines and decides, it sends it to the Foundations Directorate. They send it to the Directorates of Preservation of Cultural Assets. These processes extend the restoration time, but all have a role in modern restoration mentality. It is gratifying that the Director of the Museum does not have the financial difficulties or lack of personnel. To summarize, Cengiz says that restoration work is carried out meticulously, even there is any person works in sight. Although there are no such comments for Hagia Sophia, some of the comments on the internet are focused on the failure of restorations. We asked

Cengiz, what is missing here, conscious or knowledge? He thinks that the work of restorer is not only technical, she/he also has to have professional ethics, maybe there are deficiencies as doing tasks fast, studying without getting the correct data or shortcomings in education. It would not be possible for many people to develop sensitivity in this regard without the rapid spread of information through social media. In this context, social media also creates awareness of cultural heritage through these types of online campaigns.



## **CHAPTER 4**

### **DISCUSSION**

The primary purpose of the dissemination of cultural heritage consciousness is to preserve valuable tangible and intangible heritage items. Some cultural assets that are in danger of extinction for different reasons. For this reason, widespread awareness of cultural heritage is a matter of being. Yonca Erkan stated that UNESCO gives priority to cultural heritage items that are under threat of destruction. Social media applications, in particular location-based services, create awareness of cultural heritage sites that are at risk of extinction due to war, unconsciousness, and the lack of the necessary studies. New media also provide tools for archiving assets about cultural locations or documents to the computer environment. Models can be archived even if the assets disappear for various reasons. Thus, cultural assets will continue to be a bridge between the past and the future.

The progress of creative industries provides opportunities for the development of new communication tools and methods. The development of the technical infrastructure and the transition to a new web environment also directly or indirectly provide tools for the dissemination of cultural heritage consciousness. The high usage of internet on mobile phones is an opportunity for location-based social media applications. For instance, 41 of the surveyed people use Foursquare. Most of these people do not write comments, but they use the application to discover new places and to have information about places. The rate of influence from comments is 2.7 out of 5. The reason that this ratio is below average is due to the fact that the survey participants' education level and cultural heritage knowledge are high and also 84.33% of them are exploring places on the internet.

Cultural heritage consciousness is becoming widespread can be possible with the individuals who have education and awareness about these kinds of topics. New media tools can be used for transferring or designing real environments to virtual. These online resources are actually educational documents. According to Cengiz, the new media can be used educationally with the purpose of disseminating the cultural heritage consciousness. At the same time, he thinks that the cultural heritage must be discussed in all levels of the educational systems.

Comments, criticisms, and recommendations constitute the voice of crowds on the internet. Location-based social media applications also create geographically based social networks. Online open access to cultural heritage can provide democratization of the cult. All stakeholders of cultural heritage can participate the processes related to cultural heritage with new media opportunities. For instance, responses to frequently criticized restoration in Turkey were organized on social media, especially written comments to the location-based social media applications has been the router.

New media environments offer opportunities for museum management, visitors and researchers for Hagia Sophia. Critics of the Hagia Museum on Foursquare comments in 2016 have focused on three areas: ticket pricing, ongoing renovations, and current debates. The director of the museum, Cengiz, said in the interview with us that they were following everything that was shared about the museum on the internet. Cengiz was aware of the criticisms in the comments and gave the necessary answers. Thus, it can be said that location-based social media applications are effective for a cultural heritage consciousness.

As a universal brand in the protection of cultural heritage, UNESCO actively uses its social media accounts and organizes its campaigns online according to their aims. According to Yonca Erkan, the new media plays a fundamental role in the creation of cultural heritage consciousness for UNESCO.

New media is a medium and an opportunity to promote cultural heritage items. Interest in cultural heritage affects international relations and tourism. Foursquare comments of the Hagia Sophia Museum were written in ten different languages in 2016. 63,75% of these comments directly or indirectly contain expressions about cultural heritage. More than half of those surveyed in the museum are foreigners, and their main reasons for visiting are culture and tourism. Location-based social media applications can provide geographic filtering and suggest historical and cultural sites in the surrounding area.



## CONCLUSION

In this study, which focuses on Foursquare and Hagia Sophia in terms of the impact of social media applications on cultural heritage consciousness, the technical and theoretical background was referred to the literature, the Foursquare 2016-year data was categorized and examined, the survey at the Hagia Sophia Museum was conducted, and expert opinions were sought within the methodology of the study. The results obtained were analyzed and interpreted in the Discussion part.

The development of new media technologies and dissemination of cultural heritage awareness activities are seen as two independent processes but progress together. The relationship between these two concepts is mutual nutrition as the opening of new communication channels also means opening new ways to reach people about cultural heritage.

As a result of this study, new media tools, especially location-based social media applications, play an important role in the dissemination of cultural heritage awareness. Social media applications provide opportunities for the promoting of cultural heritage items. It serves to democratize cults by increasing access. It increases cultural tourism by drawing attention to cultural items. It creates sensitivity to cultural heritage items that are in danger of extinction. It is attracting attention to restorations. Comments written in location-based social media applications are taken into consideration by the. These comments are partial directive. New media can be used for the educational purpose of cultural heritage. Created online documents are also educational contents. Interpretations, criticisms, and recommendations form the voice of crowds of cultural heritage in location-based social media applications. These contents are taken into consideration by the institutions. UNESCO effectively uses new media tools with the goal of promoting cultural heritage awareness. New media tools provide recognition of new cultures and cultural spaces. It builds cultural friendships and networks.

The appropriate way of utilizing social media in the service of preserving cultural heritage is to enrich contents, serve them to people and measure its impacts. For this purpose, virtual cultural content can be enriched by transferring cultural assets to digital, new

social tools can be developed as a medium and the effects of these new contents and tools can be measured.

The study has some limitations as location and application. General assumptions have been made carefully. The research shows periodic effects as it is done at certain date intervals. It will be the basis for subsequent researchers. However, because no similar research has been done before, no comparison was made. In future research about these kinds of topics, it is recommended that they not only conduct qualitative research. Because, when conducting research, it was seen that some general perceptions do not overlap with the statistics. Making measurements and applying a mixed method is useful.



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## APPENDICES



## APPENDIX A

### EXPERT INTERVIEW QUESTIONS AND ANSWERS IN TURKISH

#### Expert Interview (1) with Sercan Çalbak, Lecturer at Bahçeşehir University New Media Department

**Mustafa Çetinkaya:** Birçok teknolojinin bir arada kullanılması (mashup) yeni medya araçlarının gelişimi için neden önemlidir?

**Sercan Çalbak:** Teknolojinin bize sağladığı en büyük nimetlerden biri de çoğunlukla öngörülemez olması. Bu öngörülemezlik aynı zamanda bağımsızlığı da getiriyor. Teknolojinin büyük katkısı sayesinde oluşan yeni medya kavramı doğal olarak bu bağımsızlıktan yararlanıyor ve kendisine çok daha farklı alanlar yaratabiliyor. Yarattığı alanlarsa ezber bozan, yıkıcı etki yaratan hatta çoğunlukla baskılanmak istenenleri de bir şekilde açığa çıkartan role bürünmesini sağlıyor.

**Mustafa Çetinkaya:** Yeni medyada biriken veriler kültürel miras için anlamlı içeriklere dönüşebilir mi?

**Sercan Çalbak:** Burada tek başına yeni medya diyerek, medyayı sınırlamamak gerekir. Her dönem kendi medyasını, doğal olarak da kendi birikimini oluşturur. Yeni medya kaynakları kullanılarak oluşturulan medya da aynı şekilde bir birikimdir. Bu birikim süreçle beraber her an ve her dönemde yaşayan, evrilen kültürümüzü de oluşturacaktır. Doğal olarak bu veriler de günün birinde insanlık mirası olarak kayda geçecektir. Bu arada genellikle kültürel miras kavramıyla genellikle pozitif bir anlam düşünüyoruz. Ancak yoğun olarak sıklıkla eleştirilen yeni medya verilerinin/davranışlarının negatif yönleri de olsa dahi bunlar da bize geleceğe dair dersler verdiği için yine pozitif bir mirastır.

**Mustafa Çetinkaya:** Yeni medya yorumları ve analizleri, Etkileyici Pazarlama (influencer marketing) bağlamında ne tür bir etki oluşturuyor?

**Sercan Çalbak:** Bizim için ezber bozsa da yeni medyada yapılan influencer marketing kavramı sanılanın ötesinde etki yaratıyor. Yapılan bütün araştırmalar, yeni medyada etkili yorumların özellikle pazarlama anlamında markalara olumlu etki yarattığını ortaya

koyuyor. Kısacası klasik anlamda reklamın yerini deneyim reklamcılığı alıyor. Tabii bu da bir süreç. Henüz satüre olmamış, etkininin tam olarak kim olduğu belli olmayan bir alandan bahsediyoruz. Influencer marketing, zaman içinde gelişecek ve oturacaktır.

## **Expert Interview (2) with Hayrullah Cengiz, Director of the Hagia Sophia Museum**

**Mustafa Çetinkaya:** Kurumsal olarak internet haberleri, mekân yorumları gibi dijital medyada yer alan görüşleri kurumsal olarak değerlendiriyor musunuz?

**Hayrullah Cengiz:** Basın ile ilişkileri İl Kültür Müdürlüğü ve Bakanlığımızın Basın Müşavirliği takip ediyor. Sosyal paylaşım sitelerindeki hesaplarımızı takip bir çalışmamız var. Sosyal paylaşım sitelerinde bizimle ilgili haberleri ve gönderileri takip edebiliyoruz. Hukuki olarak ilgilenilmesi gereken meseleler var ise onu doğrudan Bakanlığımızın Basın ve Halkla İlişkiler Müdürlüğü takip ediyor. Eğer bizim cevap vermemiz gereken bir husus oluyorsa bizden bir cevap istiyorlar ve biz de kendilerine bilgilendirme gönderiyoruz. Bir açıklama yapılması gerekiyorsa kendi takdirleri doğrultusunda paylaşıyorlar.

**Mustafa Çetinkaya:** Ayasofya hakkında dijital medyada yer alan görüşlerin toplumu Ayasofya algısını etkilediğini düşünüyor musunuz?

**Hayrullah Cengiz:** Mutlaka, olumlu olarak da olsa olumsuz olarak da olsa bir şekilde kamuoyunu etkilediğini ve yönlendirdiğini düşünüyorum. Bunu nasıl anlıyoruz? Sosyal paylaşım sitelerinde yapmış olduğumuz haberlere verilen tepkilerle görebiliyoruz. Şahısların açmış oldukları bloglar ve haber sitelerinde yapılan haberlerin bizim sosyal paylaşım sitelerindeki hesaplarımıza dönüşü oluyor, yorumlarını paylaşıyorlar. Ama ayaklara yere çok sert basmayan haberler üzerine de konuşuluyor. Yani daha çok hayalde düşüncede kalan haberler oluyor, verilere dayanmıyor.

**Mustafa Çetinkaya:** Yorumlar öğretici mi yönlendirici mi?

**Hayrullah Cengiz:** Ayasofya'ya herkes kendi çerçevesinden bakıyor. Tarihi gerçekler ve bilimsel mantıkla bakmak gerekiyor. Biraz Ayasofya hakkındaki bilgiler gözden geçirilse, biraz Ayasofya hakkında kitap okunabilse görüşler de büyük şekilde olumlu yönde değişecektir.



**Mustafa Çetinkaya:** UNESCO'nun Ayasofya üzerindeki kültürel miras çalışmaları hangi alanlara odaklanıyor?

**Hayrullah Cengiz:** UNESCO'nun Ayasofya'ya dair özel bir çalışması bulunmuyor. Kubbenin onarımları esnasında bir destek verildiğini biliyorum. O da yılda birkaç ayı geçmeyen bir ekip gönderiyorlardı. Şu an tüm onarımları kendi ekiplerimizle yapıyoruz. Kendi bilim insanlarımızdan oluşan bir Bilim Kurulumuz var. UNESCO'nun logosu Ayasofya'da yer almıyor, ben geldiğimde de yoktu. Logonun olup olmaması Ayasofya'ya bir şey kazandırmaz ve kaybettirmez, Dünya Kültürel Miras Listesinde Ayasofya'nın olması Dünya Kültürel Miras Listesine çok şey kazandırır.

**Mustafa Çetinkaya:** Foursquare 2016 yılı verilerini incelediğimizde yorumların bilet pahalılığı, devam eden tadilatlar ve güncel tartışmalara yoğunlaştığını görüyoruz. Bunları konuşurken Ayasofya'nın varlığı ve önemini gözden kaçırmıyor muyuz?

**Hayrullah Cengiz:** Birincisi, vatandaşlarımız için bizde bir Müze Kart uygulaması var. Şöyle ki, 18 yaşından küçükler ve 65 yaşından büyükler ile engelliler için müzemiz ücretsiz, 18 yaşından büyük vatandaşlar öğrenci veya öğretmen ise 20 TL, değilse 50TL'ye bir Müze Kart alabiliyor. Bir sene boyunca Kültür ve Turizm Bakanlığına bağlı müzeleri ücretsiz olarak gezebiliyorlar. Bilet pahalılığını meselesini çok doğru bulmuyorum. Yabancılar içinse, bizim biletimiz 40TL, dünyadaki müze giriş bilet fiyatları ile karşılaştırıldığında bizim müze giriş bilet fiyatımızın kıyaslanmayacak kadar hesaplı olduğunu görüyorum. Herhangi bir yere gittiğinizde Avrupa'da ufacık müzenin bile fiyatının neredeyse Ayasofya'ya denk hatta daha fazla olduğunu görüyorsunuz.

İkinci konu restorasyon konusunda Müze Müdürü de şikayetçi, restorasyonun neden bu kadar uzun sürdüğünü bilmeyenlerin şikâyet etmesinden şikâyetçi. Ayasofya'nın tam orta yerinde diyelim, bir iskele vardı. Bu iskelenin kalma sebebi, UNESCO'nun yardımı ile kubbe mozaiklerini onardığımızda yılda 2-3 ay birkaç uzman gönderiyorlardı ve uzmanların yol göstericiliğinde bu restorasyonlar yapılıyordu. İskeleler sürekli sökülüp takılamayacağından 2-3 ay için 17 sene o iskeleler orada kaldı. 2010 yılında biz o iskeleleri söktük. Şimdi tekrar yerleştirdik. İç yüzeylerimizde yeni restorasyona başladık. Bu restorasyonu kendimiz yapıyoruz.

Ayasofya yaklaşık olarak 1500 yaşında, yapıların efendisi olarak kabul edilen bir yapı. Çok fazla restorasyona ihtiyacı oluyor. Ayasofya beş yıl on ay gibi kısa bir sürede yapılmış. Hızlı yapılmasının bir rekor olmakla beraber dezavantajları da var. Yapının oturması, malzemelerin yapılması, beklenmesi gibi şeylerin olması gerekiyordu. Bunu nasıl anlıyorsunuz? Yapıldıktan yaklaşık 20 yıl sonra meydana gelen bir depremde ana kubbenin doğu tarafı ve doğu yarım kubbesi çöktüğünde Ayasofya'yı inşa İsidoros'un yeğeni genç İsidoros'a Ayasofya teslim edilir, şartlarından bir tanesi süre tanınmasıdır ve 4,5 yıl sürer. Ayrıca İstanbul bir deprem bölgesi. Bu kadar yaştaki bir bina bu depremlerden etkilenmiştir. Sadece sıvaları kaldırıp derzleri açayım dediğinizde bir bakıyorsunuz 9. yüzyıldan bir bakıyorsunuz 13. yüzyıldan izler görüyorsunuz. O tarihlerden kalan, yapılması onarılması gereken yerler var. Yeni restorasyon mantığına göre orada görmüş olduğunuz her şeyi projenize bire bir aktarmak zorundasınız. Örneğin, duvarın üzerindeki sıvayı kaldırdınız, baktınız ki 16. yüzyıldan kalma bir desen çalışılmış ya da 10. yüzyıldan kalma bir uygulama var. Hepsini projelere geçiriyorsunuz. Projeleri restorasyonu yapan kontrol ekibi görüyor. Sonrasında bilim kuruluna çıkıyor. Bilim Kurulu bunun eksiksiz olduğunu gördükten ve gerekli tanımlamayı yaptıktan sonra bir tutanak tutuyorlar ve vakıflara gönderiyorlar, orası da Koruma Kuruluna gönderiyor. Proje ve yapılacak uygulama oranının onayından sonra uygulamaya geçiyor. Bu süreçler restorasyonu uzatıyor mu? Evet. Ama bunların hepsi olması gereken süreçler, restorasyonun mantalitesi artık bu. Şu anda bizim maddi sıkıntımız ve personel sıkıntımız yok.

Hiç kimsenin çekici eline almadığı süreçlerde bilelim ki proje üzerine çalışılıyordur. Duvarlar üzerinden alınan örneklerin laboratuvar sonuçları bekleniyordur. Örneğin, oradaki harcın ne olduğunu bileceksiniz ona uygun bir harç kullanasınız. Bilinmeyen bir harç kullanamazsınız, birbirini iter, birbirini inkâr eder. Ya da 20. yüzyıl içinde yapılan restorasyonlarda çimento kullanmışız, bir kurtuluş olarak görülmüş. Ama bugün bakıyoruz ki çimentonun ömrü 70-100 sene. Çimento hava almayan bir malzeme, halbuki yapıların hava alması gerekiyor. Çimento esnek olmayan bir malzeme, İstanbul'daki harçların esnek olması gerekiyor, çünkü biz bir deprem bölgesindeyiz. Bunun çok olumlu bir şey olmadığını görüyoruz. Bu nedenle, biz restorasyonlarımıza çok dikkat ediyoruz.

Güncel tartışmalarla ilgili olarak, herkes kendi inancını burada görmek istiyor. Yani, Hristiyan burayı kilise olarak görmek istiyor, Müslümanlardan burayı cami olarak görmek isteyenlerin sayısı çok fazla. Hristiyanlar, Müslümanlar, başka dine mensuplar veya herhangi bir dine mensup olmayanlar arasında burayı bir müze olarak görmek isteyenler var. Bu doğal bir şey. Bütün herkesin talebi nasıl yerine getirilecektir? Türkiye Cumhuriyeti bağımsız bir devlettir. Bu devletin bir yönetimi vardır, buna karar verecek olan devletin erkidir.

**Mustafa Çetinkaya:** Yeni medya araçlarını kültürel miras bilincinin yaygınlaşması için veya Ayasofya'nın bir kültürel miras mekânı olarak tanınması için nasıl kullanabiliriz?

**Hayrullah Cengiz:** Kültürel miras bilincinin yaygınlaşmasını sadece Ayasofya odaklı değil de Türkiye genelinde bakmak gerekiyor. Coğrafyamızı medeniyetlerin doğduğu, büyüdüğü ve yıkıldığı bir yer olarak düşündüğümüzde bugün kültürel mirasımıza istediğimiz seviyede sahip çıkılmadığını görmek bizi üzüyor. Bir tarihi yapının üzerindeki yazılar, o tarihi yapı dikkate alınmadan çevresine yapılan yapılaşmalar veya bir yapının uygun şekilde restore edilmemesi gibi. Medyanın bir etkisi olabilir mi? Olur tabi ki ama işin başında okul öncesinden başlamak üzere eğitim var. Türkiye'nin kültürel varlıkları çok büyük bir avantaj, bu avantajı nasıl değerlendirebiliriz? Bu varlıkların uzun süre yaşamaları için ne yapabiliriz? Bunun yolları için de bir şuur oluşturmamız lazım. Bu varlıklara sahip çıkacak insan kitlesi yetiştirmemiz lazım. En azından tüm insanlarda bu hassasiyeti oluşturmamız lazım. Ondan sonrası uzmanlık alanlarına giren meseleler.

Bugün bir çocuğun elinde telefonu ve tableti görebiliyorsunuz. Bunlardan istifade edilebilir mi? Eğitim mantığı içinde değerlendirmek lazım. İletişim kanallarıdır, birebir diyalogdur, sözlüktür, ne olursa olsun etkili olduğuna inanmışımdır.

**Mustafa Çetinkaya:** Türkiye'de yapılan restorasyonlarla ilgili eleştiriler var. Bunları yapanlar da işin uzmanları. Burada eksik olan şey şuur mudur bilgi midir?

**Hayrullah Cengiz:** Burada eksik olan ikisi de. Bir şeyin bilgisini öğrenmek ayrı, ahlakını öğrenmek ayrıdır. Bir restoratörün işi sadece teknik olmamalı, bu işin bir de ahlakı olmalı. Oradaki insanlarda kasıt değil de belki de eksiklik vardır diye düşünüyorum. İşin hızlı yapılması bir eksikliktir, işi doğru verileri almadan yapmak bir eksikliktir, eğitim-öğretimdeki eksiklikler vardır. Her şeyden önce işin ahlakını öğretmek gerekiyor. İş

ahlakî eğitimin içinde yoksa veya bir değerlendirme tabii tutulmuyorsa, ölçülmüyorsa, iş ahlakî olan bir vatandaşın derecesi daha yüksek tutulmuyorsa olmuyor.

**Expert Interview (3) with Assoc. Prof. Dr. Yonca Erkan, UNESCO Chair, Management and Promotion of World Heritage Sites: New Media and Community Involvement**

**Mustafa Çetinkaya:** UNESCO kürsüleri dünya miras alanlarının yönetimi ve tanıtımı için ne tür roller üstlenmektedir?

**Yonca Erkan:** Ekim 2017 itibariyle tüm dünyada toplam 702 UNESCO Kürsüsü bulunmaktadır. Bu kürsüler, eğitim, bilim, kültür alanında UNESCO'nun çalışma konularını ve ideallerini araştırma ve eğitim alanlarına taşımayı hedeflemektedirler. Dünya Miras Alanları, 1972 yılında imzalanan Dünya Miras Sözleşmesi çerçevesince korunmaktadır. Günümüzde 1073 alan Dünya Miras Listesinde yer almaktadır. Söz konusu alanların korunması, tanıtılması, korunma süreçlerinin izlenmesi gibi alanlarda bilimsel çalışmalara ihtiyaç bulunmaktadır. Aynı zamanda, Dünya Miras Alanlarının küresel ölçekteki Sürdürülebilir Kalkınma Hedeflerine uyarlanması UNESCO'nun önemli hedeflerinden biridir. UNESCO kürsüleri anılan alanlarda araştırma kapasiteleri ile katkı vermektedir.

**Mustafa Çetinkaya:** Kadir Has Üniversitesinde yer alan UNESCO Kürsüsünün amaçları nelerdir?

**Yonca Erkan:** Kadir Has Üniversitesinde yer alan Dünya Miras Alanlarının Yönetimi ve Tanıtımı: Yeni Medya Kullanımı ve Toplumsal Katılım Kürsüsü, Dünya Miras Alanlarının sorunlarına toplumsal katılım ve dijital medya araçlarını kullanarak çözüm üretmeyi amaçlamakta; bu alanda yüksek lisans eğitimi vererek dünya mirası konusunda bilinç geliştirme, alanların korunmasında görev alacak uzmanların yetiştirilmesi konusunda rol üstlenmektedir.

**Mustafa Çetinkaya:** UNESCO'nun yeni medya üzerine çalışmaları hangi noktalara yoğunlaşmaktadır?

**Yonca Erkan:** UNESCO'nun yeni medya üzerine çalışmaları öncelikle uluslararası iletişim kampanyalarından oluşmaktadır (unite4heritage, give2heritage, vb), bunun yanı sıra yeni medyanın eğitim amaçlı kullanılmasının yolları araştırılmaktadır. Özellikle afetler ve terörist faaliyetler sonucu yaşanan yıkımların sonucunda tahrip olan eserlerin acil korunması için bir araç olarak değerlendirilmektedir. Bilinç geliştirme ve kaynak yaratma çabaları için geniş topluluklara ulaşabilmede yeni medya önemli bir fırsat sunmaktadır.

**Mustafa Çetinkaya:** Yeni medya kültürel miras bilincinin artmasında etkin konumda mı, erken dönemde midir?

**Yonca Erkan:** Yeni medya kültürel miras bilincinin yaratılmasında temel bir rol üstlenmektedir.

#### **Expert Interview (4) with Hakan Tozcan, Founder of Foursquare Turkey and SU9 Level User**

**Mustafa Çetinkaya:** Foursquare, Türkiye'de resmi faaliyet yürütüyor mu? Gönüllü bir kuruluş olan Foursquare Türkiye ne tür çalışmalar yapıyor? Superuser nedir, Türkiye'nin ilk Superuser'ı nasıl oldunuz?

**Hakan Tozcan:** Foursquare'in Türkiye'de resmi olarak bir ofisi bulunmuyor ama resmi olarak reklam ortaklığı yaptığı firmalar bulunuyor. Foursquare ve Swarm'ın Türkiye'deki kullanımını geliştirmek için hayranları tarafından kurulmuş bir topluluk grubuyuz. Amacımız Türkiye'deki lokalizasyon çalışmalarına katkı sağlamak, güncel haberleri kullanıcılara ulaştırmak, mekân bilgilerini düzenleyerek gereksiz karmaşadan uzak tutmak, uygulamaları daha eğlenceli ve kullanışlı hale getirmektir. Grubumuzda 13 yazar, 59 Superuser özel kullanıcı yetkisine sahip üye bulunuyor. Bloğumuzda 500'ün üstünde yerli içerikli haberimiz bulunuyor. Şu ana kadar 3 milyondan fazla mekânın bilgilerini düzenledik. Her sene 16 Nisan'da Foursquare Günü'nü kutluyoruz. Bunun dışında farklı etkinlikler de düzenliyoruz. Foursquare'in kurucularından Dennis Crowley dahil olmak üzere, Foursquare'in New York, San Francisco ve Londra'da ofislerinde çalışan birçok kişi İstanbul'da düzenlediğimiz etkinliklerimize katıldı. Foursquare'in New York'taki merkez ofisini ziyaret ettik. Bu ziyaretlerden birinde Foursquare'in kurucusu ve eski CEO'su Dennis Crowley ile ekibimizi temsilen görüşme fırsatı da bulduk. Check-in

yapılacak mekanları belirleyerek İstanbul'a özel rozet ve etiket çalışmaları yaptık. Türkiye'deki özel gün ve bayramlar için mesajlar hazırlatarak kullanıcıların ekstra puanlar kazanmalarını sağladık. İletişim formu aracılığıyla gelen sorular hariç, blogumuz üzerinde 6 binin üstünde soru yanıtlandık. İlk Türkçe dile sahip uygulama, 7 Haziran 2012 tarihinde yayınlandı. Çevirileri ekip olarak Smartling'de yaptık. Şu andaki çeviriler Foursquare ve Swarm tarafından yapılıyor, biz de destek olmaya devam ediyoruz. Superuser olarak adlandırılan ve genelde kısaca "SU" olarak kullanılan, özel kullanıcı yetkisine sahip olan kullanıcılardır. Bu kullanıcılar 1-10 arasında seviyelendirilir. Seviye arttıkça SU yetkileri de artar ve mekanların tüm bilgilerine müdahale etme yetkileri bulunur. SU yetkisi, kullanıcılara Foursquare tarafından verilir. Foursquare kullanıcılara bu yetkiyi vermeden önce, kullanıcıların profilini inceler. Kullanıcıların eklediği mekân sayıları ve nasıl ekledikleri büyük önem taşır. Ayrıca kullanıcıların hile yapıp yapmadığını kontrol eder. Sahte check-in yapan ya da çeşitli etiket veya puanlar kazanmak için sahte mekanlar oluşturup check-in yapan kullanıcılara bu yetki verilmez. Çünkü bu tarz kullanıcıların yetkilerini kötüye kullanabileceğini düşünülür. Foursquare ile 2009 yılında tanıştım ve ilk check-in yapmak istediğimde, listelenen mekanlarda bulunan hatalar ve bilgi kirliliği beni rahatsız etti. Bu yüzden Foursquare'e bir e-mail atmamın ardından SU yetkisine sahip oldum, zamanla bu yetki en üst seviyeye kadar taşındı.

**Mustafa Çetinkaya:** Foursquare ve diğer lokasyon bazlı servisler kültür mekanlarının tanıtımı ve kültürel miras bilinci için neden önemli olabilir?

**Hakan Tozcan:** Foursquare'deki veriler tamamen kullanıcı bazlı olduğu için genelde lokal kullanıcılar tarafından oluşturulmaktadır. Buradaki en önemli konu, mekanların altına eklenen tavsiyelerin tarafsız olmasıdır. Bunun sebebi de tavsiyelerin tamamen kullanıcılar tarafından oluşturulmasından kaynaklandığıdır ve dolayısıyla genelde reklam içermez.

**Mustafa Çetinkaya:** Sözlükler ve bloglarda Foursquare yorumlarına dair subjektiflik eleştirisi var. Foursquare yorumlarının mekân hakkında öğretici mi yönlendirici mi olduğunu düşünüyorsunuz?

**Hakan Tozcan:** Tavsiyelerin temel amacı aksiyon almak üzerine olduğu için yönlendirici özelliğine sahiptir. Örneğin bir restorana gittiğinizde ne sipariş edeceğinizden tutun, kullanıcıların farklı deneyimlerinden ya da damak zevklerinden yola çıkarak vereceğiniz siparişi daha da farklılaştırabilir ve özelleştirebilirsiniz. Bu nedenle genel olarak tavsiyelerin hem öğretici hem de yönlendirici olduğunu söyleyebiliriz.

**Mustafa Çetinkaya:** Kurumların Foursquare kullanımı ve elde edilen verilerin analizine dair görüşleriniz nelerdir? Kurumların dijital medya planlaması içinde Foursquare nasıl bir yer tutuyor?

**Hakan Tozcan:** Lokasyon bazlı fiziksel trafik verisi tüm dünyada büyük önem taşıyor. Ayrıca geçtiğimiz sene Foursquare tarafından yapılan açıklamaya göre, dünya genelinde yapılan check-in sayısı 10 milyara ulaştığını biliyorsunuz. Üstelik bu check-in'lerin 4'te 1'ini kapsayan 2,5 milyarının Türkiye'ye ait olduğunu belirtirsek, Foursquare'in Türkiye'deki markalar tarafında oldukça önem taşıdığını söyleyebiliriz.

**Mustafa Çetinkaya:** Etkileyici Pazarlama (influencer marketing) açısından Foursquare ne tür bir rol üstleniyor?

**Hakan Tozcan:** Yukarıda da belirttiğim gibi mekanların altındaki tavsiyeler ya da puanlamalar kullanıcılar tarafından yapılıyor. Diğer birçok sosyal medya platformunda olduğu gibi Foursquare'de de takipçi özelliği bulunuyor. Dolayısıyla takipçisi sayısı fazla olan bir kullanıcının ya da fenomenin paylaştığı deneyimler birçok kullanıcı tarafından okunarak dikkate alındığı için büyük önem taşıdığını düşünüyorum. Tabii dünyadaki check-in'lerin 4'te 1'ini Türkiye oluşturduğu için ekstra bir önem taşıdığını da söyleyebilirim.

## APPENDIX B

### SURVEY QUESTIONS APPLIED AT THE HAGIA SOPHIA MUSEUM BOTH TURKISH AND ENGLISH

- Çoktan Seçmeli Sorular/Multiple Choice Questions
- Çoklu İşaretlenebilir Sorular/Multiple Markable Questions

#### Bölüm I/Part I

##### 1. Cinsiyet/Gender

- Kadın/Woman
- Erkek/Man

##### 2. Eğitim Durumunuz Nedir?/What is your educational status?

- İlkokul/Primary
- Ortaokul/Secondary
- Lise/High School
- Lisans/Undergraduate
- Lisansüstü/Graduate
- Diğer/Other

##### 3. Ziyaret Türü/Visit Type

- Yerli/Domestic
- Yabancı/Foreign

##### 4. Ayasofya Müzesini ziyaret gerekçeniz nedir?/What is the reason for visiting the Hagia Sophia Museum?

- Turizm/Tourism
- Din/Religion
- Kültür/Culture
- Diğer/Other (*Açıklama Alanı*)



5. İnternet erişimi olan bir cep telefonu kullanıyor musunuz?/Do you use a mobile phone with internet access?

- Evet, Kullanıyorum/Yes, I am Using
- Hayır, Kullanmıyorum/No, I do not Use

Evet cevabını verenler Bölüm II'ye, Hayır cevabını verenler Bölüm III'e yönlendirilecektir./Those who gave the Yes answer will be directed to Part II, those who gave the No answer will be directed to Part III.

## **Bölüm II/Part II**

Cep Telefonundan İnternet Kullananların Cevaplayacağı Bölüm/The Section of Internet Users via Mobile Phones

6. Konum bazlı hizmetlerden hangilerini kullanıyorsunuz?/Which location-based services do you use?

- Foursquare & Swarm
- Zomato
- Diğer/Other (*Açıklama Alanı*)

7. Foursquare & Swarm uygulamalarını aktif şekilde kullanıyor musunuz?/Do you use Foursquare & Swarm applications actively?

- 1-5 Skalası/1-5 Scale

8. Foursquare & Swarm kullanma gerekçeniz nedir?/Why do you use Foursquare & Swarm?

- Arkadaşarımla Haberleşmek/Communicating with My Friends
- Yeni Yerler Keşfetmek/To Explore New Places
- Mekanlar Hakkında Bilgi Almak/Getting Information about Places
- Diğer/Other (*Açıklama Alanı*)

9. Konum bazlı servislerde yorum yazıyor musunuz?/Do you write comments on location-based services?

- Evet, Yazıyorum/Yes, I'm Writing
- Hayır, Yazmıyorum/No, I do not Write
- Diğer/Other (*Açıklama Alanı*)

### **Bölüm III/Part III**

10. İnternet üzerinden gideceğiniz yerleri araştırıyor musunuz?/Do you investigate the places to go on the internet?

- Yes/Evet
- No/Hayır

11. İnternette yer alan yorumlar mekanla ilgili görüşlerinizi ne ölçüde etkiliyor?/How does the comments on the internet affect your views about the place?

- 1-5 Skalası/1-5 Scale

12. Kültürel mirasla ilgili internetten bilgi alıyor musunuz?/Do you get information about the cultural heritage from the internet?

- 1-5 Skalası/1-5 Scale

13. UNESCO Dünya Miras Listesi hakkında bilgi sahibi misiniz?/ Do you have information about the UNESCO World Heritage List?

- (*Açıklama Alanı*)

14. Türkiye’de UNESCO’nun kültürel miras listesinde olan bir yer biliyor musunuz?/Do you know a place on the UNESCO cultural heritage list in Turkey?

- (*Açıklama Alanı*)

15. Ayasofya Müzesi Dünya Miras Listesinde yer alıyor mu?/Is the Hagia Sophia Museum on the World Heritage List?

- Evet/Yes
- Hayır/No
- Fikrim Yok/No Idea

## APPENDIX C

### SURVEY STATISTICS APPLIED AT THE HAGIA SOPHIA MUSEUM BOTH TURKISH AND ENGLISH

<b>Gender</b>	<b>#</b>	<b>%</b>
Man	163	54,33333333
Women	137	45,66666667

<b>Educational Status</b>	<b>#</b>	<b>%</b>
Primary	2	0,66666667
Secondary	14	4,66666667
High School	96	32
Undergraduate	124	41,33333333
Graduate	64	21,33333333

<b>Visit Type</b>	<b>#</b>	<b>%</b>
Domestic	146	48,66666667
Foreign	154	51,33333333

<b>Visit Reason</b>	<b>#</b>	<b>%</b>
Tourism	169	56,33333333
Culture	157	52,33333333
Religion	18	6
Attendant	8	2,66666667
Curiosity	7	2,33333333
Research	4	1,33333333
Photography	4	1,33333333

<b>Internet with Mobile</b>	<b>#</b>	<b>%</b>
Yes	277	92,33333333
No	23	7,66666667

<b>LBS</b>	<b>#</b>	<b>%</b>	<b>% Per 277</b>
Foursquare & Swarm	41	13,66666667	14,80144404
Zomato	21	7	7,581227437
Google Services	104	34,66666667	37,54512635
Apple	10	3,33333333	3,610108303

Yandex	5	1,666666667	1,805054152
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<b>F&amp;S Usage</b>	<b>#</b>	<b>%</b>	<b>% Per 41</b>
1	2	0,666666667	4,87804878
2	4	1,333333333	9,756097561
3	11	3,666666667	26,82926829
4	9	3	21,95121951
5	15	5	36,58536585

<b>F&amp;S Usage Reason</b>	<b>#</b>	<b>%</b>	<b>% Per 41</b>
Communication	11	3,666666667	26,82926829
New Places	28	9,333333333	68,29268293
Getting Information	25	8,333333333	60,97560976
Navigation	11	3,666666667	26,82926829

<b>Writing Comments</b>	<b>#</b>	<b>%</b>	<b>% Per 145</b>
Yes	41	13,66666667	28,27586207
No	104	34,66666667	71,72413793

<b>Reseach Place on Internet</b>	<b>#</b>	<b>%</b>
Yes	253	84,33333333
No	47	15,66666667

<b>Effecs of Comments</b>	<b>#</b>	<b>%</b>	<b>% Per 253</b>
1	83	27,66666667	32,80632411
2	10	3,333333333	3,95256917
3	92	30,66666667	36,36363636
4	36	12	14,22924901
5	32	10,66666667	12,64822134

<b>Information about CH</b>	<b>#</b>	<b>%</b>	<b>% Per 297</b>
1	73	24,33333333	24,57912458
2	12	4	4,04040404
3	51	17	17,17171717
4	62	20,66666667	20,87542088
5	99	33	33,33333333

3 People Missing

297

<b>UNESCO WHL Information</b>	<b>#</b>	<b>%</b>
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No	61	20,33333333
Few	94	31,33333333
Mid	61	20,33333333
Very High	84	28

Places in WHL	#	%
No	134	44,66666667
Yes	166	55,33333333
<i>Divriği Ulu Cami</i>	11	3,66666667
<i>Efes</i>	24	8
<i>Safranbolu</i>	36	12
<i>Afrodisias</i>	3	1
<i>Pamukkale</i>	17	5,66666667
<i>Bergama</i>	5	1,66666667
<i>Aspendos</i>	5	1,66666667
<i>Çatalhöyük</i>	4	1,33333333
<i>Cumalıkızık</i>	13	4,33333333
<i>Galata Kulesi</i>	5	1,66666667
<i>Gaziantep Mozaik Müzesi</i>	1	0,33333333
<i>Kapadokya</i>	14	4,66666667
<i>Sultanahmet</i>	15	5
<i>Balıklı Göl</i>	1	0,33333333
<i>Sümela Manastırı</i>	6	2
<i>Yeşil Türbe</i>	1	0,33333333
<i>Yerebatan Sarnıcı</i>	5	1,66666667

HS in WHL?	#	%
Yes	211	70,33333333
No	24	8
No Idea	65	21,66666667

## APPENDIX D

The 2016 Foursquare dataset of Hagia Sophia is provided with the CD edition (10180690.rar) as it contains a large amount of data that is not suitable for printing.



## CURRICULUM VITAE

### Personal Information

Name and Surname : Mustafa Çetinkaya  
Birth Place and Date : Ladik - 10.05.1988

### Educational Status

Undergraduate Study : Kadir Has University Management Information Systems and International Finance (Double Major), Anadolu University Economics  
Graduate Learning : Kadir Has University New Media  
Foreign Languages : English

### Work Experience

Working Institutions and Dates : Haliç University (28.03.2014 - Present)

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