KADIR HAS UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES



"NEW" MEDIA TOOLS IN THE "NEW" MUSEUMS THE STUDY CASE OF ISTANBUL MODERN

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"I, Ayça Bayrak, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis."

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ABSTRACT

"NEW" MEDIA TOOLS IN THE "NEW" MUSEUMS THE STUDY CASE OF ISTANBUL MODERN

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Master of Arts in New Media

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Technology and the individual have a reciprocal and transformative relation and the area, which is affected by this relation, is more sophisticated than the idea that technology is shaping the society. To understand the sophistication of the relation between technology and the society; historical, cultural, economic and sociologic dimensions should be considered rather than "techno-deterministic" descriptions for the topic.

In order to express the developments in the area of media; the concept "new media", of which its definition and its specifications are still debated for its aspects such as interactivity and empowering the democracy, should be considered in a critical way. The museums are an important part of the cultural life; and the restructuring of the museums in parallel to technological developments should be evaluated in the axis of "New Museology" with the above critical perspective.

In this research, it is aimed to understand the effects and the contributions of the "New Media" tools to the user experience in "New Museums", where the main focal point is shifted from the exhibited objects to the visitors. For this, the case study of the Istanbul Museum of Modern Art was examined; a survey about the awareness and the use of "New Media" tools among the visitors of the museum was done. The "New Media" tools in Istanbul Museum of Modern Art have been reevaluated in the axis of "New Museology" according to the visitor surveys.

Keywords: New media, new museology, Istanbul Modern, visitor experience, techno-determinism

Teşekkür Notu

Maddi ve manevi desteğini hiç bir zaman eksik etmeyen aileme, zor zamanlarımda yanımda olan Gökhan Uluğ'a, eğitime verdiği destek için Kadir Has Üniversitesi'ne, değerli fikirlerini paylaştığı için Yard. Doçent Dr. Eylem Yanardağoğlu'na, araştırmalarımı mümkün kılan İstanbul Modern çalışanlarına, 'Yeni Müzecilik' kavramı ile tanışmamı sağlayan Suay Aksoy'a ve Kitapyurdu ailesine en içten teşekkürlerimi sunarım.

Table of Contents

ÖZET
ABSTRACT4
Teşekkür Notu 5
Table of Contents
List of Tables
List of Figures
1. Introduction
2. "New" Media That Is Actually Not New
3. Methodology
4. Melting Pot: "New" Media and "New" Museology
5. The Case Study: Istanbul Modern
5.1. About Istanbul Modern Museum
5.2. An overview of Istanbul Modern Museum's Media Engagement42
5.3. Evaluation of Results
5.3.1. Process of Research
5.3.2. Results of Visitor Survey
6. Conclusion and Discussion
6.1. New museum approach to research60
References
APPENDIX A – Research Survey at Istanbul Modern Museum

List of Tables

TABLE 1	– Com	parison	of T	raditional	and	ı"N	ew"	Museum	.37	/
---------	-------	---------	------	------------	-----	-----	-----	--------	-----	---

List of Figures

Figure 1	17
Figure 2	52
Figure 3	53
Figure 4	54
Figure 5	55
Figure 6	57

1. Introduction

It is nearly impossible to find a place on earth, where human being has been lived but no technology has been developed or used. Since the beginning of human history, the technology has been employed by humankind. However, living in the computer and internet-driven "Information Age", we don't necessarily think of fire, wheel or spears as technologies.

As highlighted in much quoted Marshal McLuhan's book "Understanding Media" the relationship between human and technology is described as following "We become what we behold that we shape our tools and thereafter our tools shape us." (Lapham, 1964:xi). For the sake of not falling into the trap of techno deterministic explanations, this relationship should not be established in one direction as it has been done in the sentence. In fact, for developing more comprehensive and realistic understanding about the everyday life practices and society, the human factor is needed to include in these equation. Maybe it is more accurate to put a triple dot at the end of this sentence rather than a full stop. The unending version of the quote reveals not only transformative relationship but also the reciprocal nature of interaction between technology and human. Actually, not only the technology changes the individual's life but also user practices, needs, demands and expectations have an effect on the development of technological devices.

Developments in technology affected various layers of life; healthcare, education, transportation, production systems, construction sector, business management etc. It is for sure the invention of Internet technology has accelerated the developments in other technologies; so the relations between science, technology,

media and society became more complicated than before. In the 21st century, the term "new" media started to be used in order to catch up with these new technologies in the media field. It will be not wrong to say that the high availability of "new" media tools and the excessive use of them have changed the habits and the behaviors of individuals on their daily life. Thus, it resulted in new practices as it reshaped the existing practices with the new ones. Besides celebrating the possibilities created by new media, the discursive creation of "new" media should be kept in mind always. The question of "What is new media?" is a much-debated question and is not an easy one to answer. There are several definitions of the term and critics about its "newness". In the third chapter named "New Media that is actually not New?" the discussions and critics about "New" Media phenomenon will be covered. Moreover, the myths about "new" media will be reviewed and interactivity myth is the main issue.

Besides other transformative changes in cultural, economical and political spheres of life, museums as cultural institutions are affected by the transformation of the term "media", too. In the fourth chapter named "Melting Pot: "New" Media in "New" Museums", for figuring out the roots of "modern" museum a historical perspective will be adapted. Adapting historical perspective on the issue will reveal significant cultural and social factors that have a role in the making of "modern" museum. The chapter is reviewing the weight of the "new" media tools in the development of museums due to the fact that new museum phenomenon. In recent years, the human factor has been the focal point of the definitions of both the "new media" and the "new museum" by emphasizing the visitor orientation and the human interaction. Accordingly it is important to highlight that "new media art" or installations with new media elements are not put into the focus of this study. To be

more specific and clear, the discussion will be limited to the "new" media tools which are embedded in art museums in order to fulfill objectives, basic principles, structure and organization, approach and tasks of new museology in the form of software or hardware. These tools can be exemplified with QR codes, touch screens (kiosks), mobile applications and tablet computers that give information about museum and artworks before, during and after visits. I will employ the Schematic Representations of Traditional and New Museums by Andrea Hauenschild which is stated in the "Claims and Reality of New Museology: Case Studies in Canada, the United States and Mexico" (1998). Since 1998 many other discussions have been held about new museology, however Hauenschild's is the first doctoral dissertation to analyze the effectiveness of new models for museums and the scheme is functional as it compares the qualifications of traditional and new museums point by point. (Claims and Reality of New Museology: Case Studies in Canada, The United States and Mexico, 2004) This schema provides a practical framework because it gives a list of objectives, basic principles, structure and organization, approach and tasks that point out the basic differences between traditional and new museums. In addition to this scheme, the chapter introduces different perspectives on museology and covers fundamental discussions about 'new' museology.

Second Chapter "Methodology" elaborates the model and context of the research. This chapter includes a visitor survey that is designed for the research and conducted in the museum with random participants. While collecting data, paper-based survey was preferred deliberately. The reason behind the preference of paper-based survey was worked through the chapter in details. The survey questions were written for collecting data about visitor's museum experiences, new media skills, visitor's awareness of 'new' media tools in the museum and some certain type of

demographical data. Measuring two correlations was main aim of the survey:

- 1. correlation between age and technical skills,
- 2. correlation between visitor experience quality and new media tool usage.

Due to the limited field-research time provided by the museum administration and the low number of representatives from each age group of participants, the data did not yield meaningful inferences to understand the above-mentioned correlations. These limitations and the reasons behind them will be discussed in details in the next chapter called Methodology. However, the survey results enabled the researcher to understand the relationships between age, technical skills, visitor experience and new media tool usage at a certain level as evaluated in Chapter 5.

In real life practice there is a multidimensional relationship between visitors, museum and "new" media. Constituting some distinct cause and effect relationships among those variables will not illustrate the most accurate picture of the situation in reality. At this point, the Istanbul Modern example in the case study chapter will enhance the discussion of research by giving space to visitor motives, preferences and experience. Istanbul Modern Museum was preferred as a case study, because it is "Turkey's first private museum to organize modern and contemporary art exhibitions." (Istanbul Modern, 2014) and utilizes "new" media tools such as QR codes, kiosk, mobile application, iPads for the public use. On the website of the museum, The Chair of the Board Oya Eczacibaşı declares "When Istanbul Modern opened, we promised to offer our audiences an opportunity to witness, learn about, enjoy, appreciate and to continually become updated with the evolution of contemporary art." (Istanbul Modern, 2014) The sentence of Oya Eczacibaşı is a significant indicator of Istanbul Modern's management strategy. In her statement the

term "New Museology" was not mentioned explicitly. However, the claim of İstanbul Modern promising the audience an opportunity to learn, appreciate and enjoy the contemporary art museum experience on a continual basis rather than just protecting and exhibiting objects give hints about the New Museology approach in Istanbul Modern Museum's management plan. Besides being first private modern art museum and employing new media tools, it is worth to study Istanbul Modern Museum as a case study because of its new museology approach. Chapter of "A Case Study: Istanbul Modern Museum" includes the short history of the museum, its media engagement, evaluation of research process, critical observations of the researcher and the evaluation of information gathered during visitor surveys in Istanbul Modern Museum.

In general terms, "new museology" is about a shift from object-oriented museology to visitor-oriented museums. For achieving this goal "new" museums started to utilize "new" media tools in museum's physical and virtual environments. However, the idea of accomplishing new museology objectives by just embedding "new" media tools in museum's environment is an optimistic view. Employing "new" media tools for visitor-oriented museology is just the foremost step of visitor-orientation. The effective use of those "new" media tools is another significant point, which must be taken into the account as a second step. Just celebrating some certain possibilities provided by "new" media (such as increased interactivity, time and space independency, democratizing the culture etc.) can reduce visibility of the concerns about their effectiveness and negative effects. Therefore, in this research, the awareness of "new" media tools in the museum and the effects of them on visitor experience are questioned. Throughout the study, the researcher tried developing answers to the two interrelated questions: "Are 'new' media tools becoming new

objects of new museums rather than helping them with their aim of visitor orientation and are 'new' museums at the risk of having "fetish of technology" (Harvey, 2003) rather than being visitor oriented?"

The last chapter called "Conclusion and Discussion" presents the findings based on the field observations of the researcher and visitor surveys conducted at the museum environment. Additionally, the chapter includes several suggestions for accomplishing the aims of 'new' museology i.e. 'real' shift in orientation (from object to visitor), democratizing culture and being socially inclusive. The researcher hopes that the study will enable the reader for developing a critical view on the given hierarchy of relationships not only between the museum and visitors but also between the institutions and society.

When analyzing the so-called "visitor-oriented new museums", one should always keep in mind the "hegemonic" relations and the determinative power of museum administration to define the term "visitor." Otherwise, the 'new' media tools in the museums will just indicate their "new" object orientation as another kind of object orientation rather than indicating the visitor-orientated museology as discussed in Chapter 5. In order to accomplish the real visitor orientation, museum administrations should stop envisaging the visitors and should start being acquainted with them by listening to their voices. In addition to that, the museums should encourage scientific researches about museum and visitor studies to develop its strategies for meet the visitor's need. Moreover, while employing new technologies the museums should consider the fact that a part of the visitors in particular may have some form of accessibility problems, which affects their use of the technology.

2. "New" Media That Is Actually Not New

In last 20 years, most of the people around the globe witnessed astounding changes in the structure of technologies, in the nature of communication technologies, in the society and in the daily practices. As common sense knowledge, some of the technological developments were named as 'world changing' technology. Stream machine, printing press telephone, automobile, plane, computer, Internet are just some examples of 'world changing' technology as generally mentioned in the mainstream media. It is said that, so-called "world changing technologies" resulted in a "new historical era" and a 'new' kind of society. For instance, in his influential Information Age trilogy, techno evolutionary theorists Manuel Castells proposes that the successive stage of technological developments and the centrality of information technologies resulted in a 'new era' called 'Information Age' and then he concludes at the end of second millennium this particular age created a 'new' kind of society. That is 'Network Society' in the 'Information Age.' Shortly, Castells explains the reasons of the 'Information Age" and its effects of on reshaping society as "Technological revolution, centered around information technologies, began to reshape at accelerated pace, the material basis of society." (2010:1)

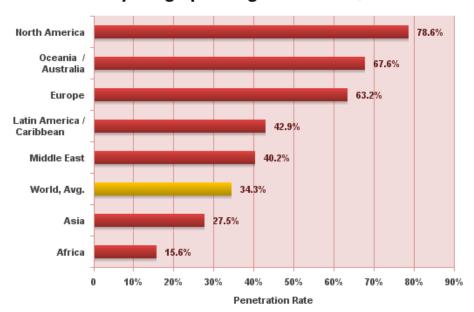
Following such highly encapsulated techno-deterministic accounts -which evaluate the technological developments as the 'prime movers' of the changes- draw a strict cause and effect relationship between the economy and society while underestimating other explanatory factors. In this techno-deterministic relationship, it is illustrated that the society has a tendency to follow a linear progression driven by developments in technology. Daniel Chandler explains techno-determinism as "in its

most extreme form, the entire form of society is seen as being determined by technology: new technologies transform society at every level, including institutions, social interaction and individuals. At the least a wide range of social and cultural phenomena are seen as shaped by technology. 'Human factors' and social arrangements are seen as secondary.'' (1999) However, the changes in 'real life' practices are neither purely in a linear progression nor just technology-driven. Beside technology many other significant aspects are involved in making of the society and the world. Also these some other factors have power to shape and reshape the scope, meaning, and intended purpose of technologies. Saying that is not claiming the technology does not play any role in the changes of society at all but it is saying technology is not the primary explanatory factor. Beside technological factors, it is needed to pay attention to the relationship and interrelations between the economic, political, cultural, social, psychological and educational contexts, too.

It can be said that since 1990s in accordance with developments in communication technology, economic and socio-cultural circumstances, the speed of technological progress increased. Thus, on the just some of parts of the world, the penetration of technology into daily life raised to a considerable level. (See Figure-1, which illustrates world Internet penetration rates in the second quarter of 2012). Saying that the developments in communication technology have certain effects on other technological developments will not be misleading; because in a general sense, the communication channels are directly affected by technological developments in communication technologies. August E. Grant describes the communication technologies as following "Communication technologies are the nervous system of contemporary society transmitting and distributing sensory and control information and interconnecting a myriad of interdependent units." (2010: 1) Thus, developing

communication technologies enabled alternative ways for transferring information. On the one hand, generalizations, reductionism and emphasizing on causality alert the danger of developing a deterministic account. On the other hand, it seems without referring some generalizations and causality chain it is nearly impossible to explain thoughts. Sometimes, the explanatory power of statements comes into existence only in these causality chains. Chandler explains this paradox as following "Any exploration of communications technology has to recognize the difficulty of isolating 'causes' and 'effects', or even in distinguishing causes from effects." (Chandler 1999)

World Internet Penetration Rates by Geographic Regions - 2012 Q2



Source: Internet World Stats - www.internetworldststs.com/stats.htm Penetration Rates are based on a world population of 7,017,846,922 and 2,405,518,376 estimated Internet users on June 30, 2012. Copyright © 2012, Miniwatts Marketing Group

Figure 1

After introducing the concept of techno-determinism briefly and giving a description of communication technologies, some perspectives on the science and technology will bring the discussion further. In the 21st century; technology and

science are embedded within themselves; so that sometimes individuals can mention them interchangeably. An example will help to make the situation clearer. The lexical definition of science is followed by an example phrase that is "the world of science and technology". (Oxford Online Dictionary 2014) This example phrase indicates connectedness between science and technology. In order to understand this tight relationship between science and technology, it is needed to define them more elaborately. Sergio Sismondo refers science as"... a formal activity that creates and accumulates knowledge by directly confronting the natural world." He also questions the relationship between science and technology "Where is technology in all of this? Technology has tended to occupy a secondary role, for a simple reason: it is often thought, in both popular and academic accounts, that technology is the relatively straightforward application of science.' (2010:1). Some philosophers such as Edmund Husserl and Martin Heidegger assume technology as a well-defined monolithic phenomenon. (Chandler, 1999) The social constructivists Trevor J. Pinch and Wiebe E. Bijker point out the need of reviewing the technology-science dichotomy "One theme that has been pursued by philosophers is the attempt to separate technology from science on analytical grounds. In doing so, philosophers tend to posit over idealized distinctions, such as that science is about the discovery of truth whereas technology is about the application of truth." (1993:19) This dichotomy of science and technology can be seen as a result of a certain kind of reductionist tendency. "As the social critic Lewis Mumford has noted, one reductionist tendency is the identification of technology with tools and machines." (Chandler 1999) Chandler himself uses the term "reification" for explaining this reductionism of technology to the material basis (tools, machines etc.) and he describes it, as "Associated with technological determinism is reification. To reify is

to 'thingy': to treat an abstraction as a material thing. Chandler explains one of the results of technological reification as "(...) 'to substitute a part for the whole' (in Pursell 1994, p. 26), because technology includes the whole of our material culture, not only tools and machines." (Chandler, 1999)

Reitification of technology is assuming technology as a material phenomenon only by explaining technology through the physical existence of some tools and machines. This assumption positions technology at the 'outside' of society rather than being an inextricable part of society. Giving technology a 'supra-social' position rather than seeing it as a product of society results in undermining socially shaped nature of the technology. Chandler refers this situation as "Technological Autonomy" and explains the term as following "Closely associated with reification is another feature of technological determinism whereby technology is presented as autonomous (or sometimes 'semi-autonomous'): it is seen as a largely external - 'outside' of society, 'supra-social' or 'exogenous' (as opposed to 'endogenous'). Rather than as a product of society and an integral part of it, technology is presented as an independent, self-controlling, self-determining, self-generating, self-propelling, self-perpetuating and self-expanding force." (Chandler, 1999)

Like technology and science, communication and media are interpenetrated in daily language, too. Even one cannot describe media without mentioning communication or vice versa. For example, when the media studies mentioned, it generally refers to communication media such as print media and press, photography, advertising, cinema, broadcasting (radio and television), publishing and so on. Thus, before coming to the emergence of the "new" media phenomenon, it is a necessity to look at previous developments in the communication technologies.

The latest developments in the communication technologies were presented as the "final communications revolution" and named as "Information Technologies (IT) Revolution". In this view, "IT Revolution" has been preceded by other "revolutions". According to Chandler, 'printing revolution' and 'electronics revolution' are presented as forming stages of IT Revolution. That's to say, the emergence of information technologies has been considered as the final stage of this so called 'electronics revolution'. (Chandler, 1999)

To come back to what was said in the previous paragraphs; the stress on technologies generally creates the possibility of developing techno deterministic accounts as Leo Marx and Merritt Roe Smith state "Taken together, these before-and-after narratives give credence to the idea of "technology" as an independent entity, a virtually autonomous agent of change." (1994: xi) In order to avoid such a techno deterministic account, August E. Grant's perspective is instructive as explained "In discussing each technology, we will address these technologies from a systematic perspective, looking at a range of factors beyond hardware." (2010:1) Consequently, in the following paragraphs, two different perspectives on the effects of technology will be held. First, the accounts that handle hardware (technology) as a prime mover of changes in the society will be mentioned, and then the critics of these techno deterministic accounts will be provided for the further the discussion.

In the second half of 15th century, Gutenberg invented the printing press technology. Printing press has been seen as revolutionary technology because it introduced the possibility of eliminating some disadvantages of the handwriting such as long production time, high production costs and non-standard alphabetical images. Moreover, decrease in the production time could result in increasing production volume, which means greater availability and access. In her book called "The

Printing Revolution in Early Modern Europe", first edition published in 1983, Elizabeth L. Eisenstein refers invention of printing press like "An Unacknowledged Revolution." and explains agency of printing press technology in the making of Early Modern European society and culture. According to her, printing press enabled the knowledge being accessible to the common people and for her it was a revolutionary moment. (Eisenstein, 1983)

Fourteen years later than 1983, S.D. Noam Cook reviewed "Gutenberg Revolution" by drawing attention to limited availability of Gutenberg Bible and low literacy rates in the Early Modern Europe. Cook claims, "The printing revolution is often evoked as a model for understanding the social importance of new technologies." (2006:18) This much, he points the need of reviewing technodeterminist perspective of "Gutenberg Revolution." and renamed it "Gutenberg Myth". Cook's review reveals the ability to read and write is related with class and gender. The knowledge did not become accessible in a revolutionary way because in 1650 the level of illiteracy in Europe in general stood at about 80 percent. (Cook, 2006)

In the nineteenth century, the invention of the electronic media was treated like a wonder as it has been done to the other technologies at the very beginning of their inventions (Briggs and Burke, 2005). Besides, in popular accounts these technologies commonsensically labeled as 'world changing' technologies. In his book called "Understanding Media", McLuhan claims that electronic media had affected perception of typographic man (1964). With his famous quote "The medium is the message." he offered that rather than the content of the media, the form of the media matters. So he claimed that after the invention of electronic media the typographic man, who was born in 15th century, evolved a man who can also decode

images which on the screens. At the second half of twentieth century, media discussions were fueled with new discussions and the need to review these technologies was revealed. (Briggs and Burke, 2005)

For developing a better understanding of New Media debates, one need to be aware that the first of all the electronic media can be in analog or digital forms. Traditionally, new media has been grouped under the digital forms. In the book "New Media: A Critical Introduction", Martin Lister et al. draw the difference line between analogue and digital in the context of media. According to writers of the book:

'Analogue' refers to the way that the input data (reflected light from a textured surface, the live sound of someone singing, the inscribed marks of some one's handwriting) and the coded media product (the grooves on a vinyl disc or the distribution of magnetic particles on a tape) stand in an analogous relation to one another. (2009: 16)

Whereas they describe digital in the context of media as:

In a digital media process all input data are converted into numbers. In terms of communication and representational media this 'data' usually takes the form of qualities such as light or sound or represented space which have already been coded into a 'cultural form' (actually 'analogues'), such as written text, graphs and diagrams, photographs, recorded moving images, etc. These are then processed and stored as numbers and can be output in that form from online sources, digital disks, or memory drives to be decoded and received as screen displays, dispatched again through telecommunications networks, or output as 'hard copy'. (2009: 16)

If the press technology directly affects the scenery of communication by letting mass consumption of printed mediums, electrical communication is another milestone that increased the speed of communication, which accelerated the pace of technological developments directly. To be clearer, invention of digital communication itself has been fostered by the application of those technologies and so it resulted in self-perpetuating developments. For instance, Internet can bee seen as one of the most far-reaching technologies, which advanced the communication; and as a result accelerated the developments in media technologies.

Technological progress not only transforms the nature of media; it also affects the scope of the media usage. Therefore, the need for redefining the media more elaborately aroused. In order to catch up with the new technologies applied in the media field the term "new media" is started to use. "What is new media?" is a much-debated question and not an easy one to answer. Still there are several perspectives and continuous discussions about the content, meaning and newness of the term. "The answer to this basic question depends very much on who is consulted. As noted by Rob Kling (1994), the literature on computerization is divided by utopians, anti-utopians, and more empirically anchored writers". In the following paragraphs some of the critical discussions will be mentioned in details. (Marien, 2006: 44)

"The Language of New Media" written by Lev Manovich puts a question mark on generally accepted characteristics of New Media by asking following questions: "What is new media? We may begin answering this question by listing the categories, which are commonly discussed under this topic: Internet, Web sites, computer multimedia, computer games, CD-ROMs and DVD, virtual reality. Is this all new media is?" (2002:43)

Then he concludes the possible reason of the revolutionary and broader impact of New Media as affecting all types of communication and media different than the previous inventions in the communication technologies:

Indeed, the introduction of printing press affected only one stage of cultural communication -- the distribution of media. In the case of photography, its introduction affected only one type of cultural communication -- still images. In contrast, computer media revolution affects all stages of communication, including acquisition, manipulating, storage and distribution; it also affects all types of media -- text, still images, moving images, sound, and spatial constructions. (2002:44)

Then he lists six key differences between old and new media as: Numerical Representation, Modularity, Automation, Variability, Transcoding and under the subheading called "What New Media is Not", he discusses other six features which are generally mentioned as distinguishing features between new and old media. Yet according to him, they do not contribute to newness of media. He refers digitality and interactivity of 'new' media as myths. (Manovich, 2002) Rather than discussing 'digitality' myth of the New Media, the research is more focused on the interactivity discourse. One of the aims of the research is to survey the globally celebrated interactive nature of new media and its relationship with users of museum visitors / audience / consumer. Accordingly, the need to include the human factor into the discussion appears. Approaches which reject extreme technological determinism (broadly involving 'social context' models) tend to be characterized more by terms such as 'human agency', 'social constraints', 'social opportunities', 'socio-cultural contexts', 'control', 'purposes', 'access', 'power' and so on. (Chandler, 1999)

Manovich summarizes the popular perspective on interactivity of New Media as following:

New media is interactive. In contrast to traditional media where the order of presentation was fixed, the user can now interact with a media object. In the process of interaction the user can choose which elements to display or which paths to follow, thus generating a unique work. Thus the user becomes the coauthor of the work. (2001: 71)

Then Manovich argues:

Used in relation to computer-based media, the concept of interactivity is a tautology. Modern human-computer interface (HCI) is by its very definition interactive. In contrast to earlier interfaces such as batch processing, modern HCI allows the user to control the computer in real-time by manipulating information displayed on the screen. Once an object is represented in a computer, it automatically becomes interactive. (2001: 71)

Similar to Manovich's argument in their book called "Critical Introduction: New Media" Martin Lister, Jon Dovey, Seth Giddings, Iain Grant and Kieran Kelly put a critical eye on the definition of new media by asking two significant questions: "First, 'What are media anyway?' When you place the prefix 'new' in front of something it is a good idea to know what you are talking about and 'media' has long been a slippery term. … Second, what, at face value and before we even begin to interrogate them, do we include as 'new media'?" (2009: 9)

Rather than making linear clear cuts like end of old media and the beginning of new media era, like Manovich they survey technical shifts in the nature of production, access, manipulation and storage processes.

They claim that 'new' media is not a neutral definition because the media as 'new' results in connotation of some messages. For them, preference of describing some media as 'new' media is problematic because of the following three reasons:

First, new media are thought of as epochal; whether as cause or effect, they are part of larger, even global, historical change. Second, there is a powerful utopian and positive ideological charge to the concept 'new'. Third, it is a useful and inclusive 'portmanteau' term which unifying term 'new media' actually refers to a wide range of changes in media production, distribution and use. (Lister et. al, 2009: 10)

Similar to Manovich they also questioned the newness of interactivity, which is like synonym of new media because it is one of the most mentioned characteristics of new media that distinguish 'new' media from the old one. As well as they introduce cultural, ideological, social and economical factors while analyzing "newness" of new media interactivity:

At the ideological level, interactivity has been one of the key 'value added' characteristics of new media. Where 'old' media offered passive consumption new media offer interactivity. Generally, the term stands for a more powerful sense of user engagement with media texts, a more independent relation to sources of knowledge, individualised media use, and greater user choice. Such ideas about the value of 'interactivity' have clearly drawn upon the popular discourse of neo-liberalism (see 3.7), which treats the user as, above all, a consumer. Neo-liberal societies aim to commodify all kinds of experience and offer more and more finely tuned degrees of choice to the consumer. (Lister et al. 2009: 21)

To sum up; in order to avoid techno deterministic (or occasionally 'media determinism') accounts, it is needed to beware of risks of generalizing too widely and of the limitations of following the linear, progressive and technology driven perspectives of media history. While discussing about "new" media, the discursive construction of the term "New Media" and its accordance with neoliberalism should always be kept in mind (Marstine et al., 2006). Leaving aside specific socio-cultural and historical contexts result in asocial and ahistorical explanations that handle changes in society through a fixed sequence of different technological developments. However, also the socio-cultural and historical contexts are determinant in the use, scope and meaning of technology because "The same technology can have very different "effects" in different situations" (MacKenzie & Wajcman 1985: 6 cited in Chandler, 1999). Shortly, it is important to consider the multidimensional nature of changes in the society and historicize these changes in order to develop more accurate explanations.

3. Methodology

As pointed in the introduction part, the aim of field research is to discover the relationship between the deployment of new technologies in the museum and successfully implementation of necessary aspects of being a "new" museum. In this field research, 42 people were surveyed in order to examine experiences, expectations and demands of museum visitors from their visits to the museum. An online survey would be an easier method to collect and store information and also it would be possible to reach more people than a paper-based survey conducted at the location of the museum experience. However, the critical point of this research is the examination of the museum visitors including those who did not possess strong technology skills. An online survey would certainly eliminate a significant part of the target population. Therefore, a paper-based survey among museum visitors during their visits was conducted because it would elicit the most significant results.

In this research, secondary sources, which are beneficial for following the past and contemporary discussions about the research, were employed to construct theoretical framework for the research. Beside the theoretical literature review, a case study was conducted for analyzing the point, which is discussed throughout the paper. Judith Bell writes about the advantages of case study as following "the case study approach can be particularly appropriate for individual researchers because it provides an opportunity for one aspect of a problem to be studied in some depth.' (2010: 8) Beside strong points of case study, Bell refers some critics about limitations of this approach, too. These limitations are the value of studying a single

event and drawback of making generalizations based just on a single event. Bassey answered such criticisms about case study by pointing out the importance of 'relatability' of a study case approach rather than 'generalizability' of it. (Bell, 2010:9) Bell draws attention to the fact that if case studies 'are carried out systematically and critically, if they are aimed at the improvement of education, if they are relatable, and if by publication of the findings they extend the boundaries of existing knowledge, then they are valid forms of educational research.' (Bassey 1981, cited in Bell 2010:10). The aim of this research is not making generalizations about new museology in Istanbul or Turkey. Similarly preference of analyzing just Istanbul Modern, which is Istanbul's first contemporary museum in terms of "new" museology and "new" media policy, does not decrease the Istanbul Modern Case Study's "relatability".

While working on the case of Istanbul Modern, a quantitative research method will provide some more extra data for discussing following questions in depth: "Are "new" media tools becoming new objects of "new" museums rather than helping them with the real aim of visitor orientation and are 'new" museums at the risk of being "technology fetishist" rather than being visitor oriented? (Harvey, 2003) "Because of that reason, a visitor survey was conducted in order to understand visitor's experiences with the new media tools not only in the museum environment but also in their daily life practices. Survey questions were designed for revealing the correlation between age, education and new media adaptation because surveys "... strengths are in collecting demographic and socio-economic data, and in describing people's general perceptions and attitudes." (Guthrie, 2010: p.77) The gender of participants was not asked on purpose. It is not ignoring the gender role's effects on technology usage performance but avoiding from reproducing male/female

dichotomy in the research.

Survey is a useful research method for gathering demographic information about people. In the given time, as much as possible quantitative and qualitative data was collected. First of all, this quantitative data was analyzed with SPSS software. Unfortunately, this analysis did not reveal any reliable and meaningful results for concluding accurate statements about the participant visitors because of two reasons. First, the limited permission for gathering data resulted in low response rates. Second, the age of survey participants were not equally distributed which disallowed the results to be comparable among determined age groups. Due to the limited timeframe allowed for the survey study, the homogeneity between the age groups in the sample was lacking. There is significant difference between the number of responders who born between 1990-86 (n=25) and other age groups (i.e. born in 1980s (n=4), 1970s (n=5) 1960s (n=3), 1950s (n=2), 1940s (n=3). Gerard Guthrie advises against false representativeness of small sample groups: "A sample of one, two or three cannot be fully representative of a larger group. It is not possible to generalize the outcomes reliably from such small samples to the population as a whole." (2010: 67) Hereby, it was needed to analyze the collected quantitative data manually to reach qualitative inferences, instead of employing statistical quantitative methods.

The biggest part of the survey questions consists of closed-response questions, which include checklist responses, categorical responses (yes/ no), ranked responses and likert scales. One funnel question is included in order to understand the motivation of participants who choose the no option in the question numbered 4.3.1 (Guthrie 2010:137) In addition to closed-response questions, two open ended questions were addressed in order to give some space for visitors' own words

because as Creswell states "meanings are constructed by human beings as they engage with the world they are interpreting. Qualitative researchers tend to use openended questions so that participants can express their views" (2003:9). These two questions enabled an explanation about participants' "new" media usage purposes and effects of "new" media tools on their museum experience. Moreover, questions numbered 1.4, 1.5, 1.6, and 1.7 were included for measuring the effects of personal curiosity and personal ability of technological tool use. These questions would provide at least some basic opinion about each participant's disposition to technology.

According to researcher's field observations, it seems that the variety (teachers, children, students etc.) and intensity of visitors is clearly high on Thursdays. Conducting the visitor surveys mostly on the public day of museum (Thursdays) could eliminate the entrance fee's negative effect on the variety of visitors, at a certain level. In addition to this economical reason, on public day the museum is open till 20.00 whereas on other days (Museum is closed on Monday) museum is open till 18.00. Beside weekends, this extra two hours will contribute to reach blue and white-collar workers. At first, the participant number was not fixed in order to reach maximum people during research. However, the museum administration permitted to conduct visitor survey in two weeks, just for 3 weekdays and in total for 8 hours within work hours of museum's administrative staff (09:00-18:00). Then, the research schedule was regulated according to this limitations and at least reaching to 50 visitors was planned. In accordance with the peak hours information given by museum Management Director, surveys were scheduled as following 19th February Wednesday between 15.00-17.00 (target: at least 10 participants), 20th February Thursday between 14.00- 17.00 (target: at least 20

participants) and 27th February Thursday: 15.00- 18.00 (target: at least 20 participants).

Visitor questionnaires were conducted mostly in the entrance lounge and cinema lounge for not disturbing visitor's communication with artworks during their walk in the exhibition halls. The participants were chosen according two factors. First one was the age of participant. The age balance between participants was tried to keep in balance as possible so to question different age groups in equal numbers is aimed. Nonetheless, during the time period in which the survey was conducted, the percentage of young visitors was seemingly higher than the older ones. Different than age, observations on the visitors' involvement with "new" media tools like iPads in the museum or their own smart phones were employed.

Istanbul Modern is conducting two different visitor surveys: One is in Turkish; the other is in English for foreigners. In order to get access to museum's own survey results and some detailed information (such as about visitor numbers, QR codes in museums etc.) a meeting with the management director of Istanbul Modern Museum was scheduled. During the meeting, scope of the research was explained and the management director gave some general information about the administrative issues. Her insider knowledge was beneficial for revising survey questions. Moreover, she helped me with getting the permission from administrative body of museum. While conducting survey Marketing Officer accompanied me, so a chance to ask some questions about the digital communication strategy of museum, aroused. Later, she provides some very basic information museum's digital media accounts via e-mail.

4. Melting Pot: "New" Media and "New" Museology

In the introduction chapter of the book "New Museology", the editor Peter Vergo relates the roots of the modern museum to the Alexandria library by stating: "The origin of the museum is often traced back to the Ptolemaic mouseion at Alexandria, which was (whatever else it may have been) first and foremost a study collection with library attached, a repository of knowledge, a place of scholars and philosophers and historians." (1989: 1)

Since the foundation of Ptolemaic mouseion at Alexandria up to the date, several definitions of museum have been developed because throughout the centuries in order to prevent its own extinction, the museum has been undergone through numerous transformations. Transformations in the museum have been paralleled with economical, cultural, social circumstances and the new possibilities created by advent of new technologies. Briefly, it can be said that the museum is an institution, which is best understood as a dynamic and always in ongoing process of transformation. For instance, this dynamic process of transformation can be traced in the definition of museum. In 1969, museums defined as 'any permanent institutions which conserves and displays, for purposes of study, education and enjoyment, collections of objects of cultural or scientific significance.' by International Council of Museums (ICOM). In 2001 they updated the definition of museum as "a nonprofit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment." Even this change in museum's definition shows how the

functions of museum were broadened.

After the Second World War, some new intellectual flows emerged. Although there were numerous variations within them, it is possible to divide these flows in two broad categories. The scientists in the one group insisted on studying social science on the model of natural sciences. The other group pointed out the significance of interpreting human subjectivity and the contextual meaning. (Bonnell and Hunt 1999:1) It seems, supporters of second group have been more influential than the first group in shaping of contemporary social science scenery. Visibly, they became diversified in various study fields through their special focus on some subject matters like media, culture, literature, performance, museums, women, gender etc.

In 1869, Philip Leopold Martin mentioned the term Museology for the first time. In his book "Praxis der Naturgeschichte", he named the second chapter as "Dermoplastik und Museologie" (1869). For the first time, the book "Die Museologies als Fachwissenschaft" (Museology as a Professional Science) by J. G. Th. von Graesse referred museology as a scientific field to study. (1883) The beginning of the 20th century was the time for publishing journals about practices in the museum studies, foundation of museum associations, and participating conferences. In the second half of the 20th century, the focus of these journals and conferences shifted a bit from the practice of museum to the 'theory of museum' in parallel to contemporary context. Postmodernism and "cultural turn" prepared the circumstances for developing more critical view on the many layers of life, as well as on museum as a cultural institution:

Museums and galleries were identified early on as one of the battlegrounds

for postmodernism; the traditional museum being seen as another repressive, disciplinary institution controlling visitor behavior and both physical and intellectual access to art, history and other cultures, while providing grand narratives from a position of uncontested authority. (Araeen et al., 2002; Crimp in Foster, 1985; Duncan, 1995; Foucault in Rabinow, 1984; Hall, 1997). Others, such as the sociologist Pierre Bourdieu, have examined the motives for visiting art galleries, for example the middle class hoping to acquire cultural capital. (Reeve and Woolard, 2006: 7)

If this theoretical questioning in the museum studies prepared the circumstances for new museology, the artists who started to challenge the 'elitist' tendency of museum, matured these circumstances for a new kind of more inclusive museum. "New ideas about culture and society and new policy initiatives challenge museums to rethink their purposes, to account for their performance and to redesign their pedagogies." (Marstine 2006: 17) Generally, these new methods of museology and the study of the changes in museums are referred to as new museum theory, new museology and critical museum theory. On the theoretical basis, traditional museum and new museum have certain differences in their approaches, focuses, and functions. It seems, the main and most obvious difference between them was the shift from object orientation to visitor orientation. The visitor orientation, which affects the quality of visitor experience in museums, has been started to matter for museum administrations. (Hooper-Greenhill, 1988: 215) Max Ross states in the article named 'Interpreting the new museology':

Political and economic pressures have forced its professionals to shift their attention from their collections towards visitors. Whereas in the past the museum tended to be exclusive and elitist, signs of a progressive opening-up and greater

accessibility have appeared. A climate of increasing reflexivity within the profession is identified as a 'new museology'. (Ross, 2004:84)

Visiting a museum can be seen as a communication through variety of media. It can be said that artwork itself is a media, which connotes several different meanings and messages to visitors. Beside artwork itself, associated information next to it is another communication channel. The advent of new technologies created the opportunity for developing new ways for these second types of communication experiences. Caroline Dunmore points the significance of the engagement with newly emerged tools for organizations, as "Any organization that has an audience with which it wants to communicate cannot afford to ignore these extraordinarily powerful tools." (2006:95) "New" Museums should benefit this communication opportunities emerged by the development of "powerful tools" carefully because as discussed in the previous chapter, first, the electronic media and then the digital electronic media (new media tools can be grouped under this heading) changed how information is produced and distribute. Also since mid-1980's these new media tools have been started to use in museums. There is a strong belief that these tools can help to achieve new museum's promise to democratize knowledge. (2003:375)

A shift from object orientation to visitor orientation is the most obvious but not the last goal of new museology. At this point, Andrea Hauenschild's schematic representations of the ideal "new" and the traditional museums is beneficial to see difference between two approaches point by point. (See TABLE 1). This shift in the orientation revealed the need for being more interactive, more inclusive and more democratic as a cultural institution. Developments in technology enabled alternative interactive ways of displaying in the museums and increasingly museums are appealed to some popular media tools for achieving new museology goals.

Schematic representation of the	Schematic representation of the
ideal "new" museum	<u>traditional museum</u>
1. Objectives:	1. Objective:
Coping with everyday life	Preservation and protection of a given
Social development	material heritage ¹³
2. Basic principles:	2. Basic principle:
Extensive, radical public orientation	Protection of the objects
Territoriality	
3. Structure and organization:	3. Structure and organization:
Little institutionalization	Institutionalization
Financing through local resources	Government financing
Decentralization	Central museum building
Participation	Professional staff
Teamwork based on equal rights	Hierarchical structure
4. Approach:	4. Approach:
Subject: complex reality	Subject: extract from reality (objects placed
Interdisciplinarity	in museums)
Theme orientation	Discipline-oriented restrictiveness
Linking the past to the present and future	Orientation to the object
Cooperation with local/regional organizations	Orientation to the past
(T)	5 T 1
5. Tasks:	5. Tasks:
Collection	Collection
Documentation	Documentation Processed
Research	Research
Conservation Mediation	Conservation Mediation
	iviediation
Continuing education Evaluation	
Evaluation	

TABLE 1 - Comparison of Traditional and "New" Museum

In the mainstream view, media like multi media guides touch screens, application, QR codes etc. are mentioned as the new media and their cooperation in new museums celebrated as a new alternative for being interactive. Commonly, audio guide is not referred as 'new' media tools. However, according to Manovich's interactivity definition, also audio guides can be named as new media tools. Manovich states "Once an object is represented in a computer, it automatically

becomes interactive." (2001: 71). Different than Manovich's definition, when the "new" media elements in the museum mentioned, generally it does not include audio guides. The choice of excluding audio guide from the interactive "new" media tools in the museum can be explained by certain type of ideology fueled with economic neo-liberalism and "a powerful utopian and positive ideological charge to the concept 'new'." (Lister et al. 2009: 10)

For a moment, museums should stop and rather than employing more "new" media elements, they should measure both positive and negative effects of the "new" media tools. According to evaluation of measurements, administrative body should develop different kind of communication strategy in order to fulfill the aims of 'new' museology. Otherwise, "new" museum are at the risk of being "technology fetishist" rather than being interactive and visitor oriented.

Different than interactivity, it is said that new media tools can increase the democracy in museums. Democracy in museums can be understood as democratizing culture and "Democratizing culture refers to public accessibility of culture, through price, location and education; there should be no barriers to prevent individuals participating in culture", as the UN Declaration of Human Rights states. Cultural democracy describes the desire for every culture to be respected equally, without hierarchy. (Reeve and Woollard, 2006:7-8)

The shift to the visitor orientation and the aim of democratizing knowledge revealed the need for investigating 'accessibility' issue so it has become another important debate in New Museology. Caroline Lang discusses the developments in the accessibility terminology starting from the late 1990's. In Code of Ethics, the International Council of Museums illustrates public access in terms of physical

sources like opening hours and physical access to collections and staff. (2006) In her article Lang reviews the Department of Culture, Media and Sport's report on intellectual, cultural, attitudinal/social, financial, physical and sensory barriers to access and she adds another significant barrier: "Technological; for example IT, websites and other new media not being available to everyone or in suitable formats." (2006: 32)

The technological barrier in front of the access to culture brings out a significant question: "Whose culture?" And before answering this question another big question should be answered "What is culture?" Raymond Williams is one of academicians who questioned the well-accepted elitist 'high culture.' It is not false to say that, focusing on high culture results in the marginalization of some practices or some groups. And he introduced the idea: "Culture is ordinary" as a first fact. (1958: 4) Then he explains "Every human has its own shape, its own purposes, its own meanings. Every human society expresses these in institutions, and in arts and learning." After Williams, many discussions about culture have been held among social scientists. Stuart Hall describes the culture in a broader sense by saying culture is about 'shared meanings' and it enables seeing the culture as a process rather than being fixed 'Thing'. (1997) Than, it is impossible to mention different types of cultures like television culture, consumption culture, Internet culture etc. together with 'high culture'. What is culture is such a big question and the aim of this paper is not discussing culture theories one by one. So returning back to technological barriers and whose culture question, in the so-called 'Network Society', first the "internet culture" should be defined. In his popular trilogy, Manuel Castells defines 'internet culture' as following. "The culture of the Internet is a culture made up of a technocratic belief in the progress of humans through technology, enacted by

communities of hackers thriving on free and open technological creativity, embedded in virtual networks aimed at reinventing society, and materialized by money driven entrepreneurs into the workings of the new economy" (Castells, 1996:61). While celebrating the presence of "new" media tools in the "new museum", one should always keep in mind beside 'internet culture' the relationship between technology and social inclusion. The "Digital divide" phenomenon is a good start for discovering the relationship between technology and social inclusion. In her book, Pippa Norris handles the digital divide as a multidimensional phenomenon and describes it with its global, social and democratic dimension. First, the global divide refers to, as its name suggests, the Internet access discrepancies globally. Second, social divide focuses on income inequalities (poor and rich) within a country (a nation). Last, the democratic divide concerns the differences between individuals who do and do not integrated new media tool usage in everyday life. (Norris, 2001)

It can be said that global divide is more visible than the other two divisions of digital divide. In the 21st century, the world is such an unequal place where on some of its part some people still do not have any access to computers. On the other hand, some part of it, broadband Internet is declared as legal right. (e.g. Finland)

Downscaling this view from a global approach to more specific social context; it seems, Turkey as an analysis unit of social divide, will not reveal sharp differences. This is mainly due to the successive mobile phone campaigns of telecommunication companies and the opportunity of paying with credit card (dividing the high prices in smaller installments) opportunity. However, in the first months of 2014, Banking Regulation and Supervision Agency (BDDK) made some regulations about credit card installments and one of these regulations involve the forbidding installments during telecommunication purchases. It can be predicted that

the social divide will be greater in Turkey than before in the following years, if sellers and buyer did not flout the rule.

Handling the museum as a smaller scale of analysis will reflect the democratic divide better. Generally, new media tools in museums raise the hopes for developing a more democratic relationship between the museum and its visitor; thus, creating more democratic visitor experience in museums. However, the question of "who is visitor?" should also be included in the equation in order to create more accurate and realistic understanding of democracy in the museums because the museum experience is not a fixed thing as Eilean Hooper Greenhill explains "...museum experience is made up of many different aspects that operate in relation to each other." (Hooper-Greenhill, 1988:223) Asking the question 'who is visitor?' opens the way for discussing the power of defining visitors and designing the aspects, which created the visitor experience through these accepted definitions. It seems, how much the museums desire to be socially inclusive thanks to media tools, there is another group which will become marginalized by not having the needed hardware or needed technological ability. Just celebrating new media tools is dangerous because of underestimating reflections of the social inequalities created by employment of new media tools to the museum environment.

5. The Case Study: Istanbul Modern

5.1. About Istanbul Modern Museum

Istanbul Modern Museum, shortly Istanbul Modern, established in 2004 as Turkey's first private museum to exhibit modern and contemporary artworks. Its building was transformed from the 8,000 square meters dry cargo warehouse into a museum building. In 1987, the warehouse was used as a space for art for the first time. It was the home to the 1st International Contemporary Art Exhibition, known today as the International Istanbul Biennial. Two-storey museum has facilities like library, cinema saloon, shop and restaurant. The permanent exhibition named "Past and Future" is situated on the first floor. This exhibition documents the history of contemporary art in Turkey through 180 varied artworks by 136 artists. On the ground floor, there is a space for temporary exhibitions consisting of international and national artists' artworks. Since 2004, more than 70 exhibitions were held there. (Istanbul Modern, 2014)

5.2. An overview of Istanbul Modern Museum's Media Engagement

Firstly, the digital communication accounts of museum will be listed for structuring a basis for the analysis of museum's media engagement. After giving an overview of website and social media accounts, personal experiences of the researcher during the research process will be explained. Finally, the results of visitor survey will be analyzed in order to understand visitor interaction with media tools in the museum. In this research, media tools in the Istanbul Modern refer to both media as software or hardware. Website, social media accounts and application can be grouped under software whereas Istanbul Modern kiosks, iPads, Desktops, audio guide can be listed as hardware.

Istanbul Modern has an official bilingual (Turkish and English) website where visitors can get information about museum's history, administration, detailed information about visits, current and past exhibitions, education facilities, event's schedule, cinema program, library collection and catalogue search, membership and donations and store through menu on the right side. On the left side of website, there are news and announcements. In the middle, there are five sections, which highlight the current exhibitions and cinema program. At the bottom of page, there are links for event calendar and being a member and there exist a general search bar and another part for submitting e-mail address in order to get newsletter. At the very bottom of site, there are icons of other digital communication platforms like Facebook, twitter, Instagram and Google Art Project. Moreover, Istanbul Modern has official Pinterest, Foursquare, Google Plus and YouTube accounts yet their icons are missing on the website.

In addition to official websites of museums, some specific websites are established in order to bring a variety of museums' collections together and make the collections digitally accessible. This project makes collections more visible and accessible to internet users with only mouse clicks. Search options categorized like artist, artwork, museum, collection, city and country. Istanbul Modern Museum is one of the contributors of project with 30 artworks of 24 different artists out of its collections.

Istanbul Modern joined Facebook on 3rd March 2009 and its Facebook account is becoming more active day to day. "More active" means the increase in the share frequency of various post types like announcements, events and photographs of their visitors. "About" section covers basic contact information, aims of museum, working hours, parking and public transportation facilities. In addition to the posts,

many albums have been created and videos shared on the wall of account. In "Sergiler" (Exhibitions) section, information about current exhibitions and in "Üyelik" (Membership) section information about membership is given and a hyperlink for membership form is embedded. "Venue Widget" and "Notes" are the passive sections of the page.

Main Twitter account of Istanbul Modern has been created on 2010 with the user name @istanbulmodern_ and currently it has 274 thousand followers. Beside this main account, there are other complementary official accounts like @modernmagaza for the news about shop and events, @gencmodern for the young visitors (currently this account seems like inactive.) and @modernsinema for news and announcements about cinema. (Currently, second active twitter account has 29.3 millions followers)

Istanbul Modern utilizes video and photograph sharing application Instagram since February of 2013. Since that day, in total 73 Photographs and videos have been shared. Considering that first photo has been uploaded at least 1 year ago, we can conclude that Istanbul Modern's Instagram account is not active as its Facebook or main twitter account.

YouTube channel of Istanbul Modern opened on 24th November 2011, since then the user has uploaded 76 videos. Channel has 4 playing lists: Sergiler/Exhibitions, Eğitim/ Education, Müzeler Konuşuyor/ Museums Talk, Koleksiyon: Geçmiş ve Gelecek/ Collection: Past and Future and Sözünü Sakınmadan. Currently, the videos on the Istanbul Modern's channel have been viewed 57.078 times in total.

Google Plus account of museum has been viewed 948.914 times but it has

just two followers. The museum did not create any photo albums yet, there are 16 photos; of some (2 photos of chairs, photo of a minibus etc.) are not directly related to museum. As mentioned above, the museum has uploaded videos about artworks on YouTube however on the Google Plus page no videos have been uploaded. It can be concluded that the museum's Google Plus account has been recently created and administrative body is not managing it actively. Regardless of this fact, visitors are using Google Plus account of museum actively for leaving comments.

Istanbul Modern's Pinterest account, which consists of 10 boards and 226 pins, is active since 2011. Moreover, according to Foursquare page of Istanbul Modern, in total 25,450 people checked in the museum.

Istanbul Modern Application launched on 31 August 2012. As a free mobile application, it is available in Appstore for iPads and iPhones and also in Google Play of Android mobile platform. Since that time it has been downloaded more than 5,000 times. The application has 5 main headings; under these headings there are subheadings that are listed below.

- Calendar: Today, Select day, exhibitions, cinema, events and education
- **Visit:** visiting tours & admissions, about Istanbul Modern, Membership, Library, Restaurant, Store, Visiting with family, checkin, suggestions, floor plans, MS tag, or code reader
- **Art:** collection, photography selection (selections from the museum collection)
- Contact: address & phone, directions & map, restaurant reservations
- **Follow:** Facebook, twitter, Pinterest, foursquare, YouTube, sign-up ebulletin, share with friends and follow options.

Researcher's interview in 2014 April, the Management Director of the museum stated that since 17th March 2014 application has been downloaded 20,989 times for iPhone and 6,467 times for Android, in total 27,456 downloads but not by single users. Moreover, the iPad application has been downloaded 3,191 times in total, again not by single users.

In the permanent exhibition Past and Future out of 180 artworks 33 have QR codes. In these QR codes, YouTube videos are embedded so beside labels next to artworks, the visitor can has the chance to enjoy extra information about artworks. Since April 2013 videos have been viewed 12,216 times. The average length of videos is 2.5 minutes and the average watching length is 2.56 minutes.

With the collaboration of The Istanbul Development Agency and Istanbul Modern Museum, "Contemporary Art: Istanbul's New Center of Attraction for Tourism" Project has been developed. Thanks to the project, 13 touch screens (generally referred as kiosks) have been placed around Istanbul as well as in Istanbul Modern. In addition to kiosks, 32 iPads placed in various areas of museum like exhibition halls, library and cinema lounge.

On the website, the function of kiosks is explained as "This way, you will be able to plan your next visit to the museum according to the exhibition, activity or workshop of your choice. Thus, potential visitors will be able to access detailed interactive information about Istanbul Modern for free."

The advantage of iPads and kiosks is their multimedia nature, which provides audio, video, photo and text through same hardware. Touch screen increases the interactive experience by reducing use of extra material like mouse or keyboard.

In the age of multimedia players, the audio guide is a bit out fashioned due to

the fact that -as its name refers- it only plays audio. Istanbul Modern's audio guide is bilingual and contains explanations about 10 artworks in the "Past and Future" collection exhibition. In the temporarily exhibitions, this number depends on the exhibition. The audio guide service is outsourced. Because of that the Director of the Management of museum could not provide any information about rental percentages.

5.3. Evaluation of Results

Evaluation of Results contains two different parts: the process of research and the results of visitor survey. First part contains the researcher's experiences and field observations during the research. This part is needed for analyzing the approach of İstanbul Modern to the researchers because ICOM describes one of the characteristics of "new" museums as being open to researchers (ICOM, 2001). In the second part, visitor survey results are examined in order to make statements not only about visitors and their utilization of the İstanbul Modern's "new" media tools, but also how effective these tools are used.

5.3.1. Process of Research

Istanbul Modern has been selected as a case study for various reasons. First, its claim of being the first modern art museum in Turkey; second, on the official website, the message of the Istanbul Modern Chair of the Board Oya Eczacıbaşı gives some hints about "New Museology" understanding although it is not expressed explicitly.

The ideal New Museum Schema which is referred in the fourth chapter "Melting Pot: New Media and New Museum" lists "social development" as one of the objectives and "extensive, radical public orientation" as one of the basic principles of "ideal new museum". The following sentence of Istanbul Modern's Chair of the

Board shows parallelism to that type of museum understanding. "Overall, we feel that we have created a vibrant, family-friendly space that addresses a wide range of tastes, cultures and interests." (Istanbul Modern, 2014) A wide range of tastes, cultures and interests reference compromises public orientation, since the visitors are not a homogenous community as stated by Philip Wright "There is no such thing as 'the typical visitor', and there is no single level which can be expected and then addressed. The museum has to cater for increasingly fragmented publics who want to learn and do different things at different speeds." (1989:119) That can be said a space that is sensitive to different types of tastes, culture and interest is welcoming for every each different parts of this homogenous community. Eczacibaşi's message continues as "With its permanent and temporary exhibition galleries, the photography gallery, new media area, library, cinema, educational programs, gift store, and restaurant, Istanbul Modern encourages a creative and interactive museum experience for its visitors." (Istanbul Modern, 2014) These sentences show that Istanbul Modern is aiming to accomplish tasks of "ideal new museum" like research and continuing education by creating a space for study in the library and by planning educational programs. Moreover, she summarizes one of the roles of Istanbul Modern as "But Istanbul Modern does not only limit itself to the display of artworks; it aims to fulfill an educational role as well." (Istanbul Modern, 2014)

These two sentences encouraged the writer of this study to contact with museum administration for asking their collaboration in this research. The researcher hoped that museum could share their own survey results, which can help for developing more accurate and realistic insights about museum's visitors. First, communicating via the contact email on the website (info@istanbulmodern.org) has been tried yet there was no response. After a time period, the mail was sent two or

three more times. By taking into the consideration of e-mail's delivery status, because sometimes e-mails could be labeled as junk mails, a visit the museum has been done. The research topic and special interest about Istanbul Modern Museum has been explained to the museum stuff on the welcoming desk. They advised to send an email to info@istanbulmodern.org. Another alternative way than contacting via e-mail was asked to the staff and they answered that unfortunately there was no other way for contacting museum administration. Then, previous e-mail was resent on 21st January and next day the demand of collaboration was met by refusal. After the refusal of collaboration request, the e-mail was resent directly to the Director of Education and Social Projects and an automatic answer received about the worker's maternity leave. This situation aroused the curiosity about other museum's attitude to the researchers and an email about the research was sent to Tate Modern in London. Few hours later, Tate Modern replied automatically. This automatic reply was informing about the delivery of e-mail. Finally after a few hours than this automatic reply, an e-mail which provides the links of information, which is asked for, was received.

Finally a direct personal contact has been found and an e-mail sent to Director of Management of Istanbul Modern and a date for meeting was arranged. In general, Director of Management explained the budget problems, which are face by the museum as hard difficulties. After explaining the scope of the research and the museum's potential help in conducting visitor surveys; access to museum's reports about new media engagement, museum's digital strategy and some statistical information about visitors have been asked. Director of Management replied that she would inform after consulting the administrative body of museum. Finally, the permission from museum administration to conduct the visitor survey was gained

with the limitation of completing the field research in two weeks, during only 3 weekdays and in total of 8 hours within the work hours of museum administrative staff. According to these experiences, it can be concluded that Istanbul Modern is not supporting the researchers much willingly, who are working on museums and their services. On top of that, if the researches are supported some other restrictions have been imposed by the administrative body of museum.

Unfortunately, this conclusion resulted that Istanbul Modern could not fulfill the "being open to the researcher" for this research process.

5.3.2. Results of Visitor Survey

Digital technologies have power to transform visitors' experiences in museums if only visitors actively utilized them. Otherwise, these technologies cannot serve for the aim of creating an interaction with visitors. Not only measuring the statistical effects and the utilization percentages of these technologies would suffice; but also closer acquaintances with visitors besides research on motives behind visitors' behaviors are needed for a full achievement of visitor orientation. For a real shift from object orientation to visitor orientation, the museum should satisfy its visitor's needs and expectations. Admittedly, surveys are very suitable for collecting information about visitors and their behaviors. By this way museum administrations can adapt new strategies for increasing their visitor interactivity and quality of visitor experience. Without a proper research on the utilization and the effects of these new technologies, they will face the risk of being "new objects" of "new museums".

Thus, through the instrument of a visitor survey, the researcher tried to picture out following points:

• The relation between age, education level and new media tool's usage,

- The awareness of visitors about Istanbul Modern's application,
- The utilization of kiosks,
- And the effects of new media tools on the quality of museum experience.

5.3.2.1. Who are the visitors?

According to reports provided by Management Director, in the last year (2013) 627,800 people visited Istanbul Modern; the visitor number is seemingly high on public day Thursdays and at weekends. The results of the survey conducted between the years 2006-2013 with collaboration of Istanbul Modern and a private research company illustrated the visitor profile of Istanbul Modern. According to survey results:

- The quarter of visitors are students and more than a half of the total visitors are younger than twenty-five years old; whereas the age average of foreign visitors was higher than locals.
- Half of the local visitors graduated from university or have other degrees of high education levels.
- Half of the visitors visited museum at least twice times.
- %67 of the local visitors and more than half of the foreign visitors were women
- %18 of local visitors have children, and half of these children aged below fifteen.

Beside Istanbul Modern's own visitor survey, which is beneficial for providing profile of visitors, the researcher conducted a survey with 42 visitors who are belonging different age and occupational groups in order to understand especially visitor utilization, expectation and awareness of "new" media technologies in Istanbul Modern. Although there were some administrative limitations on conducting independent visitor surveys, the results of survey surprisingly provided information

about wide range of visitors. In the permitted eight hours of three workdays, it was a big chance to collect answers from such varied sample group, in which the youngest participant is 18 years old whereas the oldest is 68 years old. Among 42 participants, 25 of them were born in 1990s, 4 participants were born in 1980s, 5 participants were born in 1970s, 3 participants were born in 1960s, 2 participants were born in 1950s and 3 participants were born in 1940s; shown as percentages in **Figure-2.**

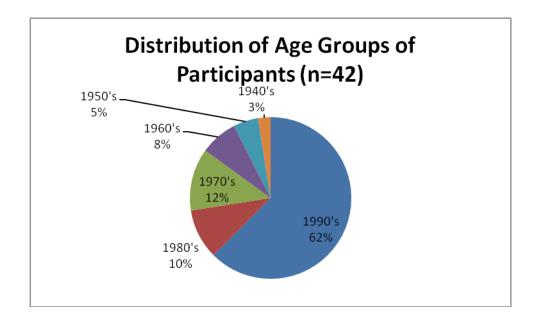


Figure 2

In accordance with museum's own survey results, the research survey showed that most of the young participants are university students. Others vary in their occupations like director of photography, professor, teacher, engineer, accountant, ironworker etc. On the one hand, just analyzing the results of this visitor survey cannot be enough for concluding the most accurate statements for drawing visitor profile of museum. On the other hand, the survey revealed some considerably significant points as can be seen in detail in **Figure-3**. First, none of the participants crossed the following option: "I do not use electronic device." In other words, using at least one electronic device is the remarkable common point of this varied group.

Moreover, 25 out of 42 participants (59.5%) stated that they are able to use new electronic devices in a short time, whereas 13 out of 42 participants (31%) need extra information while using new electronic devices. 9,5 % of sample group stated that they experience hardships while using new electronic tools.

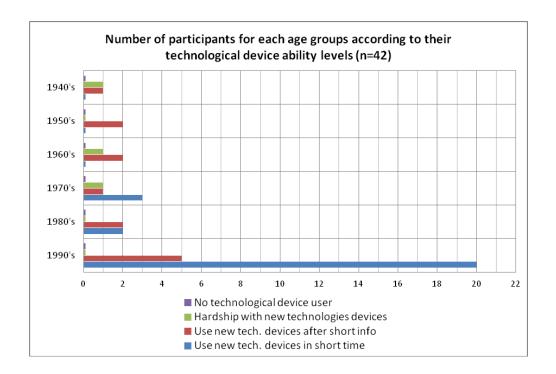


Figure 3

These differences will be referred as technological ability differences. In that case, 25 out of 42 participants have the highest technological ability though 3 out of 42 have the lowest technological ability level. Other questions about interest in technology, following technology news, purchasing the latest model provided insight into technological ability.

The survey results showed that the usage rate of electronic devices is high among museum visitors. Accordingly, technologies like QR code and application can be beneficial for responding to the needs of these types of visitors. On the other hand, structuring a 'visitor-orientation' approach only according to visitor's electronic

device usage rates is rather problematic. A further and deep examination of technology use in the museum environment is needed for responding visitor's needs and expectations. Beside ownership, it seems that there are some other determinants affecting the usage of "new" media technologies in the Istanbul Modern. For creating more accurate, effective and inclusive perspective of visitor oriented approach, other determinants like awareness, preferences and the technological abilities of visitors should be added into equation as a more comprehensive research.

Examining electronic device ownership in detail reveals that everybody in the group of participants born in 1990s and in 1980s has smart phones, irrelevant to their technological abilities. The ownership of smartphone decreases among the visitors who are in their thirties. Without regard to technological ability, among visitors born in 1970s, 3 out of 4 people have smartphone. However, 20% of the whole sample does not have a smartphone. Beside the 100% smartphone ownership rate of the ones born in 1990s, only half of the group has tablet computers. 95% of this group has laptops and 25% has desktop computers.

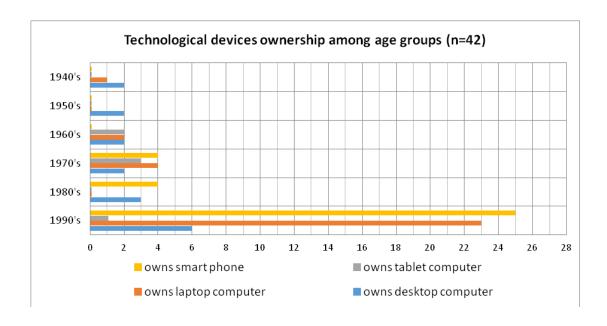


Figure 4

All of the participants who were born between 1970 and 1996 do not only have Internet access at home but are also connected to the broadband mobile Internet. On the other hand, all of the participants, who were born before 1960, do not have mobile Internet and in the same participant group 3 out of 8 people do not have Internet access at home.

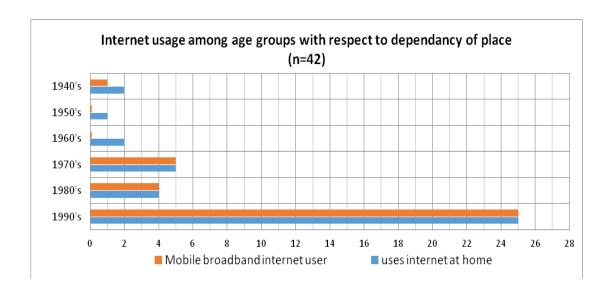


Figure 5

For a better visitor understanding, this clear split between generations should be taken into consideration because Internet connection type parallels with the digital device ownership. For instance, independently of their technological skills, all visitors belonging to first group have a smartphone whereas in the second group nobody has a smartphone. However, Istanbul Modern application and QR code practices are dependent on the smart phones or tablet computers. This dependency reveals one significant question: In these circumstances, where can we place smartphone or tablet computer dependent applications and QR codes on the visitor orientated museology axis? Is it possible to label a museum as democratic and

equally welcoming that is sharing some extra information only with a privileged group?

For ensuring the equality of opportunity, museums can offer multimedia guides beside audio guides. These multimedia guides can provide access to the extra information without having a smartphone. If Istanbul Modern updates its audio guides to the multimedia guides, probably the gap between accessing information will diminish. Otherwise, 6 out of 8 people who do not have smartphones but stated that they can use new electrical devices after short information, cannot utilize the opportunity of getting extra information about the exhibitions and museum.

In previous chapters it was mentioned that the museum administrations have the power to identify the 'visitor'. If one assumes that Istanbul Modern's visitor orientation approach addresses the visitors as having high technological skills and smartphone, then the survey results should be reevaluated accordingly. Even in that case, Istanbul Modern's visitor orientation approach is not fully accomplished once again, since survey results show that only 3 out of 34 smartphone owner visitors downloaded the Istanbul Modern Android or iPhone application. Besides, the other 37 visitors did not even know the availability of Istanbul Modern's mobile application.

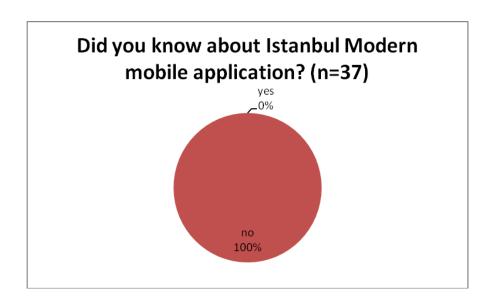


Figure 6

The aim of the application was summarized as "Istanbul Modern Mobile App was designed to make your museum visits more interactive and allows you to access exhibitions, events, cinema and educational programs any time on your mobile." whereas the survey results illustrated that the awareness about the mobile application was not satisfactory.

Unfortunately, utilization of not well positioned new media tools in Istanbul Modern is similar to exhibiting new objects as a way of becoming a "new museum", rather than a shift from object orientation to visitor orientation. For coping with this unfavorable situation, Istanbul Modern should create more dialogue with its visitors. Enhancing the dialog between museum and its visitors will result in questioning of Istanbul Modern's own envision of visitors. Chair of Board, Oya Eczacıbaşı explains "When Istanbul Modern opened, we promised to offer our audiences an opportunity to witness, learn about, enjoy, appreciate and to continually become updated with the evolution of contemporary art." Accordingly, the museum should follow up and update itself in accordance with its visitor's evolution, behaviors, needs and expectations. That is to say, for a more realistic visitor envision, the museum

administration should scrutinizingly check its visitors' opinions and feedbacks on an ongoing basis. Envisaging the visitor profile after listening to visitors and evaluating the results will be an effective method for creating a real shift from the object orientation to visitor orientation. To accomplish this, Istanbul Modern should increase the number and variety of its visitor surveys beside support the academic and non-academic researchers who are working in this field.

Half of the survey participants stated that they utilized the kiosks for extra information. There appear two significant factors to understanding the gap between the mobile application and kiosk usage rates. The former is the need for an additional hardware for gaining the needed information. For instance, in order to watch videos embedded in QR codes, visitors need to have a smartphone of their own. The latter is the tangibility of the kiosks thanks to their physical existence in the environment, which make them a visible tool rather the virtual existence of the mobile applications in the cyber world.

As discussed in the Methodology chapter, the time limitations given by the museum administration resulted in significantly low response rates and variety among survey participants. This was observed especially with the ages of survey participants, which were not distributed equally. Without the short time allowance, the research sample would be bigger and the survey could provide more meaningful statistical inferences and the homogeneity between the participant's age groups would increase. This could allow the researcher to conclude more accurate statements about visitors and their experiences with the 'new' media tools in the Istanbul Modern.

6. Conclusion and Discussion

This chapter concludes and discusses the above explained theories, perspectives, and debates on museology and media studies. After this conclusion it would like to offer discussion of findings for inspiring further researches and studies on the topic. As mentioned in the third chapter, Scott D.N. Cook deconstructs the Gutenberg Myth, which indicates the printing press technology as a milestone invention. By this means, he points out the fallacy of techno deterministic explanations, which mainly disregard human agency and social arrangements or treat them as secondary, whereas technological developments are seen as primary explanatory factors when explaining changes in the society. Cook shows, Gutenberg press was still an invention for the literate elite, so as generally claimed it could not have possibly brought a revolution in learning and democratizing culture. The same situation could be concluded about the 'new" media tools which are referred as the next great technological developments to change the society in a revolutionary way by increasing interactivity, democratizing culture and information. (Marien, 2006:45) Surely, these tools had some significant contributions to "new" museology; but they are not always inclusive, democratic or interactive as they are generalized. As study case in the fifth chapter showed; unless a visitor has a smart phone or tablet computer and enough technological ability for benefiting "new" media tools, these tools are not much of use in Istanbul Modern. It would not be false to say that in Istanbul Modern case, these tools are failing for being accessible to everyone in order to accomplish the aims of "new" museology such as visitor/public orientation, being inclusive and democratizing the culture. The term 'new museology' may not be so new, though it is an approach, which changes the museum concept in general.

Janet Marstine questions: "Are museums changing or are they merely voicing the rhetoric of change? Are museums capable of change? Are they stuck in time, limited by elitist roots? Or have they always been in the process of change?" (2006:6). It is only possible to answer these important questions when the museums acknowledge the significance of museum and visitor studies and fulfill the basis of these questions as the institutions which are the main subjects.

Nowadays, with the emphasis on new museology, the tools of new technologies have become more widespread in the museums for serving on the way to transform the 'traditional' museums into the 'new' ones. However, unless visitors are able to accommodate to and benefit from these tools by themselves, they cannot fulfill the aims of 'new' museology. The physical penetration of these new technologies into the museum environment is just a matter of budget and administrative decisions. The new media tools will never have a real impact on changing perspectives of museology regardless of how technological or how expensive they are, if the visitors cannot accommodate them. The questions of; what actual role the "new" media tools play in contemporary "new" museums and where they can be situated in the new museology axis without being 'objectified' are two significant questions.

These questions can inspire further studies on the topic. For scientific analyses of the impact and further possibilities created by these technologies, more researches should be conducted by museums, universities and other related institutions.

6.1. New museum approach to research

The existing research and discussions on new museology provide a

comprehensive basis for developing new ideas for tackling the struggles on transforming today's museums into visitor oriented environments. This basis also clears the way for understanding further practical needs of museums. As results of this research some main needs of 'to be new museums' can be seen as follows: Most importantly, there is a significant need for conducting more theoretical and practical research on new museology in academia with the focus on understanding and developing how visitor orientation can be achieved. Besides, there is significant need for a shift in the approaches of museum studies; it is clear that acquiring quantitative data only with visitor surveys falls short for understanding the museum visitors. As Eilean Hooper-Greenhill suggests, visitor orientation does not mean counting visitors, it is actually about understanding them. (Hooper-Greenhill, 1988:213-220) For sure, quantitative data collected by museum visitor surveys give important information such as figures and demographics, which can be developed more into operational knowledge for running the museums as public institutions. On the other hand, new museology approach is far beyond operating the museum at this common sense level. At this point, the need for extensive understanding of visitors via qualitative data arises because one cannot count the experience of visitors. Instead, the insight about the visitor -their needs, feelings, expectations and perceptions, etc. is needed to be developed. (Hooper-Greenhill, 1988:213-220)

Greenhill gives example from researches done in Sweden, Canada, the USA, France, Germany and Britain; saying that the quantitative data from museum visitor surveys helped to determine who will be museum visitors by measuring the education levels and wealth of the participants. (Greenhill, 1988:218) Such data provides information only about the stereotypes perceived in a commonsensical way. Also the survey study done as Istanbul Modern case study can be a similar example

for developing such relations. However, the acquired quantitative data cannot give in-depth information about the visitors, their motives, experiences, expectations etc. On the other hand, qualitative data, which needs the researcher to get their hands dirty, gives the necessary insight to break down the above mentioned stereotyped image of potential and existing visitors. (Hooper-Greenhill: 1988:219)

In her article about accessibility issues to museums, Caroline Lang provides a similar approach, confirming the limitations of the qualitative statistics:

Statistics only give part of the story. The sector still lacks a methodology for measuring its long-term contribution to society and improved quality of life for individuals, and perhaps this is not possible. However there is much anecdotal evidence and everyone who has been involved in promoting access and inclusion can give examples from their own experience to show that museums are capable of making a difference both to individuals and the wider community. (2006:37)

The utilization of qualitative research can help to understand the motives of being non-visitors to museums. The output from such research can be useful for museums to develop strategies for transforming the non-visitors into visitors and for increasing the public access to museum as an institution. This again proves the significance of qualitative research for becoming visitor oriented "new museum".

While suggesting increased utilization of qualitative research, it can be said various qualitative methods besides surveys should be employed in researches, such as participant observations, in-depth interviews, and focus groups. Each of the three methods is particularly useful to obtain a specific type of data about the museum visitors.

As also seen in Istanbul Modern case, museums conduct researches (mostly statistical and quantitative, as illustrated by Eilean Hopper-Greenhill) with marketing research companies where the research relations are based on short term with the aim of gaining statistic for a specific period, or of reaching some marketing targets. At this point, it should be highlighted that research collaborations with third parties, such as dedicated independent researchers, academic institutions, museology experts etc. can help to lighten the research allocation burden of museums. Also such collaboration would also provide benefits in long term rather than achieving short term operational goals. The collaborations with academy would provide multilateral benefit to both the museum as institution, the researcher as the interested party in the topic, and also the society as the beneficiary of the services provided by the museum as a public institution.

Another important outcome of this research is the value of researchers' open and easy access to information in terms of becoming a 'new' museum. Comparing the information inquiries to Istanbul Modern and London's Tate Modern illustrated a bold difference of new museum level of both public institutions. Even it was not the subject of the research, data provision to the researcher at Tate Modern was quick and easy, whereas Istanbul Modern's administration treated the already existing survey results as internal information and access to this data was not provided for the use in an academic research. It is an important point that; even if there is no research collaboration with researchers, making the existing information available to researchers will have significant positive effects into the development of museum studies in general. (Hooper-Greenhill 1988: 216)

On the course of becoming a "new museum" it is also important to highlight potential operational actions at the museums. Prior to taking steps for achieving the

goals of visitor orientation it is important to include the museum staff into the process. The museum's visitor strategy should be discussed and evaluated with the administration and staff of the museum; the coordination among the workers should be increased and the task allocation should be made accordingly (Hooper-Greenhill 1988: 216).

Last but not the least, the arguments provided in this chapter can be taken into considerations as parallel to the new museum approach by highlighting the importance of supporting the research in the field museum and visitor studies. Can't we identify it as a success where some aspects of new museology are taken and blended with technological capabilities, where the new museology shall be treated as a whole? New media engagement is just an important aspect in this larger sea of change.

References

- Archives.icom.museum, (2014). Development of the Museum Definition according to ICOM Statutes(1946 2001). [online] Available at: http://archives.icom.museum/hist_def_eng.html [Accessed 5 Jan. 2014].
- BANKA KARTLARI VE KREDI KARTLARI HAKKINDA YÖNETMELIKTE

 DEĞIŞIKLIK YAPILMASINA ILIŞKIN YÖNETMELIK TASLAĞI. (2013).

 1st ed. [ebook] Bankacılık Düzenleme ve Denetleme Kurumu, p.1. Available at:

 https://www.bddk.org.tr/websitesi/turkce/Duyurular/Basin_Aciklamalari/12578b

 anka_kartlari_ve_kredi_kartlari_hakkinda_yonetmelikte_degisiklik_yapilmasina

 _iliskin_yonetmelik_taslagi.pdf [Accessed 26 Nov. 2013].
- Bassey, M. (1999). *Case study research in educational settings*. 1st ed. Buckingham [England]: Open University Press.
- Bell, J. (2010). *Doing your research project*. 1st ed. Maidenhead: McGraw-Hill Open University Press.
- Bonnell, V., Hunt, L. and Biernacki, R. (1999). *Beyond the cultural turn*. 1st ed. Berkeley, Calif.: University of California Press.
- Briggs, A. and Burke, P. (2005). *A social history of the media*. 1st ed. Cambridge, UK: Polity.
- Castells, M. (2010). *The rise of the network society*. 2nd ed. Malden, Mass.: Blackwell Publishers.
- Chandler, D. (1999). *Technological or Media Determinism*. 1st ed. [ebook] Available at: http://www.aber.ac.uk/media/Documents/tecdet/tdet01.html [Accessed 7 Mar. 2014].
- Cook, S. (2006). Technological Revolutions and the Gutenberg Myth. In: R. Hassan and J. Thomas, ed., *The New Media Theory Reader*, 1st ed. pp.11-18.
- Creswell, J. (2003). Research design. 1st ed. Thousand Oaks, Calif.: Sage Publications.

- Dunmore, C. (2006). Museums and the Web. In: C. Lang, J. Reeve and V. Woolard, ed., *The Responsive Museum Working with Audiences in the Twenty-First Century*, 1st ed. Hampshire: Ashgate, pp.95-96.
- Eisenstein, E. (1983). *The printing revolution in early modern Europe*. 1st ed. Cambridge [Cambridgeshire]: Cambridge University Press.
- Facebook, (2014). *Istanbul Modern | Istanbul Museum of Modern Art*. [online] Available at: https://www.facebook.com/istanbulmodernsanatmuzesi [Accessed 12 Jan. 2014].
- Foursquare, (2014). *Istanbul Modern on Foursquare*. [online] Available at: https://foursquare.com/istanbulmodern_ [Accessed 12 Mar. 2014].
- Googleartproject.com, (2014). *İstanbul Museum of Modern Art Google Cultural Institute*. [online] Available at:

 http://www.googleartproject.com/collection/istanbul-modern-museum/
 [Accessed 12 Jan. 2014].
- Grant, A. and Meadows, J. ed., (2010). Introduction to Communication technologies.

 In: Communication Technology Update and Fundamentals, 12th ed.

 Amsterdam: Elsevier, p.1.
- Griffiths, A. (2003). Museum Display: A Century of Accommodation and Conflict. In:
 D. Thorburn and H. Jenkins, ed., *Rethinking Media Change: The Aesthetics of Transition*, 1st ed. Cambridge, Massachusetts, London: MIT Press, pp.375-379.
- Guthrie, G. (2010). *Basic research methods*. 1st ed. New Delhi, India: SAGE Publications.
- Hall, S. (1997). *Representation*. 1st ed. London: Sage in association with the Open University.
- Harvey, D. (2003). Macalester International / Vol 13 / Iss 1. [online]
 Digitalcommons.macalester.edu. Available at:
 http://digitalcommons.macalester.edu/macintl/vol13/iss1/7/ [Accessed 10 Apr. 2014].

- Hauenschild, A. (1988). Claims and Reality of New Museology. [online]
 Museumstudies.si.edu. Available at:
 http://museumstudies.si.edu/claims2000.htm [Accessed 2 Jan. 2013].
- Hooper-Greenhill, E. (1988). Counting Visitors or visitors who count?. In: R. Lumley, ed., *The Museum Time Machine: Putting Cultures on Display*, 1st ed. London; New York: Routledge, pp.213-230.
- Icom.museum, (2014). *Museum Definition- ICOM*. [online] Available at: http://icom.museum/the-vision/museum-definition/ [Accessed 5 May. 2014].
- Instagram.com, (2014). *istanbulmodern on Instagram*. [online] Available at: http://instagram.com/istanbulmodern [Accessed 12 Jan. 2014].
- İstanbul Modern Sanat Müzesi, (2014). *Geçmiş ve Gelecek / Past and Future Levent Çalıkoğlu*. [video] Available at: https://www.youtube.com/watch?v=WyHdf4l09TA [Accessed 12 Jan. 2014].
- ISTANBUL MODERN, I. (2013). *İstanbul Modern*. [online] Istanbulmodern.org. Available at: http://www.istanbulmodern.org/ [Accessed 16 Nov. 2013].
- Lang, C. (2006). The Public Access Debate. In: C. Lang, J. Reeve and V. Woollard, ed., *The Responsive Museum: Working with Audiences in the Twenty-first Century*, 1st ed. Hampshire: Ashgate Publishing Limited, pp.29-38.
- Lang, C. (2006). The Public Access Debate. In: C. Lang, J. Revee and V. Woollard, ed., *The Responsive Museum Working with Audiences in the Twenty-First Century*, 1st ed. Hampshire: Ashgate, pp.29-38.
- Lapham, L. (1994). Introduction to the MIT Press Edition. In: M. McLuhan, ed., *Understanding media : the Extensions of Man*, 2nd ed. Cambridge, Massachusetts London, England: M I T Press, p.xi and xxi.
- Lister, M. (2009). New media. 2nd ed. Milton Park, Abingdon, Oxon: Routledge.
- MacKenzie, D. and Wajcman, J. (1985). *The Social shaping of technology*. 1st ed. Milton Keynes: Open University Press.
- Manovich, L. (2002). The language of new media. 1st ed. Cambridge, Mass.: MIT Press.

- Marien, M. (2006). New Communications Technology:a Surveyof impacts and issues. In: R. Hassan and J. Thomas, ed., *The New Media Theory Reader*, 1st ed. Berkshire: Open University Press, pp.41-48.
- Marstine, J. (2006). Introduction. In: J. Marstine, ed., *New Museum Theory and Practice.*, 1st ed. Malden: Blackwell Publishing Ltd., pp.6-17.
- Martin, P. (1876). Die praxis der naturgeschichte. 1st ed. Weimar: B.F. Voigt.
- McLuhan, M. (1969). *The Gutenberg galaxy*. 1st ed. Toronto: The New American Library of Canada.
- McLuhan, M. (n.d.). Understanding media. 1st ed.
- Norris, P. (2001). Digital divide. 1st ed. Cambridge: Cambridge University Press.
- Oxforddictionaries.com, (2014). science: definition of science in Oxford dictionary (British & World English). [online] Available at: http://www.oxforddictionaries.com/definition/english/science?q=science [Accessed 8 Jan. 2014].
- Pinch, T. and Bijker, W. ed., (1993). The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other. In: 4th ed. Cambridge, Mass.: MIT Press, p.19.
- Reeve, J. and Woollard, V. (2006). Influences on Museum Practice. In: C. Lang, V. Woollard and J. Reeve, ed., *The Responsive Museum Working with Audiences in the Twenty-First Century*,, 1st ed. hampshire: Ashgate, pp.5-9.
- Resmigazete.gov.tr, (2014). *T.C. Resmi Gazete*. [online] Available at: http://www.resmigazete.gov.tr/main.aspx?home=http://www.resmigazete.gov.tr/eskiler/2013/12/20131231-2.htm/20131231.htm&main=http://www.resmigazete.gov.tr/eskiler/2013/12/20131231-2.htm [Accessed 8 Feb. 2014].
- Ross, M. (2004). *Interpreting the new museology**. 1st ed. [ebook] Lichfield, pp.84-100. Available at: http://www2.le.ac.uk/departments/museumstudies/museumsociety/documents/v olumes/ross.pdf [Accessed 3 Mar. 2014].

- Sismondo, S. (2010). *An introduction to science and technology studies*. 1st ed. Chichester, West Sussex, U.K.: Wiley-Blackwell.
- Smith, M. and Marx, L. (1994). Introduction. In: M. Smith and L. Marx, ed., *Does Technology Drive History?: The Dilemma of Technological Determinism*, 1st ed. Cambridge, Mass.: MIT Press, p.xi.
- Vergo, P. (1989). The New museology. 1st ed. London: Reaktion Books.
- Williams, R. (1989). Resources of hope. 1st ed. London: Verso.
- Wright, P. (2006). The Quality of visitors' Experiences in Art Museums. In: P. Vergo, ed., 5th ed. London: Reaktion Books, pp.119-121.
- YouTube, (2014). *İstanbul Modern Sanat Müzesi*. [online] Available at: http://www.youtube.com/user/istanbulmodern [Accessed 12 Jan. 2014].
- YouTube, (2014). *İstanbul Modern Sanat Müzesi*. [online] Available at: https://www.youtube.com/user/istanbulmodern/about [Accessed 12 Jan. 2014].

APPENDIX A – Research Survey at Istanbul Modern Museum

KADİR HAS ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ YENİ MEDYA BÖLÜMÜ YÜKSEK LİSANS TEZİ ARAŞTIRMA ANKETİ

İSTANBUL MODERN'DE ZİYARETÇİ DENEYİMİ&YENİ MEDYA ARAÇLARININ KULLANIMI

Ön Bilgilendirme: Bu anket İstanbul Modern ziyaretçilerinin müze deneyimlerinde, QR kodlar, ipadler, dokunmatik ekran gibi yeni medya araçlarının kullanımını ölçümlemeyi ve yeni medya araçlarının müze ziyaretine etkilerini anlamayı amaçlamaktadır. Anketi cevaplamak, ortalama 15 dk. sürmektedir.

1. KİŞİSEL BİLGİLER
1.1. Doğum Tarihi:
1.2. Eğitim seviyeniz:
O İlköğretim
O Lise
O Üniversite
O Yüksek Lisans
O Doktora

1.3. Meslek:	
1.4. Aşağıdakilerden hangis	i sizi en iyi tanımlıyor?
O Yeni bir teknolojik aleti, kı	sa süre içerisinde kullanabilirim.
O Teknolojik aletlerin kullanı kullanabilirim.	ımı ile ilgili kısa bir bilgilendirme yapılırsa
O Teknolojik aletleri kullanm	akta zorluk çekiyorum.
O Teknolojik alet kullanamıy	orum.
1.5. Teknolojik aletlerin en	son çıkan modelini alırım.
O Evet	O Hayır
1.6. Teknoloji haberlerini ta	ıkip ederim.
O Evet O Hay	rır
1.7. Teknolojik aletlere özel	bir ilgim var.
O Evet O Hay	rır
2. TEKNOLOJÍK ALET SA	AHİPLİĞİ VE İNTERNET ERİŞİMİ
2.1. Aşağıdaki teknolojik al	etlerden sahip olduklarınızı işaretleyiniz?
O Masaüstü Bilgisayar	
O Dizüstü Bilgisayar	
O Tablet Bilgisayar	
O Akıllı Telefon	
2.2. Evinizde internet bağlar	ntısı var mı?
O Evet O Hay	ır.

2.3. Kullandığım cep telefonu, akıllı telefon

O Eve	et O Ha	ıyır			
2.4. Cep telef	fonunuzda inte	ernet bağlaı	ıtısı var mı?	•	
O Eve	et O Ha	ıyır			
3. TEKNOL	OJİK ALET I	KULLANIM	I MİKTARI	I VE AMACI	[
_	duğunuzu bel günde toplaı	_	-	•	aatleri de dahil nuz?
O 1 saatten aa	Z				
O 1-2 saat					
O 3-5					
O 6-10					
O 10 saatten	fazla				
	Akıllı telefonu zla en çok nele		s ya da konu	ışma dışında	ya da tablet
yapıyorsunu					

4. MÜZEDE BİLGİLENDİRME AMAÇLI YENİ MEDYA ARAÇLARININ KULLANIMI VE ZİYARETÇİ DENEYİMİ

4.1. Geçtiğimiz 12 a	y içinde kaç defa İstanbul Modern'i ziyaret ettiniz?
O 1-2 defa	
O 3-5 defa	
O 5-10 defa	
O 11 ve daha fazla	
4.2. Müze ziyaretle	rinizin ortalama uzunluğu nedir?
O 1 saatten az	
O 1-2 saat	
O 2-3 saat	
O 3 saatten fazla	
4.3.1. Müze ziyareti /iPad'imde yüklemi	mden önce İstanbul Modern'in uygulamasını telefonuma ştim.
O Evet	О Науіг
4.3.2 (4.3.'e cevabın bilmiyordum.	uz hayır ise) İstanbul Modern'in uygulaması olduğunu
O Evet	O Hayır
•	ı için ihtiyaç duyduğum bilgileri, farklı noktalarda bulunan ardan (kiosk) elde ettim.
O Evet	O Hayır
4.5. Lütfen müzede	yeni medya aracı (dokunmatik ekran, tablet bilgisayar, QR

(1-Kesinlikle Katılıyorum, 2- Katılıyorum, 3-Karasızım, 4- Katılmıyorum, 5- Kesinlikle katılmıyorum)

kodlu video, fotoğraf vb.) kullanımı ile düşüncelerinizi derecelendiriniz.

4.5.1. M	üzede y	eni medya	ı aracı kull	anılmasını t	ercih ederim.	
1		2	3	4	5	
4.5.2. Y	eni med	ya araçlar	ını kulland	ığımda müz	zedeki eserler i	le etkileşimim
(eser ha	kkında l	bilgilenme	e, eseri inc	elemek için	daha fazla zar	nan ayırma vb
daha yül	ksek olu	yor.				
1	<u> </u>	2	3	4	5	
4.5.3. M	üzede y	eni medya	ı kullanım	ının müzeye	e ve eserlere ol	an ilgim üzeri
pozitif e	tkisi var	·.				
1	<u> </u>	2	3	4	5	
4.5.6. M	üze, mü	zede bulu	nan elektro	onik aletleri	n kullanımı ha	kkında daha ç
bilgilenc	lirme ya	pmalı.				
1	<u> </u>	2	3	4	5	
	•	irden çok :	-	leyebilirsin	iz.)	
O Müze	nin gele	cek etkinl	iklerinden	haberdar ol	mak	
O Müze	nin kole	ksiyonları	ndaki eser	lere dijital o	olarak ulaşabilı	nek
O Müze	deki ese	rler hakkı	nda daha k	apsamlı bil	gi almak	
O Müze	hakkınd	laki görüş	ve tavsiye	elerimi iletm	nek	
O İntern	ette dola	aşmak				
	_	•	· ·	araçlarının dar sıralay	en faydalı ole ınız.	duğu alanları
() Müz	e ziyaret	timi kolay	laştırdı.			

() Öğrenme sürecimi katkıda bulundu.
() Müze ziyaretimi eğlenceli hale getirdi.
() Müzeye olan ilgimi arttırdı.
4.8. Müzede yeni medya aracı kullanırken karşılaştığınız sorunlar nelerdir?
O Müze ziyaretimin kalitesi ile ilgisi olmayan uygulamalar sunulması
O İhtiyaç duyduğum teknik destek sağlanmaması
O Yeni medya araçlarına yeterli erişimimin olmaması
ODiğer:
5. İstanbul Modern ziyaretiniz ve yeni medya araçları ile ilgili fikriniz, öneriniz
deneyiminiz ya da bir anınız var ise kısaca açıklar mısınız?

6. Anketime vakit ayırıp araştırmamı geliştirmeme yardımcı olduğunuz için TEŞEKKÜR EDERİM.
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Kadir Has Universitesi, Sosyal Bilimler Enstitüsü Yeni Medya Bölümü Araştırma Asistanı AYÇA BAYRAK