

Ανοικτό Πανεπιστήμιο Κύπρου

## Σχολή Θετικών και Εφαρμοσμένων Επιστημών

**Μεταπτυχιακό Πρόγραμμα Σπουδών**  
*Κοινωνικά Πληροφοριακά Συστήματα*

### Μεταπτυχιακή Διατριβή



**Streaming Online Theatre Productions**

**LAMPRINI TOLIS**

**Επιβλέπων Καθηγητής**  
**KLIMIS NTALIANIS**

**November 2018**

# **Ανοικτό Πανεπιστήμιο Κύπρου**

**Σχολή Θετικών και Εφαρμοσμένων Επιστημών**

**Μεταπτυχιακό Πρόγραμμα Σπουδών**

***Κοινωνικά Πληροφοριακά Συστήματα***

## **Μεταπτυχιακή Διατριβή**

**Streaming Online Theatre Productions**

**LAMPRINI TOLIS**

**Επιβλέπων Καθηγητής  
KLIMIS NTALIANIS**

Η παρούσα μεταπτυχιακή διατριβή υποβλήθηκε προς μερική εκπλήρωση των απαιτήσεων για απόκτηση μεταπτυχιακού τίτλου σπουδών στα *Κοινωνικά Πληροφοριακά Συστήματα* από τη Σχολή Θετικών και Εφαρμοσμένων Επιστημών του Ανοικτού Πανεπιστημίου Κύπρου.

**November 2018**

**Copyright © Lamprini Tolis, 2018.**

**Με επιφύλαξη παντός δικαιώματος. All rights reserved.**

Απαγορεύεται η αντιγραφή, αποθήκευση και διανομή της παρούσας εργασίας, εξ ολοκλήρου ή τμήματος αυτής για εμπορικό σκοπό. Επιτρέπεται η ανατύπωση, αποθήκευση και διανομή για σκοπό μη κερδοσκοπικό, εκπαιδευτικής ή ερευνητικής φύσης, υπό την προϋπόθεση να αναφέρεται η πηγή της προέλευσης και να διατηρείται το παρόν μήνυμα. Ερωτήματα που αφορούν τη χρήση της εργασίας για κερδοσκοπικό σκοπό, πρέπει να απευθύνονται προς τον συγγραφέα. Οι απόψεις και τα συμπεράσματα που περιέχει αυτή η εργασία, εκφράζουν τον συγγραφέα και δεν πρέπει να ερμηνευθεί ότι αντιπροσωπεύουν τις επίσημες θέσεις του Ανοικτού Πανεπιστημίου Κύπρου.

## Περίληψη

Στο θέμα της μεταπτυχιακής διατριβής παρουσιάζεται: ο σχεδιασμός μιας όνлайн πλατφόρμας για στρείμιγκ θεατρικές παραγωγές από όλο τον κόσμο, το ιστορικό από υπάρχουσες θεατρικές παραγωγές που έχουν προβληθεί και οι μέθοδοι που χρησιμοποιήθηκαν για την έρευνα.

Προσδιορίζεται τί είναι ο όρος στρείμιγκ και θέατρο όνлайн, και γιατί μια τέτοιου είδους πλατφόρμα μπορεί να προσεγγίσει ένα νέο κοινό. Γίνεται μια ιστορική αναδρομή στην παγκόσμια ιστορία του θεάτρου μέχρι σήμερα και στις υπάρχουσες όνлайн θεατρικές πλατφόρμες.

Παρουσιάζονται και αναλύονται οι θεωρητικές έρευνες που έχουν γίνει πάνω στο θέμα αυτό, καθώς και τα χαρακτηριστικά από ανάλογες όνлайн θεατρικές πλατφόρμες. Στα πλαίσια της μεταπτυχιακής διατριβής σχεδιάστηκε ένα προσχέδιο ιστοσελίδας για την πλατφόρμα και μελετήθηκαν τα τεχνικά χαρακτηριστικά της.

Συντάχθηκε επίσης ένα ερωτηματολόγιο για να διερευνηθεί αν υπάρχει ενδιαφέρον για στρείμιγκ θεατρικές παραγωγές όνлайн και αναλύθηκαν τα αποτελέσματα. Ακόμη καταγράφηκε η άποψη δύο ειδικών του χώρου για το συγκεκριμένο θέμα. Ο ένας προέρχεται το χώρο του θεάτρου και ο άλλος από το χώρο του ντίτζιταλ μάρκετινγκ στην Ελλάδα.

Τέλος παρουσιάζονται τα συμπεράσματα της έρευνας τόσο σε θεωρητικό επίπεδο, όσο και σε πρακτικό. Αναφέρεται επίσης σε προτάσεις που θα μπορούσαν να εφαρμοστούν για να υλοποιηθεί καλύτερα το πρότζεκτ, καθώς και μελλοντικές επεκτάσεις πάνω στην πλατφόρμα, προκειμένου να διευρυνθεί το κοινό.

## **Summary**

The master thesis includes a brief introduction to the subject: the conceptual design of an online platform for streaming live or on demand worldwide theater productions, the background of online theatre streaming and the methods used for this research. It defines what is streaming and theatre online and why a complete theatre digital platform can reach a new audience. It takes us back in the history of worldwide theatre until today's established theatre platforms.

The findings of theoretical researches and features associated to online theatre platforms are analyzed. The master thesis presents a template design of the website platform and the technical requirements.

A questionnaire was conducted in order to research the interest for streaming theatre productions online. Afterwards the results were analyzed. Two specialists were interviewed for their opinion on streaming theatre plays and shows, one in the theatre industry and another from a digital marketing company in Greece.

Chapter 6 concludes this study by summarizing the theoretical and practical findings. It also refers to other features that can be integrated on the platform and recommendations are made for the project to reach a broader audience.

## **Acknowledgements**

In this part I would like to give my deepest gratitude to all those who contributed in order to complete this master dissertation. First of all i would like to thank my supervisor and academic coordinator of the program Social Information Systems, professor mr. Klimi Ntaliani for his support, enthusiasm, expertise, checking my progress through all the way and bringing valuable insights to this work. I would also like to thank my professor and academic coordinator Mrs. Jahna Otterbacher for her understing, continued support and assistance throughout the entire masters program. Finally i would like to thank all those who encouraged me in this hard road.

Lamprini Tolis

## **Contents**

<b>1. Chapter 1</b>	<b>1</b>
<b>Introduction</b>	
1.1. Digital Theatre and Performances	1
1.2. Background, Objectives and Methodology	2
1.3. Summary of the Dissertation	3
<b>2. Chapter 2</b>	<b>4</b>
<b>Theoretical References</b>	
2.1 Digital Theater and Streaming Terminology	4
2.2 Concerns regarding Streaming Theatre Shows and Performances	6
2.2.1 History of worldwide theatre	6
2.2.2 From Greek Ancient Theatre, to Radio Theatre, to TV-theatre, to Digital Theatre	8
2.2.3 Digital Theatre and Performances today	9
2.3 Incentives & Goals	10
2.4 Global Incentives & Impact, Live to Digital	11
2.5 Personal Incentives	13
<b>3. Chapter 3</b>	<b>14</b>
<b>Overview Literature and Platforms</b>	
3.1 Literature Reviews	14
3.2 Review of Existing Platforms	22
<b>4. Chapter 4</b>	<b>30</b>
<b>Platform Design</b>	
4.1 Platform Features	30
4.2 Technical Requirements	40
<b>5. Chapter 5</b>	<b>42</b>
<b>User's Aspects of Digital Theatre Platform</b>	
5.1 Questionnaire Survey	42
5.2 Research Results	44
5.3 Analysis of Research Results	46
5.3.1 User's Opinion about Live Performances	47
5.3.2 Streaming Theatre Performances	51
5.4 Interviews	67
5.4.1 Theatre Professional	67

5.4.2 Digital Marketing Expert	68
<b>6. Chapter 6</b>	<b>70</b>
<b>Conclusions</b>	
6.1 Demand of findings for Streaming Live Performances	70
6.2 Further Recommendations	73
6.3 Future Integrations on the proposed Platform	74
<b>Bibliography – Website References</b>	<b>76</b>
<b>Appendix</b>	<b>81</b>
<b>A Questionnaire</b>	<b>81</b>
A.1 Questionnaire	81
A.2 Interviews	90
A.2.1 Questionnaire for Theatre Professional	90
A.2.2 Questionnaire for Digital Marketing Professional	92



# Chapter 1

## Introduction

### 1.1 Digital Theater and Performances

Digitization has strongly transformed the method in which cultural products and services are produced, distributed and consumed. The past decades progressively more people view on their computers online cinema: T.V. shows, movies, series, documentaries and concerts. The impact of technology is more recent too for other shows, like theater plays, opera, musical and dance. Currently there are few digital platforms that host these kinds of shows by streaming live and on demand. Theater companies with more than one stage present their shows via their platform, but it has its limitations regarding the number, variety, genres of theater plays, geographical boundaries and the percentage of audience that subscribe to use these platforms. This master thesis concerns the conceptual design of a complete platform and information portal for all available theater plays and performances around the globe. The objective is to create a platform where any user around the world can subscribe only through one website and have the ability to watch any kind of show from any theater in the world. As technology is developing the audience is coming across to a 'personal theatre' transformation, where video, games, film, music and stage performances are merging together. The way the world recognized theatre performance since thousands of years, which focused on the present and here, is now shifting into the here, now and everywhere.

iTunes and Spotify have gradually become popular in the music industry, Netflix and other streaming channels are popular for movies, e-books and online libraries. All these demonstrate that there is a demand in the streaming industry and people are interested in sharing and consuming various type of content. Currently there is not a streaming platform that combines an information portal for all available theater plays and shows worldwide. There are so many theater productions around the world that run for a

limited time and the audience would love to watch. Nowadays considering the economic climate people cannot afford the costs of travelling to another country or city, nor do they have the luxury of time while others face physical disabilities. Hence the conceptual design of a platform aims to provide viewers with a global experience through their computer, laptop, tablet, TV, mobile.

## **1.2. Background, Objectives and Methodology**

The master thesis seeks all available information from the background of early theatre digital performances, it analyses existing platforms and their features and examines the bibliography relative to digital theatre performance and streaming platforms.

The objectives of this research concern the following five:

- Is there a demand in streaming performances?
- Which streaming platforms exist worldwide and in Greece?
- How valuable is this kind of platform for the audience?
- How can the information and platforms around the world be combined?
- Design of a complete platform according to existing well-designed platforms and further innovative ideas.

The methods used to answer the previous research questions are:

1. Bibliography analysis
2. Analysis of existing online sites with shows and theatrical plays, advantages, disadvantages and deficiencies.
3. Conceptual level: design of a complete platform, valuation and refinement.
4. Questionnaire – Interviews
5. Data analysis
6. Present results obtained

The attempt is to understand how to reach new audiences, provide a complete platform and answer to the second research question, which is: How valuable is this kind of platform for the audience? The collection of data include: 1) an anonymous questionnaire to theatrophilos audience in Greece and Cyprus and to students from graduate and postgraduate programs of the Open University of Cyprus who are attending studies in the faculty of Pure and Applied Science and the Faculty of Humanities and Social Sciences; and 2) interviews via Google forms with two

professionals in the theatre industry and a digital marketing company in Greece for their opinion on streaming theatre plays and shows. A questionnaire permits responses to be collected from large number, quickly and cost efficiently. It also looks for trends and gives a clear view on what people prefer live or streamed performances. The anonymous questionnaire gives the audience the chance to express their thoughts in their own words related to the topic of the questions. The proposed questionnaire was conducted online with a mix of qualitative and quantitative questions addressed to females and males from 18 years old to 65+. The aim is to examine how the audience perceives streaming theater shows and if there is a market for such a platform. The questionnaire contributes to the research by voicing peoples view and further analyzes the data as to how to they sense live and streaming performances and which features/content of the template design are more important to them. The interviews further assist for the evaluation of the streaming platform but are in less depth because of poor narrative.

### **1.3. Summary of the Dissertation**

Chapter 1 includes a brief introduction to the subject of the study, the background of online theatre streaming and the methods used for this research. Chapter 2 defines what is streaming and theatre online and why a complete digital theatre platform can reach a new audience. It takes us back in the history of worldwide theatre until todays online existing theatre platforms. Chapter 3 analyses the findings of theoretical researches and features of established platforms associated to online theatre. Chapter 4 displays the features of the complete platform as well as the technical requirements. Chapter 5 presents the questionnaire for streaming theatre productions online and the analysis, as well as interviews from people in the theatre industry and a digital marketing company in Greece for their opinion on streaming theatre plays and shows. Chapter 6 is the conclusion for the master thesis, where further recommendations are presented for the platform and future extensions.

# Chapter 2

## Theoretical References

### 2.1 Digital Theatre and Streaming Terminology

According to Oxford English Dictionary theatre is defined as: “A building or outdoors area in which plays and other dramatic performances are given.”<sup>1</sup> Gay McAuley defines theatre as the link between performer, spectator and the space among the two that makes them co-exist. He also describes the space in performance as: «the way theater buildings function to frame the performance event, the organization of audience and practitioner spaces within the building, the nature of the stage and the modes of representation it facilitates, and the relationship between the real space of the theater and the fictional places that are evoked.”<sup>2</sup>

«Digital theatre is a hybrid art form that gains its power from the theatre’s capability to enable the imagination and generate human connections and digital technology’s ability to extend the reach of communication and visualization»<sup>3</sup> As noted by Dixon (2007) digital performance is: «all performance works where computer technologies play a key role rather than a subservient one in content, technique, aesthetics, or delivery forms» His book is an anthology of essays, which demonstrates how digital technologies form people to change or reconsider the characterization of space, bodies, and relationships.

---

<sup>1</sup><https://en.oxforddictionaries.com/definition/theatre>

<sup>2</sup>[www.press.umich.edu/16220/space\\_in\\_performance](http://www.press.umich.edu/16220/space_in_performance)

<sup>3</sup>[https://en.wikipedia.org/wiki/Digital\\_theatre](https://en.wikipedia.org/wiki/Digital_theatre)

Telematic performance refers to live performances, art, dance, music, and theatre, where the distribution of the performance is among two or more locations with the use of telecommunications, video, information technologies and information systems.<sup>4</sup>

Technology and science have expanded theatre and performance possibilities. The power on stage has developed in a more interactive set, with special effects initiated by actors live on stage: avatars sword fighting with an actor live in a Pippin show, the sight of Seurat's paintings progressively coming to life on stage in "Sunday in the Park with George". These are remarkable features that have established video designers to play a necessary role in theatre programs as reported by the BBC (2012). Furthermore virtual reality masks, 3D projections, mapping 2D projections on a stage, computer animation, online writing, real time audience feedback and interactive content creation, have all been inserted on the stage. The connection between the real world of the theatre stage and the cyberspace is growing rapidly as technology continues to develop. Watching a theatre without actors, with the presence of new technologies has become a reality in shows in New York festivals. The experimental theatre 'Under the Radar' and 'Coil' showcased a play titled 'Bonanza' which presented five video projections and the play 'Hello Hi There' presented two chatbots, computers empowered with conversational programs as noted by The Guardian (2011). Theatre either mainstream or experimental is becoming more cinematic and draws inspiration from cinema, in the meaning of spectacle. Theatrical multimedia uses projection, AV, techniques from film and TV industry to create unique experiences and take the audience into new spaces.

Video streaming is the new consumption model for the audience and has altered the entertainment industry and not only. Multi cameras are positioned around the theatre's space which take close ups and different camera angles in order to provide the best view for digital streaming. The definition of streaming is considered as transferring data in order to watch a steady and constant stream, while the browser can start playing the data even though the entire file has not been transmitted yet. People subscribe to websites to stream and watch a theatre performance in real time from the Internet via a broadband and companies have found a new channel to capitalize their services. Streaming does not mean you download and own the movie but you actually rent it.

---

<sup>4</sup>[https://en.wikipedia.org/wiki/Telematic\\_performance](https://en.wikipedia.org/wiki/Telematic_performance)

Popular streaming channels are Direct TV NOW, Amazon video, Google Play, Apple iTunes, Netflix, YouTube TV.

## **2.2 Concerns regarding Streaming Theatre Shows and Performances**

Theatre is transforming not only on stage with multimedia, but also through communications and technologies. The expression “All the world is a stage” from William Shakespeare’s play “As you like it”, is the name of the streaming theatre platform that will combine all other existing platforms features into one. The drawback of the existing platforms is that they have a selected list of plays and they are subject to regional theatre companies. So if a viewer would like to watch a Greek online theatre production or performance there is no availability, nor subtitles for those who do not understand the language. They also have limited levels of computer-mediated communication within the audience regarding the interactivity and real-time audience feedback for the performances broadcasted. In this platform users will have the ability to comment, like and write their reviews about the production, while it’s live. Through new communication technologies cyber communities are growing and sharing a new location where they can exchange ideas, opinions and share interests and content. Integrating an informational portal to a platform like this, aims to bond groups with culture differences into one, in an extended community with common culture interests.

### **2.2.1 History of worldwide theatre**

Greece is the cradle of ancient theatre and dated from 700 BC. Athens was the heart of theatre culture and evolved into a cultural, political and military power. Greek ancient theatre, which includes three dramatic genres tragedy (tragoida), comedy and satyr plays, was established as an institution in Greece. The plays were performed in ancient theatres during a religious festival called Dionysia. Athens disseminated the festival to the Mediterranean, Romans and Hellenistic empire in order to foster a common culture identity. In the Roman colonies theater plays were translated and imitated in Latin, thus a new genre of art was created, pantomime. Theatre was becoming a widespread form of entertainment, which is lively present till today. Ancient tragedy plays are still performed in modern and ancient theatres around the world. New generations have the ability to see timeless plays, which still fascinate the audience. The Greek mythology and gods have also inspired Hollywood movies. They are based on different subjects, love

tragedies between mortal and immortal, epic battles and the belief in different gods that controlled Greek cultures<sup>5</sup>

Commedia dell' arte is another type of ancient theatre that was born in Italy and began to be popular in Europe in the 16<sup>th</sup> and 18<sup>th</sup> century. It's known for its masked characters and actors who would improvise their performances every time on stage.<sup>6</sup>

The Elizabethan theatre was established in England the period of 1562 to 1642 during the British Renaissance. In its early start the performances were raised by companies and were played in the Courtyard, the aristocrats, the municipal theatres and the public. William Shakespeare was the most significant writer and most of his scripts were performed in the famous Elizabethan theatre Globe.<sup>7</sup>

Opera- Ballet is a French lyric theatre which was widespread throughout the 18<sup>th</sup> century. Singing is vital for Opera but it also features dance. The performances can last hours and even days long. Opera demands singers to be loud and hold notes longer. Ballet is a theatrical representation of dancing with music, where dancers do not speak or sing, but communicate through their dancing to deliver a story to the audience, which is usually tragic in their message.<sup>8</sup>

Musical is a theatrical performance, which has a great combination of singing, acting, dancing and spoken dialogue. This form of theatre developed in the 19<sup>th</sup> century in the western world and are know as musicals. The content of the storylines involve social issues, but comedy is mostly the basic theme. The difference with opera and ballet is that music is the paramount of the theatrical play. High demanding musical productions are mostly associated with Broadway in New York City and West End in London. Broadway entertains their audience with musicals in their 41 professional theatres. West End is an

---

<sup>5</sup>[https://en.wikipedia.org/wiki/Theatre\\_of\\_ancient\\_Greece](https://en.wikipedia.org/wiki/Theatre_of_ancient_Greece)

<sup>6</sup>[https://en.wikipedia.org/wiki/Commedia\\_dell%27arte](https://en.wikipedia.org/wiki/Commedia_dell%27arte)

<sup>7</sup><https://www.mytheatro.gr/elisavetiano-theatro>

<sup>8</sup> <https://en.wikipedia.org/wiki/Op%C3%A9ra-ballet>

area in central London where theatrical performances are presented in the largest mainstream professional theatres in the city.<sup>9</sup>

Asia has also a long history in theatre and dance, which counts from the 13<sup>th</sup> century till nowadays. Theatre performances are deeply connected with religious rituals, dancing movements that imitate animals, martial arts and the art of storytelling. The best-known form of Japanese theatre is Kabuki and Noh. Kabuki combines music, dance and drama and Noh acts were played to high-class audience.<sup>10</sup>

The theatre of Russia finds its roots in the 16<sup>th</sup> century where the first performances started as pagan shows with narrations of tales and proverbs, singing and dancing by minstrels. Moscow and St.-Petersburg became in the 19<sup>th</sup> century the center of theatre culture, where the Maly (Small) Theatre and the Theatre of Bolshoi was found. The foundation of the Moscow Art Theatre by Konstantin Stanislavsky and Vladimir Nemirovich was an essential event for that period. Stanislavsky's method introduced the new drama, which is recognized internationally and refers to the way of training actors and getting them to reach a psychophysical level of the role. Chekov plays reflect the new Russian drama.<sup>11</sup>

### **2.2.2 From Greek ancient theatre, to radio-theatre, to TV-theatre, to digital theatre**

Radio theatre began around 1938 on ERT radio for the 3rd program, called «Sunday Theatre». The audience had the ability to tune in to listen to great theatrical plays. Till then only the music from theatre plays, great poets and musicians like Theodorakis, Hatzidakis, was reaching the ears of the audience, but slowly and gradually they were able to listen to theatre plays from popular play writers like Ionesco, Brecht, Lorca, Campanell. The production of new radio plays stopped in 1994, but the Greek audience is still lively and archives broadcasts from the radio station ERT. In March 2017 it premiered again with acts from Iakovos Kampanellis and Loula Anagnostaki. Radio

---

<sup>9</sup>[https://en.wikipedia.org/wiki/Musical\\_theatre](https://en.wikipedia.org/wiki/Musical_theatre),

[https://en.wikipedia.org/wiki/West\\_End\\_theatre](https://en.wikipedia.org/wiki/West_End_theatre)

<sup>10</sup><http://disco.teak.fi/asia/the-origins-of-asian-theatrical-traditions>

<sup>11</sup>[http://russia-ic.com/culture\\_art/theatre/158](http://russia-ic.com/culture_art/theatre/158)



theatre unlike the theatre, does not need a scenery, lights or costumes. Everything is left to the listener's imagination. Web pages and groups have been created on the Internet in order to exchange information and collect as many recordings as possible. Greek-theatrical-evenings.blogspot.gr is a page where all the radio plays are recorded and it's open for anyone who would like to contribute with any information or comments. The 5th high school of Heraklion has devoted their site to a wide range of theatre plays.<sup>12</sup>

During the 70's in Greece there used to be a program called "The theatre of Monday", where the audience could watch theatre plays from the Greek TV channel ERT. It started in 1976 and ended in 1992 where more than 400 plays were broadcasted. Families back in the days would all gather in their living room to watch a play on TV, with famous artists and well known theatre play writers. The audience from the comfort of their couch had the chance to access the Greek theatre culture, especially for those ones who did not have the ability to travel to the capital of Athens to watch a live play. They could view an ancient theatre like «Oedipus Tyrannous» performed by the famous artist Manos Katrakis.<sup>13</sup> Nowadays Greek audience can view on Greek TV channels certain theatre plays. The most common type of theatre is called inspection (epitheorisi) and was created in Greece the last quarter of the 19th century. It combines acts of dialogue, music, singing, dancing, ballet and the theme is mostly satire, questioning the political and social news.

### **2.2.3. Digital theatre and Performances today**

Digital media is progressively integrated into live theatre and shows, and new types of interactive performance have emerged online. When markets introduce a new product or service, industries and consumers develop ways to adapt to the new product. The Greek audience today by purchasing a ticket online or offline has the ability to watch live performances from the National Theatre Live of London, the Kenneth Branagh Theatre Company and the historical Bolshoi Live Moscow in the Megaron Mousikis in Athens.

The website of the Onassis Cultural Centre offers the audience limited performances by clicking on the link to watch them live streamed.<sup>14</sup> Greek-movies.com is a webpage with different categories in their menu: movies, series, live TV, theatre, shows, animation,

---

<sup>12</sup><http://tetartopress.gr/to-radiofoniko-theatro-epistrefi-stin-ert/>

<sup>13</sup><http://tospirto.net/column/opinions/31957>

<sup>14</sup><https://vakxes.sgt.gr/?lang=gr>, <https://ion.sgt.gr/ion-live-streaming?lang=gr>

music, sports and lessons. In the menu theatre there are available several theatre plays from 1962 to 2018, comedy, drama, musical, puppet theatre and tragoida. Users can click on the button and get transferred to you tube videos to view the plays. Also they can get archived information on theatre productions from the national Greek theater website [www.nt-archive.gr/plays.aspx](http://www.nt-archive.gr/plays.aspx) from 1932 to 2006.

Furthermore the theatrophilos audience can watch online theatre plays in English upon subscription. The [www.globeplayer.tv](http://www.globeplayer.tv) and the [www.strafordfestival.ca](http://www.strafordfestival.ca) have a wide selection of Shakespeare plays. The [www.broadwayhd.com](http://www.broadwayhd.com) affords its audience musicals from Broadway. Viewers can subscribe to other platforms as well, such as [www.kanopystreaming.com](http://www.kanopystreaming.com) and [www.cennarium.com](http://www.cennarium.com), which have a wide selection of theatre plays online. In the UK [www.digitaltheatre.com](http://www.digitaltheatre.com) works with multiple theatre companies in the country, uses multiple angles and high definition cameras to capture the plays onscreen and deliver globally the best experience to the audience. All the productions are available upon subscription, annually, monthly or per rental. Digital theatre has also Digital Theatre Plus, which is a Theatre Art database introducing streamed videos of British productions, interviews of casts and crew, documentaries about practice, production and workshops that can be viewed in classrooms and lecture halls. The productions contain Shakespeare plays to contemporary, including teaching and studying guides, theory and criticism. There are also open online theatre rehearsals at [www.openonlinetheatre.org](http://www.openonlinetheatre.org), where the audience can interact and connect with artists. The website [www.dramaonlinelibrary.com](http://www.dramaonlinelibrary.com) includes streamed videos from live performances of Shakespeare's Globe theatre and professional audio recordings from L.A. theatre works. Pilot Theatre ([www.pilot-theatre.com](http://www.pilot-theatre.com)) is a pioneer in digital networks. It delivers and distributes live streaming of events, tours, conferences, workshops, shares audio, video and images.

## **2.3 Incentives & Goals**

Big and famous productions are always played in capitals or large cities and countries. How many people have seen a Broadway movie or have the chance to visit an ancient theatre in Greece and watch a play, or go to the Metropolitan Opera? Many reasons can impede people from attending a theatre performance, in terms of culture capitals, labor status, occupation, demographics, disability, geographic and socio- economic status. Not all people have the ability to travel to those cities or countries when the performance is taking place, due to costs, venue facilities or even sold out tickets. The rising costs

prohibit travelling especially for all family members. Understanding the motivations and hurdles with online engagement, cyber theatre can enhance the development of a new theatre interface and engage audience, where people from all over the world can view a wide variety of productions via streaming.

Information systems can bring people closer to the theatre industry. The digital theatre platform will combine all available theatre productions globally, along with an information portal regarding the productions, cast and crew, user's and critic's reviews and commentary. Experiencing live theatre is not as accessible as watching a movie. The platforms target is to bridge the gap between the physical world and the cyberspace, aiming to a larger audience globally, where all individuals can access productions with subtitles, in their own time and pace. With one subscription on the website they can watch their desired production with multiple participants.

## **2.4 Global Incentives & Impact, Live to Digital**

Companies have started to broadcast live performances and theatre is stepping off the stage and onto a smart phone. Video streaming and broadband connections allow viewers to watch videos with just a click away. American Netflix provides access to theatrical productions with an online payment. Broadway HD affords the entire library of their productions for \$8.99 per month. The Globe theatre in London has been a pioneer in streaming plays, despite there were objections that theatregoers would be driven away from live performances. After a couple of years they gained 25,000 online registrations that paid from 4 to 6 pounds to stream a production.<sup>15</sup>

“With the growing acceptance of the genre and more content opportunities, the market for Event Cinema is forecast to achieve annual revenues of £60-80 million and \$1 billion worldwide by 2019, with the UK/Ireland currently the global market leader”. (Abramson, Casale, Durski, Ellis, Karpf Reidy, Throsby and Schutt, 2016). The international trade body Event Cinema Association (ECA) was established in 2012, when it recognized the demand for support and promoting this developing market place.

---

<sup>15</sup><https://www.thetimes.co.uk/article/streaming-service-launched-in-the-west-end-as-theatres-seek-new-audiences-9wts0d330>

As mentioned previously the existing platforms originate from USA [www.broadwayhd.com](http://www.broadwayhd.com), Canada [www.strafordfestival.ca](http://www.strafordfestival.ca), Australia [www.kanopystreaming.com](http://www.kanopystreaming.com), England [www.digitaltheatre.com](http://www.digitaltheatre.com), [www.shakespearesglobe.com](http://www.shakespearesglobe.com) and distribute online content from theatre producers and companies. Digital distribution is easy in its use, has less cost of production and security in archive. Theatre companies and producers take the plays from stage to screen and gain more popularity with monthly, annual subscriptions, individual rentals, librarian and corporate plans. Consequently companies increase revenue otherwise theatre plays would be limited to an audience and less profitable. The Greek market could benefit widely from such a project since there is no such platform available currently, apart from individual attempts from Onassis Culture Center and the Foundation of Hellenic World.

Although theatre is viewed through the new media, it's capable of making an emotional connection with the viewer during the course. Though some might object to that, for the reason that live theatre exceeds in quality. There is something magical in live performances. Susan Bennett writes this about the in-home entertainment forms, saying: "Television, above all, lacks the sense of public event that attaches to both theatre and cinema. It denies the audience the sense of contact with the performers that is integral to any theatrical performance and, moreover, it denies the spectator-to-spectator communication (in both its positive and negative aspects) within the larger framework of audience as community." (Masura, 2007, p343). Everything is big and loud which makes the audience feel like part of the story. There is no pause button, no other channels to change and no re do. Actors rehearse for months to make a show perfect, perform live every night and give their best. Even if they make a mistake u can see it happen for real. The applause brings even more emotion to the play and the audience shows their gratitude for the performance. In private the viewer from their room experiences physical isolation from the event, multi tasking and distractions might occur that can make the performance as a secondary activity.

Some might see a threat in digital theatre and a lead to collapse regional theater going. Filling the gap between physical place and cyberspace in digital theatre is essential for those who would not have the chance at all to see a live performance. Streaming to more people worldwide and creating virtual capacity can lead to a bigger audience. When the costs are rising who would not prefer to download from a wide selection of

performances, stay at the comfort of their home, enjoy a glass of wine and food during the show. Distribution in any form and the dissemination of theatre productions can provide incentives to more people to visit a theatre. It does not mean that someone would not attend a show at their local theatre, if they stream a show. Individuals are more likely to visit a theatre at some point after having a first experience online. Moreover people who already visited theatres have the potential to see more plays in future time.

The way theatre is known over a thousands of years cannot be rejected, but the innovation of distribution can enhance the adoption and adaptation of digital technologies to expand their reach to audiences they would have never imagined and grow an international following. It's difficult especially in Greece at this time to fill theatres seats and digital technology signifies a new way of serving the box offices to attract further revenue. Children and students can get acquainted to theater from early years, actors can view rehearsals and plays from other international actors. Viewers are able to have a social experience, dramatic interaction and give their output during or after a performance, with comments, reviews and online dialogue through the new media.

## **2.5 Personal Incentives**

My studies in the master course of Social Information Systems in the Open University of Cyprus, as well as my bachelor studies in theatre in the University of Athens led me to the concept of a streaming theatre platform, where worldwide theatre productions can be available for anyone regardless of geographic, social and economic boundaries. Acknowledging the need for theatre to be viable with digital technology and inspire young people, who live between real and virtual worlds, theatre can transform in a unique live medium. Living in Greece which is the cradle of theatre and the fact that there is not an existing platform that includes all Greek theatre productions, enhanced the thoughts of such a development, where online theatre and performances can be combined with new media communication technologies.

# Chapter 3

## Overview Literature and Platforms

### 3.1 Literature Review

Theoretical findings in this research confirm that there is growing demand in streaming live theatre productions, distributing and expanding to new audiences. Reports, articles, academic papers, from 2005 and later, were reviewed in order to conduct a complete research, but surely articles have been left out. The review discloses more conclusions of these articles in order to synthesize an overview, rather than analyzing each data collected or the methods used.

NESTA (National Endowment for Science, Technology and the Arts) along with Arts Council and the AHRC (Arts Human Resources Council) noted that in 2014 they gained high impact in their use of content and grew a larger digital audience comparing to other organizations. Their researches provide a profound amount on how viewers engage with art online. The results reveal that there is a large and active online arts and culture community with 53% of web users participating online. Moreover there is a noteworthy potential market for increasing online culture, with 92% of the online population interested in arts and culture.<sup>16</sup> “At the core of any digital engagement strategy is people. We do what we do because we want people to connect with culture, heritage and the arts. We want people to discover, have fun, learn, grow, think, participate, and share ideas. Regardless of what anyone might say: without people our work would be worthless. Most people with an Internet connection are either consciously or unconsciously a member of one or more communities. And so are the people in your audience.” (Richardson, Visser, 2013, p26).

---

<sup>16</sup>[https://www.nesta.org.uk/sites/default/files/nt\\_live.pdf](https://www.nesta.org.uk/sites/default/files/nt_live.pdf)

National Theatre Live (NTL) was launched in 2009 and understood early that digital technology in the theatre industry can have vast prospects. It became the first Theatre Company that delivered its plays both live and encore<sup>17</sup>. Their researches showed that with live broadcasting people experience and get inspired by arts, but they also had to face a significant problem, whether the theatrical medium could be captured efficaciously and secure the trusted relationships with artists, agents and organizations in a financially stable business model. The main objective was to offer a different experience for those who live outside London, acknowledging that the live experience of watching a live theatre cannot be replaced. It appeared to have boosted local theatre attendance in neighborhoods. Digital distribution has transformed cinemas to broadcast alternative content, like in 2002 in the music industry, when a David Bowie concert was broadcasted worldwide. Audience is positive, they feel the real excitement and have a different psychology, when they know that the performance is taking place live in another venue and can even applaud at the end of the screening. National theatre live had a four week window for the recording to be shown and the audience showed the same enthusiasm as those who had viewed simultaneously the live show. The size of the screens and the quality of sound promotes the imitation of the theatre experience. NESTA's research (2014) found that the screenings increased the virtual capacity of the National Theatre. In June 2009 the performance 'Phaedra' secured an audience around 50,000 including audiences in Europe and North America. NT Live engaged 5 million people in 2,000 locations in more than 50 countries in the world since 2009.<sup>18</sup>

According to Guardian's article there was a project conducted in 2011 for the Camden Fringe Festival in association with technology provider Ipercast (a leading European company which specializes in secure content management and delivery for the Web and mobile devices), which streamed 18 performances from the festival (plays, dance, comedy) and received an average of 500 viewers per show. The research also revealed that 5% to 7% of the audience was ready to pay for a streaming. Apart from producing

---

<sup>17</sup>Encore Performance (or playback): Recorded performance screened after the live satellite broadcast.

<sup>18</sup><https://www.nesta.org.uk/news/research-finds-nationaltheatre-live-has-no-negative-impact-regional-theatre-going>

and distributing theatrical content, producers must improve their engagement with their online audience using social media strategies, which could generate valuable audience data to their business. Successful online models have been presented online, such as “The Untimely Death of Mr. Strange” at Camden’s People’s Theatre, where the show had a website for its main character. A blog was inserted for the creative team and a secret reading club, where users could express their opinion on new scripts. The Virginité Project at London’s Tristan Bates Theatre, engaged with audience by involving them into sharing their virginité stories online from the “Virginité Chair”. The Twitter campaign engaged three times as many as the performances and 1/3 active user’s viewed the live stream show online. Streaming shows along with digital marketing requires a big budget, but now there are affordable solutions, if theatres can share their equipment and technical partners. Ipercast has offered free training and low priced support to Camden theatres.<sup>19</sup>

Marcus Romer, the creative director of the Pilot Theatre Company, with his project [theatrelivestreaming.tv](http://theatrelivestreaming.tv)<sup>20</sup> has acknowledged the benefits of live streaming and provides services, which can capture performance, rehearsals, workshops, promotional filming, conference and events. Pilot has been converting from live to digital landscape in order to build a new audience for arts organizations. It broadcasts on the clients player and also streaming’s are available through an integration into its website. Live streams can be archived, built into any chosen channel and subtitles can be provided if required. “Platform shift +” is another project of Pilot, that has been funded under the European Culture Funding Stream Creative Europe and includes 11 partners from 9 countries, ten theatres and a university. The platform aims to produce theatre for the new generation in the digital age. The concept derived from the need for theatre to be sustainable with digital technology and inspire young people, who live between real and virtual worlds, and create theatre as a distinctive live medium. The project has been funded with 2,000,000 euros by the EU Cultural Commission and will run from 2014-2018.

As noted by MTM London (2014) (a research and strategy company), 40,000 people track the Royal Opera House, 58,000 the British Museum through Facebook and FACT (Foundation of Arts and Culture) has 7,000 Twitter followers in Liverpool. The research

---

<sup>19</sup> <https://blogs.commons.georgetown.edu/cctp-748-fall2014/2014/04/22/notes-for-class-discussion-netflix-and-movie-streaming>

<sup>20</sup><http://pilot-theatre.com/livestreaming>



has been held across England and confirms the online engagement through digital media with arts, which augments instead of replacing the live experience. From the sample taken in 12 months 92% was at least interested in one of the list of arts and cultural areas presented to them: Music, Museum, Theatre, Libraries, Dance, Literature, Visual Arts, and Archives. Theatre reached 45%, Performance arts 36%, Play/Drama 19%, Other Theatre Performance 19% and Street arts or Circus 12%. 5% participated in performance arts, 4% in Play/Musical/Opera, 2% Street arts and 5% Combined arts (carnival/festival). Internet is the new media where users spend most of their leisure time, even more than TV.

Respondents from the sample acknowledged the importance of digital technology in spreading their shares and access to arts and culture. 35% of those interested in the theatre genre viewed a 5min clip of a performance, 32% viewed an entire performance, 30% viewed a live performance as it happened, 38% took a virtual tour around backstage/exhibits, 34% learned about performance on how to do something (per clip/20min lesson), 14% used phone apps to be provided with location based info and 9% subscribed to a regular service to download a performance. Virtual tours received the highest percentages and second those who viewed a clip of a performance, then those who learnt something about a performance or on how to do something. Respondents defined the process of reviewing and filtering information about arts and culture, as “getting the feel of it” and that with the right information they might attend live or in future time a performance if they had not got time, no available tickets and some would even revisit a performance. Other factors that play an important role in filtering and planning are synopses with summaries of the performance, audience reviews and ratings, which create credibility, attract interest and support decision-making. Virtual tours are also a key so users get the feel of a live experience and evidence of value for money. Furthermore the pricing information can play a vital role for people who seek offer and discounts in order for them to decide upon attending any performance.

The research that was held in the UK examines the emerging live-to-digital arts market and outlines live arts performance captured exploiting digital technologies and distributed through cinema, online and broadcast. It values how small and medium scale organizations are using digital technology and how to overcome hurdles, such as managing production, upfront costs, and understanding consumer demand. Key findings

showed that the distribution models could not guarantee return of investment. Developing a package with a windowing strategy can create long-term revenue and audience development. Smaller companies had a disadvantage in rights clearance and should take advantage of partnerships, brand development and loyalty. Consumers of Live to Digital were early adopters of digital technology and were aware of its existence but uninformed of its dimensions and features.

According to the ACE (2016) (Arts Council England) survey: “Understanding the Impact of Event Cinema<sup>21</sup>: An Evidence Review 2016”, based in England, concentrates on those suppliers across the distribution chain<sup>22</sup>, existing theatre-going audiences and digital platforms that distribute live theatre (including online, Event Cinema and digital screenings in alternative venues). The research corroborates that theatregoers are neither more nor less likely to attend live theatre if they experience it digitally.

Live-to-Digital (2016) created a burst of new chances for artists, producers, directors

---

<sup>21</sup> **Event Cinema:** Also referred to, as Alternative Content is the use of cinema theatres that display live and recorded entertainment, excluding traditional films. It includes theatre, opera, musicals, ballet, music, exhibitions, one-off television specials, sports, current affairs, comedy and religious services. In the UK Event Cinema productions are currently broadcasted via satellite, but in the near future soon satellite technology will be replaced by Internet Protocol (IP) delivery.

<sup>22</sup> **Distribution chain:**

Production: The playwright, content owner, director, cast and crew

Distribution: The theatre, the cinema, the online performance

Exhibition: Online platforms, cinemas, mixed-art venues, small-scale venues (incl. pubs and village halls)

Consumption: audiences

Distributors: The party responsible for marketing or hosting a production

Content producers: Organizations that develop and create work

Exhibitors: In the ‘Live-to-Digital’ space are platforms or spaces that show the theatre production. This can include online platforms (such as Canvas/YouTube or Digital Theatre); venues (such as mainstream cinemas like the Odeon and the Vue); mixed-arts venues or small-scale venues (like pubs or village halls).

and companies to engage with their audiences and re-evaluate the possibilities of traditional theatrical forms. It also pointed out the use of emerging technologies, financial and artistic risk. Suppliers that were interviewed said that the barriers remain too steep for a high percentage of theatre companies, while others believed that mid scale theatre organizations could present and produce custom-made content for distribution on established online platforms. Training in the digital technology can promote and help organizations defeat the lack of capacity, technical expertise and assist in understanding who the partners and audience is and where to reach them.

In fact, those who stream Live-to-Digital work are slightly more likely to attend live cultural performances than the average theatregoer:

- 37% of those who stream attended a dozen times or more in the past year, comparing to the 24% of respondents overall.
- The study has also disclosed that streamers are younger: 71% from ages 16 to 24, 55% from 25-44 and below 30% from 45+.
- 94% of respondents with annual household income of £100,000 and over have attended a live performance and 32% have streamed. 80% of those with household income less than £20,000 have attended a performance, comparing to those who have streamed 49%. The correlation of income does not indicate that people do not attend live performances.
- The audience interviewed, suppliers and creators have shown that they see the Live to Digital as: 66% to 77% a distinct experience and 72% to 75% as the “new way of seeing theatre” rather a substitute for live.
- Motivations for streaming: 48% of respondents like to have the ability to access any time they want, when the live performance is not available, 38% avoid the costs getting to the location, 33% get cheaper tickets, 31% save time, 31% do not attend cause of sold out tickets.
- Lack of understanding puts streamers off: content availability 43%, content accessibility 43% and 15% poor connectivity.
- Audiences said that they would like supplementary content (part of an Event Cinema screening): interviews with actors and directors (62% to 59%), documentary material shown at the time of online performance (25%) or made available in advance (36%), digital programs sent in advance of the performance (51%).

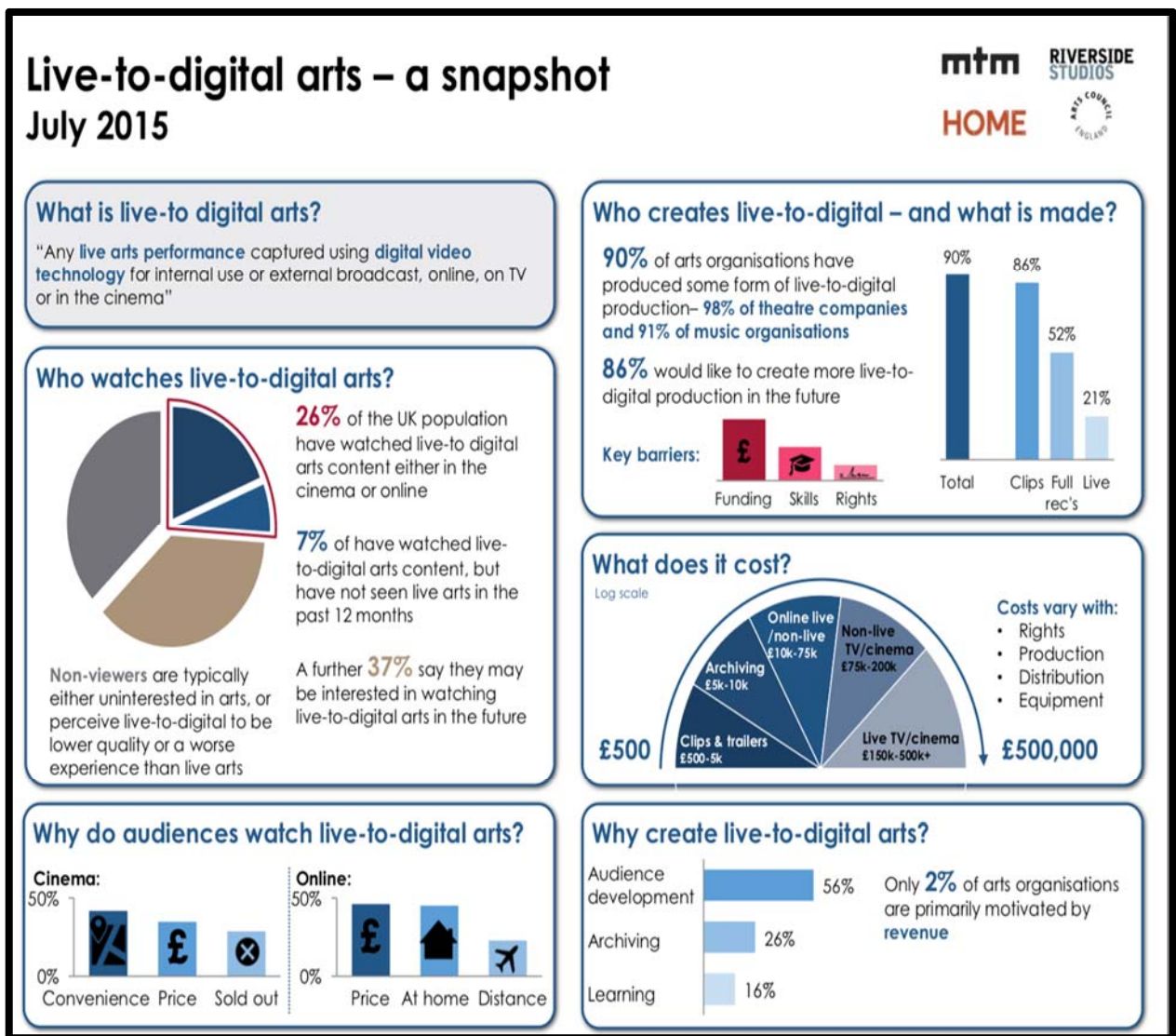
Complicite a touring company, partnered with The Space, the Barbican, Edinburgh International Festival, Onassis Cultural Centre, Schaubuhne Berlin, Theatre Vidy-Lausanne and Warwick Arts Centre in order to live stream the production “The Encounter” for free and as an encore with a one week window following the live production. This was the world’s first use of 3D with ‘binaural’<sup>23</sup> sound in theatre. The Virtual and Augmented<sup>24</sup> reality market are expected to reach up to \$30 billion and \$120 billion, in worldwide profits by 2020.

Richardson (2015) in his journal: ‘Digital habitus’ and the youth live theatre audience, presents how youth audiences experience live theatre, since newer generations are considered as net citizens. The study concentrates on students from 16 to 18 and how they understand a 4-play theatre series. The key findings were that students expressed a fear that they would get bored in a theatre because of their cyber-induced, short attention spans. They also found that youngsters see live theatre as a tangible connection, which can increase their emotions and create stress relief. Theatre administrators and educators can exploit these results in order to develop further educational initiatives that use live theatre. Young audience was also more interested in avant-garde live theatre.

---

<sup>23</sup>Binaural recording is a method of recording sound that uses two microphones to create a 3D stereo sound for the listener to feel like being in the room with performers or instruments

<sup>24</sup>Augmented cinema adds a further dimension to the film text through: the site situating the screening in a location relevant to the film itself, e.g. Harry Potter at Kirkstall Abbey, through sensory enhancement and elements of non-interactive performance.



**Image 1.** Exploring the market for live to digital arts- full report (MTM, Exploring the market for live-to digital arts)

According to a new survey by Deloitte, streaming is dominating the entertainment industry. In a decade U.S. households subscribing to video streaming services such as Netflix, Amazon Prime and Hulu services has surged up to 450%, from 2009 just 10% and reached 55% in 2017. 54% of the subscribers said that they had streamed content they could not find elsewhere and had the ability to watch movies and shows anytime they like, as well as commercial free content. The study showed that 16% to 22% of millennial<sup>25</sup> consumers and also the Generation X<sup>26</sup> and Z<sup>27</sup> haven't subscribed to a paid

<sup>25</sup>Generation Y, Echo Boomers or Millennials Born: 1977-1994, Coming of Age: 1998-2006. Gen Y kids are known as sophisticated, technology wise, immune to most

TV service and have no intention of doing so. Generation X those who were born in 1966 to 1976 are adapting to the consumer patterns of younger generations and consume more content on their mobiles.<sup>28</sup>

### 3.2 Review of Existing Platforms

Digital Theatre is an online platform ([www.digitaltheatre.com](http://www.digitaltheatre.com)) that specializes in the creation and distribution of high definition theatrical productions. It works with multiple theatre companies in England and uses multiple angles with high definition cameras to capture the plays onscreen and deliver globally the best experience to the audience. 80+ productions from world-leading companies are available for individual subscriptions, unlimited access per month for £9.99 and single rental productions for £7.99. Their home page features their most popular productions and downwards all productions are displayed in categories: recently added, musical theatre, theatre, film, opera, dance, music. Clicking on a category and a desirable play, users can watch a trailer of the show, opt for single rent or subscribe annually. They can also read a brief summary, photos of the show, view similar productions, recommendations, and comments of the productions from two media sources 'What's on stage' and 'Bracknell News'. The title, name and duration of the play are displayed, also age guidance, starring performers and full cast.

For educational institutions Digital theatre offers Digital Theatre Plus ([www.digitaltheatreplus.com/](http://www.digitaltheatreplus.com/)). Users can join 3million students at 1200+ institutions worldwide, who have access to 900+ curriculums, linked resources, backstage insights,

---

traditional marketing and sales pitches, because they grew up with it all, they've seen it all and been exposed to it all since early childhood. Gen Y members are much more racially and ethnically diverse and they are much more segmented as an audience aided by Cable TV channels, satellite radio, the Internet.

<sup>26</sup>**Generation X:** Born: 1966-1976, Coming of Age: 1988-1994. Sometimes referred to as the "lost" generation that was exposed to lots of daycare and divorce. Also known as the generation with the lowest voting participation rate of any generation. GenXers are the best-educated generation with 29% obtaining a bachelor's degree or higher.

<sup>27</sup>**Generation Z:** Born: 1995-2012, Coming of Age: 2013-2020. This highly diverse environment will make the grade schools of the next generation the most diverse ever. Gen Z kids grow up with a sophisticated media and computer environment and will be more Internet savvy.

<sup>28</sup> <http://www.latimes.com/business/hollywood/la-fi-ct-digital-media-report-deloitte-20180320-story.html>



practitioner's interviews, written analyses and 400+ captured productions. The Theatre Art database introduces streaming videos of British productions, interviews of casts and crew, documentaries about practice, production and workshops that can be viewed in classrooms and lecture halls. The productions contain Shakespeare plays and contemporary, including teaching and studying guides, theory and criticism. Students engage in the content that could have never had a chance to see and teachers realized that increased engagement improved exam performance. Teachers also trust the quality of the content and save time on lesson planning, because it's all in one place. Students have the opportunity to explore outside the classroom and enrich their knowledge's, hence making them more employable.

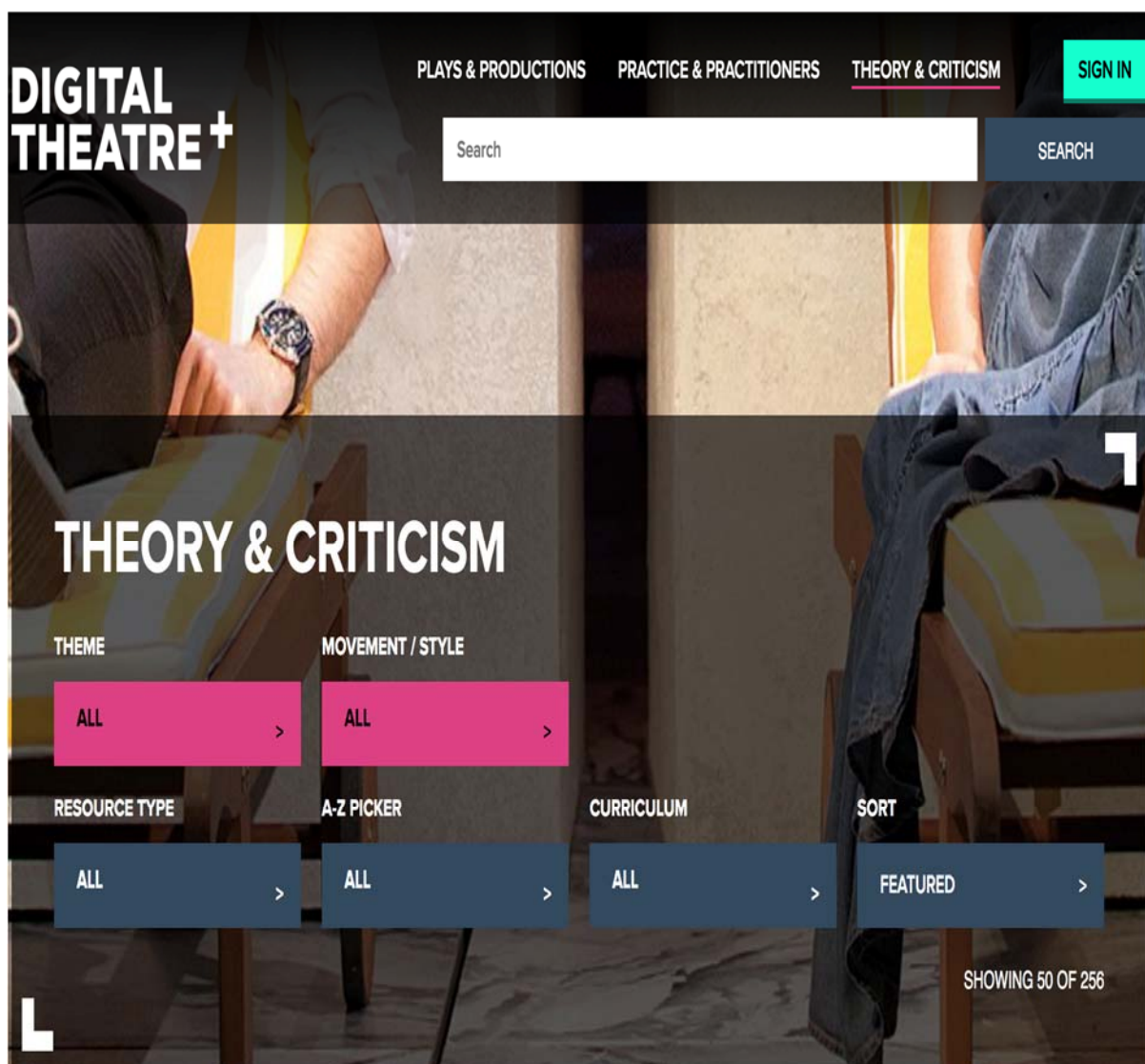


Image 2. Digital Theatre Plus

The menu consists following categories:

Plays & Productions: Performance Form, Genre, Resource Type, A-Z Picker, and Curriculum, Sort

Practice & Practitioners: Role, Form of Practice, Resource Type, A-Z Picker, Curriculum, Sort

Theory & Criticism: Theme, Movement/Style, Resource Type, A-Z Picker, and Curriculum, Sort

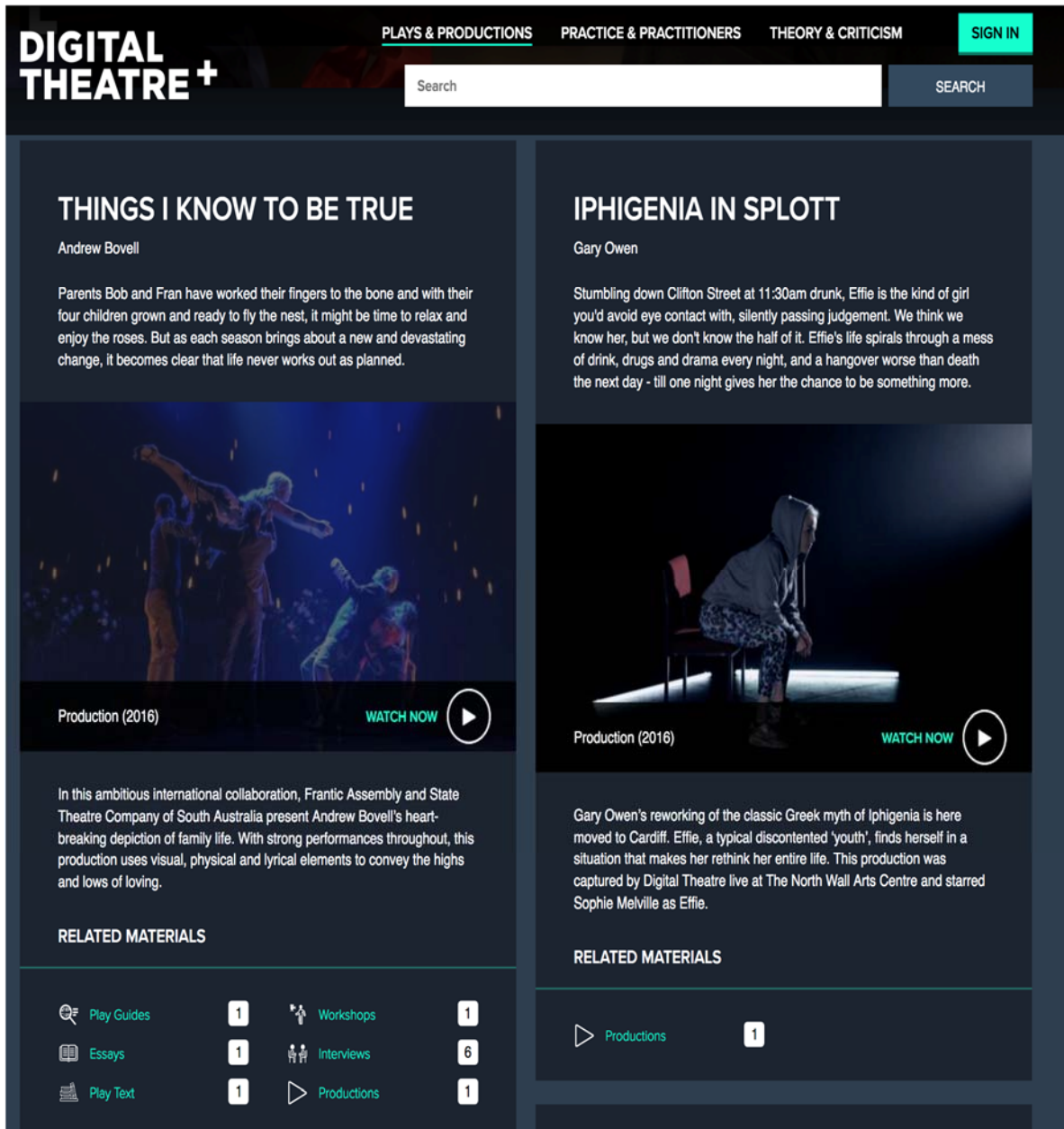


Image 3. Digital Theatre Plus / Plays & Productions

Stratford Festival platform [www.stratfordfestival.ca/](http://www.stratfordfestival.ca/) belongs to the largest theatre company in North America with four venues, which produces and presents classic,



contemporary drama and musical theatre shows, with an emphasis especially in Shakespeare plays. Through their platform users can book and buy tickets, check the calendar for available dates and plays. They can also apply for job vacancies, participate in auditions, volunteer, join the forum that showcases guest speakers, dynamic dialogues and engaging debates, watch videos behind the scenes and on demand productions. The company rents their space and costumes for events and occasions and they also provide customers with a variety of packages: travel, transportation, educational, seminars, tours inside their studios and warehouse with costumes, discounts and deals on tickets, gift certificates, and collections of HD DVD's. Customers can read about the play, view photos and videos, see reviews from media, and check out the cast and creative team.

Regarding live streaming events the platform affords their audience with selected Forum events that are streamed live on their Facebook page. Eight theatre productions are available on demand for the current season (spring-summer 2018), through streaming providers Apple iTunes, Amazon and Google play. The play is not available for the Greek iTunes store, but for the Canadian store it's available to purchase for \$14,99 and rent for \$6.99, in HD (high definition), CC (closed captioning) and SDH (subtitles for the deaf and hard hearing), SD (secure digital). Customer reviews, ratings and related products are presented to users. Amazon rentals include 30 days to start watching the video and 7 days to finish once started. Viewers can also see IMDB customer reviews, ratings on the play and share their comments. On Google play you have to add a payment method to view the play.

BroadwayHD ([www.broadwayhd.com/](http://www.broadwayhd.com/)) is a user-friendly platform for pure live streaming shows of Broadway on any device. The genre of shows include Most Popular, Musicals, Plays, Drama, Comedy, Concerts, Romance, Shakespeare, Foreign Theatre, Education, and Behind the scenes. Subscribing to BroadwayHD customers can access the magical theatre productions with Internet streaming, view video trailers, cast and crew and write reviews. In the menu section viewers can read the latest news, articles and posts of related theatre content. They offer monthly packages for subscriptions, which allow access to all productions on demand for \$8.99, and customers can also send a play as a gift. The annual package is a get and gift offer for \$99.99 with unlimited access to all shows. The above subscriptions include all BroadwayHD live streams, but cannot be

used to access Amazon channels and not all shows are available in all regions. Individual rentals are limited, cost \$14.99 and cannot be gifted.

Thanks to digital technology Shakespeare plays can reach a new audience with a video-on-demand platform Globe Player TV (<https://globeplayer.tv/>). The menu offers more than 50 Shakespeare productions: comedies, tragedies, history plays for rental £5.99, to own £11.99, send as a gift £11.99, new writings, documentaries accessible to rent £5.99, own £9.99 and gift £9.99. Globe-to-Globe festival is a carnival of plays, from different nations, who perform in their own language Shakespeare's stories in the Globe theatre. Rentals cost £4 and buy £8. Introduction and synopsis, cast and creative, comments and similar related content is provided to users. Music productions performed in the globe theatre can also be purchased for £7.99. It's the only platform that provides silent Shakespeare films, accompanied with music.<sup>29</sup>

Cennarium ([www.cennarium.com/](http://www.cennarium.com/)) found in 2014 is an online platform that works on a subscription base and brings high quality, streamed global performing arts onto a mobile device, tablet and computer. The company is a start up organization and takes pride in being the first global producer, distributor and exhibitor of audiovisual content. Over 400 performances are available in their library ranging from theatre, documentary, drama, ballet, stand-up comedy, opera, concerts, dance, magicians and circuses. Cennarium's platform is user friendly and equipped with excellent picture and audio quality. Members can get a free trial for ten days with unlimited access to performances, exclusive news, sneak peeks, interviews, and behind the scene videos. Viewers can read their online magazine edition with relative content for free, as well as posts on their blog and share their comments. Gift cards are available: for a year \$95.64, 6 months \$59.82 and per month for \$9.97. Furthermore Cennarium offers companies a 20%-to-40% commission upon every view of their performances watched through their platform. Corporate and librarian plans are offered. A detailed form can be submitted online for theatre producers and filmmakers in order to distribute their content on Cennarium's streaming platform. The company is rooted in New York and looking to expand in English speaking markets.

Kanopy ([www.kanopy.com/](http://www.kanopy.com/)) is an on-demand streaming video service where users can access public libraries, educational institutions and watch films without a subscription,

---

<sup>29</sup><https://www.theguardian.com/culture/2014/nov/04/shakespeare-on-demand>

only with a library card. The menu consists movies, documentaries, arts, business, media and communications, health, global studies and languages, social sciences, instructional films and lessons, education and sciences. Each category has a large variety of subcategories. Videos can be viewed on a large range of devices and platforms like Roku<sup>30</sup>, Apple iOS, Android, Microsoft Windows, Google Play. The platform offers streaming for free with a library card for students, members and professors. Users can view on their dashboard the watch list, viewing history, playlists and write their comments.

The table below lists all the features of established streaming theatre platforms. With a quick view someone can notice which platforms have drawbacks and which outweigh.

<b>Platform Comparison</b>	<b>Digital Theatre</b> www.digitaltheatre.com	<b>Stratford Festival</b> www.stratfordfestival.ca	<b>Broadway HD</b> www.broadwayhd.com	<b>Globe Player TV</b> https://globeplayer.tv	<b>Cennarium</b> www.cennarium.com	<b>Kanopy</b> www.kanopy.com
<b>Costs Per Rental</b>	£7.99	\$6.99	\$14.99	£4.99	×	×
<b>Costs Per Month Subscription</b>	£9.99	×	\$8.99	×	\$9.97	×
<b>Costs Per Annual Subscription</b>	×	×	\$99.99	×	\$95.64	×
<b>Purchase</b>	×	\$14.99	×	£12.99	×	×
<b>Free Trial</b>	×	×	✓	×	✓	Stream for free with library card
<b>Theatre Productions</b>	Multiple Theater Companies in England	North America Theatre company with 4 venues	Broadway Shows in N.Y.	Globe Theatre Company	Global producer, distributor and exhibitor of audiovisual content	Partnering with public libraries and universities

---

<sup>30</sup> Roku is a streaming company for television and provides access to 50,000 + movies and TV episodes from free and paid channels.

<b>Number of Productions</b>	80+	8 (spring-summer 2018)	168+	50+ Shakespeare productions	400+ performances	30.000 films
<b>Genre of Productions</b>	Musical theatre Theatre Film Opera Dance Music	Classic Contemporary Drama Musical Theatre shows with emphasis on Shakespeare plays	Musicals Plays Drama Comedy Concerts Romance Shakespeare Foreign Theatre	Comedies Tragedies History plays	Theatre Documentary Drama Ballet Stand-up comedy Opera Concerts Dance Magicians Circuses	Documentaries Arts Business, Media and Communications Health Global Studies and Languages Social sciences Instructional Films and Lessons Education Sciences
<b>Filters</b>	Genre	Behind the scenes Forum Livestream On Demand	Genre	Genre	Alphabetical (A-Z) (Z-A) Newest to Oldest Oldest to Newest Titles Actors Directors	Genre
<b>User -Friendly</b>	✓	✓	✓	✓	✓	✓
<b>Educational</b>	✓ (Digital Theatre Plus)	✓ *	✓	✗	✓	✓
<b>Reviews</b>	✓ <sup>2</sup>	✓	✓	✓	✓	✓

<b>Ratings</b>	×	✓	✓	×	×	×
<b>Related Content/Recommendations</b>	✓	✓	✓	✓	✓	✓
<b>Trailer of the show</b>	✓	✓	✓	✓	✓	×
<b>Summary</b>	✓	✓	✓	✓	✓	✓
<b>Backstage Videos</b>	×	✓	✓	×	✓	×
<b>News</b>	×	✓	✓	✓	✓	×
<b>Gift</b>	×	×	✓	✓	✓	×
<b>Radio Show</b>	×	×	×	×	×	×
<b>Silent Films</b>	×	×	×	✓	×	×
<b>Parental Rating</b>	×	×	✓	×	×	×
<b>Interviews</b>	×	×	×	×	✓	×
<b>Box Office Info</b>	×	×	×	×	×	×
<b>In theatres yes/no</b>	×	×	×	×	×	×
<b>Plays for Kids</b>	×	×	✓	×	✓	×
<b>Special Features</b>	×	×	×	×	×	×
<b>Crew &amp; Industry Executives Program</b>	×	×	×	×	✓	×
<b>Subtitles/Translation</b>	×	×	×	×	×	×

**Table 1.** Platform Comparison

\* [www.stratfordfestival.ca](http://www.stratfordfestival.ca) offers audience educational programs but not online

# Chapter 4

## Platform Design

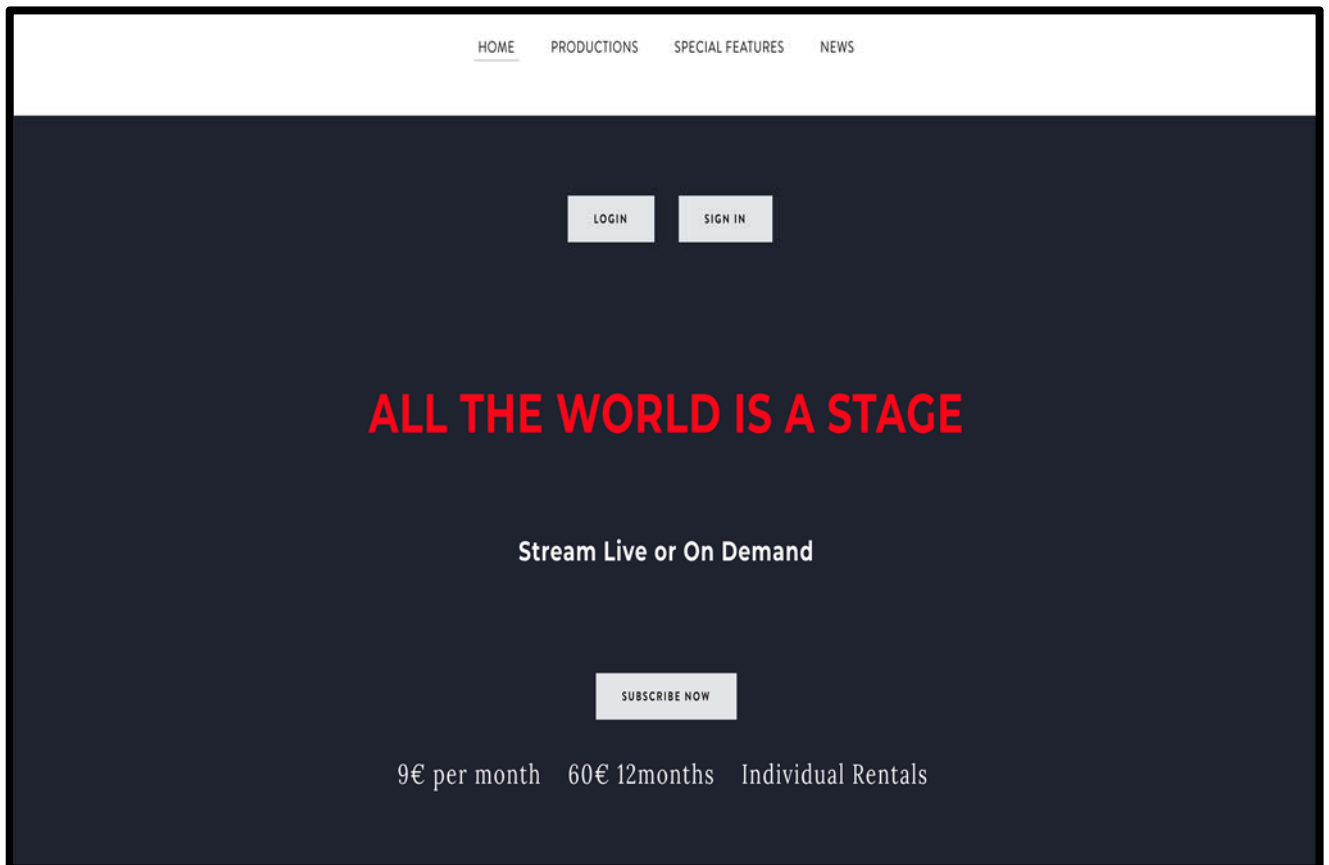
### 4.1 Platform Features

Having researched and analyzed the features of the existing platforms aforementioned in chapter 3.2 Online Platform Contributions, the objective of this master thesis is to develop a conceptual platform template that will provide audiences a combination of several features for streaming online theatre productions. The website's link is <https://theaterstage.weebly.com>. The features of the site are presented below.

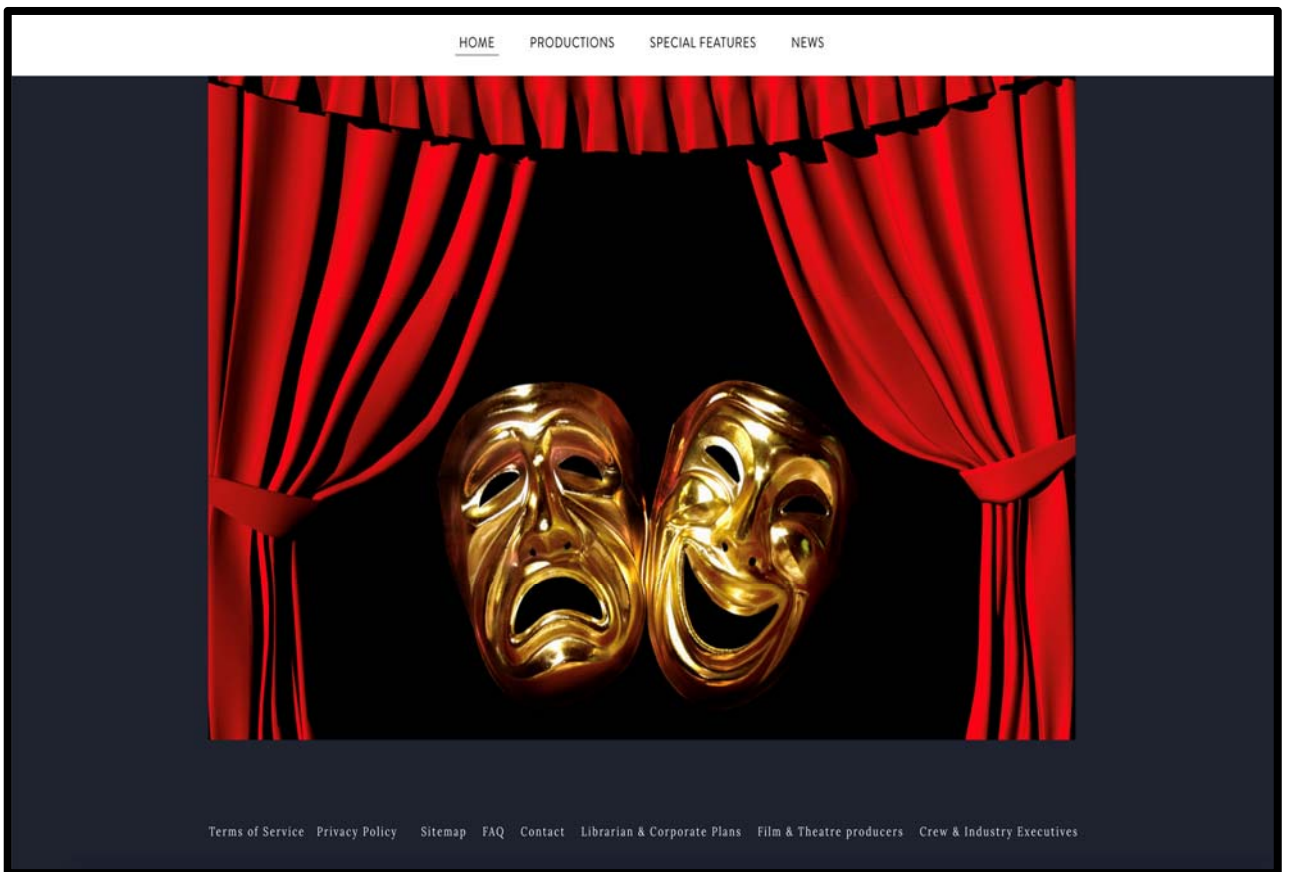
The screenshot of the Home page displays the menu, login and sign up buttons, subscription plans, a slideshow with various plays, connect with social media icons and the menu in the footer.

- The Menu is displayed on the Home page: Home, Productions, Special Features, News, where users can click on to see available productions, the special features and news related to the industry, or go back to Home page (image 4).
- Users can login and sign up. By logging in they can see: My movies, Recently Viewed, Watch list and Recommendations for them. In order to sign in they will have to fill a form with all the appropriate info (image 4).
- Clicking on the subscribe now button users can choose their desired subscription plan (image 4). If users bring new subscribers to the platform they will be able to extend their subscription or get discounts. Additionally they can gift a play.
- Users can connect with Social Media and follow (image 5).
- Librarian & Corporate Plans is a form for corporate or educational institutions to fill in and send if they wish to have license (image 6).
- Additionally filmmakers and theatre producers can fill in a form and send it by clicking on the button, if they are interested in distributing their content (image 5).

- Crew & Industry Executives in the bottom menu serves for specific users. This section gives them the ability to post their resume and photos for an annual fee (image 5).



**Image 4.** Menu: Home page



**Image5.** Menu: Home page

The image shows a website form titled "Librarian & Corporate Plans". The form is set against a white background with a dark header area. The header text reads: "Librarian & Corporate Plans", "Would you like to have a license for corporate or educational institution?", and "Please fill in the form". Below this, the form title is "Educational & Corporate Membership Request Form". The form contains several input fields: "Name\*", "Email\*", "Phone\*", "Company", "Would you like to give membership access to how many people?\*", "What is your budget for this request?\*", and "When you would like your educational/corporate license to start?\*" with a date format "dd/mm/yyyy" below it. At the bottom center of the form is a purple "SEND" button.

**Image 6.** Librarian & Corporate Plans



## Productions menu

- In the menu Productions users will have the ability to select productions worldwide. All productions will be available upon one subscription monthly, annually or individual rentals, so users do not have to subscribe on multiple platforms and be restricted to limited productions (image 7).
- Users have the ability to filter their search, by continent, genre, year, actors, subtitles, translated, and most popular by genre and by stars (image 7).
- Info about the productions will be provided once clicking on the desired show: Click to watch show, View rating by stars, Read storyline, Click on read more, Share with social media, Send as gift, Videos (watch backstage videos or related videos of the play), Photos (view photos related to the play), Playing live in theatres (click on to watch venues and hours), Star ratings (rate from 1-5 stars and insert group age), Viewers Reviews (share your review), Cast & Creative Team (information about cast & creative team), Trivia (bits of information about the play), Recommendations (recommended plays according to what viewers are interested in), Duration, Box Office Info, Views, In theatres (yes/no, if yes the theatre will be mentioned) and finally Parental Rating (image 8).
- Signing in will allow users to contribute information to the site, comment, like productions and write their reviews.
- The platform will provide subtitles of the play or translated into the 6 official languages, English, Spanish, French, Russian, Chinese, Arabic.



Image 7. Menu: Productions- Filter By Continent

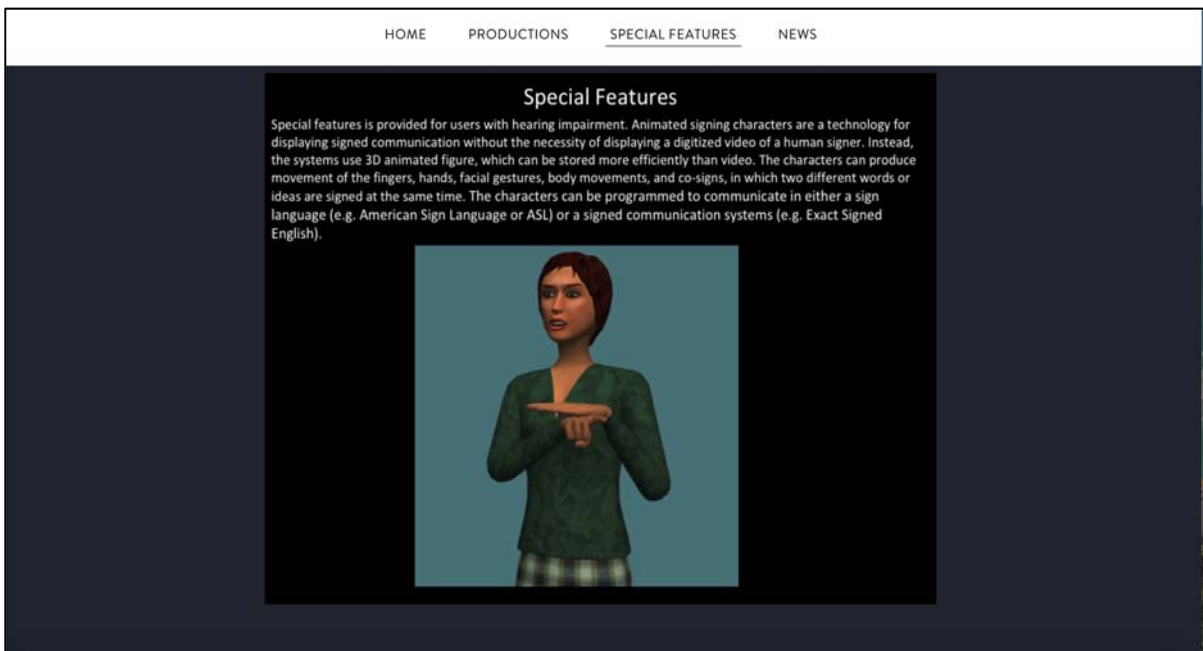


Image 8. Selected Theatre Play

## Special Features

The platform will afford features for people with vision and hearing impairment, so they're not excluded from participating and attract a larger audience (image 9). Features on the platform can translate information in multiple ways.

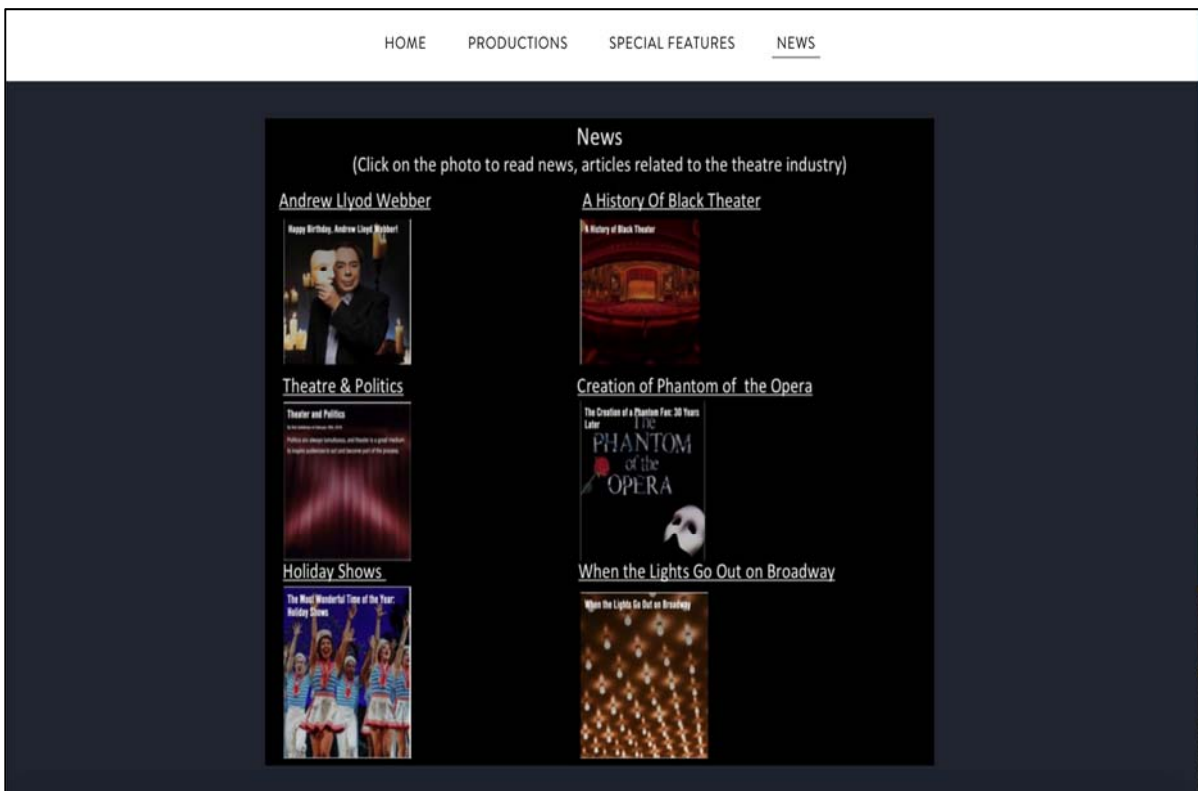
- For the hearing impaired a signing avatar with animated hands will provide sign language interpretation and welcome the audience with a hello sign. Users can select the available productions. Animated signing characters are a technology for displaying signed communication without the necessity of displaying a digitized video of a human signer. Instead, the systems use 3D animated figure, which can be stored more efficiently than video. The characters can produce movement of the fingers, hands, facial gestures, body movements, and co-signs, in which two different words or ideas are signed at the same time. The characters can be programmed to communicate in either a sign language (e.g. ASL American Sign Language) or a signed communication system (e.g. Exact Signed English).
- For the visual impaired users can select available Radio shows through a recorded voice guide by answering to the guide's questions.
- Audio Description will be provided which is the track of narration and describes important visual elements of a show or performance.
- Closed caption will present audio content as text on screen and SDH (subtitles for the deaf and hard hearing).



**Image 9.** Menu: Special Features

News menu (image 10)

- Users can click on News menu to read a variety of articles related to the theatre industry and productions.
- The page News shows several links with photos that users can click on in order to read the full article.



**Image 10.** Menu: News

The following table presents all the features of established streaming theatre platforms plus the last column in blue with the conceptual template design of the website: All the World is a Stage. The main attributes of the website exceed comparing to the others, for the reason that with one subscription you can stream worldwide productions from multiple continents, with subtitles or translated in the 6 official languages. Performances for kids will be available with parental rating. Signing avatars and a Radio show will be provided for the visual and hearing impaired.

Platform Comparison	Digital Theatre www.digitaltheatre.com	Stratford Festival www.stratfordfestival.ca	Broadway HD www.broadwayhd.com	Globe Player TV https://globeplayer.tv	Cennarium www.cennarium.com	Kanopy www.kanopy.com	All the World is a Stage https://theaterstage.weebly.com/
Costs Per Rental	£7.99	\$6.99	\$14.99	£4.99	×	×	✓
Costs Per Month Subscription	£9.99	×	\$8.99	×	\$9.97	×	✓
Costs Per Annual Subscription	×	×	\$99.99	×	\$95.64	×	✓
Purchase	×	\$14.99	×	£12.99	×	×	×
Free Trial	×	×	✓	×	✓	Stream for free with library card	✓
Theatre Productions	Multiple Theater Companies in England	North America Theatre company with 4 venues	Broadway Shows in N.Y.	Globe Theatre Company	Global producer, distributor and exhibitor of audiovisual content	Partnering with public libraries and universities	Worldwide: North America, South America, European, Asian, African, Eurasian
Number of Productions	80+	8 (spring-summer 2018)	168+	50+ Shakespeare productions	400+ performances	30.000 films	Currently N/A

<b>Genre of Productions</b>	Musical theatre Theatre Film Opera Dance Music	Classic Contemporary Drama Musical Theatre shows with emphasis on Shakespeare plays	Musicals Plays Drama Comedy Concerts Romance Shakespeare Foreign Theatre	Comedies Tragedies History plays	Theatre Documentary Drama Ballet Stand-up comedy Opera Concerts Dance Magicians Circuses	Documentaries Arts Business, Media and Communications Health Global Studies and Languages Social sciences Instructional Films and Lessons Education Sciences	Drama Comedy Concerts Documentary Ballet Stand-up comedy Opera Dance Tragedy History Kids
<b>Filters</b>	Genre	Behind the scenes Forum Livestream On Demand	Genre	Genre	Alphabetical (A-Z) (Z-A) Newest to Oldest Oldest to Newest Titles Actors Directors	Genre	Continent Genre Year Actor Subtitles /Translated Most popular by Genre and by Stars
<b>User - Friendly</b>	✓	✓	✓	✓	✓	✓	✓
<b>Educational</b>	✓ (Digital Theatre Plus)	✓ *	✓	✗	✓	✓	✓
<b>Reviews</b>	✓	✓	✓	✓	✓	✓	✓
<b>Ratings</b>	✗	✓	✓	✗	✗	✗	✓

Related Content/ Recommendations	✓	✓	✓	✓	✓	✓	✓
Trailer of the show	✓	✓	✓	✓	✓	✗	✓
Summary	✓	✓	✓	✓	✓	✓	✓
Backstage Videos	✗	✓	✓	✗	✓	✗	✓
News	✗	✓	✓	✓	✓	✗	✓
Gift	✗	✗	✓	✓	✓	✗	✓
Radio Show	✗	✗	✗	✗	✗	✗	✓
Silent Films	✗	✗	✗	✓	✗	✗	✓
Parental Rating	✗	✗	✓	✗	✗	✗	✓
Interviews	✗	✗	✗	✗	✓	✗	✓
Box Office Info	✗	✗	✗	✗	✗	✗	✓
In theatres yes/no	✗	✗	✗	✗	✗	✗	✓
Plays for Kids	✗	✗	✓	✗	✓	✗	✓
Special Features	✗	✗	✗	✗	✗	✗	Signing avatar
Crew & Industry Executives Program	✗	✗	✗	✗	✓	✗	✓
Subtitles/Translation	✗	✗	✗	✗	✗	✗	English, Spanish, French, Russian, Chinese, Arabic

**Table 2.** Platform Comparison + Website Template

\* [www.stratfordfestival.ca](http://www.stratfordfestival.ca) offers audience educational programs but not online

## 4.2 Technical Requirements

According to Google engineers, they have realized that the perceptible page load time should not be anything slower than the blink of an eye, 0,04 milliseconds. Website performance in user experience can affect dramatically an online business. "Google researchers suggest page load times of less than 100 milliseconds give visitors the illusion of instantaneous website response as the visual sensory memory processor in our brain works in bursts of 100 milliseconds.<sup>31</sup> Depending on the server, the website has to upload in 3 seconds immediately. Streaming sites work on buffering, this means that once you click download it starts downloading partly the content from the Internet on the RAM of your computer and you can start watching it, while the rest is still downloading until the whole content is downloaded.

Considering how many parallel users should the site be able to serve in the first year of operation, this can be translated into how many users will visit the site annually, how many of them will be viewing the site simultaneously, how many will be streaming simultaneously, therefore how much time will it need to download the videos while users are online. The more synchronous streamers and users the more bandwidth and buffering capabilities it will need. Having these in mind an estimation can be given on what server the website will need to rent and the possibilities of trafficking. If the website serves for the population of Greece, then it can be estimated for 10.000 users annually, 0,1 % of users depending on their age, if they have a computer, Internet and they are interested in theatre. The website should have a business plan for the following years of operation, to reach a European and global audience. If the estimation is 1,5 billion and everyone can see everything online and have access to content worldwide, meaning copyright for all productions and one out 10.000 uses the site then the visits will reach 1,5 million a year.

The types of devices the site should support are everything in the current market, tablets, smartphones, and desktops. The site should be user friendly, simple, easy to navigate and search for content, regardless of the device and designed to be responsive. Different payment methods should be offered so users have the ability to choose their

---

<sup>31</sup><https://kinsta.com/learn/page-speed/>



payment method. The logo should be identified easy for the brand/service and be clickable to be directed to the home page. Buttons with actions to call like “Download Now”, “Contact Us”, “Subscribe Now”, “Get a Free Subscription” should be included in the website to encourage users to click on. The language menu will be in English and the users will have options for several other languages. The language on the site should be simple and succinct, with headers, sub headers, bullets and other formatting techniques. The content should be shareable to reach a bigger audience. To detect content of interest, let’s say if a user clicks on 5 comedies, the site will display them suggested comedies. The range can be set to 3 clicks By Gender, 5 By Year, 2 By Actor and so on.

The plugins that the website will need are multiple and it depends on the features. Plugins like WP (Word Press) multilingual CMS (content management system) provides translation, All in one SEO: features XML maps, SEO for content, SEO for online business and many more, Bullet Proof security features: Malware Scanner, website security protection (firewalls), DB backup, login security, and many more, Social Media Shares plugin to add media icons to the website, Antispam plugins, Updraft Plus: backups and restores, Plugins for ratings and subscribing. Another plugin that can be activated is when we want to notice users about certain live streaming’s, if the show starts at 8 they will be informed at 7:30. Plugins for geolocation can be activated, lets say if a production is restricted for a region then it wont be available for certain countries. Additionally there can be plugins for pay per view and payment methods with Woo Commerce. Plugin Stream Video Player is one of the best video audio-players with playlist support and subtitles. Cookies are required for all websites and users have to be informed to comply with EU cookie law GDPR regulations. A website without analytical cookie notice can be penalized. Users have to have the ability to submit their preferences while accepting required, advertising, and functional cookies. Widgets can serve live chats and also calendars that appear on a different window on the website.

# Chapter 5

## User's

# Aspects of Digital Theater

# Platform

### 5.1 Questionnaire Survey

The following research was conducted during March to June 2018 in order to enrich the existing bibliography upon streaming live or on demand in Greece. First the research will be presented and after the results with diagrams. The questionnaire was delivered electronically with the online service of Google Forms. It was sent to theatrophilos audience in Greece and to students from graduate and postgraduate programs of the Open University of Cyprus who are attending studies in the faculty of Pure and Applied Science and the Faculty of Humanities and Social Sciences. Participants were called to answer the questionnaire with the following message:

Αγαπητέ Κύριε/α,

Ονομάζομαι Τόλη Λαμπρινή και διενεργώ την παρούσα έρευνα στο πλαίσιο της εκπόνησης της Μεταπτυχιακής μου Διατριβής στο Μεταπτυχιακό Πρόγραμμα Κοινωνικά Πληροφοριακά Συστήματα του Ανοικτού Πανεπιστημίου Κύπρου και έχει ως θέμα "Streaming Theatre Shows Live or on Demand".

Θα εκτιμούσα ιδιαίτερα τη συμβολή σας στην έρευνα αυτή, μέσω της συμπλήρωσης του ερωτηματολογίου που ακολουθεί. Η συμπλήρωση του ερωτηματολογίου απαιτεί περίπου 5-10 λεπτά από τον χρόνο σας. Παρακαλώ όπως συμπληρώσετε το ερωτηματολόγιο το αργότερο μέχρι τις 1 Ιουνίου 2018.

Η συμμετοχή σας στην παρούσα έρευνα είναι πολύτιμη, αλλά εθελοντική. Το ερωτηματολόγιο είναι ανώνυμο. Τα δεδομένα σας θα παραμείνουν εμπιστευτικά και θα χρησιμοποιηθούν αποκλειστικά για τους σκοπούς της παρούσας έρευνας. Η βοήθεια σας στην ολοκλήρωση της έρευνάς μου είναι αποφασιστικής σημασίας και συνίσταται στην συμπλήρωση του συγκεκριμένου ερωτηματολογίου. Για τη συμμετοχή σας στην έρευνα, παρακαλώ πλοηγηθείτε στον ακόλουθο σύνδεσμο: [https://docs.google.com/forms/d/19TZiqN3EnD8VL\\_AgRh5pPK1tUQqxbRYkQfBwyYeYku8/edit](https://docs.google.com/forms/d/19TZiqN3EnD8VL_AgRh5pPK1tUQqxbRYkQfBwyYeYku8/edit)

Σας ευχαριστώ εκ των προτέρων για τη συνεργασία σας.

Με εκτίμηση,  
Λαμπρινή Τόλη

Μεταπτυχιακή Φοιτήτρια Ανοικτού Πανεπιστημίου Κύπρου: Κοινωνικά Πληροφοριακά Συστήματα.

The questionnaire was divided in 3 sections, which outline quantitative and qualitative elements. The first section consists general info about users, regarding age, gender, studies attended, where participants live, employment status, how often participants stream to watch movies or listen to music and how they get informed about theatre productions, tickets, locations.

The second part includes questions about participant's behavior regarding live performances: how many times and with how many people they've attended a live performance, the barriers for not attending, how much have they paid on an average for a performance and the way they get informed about a theater show.

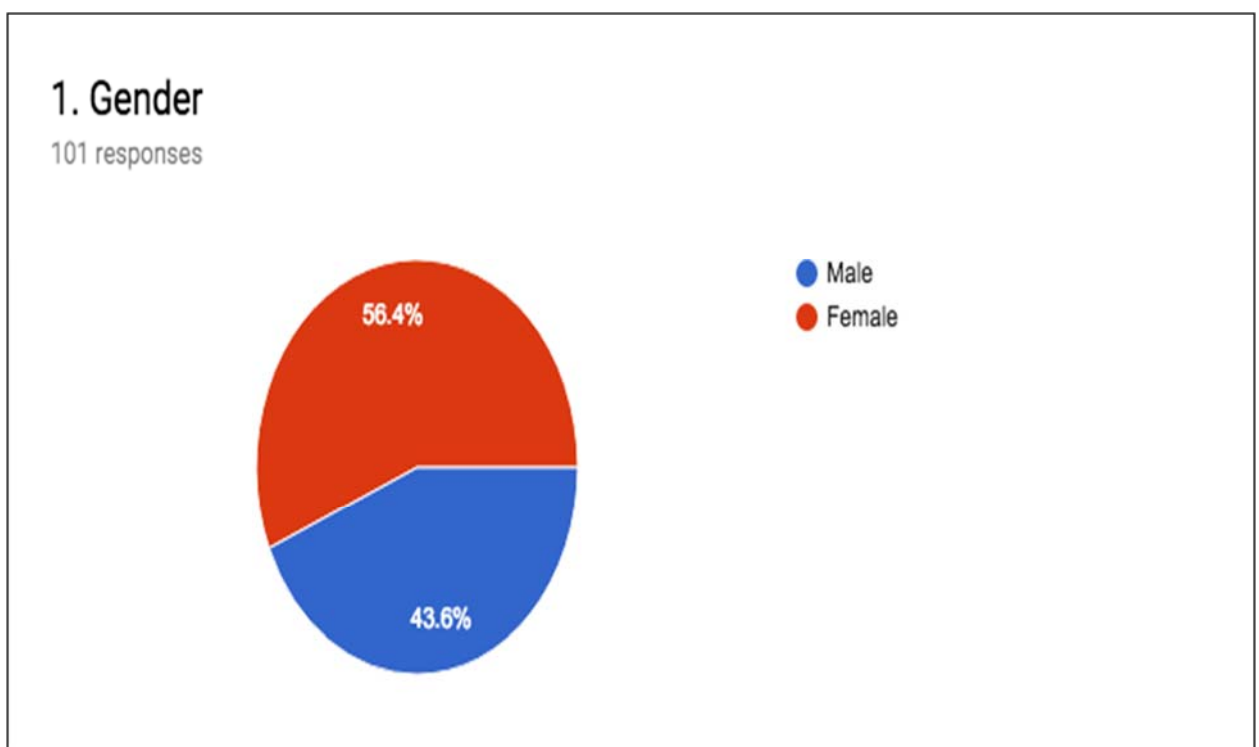
The third section consists questions about participant's behavior regarding streaming theatre shows: whether they prefer live or streamed theatre performances, which reasons make them want to view a show, how much would they be willing to pay for such a service and the barriers for not streaming online are significant for such a research. Questions related to the predesign of the website are included in order to gather information on the features of the platform and what users consider important as

content on the website. Finally questions about how much they would be willing to pay for such a service can give further feedback. The questionnaire can be found in Appendix A.1.

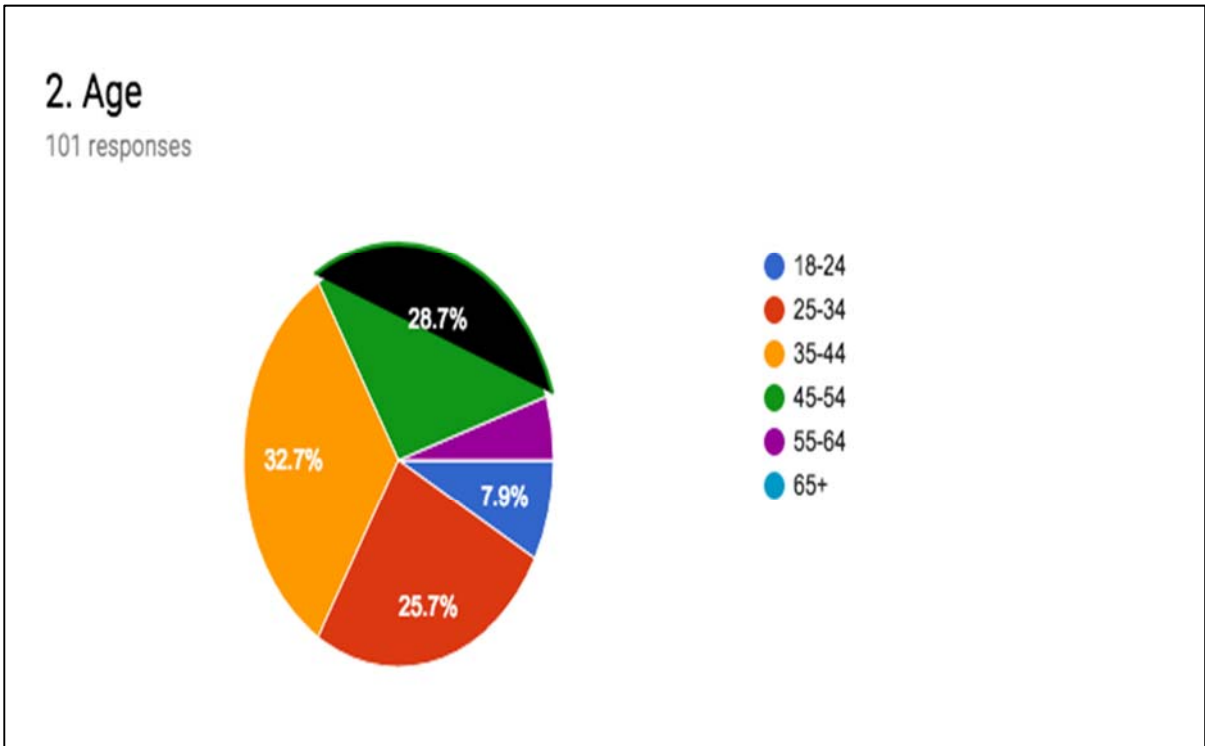
## 5.2 Research Results

In this chapter we are introducing the demographic profile of the sample taken. The number of participants for the questionnaire of Streaming Online or On Demand Theatre Productions is 101, of which 56,4% were female and 43,6% male. The percentage of participants age was from 35-44|32,7%, 45-54|28,7%, 25-34|25,7%, and the smallest were 18-24|7,9% and 55-64|5%.

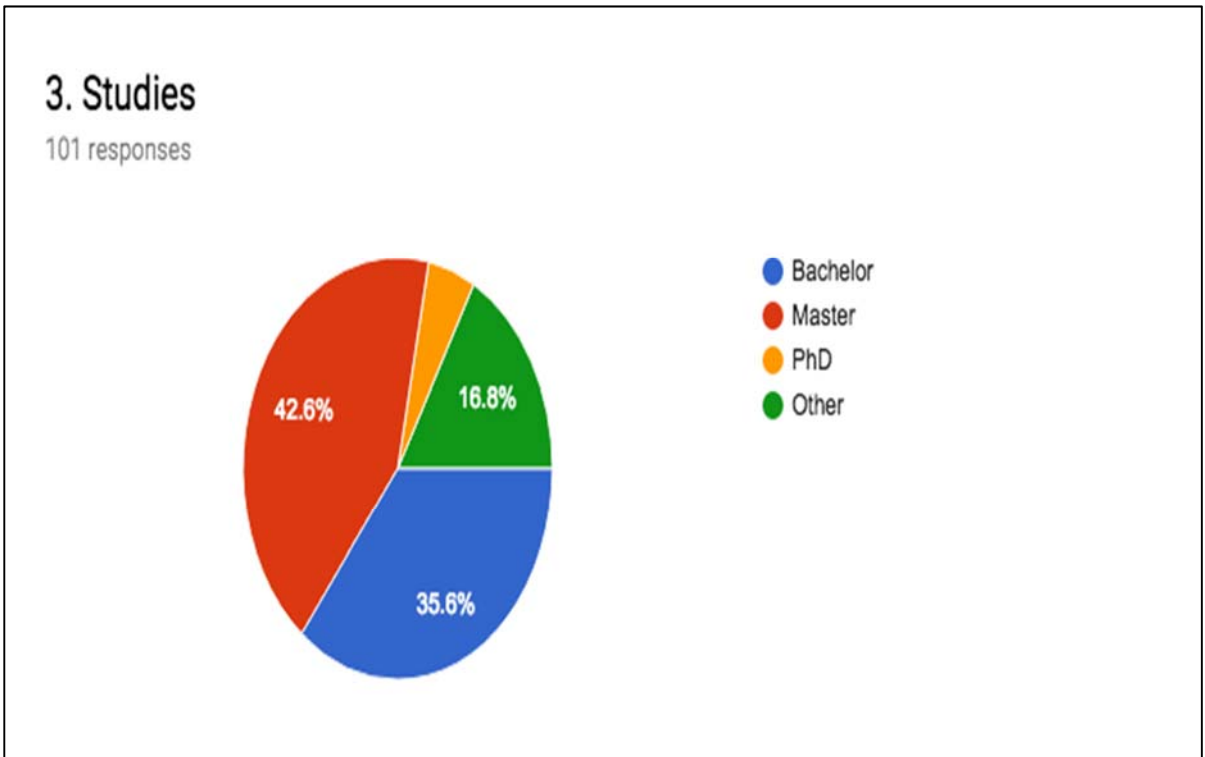
42,6% have a masters degree and 35,6% a bachelors degree. Other studies gathered 16,8%. 62,4% lives in the capitol and the rest 37,6% in a province of Greece or Cyprus. Their employment status reaches 70,3% and unemployed 17,8%. Females seem to be prevalent in the research. The age ranges more from 35-44, which is an adult audience, and the overall live in a capitol, have some degree and are employed.



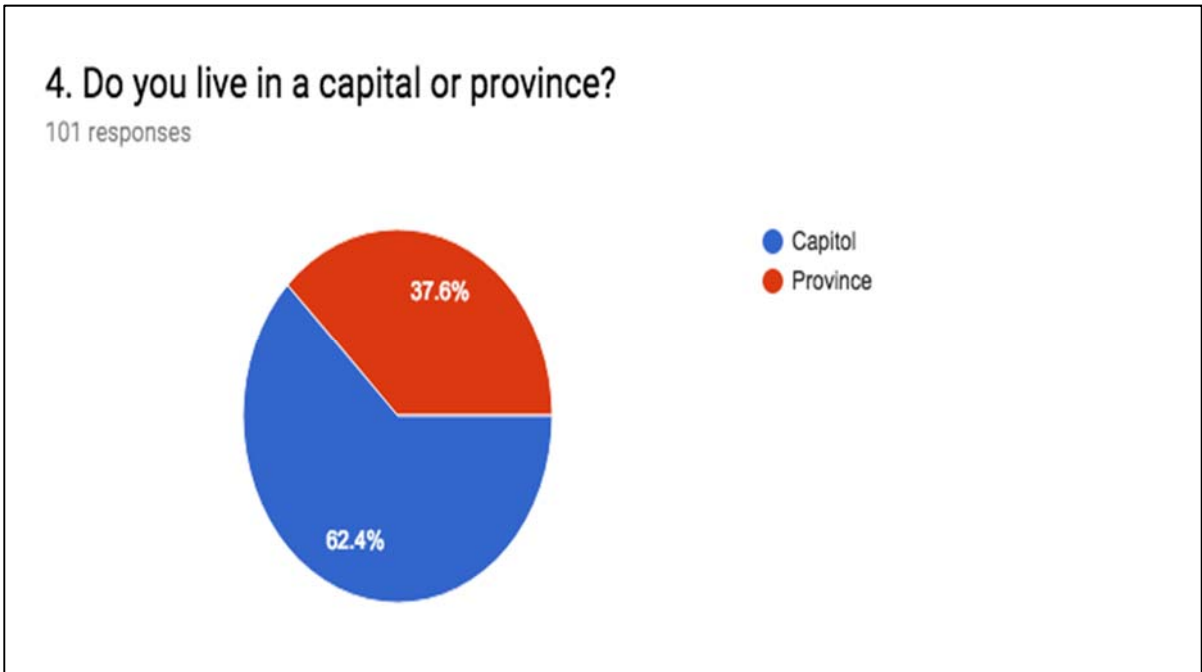
**Diagram 1.** Gender of participants



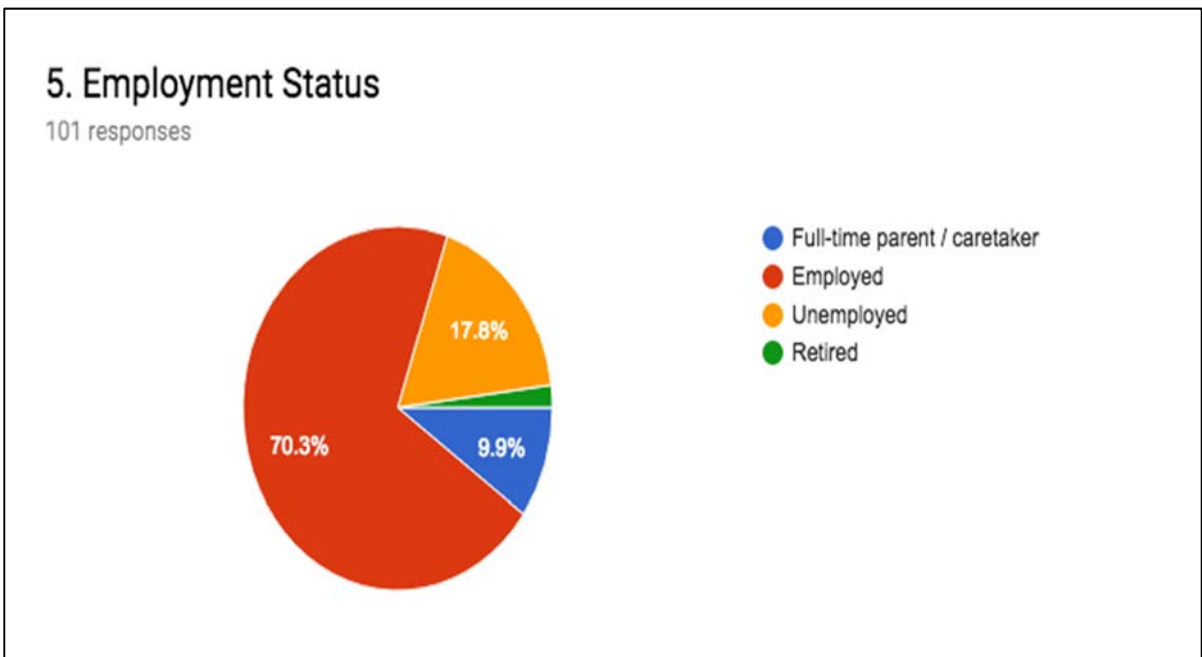
**Diagram 2.** Age of participants



**Diagram 3.** Education Status



**Diagram 4.** Location



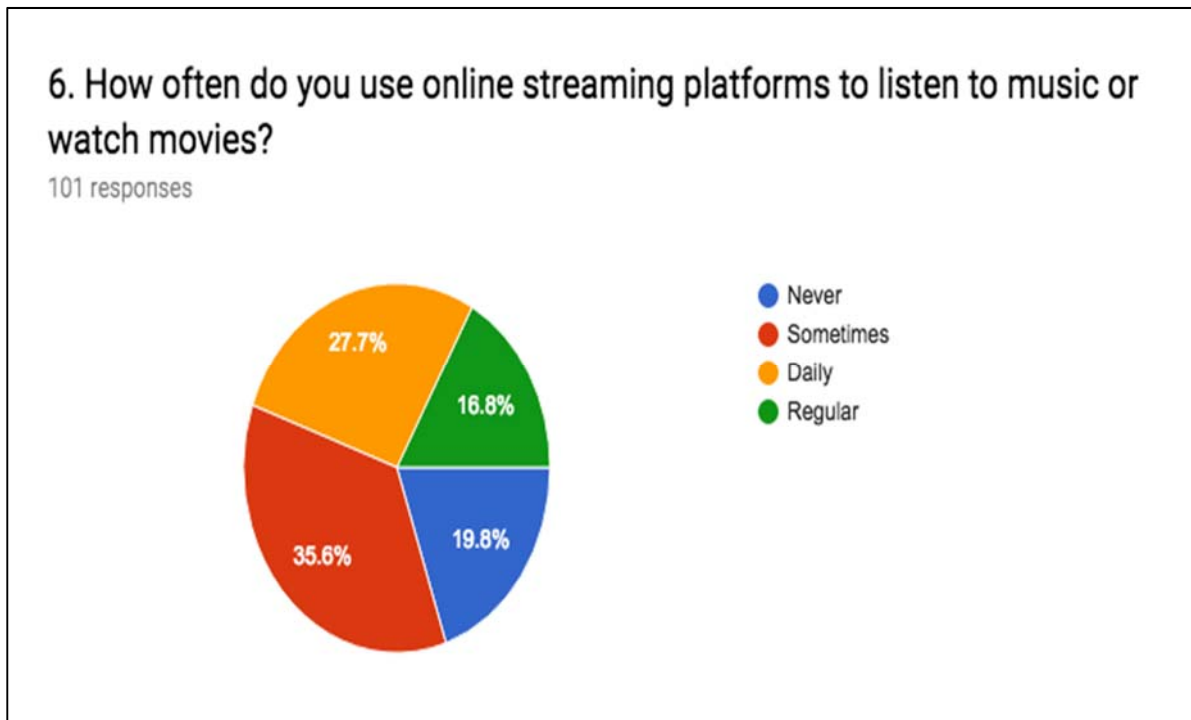
**Diagram 5.** Employment Status

## 5.3 Analysis of Research Results

A key objective of this research is to generate insights on how digital technology can expand users experience in using an online platform to stream theatre productions live or on demand.

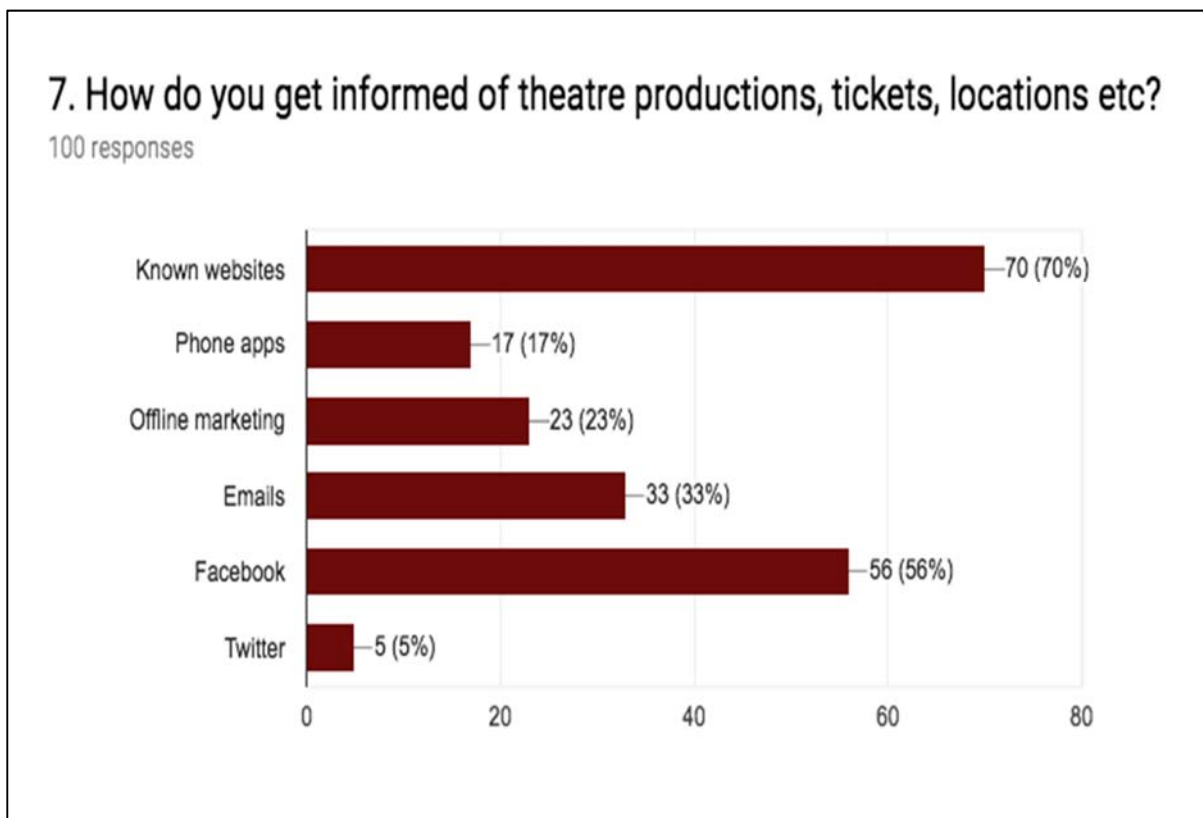
### 5.3.1. User's Opinion about Live Performances

Participants replied to the question on how often they stream for music or movies: 35,6% Sometimes, Daily 27,7%, 16,8% Regular which leads to the conclusion that the majority obtain a digital culture on streaming online, while the minority 19,8% has never streamed for these services (diagram 6).



**Diagram 6.** How often do you use Streaming Music & Movies

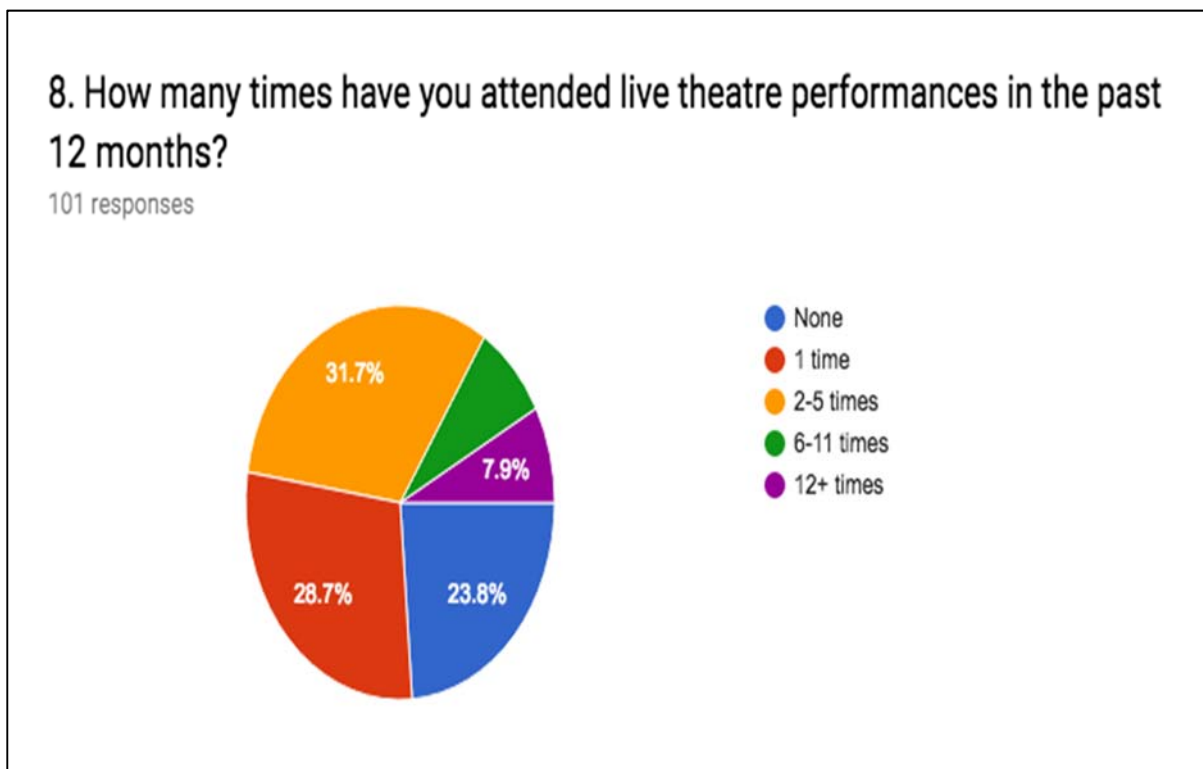
The data disclosed in Diagram 7 shows how attendants get informed about theatre productions, tickets, locations etc. 70% responded by known websites which reveals the importance of users trust for safety and familiarity for their information. 56% use Facebook as their main information feed, while emails gather 33%. Offline marketing follows with 23%, phone apps with less percentage 17% and Twitter comes last with 5%. There is a big difference in the two big social media platforms Facebook and Twitter. Participants are more engaged in Facebook rather than Twitter. They are also highly interested in getting their information from online marketing: social media, websites, emails, phone apps comparing to offline 23%. Online platforms are a major tool for discovering and sharing information.



**Diagram 7.** Information on theatre productions, tickets, locations.

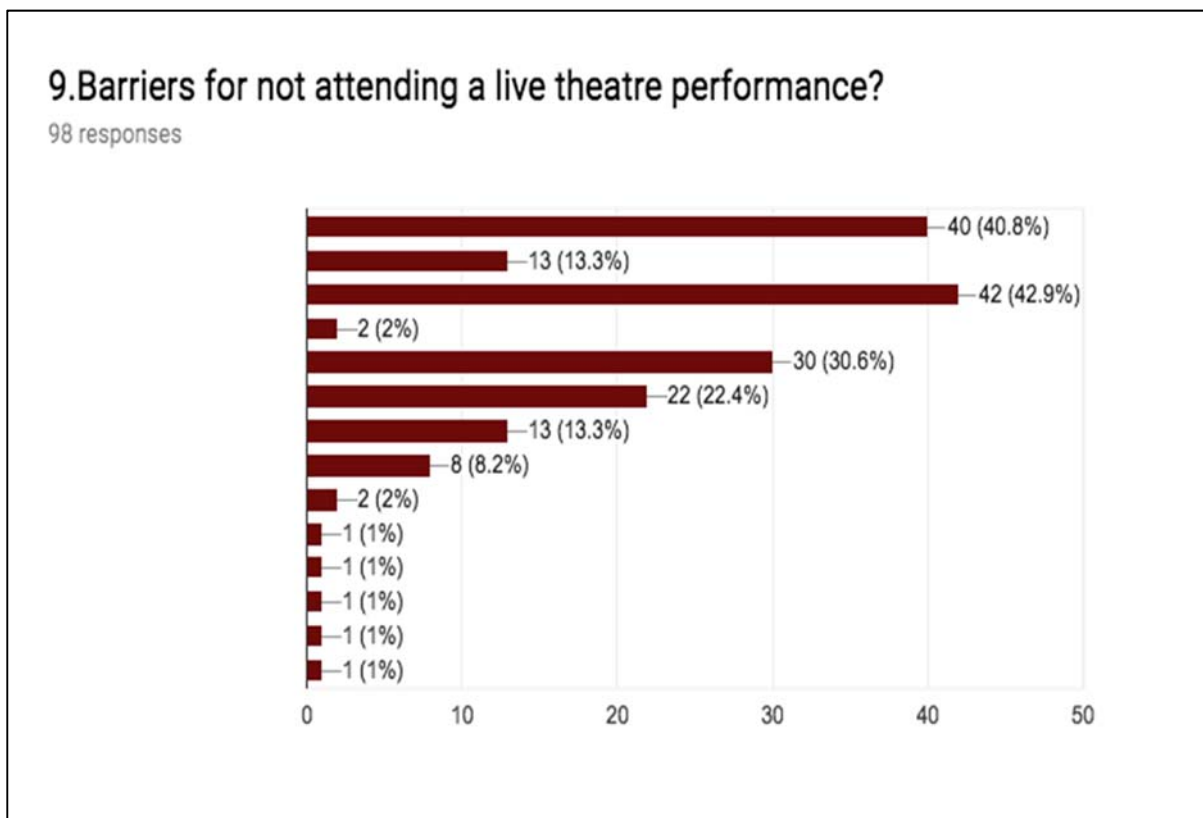
Participants were asked several questions regarding live performances. The survey displays data on how many times people have attended a live theatre performance in the past 12 months during the period May 2017-2018. 23,8% havent been to a live performance, 28,7% only 1 time, 31,7% 2-5 times, 6-11 times 7,9% and 12+ times 7,95%. The total of the sample 76,2% has actively engaged in a live performance at least once in the past 12 months, which shows that people are interested in watching a live show and 23,8% not even once (diagram 8).





**Diagram 8.** How many times have participants attended a live theatre performance.

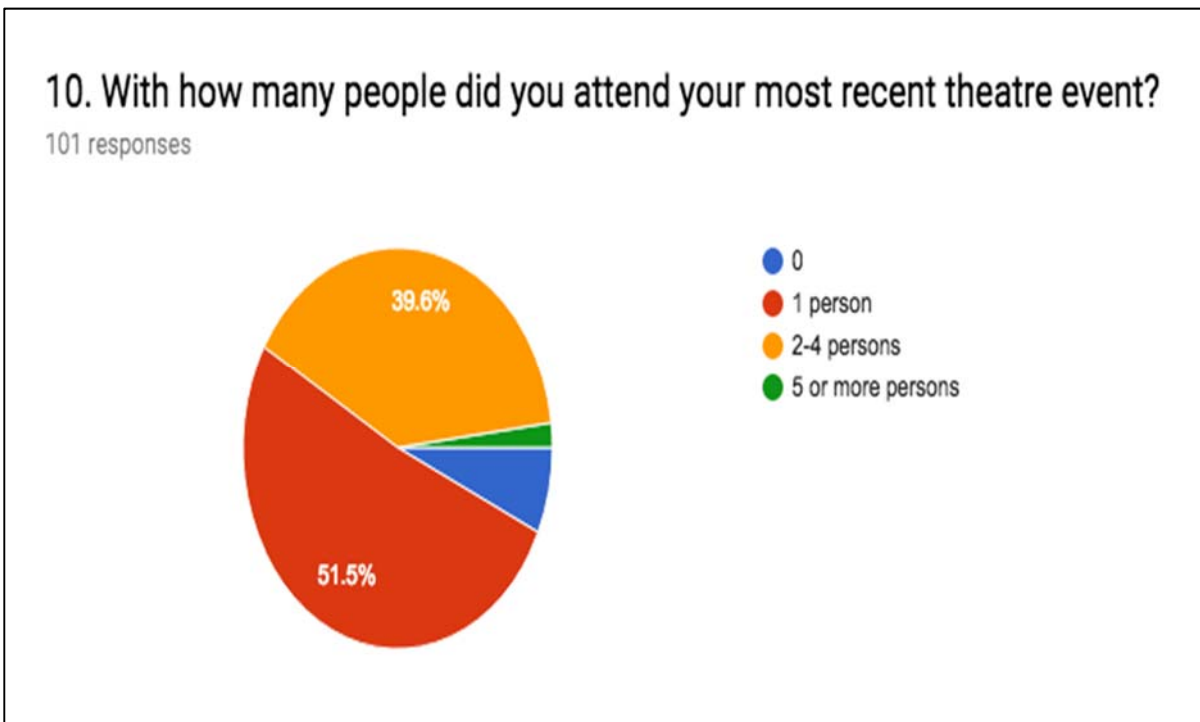
The findings from the question: Barriers for not attending a live theatre performance (diagram 9), demonstrated that almost half of the majority of people 42% agreed with the statement that they didn't have time to go to a live event. 40% believe that the tickets cost too much. Additionally 31% claim that travelling (parking, petrol, airfares) are also a barrier. Below a quarter 22% answered that they do not live near a theatre and 13% that their friends cannot afford to go to a theatre show. Only 10% were unable to get to the venue due to parking facilities, traffic, transportation. 1% replied that they got informed about the show too late, 2% that they take care of their kids, 1% that they are not a theatre fan. The majority of the sample taken consider time, travelling and tickets costs as a significant barrier. There was lack of information in respondents' replies, if they have any family members with disabilities, so the struggle for live theatre performances to reach audiences with disabilities could not be answered.



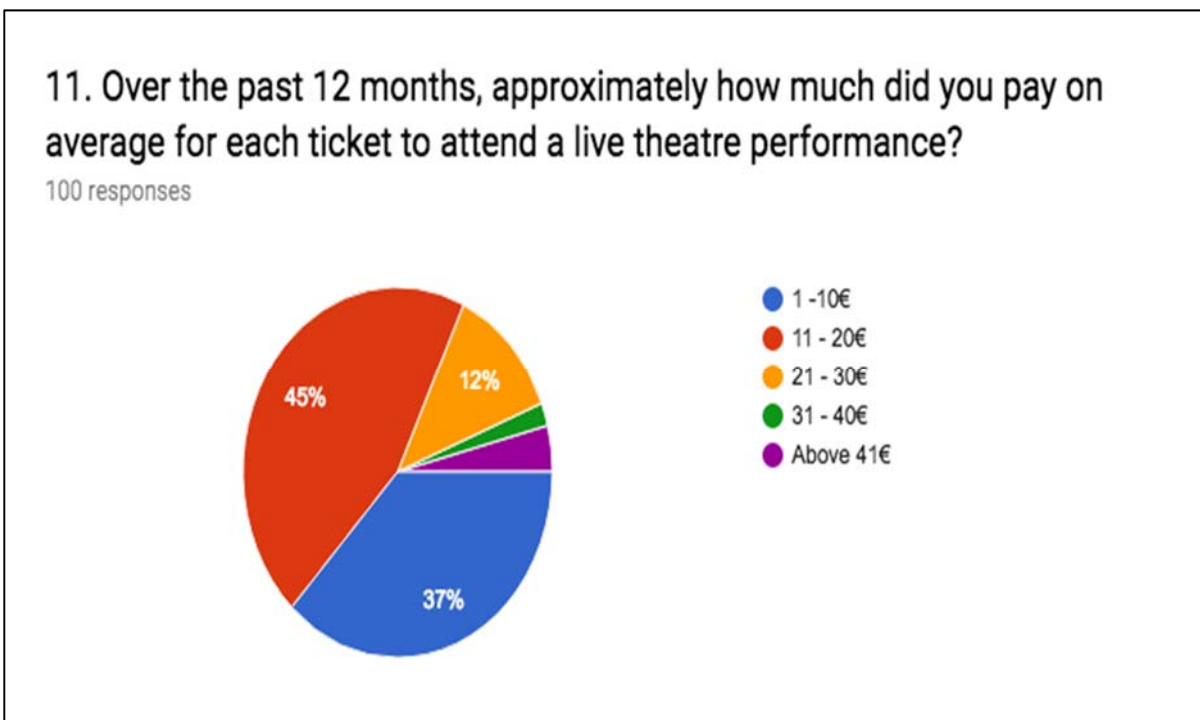
**Diagram 9.** Barriers for not attending a live theatre performance

Above 50% of respondents have attended a show with at least one person, 39,6% with 2-4 persons, the minority 2% with more that 5 persons and 7% with no one. The most popular combination is with 2 people (diagram 10).

As shown in diagram 11: “Over the past 12 months, approximately how much did you pay on average for each ticket to attend a live theatre performance?” 45% replied each ticket cost them 11-20€, 37% 1-10€, 12% 21-30€, 4% above 41€ and 2% between 31-40€. It’s obvious that 82% of the sample has not spent more than 20 euros for a ticket. This can be enhanced by the data from diagram 9, which shows that users believe that a main barrier for not attending a live performance is the ticketing cost.



**Diagram 10.** With how many people did you attend your most recent theatre event



**Diagram 11.** Over the past 12 months, approximately how much did you pay on average for each ticket to attend a live theatre performance?

### 5.3.2. Streaming Theatre Performances

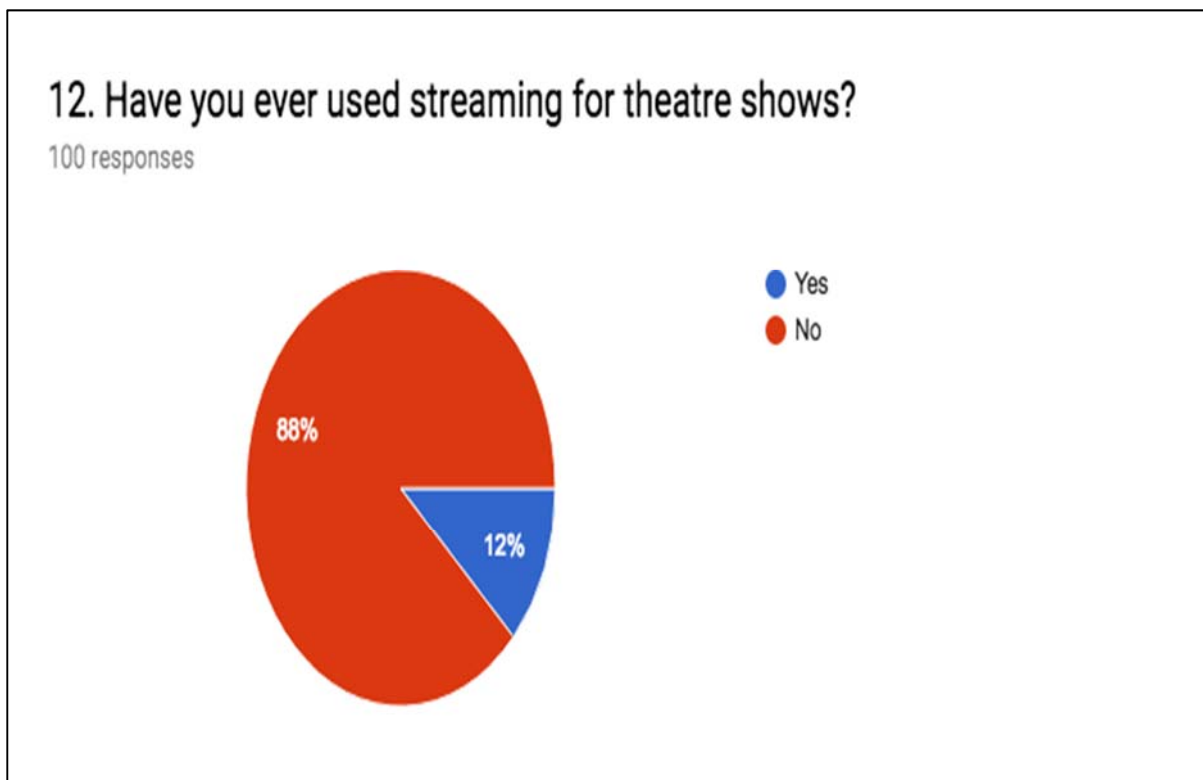
It's prevalent that the 88% proportion has not experienced or perhaps never heard of streaming an online theatre production and nearly 12% have used streaming for theatre

shows (diagram 12). Following diagrams disclose how participators perceive online streaming theatre productions comparing to the live experience.

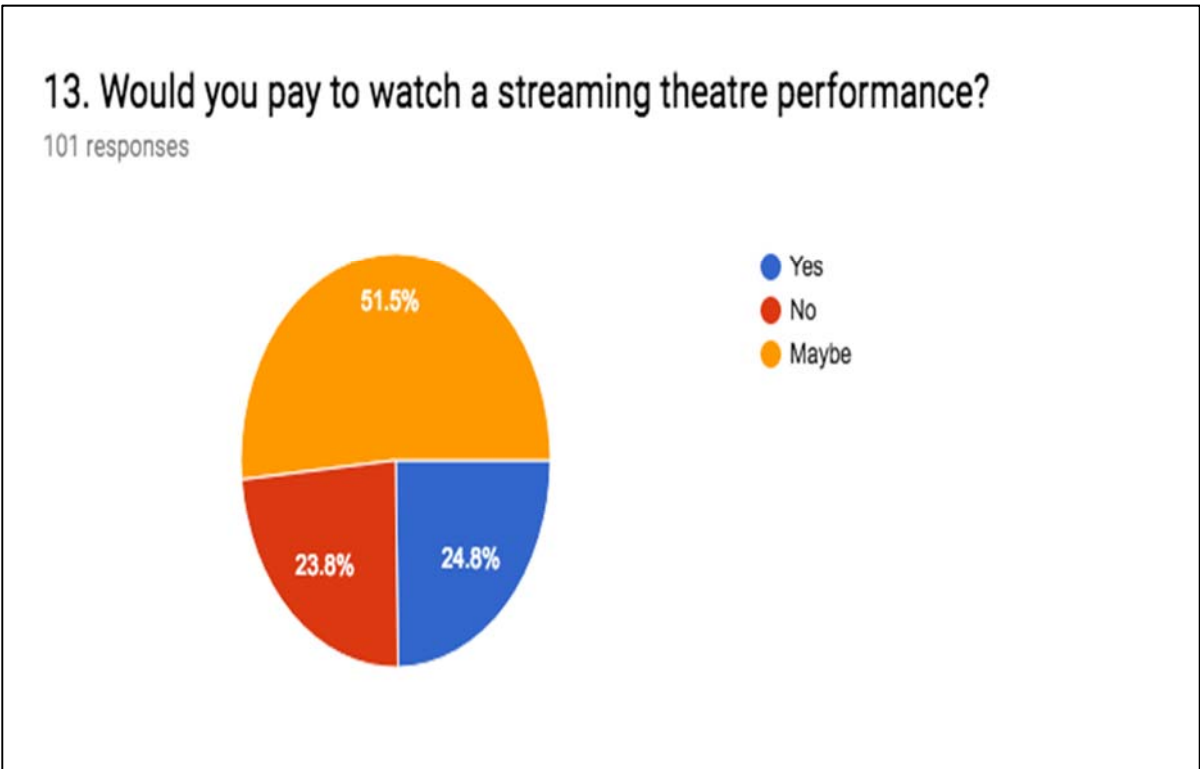
The figures in diagram 13 reveal that more than half of the audience participating in the study might consider paying for an online streaming production. The levels of response, if they would pay or not for such an online service are almost equivalent: 23,8% says no and 24,85% says they would agree to pay.

Diagram 14 indicates that participants prefer live performances with 58,4%. A significant amount 37,6% would enjoy both live or streamed and only 4% would choose streamed. This gives us the sense that most people feel that online experiences will be mediocre to the live experience.

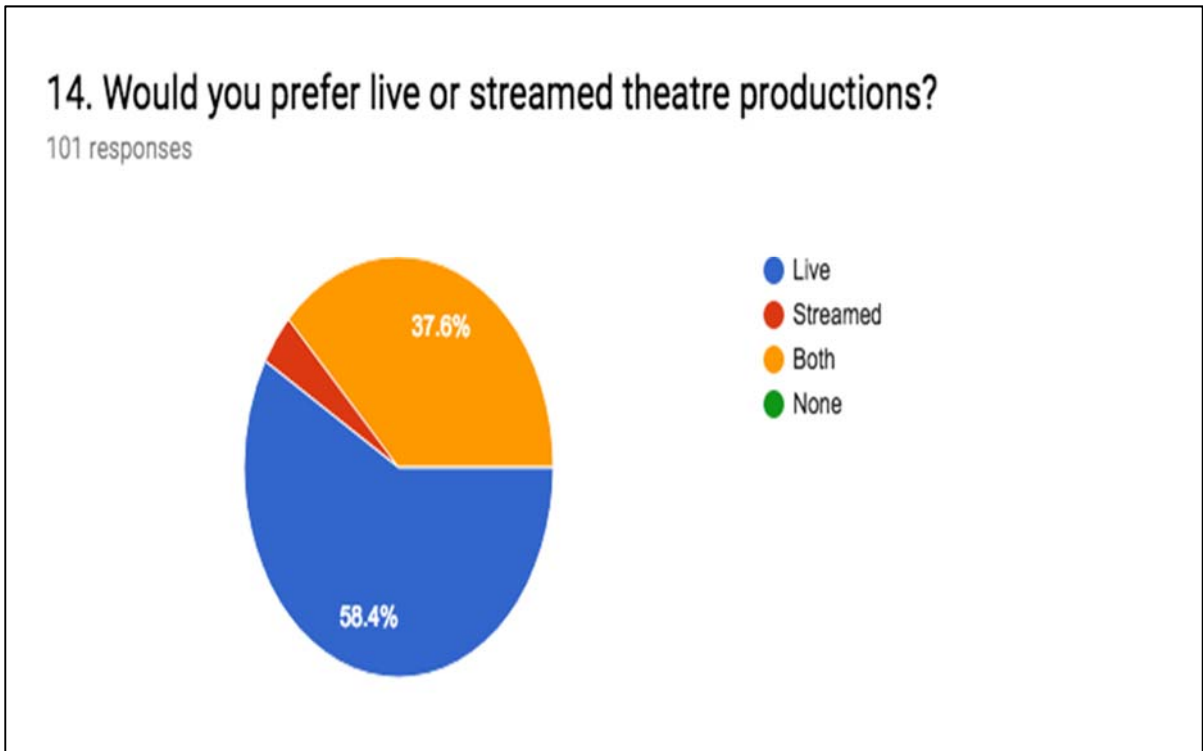
People were asked (diagram 15) whether they would be willing to subscribe to the streaming platform. The question received very strong and positive reactions that yes they would subscribe with 43,6%, maybe 39,6% and 16,8% said they would not.



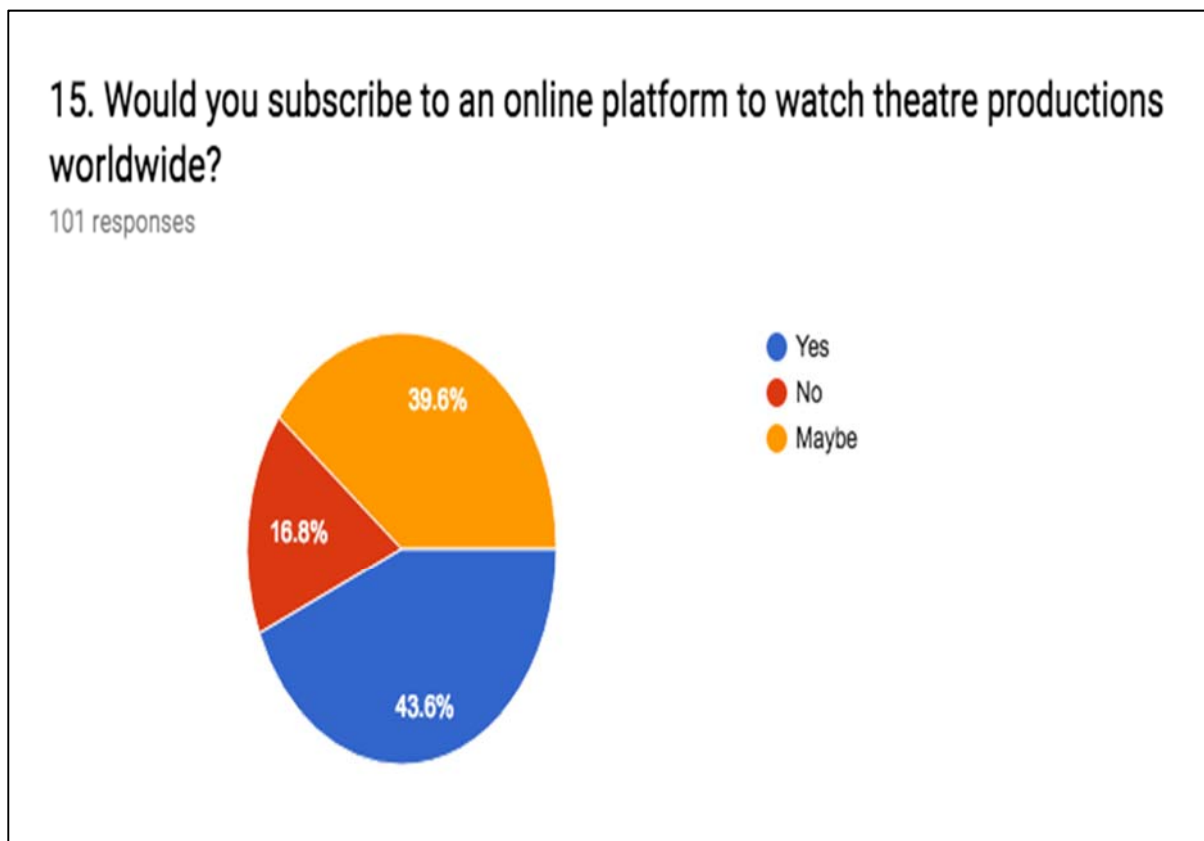
**Diagram 12.** Have you ever used streaming for a theatre production



**Diagram 13.** Would you pay to watch a theatre production

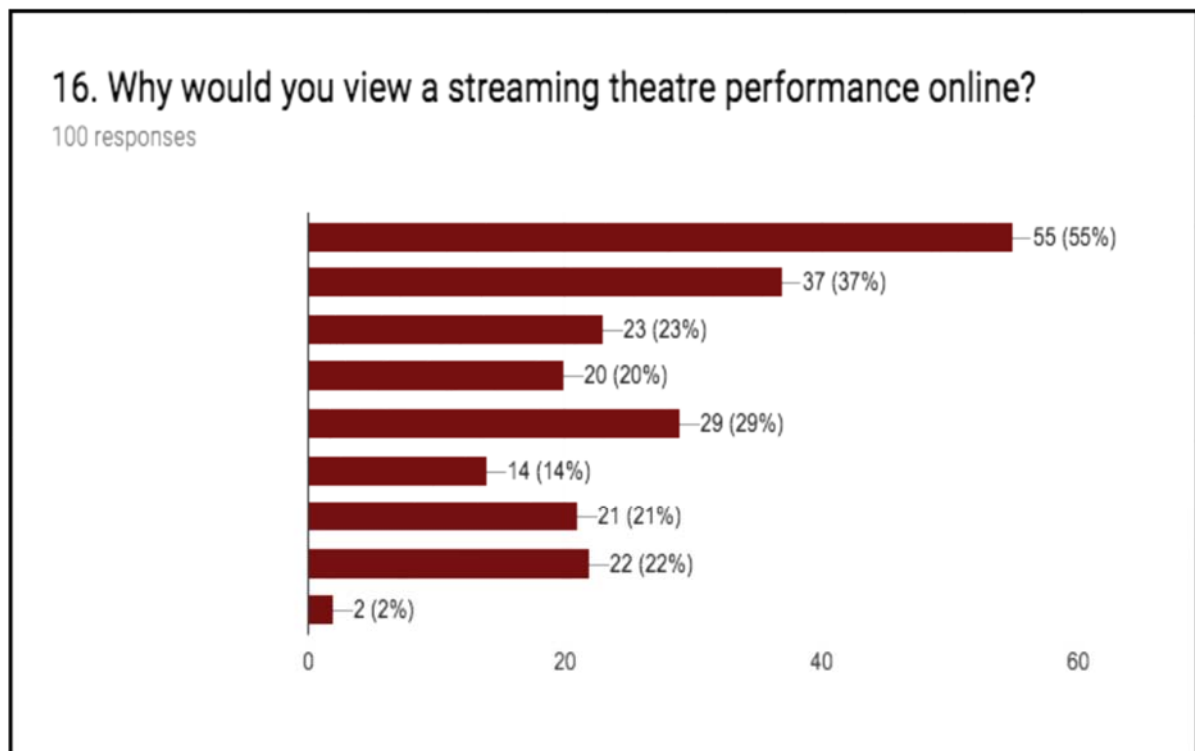


**Diagram 14.** Would you prefer live or streamed



**Diagram 15.** Would you suscribe to an online platform to watch worldwide theatre productions

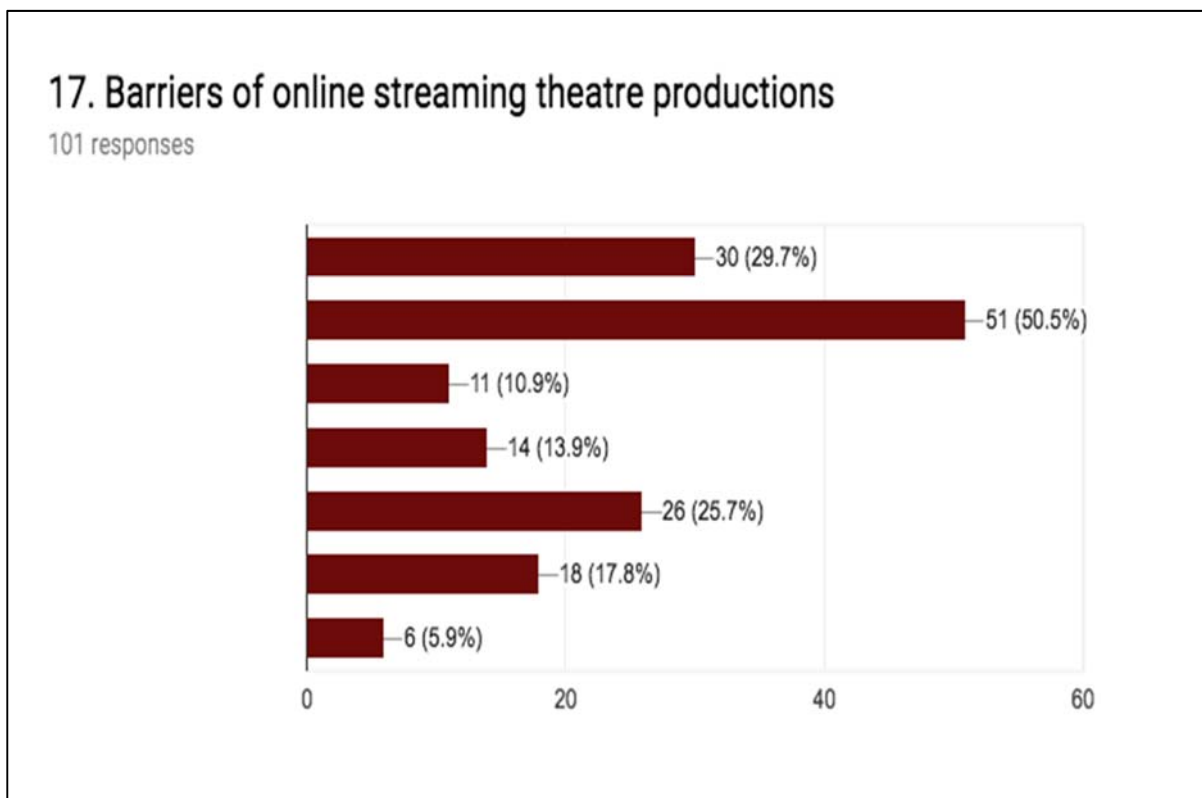
The question “Why would people view a theatre show online” in diagram 16 clarifies further people’s choices to engage in streaming theatre shows. The figures of the replies to such a question provide more insight and understand what drives people to prefer streaming theatre productions. A significant 55% replied if there would be no opportunity to attend otherwise. 37% said if the performance would be an exclusive one, that would have been unavailable any other way, they would view it. These statistics expose that when participants consider the production of high value they would stream it. 29% prefer their convenience of home to watch an online theatre production. 23% would stream if the tickets were sold out. 34% consider that streaming would be cheaper. Moreover 22% think that with one subscription you can have many participants and 21% that it costs too much to get to the venue. People always bare in mind the costs to attend a live performance. This reveals that digital technology can expand the theatre audience. The minority 2% wouldn’t stream.



**Diagram 16.** Why would you view a streaming theatre performance

Diagram 17 refers to the barriers respondents find in streaming online theatre productions. Over half of the sample, 51%, reports that their preference is live theatre experience. Not everyone is a digital audience, but digital engagement ensues to tribute to live engagement rather than turn out to be a substitute. According to previous diagram 15, 43,6% of the people would subscribe to stream online theatre productions and the data in diagram 13 shows that 51,5% might pay to stream online. Considering that 88% has not ever viewed a streamed theatre show, it's obvious that the benefits of such a feature have not been experienced. There is room for growth in the business since people show interest and if the quality of streaming is high then there is potential that the experience can exceed their expectations. 30% of the contestants also stated that they are unaware of content online. This means that there is lack of awareness and the Internet can further distribute and deliver content through its marketing tools. 26% believe that security of online payments is significant and 18% consider their privacy valuable. Especially with the new regulations of the GDPR policy (general data protection regulation) users are more informed about their rights, usage and distribution of their personal information by third parties. 14% do not know how to pay for content they want to view. Low awareness of payment methods inhibits consumption of streaming live or on demand. 11% believe in the non-existence or poor technology. The minority 6% does not consider any above as a barrier, a figure that

could significantly change with the right digital marketing. Breaking down the barriers can lead to a wider promotion of the platform and engage new audience.



**Diagram 17.** Barriers of online streaming theatre productions

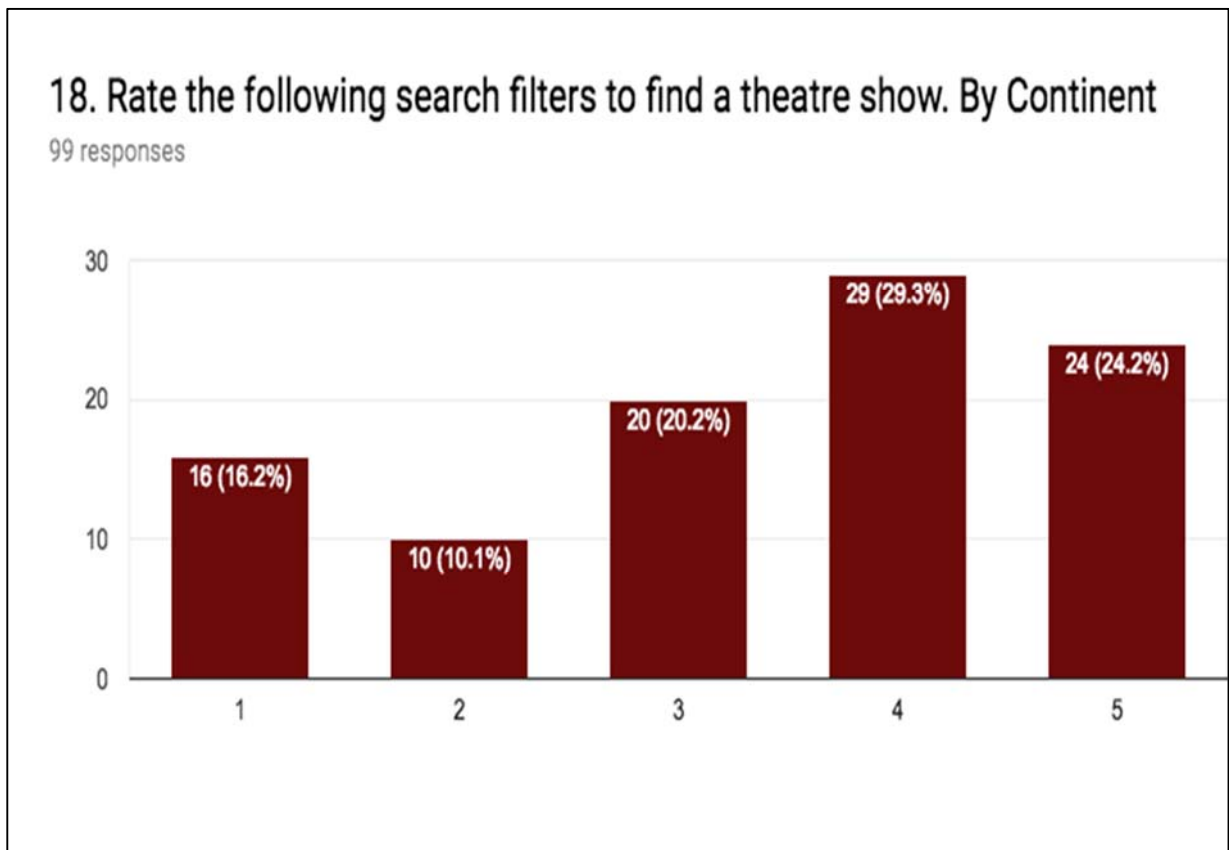
The template displays a menu where users can search with filters their desired theatre show. Respondents that have visited the link of the streaming platform template <https://theaterstage.weebly.com> replied to the following questions by rating them according to: Not important 1, Less Important 2, Neither Important nor Not Important 3, More Important 4 and Very Important 5. All the filters aforementioned define the importance of the menu Search Productions.

1. The question “Rate the following search filters to find a theatre show: By Continent”, received 29% as More Important and 24% Very Important. More than half percent believe that the filter by continent is significant for their search in order to filter down a theatre production By Continent (diagram 18).
2. 33% rate by More Important and 26% by Very Important the filter By Genre in order to narrow down their search: Tragedy, Drama, Comedy, Musical, Opera, Ballet, Dance, History, Documentary, Stand up Comedy, Kids (diagram 19).
3. 41% rated as Neither Important nor Not Important the filter By Year. This filter is not highly listed in people’s choice (diagram 20).

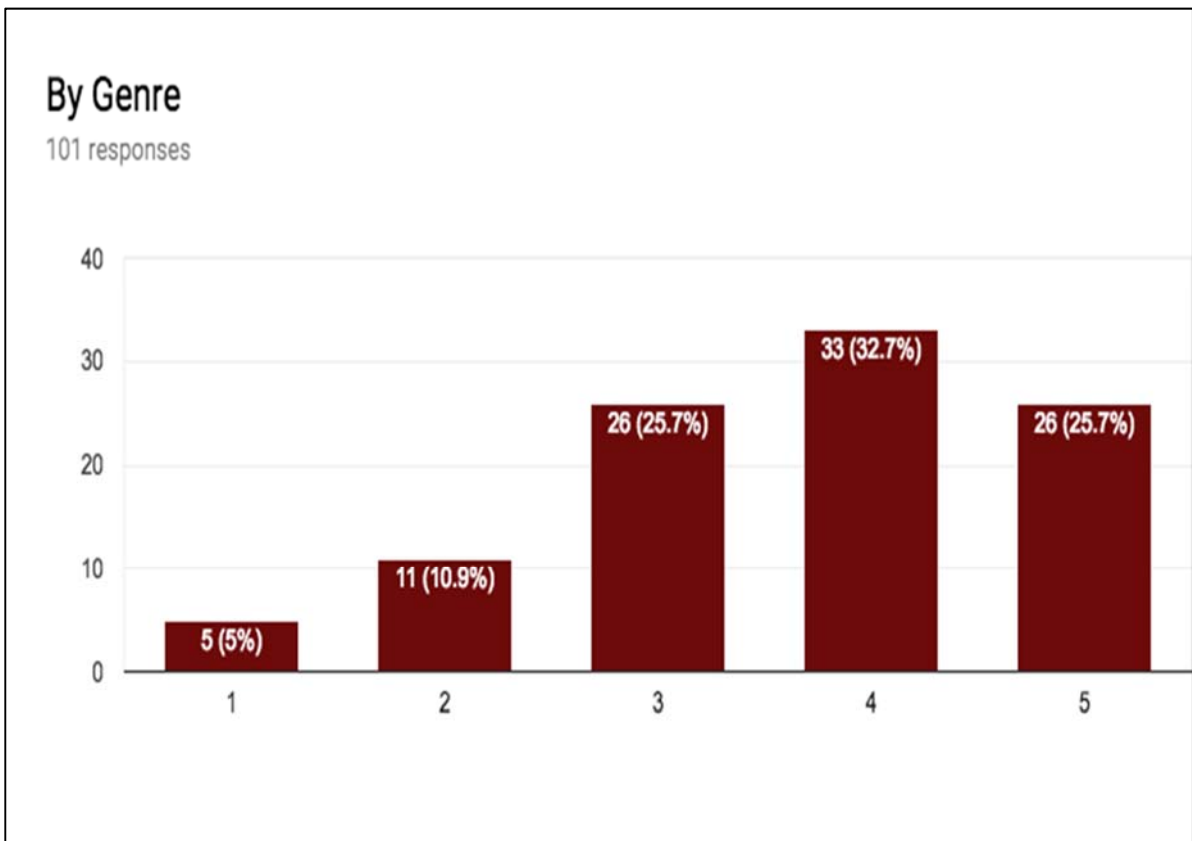


4. By Actor 40% was rated with More Important and 25% with Very Important. By Actor is a big driver in people's choice (diagram 21).
5. Subtitles and Translated are the highest in participant's preference for filtering their search, 45% rated as Very Important and 33% rated as More Important (diagram 22).
6. Most Popular By Genre – By Stars received: 38% Neither Important nor Not Important in people's choice to select a theatre production, 32% More Important and 16% Very Important (diagram 23).

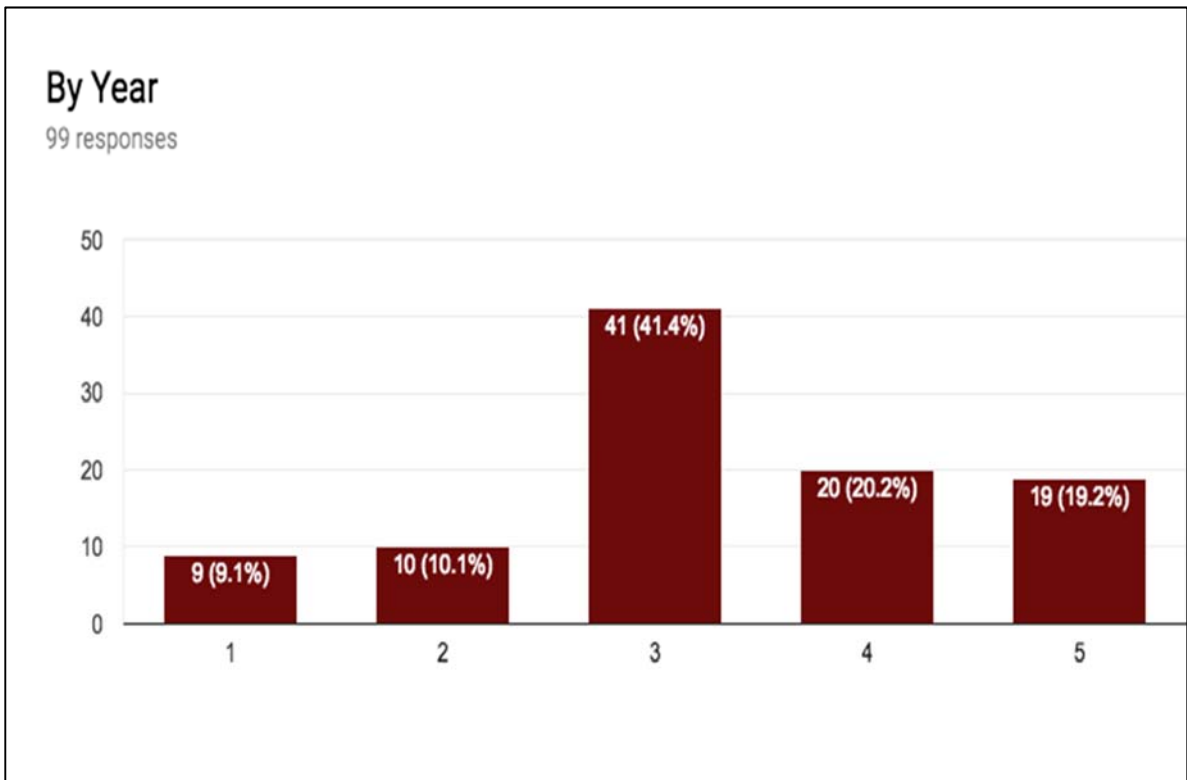
Mostly all filters received an affirmative response and are considered important for users search. Therefore these features should have priority on the website.



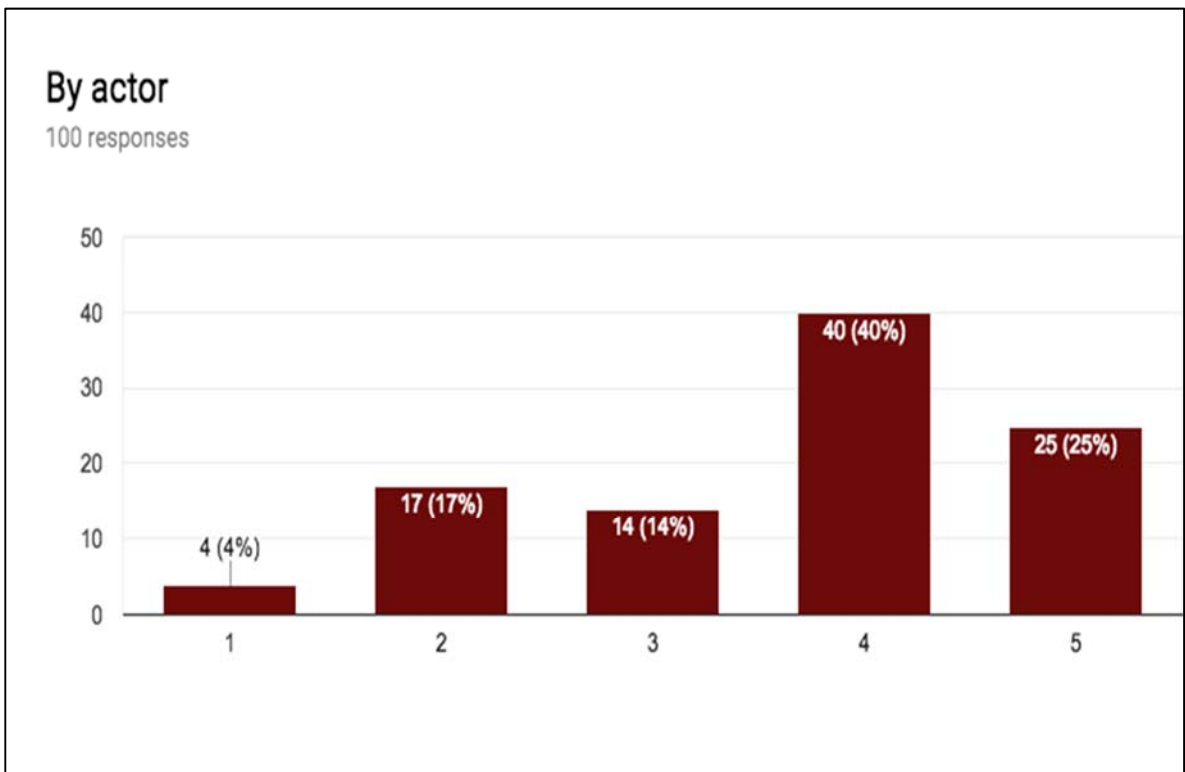
**Diagram 18.** Rate by continent



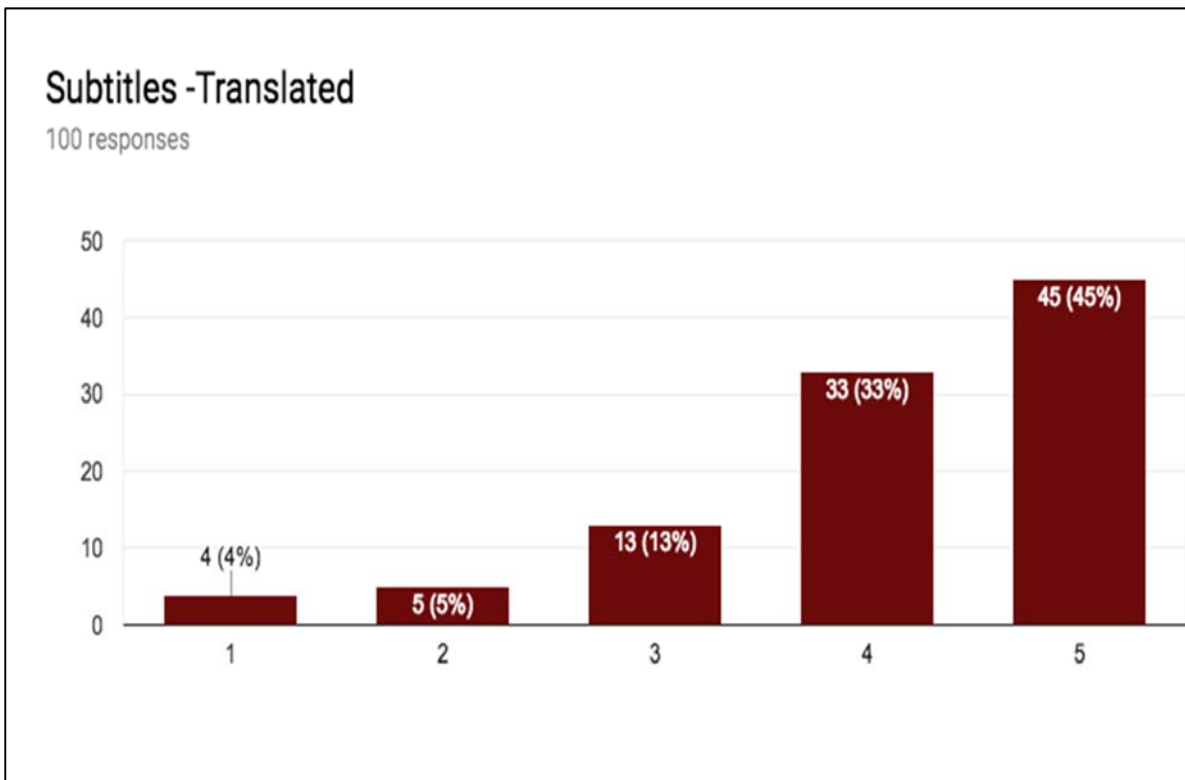
**Diagram 19.** Rate by Genre



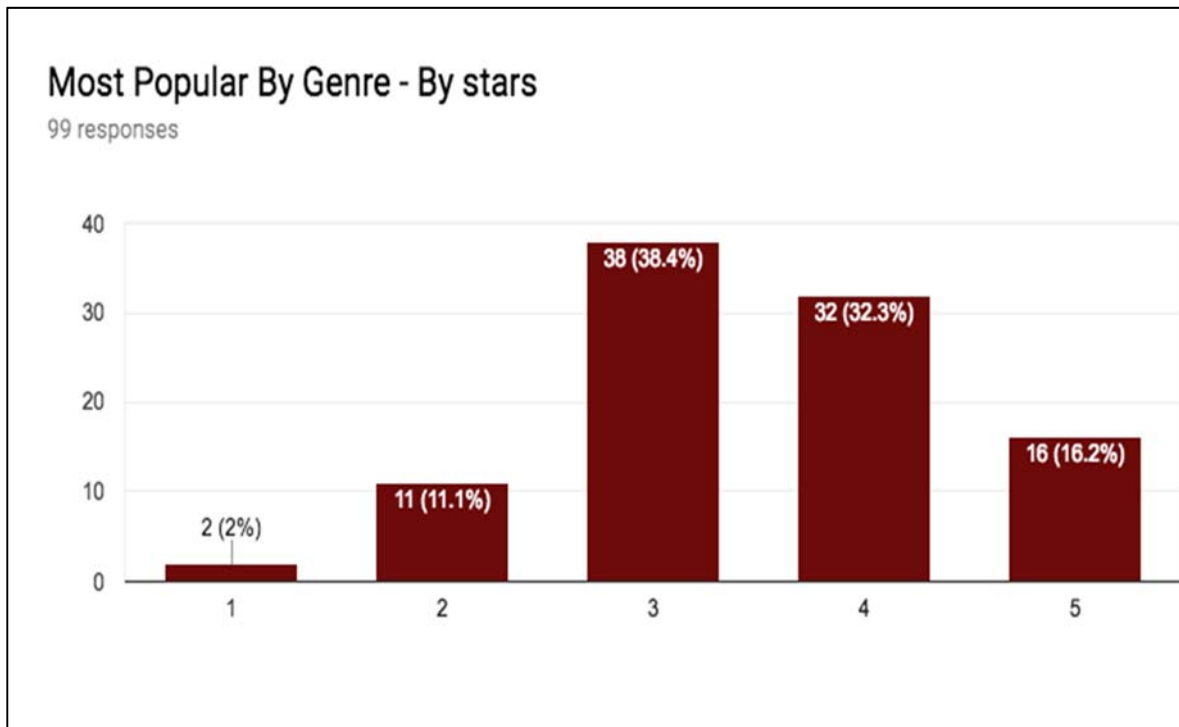
**Diagram 20.** Rate by Year



**Diagram 21.** Rate by Actor



**Diagram 22.** Rate by Subtitles - Translated



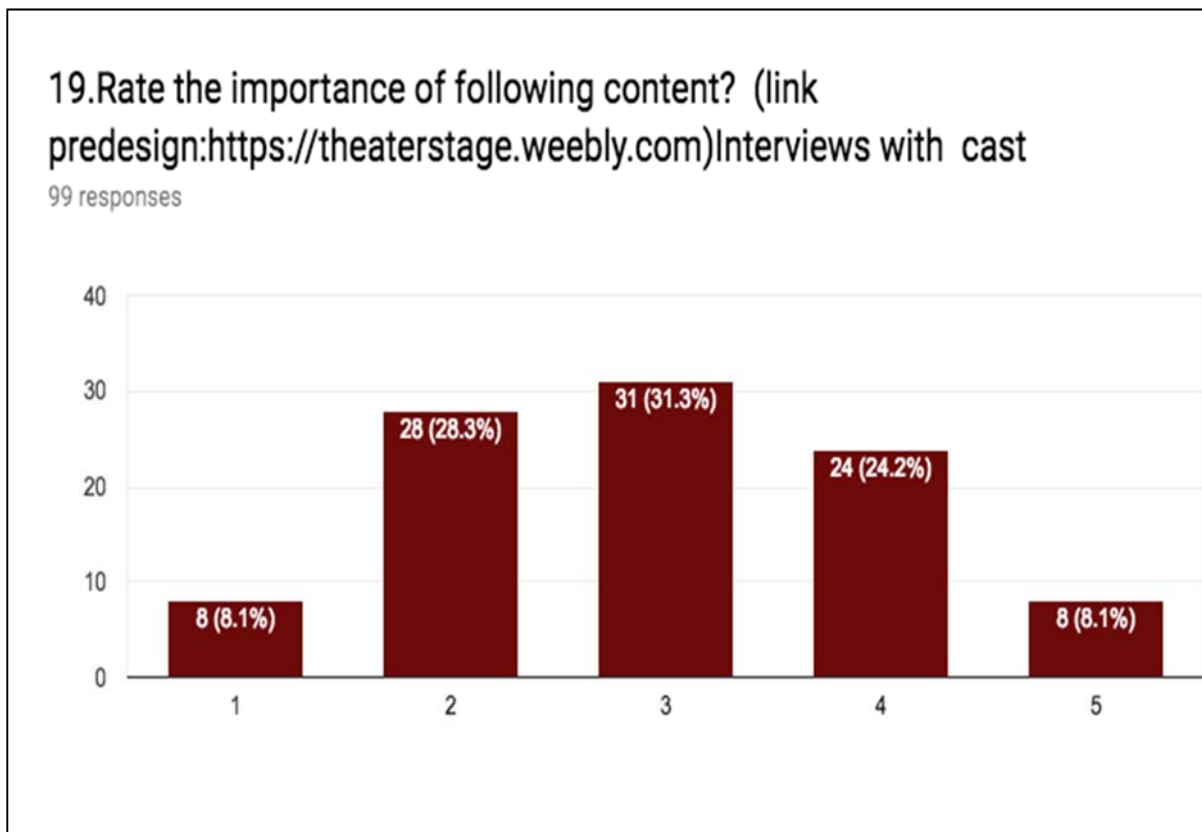
**Diagram 23.** Rate by Most Popular By Genre- By Stars

Other factors that play an important role in designing are the importance of content on the websites template [www.theatrestage.weebly.com](http://www.theatrestage.weebly.com), which can create credibility and attract interest.

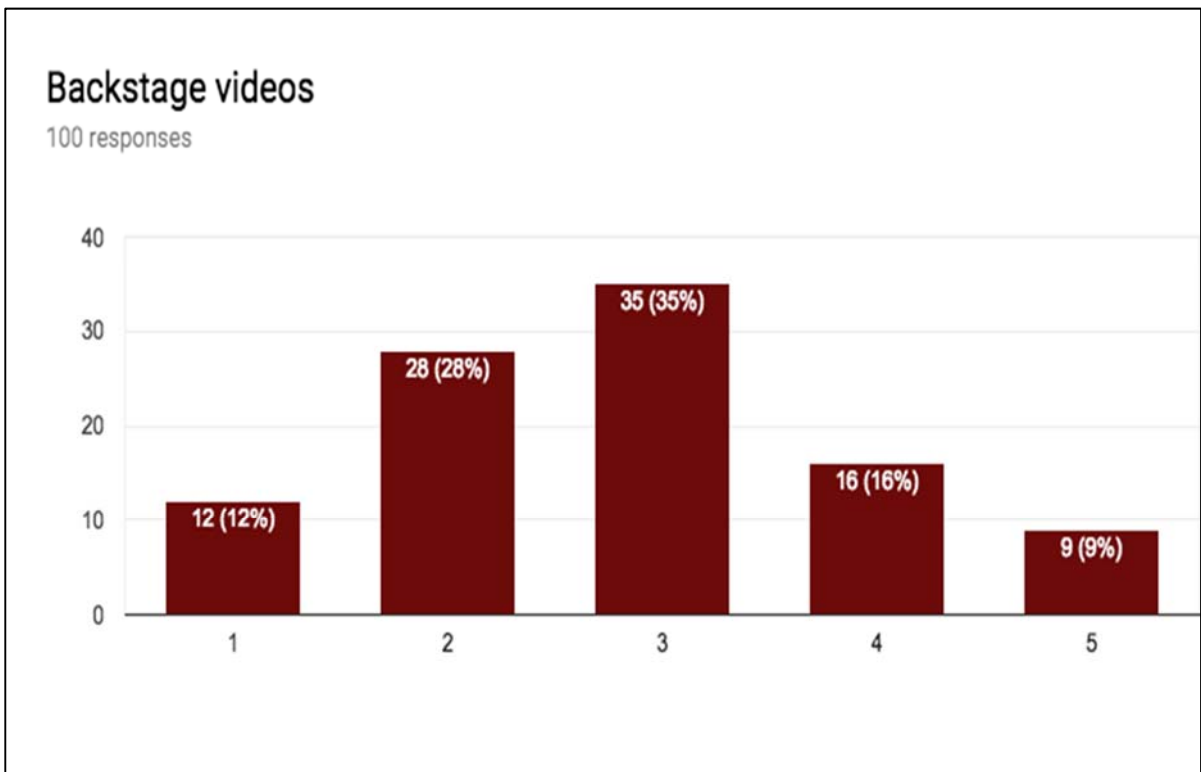
1. Respondents believe that interviews with the cast (diagram 24) is 31% Neither Important nor Not Important and 28% Less Important. Almost 3 quarters do not consider interviews with cast so important for the menu.
2. 75% from Not Important to Neither Important nor Not Important believe that backstage videos are not as important for them (diagram 25).
3. Documentaries sent before the play (diagram 26) are considered in peoples choice More Important 25%, Neither Important nor Not Important 23% and 22% Less Important and Not Important. Only 8% believe it's Very Important.
4. The data in diagram 27 displays that people understand the importance of ratings from online viewers which gathered 67% in columns 3-4 More Important and Very Important .
5. Discounts and offers (diagram 28) gathered above half percent in importance, 30% in column 4 More Important, and 29% in column 5 Very Important. Only 3% do not regard them as important.

6. News related to the theatre industry are less important in participants rating (diagram 29). Only 5% believe it's Very Important, 22% More Important., while the rest gather in total 70% varying from Not Important to Neither Important nor Not Important 17%, 27%, 26%.

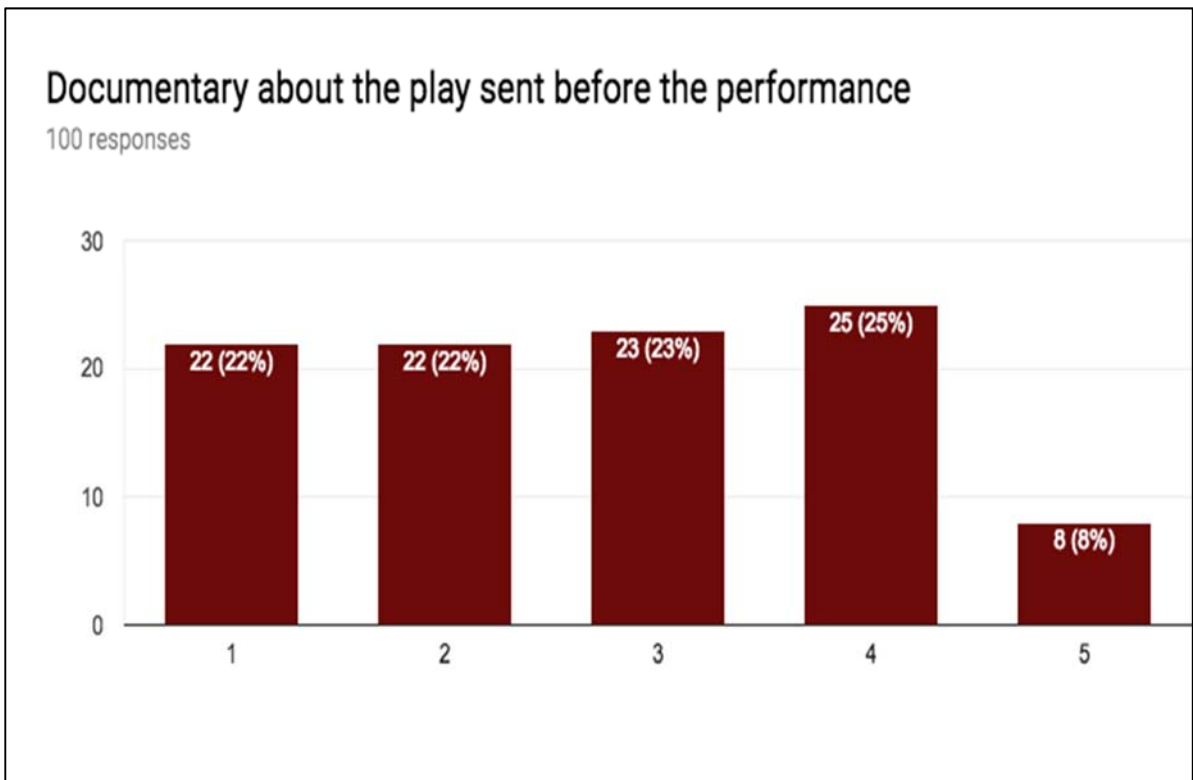
Audience demonstrate different characteristics in their preferences, other are more passionate about certain content and other less, therefore the menu needs to serve a variety of content. The feature that was not highly recommended was Documentaries sent before the play. Though this does not mean it cannot be included in the website. This feature can be inserted in a later phase, if there is a budget and if it does not create malfunctions, like time loading of page -website, consume alot of storage, or demand constant computational resource. The features that were highly recommended should have priority in implementation.



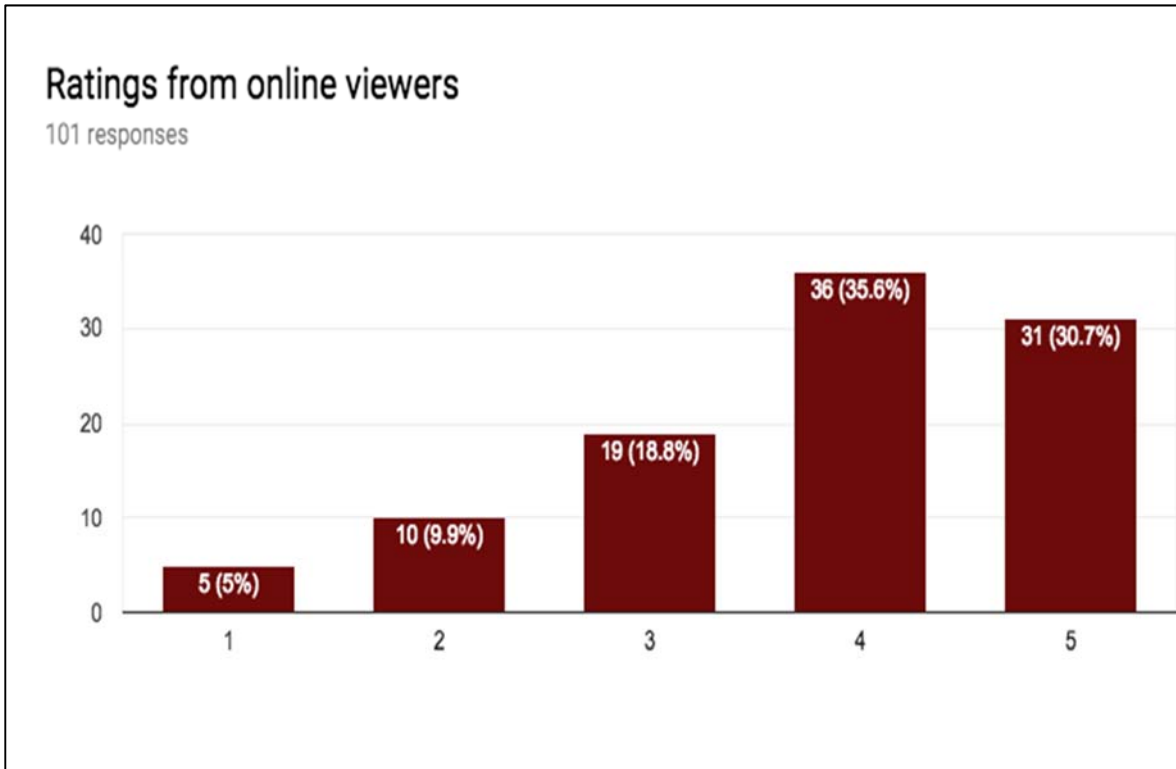
**Diagram 24.** Rate the importance of following content: Interviewswith cast



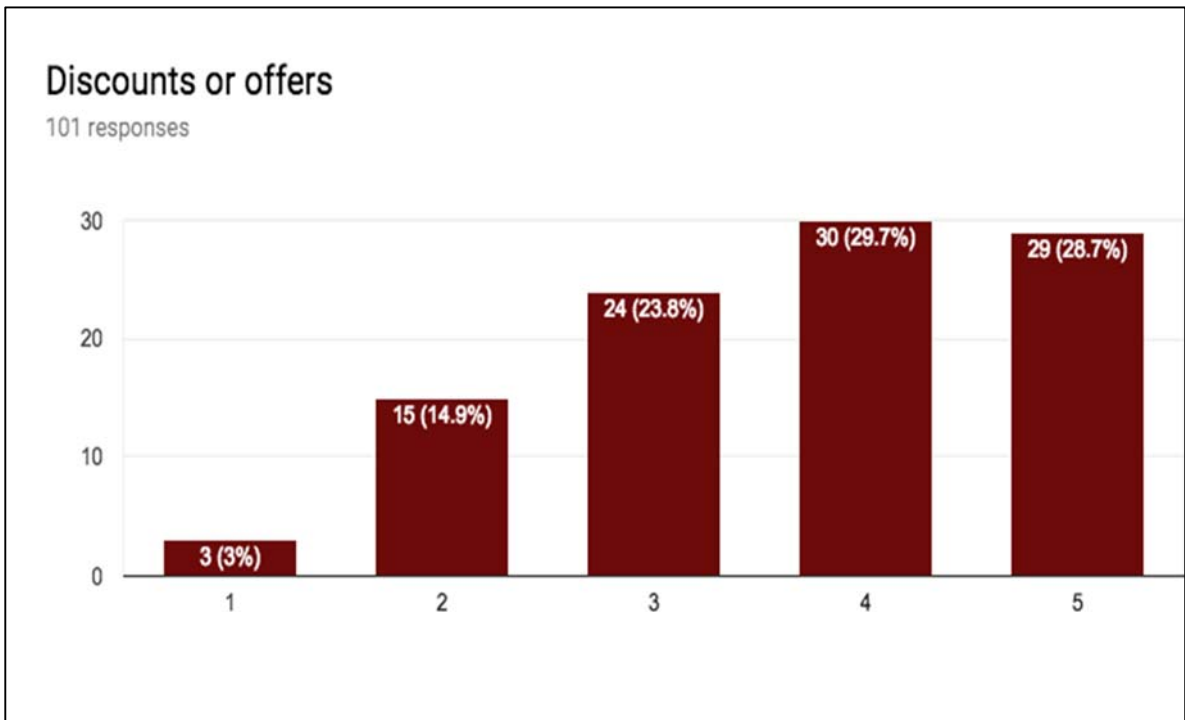
**Diagram 25.** Backstage Videos



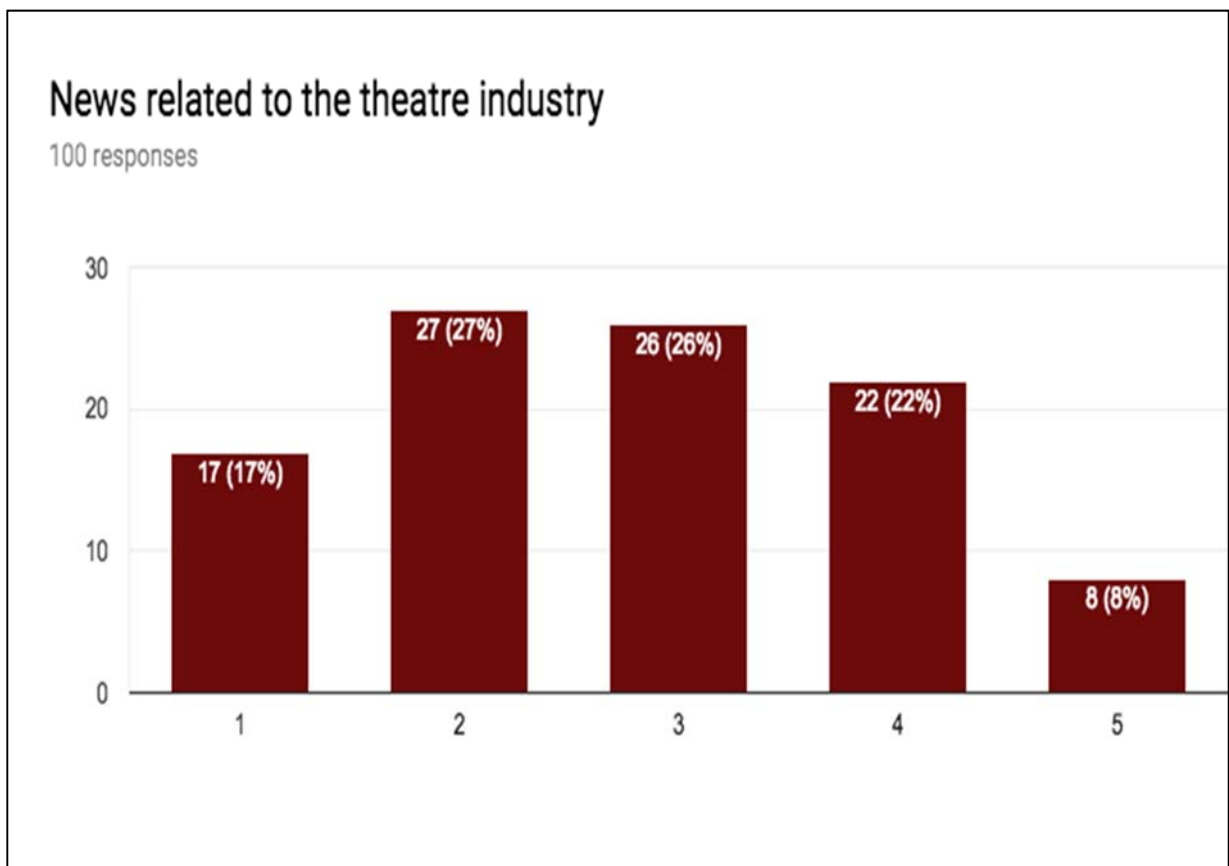
**Diagram 26.** Documentary about the play sent before the performance



**Diagram 27.** Ratings from online viewers



**Diagram 28.** Discounts or offers



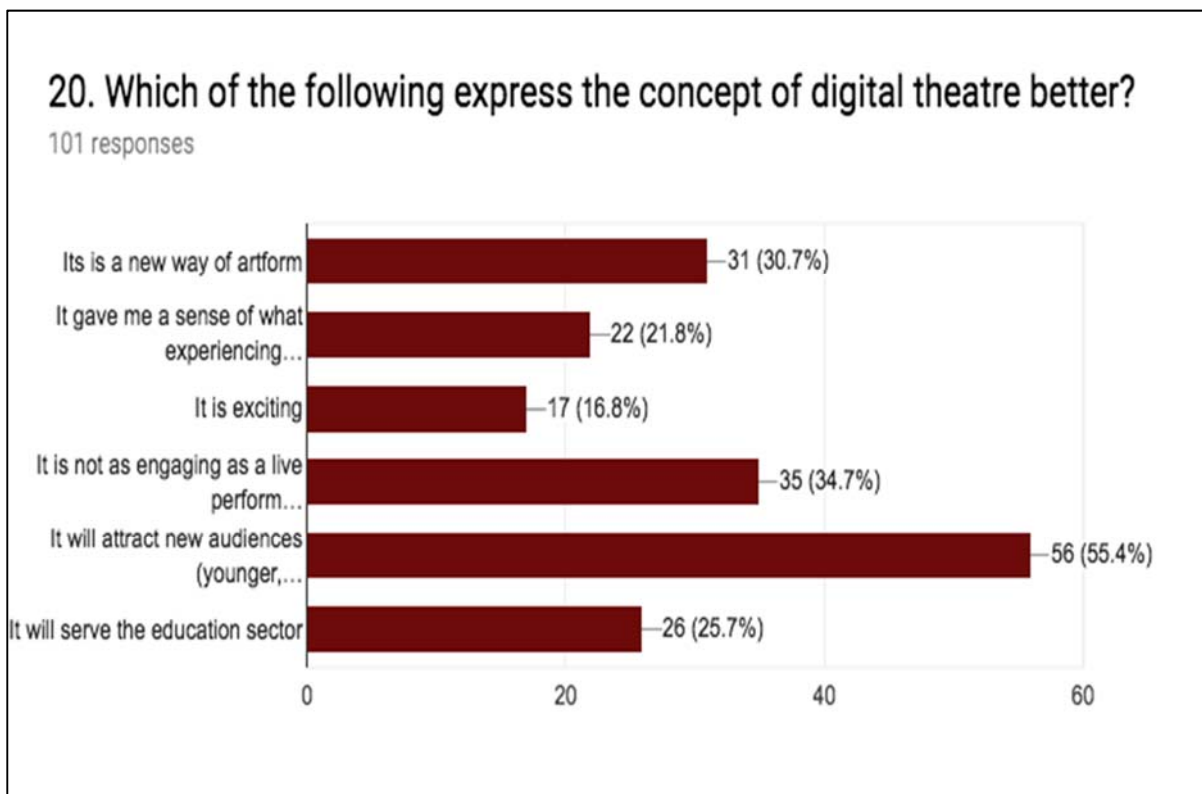
**Diagram 29.** News related to the theatre industry

Considering that people have an experience of live or on demand streaming theatre performances they feel that the concept of digital theater will (diagram 30):

1. attract new audiences (younger, older, international, disabilities, etc) by 56%.
2. 35% believe it's not engaging as a live performance.
3. 31% that it's a new way of artform.
4. 26% that it will serve the education sector.
5. 22% gave them a sense of what experiencing it live in a theatre would be like.
6. 17% consider it exciting.

Overall the feedback is positive on how people percieve a streaming theatre experience.





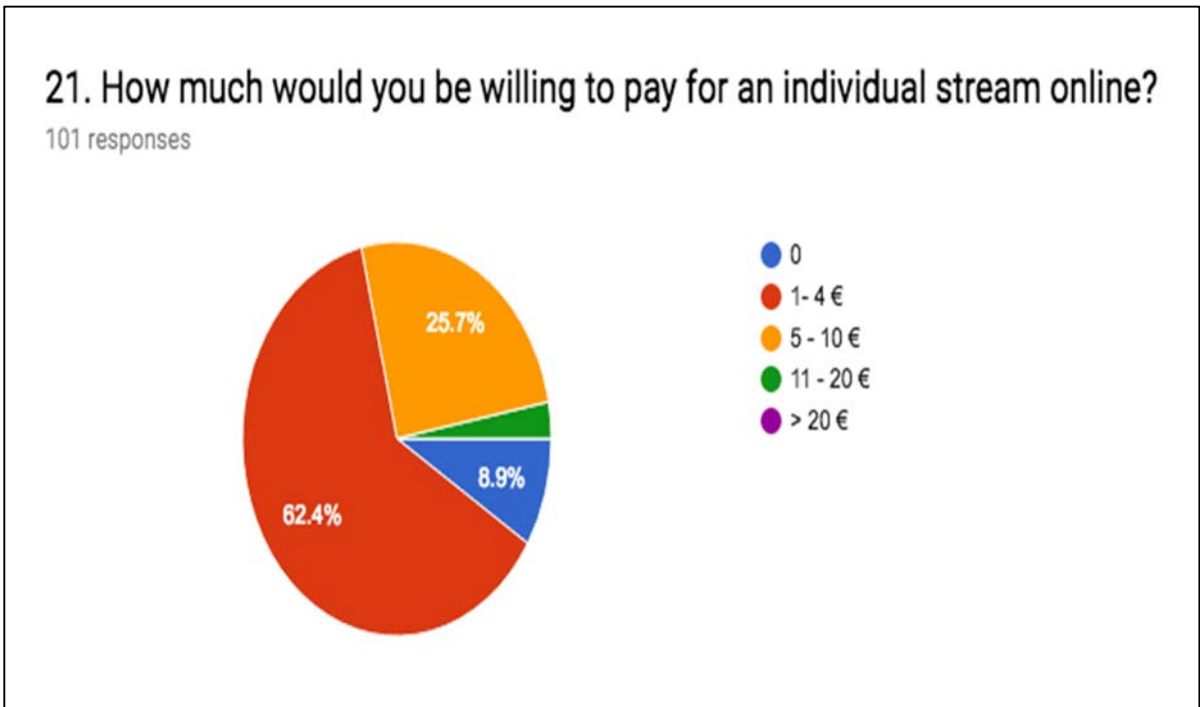
**Diagram 30.** Which of the following express the concept of digital theatre better

The data collected from the question how much you would be willing to pay for an individual online stream (diagram 31), 62,4% replied that they would pay 1-4€, 25,7% 5-10€ and 8,9% would not pay anything to stream. No one was willing to pay above 20€ and 3% would pay 11-20€. The lowest price 1-4€ is essential for an individual stream.

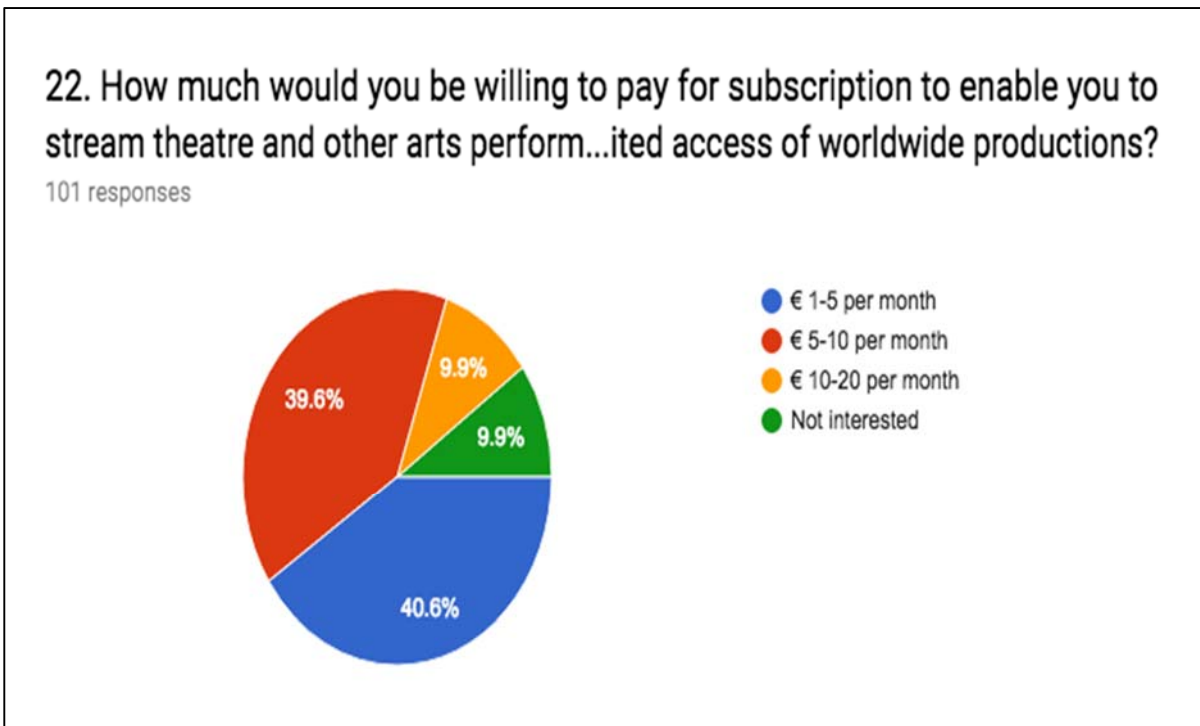
When respondents were asked (diagram 32) how much they would pay to enable them to stream theatre and other arts performances online for a monthly fee, with unlimited access to worldwide productions 40,6% stated 1-5€, 39,6% 5-10€, 9,9% 10-15€ and 9,9% are not interested in a monthly subscription with a fee.

73,3% agreed that they would try a month for free (diagram 33), which indicates peoples high intention of having an online streaming experience. 21,1% said that maybe they would try it for free and the minority 5,6% disagreed in trying it for free.

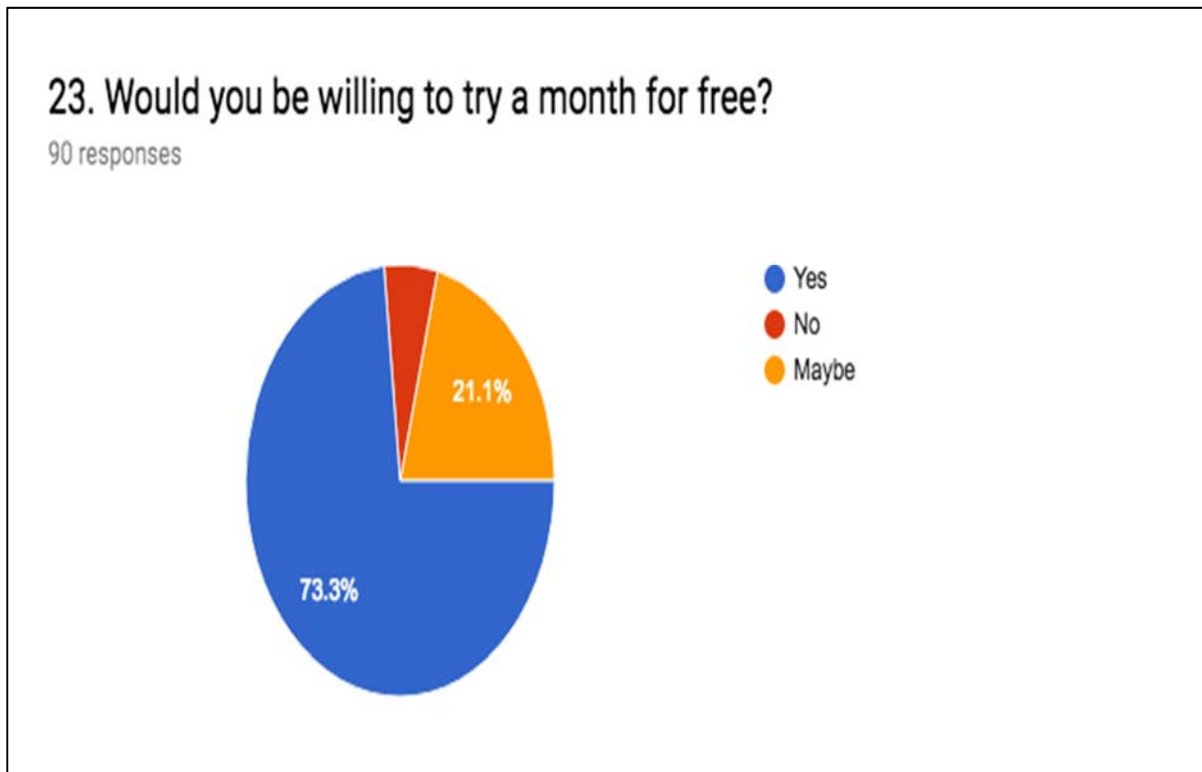
Overall charging prices can drive more audience if they are maintained in a low level, but it's also hard to name a price for a product/service that people are not aware of or have limited experience. Considering the increasing costs in theatre tickets as well as travelling costs, streaming theatre performances can be economically compelling for online users with the right pricing policy.



**Diagram 31.** How much would you be willing to pay for an individual stream online



**Diagram 32.** How much would you be willing to pay for a subscription to enable you to stream theatre and other arts performances online for a monthly fee, with unlimites access toworldwide productions.



**Diagram 33.** Would you be willing to try a month for free

## 5.4 Interviews

To inform further this study two interviews were taken after the questionnaire research from people that were willing to participate and share their expertise and opinion, in order to focus more on details of the streaming platform. The interviewees, a theatre professional and an expert in the digital marketing industry responded to several questions via Google online forms. The interviews can be found in Appendix A.2.1 and A.2.2.

### 5.4.1. Theatre Professional

The interview was addressed to Mrs. Thaleia Protonotariou, which has studied Classical Literature and Theatre Directing, and has worked as a director in theatre productions and as a manager in TV series. The questions explored further interest into the initial responses that were delivered in the questionnaire, especially around motivations for streaming, barriers for participation on both side's audience and theatre companies and finally benefits for theater producers and actors.

Mrs. Protonotariou replied positive if she would subscribe to the online platform in order to watch a streamed theatre play and the main reasons would be if there were no other way to watch the show, if the tickets were sold out and because of no time and ability to travel. When she was asked what are the barriers for not streaming: lack of information for online theatre productions, prefer live, no internet access or slow, do not know how to pay for an online theatre show, security of online payments, or nothing of the above, she definitely preferred live performances. Thaleia Protonotariou response to the question: “do you think that a platform for streaming theatre shows live or on demand will increase the audience?” was affirmative, because more projection leads to a wider audience in theatres. She believes that the benefits for an actor of streaming theatre shows will increase their audience and gain more rights in copyright. Theatre producers can benefit from acquiring commission upon each subscription to the platform and gain more publicity for their productions. Mrs. Protonotariou considers that the most important barrier for a theatre producer or company to participate in this platform would be the copyrights of the show, cast and creative team. Another barrier would be the potential loss from ticket profits and also the difficulty of recording a live performance for streaming purposes.

It's obvious that the results from the questionnaire earlier showed that people prefer a live performance and from this interview the response was similar, but the barriers are also considered important for not attending a live performance. Studies and researches aforementioned definitely show that the audience can increase with live streaming and from Mrs. Protonotariou's professional point of view she believes the same. Theatre companies and actors can benefit from this platform but can also lose if there is no successful business model for them.

#### **5.4.2. Digital Marketing Expert**

In order to generate more depth around the financial costs and technical support for this platform the interview was addressed to a digital marketing company in Greece. 7 questions were answered out of 11, not the desired response, but still give basic insight on the survey. According to Alexandros Kokkolis manager of the company [www.sem-wizard.com](http://www.sem-wizard.com) (search engine marketing) he believes the estimated time to develop an online streaming platform is six months, the cost of development and hosting would be 50.000€ and the marketing and promotion 3.000€ per month, with a minimum six month campaign. To support such a platform it will need at least six staff members,

including translators. A page 100kb can load in 1". The basic plugins it will require are players for video and audio. The reply to the question: "What is the most important struggle for the streaming platform?" is the concurrent streaming combined with server capacity. The questions how can a signing avatar be designed, if is there an online signing language, what will a radio show require and how big will the pages be according to time loading factor, were not answered. Overall the development of the platform requires a high budget, which should be included in the business plan of the company.

# Chapter 6

## Conclusions

In this chapter of the master thesis we present the conclusions from the research. Furthermore we will explain what is lacking from this research and why it requires extra analysis. Also we will refer to what other features can be subjoined to the streaming platform in future time. Additionally recommendations are made to introduce the project in the market.

### **6.1 Demand of findings for Streaming Live Performances**

When the research began it was surprising to see several online theatre streaming platforms, while most of them come from big theatre companies, such as Broadway, Stratford, Globe Theatre. The report confirms that there is a high inclination in the sector of streaming theatre performances, which can create a new era of digital experience considering the current economic climate.

Digital Theatre's website specializes in the creation and distribution of high definition theatrical productions and works with multiple theatre companies in England, using multiple angles, high definition cameras to capture the plays onscreen. Additionally Digital Theatre Plus offers students and institutions educational resources and material. Stratford Festival platform belongs to the largest theatre company in North America and gives emphasis in Shakespeare plays. Through their platform users can book and buy tickets and check the calendar for available dates of plays. BroadwayHD offers the audience pure live streaming shows of Broadway. Shakespeare plays can be streamed on Globe Player TV. The platform also provides a feature called Globe-to-Globe which is a festival of plays, from different nations, who perform in their own language

Shakespeare's stories in the Globe theatre. Cennarium is the first global producer, distributor and exhibitor of audiovisual content and offers companies a 20%-to-40% commission upon every view of their performances watched through their platform. They provide corporate and librarian plans and a detailed form can be submitted online for theatre producers and filmmakers in order to distribute their content on Cennarium. Kanopy is an on-demand streaming video service where users can access public libraries, educational institutions and watch films with a subscription. The platform offers streaming for free with a library card for students, members and professors.

Each one of the above platforms is unique in their features and all of them distribute online their theatre productions apart from Cennarium, which has a wide variety of shows and genres, like Stand Up Comedy, Magic, Concerts and Circus from different producers. Only Digital theatre Plus, Kanopy and Cennarium provide educational plans. Cennarium is the only one that features productions from various theaters, but is limited still in the English market. The advantages of these platforms are that they retain full control of production rights, distribution, ticketing, monetization, membership and C.R.M. (customer relationship management) <sup>32</sup>. The drawback is that they need a higher volume of content to acquire a compelling service and attract more audience. Therefore this research studies the design of a platform that brings a new concept in the market, streaming theatre plays from all the over the world. The advantages would be an aggregated audience with cross-promotional benefit. On the other side there are disadvantages such as revenue share and the lack of power of productions rights that can affect sales.

The literature reviews in this research show that there is a growing demand in streaming live theatre, distributing and expanding to new audiences. NESTA (National Endowment for Science, Technology and the Arts) gained high impact in their use of content and grew a larger digital audience comparing to other organizations. Their researches provide a profound amount on how viewers engage with art online. National Theatre Live (NTL) was launched in 2009 and understood early that digital technology in the theatre industry can have vast prospects. According to MTM London (a research

---

<sup>32</sup> C.R.M. refers to practices, strategies that companies apply in order to analyze data and customers interaction, hence improve customer service relationships, retain customers and drive sales growth.

and strategy company) confirms the online engagement through digital media with arts, which augments instead of replaces the live experience.

The key findings from the questionnaire indicate that, from the sample taken, people are willing to engage in streaming theatre productions, even though a big percentage believe that live performances lead the way in consumption, despite the barriers they encounter (time, ticketing, travelling costs) for attending a live performance. It's prevalent from the questionnaire that 88% proportion has not experienced or perhaps never heard of streaming an online theatre production. People are not aware of content online and would be willing to stream upon subscription, if there would be no opportunity to attend otherwise. Experiencing a live theatre performance cannot be replaced. Not everyone is a digital audience, but digital engagement ensues to tribute to live engagement rather than turn out to be a substitute.

According to the template [www.theatrestage.weebly.com](http://www.theatrestage.weebly.com) people were asked for their opinion regarding the importance of several features and the content of the platform. Generally all the filters received an affirmative response and are considered important for users search. Regarding the content of the website audience demonstrate different characteristics in their preferences, others are more passionate about certain content and others less, thus the menu needs to serve a variety of content.

The data selected from the questionnaire fosters a limited response in how people can engage in the platform. However to examine further and in depth, the questionnaire should obtain data from a stronger sample above 2000 participants in Greece and Cyprus and participants worldwide. With this number of participants the result can be safer. Also actors, theatre companies in Greece and abroad should be interviewed to have a full coverage of their perception of streaming theatre productions. The websites template could give a stronger indication on how the interface would be and operate, if it was complete and ready to be hosted online. If some basic features would be activated then the audience would have the chance to use it and give a thorough feedback, in order to have a better view on their preferences and what works better for the website and users. To achieve this a budget is required, hence the project remains at a conceptual level.



## 6.2 Further Recommendations

In order to reach a bigger audience and grow the websites performance in the network, it should use affiliate marketing. Affiliate marketing is when a product or service is recommended to potential consumers via an affiliate website, which contains details-reviews about the product, service and links to the advertiser's page via an affiliate link. The platform can connect with bloggers that write critics about theatre productions, city guide websites, theatre company websites, news portals, and ticketing websites to create an affiliate network.

Global reach is very significant for the website, thus it should have a wide variety of opera and ballet productions since they travel better internationally than a theatre play, due to language and culture differences. Also live-ness is an important factor to engage the audience and create a premium event feeling for them. Sold out shows have higher potential in audience's preferences, hence a sold out show viewed at home can service a wider audience. Showcasing productions with big star actors is a good promotion for the website, but not always essential as the production and quality of streaming.

Audience need high quality to engage is such a platform. Costs can vary for theatre producers in order to record their theatre play to be suitable for paid online services. Big theatre companies in Greece such as Onassis Culture Center and I.M.E. Hellenic Culture Foundation have their own in house equipment, but other small theatres cannot bare the costs of kit for online streaming. There could be various production models for online streaming. A convenient way to deliver a high tech production online would be to rely on outsourcing the technical support. Small organizations could rely on external support entirely, or if they have the skills in house they could. Small size companies over time can train their staff or hire new people. Regarding large size organizations if they afford in house production managers for this kind of projects, then they would need suppliers for technical skills and equipment, or if they provide full in house managing with equipment then the support will be limited. Consequently theatre organizations need an additional budget to fund video productions. Digital content should be included in the core of every production budget. The funding models could consist of Core Budgets, Public Funding, Producer Funding and Private Funding. Low size companies should look for online distributors that can bring them audience, focus on strategies and partnerships. Creating challenging content that is worth streaming is fundamental for

any size of company and should not be regarded as an afterthought, but more built in from the beginning. Using six or eight high definition cameras in the theatre to capture all angles and the sound are very important, rather than using one or two cameras, where the audience cannot enjoy the full action. Changing the mindset of the staff and theatre producers to go digital, expand their audiences and generate new income is essential.

Theatre companies especially in Greece are currently undergoing a recession. Digital technology can play a vital role in how the theatre audience can experience a new interface with theatre. This requires support and systems should assist with funds. The Ministry of Culture and Sports should perceive the importance of streaming theatre and make Greek productions reach audience, internationally, nationally, rural, students in primary, secondary, college and university, disabled, older, younger, and for those who the tickets are not affordable. The Ministry Of Culture and Sports should focus on the dissemination of Greek theatre worldwide in a new way of art form and increase the dynamic of culture tourism for the country. The challenges for theatre companies are multiple in entering this kind of market and official authorities should break the barriers of costs, lack of staff, and investment. A funding program should be planned for the development of a third party website and mobile application for streaming live and on demand theatre content. It's also essential in funding opportunities for theatre companies to overcome hurdles, to be able to develop productions with better technology and distribute theatre plays to gain more economic value. This new form of theatre interface can create new opportunities for performers, directors, producers and companies and bring a new culture in the traditional theatrical form.

### **6.3 Future Integrations on the proposed Platform**

Overall the research generates insights into the benefits of the conceptual design of the streaming platform, though more features can be integrated to serve a bigger audience and enrich the menu.

Hologram shows are getting more popular and being intergrated in theatre plays.A 7D hologram<sup>33</sup> is a method for capturing a high quality hologram using 7 dimensions. The hologram is a photographic recording of a light field and it's used to display a fully three dimensionalimage of the subject, which is visible without special glasses or intermediate optics.Companies with the aid of 7D technology project enormous sizes of animals that someone would see at the zoo and the experience is so realistic as it would be live. Theatre productions with holograms can be included in the menu of the website.

Live streaming a zoo is not so popular worldwide, but there are existing platforms that use live webcams to provide a tour with multiple views of various animal habitatslike in the zoo of Houston, Seattle, San Diego, Budapest, Edinburgh, Prague, Chester. Live streams of zoo's can be inserted in the menu of thisplatform.

---

<sup>33</sup> The universe exists in 3D space. A 7D hologram has many dimensions because the hologram is captured from a large number of positions that surround the scene or subject of the hologram.Each position captures various directions in 2D space. Two more parameters are captured for each direction: image intensity and time. Adding them up are 7 parameters, known as dimensions.

# Bibliography-Website References

1. ABRAMSON, D., CASALE, L., DURSKI, A., ELLIS, E., PRINICIPAL, REIDY, B. K., SCHUTT, B. and THROSBY, D. (2016) From Live-To-Digital Understanding The Impact Of Digital Developments In Theatre On Audiences, Production And Distribution. *AEA Consulting for Arts Council England, UK Theatre and Society of London Theatre*.
2. BRAZANTI, C., DEVLIN, G., DIX, A., LEWIS, B. and NAYLOR, R. (2016) Analyses Of Theatre In England. *Arts Council England: Final Report by BOP Consulting & Graham Devlin Associates*.
3. BroadwayHD (2017) [Online] Available from: <https://www.broadwayhd.com>. [Retrieved: 3rd March 2018]
4. CS Blog, Live Zoo Cam. (2018) [Online] Available from: <https://camstreamer.com/blog/streaming-as-an-online-zoo-phenomenon>. [Retrieved: 25th August 2018]
5. Cennarium. [Online] Available from: <https://www.cennarium.com>. [Retrieved: 3rd March 2018]
6. DAVID, N.G. (2018) U.S. Households With Paid Streaming Service Surged 450% In Less Than A Decade, Study Says. *Los Angeles Times*. [Online] Available from: <http://www.latimes.com/business/hollywood/la-fi-ct-digital-media-report-deloitte-20180320-story.html>. [Retrieved: 10th March 2018]
7. Digital Theatre. [Online] Available from: <https://www.digitaltheatre.com/consumer>. [Retrieved: 3rd March 2018]
8. DIXON, S. (2007) *Digital Performance: A History Of New Media In Theater, Dance, Performance Art, And Installation*. London, England: The MIT Press Cambridge Massachusette.
9. Drama online. (2018) [Online] Available from: <http://www.dramaonlinelibrary.com/>. [Retrieved: 2nd March 2018]

10. ELLIS, K., KENT, M., LOCKE, K., and MERCHANT, M. (2016) Accessing Subscription Video On Demand: A study of disability and streaming television in Australia. Curtin University. *Australian Communications Consumer Action Network*. p.7,8.
11. ELLIS, R., & CORN, E. (2015) Exploring The Market For Live-to-Digital Arts. *MTM London, Riverside Studios and HOME*.
12. GAVALDA, M. (2018) *Beginner's Guide To Website Speed Optimization*. [Online] Available from: <https://kinsta.com/learn/page-speed/>. [Retrieved: 22<sup>nd</sup> July 2018]
13. SCHROER, J. W. *Generations X, Y, Z, AND THE OTHERS*. [Online] Available from: <http://socialmarketing.org/archives/generations-xy-z-and-the-others/>. [Retrieved: 10<sup>th</sup> March 2018]
14. Greek Movies. [Online] Available from: <http://greek-movies.com/>. [Retrieved: 2<sup>nd</sup> March 2018]
15. Greek Theatrical Evenings. [Online] Available from: <http://greek-theatrical-evenings.blogspot.gr/>. [Retrieved: 28<sup>th</sup> February 2018]
16. 7D Hologram. [Online] Available from: <https://simplicable.com/new/7d-hologram>. [Retrieved: 25<sup>th</sup> August 2018]
17. Houston Zoo. [Online] Available from: <https://www.houstonzoo.org/meet-the-animals/giraffe-barn-cam/>. [Retrieved: 25<sup>th</sup> August 2018]
18. Kanopy. [Online] Available from: <https://www.kanopystreaming.com>. [Retrieved: 3<sup>rd</sup> March 2018]
19. MASURA, N.L. (2007) *Digital Theatre: A 'live' and mediated art form expanding perceptions of body, place, and community* (Director of Graduate Studies, Dr. Franklin, J. Hildy, Department of Theatre). University of Maryland. p. 343- 349.
20. MEEHAN, M. (2016) *All About Cennarium: Netflix for the Performing Arts*. AXS. [Online] Available from: <https://www.axs.com/all-about-cennarium-netflix-for-the-performing-arts-108698>. [Retrieved: 10<sup>th</sup> March 2018]

21. MELLOR, C. (2011) Live Streaming: see the potential in putting your performances online. *The Guardian*. [Online] Available from: <https://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2011/dec/16/live-streamed-theatre>. [Retrieved: 10th March 2018]
22. ESPIRITU, A. S. RABA, (2014) *FINAL PROJECT: Netflix and Video Streaming: The remediation of the video rental store into the consumer's home*. [Online] Available from: <https://blogs.commonsgorgetown.edu/cctp-748-fall2014/2014/04/22/notes-for-class-discussion-netflix-and-movie-streaming>. [Retrieved: 6th March 2018]
23. National Theatre. [Online] Available from: <https://www.nationaltheatre.org.uk>. [Retrieved: 3rd March 2018]
24. NESTA, (2014) *Research Finds That National Theatre Live Has No Negative Impact On Regional Theatre Going*. [Online] Available from: <https://www.nesta.org.uk/news/research-finds-nationaltheatre-live-has-no-negative-impact-regional-theatre-going>. [Retrieved: 5th March 2018]
25. National Theatre, (2008) [Online] Available from: <http://www.nt-archive.gr/plays.aspx>. [Retrieved: 3rd March 2018]
26. Oxford Dictionaries, (2018) [Online] Available from: <https://en.oxforddictionaries.com/definition/theatre>. [Retrieved: 26th February 2018]
27. Onassis Culture Center, (2018) [Online] Available from: <https://ion.sgt.gr/ion-live-streaming?lang=gr>. [Retrieved: 1<sup>st</sup> February 2018]
28. Onassis Culture Center, (2018) [Online] Available from: <https://vakxes.sgt.gr/?lang=gr>. [Retrieved: 25<sup>th</sup> March 2018]
29. Open Online Theatre, [Online] Available from: <http://www.openonlinetheatre.org>. [Retrieved: 2nd March 2018]
30. PETTAS, V. (2017) Το Ραδιοφωνικό Θέατρο Επιστρέφει Στην ΕΡΤ. *Tetartopress*. [Online] Available from: <http://tetartopress.gr/to-radiofoniko-theatro-epistrefi-stin-ert/>. [Retrieved: 28<sup>th</sup> February 2018]
31. Press Association, (2014) Shakespeare On Demand: Globe theatre launches digital player. *The Guardian*. [Online] Available from: <https://www.theguardian.com/culture/2014/nov/04/shakespeare-on-demand>. [Retrieved: 10th March 2018]
32. Pilot Theatre, [Online] Available from: <http://pilot-theatre.com>. [Retrieved: 3rd March 2018]

33. RICHARDSON, J. M. (2015) Live Theatre In the age Of Digital Technology: “Digital habitus’ and the youth live theatre audience”. *Participations, Journal of Audience & Reception Studies*. Issue 1, Volume 12, University of Calgary, Canada. [Online] Available from: <http://www.participations.org/Volume%2012/Issue%201/13.pdf>. [Retrieved: 3rd March 2018]
34. RICHARDSON, L., & Visser, J. (2013) Digital Engagement In Culture, Heritage And The Arts. [Online] Available from: [http://digitalengagementframework.com/digenfra3/wp-content/uploads/2016/02/Digital\\_engagement\\_in\\_culture\\_heritage\\_and\\_the\\_arts.pdf](http://digitalengagementframework.com/digenfra3/wp-content/uploads/2016/02/Digital_engagement_in_culture_heritage_and_the_arts.pdf). [Retrieved: 3rd March 2018]
35. Dr. RUDMAN, H. (2010) *Digital Audiences: Engagement With Arts And Culture Online*. Rudman: Consulting: Digital Transformation. [Online] Available from: <https://www.hannahrudman.com/2010/12/digital-audiences-engagement-with-arts-and-culture-online/>. [Retrieved: 6th March 2018]
36. SANDERSON, D. (2017) Streaming Service Launched In The West End As Theatres Seeks New Audiences. *The Times*. [Online] Available from: <https://www.thetimes.co.uk/article/streaming-service-launched-in-the-west-end-as-theatres-seek-new-audiences-9wts0d330>. [Retrieved: 3rd March 2018]
37. San Diego Zoo, [Online] Available from: <http://animals.sandiegozoo.org/>. [Retrieved: 25th August 2018]
38. SHAW, D. (2012) Digital Drama: The Technology Transforming Theatre. *BBC* [Online] Available from: <http://www.bbc.com/news/technology-17079364>. [Retrieved: 26th February 2018]
39. SOLOSKI, A. (2011) No Actors. Just Robots. Call This A Play? *The Guardian*. [Online] Available from: <https://www.theguardian.com/stage/theatreblog/2011/jan/28/no-actors-robots-play-theatre>. [Retrieved: 29th February 2018]
40. Stratford Festival. [Online] Available from: <https://www.stratfordfestival.ca>. [Retrieved: 3rd March 2018]
41. Telematic Performance. [Online] Available from: [https://en.wikipedia.org/wiki/Telematic\\_performance](https://en.wikipedia.org/wiki/Telematic_performance). [Retrieved: 28th February 2018]
42. Theatre. [Online] Available from: <https://en.oxforddictionaries.com/definition/theatre>. [Retrieved: 26th February 2018]

43. TSATSARAGOU, C. (2017) *Ένα Βράδυ Στο Θέατρο Από Τον Καναπέ*. Tospirto.net. [Online] Available from: <http://tospirto.net/column/opinions/31957>. [Retrieved: 15th February 2018]
44. Weebly. [Online] Available from: <https://www.weebly.com>
45. Ancient Greek Theatre. (2018) Wikipedia. [Online] Available from: [https://en.wikipedia.org/wiki/Theatre\\_of\\_ancient\\_Greece](https://en.wikipedia.org/wiki/Theatre_of_ancient_Greece). [Retrieved: 26th February 2018]
46. AsianTheatre. (2018) Wikipedia. [Online] Available from: <http://disco.teak.fi/asia/the-origins-of-asian-theatrical-traditions>. [Retrieved: 26th February 2018]
47. Ballet. (2018) Wikipedia. [Online] Available from: <https://en.wikipedia.org/wiki/Op%C3%A9ra-ballet>. [Retrieved: 26<sup>th</sup> February 2018]
48. Commedia dell'arte. (2018) Wikipedia. [Online] Available from: [https://en.wikipedia.org/wiki/Commedia\\_dell%27arte](https://en.wikipedia.org/wiki/Commedia_dell%27arte). [Retrieved: 26th February 2018]
49. Digital Theatre. (2018) Wikipedia. [Online] Available from: [https://en.wikipedia.org/wiki/Digital\\_theatre](https://en.wikipedia.org/wiki/Digital_theatre). [Retrieved: 26th February 2018]
50. Elisabethan theatre. (2018) Wikipedia. [Online] Available from: <https://www.mytheatro.gr/elisavetiano-theatro>. [Retrieved: 26th February 2018]
51. Musical Theatre. (2018) Wikipedia. [Online] Available from: [https://en.wikipedia.org/wiki/Musical\\_theatre](https://en.wikipedia.org/wiki/Musical_theatre). [Retrieved: 26th February 2018]
52. Russian Theatre. (2018) Wikipedia. [Online] Available from: [http://russia-ic.com/culture\\_art/theatre/158/](http://russia-ic.com/culture_art/theatre/158/). [Retrieved: 26th February 2018]
53. WALMSLEY, B. (2016) *From Arts Marketing to Audience Enrichment: How digital engagement can deepen and democratize artistic exchange with audiences*. School of Performances and Culture Industries, University of Leeds Poetics 58, p.66-78.



# Appendix A

## Questionnaire

### A.1 Questionnaire

Ερωτηματολόγιο για Streaming Theatre Shows Live or On-demand

Αγαπητοί/ές φοιτητές/ήτριες,

Στο πλαίσιο της εκπόνησης της μεταπτυχιακής μου διατριβής έχω διαμορφώσει ένα ερωτηματολόγιο για Streaming Theatre Shows Live or On-demand.

Η βοήθεια σας στην ολοκλήρωση της έρευνάς μου είναι αποφασιστικής σημασίας και συνίσταται στην συμπλήρωση του συγκεκριμένου ερωτηματολογίου. Η συμμετοχή σας είναι ανώνυμη και τα δεδομένα που θα συλλεχθούν θα αξιοποιηθούν αποκλειστικά για τους παραπάνω σκοπούς.

Σας ευχαριστώ εκ των προτέρων για τη συνεργασία σας,

Με εκτίμηση,

Λαμπρινή Τόλη

**\* Required**

1. Gender \*

Male

Female

2. Age \*

18-24

25-34

35-44

45-54

55-64

65+

3. Studies \*

- Bachelor
- Master
- PhD
- Other

4. Do you live in a capital or province? \*

- Capitol
- Province

5. Employment Status \*

- Full-time parent / caretaker
- Employed
- Unemployed
- Retired

6. How often do you use online streaming platforms to listen to music or watch movies?

- Never
- Sometimes
- Daily
- Regular

7. How do you get informed of theatre productions, tickets, locations etc.?

- Known websites
- Phone apps
- Offline marketing
- Emails
- Facebook
- Twitter

Live Performances

8. How many times have you attended live theatre performances in the past 12 months?

- None

- 1 time
- 2-5 times
- 6-11 times
- 12+ times

9. Barriers for not attending a live theatre performance?

- The tickets cost too much
- You cannot get tickets (sold out)
- You do not have time to go to a live event
- Disability or accompanying someone who is a disabled
- Travelling costs (parking, petrol, airfares)
- Do not live near a theatre
- My friends cannot afford to go a theatre show
- Other:

10. With how many people did you attend your most recent theatre event?

- 0
- 1 person
- 2-4 persons
- 5 or more persons

11. Over the past 12 months, approximately how much did you pay on average for each ticket to attend a live theatre performance?

- 1 -10€
- 11 - 20€
- 21 - 30€
- 31 - 40€
- Above 41€

#### Streaming Theatre Shows

12. Have you ever used streaming for theatre shows?

- Yes
- No

Other:

13. Would you pay to watch a streaming theatre performance?

Yes

No

Maybe

14. Would you prefer live or streamed theatre productions?

Live

Streamed

Both

None

Other:

15. Would you subscribe to an online platform to watch theatre productions worldwide?

Yes

No

Maybe

16. Why would you view a streaming theatre performance online?

If there would have been no opportunity to attend live the performance

If the performance is an exclusive one that would have been unavailable any other way

If the live event tickets are sold out

If streaming theatre performances is cheaper

Convenience of home

Cheaper to stream than buy a ticket

Cost too much to get to the venue

With one subscription many participants

None

Other:

#### 17. Barriers of online streaming theatre productions

Unaware of content online

Prefer live theatre experience

Internet access is too slow / non-existent

Do not know how to pay for content I want to view

Security of online payments

Privacy (i.e. administrators and hackers may know my preferences)

None

Other:

#### 18. Rate the following search filters to find a theatre show. By Continent

not important

1

2

3

4

5

important

By Genre:

not important

1

20

30

40

50

important

By Year:

not important

10

20

30

40

50

important

By actor:

not important

10

20

30

40

50

important

Subtitles -Translated

not important

1○

2○

3○

4○

5○

important

Most Popular: By Genre - By stars

not important

1○

2○

3○

4○

5○

important

19. Rate the importance of following content? (link predesign:  
<https://theaterstage.weebly.com>) Interviews with cast

not important

1○

2○

3○

4○

5○

important

Backstage videos:

not important

1

2

3

4

5

important

Documentary about the play sent before the performance

not important

1

2

3

4

5

important

Ratings from online viewers

not important

1

2

3

4

5

important



Discounts or offers

not important

1

2

3

4

5

important

News related to the theatre industry

not important

1

2

3

4

5

important

20. Which of the following express the concept of digital theatre better?

- It's is a new way of artform
- It gave me a sense of what experiencing it live in a theatre would be like
- It's exciting
- It's not as engaging as a live performance
- It will attract new audiences (younger, older, international, disabilities, etc.)
- It will serve the education sector

Other:

21. How much would you be willing to pay for an individual stream online?

0

1- 4 €

5 - 10 €

11 - 20 €

> 20 €

22. How much would you be willing to pay for subscription to enable you to stream theatre and other arts performances online for a monthly fee with unlimited access of worldwide productions?

€ 1-5 per month

€ 5-10 per month

€ 10-20 per month

Not interested

23. Would you be willing to try a month for free?

Yes

No

Maybe

## **A.2 Interviews**

### **A.2.1. Questionnaire for Theatre Industry**

Streaming Theatre Shows Live or On-demand

Στο πλαίσιο της εκπόνησης της μεταπτυχιακής μου διατριβής έχω διαμορφώσει ένα ερωτηματολόγιο για Streaming Theatre Shows Live or On-demand.

link:<https://theaterstage.weebly.com/>

Η βοήθεια σας στην ολοκλήρωση της έρευνάς μου είναι αποφασιστικής σημασίας και συνίσταται στην συμπλήρωση του συγκεκριμένου ερωτηματολογίου. Η συμμετοχή σας είναι ανώνυμη και τα δεδομένα που θα συλλεχθούν θα αξιοποιηθούν αποκλειστικά για τους παραπάνω σκοπούς.

Σας ευχαριστώ εκ των προτέρων για τη συνεργασία σας,

Με εκτίμηση,

Λαμπρινή Τόλη

Όνομα, Επώνυμο, Σύντομο Βιογραφικό

Θάλεια Πρωτονοταρίου. Σπουδές: Κλασική Φιλολογία, Σκηνοθεσία Θεάτρου. Έχω δουλέψει στο θέατρο ως σκηνοθέτης και στις εκδόσεις ως υπεύθυνη σειρών.

1. Θα κάνετε εγγραφή για να έχετε τη δυνατότητα να παρακολουθείτε παγκόσμιες παραστάσεις όνлайн επί πληρωμή;
  - Ναι
  - Όχι
  - Άλλο
2. Για ποιους λόγους θα προτιμούσατε να παρακολουθήσετε μια παράσταση όνлайн;
  - Αν δεν υπήρχε δυνατότητα να δείτε την παράσταση διαφορετικά
  - Αν ήταν sold out τα εισιτήρια
  - Αν κοστίζει λιγότερο μια streaming θεατρική παράσταση
  - Κόστος μετακίνησης στο χώρο
  - Δεν έχετε χρόνο και δυνατότητα να ταξιδέψετε
  - Με μια συνδρομή πολλοί θεατές
  - Άνεση προβολής από το σπίτι
  - Άτομο με ειδικές ανάγκες στο σπίτι
  - Άλλο
3. Ποια πιστεύετε πως είναι τα εμπόδια για να παρακολουθήσετε μια παράσταση όνлайн;
  - Έλλειψη ενημέρωσης για όνлайн στρέιμινγκ θεατρικές παραστάσεις
  - Προτιμώ το live

- Internet πρόσβαση αργή/δεν υπάρχει
  - Δε γνωρίζω πως να πληρώσω για να παρακολουθήσω μια όνλαιν θεατρική παράσταση
  - Ασφάλεια των όνλαιν πληρωμών
  - Τίποτα από τα παραπάνω
4. Πιστεύετε ότι μια πλατφόρμα για στρείμιγκ θεατρικές παραστάσεις θα αυξήσει το κοινό; [link:https://theaterstage.weebly.com/](https://theaterstage.weebly.com/)  
*Ναι, περισσότερη προβολή μεταφράζεται σε περισσότερο κοινό και στο θέατρο.*
5. Πως πιστεύετε ότι μπορεί να επωφεληθεί ένας ηθοποιός από μια τέτοια προβολή;  
*Αποκτά μεγαλύτερο κοινό, ενδεχομένως καταγράφεται η παράστασή του, κερδίζει ποσοστό πνευματικής ιδιοκτησίας.*
6. Πως πιστεύετε ότι μπορεί να επωφεληθεί ένας θεατρικός παραγωγός από μια τέτοια προβολή;  
*Παίρνοντας ποσοστό από τις εγγραφές και αποκτώντας περισσότερη διάδοση του έργου του.*
7. Ποια εμπόδια πιστεύετε υπάρχουν για έναν θεατρικό παραγωγό ή εταιρεία να μπει σε μια πλατφόρμα στρείμιγκ θεατρικές παραστάσεις;  
*Τα πνευματικά δικαιώματα είτε του έργου είτε των καλλιτεχνών είναι νομίζω το μεγαλύτερο εμπόδιο. Η πιθανή απώλεια μεγαλύτερων κερδών από τα εισητήρια. Η δυσκολία κινηματογράφησης ζωντανής παράστασης.*

### **A.2.1. Questionnaire for Digital Marketing Industry**

#### **Streaming Theatre Shows Live or On-demand Technical Requirements**

Στο πλαίσιο της εκπόνησης της μεταπτυχιακής μου διατριβής έχω διαμορφώσει ένα ερωτηματολόγιο για Streaming Theatre Shows Live or On-demand. [link:https://theaterstage.weebly.com/](https://theaterstage.weebly.com/)

Η βοήθεια σας στην ολοκλήρωση της έρευνάς μου είναι αποφασιστικής σημασίας και συνίσταται στην συμπλήρωση του συγκεκριμένου ερωτηματολογίου. Η συμμετοχή σας είναι ανώνυμη και τα δεδομένα που θα συλλεχθούν θα αξιοποιηθούν αποκλειστικά για τους παραπάνω σκοπούς.

Σας ευχαριστώ εκ των προτέρων για τη συνεργασία σας,

Με εκτίμηση,

Λαμπρινή Τόλη

1. Ποιός είναι ο εκτιμώμενος χρόνος υλοποίησης μιας τέτοιας πλατφόρμας για  
όνλαιν στρεϊμινγκ θεατρικές παραστάσεις; link: <https://theaterstage.weebly.com>  
*6 μήνες*
2. Ποιό είναι το εκτιμώμενο κόστος ανάπτυξης και φιλοξενίας της πλατφόρμας;  
*50.000€*
3. Ποιό είναι το εκτιμώμενο κόστος προώθησης και διαφήμισης;  
*Minimum 3.000€/month για τουλάχιστον 6 μήνες διάρκεια καμπάνιας.*
4. Πόσο προσωπικό θα χρειαστεί για την υποστήριξη του website;  
(συμπεριλαμβάνονται μεταφραστές-μεταγλωτιστές)  
*6 άτομα*
5. Signing avatar with handed animation will provide sign language interpretation.  
Technically how can that be designed?  
*No answer*
6. Υπάρχει μια νοηματική γλώσσα που χρησιμοποιείται όνλαιν;  
*No answer*
7. Σε πόσο χρόνο θα φορτώνει μια σελίδα 100kb;  
*1"*
8. Πόσο μεγάλες θα είναι οι σελίδες;  
*No answer*
9. Τί θα χρειαστεί για Ραδιοφωνικό Θέατρο;  
*No answer*
10. Ποιά βασικά plugins και widgets είναι απαραίτητα;  
*Players για video και audio*
11. Ποιό θεωρείται ως βασικό κίνδυνο μιας τέτοιας πλατφόρμας στρεϊμινγκ  
θεατρικές παραστάσεις;  
*Την ταυτόχρονη παρακολούθηση σε συνδυασμό με τη δυναμικότητα του server.*