VIRTUAL REALITY IN HOTEL BOOKING SYSTEM

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Undergraduate thesis / Završni rad

2020

Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj: **RIT Croatia / RIT Croatia**

Permanent link / Trajna poveznica: https://urn.nsk.hr/urn:nbn:hr:229:497614

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Download date / Datum preuzimanja: **2024-04-20**

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VIRTUAL REALITY IN HOTEL BOOKING SYSTEM

SENIOR PROJECT

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Dubrovnik, May 2020

Abstract

The purpose of this paper is find and present relevant data that would encourage owners of accommodation units of the necessity to implement virtual reality systems into their businesses and ensure that, by doing so, these business can be adapted according to current and future trends in this field and can successfully survive on the market.

The findings of this paper mostly attempted to focus on the personal impact of virtual reality as well as the existing knowledge of this phenomena.

A questionnaire represented opinions of the people which are surveyed during the data collection so that it can be seen how many positive and negative comments we have about this implementation.

KEYWORDS : virtual reality, importance, hotel booking system, positive

Introduction

Business today is very demanding and complicated. The first reason is that everyone wants to be better than others, wants to overcome their competition on the market. Those who are persistent and different will succeed in the future. There are many accommodation providers today and almost all have a clear mission and vision to become a market leader. From the years competition grows constantly very fast and it is not easy to adapt to the current trends. Trends are changing almost every single year so without following it, it is really hard to stay at the top.

The goal of this senior project is to explain importance of developing virtual reality, collect relevant informations and check what are the positive and negative experiences. The aim is to understand if this system can be influential in our country and to what extent.

As one of the most important factors in the impact of technology on the growth of hotel bookings in the hospitality zone, the main interest of the research was put on this topic. This term is very recent and is more recognizable by younger population.

According to Marxent 3d Commerce Virtual Reality is a platform that allows people through special glasses to enter into the world of what they look in the pictures. In an incredible way, it is allowed to view everything that is contained in that specific place (Joe Bardi). It simulates real places and circumstances through a computer or TV screen and makes an impression of the real situation. The kit that this imaginary thing contains consists of 3d glasses through our view is becoming realistic. This principle has been booming in a lot of segments. It is introduced in the military, medicine, education, sport, and design. In addition to those segments, it eventually began implemented in the tourism industry especially in the hotel booking system (currently in

China) and it is expected to expand worldwide. It is something that is real, that exists and apparently allows to see but in an unrealistic world.

It is clear that with the usage of this platform people can explore cities, streets, amenities, etc. Some companies have implemented this system. For an example, there is a site adrialece.hr (our Croatian brand) that is selling sunglasses, glasses, and lenses. All clients are allowed to view how certain models fits. That system is trying to persuade to buy immediately.

When it comes to virtual booking which actually is topic then it should be positive for people to ''walk'' through space from homes and make the experience. That's a way how it works. It is necessary to do it in a realistic way without additional décor because guests might be disappointed and simply not return to the facility.

This technology cannot and will never replace the real situation but it can improve the status of the company and increase its popularity. It is also important to take into consideration the costs of this. The richest companies could afford this and even become more popular and richer.

According to the research, Virtual reality has increasingly been used in tourism to engage consumers and to market and sell tourism services and products (Bogicevic, Seo). According to another research, the adoption of virtual reality started to spread to the travel and hospitality sector, including leading brands such as Carlson Rezidor, Hilton, Airbnb, Holiday Inn Express, and Vacasa (Ting, 2016). According to these two sentences, it is necessary to think about what could happen in a couple of years. Many people are not aware of what the future can bring and how all those technologies can be utilized.

The situation in which real-life scenario jump in front of the eyes, in which users can feel the atmosphere of place but not touch it is the virtual reality situation which makes sense of presence

(Deng, Unnava, Lee 2019). According to the same source virtual reality differs from other visual contents such as two-dimensional pictures or 360 images, as it possesses more interactive and vivid multi-sensory information (Van Kerrebroeck, 2017).

The main objective for the virtual reality stands for transforming and selling tourist experiences with bringing changes to the strategies that marketing offer in the tourism and hospitality industry zone (Graham, 2016). With the citation that ''global market for virtual environments (virtual reality) is expected to grow from $16.8 billion in 2019 to $160 billion in 2023, it is important to try to understand concept and way of the implementation together with meanings how virtual reality can affect consumer decision making (Statista, 2018).

The primary thing is to move forward step by step and try to become different in the whole aspects. People usually are not aware and do not care how future predictions and decisions makings can change business structure completely and bring positive experiences.

This technique forces current and future consumers to change behavior, simply the feeling is more pronounced while doing the booking.

The company goal is to make marketing strategy strengthen and certain destination with maximizing revenue.

Influence of Virtual Reality in the hotel booking system

''Not only does virtual reality technology increase time and engagement spent on hotel websites--as guests explore the look and feel of each room--but it radically increases their exposure and rankings on search engines.'' This quote from a well-known business developer (Michal Hubschmann) can automatically explain how this technology can improve booking system. It is important to understand how this is not just ''wasting time'' on these pages during the research of the hotel. It helps to gain reputation, increasing rating and popularity on booking as well as other booking sites (of course if they introduce this system).

GCH is one of the most popular hotel management companies in Germany. Best Western, Wyndham, and Radisson Blu are some of the hotels which are under that firm. Guests are offered with virtual bookings and the ability to view rooms in 360 (Michal Hubschmann).

According to Daniel Wishnia, GCH digital marketing consultant, the "wow" effect from virtual reality offers an incentive for guests to book directly through the hotel as opposed to using an OTA. This is critical for hotels that commonly pay up to 30% commission to OTA's to serve as their booking agents.

In the next few years, innovations may be the main important in order to expand this system worldwide and make it better. There is a situation in which through your smartphones or laptops it is allowed to do virtual booking without special equipment or glasses. The GCH sees virtual reality as a part of a business, useful strategy which will bring positive results and help you with achieving more profit (Michal Hubschmann).

According to the improvements in the hospitality industry, there are many ways how virtual reality can enrich all renters who are providing service to current and future guests with a new experience.

The first important thing is that in this way, many more information will be able to find with the VR system. All descriptions that are listed on the pages of various sites are not accurate, the service providers just ''add'' to their text in order to people convinced in something.

"For an example, this potentially allows customers to experience a virtual recreation of a room within a hotel, or take a look at one of the nearby attractions. Essentially, this allows the hotel industry to benefit from the type of 'try before buy' marketing that has been commonplace within the food industry for decades." (Martijn Barten).

In many situations, virtual reality has been the ''frontier'' in the booking system. This is considered as something new that has just hit the market, not introduced in many hotels which are predicted to improve productivity for all future renters.

'' The Flushing Meadows Hotel & Bar in Munich, Germany has a unique story to share. With eleven spectacular rooms all inspired and created by selected designers, musicians, artists and even a local surf legend, it is the place to stay for aficionados of good taste - and top-notch drinks.

Showcasing this attention to detail, design, and a unique "home away from home" experience to potential guests can be challenging to achieve with just words and photos alone ''.

There are many different opinions and ways about virtual reality helpfulness. According to the Silversea Media Group there are 5 which are very important for improving booking. Today guests are becoming more demanding, want to know what to expect. By the reading comments and looking pictures, it is important to feel experience and mindset should be positive.

First Long-Lasting Impressions

It is important to make the first impression phenomenal, positive in order to fulfill requests made by the guests. Through this system, it will be able to investigate expectations of certain places. Being memorable and making perfect experience is necessary for adequate operation (Silversea Media Group).

'Sticky' Content That Sends Traffic to Your Page

Knowing how to create sticky content means that you know how to manage with guests. The mission is to return guests to the site and pay more attention because of this virtual reality that is being provided. Present guests need to be retained and future gained in order to create an unforgettable experience that will remain memories forever. According to the Pew Internet and Life Study, a site with a 360-degree virtual tour will receive 40% more views than competitor's sites that are lacking in this visual media. This is a substantial amount that should not be overlooked (Silversea Media Group)

Improved Online Search Results

Hotels with virtual options are always at the top of the search. That is the popularity which put company on the top. The 360 system allows to explore a room or object within the hotel from any angle. It is mentioned that '' Virtual tours increase page views by 40% and keep visitors on-

site for three times longer- all of which does not go unnoticed by the search engine crawlers' (Silversea Media Group).

Interactive Experiences, Controlled by Customers

Experience is the main part of traveling today. If it is possible to make it positive then reviews and comments will afford the operational level. ''Virtual tours serve the most efficient way of allowing visitors to interact with your property, without being physically present''. This is a new level of interaction with objects which are offered in certain places (Silversea Media Group).

Increased Exposure and Direct Bookings

This tour can be provided via e-mail and numerous social networks like Facebook, Instagram, Twitter, etc. Guests are provided with an extensive overview of the content. It is a situation of ''new experience'' in order to ''force'' to make a reservation. The New Age Traveler stated " A hotel is not a single product. It's not just about the room — it's about the facilities, the service, and the style too. Businesses with the confidence to throw open doors to online explorers are the ones who will earn the trust of the internet-savvy traveler. Travelers of the future will be driven by experiences and a focus on value-for-money, and will interact differently with the world.'' (Silversea Media Group).

According to the digitalhotelier.com and the importance of increasing rates by using virtual reality as a tool of booking it is stated that this term is growing from day to day and the interests of people are higher every month. While doing a process of booking then it is necessary to sell an experience, not only the room. That is a part of key success nowadays because market competition is very strong and potentials are coming from every part of the world. Virtual reality

is a tasting of that experience by using it from homes in order to know what can you expect from a particular provider (Manvi).

''Thomas Cook placed a virtual reality headset in a small number of their European stores and encouraged visitors to experience snapshots of potential holiday destinations – complete with sights and sounds.''

Methodology

The mission and vision are that it is necessary to conclude how this virtual reality can offer the system that hotels offer while doing bookings. In every situation, there are positive and negative experiences that led to conflict. Before doing an investigation questionnaire is used as a method of collecting data based on different persons.

Students, as well as others, were interviewed. Most who have some kind of accommodation (according to the situation of corona-virus it was hard to reach for a person in certain places such as hotels who could do this). The point is to find common interests and introduce this modern technology to the world that everyone can check how it works. The questions are found on the internet and are modified. The division is made of 50% male population and 50% of the female population in order to better understanding situation.

This questionnaire actually concludes whether people are aware of how this technology can change business structure and increase annual revenue. The questions were arranged in such a way with multiple-choice options (more then one answer is possible). All questions are focused

on the experiences and opinions. Later in the results it is gonna to be explained what we got from.

Results

According to survey, there is 82.4% of the population between 18 and 24 years and 17.6% of the population between 24 and 30 years. As noted, the reason is the current situation of corona-virus that blocked the connection with people in older years. The female population is 64,7% and male 35.3%. When it comes to how often people travel, we come to the percentage of 35.3% which they mark as ''Usually'', the equal percentage od 35.3% which they mark as ''As more as I can''. 29.4% are those who travel only once per year. As for the virtual reality system itself, 82.4% are those who have heard of this term before, which is really impressive and shows the beautiful picture, 11.8% are those who are not and only 5.8% are unsure. This makes positive vibes and almost everyone knows what it is all about.

A very important question is about the experience. 43.8% are those who had the experience, 25% who were in the situation while someone others used it, and 31.3% of those who absolutely have no experience. Again, there are more students who have some experience and automatically make everything positive. The next question is ''How long have you been using a VR system''. Unfortunately, the percentage of 69.2% of those who have used it only for 2-3 minutes in order to explore it, 23.1% of those who have stayed for over 10 minutes, and 7.7% who are completely familiar and used it many times. 57.1% of those who are absolutely satisfied with the service being provided, 35.7% who believe that an improvement is needed and 7.2% of those who do not agree that this system is reliable and confidential. The most crucial question is ''Do you have a

clear picture of view''? As stated before, it is always necessary to be realistic without editing. 42.9% of those who think that the picture is good but that an improvement is needed, 28.6% of those who absolutely agree that picture is the excellent and same percentage of those who think the picture is blurry. In the end, the respondents stated their opinions (positive vs negative sides) and they are generally positive. Some of them are: ''Overall great, useful and educational experience'', ''It is obviously the future and it will be better and better in the future'', ''Very revolutionary'', ''Good but needs improvement''.

The conclusion is that there are more positive thoughts and experiences associated with virtual reality. The positive percentage is more pronounced than the negative. The questionnaire is effective and sends us the message that opinions should be combined to find a common interest.

Discussion & Conclusion

This research was primarily focused on trying to understand what virtual reality is, what it provides, and how it will improve hotel business in order to meet requirements. At the same beginning, it was explained from different opinions what this is and that we must be aware of the consequences.

After processing my questionnaire with the aim of trying to find a ''common opinion'' that will help me to show this paper to others the conclusion is that there are a higher number of positive thinkings than negative what makes me happy. Many of them who filled it might consider implementing this system in their accommodation types. Initially, when I started to discuss the topic, I was introduced to this term through Playstation, there is an option of adopting virtual reality in that console. The honest opinion is that some people are simply ''outdated'' but by the

development of many innovations, they can change their overall thinking and worldview. There are a number of them who sometimes have a fear of changing something, that won't push you forward at the next step.

In any case, the technological world is progressing more and more every day. I think that virtual exploration of certain destinations and bookings in hotels is likely ''coming to our life'' in the next few years (even in Croatia). There is already a virtual tourist tour of the City of Zagreb (Zagreb Time Travel) where tourists are offered with tablets in order to see the historical tour and adventure exploration of the city. Split offers a virtual tour of the Diocletian Palace, Zadar and Osijek offer city tours. That is virtual reality where a person in the real world by using applications on smartphones or laptops connecting the ''virtual and the real world''. People like to have more options in their choices in order to make better decisions. It will be available to ''walk'' in advance in the hotel, apartment, or any other amenity which is surrounded. On the other hand, there will be always a group of people who prefer the ''surprise factor'' in order to visit destinations without pre-creating impressions, even virtual ones. Whatever your opinion is, virtual booking will be introduced in the cities, travel agencies, and private renters as an option because of the increasing competition on the market daily. In order to survive, they must follow trends or be suppressed on the market.

In the near future, it can be assumed that this will be most interesting to all young generations who are addicted to new technologies.

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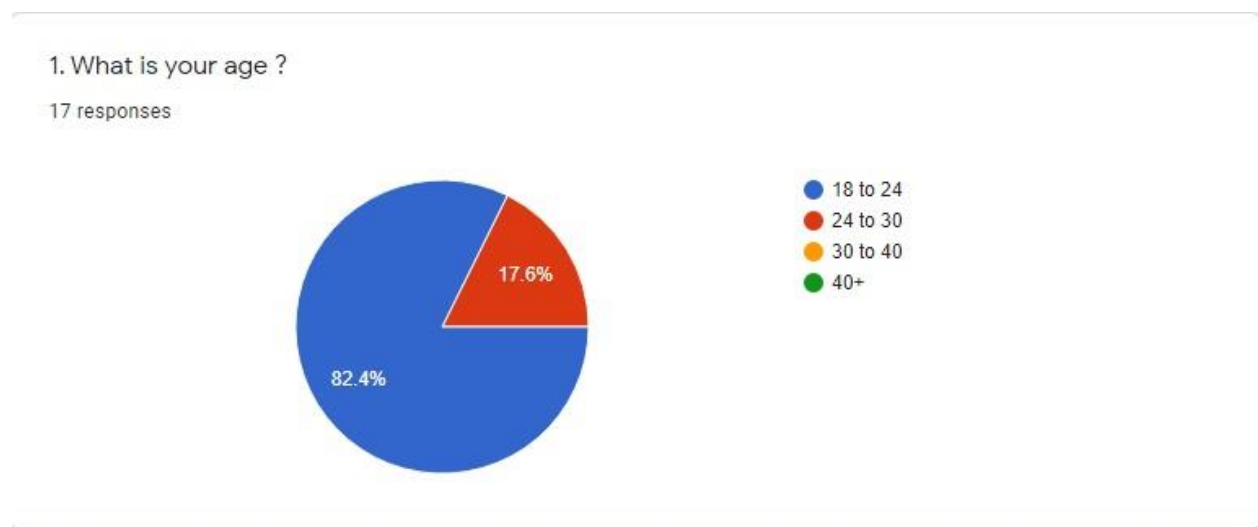
Appendix A
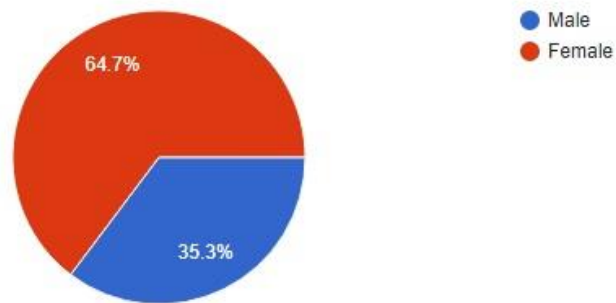
Figure 1.

Figure 2.

2. Gender Status

17 responses
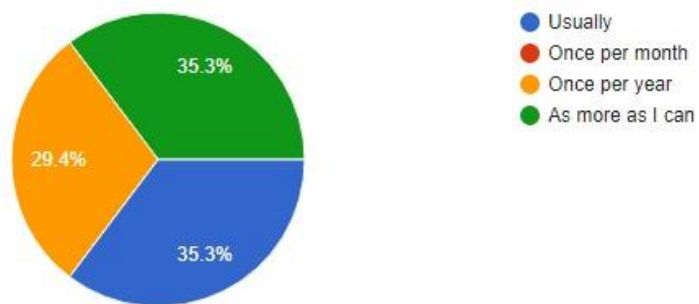

Figure 3.

3. How often do you travel ?

17 responses

Figure 4.

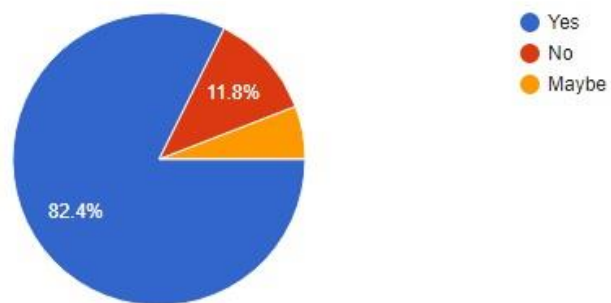## 4. Have you heard of Virtual Reality system before ?

17 responses

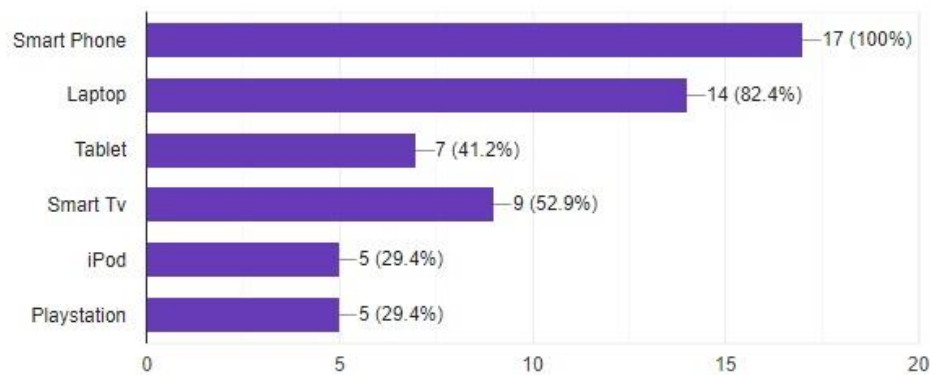Figure 5.

5. Which devices are you using ?

17 responses

Figure 6.

6. Do you have some type of experience with Virtual Reality ?
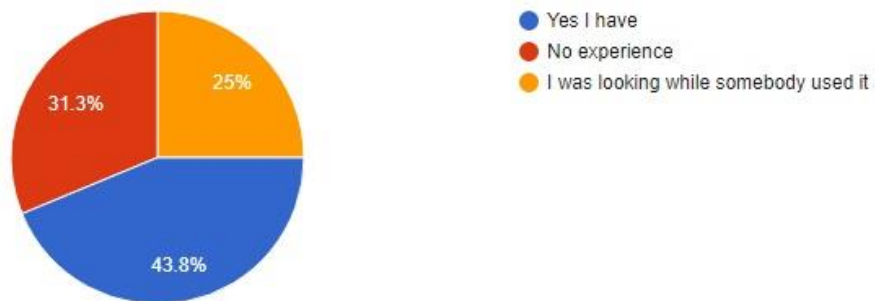
16 responses

Figure 7.

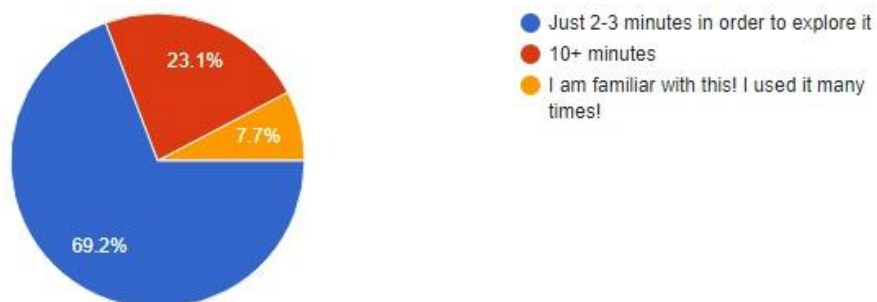7. How long did you use Virtual Reality Tour ?

13 responses

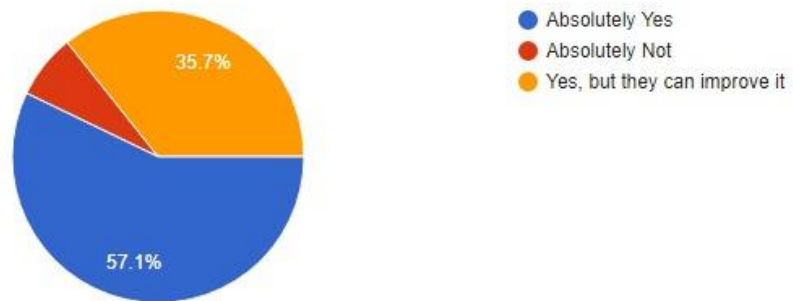Figure 8.

8. Are you satisfied with tour ?

14 responses

- Absolutely Yes
- Absolutely Not
- Yes, but they can improve it

35.7%

57.1%

Figure 9.

9. Do you have clear picture of virtual tour ?

14 responses

- Yes, picture was excellent
- No, it was dimly
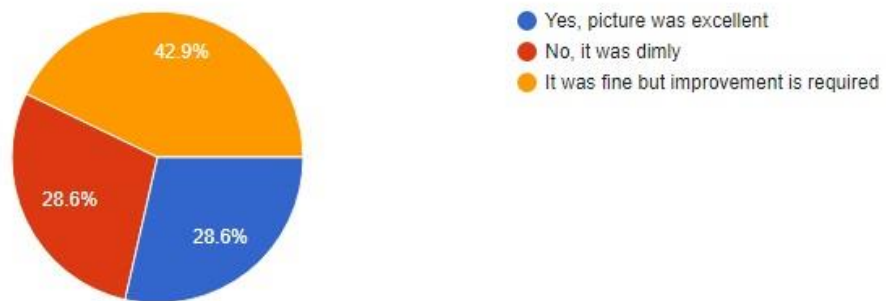- It was fine but improvement is required

42.9%

28.6%

28.6%

Figure 10.

10. What is your total opinion about this?(Positive vs Negative sides). Can you describe it into few words?

10 responses

It is good for people who want to explore places, but still prefer reality.

I did not used it so am not familiar with it, but it seems pretty cool. I would try it, as soon as I have chance.

Future adds, offers...

Overall great, useful and educative experience

I think that this is very cool because you can see 3D models of recreated historical buildings, it is also easy to use and you don't have to have any advanced technological knowledge.

Good but needs improvement.

It is obviously future and it will better and better in the future

Very revolutionary

I don't know what this is

Appendix B

Dear Participant,

My name is Benjamin Čustović. I am a senior student graduating from RIT Croatia in Dubrovnik, a global campus of Rochester Institute of Technology, based in Rochester, New York.My program is Hospitality and Service Management. In order to finish college I must make final senior project and connect it with this questionnaire. I chose topic which is related to technology, so about the virtual reality system in hotel booking system. It is all about different experiences. By the completing this questionnaire you will be help me in collecting information and data collection. Your honest answers will stay anonymous so please let be direct.

Thank you for investing your time!

If you would like to add additional information about this survey please contact me via mobile phone +385 98 9456899 or e-mail benjamin.custovic@yahoo.com or my mentor professor Zrinka Friganović Sain at zfsain@gmail.com or via mobile phone 0994411028.

Sincerely,

Benjamin

E-mail adress

_____

1. What is your age?

- 18 to 24

- 24 to 30

- 30 to 40

- 40+

- other _____

2. Gender Status

- Male

-Female

3. How often do you travel?

- Usually

- Once upon per month

- Once per year

- As more as I can

4. Have you heard of Virtual Reality system before?

- Yes

- No

-Maybe

5. Which devices are you using?

- Smart phone

- Laptop

- Tablet

- Smart TV

- iPod

- Playstation

6.Do you have some type of experience with Virtual Reality?

- Yes I have

- No experience

- I was looking while somebody used it

7. How long did you use Virtual Reality Tour?

- Just 2-3 minutes in order to explore it

- 10+ minutes

- I am familiar with this! I used it many times

8. Are you satisfied with tour?

-Absolutely yes

- Absolutely no

- Yes, but they can improve it

9. Do you have clear picture of virtual tour?

- Yes, picture was excellent

- No, It was dimly

- It was fine but improvement is required

10.What is your total opinion about that ? (Positive vs Negative) Can you describe it into few words?

_____