

Virtual reality in destination marketing

Pia Tiusanen

Master's Thesis
Degree Programme in Tourism
2017



Author Pia Tiusanen	
Degree programme Degree programme in Tourism (Master)	
Report/thesis title Virtual reality in destination marketing	Number of pages and appendix pages 76 + 15
<p>The subject of this research is virtual reality (VR), and its role in destination marketing. As a consumer technology VR is still relatively new, and as a marketing tool in the tourism industry as well. There is a large hype about VR going on right now, and next few years will eventually show how the hype develops; to the mainstream technology, or will it still stay in margin. The aim was to find out the current attitudes towards VR among tourism industry and travellers, and that way get a clue about the future of VR in the tourism branch.</p> <p>In the literature review destination marketing, the current marketing tools, virtual reality in general and also in tourism are presented. The research consists of two parts. In the first part the subject is ordinary travellers; their attitudes and opinions towards VR, and how they experience its affection to their own travel planning and destination choices. In the second part the subject is operators in the tourism industry; the tourist attractions, which are chosen to be the historical castles in Germany, and the tourism marketers, the DMOs.</p> <p>The research as a whole was conducted during July-August 2017. A questionnaire for travellers was shared in researcher's own Facebook page, and in addition 18 people shared in forward in their own Facebook pages. Altogether 123 answers was received. In the e-mail interview for industry operators the number of answerers was left to two, one castle and one DMO. The results will be presented as expert interviews.</p> <p>The research managed to answer to the research questions, so it can be considered as successful. There is a clear interest towards VR among travellers, even though it was not yet familiar for many, and they see VR as a potential way to gain information about the destination before they travel. They were interested in actively approaching VR for information, and they feel that it could bring additional value to the planning process. However it became clear that VR could not be a substitute for the actual travelling. The industry operators were still slightly careful when considering adding VR to their promotional mix, but there was also interest and even experiments existing. A wider research among the industry operators would be in order to get a clearer picture about their thoughts.</p> <p>Based on the results it is clear that the travellers are interested in all kinds of visual information provided about the destinations; thus it is worthwhile for destination and attraction marketers to consider adding VR to their promotional mix. It can persuade the curious travellers in fair events and travel agents' offices, and ease the promotion of new destinations and attract especially the very active travellers. When the amount of VR equipment in peoples' homes will seemingly rise soon, it is a good chance for marketers to provide content for the audience. Also augmented reality possibilities intrigued both the travellers and operators, in a form of a destination information channel.</p>	
Keywords Virtual reality, marketing, destination marketing, attraction marketing, augmented reality.	

Table of contents

1	Introduction	1
2	Destination Marketing	3
2.1	Definition of Destination	3
2.1.1	Definition of attraction.....	4
2.2	What is destination marketing?	6
2.3	The key processes of destination marketing	8
2.4	Marketing tools in destination marketing	10
2.4.1	Advertising.....	11
2.4.2	Sales	13
2.4.3	Public relations and publicity	13
2.4.4	Sales promotion and merchandising	14
2.4.5	Digital marketing.....	14
2.4.5.1	Websites.....	15
2.4.5.2	E-mail	16
2.4.5.3	Social network sites.....	16
2.4.5.4	Review sites	17
2.4.5.5	Blogs	17
2.4.5.6	Mobile devices.....	18
2.5	Attraction marketing.....	19
3	Virtual reality	20
3.1	What is virtual reality?	20
3.2	How to experience virtual reality?	21
3.3	Where virtual reality is used?	23
3.4	Challenges of virtual reality	24
3.5	What is augmented reality?	25
4	Virtual reality in destination marketing	28
4.1	VR in tourism	28
4.2	What VR can offer for destination / attraction marketing?	30
4.3	What VR can offer for tourists?	32
4.4	Discussion about VR in tourism	35
5	The research.....	38
5.1	Research questions and expectations	39
5.2	Research details.....	40
5.3	The implementation of the research and methods	41
5.4	The form of the questionnaire and interview blanket.....	42
5.5	The samples	43
5.6	The processing of the results	44

5.7	Reliability and validity	45
7	The results	47
7.1	Part 1: The travellers	47
7.1.1	The background of the participants	47
7.1.2	Virtual and augmented reality questions	51
7.2	Part 2: The industry operators	57
7.2.1	Interview of a castle marketer	58
7.2.2	Interview of a DMO representative	59
8	Discussion	60
8.1	Reliability and validity	66
9	Conclusion	69
	References	72
	Appendix 1. The questionnaire for travellers	1
	Appendix 2. The interview questions for attractions and DMOs	7
	Appendix 3. Open answers to the questionnaire's question number 16.....	10
	Appendix 4. Open answers to the questionnaire's question number 17.....	12

1 Introduction

The subject of this research is virtual reality, and its role in destination marketing. This subject has been chosen since as a consumer technology VR is still relatively new, and as a marketing tool in the tourism industry as well. As can be seen from the becoming chapters, there is a large hype about VR going on right now. Next few years will eventually show how the hype develops; to the mainstream technology that “everybody” uses, or will it still stay in margin. This research will try to find out the current attitudes towards VR among tourism industry and travellers, and that way get a clue about the future of VR in the tourism branch.

The aim of this research is to find out how these subjects in tourism industry see this new technology, VR, and its possibilities. Are the travellers familiar with the possibilities of VR and can they imagine to use it in their travel planning, or imagine that it will have some affection to their destination choices – or if they are using it already, has it provided added value to for them, or perhaps changed their opinions when choosing a destination? Can the marketers imagine involving it to their marketing strategy in the future - and if they are already doing it, do they feel that it has provided added value for them?

The first part of this report consists of a literature review, where destination marketing, the current marketing tools, virtual reality in general and also in tourism are presented. In the research part the research is presented; the methods, the process, and how to estimate the reliability of the research. In the results part the results of the research are presented. Lastly, the results are estimated and discussed, and conclusions and future suggestions for the industry are presented.

The research itself consists of two parts. In the first part the subject is ordinary travellers, and their attitudes and opinions towards VR, and how they experience its affection to their own travel planning and travel destinations, now and in the future.

In the second part the subject is operators in the tourism industry; the tourist attractions, which are chosen to be the historical castles in Germany, and the tourism marketers, the DMOs. The castles have been chosen since they are very popular and traditional tourist attractions. They have to compete from the limited amount of time of tourists with a great amount of other attractions, so effective marketing actions are necessary. Also the researcher’s personal interests have affected to the choice of this target group. The DMOs

are a natural choice since they market not only single attractions but the whole destinations, and need a good combination of different marketing techniques to make it effectively and to stay on top of the competition.

The research questions are defined as follows. In part one, the travellers, the main question is: Do travellers see the VR as a potential way to find out and gain information about the destination before they travel? In part two, the operators, the main question is: Do the operators see the VR as a potential marketing technique? Sub questions will be presented in the research part.

In this research strategy is chosen to be a survey. In the first part of the research the form of survey was a self-administered questionnaire, which was delivered in Facebook and was completed by respondents in their own time. In the second part of this research, the structured interview questions were sent to the respondents by e-mail and they could answer in their own time.

There was a desire that the results would provide general information whether the VR is really going to be the big thing in the destination marketing in the (near) future – if these kind of traditional operators are already on the move with the new technology, it tells a lot about the expected distribution of the technology. And if the travellers are really into VR, this tells a lot how the marketers should start acting with it. Also based on the results it may be possible to form some suggestions how to benefit VR in tourist destination marketing.

2 Destination Marketing

Destination marketing is a wide area, and even for destinations themselves there are plenty of descriptions to define them. Destinations should keep a wide range of marketing tools in their selection, in order to always reach, convince and also surprise both the existing and also potential customers. The competition is hard, and in order to succeed the destination marketers must be all the time awake and timely, and be ready to adopt the latest inventions of this field. The attractions are an essential part of the destinations, and the travel experience of the customer. Same rules in marketing are equally accurate for them as they are for the whole destinations.

2.1 Definition of Destination

World Tourism Organization (UNWTO) defines a destination as follows:

A Tourism Destination is a physical space with or without administrative and/or analytical boundaries in which a visitor can spend an overnight. It is the cluster (co-location) of products and services, and of activities and experiences along the tourism value chain and a basic unit of analysis of tourism. A destination incorporates various stakeholders and can network to form larger destinations. It is also intangible with its image and identity which may influence its market competitiveness. (UNWTO 2016)

Alastair M. Morrison writes in his book that to put it very simple, “a tourism destination is a geographic area that attracts visitors”. But as he continues, there is a lot more in this concept than this one simple sentence. First of all, a destination has administrative boundaries, i.e. it is a country, a state, a province, a region, a city, or so on. There is a “destination mix” offered for tourists; places for accommodation, restaurants, attractions and events. And transportation and infrastructure must be in order. In a destination marketing efforts exist to to attract tourists, and a coordinating organization structure has been created. There is a mixture of stakeholders; besides government agencies who have given the laws and regulations to control the tourism, there are private enterprises, non-profit organizations and also individuals. And last, the destination has an image in tourists’ minds, which can be accurate or inaccurate, but it exists and people have perceptions about what destination has to offer for them. (Morrison 2013, 4)

Kozak and Baloglu (2011, 79) write that “each destination management is supposed to be responsible for or representative of a particular place where any direct or indirect interaction among such elements as tourist supply (physical and human resources, products and services, tourism laws and legislation and tourism businesses), tourism demand (mass, individual, domestic or foreign tourist groups) and tourism suppliers (tour operators and travel agents) appears”.

Steven Pike writes that from the DMOs’ perspective, the destination is defined by a political boundary, such as a continent, country, state, a city etc., but reminds also that from another perspective it might be perceived differently; it could be just “a geographic space in which a cluster of tourism resources exists”. The DMOs’ definition, with boundaries, is logical for them, for the reason that DMOs receive the main funding from the governments, which in different forms collect taxes from that certain area. If the DMO is considered to be a focus of the definition, then a destination is defined to be a “geographic area represented by a DMO at which visitors, other than regular commuters, temporarily base themselves for whatever purpose”. (Pike 2016, 10-11)

So there are many descriptions to define a destination, from the “official” UNWTO definition to the ones of different authors, and even though there are small differentiations, like the one concerning the boundaries, mostly the main things stay the same in every definition.

2.1.1 Definition of attraction

As mentioned in the definition of destination, in a destination there are always stakeholders involved (Morrison 2013, 4, UNWTO 2016). These are more than just destination management organisation’s straight stakeholders; they are groups or individuals that have interest in the management of a destination for tourists, direct or indirect. Alastair M. Morrison shares the stakeholders in five groups: tourists, tourism sector organizations, community, environment and government. In these, tourists and tourism sector organizations are directly affected by the tourism in the destination, while the other three groups are more indirectly affected. However they all contribute somehow to the success of the destination in tourism industry. All the stakeholders can be further delivered to subgroups. Under the tourism sector organizations can be found for example destination management organizations (DMOs), hospitality, transport – and attractions. (Morrison 2013, 23)

Attractions are normally single units with a specific geographical position, so the differentiation between destination and attraction is important. As already mentioned above, attractions are a part of the destination, and in the destination there can exist a bunch of attractions. (Connell & Page 2011, 221)

Professor Philip Pearce, Head of the Department of Tourism in James Cook University in Australia, defined the tourist attraction as follows:

A tourist attraction is a named site with a specific human or natural feature which is the focus of visitor and management attention. (Pearce 1991, 46)

S. Medlik (1993) defines the tourist / visitor attractions as follows:

Elements of the tourist product which attract visitors and determine the choice to visit one place rather than another. Basic distinctions are between site attractions (e.g. climatic, scenic, historical) where the place itself is a major inducement for a visit, and event attractions (e.g. festivals, sporting events, trade fairs) when the event staged is the larger factor in the tourist's choice than the site; often the site and the event together combine to determine the tourist's choice. Another distinction is between natural and man-made or built attractions, as between beaches and heritage towns.

In addition to these, there are many other classifications and categorizations of attractions, depending on the author (Connell & Page 2011, 222). According to the definitions, for example a good scenery is itself not a tourist attraction, but if it is named, managed and well used it becomes one (Pearce 1991, 46). Also some definitions do not consider events as actual attractions.

Attractions differ in shapes and sizes, and they have different kinds of audiences. They can be very large, like a national park, or very small, like a small museum with a special collection interested for a limited number of enthusiasts. The physical environments vary; they can be natural environments, build environments that have been adapted for visitors, or build environments that have been designed only for visitors. (Stein 2015, 11, Connell & Page 2011, 222) What the attractions offer to the tourists naturally vary a lot as well. They can provide excitement, entertainment, awakening of memories, impression, education in form of history, culture or art. The advertising and promotions of attractions have to be adapted in terms of these; what the attraction has to offer and what are the desired target groups. (Stein 2015, 11)

Attractions are one of the essential parts of tourism, along for example with transport and accommodation. When thinking about the tourists' experience and satisfaction they form a crucial element, and can be a whole reason why tourists even visit the particular destination. They can be even called the "lifeblood" of a destination. Attractions are of course favoured by tourists, and not only the ones who stay overnight in a destination but also day-trippers, and on top of that they can also be important for local people. (Connell & Page 2011, 215)

The successful attraction industry provides income for the destination, in terms of visitors' spending. They can help to create a new image for a destination and perhaps reposition it in the markets. In the theory of the tourism area life cycle, the development of the destination follows the order: development – growth – expansion – maturity – decline – redevelopment. When the destination falls into the declination phase, the attractions can help to the success of the regeneration plan. (Connell & Page 2011, 216-217)

2.2 What is destination marketing?

Morrison (2010) defines destination marketing as follows:

Marketing is a continuous, sequential process through which a destination management organization (DMO) plans, researches, implements, controls, and evaluates programmes aimed at satisfying traveller's needs and wants as well as the destination's and DMO's visions, goals and objectives. To be most effective, the DMO's marketing programs depend upon the efforts of many other organizations and individuals within and outside the destination. (Morrison 2013, 9)

Morrison's definition stresses that marketing is an everyday activity and it should be done systematically in order to succeed. The effectiveness of destination marketing can be affected also by the parties outside DMO, so DMOs must collect and handle the efforts of all the stakeholders; partner organizations and individuals in order to accomplish the best results. (Morrison 2013, 9)

Morrison states that destination marketing is actually one of the functions within a broader concept, destination management, which includes coordinated and integrated management of the destination mix. As mentioned in the chapter 2.1, the destination mix is the "mixture" that the destination offers for tourists; places for accommodation, restaurants, attractions, events and so on. To perform an effective destination management, a long-term approach based on visioning and planning is needed. DMOs are the organizations

who are responsible for the destination management; they coordinate the efforts of all the stakeholders in order to achieve the destinations' visions and goals. In the past, the role of the DMO was indeed more promotional, taking care of sales and public relations, but nowadays the role, i.e. destination management, is a much wider and professional area. (Morrison 2013, 5)

Steven Pike has a slightly different view to the destination management; he writes that while the marketing practises have already over 50 years concentrated around the 4 P's (product, price, promotion and place), in tourism industry this can be increased to 8 P's, by adding partnerships, people, programming and packaging. However, since DMOs have only limited influence to most of the destinations' stakeholders' marketing practises and they do not have control over the resources they promote, in his view their core focus leaves to be in promotion, since only a few DMOs have the mandate to really manage the destination. (Pike 2016, 4) Morrison on the other hand also recognizes this matter; the DMOs do not have a total control over the destination mix. Everybody in the tourism sector and also other stakeholders are involved, and the quality standards may vary largely (Morrison 2013, 294). Therefore in Pike's view it would be more realistic to talk about "destination marketing organizations". They should lead and implement collaborative marketing communication strategies, which match the destination resources (internal) to market opportunities (macro environment). As he writes, "destination marketing is as simple and as complicated as that". (Pike 2016, 4)

So there are different views about destination marketing and DMOs' roles existing as well. UNWTO has identified the roles of DMOs being leading and coordinating, creating a suitable environment, delivering on the ground, and *marketing*. The marketing sector they detail as being destination promotion, campaigns, information services, bookings, and customer relationship management (CRM). These efforts are performed to get people to visit the destination. Naturally, the environment creating and delivering are an essential part and continuum for the marketing; when the visitors' expectations are met, they can as for them recommend the destination forward, and also want to return themselves. (UNWTO 2007, cited by Morrison 2013, 5-6)

Destination marketing has some special features compared to the marketing of other targets. It is influenced by the characteristics of services, seasonality and diversity and interdependence of tourism products. All the stakeholders involved can have different interests, and effective marketing decisions are still to be made. Tourism marketing's main role is to link supply and demand, where the start is often in the supply side, i.e. in product orientation rather than on the demand side (market orientation). On the supply side there are

all the elements of the destination; attractions, services, facilities, people, brand identity strategies etc. On the demand side understanding tourists' characteristics, perception, behaviours, images and experiences, market trends etc. can be found, and these are essential to strategic destination marketing. (Kozak & Baloglu 2011, xvi, 14)

2.3 The key processes of destination marketing

As per Morrison (2013), destination marketing, as an utmost important part of destination management, has a great influence into it. The main parts of the DMOs' role in marketing are marketing planning, market research, market segmentation, marketing strategy, marketing plan, promotion and communications, and marketing control and evaluation. (Morrison 2013, 16)

Marketing planning can be considered as following a systematic approach in developing marketing strategies and plans, while marketing plan is preparing short-term action plans to direct marketing activities. So these encompass both the long-term (first one) and short-term operations (second one). Marketing is expensive, so the sensible planning and good targeting and communication are important. Also since the competition is very hard, it requires careful and constant promotion to stand out; high level of creativity and innovation is needed. A time-ordered hierarchy to lead the marketing planning process is essential, and it should include destination's vision, DMO's vision and destination marketing goals and objectives. Figure 1 provides one template that can be used in destination planning. (Morrison 2013, 16, 70, 72-73)

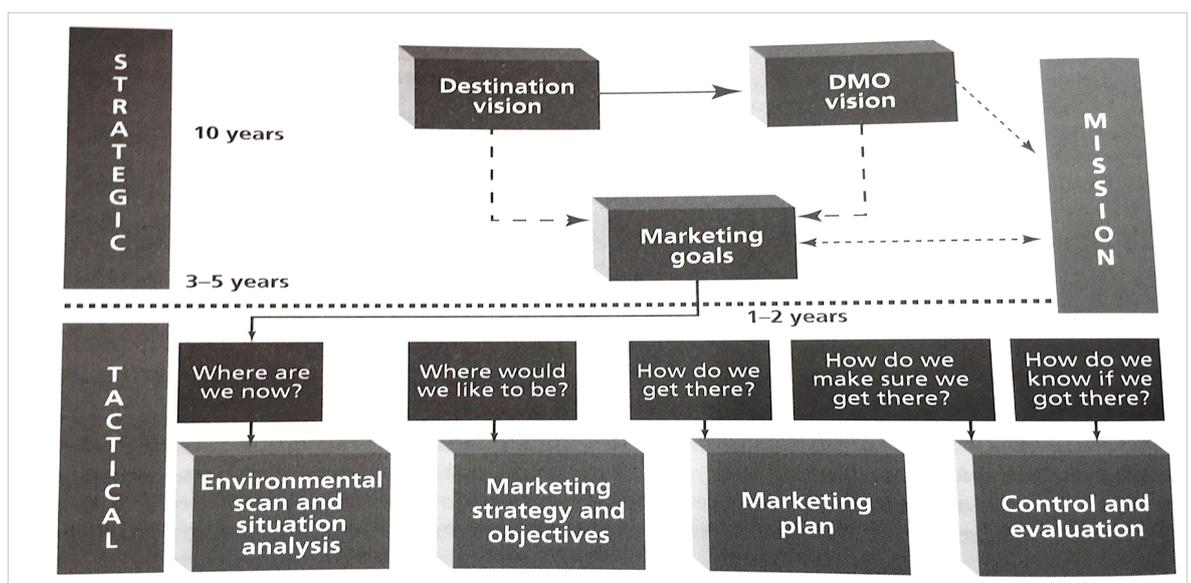


Figure 1: The destination marketing planning process model (Morrison 2013, 72)

As shown in the Figure 1, the marketing plan should answer the question “how do we get there”. The marketing plan should exist in written, and describe the activities and programmes to use in order to accomplish the marketing objectives. The past marketing plans should always be analysed and evaluated whether they were effective or not, and which activities and programmes worked and which not. (Morrison 2013, 72, 85, 98)

In order to make effective marketing decisions in the marketing planning process, a careful market research is needed to gather the relevant and actual information. When it comes to marketing, the researches can include analysing marketing’s efficiency, determining destination image, identifying potential visitors and profiling the existing ones, and preparing competitive analysis. (Morrison 2013, 16, 113)

DMOs have to know their customers – naturally they are the tourists but also the destinations’ stakeholders can be considered as DMOs’ customers. In destination marketing a good segmentation is needed; it is more effective to target the special, suitable groups than trying to reach everybody. The targeted segments must be chosen carefully, based on the segmentation analysis. Segmentation forms a foundation for the destinations’ positioning and branding. To effectively use the existing resources and achieve the best return the priority target markets should be carefully selected. The criteria how to evaluate and separate the most important segments should include segment size, growth and sales potential, competition and segment structural attractiveness, destinations and DMOs visions and marketing goals, serviceability (i.e. whether the destination is able to effectively serve the segment in question) and the costs to break into the target market or increase it. How to divide the markets into parts then; the most common place to start is to divide by trip purpose (business, leisure etc.) and geography (the place of residence). The other dividers can be socio-demographics (age, income etc.), psychographics (lifestyles etc.), behaviour (past and future behaviour), product-related (skiing, golf etc.) and channel of distribution (travel agents defined by geographic area etc.). Tourism today has become more and more to “one-to-one” phenomenon, mass market belongs to the past. (Morrison 2013, 70-71, 88-89, 414, 428)

As can be seen in Figure 1, the marketing strategy of the destination is developed in the phase “Where we would like to be?”. Marketing strategy is formed as a combination of the target markets selected and a positioning-image-branding approach. (Morrison 2013, 87) Positioning is a marketing term which stresses that a certain destination is different from its competitors, and positioning helps to make the destination more attractive and competitive (Kozak & Baloglu 2011, 137). The DMOs must decide how to position the destination,

both in the minds of the potential visitors, and among the competitors. Based on this, the decision must be made how to brand the destination, and the image should reflect this positioning. The perceived image of the visitors and the desired image must ideally come close together. Through positioning the image is communicated to the people, and branding is used to support the selected positioning approach, in communicating the image. (Morrison 2013, 87, 89, 91)

Promotion and communications mean using both on- and offline tools and techniques to reach and communicate with the selected audiences. Promotion has been a traditional activity of DMOs'. The "promotional mix" include advertising and sales, public relations, sales promotion, merchandising, and nowadays as an important part digital marketing, i.e. promotion through internet, e-mail, mobile, social media etc. All promotions can be seen as types of communication, and they should be integrated and consistent. Instead of promotional mix, this selection can be called integrated marketing communications (IMC), which stresses the importance of the integration, and this approach helps the messaging to stay coherent and consistent. About promotion and marketing tools is more to follow in the next chapter. (Morrison 2013, 16, 96, 320)

Marketing control measures the process when the marketing plan is being implemented, and evaluation is measuring after the marketing plan is completed. In the control, if the progress of a certain activity or programme turns out to be poor, it is possible to call it off, or make adjustments. After the certain marketing plan is completed, an evaluation should be made, and this way for example show how the money invested to DMO is used and what are the results. Of course the evaluation also provides information for the becoming marketing plans. (Morrison 2013, 103, 105)

2.4 Marketing tools in destination marketing

As talked in previous chapter, promotion of the destination has been a traditional activity of DMOs'. It is possible to talk about a "promotional mix", which includes many different tools, with which the tourists can be attracted to a destination. As mentioned, all these promotions can be seen as types of communication, and this selection can be called integrated marketing communications (IMC), stressing that they should be integrated and consistent. (Morrison 2013, 319)

Destination marketers are now allocating their attention and marketing budgets to inbound marketing tactics in order to make changes that have occurred in consumer behaviour (i.e. social networking, sharing content etc.) to work for their benefit. However this should

not lead to a complete rejection of outbound marketing, i.e. paid media advertising. It can now have new strategic roles and assist in inbound marketing tactics. (UNWTO 2014, 5)

2.4.1 Advertising

Even though the digital marketing, social media and sharing content is strongly taking the main foothold in destination marketing, the traditional advertising is still a major area for many DMOs when doing promotional campaigns. The traditional advertising is often quite expensive, and needs a good share from the DMOs' marketing budget. Advertising can be very important when promoting a whole new destination, and also when the destination is achieving a more "mature" level and is facing a hard competition. The most important functions of advertising are informing (especially important for new destinations), persuading (important in hard competition situations) and reminding (important to allocate to people who have already visited the destination). (Morrison 2013, 325-326)

For destinations there are many ways to practise advertising. These can be television, radio, magazines and newspapers, outdoor commercials, and also online advertising. (Morrison 2013, 326) These can be referred as "paid media", which refers to the advertising form where the advertiser pays an agreed amount to the publisher. (UNWTO 2014, 227)

The advertising must be eye-catching and inspiring. Magazines provide good quality for advertisers, outdoor commercials can provide large size and visuality, and in addition to these, TV commercials can provide yet much more inspiration and emotions with the combination of music, moving picture etc. (Morrison 2013, 326-327) One of the key trends in technology and consumer behaviour lately is that visual information is the supreme information nowadays. Because of the huge information overload consumers rather turn towards visual information. (UNWTO 2014, p. 3)

Online advertising has increased nowadays a lot, naturally due to the all the time growing number of internet users (Morrison 2013, 327). Compared to the traditional advertisement methods mentioned just before, online marketing offers benefits like possibility to spread the advertising around the world, lower costs, possibility for two-way communication with customers, and offering much more information at once (Kozak & Baloglu 2011, 203-205). Search engine and display advertising and social media marketing are the most applied online marketing forms (UNWTO 2014, 227).

Paid search engine advertising means that when the customer using search engine types in the certain words to find what he/she is looking for, the results provided include both "organic" results (non-paid) and paid results, i.e. sponsored ads. To get an ad to the

search results based on the keywords that the searcher used, requires that the advertiser pays for the search engine a certain number per keyword, not in forehand but only if and when the searcher clicks the ad and visits the advertiser's web page. That is why this form of advertising is also called pay-per-click advertising. This kind of advertising can be very targeted to the desired target group, the budget can be controlled, the performance can be measured in real-time, and if the ad is not attracting well, the immediate reaction is possible. The challenges can be managing the quality of the chosen keywords and the total budget. If there are many advertisers using the same kind of keywords, these both affect the order of the search results also in paid ads. Who pays more and has the best matching keywords gets the top place in the search results, and customers tend to click the results that appear on top in the results. (UNWTO 2014, 233-234)

Display advertising (the ads) can take many forms in different web pages, and it can be very targeted to the desired audience. Ads can include static or animated images, and also audio or video elements. Video advertising is a very good opportunity for advertisers today, since potential clients consume a lot of videos nowadays and with different devices, and the click-through rates (how many people clicks the ad and visits website for example) can grow very high. Often the online advertising is used to generate traffic for the advertiser's web site, but they can also be used to deliver content, increase sales, build brand awareness, remind respondents about the destination and promote social media pages. There are many benefits in this paid online marketing: it can be used when there is a certain demand, it can be delivered immediately, it is scalable, and the results can be easily measured. However there occurs also challenges, like declining response, poor click-through rates, possible high costs, poor credibility and advertising clutter. To overcome these challenges, large efforts in the planning, creation and implementation to the online advertisement campaigns are needed. (UNWTO 2014, 227-229, 232)

Social media advertising is basically paid advertising on social media. It can include display advertising there, but it can also refer to a special way of advertising that benefits the nature of the social media. Also term "native advertising" is being used; it is aimed to provide content in social media "in-stream", meaning that the ads blend in to the other content and do not interrupt the users' experience. Benefits of this marketing form include good targeting (users offer a lot of information about themselves in social media which can be benefitted), relationships between users (word of mouth between users – the ads can be spread widely if users like and share them) and relevance (with the help of the benefits mentioned before, the advertisement provided can be formatted to be very relevant). Challenges can include the integration; the paid social media advertising must support the whole social media strategy and other marketing objectives. The advertising in

social media should add value to the users' experience, so being too "sales oriented" is not desirable. (UNWTO 2014, 237-239)

2.4.2 Sales

Personal selling (sales) is also very important marketing form to some DMOs. When talking about for example getting business events to the destinations this is an important aspect; when making big decisions or purchases, a personal touch with clients raises trust. Promoting to travel trade (tour operators and travel agents) needs also somewhat personal communication. In travel exhibitions and events sales persons can provide much information about the destination in stands. With some key clients a personal contact and keeping touch is important, and also when searching future key clients. Personal conversations can also help in gathering information about competitors. (Morrison 2013, 328)

2.4.3 Public relations and publicity

Publicity can be a very cost-efficient way to gain visibility for a destination. However public relations (PR) is more than just publicity-seeking; it needs working with different stakeholders in order to provide favourable impressions of the destination. Generating positive publicity is important, but also PR demands positive relations between stakeholders (both internal and external) to avoid negative issues; politicians, media, tourism businesses and the community. (Pike 2016, 268)

PR and publicity help DMOs to maintain a positive public presence and image, both externally and internally. Positive publicity can also help in marketing efforts; if for example a marketing campaign gets positive attention in media, it helps to spread the message wider. Also if something negative happens within the destination, the DMO needs to handle the publicity and with the means of PR try to shift the publicity back to balance again. (Morrison 2013, 330)

Besides media relations, PR in tourism business can also include engaging with stakeholders trying to manage their perceptions of the destination, brand reputation management, networking with potential customers in different kinds of events and possible "wine and dine" them. As Steven Pike writes, "effective PR requires the organization to reinforce the brand identity, monitor stakeholders' perceptions, be prepared to adjust to change and/or convince others to change". (Pike 2016, 269)

2.4.4 Sales promotion and merchandising

Sales promotion and merchandising can occur in many types and forms, usually the main idea in them is to attract tourists during the off-season, with special offers or using special communication methods. Special offers can include coupons or price-offs. Contests and games can also be used as lures, and recognition programmes for travel trade companies or direct to individual tourists can be benefitted. Special communication methods can include for example give-aways (with destination logo etc.), familiarization tours for travel agents, media etc., and site investigations for event organizers. Travel shows, as an example ITB Berlin, are a good way to promote the destination. DMOs can produce a lot of merchandising material about the destination, both printed and audio-visual material, which can be benefitted in travel shows, delivered to media, and also when presenting destination for potential customers. (Morrison 2013, 332-336) Brochures have since long been a common form of destination promotion. They can act not only as attracting people to travel to destination, but also as a travel guide where the attractions and facilities that the destination offers can be found, which benefits the service providers too. Nowadays these guides are increasingly moving online. (Pike 2016, 263-264) The audio-visual material can be spread directly in YouTube, to attract individual tourists. (Morrison 2013, 336) Yet increasingly, video is the way to learn about products and services; as an example Google-owned YouTube is now the second largest search engine after Google itself. (UN-WTO 2014, p. 3)

Sales promotions and merchandising can be very useful when attracting people to visit the destination for the first time, or during the off-season. It can encourage travel trade to sell the destination more effectively, to attract future clients. The results of the special offer campaigns and different kinds of invited visits are easy to measure and analyse, however for example the affection of some of the promotion material is much more difficult to evaluate. (Morrison 2013, 337-338)

2.4.5 Digital marketing

Digital marketing basically means using all kinds of information and communication technologies (ICTs) in destination marketing. It has become the most important form of marketing, and a very important success factor in marketing a destination. Many DMOs invest in it a lot, which has reduced the use of the more traditional marketing forms. Some DMOs have own departments dedicated themselves only to digital marketing. For travellers internet is the most important source for finding information and planning trips. It can be even called a partner for travellers. (Morrison 2013, 338-339, 371)

Destination management organizations, as well as single operators, can benefit hugely from the technological developments. In this hyper-connected society destination managers need to be active players, and as technology all the time develops, consumer behaviour also changes. It is utmost important to understand recent trends and the evolving market environment, and skills are needed to take full advantage of them. The customer focus has to be maintained in every action. (UNWTO 2014, p. 1-2)

Over the past two decades, destination managers have learned to benefit different forms of electronic communication, in order to build their brand in innovative ways. This is made possible by the rapid spread of broadband connections, which allows users to experience attractive imagery and animation. They can help visitors in planning their trip by offering tools such as ideas, itineraries and route planners, and combine promotional activity with online purchasing possibilities. (UNWTO 2014, p. 1-2)

Digital marketing techniques and platforms can include websites, e-mail, social network sites, traveller review sites, blogging and mobile marketing. Also online advertising is a part of digital marketing, and was covered already in the advertisement chapter. (Morrison 2013, 339)

2.4.5.1 Websites

The websites must offer to its users a wide range of information while still remaining somewhat personal touch. They are nowadays the main communication platform for most of the DMOs. Websites should be built for different languages, and sites for individual visitors and corporations can exist separately. Websites naturally primarily offer information about the destination, but they also act as promotion channels by not only promoting themselves the destinations' products and services, but also supporting the other forms of marketing. They communicate the destinations positioning and branding by reflecting the image that is wanted to deliver for the audience. They help in building the relationships with travel trade, and can engage tourists in discussion in the destinations' social media pages. If there is a possibility for people to somehow register in the website, it is possible to build a database of customers. They can encourage the destinations different partnerships, and also enable bookings through them. (Morrison 2013, 371, 373-374) For tourists websites function as a source in every phase of the customer journey; dream, plan and book, visit, and repeat and recommend. The websites should offer something for every of these phases, and make the path through this journey smooth for the customers. (Morrison 2013, 375, UNWTO 2014, 74) Critical elements which define a good website are ac-

cessibility, identity and trust, customisation and interactivity, navigation, search engine optimization and technical performance. All the web activities should be seen as service, and the best websites provide the best possible service. (UNWTO 2014, 73-74)

2.4.5.2 E-mail

Even though e-mail marketing is nowadays sometimes considered as somewhat “old-fashioned”, it is very cost-effective and combined with the social media it is a powerful marketing tool. It is possible to motivate respondents to interact in social media by e-mail and on the contrary, activate the followers in social media to order the newsletter. Valuable content in e-mails build trust and credibility for the brand, and help to form long-term relationships, when respondents use time to open and read the e-mails. The successful e-mail marketing requires a structured e-mail marketing program; targeted respondents and content designed to the different phases of customer journey. Naturally e-mail marketing should be integrated in all the other forms of marketing. The results of e-mail marketing campaigns can be reported and measured well with the help of good systems and service providers. (UNWTO 2014, 175-178)

2.4.5.3 Social network sites

Many tourists use nowadays social media when planning a trip, in order to find advises from other travellers, to read reviews, and to possible find some good deals. For DMOs the raise of the social media means a shift in mindset: from organizations who provide and publish information to ones creating attractive and engaging content which people want to share to their network, and also stimulating people to create connecting content themselves (user-generated content). The relationships that DMOs manage to create in social media must be taken care of and appreciated. (UNWTO 2014, 121-122) A great benefit of social media is the possibility to reach the global audience with lower costs than with the traditional media (Pike 2016, 93).

Thus social media offers a great possibility for DMOs to distribute information and communicate with clients, existing and potential ones. DMOs can use social media in building (and maintaining) communities of interest around them, collecting content that the users have created related to the destination (blogs, videos etc.), delivering DMOs' own photos and videos and also new stories about the destination, marketing upcoming events and campaigns, encouraging visitors' recommendations for others, and also getting feedback. (Morrison 2013, 385) It is good to notice that in social media the aim is to discuss and engage with the customers, it is not for hard selling (UNWTO 2014, 131). In DMOs social

media strategy the main philosophy and concentration must be in “social” rather than “media”, which means concentrating on engagement, not on placement. Traditional marketing communication methods do not function in social media. (Pike 2016, 76) An impression of personal touch should be delivered; instead of some generic messages communication should be authentic style. The differences between different social media channels should be recognized and kept in mind; what suits to Facebook, what to Twitter etc. What is important to remember is that also negative things spread fast in social media; DMOs cannot totally control their brand image in comparison to the consumers’ image, when user-generated content and word-of mouth spread fast in social media. So the “online reputation” should be watched and protected; in case something negative spreads, it must be reacted immediately. (Pike 2016, 98, UNWTO 2014, 131-132)

2.4.5.4 Review sites

Review sites are websites that feature reviews from people about different kinds of services or material things that they have purchased, used or visited. Regarding travel review sites TripAdvisor is probably the most well-known. Travellers planning a trip and comparing options are able in these websites to read and reflect the others experiences and opinions. For DMOs the challenge is that all the reviews are probably not positive. (Morrison 2013, 386) However for example in TripAdvisor there is a chance to answer to the reviews and that way aim to soften the message and perhaps clarify the situation which has led to the negative review. And the reviews are naturally a good way to receive feedback and benefit it for development.

2.4.5.5 Blogs

The blogs, shortening from “web log”, can appear in many different forms, and be written by many different kinds of authors. The travel blog authors can be professional or semi-professional writers; just normal tourists writing online about their experiences, or DMOs can also have a blog of their own in their own web pages. There can also be collaborative blogs written by many different authors, and blogs using other form of media than writing, like photo or video blogs or audio blogs (podcasts). DMOs having their own blog can benefit it for branding, marketing, public relations or internal communication. They can even replace traditional press or news releases. If DMOs cannot find a blog writer “inside”, it is possible to sponsor a professional blogger in writing about the destination. DMOs’ blogs should look objective and not too commercial, where an outside blogger can also be of assistance. Content should also be attractive and include different kinds of media, like text combined to pictures and video. New blog posts should be shared in the social media channels in order to encourage people to visit the website, and to provide a chance to

share the message ahead. (Morrison 2013 386-388, UNWTO 2014, 136-139) There are some major advantages in blogs when compared to other content types: they are easy to update, structure is flexible, they encourage the interaction between author and readers, and allow information exchange to people who would not have the opportunity otherwise (Schmallegger & Carson 2008, cited by Morrison 2013, 387).

2.4.5.6 Mobile devices

Digital marketing is moving increasingly to mobile. Therefore all the websites must now be optimized also to mobile devices, and increasingly important are different kinds of mobile applications. For marketers this opens new opportunities, in form of communication with customers and creating new revenues by mobile advertising. The word m-tourism, mobile tourism, means using mobile information and communication technologies (ICTs) and devices for tourism activities. Mobile tourism can increase the effectiveness and convenience of the visitors' experience. The features of ICTs allow tourism marketers to provide tourists real-time information throughout the whole customer journey. (UNWTO 2014, 189-190) The smartphones offer great opportunities for marketing campaigns, since basically customers have always the smartphone with them, it is switched on and always in reach, it's location can be identified and also they can be used for augmentation of the reality (Grabs & Bannour 2011, cited by UNWTO 2014, 198).

DMOs can benefit mobile marketing in different forms, for example sending SMS messages, creating mobile electronic tourist guides and benefitting the possibilities of GPS and augmented reality (Morrison 2013, 389). Especially the mobile guides can be very useful and attracting; tourists have the information right away "in their pocket" without the need to use the travel time for searching information and instead use the time perhaps spending more in the destination, and they can access the information anywhere and any-time. DMOs can provide a great amount of information through the program and influence more to the offered information, and they can also monitor the tourists' experiences. Tourists' loyalty towards the destination might increase due to these guides. (Peres et al. 2011, cited by Morrison 2013, 389) Global positioning system (GPS) identifies the location of the mobile device user, and that way on the screen can be shown what attractions and other possible interesting places there are nearby. This is benefitted in general map applications, and also in mobile travel guides. This is a good way to advertise the attractions and services in the destination, and it is also called location-based advertising. (Morrison 2013, 391-392, UNWTO 2014, 210) About the possibilities of augmented reality there is more to come.

2.5 Attraction marketing

The primary role of marketing an attraction is to create awareness and awake interest in the attraction, in order to won them to visit the attraction. The promotional mix for marketing the attractions is very similar to the one marketing the whole destination: it can include advertising, sales promotions and merchandising and social media. Also public relations are important, and attractions can benefit special events in marketing efforts. Marketing can be targeted not only to the individuals but also travel agents, tour operators, meeting organizers and media. They can then for their part promote the attraction. (Stein 2015, 41-42)

When marketing an attraction, defining the target audience is also important. Promotional materials and advertising in general should be created after the audience they are intended to is defined. Same definitions than marketing a destination can be used: geographic location, lifestyles etc. In advertising choosing the right media depends on the message to be delivered and the target audience. Advertising, especially traditional forms, is expensive, so careful planning is needed. Digital marketing tools provide great marketing opportunities for attractions too. Websites are utmost important and possibilities of e-mail and for example blogs can be benefitted here too. Same "rules" regarding social media marketing and advertising concern attraction marketing as well as destination marketing. Still, traditional brochures hold their position as being very important advertising tool for attractions. They can be delivered to travel agents, visitor information centres and hotels, where the tourists can find them and easily pick them with them. Tourists might this way get to know the attractions that they have not received information before. (Stein 2015, 42-50, 71-72)

Video platform YouTube is a good way to promote attractions; the videos can be self-created, or user-generated content can be benefitted. Videos are very diverse, and with them it is also easy to attract people to get to know the destination more, for example in other social media channels. (Wain & Levinson 2012, cited by Stein 2015, 75) When thinking about social media marketing, it has to be noticed that people use it increasingly with mobile devices, and they have the devices always with. This can be benefitted for example by encouraging tourists to post their location (the attraction) on Facebook or share photos of the attraction on Instagram. Also attractions can have their own mobile applications, which can aid peoples' visits in the attraction in several different ways, like by providing a map or a possibility to make a reservation to attraction's restaurant. What the mobile devices also enable, are virtual tours or augmented reality applications. (Stein 2015, 80-82) About these possibilities there is more to follow.

3 Virtual reality

The excitement and attention towards virtual reality (VR) is at the moment huge, and VR has obviously hit also the critical mass. High-quality VR, mostly head-mounted displays (HMDs) and input devices, are becoming available at consumer prices, and Facebook and YouTube have enabled 360° video through their online video players. (Steinicke 2016, viii-ix) Nearly 1,3 million people subscribe the YouTube 360° channel, which is for its part also helping the mainstream viewers getting interested in the idea of viewing VR content (Sun 2016). Until recently the virtual reality devices were only used by experts, for example in research, training or simulation activities. However with current VR display and user interface technology it is obvious that soon more and more people will benefit VR, especially for communication and entertainment purposes. (Steinicke 2016, ix) According to the investment company The Motley Fool the virtual reality market could be worth 30 billion dollars by 2020 (by tech M&A advisory firm Digi-Capital); most of that growth is expected to come from sales of VR headsets, games, and videos. Also they mention that 500 million VR headsets could be sold by 2025 (according to Piper Jaffray). (Sun 2016) But what actually is virtual reality, how it can be experienced and where it is used? And what is the difference between virtual reality and augmented reality?

3.1 What is virtual reality?

Virtual reality (in future VR) can be described as an Immersive Multimedia technology (Krau 2016), where “immersive” according to a wordbook means “generating a three-dimensional image which appears to surround the user” (MOT Oxford Dictionary of English). In his article Jesse Emspack describes VR as meaning “creating immersive, computer-generated environments that are so convincing users will react the same way they would in real life”. The idea is by using visual and auditory elements, and same time blocking out the distractions from outside, to make the virtual world seem more real. (Emspack 2016) Jonathan Strickland describes: “using computer technology to create a simulated, three-dimensional world that a user can manipulate and explore while feeling as if he were in that world” (Strickland 2007). As Nicholas Negroponte, an architect who had an early research focus on computer-aided design, has said, “VR has the potential to make the artificial as realistic as the real” (Saiduzzaman 2014, cited by Steinicke 2016, viii).

An American computer scientist Jaron Lanier popularized the term “virtual reality” originally already in the end of the 1980s. There are many definitions for VR appearing, in research and in media, some of them misleading or contradictory. One definition made by Frederick Brooks, an American computer scientist, goes as follows:

Virtual Reality (VR) requires three real features: (i) real-time rendering with viewpoint changes as head moves, (ii) real space, i.e., either concrete or abstract 3D virtual environments, and (iii) real interaction, i.e., possible direct manipulation of virtual objects. (Steinicke 2016, viii)

According to Strickland, the VR experience should include three-dimensional images that from the perspective of the user appear to be life-sized, and the ability of the system to track user’s motions, especially the head and eye movements, and adjust the images on the display to reflect the perspective changes. An effective VR causes the user to become unaware of the real surroundings and only focus on the existence in the virtual environment. (Strickland 2007)

3.2 How to experience virtual reality?

Devices powered with VR are very powerful for simulations (Krau 2016). The systems need a way to display the image for its users (Strickland 2007). Many systems use head-mounted displays (HMDs), which are headsets that include two monitors, one for each eye. The images shown create a stereoscopic effect, which provides an illusion of depth. The HMDs are combined with tracking systems. The input devices are also important; these can include for example joysticks or controller wands. With HMDs the user can be fully absorbed into a virtual environment, and the user only observes the environment which is displayed (Figure 2). All the movements in the real world, like walking or head movements, can be transferred to corresponding movements in the virtual world, which provides an updated virtual view (Bowman et al. 2004, cited by Steinicke 2016, vii-viii, Strickland 2007).



Figure 2: Using head-mounted displays (HMDs). (businessinsider.com)

There are also CAVE systems (Cave Automatic Virtual Environments) which are small rooms where by using a projection technique images are displayed on the walls, floor and ceiling. Users can move around there, wearing special glasses or headsets and input devices like joysticks or gloves to complete the illusion. These can provide a very wide field of view, which helps the immersion, and a group of people can in the CAVEs share the experience. The CAVEs are mostly used in different industry or research fields. (Strickland 2007, TechTarget)

Nowadays large technology companies offer their VR device options, particularly HMDs, as an example Sony's PlayStation VR, Oculus Rift HMD, Samsung GEAR VR and Google Cardboard. The two last ones mentioned use smartphone as VR device. (Steinicke 2016, ix, 31) The company Oculus VR is nowadays owned by Facebook, whos founder Mark Zuckerberg discussed about the purchase as follows in Facebook in 2014:

... When you put it on, you enter a completely immersive computer-generated environment, like a game or a movie scene or a place far away. The incredible thing about the technology is that you feel like you're actually present in another place with other people. People who try it say it's different from anything they've ever experienced in their lives. ... After games, we're going to make Oculus a platform for many other experiences. Imagine enjoying a court side seat at a game, studying in a classroom of students and teachers all over the world or consulting with a doctor face-to-face -- just by putting on goggles in your home. (Zuckerberg 2014)

To make the user feel truly involved in the VR, there must be an element of interaction. Three factors creating interaction are speed (the rate that the user's actions are incorporated in the system), range (how many possible outcomes can occur from the user's actions) and mapping (system's ability to provide natural results as a response to the user's actions). Navigation is also one kind of interaction; this means that the user can direct his/her own movements in the VR, and this provides an interactive experience. Also being able to modify the virtual environment is true interaction. Without interaction the user can easily get bored. (Strickland 2007)

In order to the user's immersion to the virtual world to be effective, the system should work seamlessly and the sensory stimulation must be consistent. If the virtual environment does not reflect the user's actions immediately but there is delay in between, it is called latency. And if the user experiences latency, he/she loses the sense of immersion and becomes aware of the artificial environment, the interaction device and the real world around. In a truly immersive experience the computer becomes "non-entity" and the user forgets the real surroundings around. A good virtual environment responds to the user's actions in a way that it makes sense, no matter if it only makes sense in the virtual environment. If there occurs unpredictable or weird changes in VR, it disrupts the user's seamless experience. (Strickland 2007)

3.3 Where virtual reality is used?

Quite many people might know that VR is used in entertainment industry, especially in gaming industry. Gaming industry has actually been driven the development of consumer VR (Steinicke 2016, 31). But there is indeed VR use in other areas as well. In entertainment industry, besides games, it can be used in watching movies (the user can get a possibility to feel like he/she is inside the movie), sport games or concerts (Sheikh 2016). In architecture VR can be used in creating virtual models of the building plans, which can allow people to walk through the structure. Car industry uses VR in creating prototypes of new cars and testing them. VR can be used in different kinds of trainings, which is benefited by for example the military, the space program and the medicine. Regarding the medicine, surgeons have used VR besides training, also in performing surgeries remotely by using robotic devices. In medicine with the help of VR it is also possible to treat different physical conditions, for example phobias. Here the patient is under controlled conditions exposed to the condition that causes the phobia. (Strickland 2007) Also for example for stroke and brain injury victims there has been developed virtual reality exercises to practise motor and cognitive functions, like in traditional physical therapy. In court proceedings, VR can be benefited in visualizing the crime scenes, so that the jury members do

not necessary have to go on the spot to the scene. In online shopping, VR can provide a virtual tour in the shop and this way provide a better shopping experience than just a basic online store, and the experience can even be shared with friends. Some online retailers are already developing this possibility for their online stores. (Sheikh 2016).

And VR is becoming to the tourism industry as well. With VR applications the user can “travel” to different places around the world. Different attractions like museums are already offering virtual tours with which people can experience the museums’ collections. As an example, the British Museum in London has launched a “virtual reality weekend”, and American Museum of Natural History in New York City has made some of its collections virtually accessible through Google Cardboard, which means that anyone can now take a tour in the museum with a smartphone and a Cardboard VR headset. (Sheikh 2016). About VR and the tourism industry there is more to come.

3.4 Challenges of virtual reality

The big challenge in virtual reality use is always the “reality” – i.e. that the user feels truly present in VR, since the feeling of presence is very sensitive. By developing the technical systems these challenges must be overcome; the resolution of the graphics, the latency problems as mentioned before, the elements of the field of view and so on. Also in the future there will be a need for VR developments that would allow the wireless experience – the cables and wires of the devices can disturb the immerse experience a lot. (Steinicke 2016, 47) One challenge related to the virtual environments is the time it takes to build new virtual spaces. Creating virtual worlds can take a long time, in order to make them convincing and realistic. A team of programmers can need more than a year to create a real room accurately in virtual space. (Strickland 2007)

Another challenge for VR is the phenomena called cybersickness. Experiencing this is very much personal; some people can use VR a long time without symptoms whereas some people might feel sick very soon. Cybersickness is related to the motion sickness; even though the user would not move when using VR, the illusion of moving can still cause the sick feeling, i.e. the symptoms of disorientation and nausea. Other health-related challenges related to the use of VR can include physical affections, and also eye affection, which in particular means the children’s VR use. Since the eyes are not fully developed until 12 years old, the use of VR systems is often limited to persons over this age by most of the manufacturers. This is a reasonable precaution, since the effects of VR usage have not yet been researched enough. Regarding the physical affections, some psy-

chologists are concerned about the possible appearance of them, caused by the immersion in virtual environments. If the user is placed into a violent situation in VR, this could result in the user becoming desensitized for violence. Some psychologists warn about cyber addiction; engaging VR can potentially be very addictive. Also since at the moment the usage of VR mostly happens alone, some are afraid that the usage, when increasing and becoming more mainstream, can cause social isolation. However there can be settled a question that if someone enjoys the VR life more than the real one and is able to fill the human needs there, is this necessarily a bad thing? (Steinicke 2016, 47-48, 53, Strickland 2007)

One challenge in the future's VR devices is how to bring the normal, natural walking of the users along. Since walking is the most basic and intuitive way of moving in the real world, the concepts for VR are needed that can enable walking over large distances in the virtual world, while same time staying within a relatively small space in the real world. Various prototypes of suitable devices have already been developed, like treadmills or motion carpets. However these are still very expensive, and suitable only for one user at the time. Another challenge related to the devices is how to imitate the touch in VR. The elements of vision and sound are already experienced quite realistic in VR, but an important element, touch, is still a future challenge. (Steinicke 2016, 49)

3.5 What is augmented reality?

Jesse Emspack defines augmented reality in his article as follows:

“Augmented reality is using technology to superimpose information on the world we see. For example, images and sounds are superimposed over what the user sees and hears.”.

On the contrary to virtual reality, which means computer-generated environments where the user can immerse and with which the user can interact, augmented reality (in future AR) adds elements to the “normal” reality. (Emspack 2016) This means that when walking around, with the aid of certain AR displays, informative graphics will appear in the field of view, and also audio elements are possible. And the view will refresh continually when moving, and reflect the movements of the head.

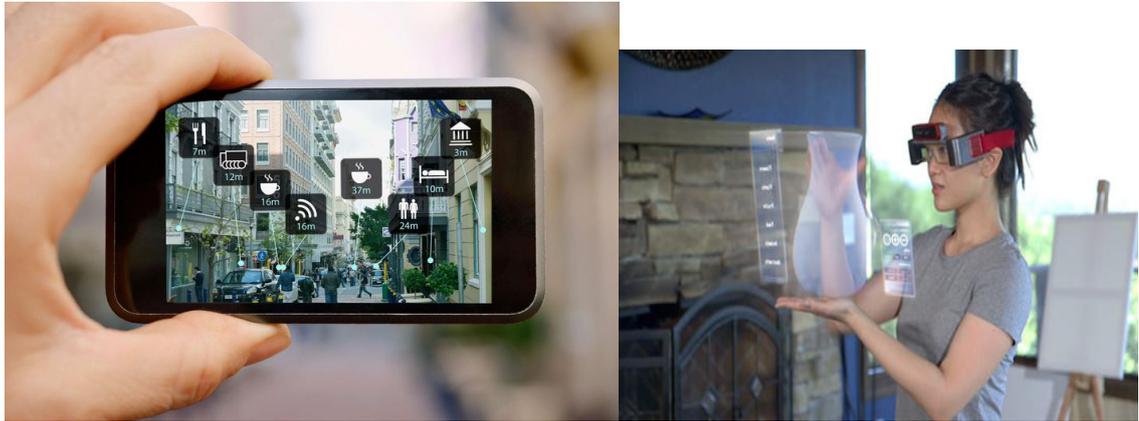


Figure 3: Augmented reality via smartphone or glasses (lifewire.com / hongkiat.com)

When people use VR, its immersive nature causes the user to disappear to that world. While using, there is no checking of emails or updating social media statuses. This can be on the other hand very liberating. However, this naturally also prevents all the intercourse with the real world surrounding, and the other people. There is no interaction with the real world. As for AR, it adds virtual layers and objects to the real world, or our perception of it. And users can always observe the real surrounding. So both AR and VR tinker with reality, whereas AR heightens it, VR diverts the users from it. (Diaz 2016, Steinicke 2016, 160)

Paul Milgram introduced a term mixed reality; he illustrated it with a “reality–virtuality continuum as a continuous scale ranging between the real world, i.e., our reality, and a completely virtual environment, i.e., virtuality”. The continuum represents the possible variations of real and virtual and includes augmented reality and shows its position in the continuum. Whereas AR means that the virtual augments the real, augmented virtuality means that real augments the virtual. In this chapter we concentrate on AR. (Steinicke 2016, 5)

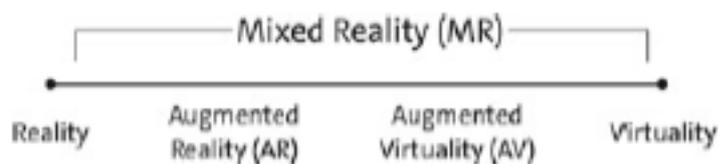


Figure 4: Mixed reality. (Milgram & Kishino 1994, cited by Steinicke 2016, 6)

Augmented reality has been here already for a while, even though it has previously not touched the normal, everyday life so much. For example the military has used it in the fighter aircrafts, where the AR displays can show the pilots details about flight conditions and the targets, in their field of view. (Emspack 2016) Naturally based on the same idea

AR can be very useful in other professions too, as an example construction works and medicine (Bonsor 2017). Nowadays video games and smartphones are driving the development of this technology, and applications for smartphones already exist. Through mobile devices AR arrives to our everyday lives. There are applications available for smartphones, which by using the device's camera and GPS, show information on the screen about the area where user is, for example restaurants, or perhaps the history of the building that the user sees. (Emspack 2016, Bonsor 2017) About AR applications related to travelling there is more to come. In very recent past, the augmented reality has become well-known for the big audience in a form of a smartphone game, Pokemon Go, which functions so that people can walk around just normally outside, in public places, and at the same time play the game by catching "Pokemons" which appear on the screen with the aid of the camera and GPS. The game became immediately hugely popular. (Malik 2016)

In 2013 Google introduced the Google Glass, where when user wears the glasses, images, videos and sounds appear to the screen. The first version was a failure, but they are planning a new version. (Diaz 2016, Emspack 2016) And eventually, there might be eye glasses or contact lenses that look just normal, but can provide informative graphics to the user's view, and audio that coincides that, when the user moves his/her head. (Emspack 2016, Bonsor 2017)

There are also different views existing what is really augmented reality and what is not; as an example computer science professor Ken Perlin says about Pokemon Go that it is not truly augmented reality, since the characters are just dropped onto the screen and not truly integrating them into the surroundings so that they would appear more real than virtual. In his view the game is more "location-based entertainment", and "real" AR would need other devices than just the phone screen. (Greenemeier 2016) Besides different point of views, what also awakes the conversations around AR are the ethical issues like privacy. Some people were worried that the devices like Google Glasses can secretly record conversations, take pictures or recognize faces and thus provide personal information. (Bonsor 2017, Emspack 2016) Also can be asked, if there is already too much information provided. When concentrating only on AR, people can miss what is really in front of them. When thinking about travelling, a personal tour guide can provide much more than an AR application – interaction and personal touch should not be totally abandoned. (Bonsor 2017)

4 Virtual reality in destination marketing

As discussed in the previous chapter, VR is definitely becoming to the tourism industry as well, and it clearly opens big possibilities for the industry. In the web page blog of marketing agency Accord Marketing they write that according to recent studies, virtual tourism is the third most popular activity to potential VR users, just behind viewing 'virtual attractions' such as museums in second place (first is computer games). When virtual tours of hotels and resorts for example are already quite commonplace, adding VR content, like 360° video and attracting audio, into this is the natural next step. (Accord Marketing 2016)

Lonely Planet raised virtual travel to its Top 10 travel trends of the future in 2014:

The onward march of Google Streetview gave travellers a virtual eye on places from the Pyramids of to remote, and tourism boards have clamoured to create virtual spaces to lure more visitors. But fears of a dystopian future, where travellers plug into a headset rather than hitting the road, are unfounded. Glimpsing a virtual world or exploring on Google Streetview is a catalyst for a generation of travellers itching to explore for themselves. And the past century's great strides in transport and new technology have shaped a global community of explorers who are bolder and more curious than ever before. (Isalska 2014)

4.1 VR in tourism

According to Daniel A. Guttentag, there are six areas of tourism where VR can be truly valuable: planning and management, entertainment, education, accessibility, heritage preservation and marketing. Marketing will be discussed in it's own chapter.

In planning and management, since VR makes it possible to create realistic virtual environments, the tourism planners can benefit these navigable environments for analyzing, in order to consider the possible developments. For example in a destination, the plans can be communicated to the group or community around, with the help of VR again, and receive feedback from the parties. Also the created environment can be published online for a wider public to see that. Augmented reality can be benefitted with the same idea; with AR systems it is possible to superimpose the planned developments to the landscape and this way present them to the target audiences. For the testing purposes VR is good as well. Guttentag mentions as examples a museum which would like to test the popularity of the potential special exhibition, and a tour company could test the preferences for certain attractions with the help of VR. (Guttentag 2008, 640-641)

Regarding entertainment, VR can serve itself as a tourist attraction. Theme or amusement parks can benefit this idea, and some parks or destinations have already done that. (Guttentag 2008, 642) As an example, amusement park Linnanmäki in Helsinki, Finland, has a rollercoaster where people wear Samsung GearVR glasses during the ride, and this way can experience the ride in a virtual environment (Linnanmäki.fi).

The educational potential of VR, as well as AR, can be benefitted for example by museum or heritage areas (Guttentag 2008, 642). As mentioned before, the British Museum in London, with their Samsung Digital Discovery Centre (SDDC), has organized a “virtual reality weekend”, by offering the visitors the VR world experience with Samsung GearVR headsets, tablets, and an immersive dome. The SDDC in general provides digital learning programmes at the museum, in which with the aid of digital devices they support participants in the learning, by encouraging them to explore, engage with, and respond to the collection of the museum, and VR has been one part of this educational programme. (Rae and Edwards 2016) An example of benefitting AR is the app StreetMuseum, with which travelers can experience the “old London” by using GPS to locate an image near location, holding a mobile device camera to the present day street scene, and getting the picture of the location from old times to the screen. Also there appears an information button where to get more information. (Museumoflondon.org.uk)

In case the access to an attraction would be too distant, expensive, inhospitable or dangerous, fragile, or some other ways difficult or totally impossible, VR can be of assistance in enabling the experience no matter the circumstances. Especially beneficial this can be to the people whos ability to travel is somehow limited, for example because of the limited moving possibilities. Since adjusting for example some historical sites to be barrier-free might be impossible, this way they have the possibility to experience otherwise unapproachable places as well. The virtual experience can in addition be fulfilled with different elements, like a possibility to switch between different time periods when experiencing a certain place. (Guttentag 2008, 643)

When thinking about the heritage preservation, VR can offer a possibility to access the heritage sites virtually, and this way help to protect the sensible heritage environments or attractions from the tourism masses. However, as Guttentag asks, would tourists accept these “substitutes” instead of the real experience? We come back to this question a bit later.

4.2 What VR can offer for destination / attraction marketing?

In her blog in the website travel-think.com Aurélie Krau writes that the two major usages of VR in tourism are inspiration and demonstration, and because of its highly visual nature it can be a very powerful selling tool (Krau 2016). Deanna Ting at skift.com goes a little bit further, and states that there can be two marketing approaches in using VR: informing and selling, and entertaining and marketing. There are examples from the hotel branch how these approaches have been benefitted. From informing and selling, can be mentioned Shangri-La Hotels, which has equipped its global sales offices and also individual hotels' sales teams with Samsung GearVR headsets, in order to sell the hotels to the business customers, like wholesalers and travel agents. Orbit World Travel actually predicts that in the travel trade events VR headsets as a sales tool will be mainstream very soon. Another example is Best Western Hotels, which has shooted 360° videos from its North American properties, which when viewed with VR devices show the customers the rooms, lobbies and other amenities of the hotels. In this approach VR is used as a tool to inform the customers about the product and this way create sales. Travel agencies can naturally benefit VR as a selling tool as well, by helping the customers' decision by showing the destinations from which to choose in VR in forehand. TUI has already delivered VR headsets for travel agencies in Europe. From the other approach, entertaining and marketing, can be mentioned an example from Marriot hotel chain's two hotels, which provides the guests the possibility to borrow Samsung GearVR headset and "travel around the world" in the hotel room, and this way "entertain" their guests. This can also provide a marketing asset. (Orbit World Travel, Rogers 2016, Ting 2016)

Previously, there has been conducted researches, which show that when a certain place appears in a movie, it attracts people to travel there, and even just a visit to a attraction website can increase the desire to visit there. In this light it can be stated that experiencing a destination in VR can encourage the actual visit to the spot. (Guttentag 2008, 641) VR can really provide "deep information" for the consumer before the purchase decision (Krau 2016, Ting 2016). With the possibility to experience the destination, hotel, attraction or a restaurant, almost "live" in forehand, moves the "try before you buy" to a whole new level. This is where VR's possibilities in marketing definitely are: to provide very sense-stimulating information to the potential tourists. It can very much enrich the tourists' information search and provide a competitive edge over the competitors who are not yet engaged to VR. (Guttentag 2008, 641)

Using information technology (IT) in general can add value to tourism products and services for differentiation, and help to distinguish from the competitors and bring competitive

advantage, whereas avoiding the use of the latest innovations of IT can cause that the destination leaves behind its competitors. Nowadays tourism industry spends worldwide billions of dollars per year on technology, and technological innovations have been ranked as top priority in the industry. Practical observations and literature show that businesses that adopt the latest developments in their management and marketing strategy are more likely to be competitive compared to those who do not adopt them. IT developments can provide a great contribution in attracting customers and directing their interest towards the business in question. (Kozak & Baloglu 2011, 194-195, 206) The tourism industry is selling the experience, which includes the feeling, the landscape, the history and so on. VR goes beyond the traditional market tools, including also the digital ones, since unlike them it can truly provide the potential customer the experience of the destination; with other tools there is still imagination needed. (Livermore 2016)

The image of the destination affects the tourists' behaviour and the choice of their destination. Since the tourists have only a limited amount of information at their use about a destination they have not previously visited, the image in tourists' minds can be a critical factor affecting the decision. (Um & Crompton 1990, cited by Kozak & Baloglu 2011, 141) A tourist can have an image in his/her mind that one destination is more high quality than another one, even though their supply seems similar. Image also varies depending on the person; another person might feel that the other destination is the one with higher quality. Images are mixtures of positive and negative perceptions. Since the destinations compete in attracting tourists, the competitive position can be achieved by creating and communicating the positive image, and with that also differentiate the destination from the others. The image is formed by offering information about the destination in various information sources; these include promotion material, advertising, media, and opinions and experiences of other people. (Kozak & Baloglu 2011, 141-142) As mentioned before, the perceived image of the visitors and the destination marketers' desired image must ideally come close together (Morrison 2013, 89). Since unlike the other marketing and promotion tools, VR can provide the potential customer the "live" experience of the destination, which can be of great assistance in image creation and thus differentiating the destination from competitors and attracting more tourists.

As discussed before, destination management organizations, as well as single operators like attractions, can benefit hugely from the technological developments, and over the past two decades, destination managers have learned to benefit different forms of electronic communication in their brand building. As technology all the time develops, consumer behaviour also changes, and destination managers have to stay up-to-date in this development, and understand recent trends and the evolving market environment. (UNWTO

2014, p. 1-2) Since marketing of a tourism products is basically a selling of a dream, the image of the destination plays a huge role in decision-making. The customers are surrounded by a huge amount of travel possibilities to choose from, but the researches show that the actual size of their competitive set of destinations is limited to around four. (Pike 2016, 217) To be a part of this four-numbered set demands the use of all the possible competitive tools, meaning that also that the latest technological developments should be in effective use. Including VR, with which to communicate the image and offer the potential tourists the possibility to the attracting experience, which they also want to experience in reality next.

4.3 What VR can offer for tourists?

The customer journey is a cycle, which describes the visitor's or traveller's thoughts, decisions and actions, before, during and after the visit or travel. There are many expressions for the customer journey, for example "Customer decision journey" or "Customer experience cycle" (UNWTO 2014, p. 12-13)

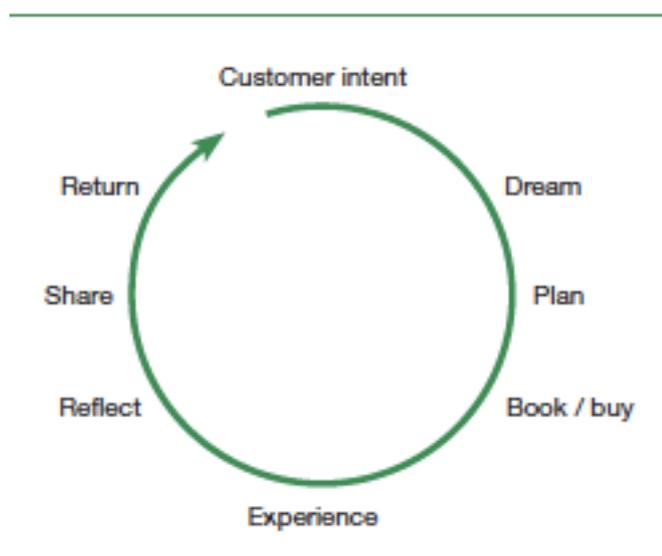


Figure 5: Indicative diagram of the customer journey. (UNWTO 2014, 13)

Figure 5 presents one way to describe the customer journey, but there are also different ways. The terms can vary; "Dream" can also be "Intent", "Experience" can be "Travelling and visiting", "Reflect" can be "Evaluating" and so on. Regardless the terms used, the point of the customer journey cycle is that it creates awareness of the need to understand how to serve and influence the customer in each stage in the journey, and that way achieve the marketing goals. (UNWTO 2014, 13)

In the customer journey VR can start playing a significant role in the stages dream and plan, and experience (during travel). Before the trip the role of VR stands out, and during the trip especially the applications of AR, but both can be benefitted in both stages as well.

As mentioned earlier, VR can work as a tool in inspiration and demonstration, and also information. In the first stage of the journey the customer identifies a collection of products and brands, and seeks information. In the Phocuswright's U.S. Traveler Technology Survey (6th edition), there was given a question "What influences travel decisions?". In the top-5 among for example online travel reviews and blogs there was also vacation pictures and videos, in social media networks or in YouTube. (Phocuswright 2016, 11) This is definitely one of the key trends in technology and consumer behaviour lately; visual information is the supreme information nowadays. Because of the huge information overload consumers rather turn toward visual information, which can be seen in the rise of popularity of websites such as Instagram and Pinterest. And yet increasingly, video is the way to learn about products and services; when as an example Google-owned YouTube is now the second largest search engine after Google itself. (UNWTO 2014, p. 3) In this development, the natural next step can be the raise of virtual reality. If the normal video can bring the destinations "live" to the tourists in a very different way than the literary material like brochures, VR takes this even further.

So a big advantage of VR will be helping consumers decide where to travel. It can also open whole new possibilities for tourists; they might find places that are not familiar at all for them in forehand, which do not have a lot of name recognition. But when having a possibility to experience their supply in VR, in the fields of culture and nature for example, it can persuade the customers to choose them over the others. This will naturally be beneficial for these yet not so well-known destinations as well. (intelligenthq.com)

As discussed, the "try before you buy" moves to a whole new level. Before investing a lot of money for the travel, the comparison and consideration can be made much easier with VR applications. From the destination-decision, made at home or in the travel agent's office, to the hotel room selection or even place at the airplane selection, the virtual walk-throughs can aid the indecisive tourists to find and create their dream holiday. (Orbit World Travel) The digital marketing in general can also help to stabilizing the gap between expectations and perceptions of the holidays (Kozak and Baloglu 2011, 204). The visitors' experience should always match or even better, exceed, the expectations, right from the point where tourists start to think where to go, to returning home and beyond (Lane 2007,

248), in order to end to the satisfaction and good feedback afterwards. Because VR provides the potential tourists the experience which is closer than ever before to “being there without actually being there,” travelers’ expectations will be properly set before they book. However it is possible that the expectations will also rise, which means that everything should match well in the destination as well. (Orbit World Travel)

When travelling then, the AR, and also VR applications can significantly enrich the journey. Previously has been mentioned that VR can serve itself as a tourist attraction (like in amusement parks), the educational possibilities of VR and AR (in museums for example), and the accessibility possibilities they can provide. Nowadays the use of mobile devices during the trips is everyday. A worldwide research in 2014 for adults across 25 countries show that from leisure travellers 94 per cent take at least one mobile device with them to a trip (Statista 2016). Mobile technology enables the provision of different kinds of applications that support tourists during their journey. Based on one’s location, the information can be filtered and tailored to the travelers’ prevailing needs and wants. (Kourothanassis, Boles, Bardaki & Chasanidou 2014, 71) Mobile travel guides that benefit AR are raising. As mentioned earlier, augmented reality is using technology to superimpose information on the world we see. In these travel guides, when the user points the mobile device in the direction of interest, the system augments the visible environment with additional information. This information can be names of buildings, information related to the points of interest, and also real-time notifications regarding location or time dependent events, for example different kinds of discounts. Information provided can also be personalized to the certain user’s needs. This can really aid tourists on their journey, and naturally offer a possibility for the different actors in the destinations to market their services. (Kourothanassis et al. 2014, 73)

Even though this chapter has focused the main parts of the customer journey where the VR and AR can be benefitted, in some point the future it will be possible that consumers can also build their own VR and share their experiences in this format, i.e. VR arrives to the “remember” –phase as well. Travellers turn nowadays to social media, when planning a trip, in order to find travel destinations, advices and reviews from other travellers that they have created during or after their journey. Content generated by other users, like videos, are very important for decision-making, and if in the future they would turn into VR format as well, it will be groundbreaking. (Krau 2016, UNWTO 2014, p. 122)

4.4 Discussion about VR in tourism

As all the new technologies and solutions, VR also awakens a lot of questions, which as for them awake discussions among researchers and interested audience. Here some of the actual topics are discussed.

James H. Gilmore ponders in the foreword of the book by B.J. Pine and K.C. Korn why so many companies use digital technology as an added, worthless or even disrupting part of the existing whole, instead of using it for enriching the experience. He provides examples, like museums who just “place freestanding kiosks at every turn, unused or abused until sitting in despair, instead of designing new ways of technologically introducing context or inciting action that draws patrons into its core exhibits”. Or large digital screens in a restaurant that distract the dinner. He reminds that naturally some companies can use it the right way, to improve the experience, but some still fail in that. (Pine & Korn 2011) This is definitely the way that the travel industry companies interested in the possibilities that VR or AR can provide should consider; what can it offer for my company and my customers? Is it just an impressive trick, or does it really enrich and improve the tourists’ experience? And this way grow the commitment to the company and brand, and in the end provide more sales and better position in the markets?

Some authors have speculated that is VR really raising, or more closely, becoming so mainstream that the other authors predict? According to the research made by Ipsos MORI, an UK research company, for 1000 British adults, the perception that VR is only for computer games can be the barrier on the way to success. Found out in the research, people are nowadays aware what VR is (52 per cent agreed that they have at least “good” understanding) and 47 per cent wants to give it a try. However, 34 per cent said that they are not interested in it, 36 per cent said that VR devices are confusing, and 66 per cent think that the devices are expensive. In addition, 60 per cent of the answerers think that VR is for games, and 46 per cent cannot find any practical use for it. Still, the situation might change, since 68 per cent mentioned that they should try VR to be able to give a better judgement. (ipsos-mori.com 2016) Also Motley Fool warns that the investors should still be a bit careful with VR, based on a couple of researches that give same kind of results (for example price and no-interest were mentioned) (Sun 2016). But what is really interesting for the tourism industry, is that 56 per cent in the Ipsos MORI’s research answered that experiences related to travel are the ones they would like to have with VR. From the options provided this is the largest number, just behind it comes experiencing music events and fantasy experiences. Ipsos Mori’s research manager Neil Stevenson commented to the Marketing Week the results that “2016 is a pivotal time for VR in the

UK, a year when everything is up for grabs for savvy players looking to get out in front and experiment with the technology, engaging consumers while their perceptions of the technology can still be influenced". Also he thinks that customers' interests are not yet really formed; they are open to the new experience, but at the moment VR is seen as "a technology without application". When looking at the results, even though they in general now do not look so good, for the travel industry they are still very promising. (ipsos-mori.com 2016, Rogers 2016)

As mentioned earlier, Daniel Guttentag offered as one use of VR in tourism the possibility to protect sensible heritage sites from mass tourism; instead a visit to the heritage attraction tourists would be offered a virtual visit (Guttentag 208, 644). Some authors have thus considered VR to be even a threat for tourism, if people would accept VR as a substitute (Kozak & Baloglu 2011, 60, 206). But as Guttentag asks, would tourists really except this as an option, VR as a substitute for the real experience? R. Cheong (1995) has posed a question: "For instance, how is VR able accurately to simulate the smell of ocean spray and the splash of seawater on one's face as one participates in virtual surfing?" This question is still up to date. Also, the purpose to protect heritage can backfire; as discussed widely earlier in this paper, VR can really have an affection to attract tourists to travel to the destination they have experienced virtually. What can be possibly made, is to provide the tourists access to the actual site, but organize the possibility to virtually visit the most sensible parts of it and keep them otherwise preserved. This is a "halfway solution" which can satisfy all, and has already been put into practise in some heritage sites. Regarding the VR as a substitute for the original destination or attraction and the acceptance of it, the personal perceptios, motivations and characteristics affect here. The experience of authenticity varies depending on the person; where some people might accept the authenticity, some will not. (Guttentag 2008, 637, 644-645)

Daniel Guttentag also questions the expression that is used: virtual reality tourism. Can we say that visiting a place from home couch is tourism, when the UNWTO defines tourism as "...travelling to and staying in places outside their usual environment...". Based on this, experiencing a VR substitute would only be considered tourism if the tourist has travelled in order to use it. This question might be interesting, when thinking about the economic aspects of tourism: who will receive the revenues from VR tourism? Will they be directed towards the right place, the destination, or for the programmers in totally "wrong" country? As Guttentag stated, when VR is further integrated and used in tourism, new questions and challenges clearly will raise. (Guttentag 2008, 637, 647, World Tourism Organisation 2011)

Related to the economics, it is good to keep in mind that the technological developments are not alone good for every business. It is possible that when the technology all the time goes forward, it can cause inequality to the tourism industry, when the large organizations and companies are able to still grow their lead in the markets by having the opportunity to afford all the latest developments which the smaller business or developing countries cannot do. (Kozak & Baloglu 2011, 205-206) Aware travellers should recognize this problem and try to see also behind the technology hype and consider their choices. Tourism boards and authorities also have a great role in supporting smaller businesses here, in order to them to be able to compete internationally and maintain some market share, however also the boards and authorities have to then have high levels of resources (Kozak & Baloglu 2011, 207).

As can be seen, VR has already quite many years raised questions, which have not yet been answered. As a consumer technology VR is still relatively new, and as a marketing tool in the tourism industry as well. Next few years will eventually show how the hype develops. The research that follows will try to find out the current attitudes among tourism industry and travellers, and get a clue about the future.

5 The research

The subject of this research is virtual reality, and its role in destination marketing. As discussed in chapter 4, in the web page blog of marketing agency Accord Marketing they write that according to recent studies, virtual tourism is the third most popular activity to potential VR users, just behind viewing 'virtual attractions' such as museums in second place (first is computer games). Also in another discussed research, by Ipsos MORI, 56 per cent of the attendants answered that experiences related to travel are the ones they would like to have with VR. When virtual tours of hotels and resorts for example are already quite commonplace, adding VR content into this is the natural next step. (Accord Marketing 2016, ipsos-mori.com 2016) This subject of the research has been chosen since as mentioned, as a consumer technology VR is still relatively new, and as a marketing tool in the tourism industry as well. As can be seen from the previous chapters, there is a large hype about VR going on right now. Next few years will eventually show how the hype develops; to the mainstream technology that "everybody" uses, or will it still stay in margin. This research will try to find out the current attitudes towards VR among tourism industry and travellers, and that way get a clue about the future of VR in the tourism branch.

This research consists of two parts. In the first part the subject is ordinary travellers, and their attitudes and opinions towards VR, and how they experience its affection to their own travel planning and travel destinations, now and in the future.

In the second part the subject is operators in the tourism industry; the tourist attractions, which are chosen to be the historical castles in Germany, and the tourism marketers, the DMOs. The castles have been chosen since they are very popular and traditional tourist attractions. They have to compete from the limited amount of time of tourists with a great amount of other attractions, so effective marketing actions are necessary. Also the researcher's personal interests have affected to the choice of this target group. The DMOs are a natural choice since they market not only single attractions but the whole destinations, and need a good combination of different marketing techniques to make it effectively and to stay on top of the competition.

The aim of this research is to find out how these subjects in tourism industry see this new technology, VR, and its possibilities. Are the travellers familiar with the possibilities of VR and can they imagine to use it in their travel planning or imagine that it will have some affection to their destination choices – or if they are using it already, has it provided added value to for them, or perhaps changed their opinions when choosing a destination? Can

the marketers imagine involving it to their marketing strategy in the future - and if they are already doing it, do they feel that it has provided added value for them?

There is a desire that the results would provide general information whether the VR is really going to be the big thing in the destination marketing in the (near) future – if these kind of traditional operators are already on the move with the new technology, it tells a lot about the expected distribution of the technology. And if the travellers are really into VR, this tells a lot how the marketers should start acting with it. Also based on the results it may be possible to form some suggestions how to benefit VR in tourist destination marketing.

5.1 Research questions and expectations

The research questions can be defined as follows:

Main question in part one, the travellers:

Do travellers see the VR as a potential way to find out and gain information about the destination before they travel?

Sub questions:

- Would they actively approach the VR to gain information, and how much they would be willing to invest in it? Would they even buy the equipment?
- Would it bring additional value to them, or are the nowadays' sources (video etc.) enough?
- Do they feel that the possibility to experience the destination in forehand in VR would encourage to travel there? Or the opposite; no need to travel there anymore?

Main question in part two, the operators:

Do the operators see the VR as a potential marketing technique?

Sub questions:

- What kind of dynamics can VR bring into destination marketing? Would it change the way the marketing is been doing now, or would it be a good addition to that?
- Do they feel that the possibility to experience the destination in forehand in VR would encourage the tourists to travel there? Or the opposite; no need to travel there anymore?

The researcher's expectation in advance is that VR is not yet widely used in marketing of German castles and DMOs. However the forehand information is that there are exceptions, and it will be interesting to see how aware the castle marketers are about the possibilities of VR, and have they already been thinking of including it to their marketing selection. Regarding the expectations of another part, the travellers, the researcher's expectation is also that there is not yet a wide use of VR in travel planning, but it will be interesting to see how interested the travellers are about the possibilities in the (near) future.

5.2 Research details

This research will be descriptive, which means that the research describes the phenomena as it exists. This purpose of the research can be used in researching attitudes and opinions, and this will enable the researcher to identify and describe the variability in the phenomena. The main purpose in descriptive researches, including this one, is to describe the populations' characteristics; either at fixed time like this research, or at a series of times. Descriptive surveys are frequently used in business research as attitude surveys, for example to research customers' attitudes to the products or services. (Saunders, Lewis & Thornhill 1997, 279, 284, Collis & Hussey 1997, 11, 66)

There are two different approaches in research process: quantitative and qualitative. Quantitative approach is objective, and concentrates on measuring. It involves collecting and analysing numerical data, and applying statistical tests. Qualitative approach is more subjective. It involves to gain an understanding of social and human activities, by examining and reflecting on perceptions. Qualitative data is about qualities and non-numerical characteristics. (Collis & Hussey 1997, 13, 161) In this research the approach will be quantitative, since it concentrates on collecting and measuring the answerers' opinions and attitudes mostly in numerical way. However, it can be also partly considered as qualitative since there will be open-ended questions as well, especially the part two consists of those questions. So the research can be considered as a mixture of both approaches.

The research logic in this research is deductive. This means that there is a theory existing behind the phenomena to be researched, and based on that theory it is possible to form a hypothesis of the results of the research. The results of the research will either confirm the theory or show that there is a need for modification. It can be said that the method is moving from general to particular. The deductive logic emphasises to the need to explain the causal relationships between variables. By deductive logic it is possible to describe "what is happening". Here the research will start by forming a hypothesis, and then deciding a research population, from which the sample should be large enough. The definitions for

the research tools (for example questionnaire) should be done carefully. At last, the results should be able to standardise, or generalise to a population. (Saunders et al. 1997, 87-90, Collis & Hussey 1997, 15)

As mentioned, the researcher has an advance expectation that VR is not yet widely used, neither among the travellers nor the industry. This expectation is based on the literature review and previous researches, which describe the novelty and still slight disarray of the phenomena of VR. However, the research can also provide new insights to the theory, and results which demand the modification of the expectations for the following researches.

The outcomes of this research can be considered as basic research. The aim of this research is to improve the understanding of a general issue. The principal aim of basic research is to make a contribution to knowledge, rather than solve a specific problem. (Collis & Hussey 1997, 15)

5.3 The implementation of the research and methods

In this research strategy is chosen to be a survey. Surveys are mostly based on a questionnaire, and the first part of this research where the subject is the travellers, will be based on that as well. The questionnaire is yet not the only way to carry out a data collection under the survey category; for example structured interviews, where standardised and same questions are asked from all interviewees, fall into this category as well. This method will be used in the second part of this research, where the subject is the industry actors. (Saunders et al. 1997, 93-94)

Like in any strategy, there are redeeming features and also downsides in survey researches. Surveys allow a collection of a large amount of data from a large population, and it can be carried out in a very economical way. The questionnaire enables the simple comparison of data by standardisation, and survey strategy can provide good control for the researcher over the research process. When the research sample (i.e. the amount of respondents from the population) is representative, by statistical techniques it is possible to demonstrate that most probably the characteristic will be found from the whole population, meaning the findings can be generalised. However, in order to succeed, to the designing and piloting process of the questionnaire and also to sample selection a rich amount of time should be used. Also should be taken into notice that the analyse of the results can be time-consuming. Compared on the results gained by qualitative methods,

the data received by survey may not be as wide-ranging. (Saunders et al. 1997, 93-94, Collis & Hussey 1997, 66)

In the first part of this research the form of survey will be self-administered questionnaire, which will be delivered online (Facebook and possibly e-mail) and will be completed by respondents in their own time. In the second part of this research, the structured interview questions will be sent to the respondents by e-mail and they can answer in their own time.

Through questionnaires can be collected four types of data: attitude, belief, behaviour and attribute. (Dillman 1978, cited by Saunders et al. 1997, 285-286) This research's questionnaire and interview will combine attitude (how do the respondents feel about something), behaviour (what people did, do or will do) and attribute (background questions, f.ex. how often do respondent travel).

The research methods (questionnaire and structured e-mail interviews) were chosen because of the limited amount of time to complete the data collection, and financial resources of the researcher; possibilities to travel to make interviews were limited. Also the hope is to get more answers with these techniques; when people can choose their own time to answer the questionnaire or interview, they might not refuse to answer. With survey techniques it is easier to get a relatively large amount of answers within a short time period.

5.4 The form of the questionnaire and interview blanket

There will be both closed questions and open-ended questions in this research. Especially the part two, for industry actors, will consist of open-ended questions.

The questionnaire and structured interview were in the end checked by using the following checklist:

Figure 6.16 Checklist for eliminating questions

1. Does the question measure some aspect of one of the research questions?
2. Does the question provide information needed in conjunction with some other variable?
(If NO to both 1 and 2, drop the question; if YES to one or both, retain)
3. Will most respondents understand the question and in the same way?
(If NO, revise or drop; if YES, retain)
4. Will most respondents have the information to answer it?
(If NO, drop; if YES, retain)
5. Will most respondents be willing to answer it?
(If NO, drop; if YES, retain)
6. Is other information needed to analyse this question?
(If NO, retain; if YES, retain only if the other information is available or can be obtained)
7. Should this question be asked of all respondents or only a subset?
(If ALL, retain; If ONLY A SUBSET, retain only if the subset is identifiable beforehand or through questions in the interview)

Source: Adapted from Czaja and Blair (1996) p.61.

Figure 6: Checklist for eliminating questions. (Cited by Collis & Hussey 1997, 187)

The questionnaire for travellers and interview questions for the industry operators (Appendices 1 and 2) were gone through based on this checklist before publishing it. It was ensured that the questions really measure some aspects of the research questions, and they provide information which can be conjuncted with other variables. Questions 3, 4 and 5 were ensured by testing the travellers' questionnaire with four people with different kinds of backgrounds in forehand, and asking for their feedback. Bases on the feedback the questionnaire was fine-tuned before publishing. The questions were kept simple and understandable for all parties, so there is no other information needed for analysing. All the questions were drawn up so that everybody answers to all questions.

5.5 The samples

The up-front presumption is that all the respondents travel, at least once a year for a leisure trip. The questionnaire will be delivered in Facebook, and the presumption is that mostly the respondents will be friends or acquaintances of the researcher. Then the researcher has the knowledge that the above-mentioned condition will be fulfilled. When time and the possibilities to spread the questionnaire are considered, the aim is to collect 100 responses.

From the industry actors the aim is to collect ten answers; five from the castle respondents and five from different DMOs, also time and the possibilities to spread the interview considered.

5.6 The processing of the results

In all quantitative data collected an exploratory data analysis, also called descriptive statistics, can be conducted to summary, describe or display the data. This technique is useful for summarising and presenting the data. It includes presentation techniques like tables, charts and graphs, which help to show the patterns and relationships not apparent in the raw data. With these techniques, it is possible to make a preliminary or a full analysis of the data. (Collis & Hussey 1997, 196-198) "Graphical presentations do not merely present the data in a different, more compact form but the form positively aids subsequent hypothesis detection/confirmation" (Lovie 1986, cited by Collis & Hussey 1997, 198).

There are four main groups of techniques in exploratory data analysis. First one is presenting frequencies, where the frequency means a numerical value representing the total number of observations for a variable in question. The frequencies can be summarised by calculating averages or percentages, or both. This technique is used in this research. Second one is measuring location, or central tendency, which is a good way of describing a large frequency distribution with a help of a single value. This technique includes for example the concepts of the mean and the median. Third and fourth techniques are measuring dispersion and measuring change, which will not be used in this research. (Collis & Hussey 1997, 198-223)

In qualitative data analysis there are different approaches, however the usual perspective is either deductive or inductive. When starting from the deductive position, the existing theory of the subject will provide a basis for both the research questions and objectives, and then also for the data analysis. In inductive position the theory is builded up during the analysis process. (Saunders et al. 1997, 390-391) In the qualitative data of this research the analysing strategy will be deductive, since the research is based on the existing theory and the literature review. In deductive approach the researcher is already aware of the probable answers to be received. (Burnard, Gill, Stewart, Treasure & Chadwick 2008, 429) This is also the case in this research.

One way to present qualitative research findings is to report key findings under main themes or categories, and then by using appropriate written quotes illustrate the findings.

This should be accompanied by a separate discussion chapter where to discuss the findings in relation to existing research. (Burnard et al. 2008, 432) This method will be used in this research to present the qualitative results.

5.7 Reliability and validity

When conducting a research, the researcher must do his/her best to ensure the credibility of the results. Since it is truthfully impossible to know whether the answers in the research are right or wrong, the researcher can only reduce the possibility of getting wrong answers. Thus, the attention must be paid in two essential elements: reliability and validity. (Saunders et al. 1997, 100-101)

Regarding reliability, there might occur subject errors and biases, and observer errors and biases. Subject errors can occur when the answerers for example answer to the questionnaire in different times of the day or week; this may affect to results. Subject bias can occur for example when people answer to questions in a way they assume that they are wanted to answer, when they are for example afraid that they can be identified from the answers and therefore do not want to tell the truth. Observer error can occur for example when several people conduct the interviews; this may provide different approaches to the same answers. Observer bias can occur if several people interpret the results, in a different way. (Saunders et al. 1997, 101) A key element of reliability is that the research findings should be repeatable. This means that if the same research is repeated, the results will come out the same. (Collis & Hussey 1997, 58)

Validity means that the results of the research must be “really about what they appear to be about”. The relationship between the variables should be a causal relationship. To ensure validity, the external factors of the subjects of the research must be taken into notice. These factors can be the events in the (near) history, doubts towards the research, wrong instructions regarding the research et cetera. (Saunders et al. 1997, 101-102) Research findings must accurately represent what is happening in a certain situation; the findings must reflect behaviour in natural setting. Research errors can weaken the validity of the research. These errors can be for example poor research process and samples, or misleading measurement. It can occur that the measure does not reflect what the researcher is investigating. The validity of this matter is indicated as face validity, which means ensuring that the measures used do represent what they are supposed to. Also there is another form of validity, the construct validity, which is related to the phenomenas that are not directly observable. Examples of these are motivation or ambition. These are called hypothetical constructs, and they are assumed to exist as factors to explain the

phenomena in question. To ensure construct validity, the researcher must be able to demonstrate that the research findings can be explained by the construct in question. (Collis & Hussey 1997, 59, 186)

In survey researches, reliability and validity can be ensured by a careful design of survey questions, clear layout of the form they are presented, clear explanation of the purpose of the survey, and completing these by testing the questionnaire in forehand. (Saunders et al. 1997, 279) There are different types of questionnaires existing under the general concept of questionnaire, and the choice will affect to the reliability of the research. If the type is self-administered questionnaire, the researcher cannot be sure that the respondent has really answered to the questionnaire him-/herself. Another factor is that there can occur "contamination" in the answers. This means that the answerers may guess the answers if they do not know the actual one or they can discuss the answers with other people. (Saunders et al. 1997, 281) Even though the responses appear to be reliable, there is still a possibility that the validity is low; if the questions do not measure what they are supposed to. One way to ensure that is to take care carefully that the explanation of the purpose of the research to the answerers corresponds to the asked questions. If the questions seem to be irrelevant to the answerers, they might not have interest to answer. (Collis & Hussey 1997, 187)

7 The results

In this chapter the results of the both parts of the research (part one for travellers and part two for attraction marketers and DMOs) are presented.

7.1 Part 1: The travellers

The first part of the research, the survey for travellers, was conducted during about two weeks time in 24.7. – 9.8.2017. The questionnaire was shared in researcher's own Facebook page, and in addition 18 people shared in forward in their own Facebook pages, so the number of potential answerers raised pretty high. One reminder was sent by publishing the questionnaire again with a request to still answer, in researcher's own Facebook page; this happened 3 days before closing the survey. In order to persuade people to answer, a prize was promised to draw among the answerers, who leave their contact details. The prize was a gift card to Hotel Katajanokka in Helsinki. Altogether 123 answers were received, which is over the researcher's aim, which was 100 answers. The questionnaire form is presented in Appendix 1.

7.1.1 The background of the participants

Vastaajien määrä: 123

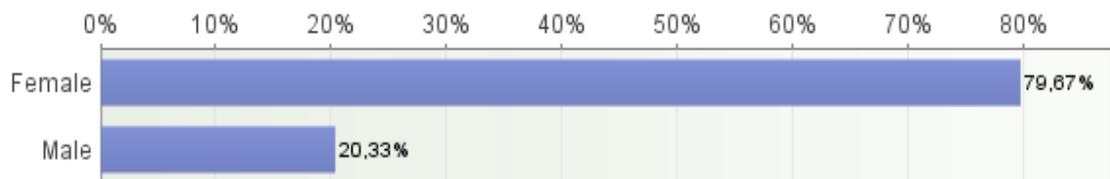


Figure 7: The gender of the participants

As can be seen from Figure 7, the female answerers were much more larger group than the male answerers, with almost 80% of the answerers. This was however assumed in forehand by the researcher, since the expectation was that the females are more eager to answer to this kind of surveys.

Vastaajien määrä: 123

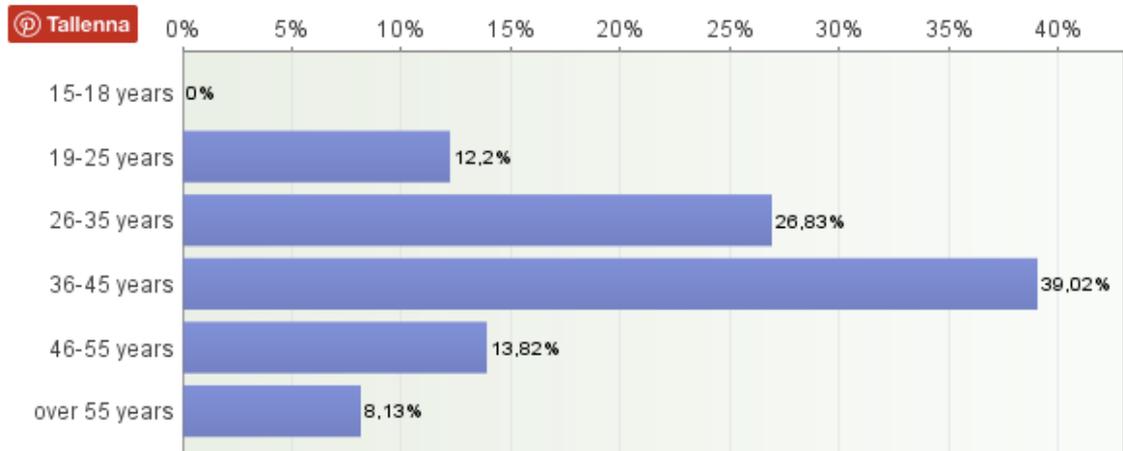


Figure 8: The ages of the participants

As can be seen in Figure 8, the biggest age group among the answerers was 36-45 years, with approximately 39% share. However, also the group 26-35 years is well represented with approx. 27% share. The other age groups are almost even together, +/- 10%. Since virtual reality is perceived to be younger generations' thing, the researcher finds it good that there is also the older age groups (over 46 years) represented. Within the age group 15-18 years there became no answers.

Vastaajien määrä: 123

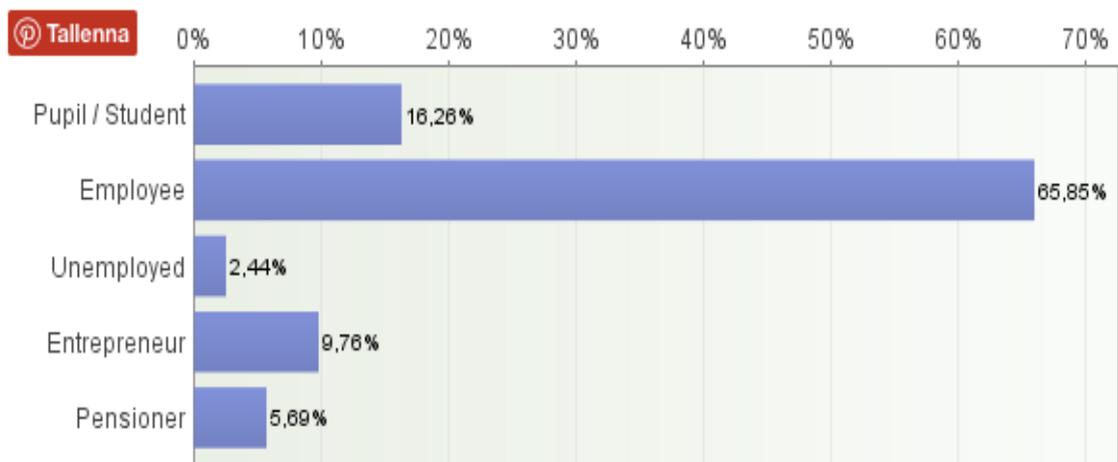


Figure 9: The socioeconomic groups of the answerers

Here, the employees are overrepresented, can be said, with almost 66% share. However there are answerers from all the age groups, with pupils/students as a next largest group with approx. 17% share.

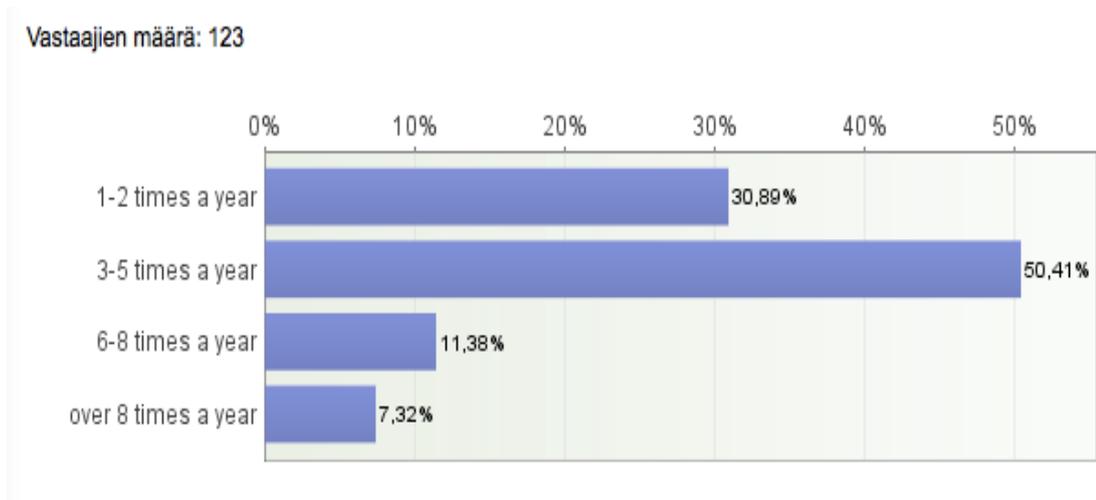


Figure 10: How many leisure trips / year

This question was interesting to ask, since it can be compared for example to the willingness to use virtual and augmented reality; does the eagerness to use them correspond to the amount of travels. The leisure trip was defined here to be over 50 kilometres from home, and visits to relatives or friends do not count; the idea was that during these travels people really use travel services, like hotels, attractions etc. which not necessary happen when visiting friends or relatives. As can be seen from the Figure 10, half of the answers travel 3-5 times a year, and the other big group, approx. 31%, 1-2 times a year. The group over 8 times a year was also represented, with a little bit over 7%.

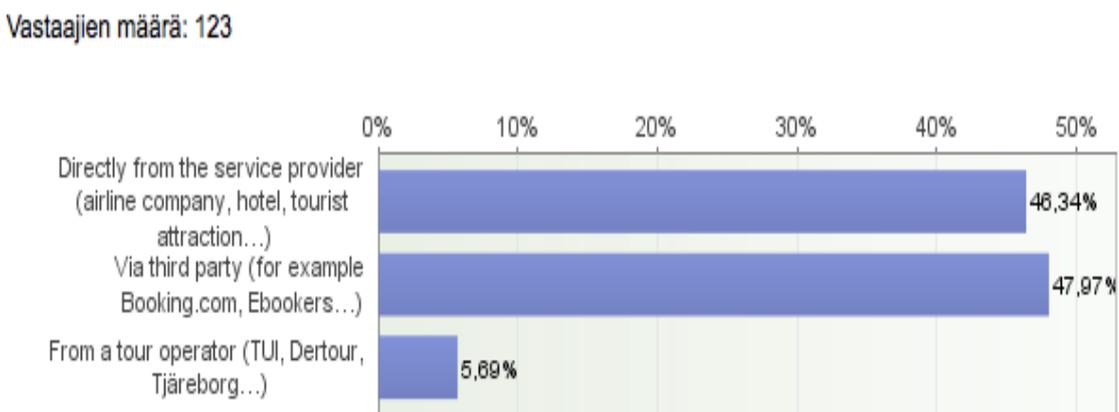


Figure 11: From where do you usually purchase your leisure trip services?

The next question about where people usually purchase their trips can be related to the information that who will benefit from the virtual reality, if it seems that it will grow in the (near) future to be a common tool. Here the options “directly from the service provider” and “via third party, for example Booking.com” are almost even, whereas tour operators

leave far behind. This imitates the nowadays' trend to book and organise everything individually, and mostly online, at the expense of the traditional travel agencies.

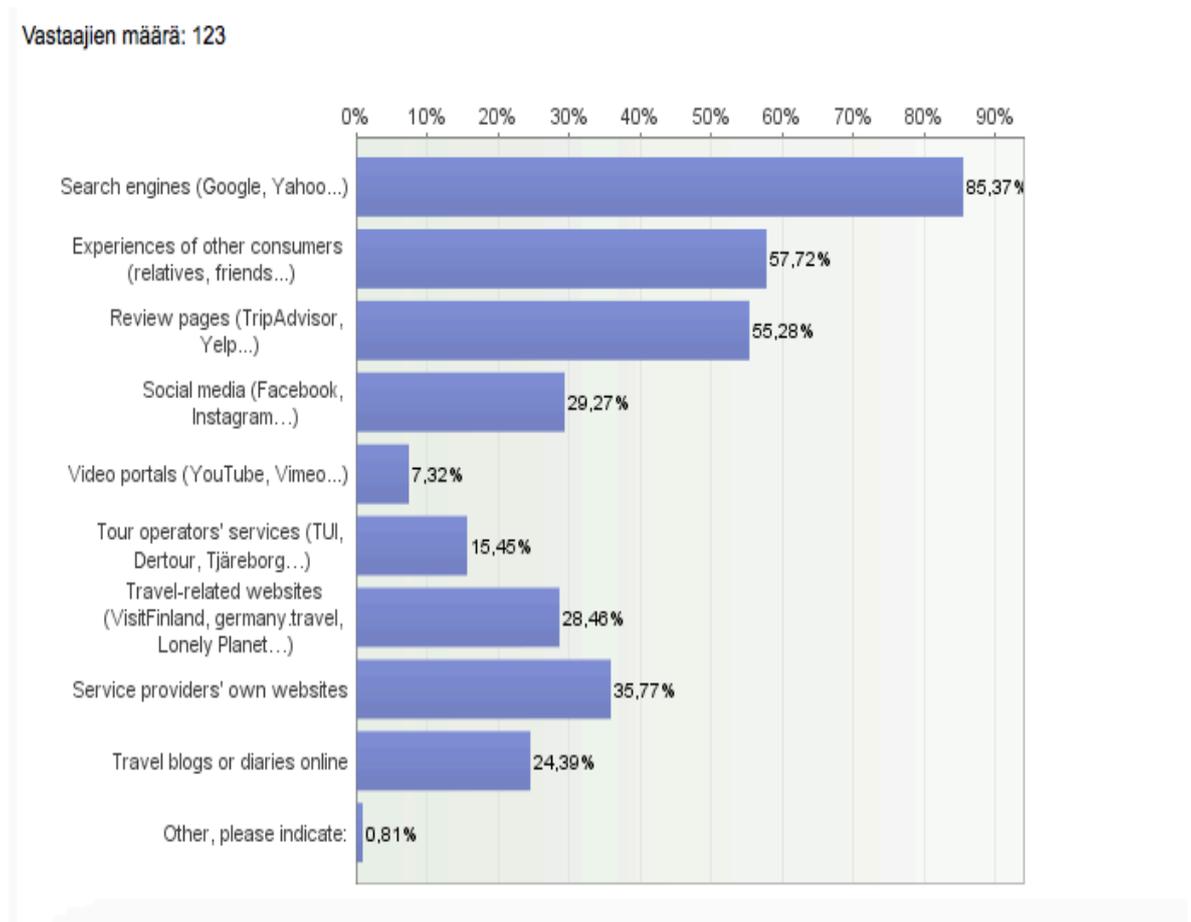


Figure 12: When you are planning your leisure trip, or choosing the travel destination / services in the destination, how do you familiarize yourself with different options and search for information?

In the next question the idea was to find out how people search information about different options related to their becoming trip, in the planning phase. These can be then compared to the eagerness to use VR in the planning phase. The answerers had a possibility to choose minimum 1 and maximum 4 options. Search engines like Google are absolutely the winner here, when approx. 85% uses them when planning. Also over half of the answerers rely on the experiences of their acquaintances, and the review pages like TripAdvisor. Social media, travel-related websites like Lonely Planet and service providers' own web pages are also in studious use. What surprised the researched a little bit is that video portals like YouTube leave only to approx. 7,5%. Since both shooting and watching the videos in general is so popular nowadays, also here in travel-related matter a little bit bigger number would have been expected. There was one mention in the option "other"

where one answerer has written to the open field “Guest reviews on hotels.com and booking.com”.

Vastaajien määrä: 123

	1	2	3	4
Brochures of the destination with pictures and information	22,58%	40,32%	26,61%	10,48%
Videos of the destination (generated by other travellers or professionals)	15,32%	37,9%	32,26%	14,52%
Photos of the destination online (generated by other travellers or professionals)	0,81%	16,13%	45,97%	37,1%
Virtual tours (360° videos, tours in the attractions, hotel properties etc.)	28,23%	31,45%	28,23%	12,1%
If you don't use any of these, please indicate why:	0%	100%	0%	0%
Yhteensä	16,57%	32,14%	32,93%	18,36%

Figure 13: In a scale from 1 to 4, please evaluate how influential the following sources are to your decisions, when planning your leisure trip or choosing a trip destination:

1 = not influential at all 2 = slightly influential 3 = quite influential 4 = highly influential

In the next question, the answerers were asked to evaluate how influential the mentioned sources are, when they are making decisions related to their trip. The traditional marketing method, the brochures, 40% finds only slightly influential, and even approx. 23% not influential at all. The influentiality of the videos divide between slightly and quite influential, with only approx. 15% answering highly influential, which can be related to the previous question where it was noticed that a little amount of people use videos for familiarizing. Photos were more influential here, with approx. 46% finding them quite and approx. 37% highly influential. Virtual tours go to the other direction here, when approx. 28% finds them not influential at all; however still also 28% finds them quite influential. Nobody answered to the open field why not to use these sources.

7.1.2 Virtual and augmented reality questions

Vastaajien määrä: 123

	Yes	No	I'm not sure
a) virtual reality (Picture 1)	26,02%	69,92%	4,07%
b) augmented reality techniques? (Picture 2)	28%	61,6%	10,4%
Yhteensä	27,02%	65,73%	7,26%

Figure 14: Have the participants experienced VR or AR?

The first question in the VR and AR questions part was that have the answerers used them in general. As expected, most of the answerers have not (60-70%).

Vastaajien määrä: 123

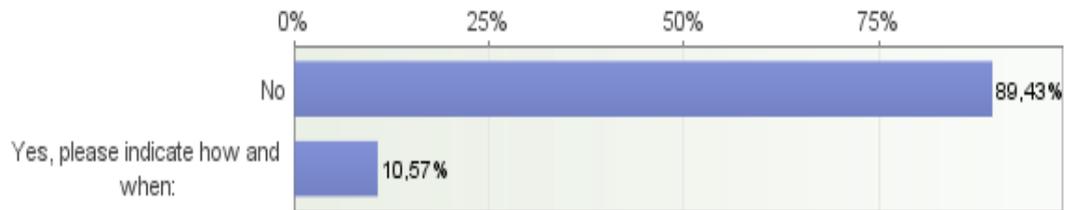


Figure 15: Have the participants seen VR or AR techniques in tourism-related situations?

In the next question the answerers were asked to tell if they have seen VR or AR in use in tourism-related situations. Compared to the previous question, the answers are in line: almost 90% have not seen these. Those who had, mentioned in the open field AR applications in the phones, used for informing for example about restaurants and sights. VR have been seen used for hotel or holiday residence introduction, in a building attraction, in travel trade show and in some other fair events. One answerer mentioned “visiting” “beautiful destinations via virtual reality experience”.

Vastaajien määrä: 123

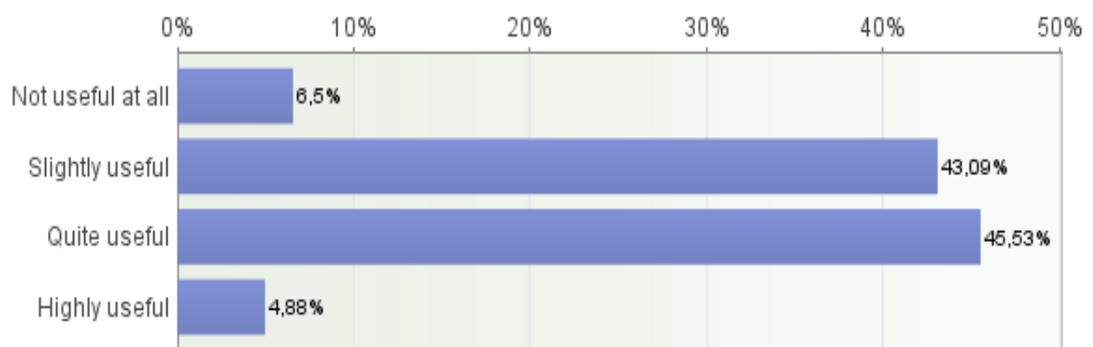


Figure 16: Would VR experience be useful in travel planning?

Despite the fact that most of the participants have not experienced VR, almost 90% altogether find that it could be slightly or quite useful there. As quite or highly useful it finds altogether approx. 50% of the answerers.

Vastaajien määrä: 123

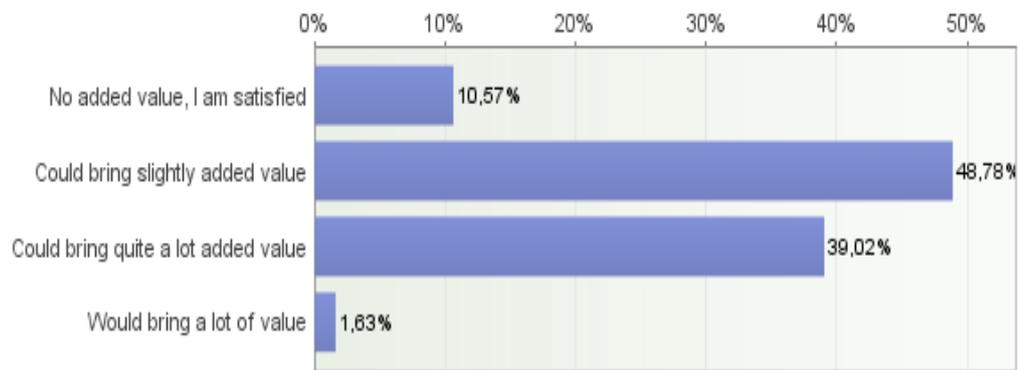


Figure 17: Would VR experience bring added value in travel planning (or are you satisfied with the current technologies; video, pictures etc.)?

In the next questions, the participants were asked to evaluate, whether the VR could bring added value to their travel planning, or are they satisfied with the current (widely-used) technologies. Almost 50% answered that it could bring slightly added value, and almost 40% that it could bring a lot.

Vastaajien määrä: 123

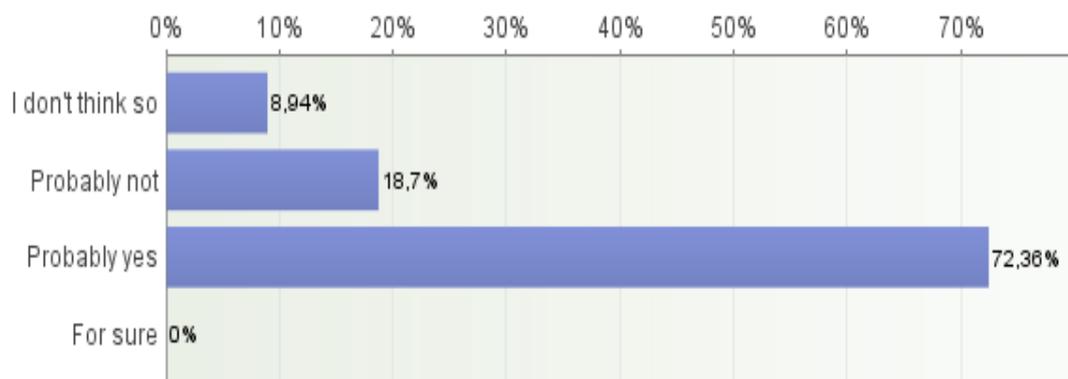


Figure 18: Would the VR experience in advance encourage the decision to travel to the destination?

The next question follows the same line as the previous ones; over 70% thinks that the VR experience could encourage the decision to choose the destination in question.

Vastaajien määrä: 123

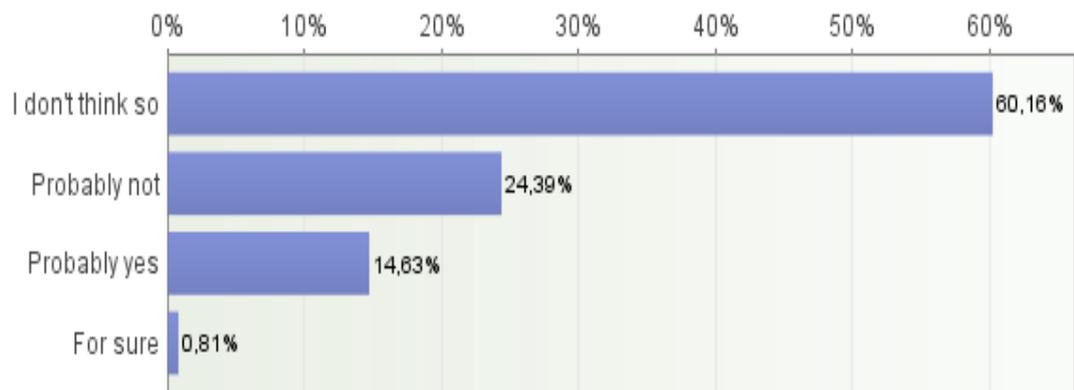


Figure 19: Would the VR experience in advance cause a feeling that there is no need to travel to the destination anymore?

Here, most of the participants took a negative stand, and announced that the VR experience would not stop them from travelling. Approx. 60% were sure about it, and almost 25% quite sure. However must be mentioned that still almost 15% thinks that it could have an affection.

Vastaajien määrä: 123



Figure 20: Would you be interested in actively approaching virtual reality possibilities to support your travel planning / destination choice?

Vastaajien määrä: 63

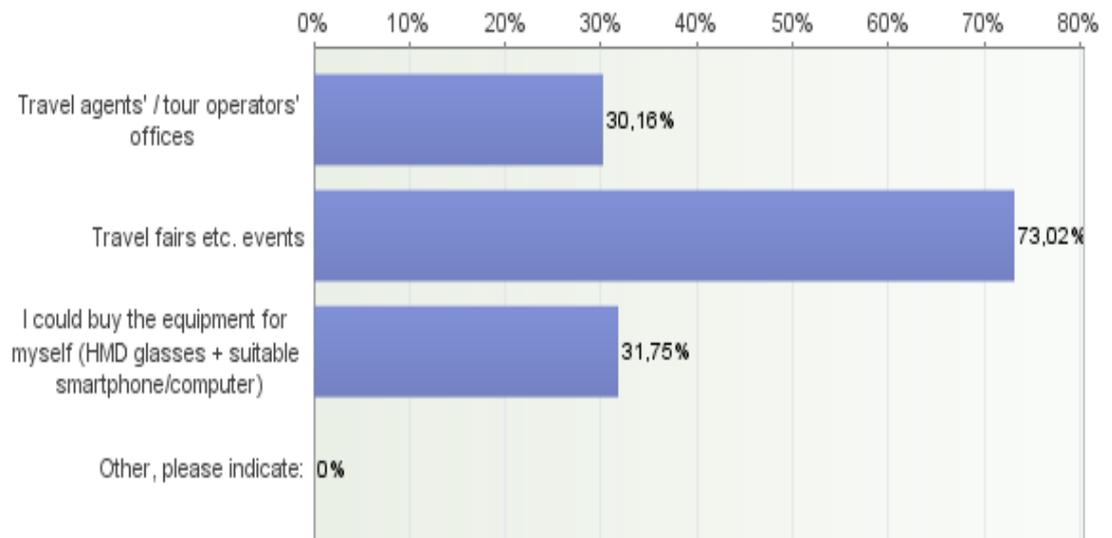


Figure 21: In reference to the previous question, if yes, how to do that?

The next two questions belong together, as in these the participants were asked to evaluate, would they be interested in being active themselves in approaching VR possibilities and thus support their travel planning and / or destination choice. The answers were here quite even between yes and no. If the answer was yes, most of the answerers would do that in the travel fairs. Here the answerers had a possibility to choose multiple options. So also approx. 30% would find their way to the travel agents etc. office, and even approx. 30% would consider to buy the equipment themselves.

Vastaajien määrä: 123



Figure 22: Would you be interested in using augmented reality applications during your trip?

In the last question, participants were asked if they would be interested in using AR during their trip, for searching places or exploring the surroundings. Almost 60% is not interested about this possibility. Those who were, gave examples in the open field about to which

and how they would use it. Answers in the open field were altogether 34, from which 22 mentioned the search possibilities; search for restaurants and attractions, and getting to know the area in general. 11 answerers mentioned the possibility to familiarize themselves with AR to the historical attractions; to receive information and historical facts, possible how people lived there in former times, stories etc. Those who mentioned it, were interested in using the AR by phone and their applications, only one answerer mentioned the AR glasses. All the open field answers are presented in Appendix 3.

Lastly, the participants were provided an open field for sharing their thoughts in general about VR and AR, and for the feedback about the research. 40 answerers used this possibility. In comments, there were opinions both positive and negative towards VR; quite the same amount of both. In the positive comments, quite many mentioned the novelty of VR and the future possibilities, the possibilities of AR to ease the travelling and VR to ease the planning and decisions.

“It is definitely something new and exciting and will shape the future of the travel industry. Something new such as virtual or augmented reality should be explored further in travel experiences.”

In my opinion, virtual reality in travel and tourism industry offers first new possibilities to explore travel destinations in advance when making the travel decision. As pointed out in the research, augmented reality could be also implemented while travelling to provide information to travellers through virtual signs and boards and therefore add value to sites. Augmented reality could be also used for site-related games to entertain people while giving them an understanding of the site at the same time. I like the future orientation of the topic and I am quite excited about new developments in technology. ...”

“I think AR could really help people find places better when they are abroad and VR definitely would help me decide my travel destination and hotel.”

However, some answerers, even positive to the subject, were concerned about the all-the-time-increasing amount of technology, and mentioned the difference between the VR and “the reality”.

“I think I could use services when I am searching the destination and planning the trip, but normally when I am in holidays, I want to live quite free from any technical devices.”

“I think it's a useful method for planning a trip, during the trip I would rather prefer to see the "real world". However there is the risk that people have too high expectations and will be disappointed when seeing the real world.”

“In a way I would be interested to explore destination by VR but in a way I also like to keep the surprise momentum.”

In more negative comments, these same things repeated: living rather the “real life”, and the possibility the VR to provide “better” experience than it in the end is.

“I do enjoy my human experience of the universe in my human body. I do not think the constant immersion in technology does us any good. One of the best things about travelling is that it often provides a way to snap out of the everyday intelligence technology. I like to have even camera-free days when abroad, as I value my experiences without a gadget separating me from the world :) “

“I think the idea of any virtual and/or augmented reality sounds scary for me and I rather see and experience things like they are without any extra electronics involved.. the world is already full of different kind of electrical devices and I don't need any more of those. :) ...”

“I don't see how virtual reality is much different than watching a video. For me, videos are enough. I don't think experiencing it in advance will really make more likely to go to a certain destination. Augmented reality seems very interesting though. If it makes finding certain places easier or getting info about a place then I think it would improve the travel experience.”

All the open answers can be found in Appendix 4.

7.2 Part 2: The industry operators

The second part of the research, the e-mail interview for industry operators (attraction i.e. castle marketers and DMOs) was conducted during the summer, 5.7. – 21.8.2017. The questionnaire was sent first to 19 castles and six DMOs. The castles were chosen so that they are open to all public, as a sight or a museum, where people can visit relatively shortly during their trip to the destination region. Castles operating as a hotel or corresponding were not included. All the castles were somehow familiar for the researched; either visited or otherwise known. From DMOs four were in Germany and two in Finland. A reminder was sent approximately two weeks after the first sending. Already at this point it

was clear that getting the answers will be hard. In August the interview was sent in addition directly to one castle contact person, who's e-mail address was received from an acquaintance, two more DMOs and two general castle marketing operators, who are responsible for castle marketing of two states in Germany. Unfortunately even these actions did not help, and the number of answerers was left to two, one castle and one DMO. Even though from such a low number of interviews it is hard or even impossible to make any kind of sweeping conclusions, the results will be presented here as a kind of "expert interviews". The interview questions are presented in Appendix 2.

7.2.1 Interview of a castle marketer

The castle represented here is located in the very popular tourism region around river Mosel in Western Germany. Within this area there are a lot of old castles for tourists to visit.

In the background questions the operators were asked, which digital marketing tools they use at the moment, and which marketing tools in general are the most important for them. This castle in questions uses as digital tools Website, Facebook, Twitter and Google, and besides Website, Facebook and Google, the interviewee mentions as an important marketing tool the flyers.

About virtual reality, the interviewee sees it as a potential marketing tool in general, and in tourism in general, but not for a museum since "it is not the reality". They personally in the castle have not considered including it to their marketing tools in the (near) future. To the questions could some marketing processes be replaced by the VR the interviewee finds it in general to be a good addition, i.e. not a replacement, but not for their branch. However, he mentions that "it could be interesting for a castle for handicapped people in wheelchairs for example: they cannot go up the steps and so they could perhaps "feel" a little bit of the castle". For augmented reality possibilities the interviewee is positive, and answers that they can be a good addition to the existing.

The last question was about do the interviewee feel that if travellers could experience the travel destination or attractions in advance in virtual reality, would it encourage their decision to travel there, or that they would not want to travel anymore. The interviewee answered:

"I do not think, that everybody would not come to a destination or attraction, because reality is the best way to explore a destination and an attraction. And everybody want to go out of their ordinary life. But it could be interesting for destinations which

are very fast and for those, who have not the money to travel. So they could explore “virtually” a destination. But I think that a small number of people would not want to travel anymore.”

7.2.2 Interview of a DMO representative

Another interviewee represents an area destination marketer, a state in Germany. In the state there are a lot of possibilities for tourists to visit, accommodate and spend their holiday. The questions were answered in German and the translation is handled by the researcher.

In the background questions the interviewee mentions as their digital marketing tools the homepage and social media; Instagram, Facebook, Youtube, Twitter, blogs and podcasts. As an important marketing tool he highlights the publications in a travel magazine concentrated on the region, but mentions also the marketing-mix as a whole.

About the VR, the interviewee sees it in general and in tourism branch as potential, but says that it is difficult in destination marketing. He mentions that for hotels it is for sure better exploitable, but also that the potential is strongly depending on the spreading of the equipment among the customers. Their company already has some experience with VR; they have published 360° videos in YouTube. He tells that the reason they did these was to gather some experience, and that they have learned from that a lot. They can serve the marketing attempts a lot, but more as a “showcase”, for example in events. They see more potential in AR. For the question if VR could replace some other marketing tools he thinks that it could not, but it can support them, for example in events, where VR glasses can be used in stands. But as mentioned, about AR they are interested, and can add it to their services in the (near) future. He mentions that it could be a good way to provide information for the guests about the holiday destinations.

Lastly, he answers that for the question about would VR encourage the decision to travel to a place, or the opposite, that all the media sources can have a positive or negative affection to the travel decision, and he feels that VR does not for sure have a greater than average influence here.

8 Discussion

The aim of this research was to find out the current attitudes towards VR among tourism industry and travellers - how these subjects see this new technology and its possibilities in the tourism branch. There was a desire that the results would provide general information whether the VR is really going to be the big thing in the destination marketing in the (near) future.

This research consisted of two parts. In the first part the subject was ordinary travellers, and their attitudes and opinions towards VR, and how they experience its affection to their own travel planning and travel destination decisions. The form of survey was self-administered questionnaire, which was delivered in Facebook and was to be completed by respondents in their own time. The research method, questionnaire, was chosen because of the limited amount of time to complete the data collection, and with the hope is to get more answers; when people can choose their own time to answer, they might not refuse. The up-front presumption was that all the respondents travel, at least once a year for a leisure trip, and this was fulfilled. Considering the time and the possibilities to spread the questionnaire, the aim was to collect 100 responses. This was achieved and even exceeded, since the final number of respondents was 123.

The main research question was that do travellers see the VR as a potential way to find out and gain information about the destination before they travel. There were also sub questions; would they actively approach the VR to gain information, would it bring added value to them (or are the current sources (video etc.) enough), and do they feel that the possibility to experience the destination in forehand in VR would encourage to travel there (or maybe the opposite)? The research managed to answer these questions, so it can be considered as successful.

In the second part of this research, the structured interview questions were sent to the respondents by e-mail and they can answer in their own time. The research method was chosen because of the same reasons mentioned already above; limited amount of time to complete the data collection, the hope to get more answers, and also financial resources.

The main question for the operators was that do they see the VR as a potential marketing technique. The sub questions were what kind of dynamics can VR bring into destination marketing and could it change the way the marketing is been doing now, or would it be a good addition to that. The operators were also asked that do they feel that the possibility to experience the destination in forehand in VR would encourage the tourists to travel

there, or the opposite; no need to travel there anymore. Unfortunately this part of the research cannot be considered as successful as the first part, since the subtotal number of answers to the interviews was only two. The interviews do answer to the research questions, but they cannot be used as sweeping conclusions, when the amount of answers is so low.

The research logic in this research was deductive, which means that there is a theory existing behind the phenomena to be researched, and based on that it is possible to form a hypothesis of the results of the research. The researcher's expectation in advance was that there is not yet a wide use of VR in travel planning among ordinary travellers, and this was confirmed, when only approximately 26 per cent had experienced VR in general, and only approx. 10 per cent have seen it in use in tourism-related situations. In order to answer to the research question the aim was still to find out how interested the travellers yet are about the possibilities of VR, and it came out that they are interested, when almost 90 per cent thinks that it could be at least slightly, or even quite, useful in travel planning, and almost the same amount thinks that it can bring slightly or quite a lot added value. This can be compared to the IpsosMORI –research presented earlier, where 47 per cent of the participants wanted to give VR a try, and 56 per cent of answerers said that experiences related to travel are the ones they would like to have with VR. (ipsos-mori.com 2016) So there is an interest existing, even though it does not materialize yet.

Compared to this, it was surprising that to the background question how the participants familiarize themselves with the destinations and their services, only a bit over 7 per cent chose the video portals. Even tour operators' services got a bigger amount. It can be asked, if this has something to do with the age breakdown of the participants in this research, when over 50 per cent of the answerers are over 36 years old? But when the answers are observed within only the age groups younger than 36 years, the per cent raises only a little, to a bit over 10 per cent. It can also be the case that people watch the travel videos rather in social media than in separate service, YouTube is then used for other purposes. Even though it is said that YouTube is now the second largest search engine after Google (UNWTO 2014, p. 3), in this research that does not come out.

However, wherever watched, the videos are still considered to be somewhat influential, when altogether approx. 47 per cent find them quite or highly influential. In the previous-presented Phocuswright's U.S. Traveller Technology Survey (Phocuswright 2016, 11), the videos made it into top-3, though combined partly with the "traditional" photos. The influence of the photos is obvious, when in this research approx. 83 per cent find them influential. When the traditional information brochures were left far behind, here can therefore be

stated that it is the case: visual information is the supreme information nowadays. This combined with the evident interest towards VR and its use in travel planning predicts good for it, and can provide food for thought and encouragement for the travel industry operators considering adding VR to their marketing techniques.

Of course can be asked why the interest has not materialized yet; why so few people have actual experiences with VR even though they are interested. When asked where people would like to use VR, travel fairs etc. events got the most references. This is something where the travel trade could grab and take advantage of. Also when comparing the two questions; where people purchase their travel services and where they would like to use VR, only approx. 6 per cent used the tour operators, but approx. 30 per cent would like to experience the destinations via VR in the tour operators' / travel agencies' offices. This could definitely be a way to persuade customers from their internet services back to the travel agents – which is what some operators are doing already. As mentioned early, for example TUI has delivered VR headsets for its travel agencies in Europe (Rogers 2016). These actions would as for make VR more familiar to the big audience, which would again open new possibilities for the industry. To this same question even approx. 30 per cent answered that they would be ready to invest to the equipment. This can predict that even more people will own these in the near future, when the prices come down all the time and the solutions get easier and more understandable for the “regular” consumers as well. One answerer mentioned in the open comments that “... I have two VR glasses (Oculus VR and a stand alone) which are great but they are in desperate need of more content, other than moronic games and short rollercoaster videos.” Also based on the IpsosMORI –research it was stated that at the moment VR is seen as “a technology without application” (ipsos-mori.com 2016, Rogers 2016). There is a place to strike for the travel industry and provide the content, and start the positive spiral which could benefit all the parties.

In addition to the already mentioned questions in the research, here can also be brought up the question, if VR would encourage the participants' decision to travel to a certain destination. Over 70 per cent answered that it would encourage the decision, which supports also the possible decisions of including VR to the marketing selection. As mentioned earlier, a big advantage of VR will be helping consumers to decide where to travel. Here is a chance for the operators to market new places and not yet so well-known destinations. The research supports the view that when people, who always tend to travel to the same, familiar or well-known places, would have a possibility to experience the supply of some new places in VR, it can fade out the possible doubts and persuade the customers to choose them instead. As stated, this will naturally be beneficial for the new destinations and ease the breakthrough to the markets for the industry operators.

An interesting counterquestion to the previous was that do participants feel that if they would have the chance to experience the destination in VR in forehand, would they feel that there is no need to travel there anymore. Over 80 per cent felt that no or probably not. As discussed earlier, some authors have considered VR to be even a threat for tourism, if people would accept VR as a substitute for the actual travel. This research proves that this is not in sight of. As two participants sum up in the open field: "I think it's a useful method for planning a trip, during the trip I would rather prefer to see the "real world" ..."

and "Interesting possibility, but you will never experience the same through digital equipment while actually traveling." However, has to be mentioned that still approx. 15 per cent answered yes or probably yes. One participant wrote to the open field that "I might be old-fashioned, but I think that experiencing virtual/augmented reality might take away some excitement of exploring a new place on site.". And another one: "... But could these virtual reality equipments make your trip a bit boring, you know where you are and what places are near, you don't need to explore so much anymore." For some people VR seems to be "too much information" – some adventure lovers will always want to retain the surprise moment while travelling. For them experiencing the destination in forehand can act as a spoiler, and make to choose another destination instead.

One interesting comparison to make was that do certain numbers change a lot when they are been observed within only the participants who travel a lot, over 6 times a year. Are these super-active travellers more interested in VR than others? The question worth mentioning here is the question about would these active travellers actively approach VR to support their travel planning. Here the number of yes-answers raises from approx. 48 per cent of all participants to a bit over 65 per cent among these active travellers. So they are somewhat more interested in the possibilities that VR could offer to their travel planning. Also among this group the percentage of answer "highly useful" to the question would VR be useful in travel planning raises approx. 4 percentage points from a bit under 5 per cent to almost 9 per cent. This could indicate that when this target group is obviously highly interested in travelling and probably consider it as a hobby, they are also willing to invest time and other resources to the planning process. Also, presumable is that they travel, if not every time at least often, to new and different places, which can need more planning than if one travels to known and familiar place often. Also a simple statement is that if you are interested in something, you are most likely interested in everything that is related to the subject, and especially the novelties. These people are highly interested in travelling, and all the novelties that are related. This result fulfills the researcher's advance expectation in this matter, and is also worth considering for the travel industry operators; how to persuade these actives to their loyal customers, which marketing techniques to use.

An interesting result that the researcher left to consider is that why only approx. 40 per cent would be interested in AR possibilities. As mentioned earlier, based on a research, 94 per cent of the travellers take at least one mobile device with them to a trip (Statista 2016). And people for sure also use them during the trip; for photographing, maps, social media... It could have been assumed that AR possibilities would have been more interesting to the participants. Possible explanation here can be that AR and its possibilities are simply not enough familiar to the audience yet. Have to remember that to the combined question if participants have seen VR or AR in tourism-related situations the amount of yes-answers was only a bit over 10 per cent. Some knowledge there exist, since in the open fields quite many mentioned the possibilities of AR during the trip, but there also came up the counterforce, who felt that there is already now too much technology involved, as introduced in the previous chapter. So these two factors combined, the lack of knowledge and on the other hand the certain amount of resistance to the ever-spreading technology, could explain the relatively low per cent of interest. Also can be asked is there yet enough and sufficiently easy applications available? However, about AR only a completely own research could be made, to clarify the interest towards it and the possibilities properly.

From the open field and the participants' thoughts there is yet one interesting detail to highlight, and it is the contradiction between expectations and reality. As discussed earlier, the visitors' experience should always match or even better, exceed, the expectations (Lane 2007, 248), in order to ensure the satisfaction. And because VR provides the tourists the experience almost "being there without actually being there," travellers' expectations will be properly set before they book, and it is possible that the expectations will also rise (Orbit World Travel). This came out also in this research, when a few people mentioned the raise of the expectations. For example: "I prefer experience myself before using VR or AR since I think these two techniques is more suitable for recalling memories after the trips. Otherwise, they can be reasons for high expectations and disappointment afterwards." and "... However there is the risk that people have too high expectations and will be disappointed when seeing the real world." So this research proves also that if and when VR spreads wider and becomes "everyday" tool, the service providers have to be ready to answer to this expectations. Of course the creators of the VR introductions of the destinations etc. must remember that even if it would be possible to process what will be shown to the audience, this will easily backfire later.

When considering here the answers of the interviewees representing the industry, it can be said that they are at the moment using the right methods in their marketing, when both

mentioned social media and own websites, and the other one the search engines, which are all in the top-five of sources where travellers search information. A good thing not to forget are the review pages, like TripAdvisor, where it is worthwhile to be active and for example answer to the possible negative comments. After all it is a very important source of information for travellers, and being active there is an important part of marketing. Interesting is that they both mentioned a “paper source” as an important tool (flyers / a magazine), even though travellers do not find them any more very influential. Also both of them do not find VR very suitable for their branch (museum attraction / destination marketing). This is contradictory to the fact that travellers would find it useful.

However, the castle representative provides a very timely option when he suggests that it could be of assistance for the handicapped people in exploring the attraction. This supports the ideas mentioned in the literature review, where it was discussed that in case the access to an attraction would be for example too distant, dangerous, fragile, or some other ways difficult or totally impossible, VR can be of assistance in enabling the experience no matter the circumstances. And that could be especially beneficial to the people whos ability to move is somehow limited; this way they have the possibility to experience otherwise unapproachable places as well, when adjusting for example some historical sites, like castles, to be barrier-free might be impossible. (Guttentag 2008, 643) This came out also in the open field of travellers’ questionnaire, where one participant mentioned the possibility to experience the interesting but too dangerous destinations in VR.

Both of the interviewees saw that AR could be an interesting opportunity for their company to use in the future. As mentioned, only 40 per cent of the travellers were interesting in AR possibilities, but as also mentioned, it could be due to the fact that it is yet not enough familiar to the audience, and the possible lack of easy applications available. If the companies are interested and start to use AR in destinations more widely, the enthusiasm can spread more among the travellers too. Even though the percentage of interest here was relatively low, in the open comments many mentioned the possibilities; for example regarding historical attractions, like castles, they would like to receive information and historical facts, how people lived there in former times etc. In some castles the tourists are forced to take part to a guided tour, which obviously makes sense if there are for example very valuable old things represented in the castle; it is safer than people wandering around themselves. But there are also many castles where touring alone is possible, and here AR could be of great assistance in familiarizing oneself to the premises and history. One participant even mentioned an idea of site-related games which could at the same time provide information; this is of course a nice option especially for children, and worth considering by these historical attractions.

The DMO representative highlights the power of VR in events, as a representing tool. This goes well with the fact that over 70 per cent of the travellers would like to see VR in use in travel fairs etc. events. It is indeed a good way to persuade people to the stands, introduce the destination, and encourage the travel decisions. Since even though the DMO representative feels that VR does not have greater than average influence, over 70 per cent of the answerers say that probably it would encourage the decision. So the DMO is still on the right track with 360° videos and when using VR in events. The castle representative mentions that only a small number of people would not want to travel to the destination anymore after experiencing it in VR. Based on the survey for travellers he is on the right track, when over 80 per cent of the participants also feel that way.

8.1 Reliability and validity

As already discussed, when conducting a research, the researcher must do his/her best to ensure the credibility of the results, and with all the available techniques reduce the possibility of getting “wrong” answers, i.e. ensure the research’s reliability and validity. (Saunders et al. 1997, 100-101)

In survey researches, reliability and validity can be ensured by a careful design of the questions, clear layout of the form, clear explanation of the purpose of the survey, and completing these by testing the questionnaire in forehand (Saunders et al. 1997, 279). The questions, both in questionnaire and interview, were designed with great caution, using a checklist for survey researchers as help, in order to ensure that all the questions as for support the research questions. Also a high attention was paid to the things like that the questions are easy to understand to all the answerers with different kinds of backgrounds, and are of clear language. A small explanation about the subject (VR and AR) was added, in order to encourage also the answerers who do not necessary have deep understanding about the technology in question, and/or can easily mix these two concepts. If the participant would feel that he/she has not enough knowledge about the subject, the answering could be easily called off, even though this survey did not demand any technical knowledge. Therefore the explanations were added. The questionnaire was tested in forehand with a few people, with different kinds of backgrounds and language skills, and some feedback was received. Based on the feedback the questionnaire was fine-tuned before publishing.

As mentioned, in self-administered questionnaire (and interview) the researcher cannot be sure that the respondent has really answered to the questionnaire him-/herself, the answerers may guess the answers if they do not know the actual one, or they can discuss the answers with other people. These factors can affect to the reliability of the research. (Saunders et al. 1997, 281) In self-administrated questionnaire these are impossible to completely eliminate, but in this research the best was made to reduce these factors. By making the questions as clear and understandable as possible, with the means mentioned before, the respondents should not be forced to ask somebody else to answer, and/or discuss what to answer with other people. With the addition of the small explanations of the subject, as mentioned the idea was to make the subject clear, and then the answerers should not be forced to guess the answers. Also since this survey measures more opinions than any level of knowledge, the guessing should not be necessary. The interviewees were also offered a possibility to answer in their hypothetical mother language, German, in which the idea was not only to receive more answers, but also reduce the risk to the above-mentioned problems in reliability.

There is still a possibility that the validity of the research is low, even though the reliability is in order. The questions has to measure what they are supposed to, and the purpose of the research should corresponds to the asked questions. If the questions seem to be irrelevant to the answerers, they might not have interest to answer. (Collis & Hussey 1997, 187) The questions were created so that they all as for answer and support the research questions, and fit under the headline of the questionnaire; Virtual reality in destination marketing. The feedback about the questionnaire helped to correct some original confusions in the questions. These actions were performed to ensure the validity.

An important factor in the research is of course to receive an extensive sample of respondents. In this research for travellers this succeeded quite well, when there were respondents from different age groups, socioeconomic groups, and with different amounts of travels (different kind of activity in this matter) but yet everybody travelled. The only setback was that the number of male respondents was left so low, so there was no idea to make any comparison between genres in the answers, which in this kind of technology-related subject would have been interesting. Since the questionnaire was shared forward in Facebook by a large number of researcher's friends, it extended the amount of potential answerers finely, and it was no longer limited only to the friends of the researcher. Thus it was possible to get answers from people with yet different kinds of backgrounds. This as for adds the reliability and the value of information of this survey. Unfortunately regarding the interviews the amount of answerers is very low, and it would have needed some more

in order to be able to make generalizations about the answers, even though those who answered are very typical representatives of their branch.

A key element of reliability is that the research findings should be repeatable, which means that if the same research is repeated, the results will come out the same. (Collis & Hussey 1997, 58) This whole research is easy to repeat; this time it was not possible to make, but when comparing the results of the travellers' questionnaire to the existing theory and the advance expectations of the researcher, repeated to the same kind of target group and within a relatively short time period, the results will easily come out the same way. Of course one has to remember that this survey is about technological matter, and nowadays these technology solutions develop all the time. So if this survey would be repeated in let's say three years later, the results will most likely be different, both in the view of travellers and industry operators. But this as for proves the reliability of the research, and supports the subject and the theory.

9 Conclusion

The aim of this research was to find out the current attitudes towards VR among tourism industry and travellers - how these subjects see this new technology and its possibilities in the tourism branch. There was a desire that the results would provide general information whether the VR is really going to be the big thing in the destination marketing in the (near) future, and also that based on the results it would be possible to form some suggestions how to benefit VR in tourist destination marketing. Some suggestions were formed and are introduced in the discussion chapter.

This subject of the research was chosen since as mentioned, as a consumer technology VR is still relatively new, and as a marketing tool in the tourism industry as well. As can be seen from the literature review, there is a large hype about VR going on right now. Next few years will eventually show how the hype develops. Based on the results of this research, the hype has not yet exploded, but definitely it is still bubbling under, not forgotten and buried.

When the findings of this research are observed from the view of the travellers, the result is clear: there is an amount of interest existing, and if the operators follow, it can truly be a big thing and mainstream technology in destination marketing. However the traditional operators seem to be still a bit careful with VR, and consider where it suits in their marketing mix. A good start are the 360° videos in YouTube (and definitely in social media) and VR introductions in fair events. If and when the customers adopt the technology first there, it can encourage to produce more material in VR, and the more careful operators can notice that it is worthwhile to follow the leaders.

Of course this depends also a lot on the technology industry: can they provide easy and affordable enough equipment to the markets? This seems to be coming; the researcher just awaked here on the other day to an announcement in a basic supermarket commercial magazine, where they provided HMD-glasses in relatively affordable price. So when the consumers do not even have to go to the special stores anymore to buy the equipment, it promises good to the spreading of this technology.

This research also has its shortages, and to get even more wider picture, especially a larger research for the industry operators, the attraction marketers and/or the DMOs, would be worthwhile, possible as telephone- or on the spot –interviews. The number of answers here was so low that it is difficult to generalize the answers. What would also be

interesting to investigate is the attitudes of the travel agencies' and tour operators' towards VR, not only the DMOs. Many participants mentioned their offices as the place where they would like to experience VR. It would be interesting to see are these operators jumping in, and who had already done that, since there is information that some are already using VR. And has it provided added value for them. These operators are also active in travel fairs, which was the one interesting place for customers too to experience destinations in VR. And of course the eagerness of all the travel industry operators to provide material which the customers can experience in their homes could be found out.

Regarding the survey for travellers, as already mentioned, it would be interesting to repeat this survey after maybe three years and see if the situation has changed, when the technology verifiably goes forward all the time. Also one lack in this part of the research was the relatively low amount of male participants. Especially since traditionally males are considered to be more interested in technological stuff, it would have been interesting to see if this outdated impression could have been "officially" overturned. Partly it is of course possible to do that since most of the answerers were females and there was the clear interest existing, but a comparison would have been still in order.

One idea for the future research is also to make an own research about AR only. Even though VR and AR are "related", they are still a very different thing, and there was an interest towards AR existing in both sides; travellers and industry operators. A research about the subject would therefore be in order; to find in detail how travellers would wish to use AR in travelling, and what kinds of attitudes and plans (or perhaps already existing services) the industry operators have towards AR.

However, it can be said that the aim of this research - to find out the current attitudes towards VR among tourism industry and travellers - was fulfilled from the travellers' part. And even though the number of interview answers was so low, they were representative and provided interesting information.

Lastly, the researcher hopes that this research would be interesting to some travel-related operators and could provide interesting information, even though this was not made directly to any operator or company. For the researcher the journey from the beginning to this point was very educational, and after the small struggle in finding a suitable subject for the thesis, the researcher is very satisfied with the choice of the subject. It provided a chance to learn many new things, since the subject was quite new for the researcher as well, and it fulfilled the researcher's aim to write about something very actual and timely subject. The original idea which led to the choice of this subject was especially related to

the historical castles as tourism attractions, which are of high interest for the researcher. This left unfortunately a little bit short of, when to the interview part so little answers was received. However this was compensated with a numerous interesting answers to the research for travellers, which were extremely nice to read, and provided so much useful information. The research feels that much learning has received during this half a year not only about the subject itself, but also writing, time management, focusing and researching. Perhaps there will be a chance to perform some research in the work life in the future. Also the subject is very captivating, and the researcher will follow with great interest how the hype around VR and AR develops in travel business in the near future.

References

- Accord Marketing 2016. Virtual reality and the future of the travel industry, in: <https://accordmarketing.com/blog/virtual-reality-and-the-travel-industry>, accessed 13.4.2017
- Bonsor, Kevin: How Augmented Reality Works, in: <http://computer.howstuffworks.com/augmented-reality.htm>, accessed 11.4.2017
- Burnard, P., Gill, P., Stewart, K., Treasure, E. & Chadwick, B. (2008): Analysing and presenting qualitative data, in: *British Dental Journal*, Volume 204, No. 8, 429-432.
- BusinessInsider 2015. Samsung's \$100 virtual reality headset is selling out online, in: <http://www.businessinsider.com/samsung-gear-vr-headset-selling-out-online-2015-11?IR=T>, accessed 11.4.2017
- Collis, Jill & Hussey, Roger (1997): *Business Research: A practical guide for undergraduate and postgraduate students*. Palgrave Macmillan 1997.
- Connell, Joanne & Page, Stephen J. (2011): Visitor Attractions, in: Page, Stephen J.: *Tourism Management*, p. 215-240. Elsevier Ltd. 2011.
- Diaz, Ricardo (2016): Augmented Reality Versus Virtual Reality: The Battle Is Real, in: <https://techcrunch.com/2016/01/04/ar-vs-vr-the-battle-is-real/>, accessed 11.4.2017
- Emspack, Jesse (2016): What is Augmented Reality?, in: <http://www.livescience.com/34843-augmented-reality.html>, accessed 11.4.2017
- Emspack, Jesse (2016): What Is Virtual Reality?, in: <http://www.livescience.com/54116-virtual-reality.html>, accessed 4.4.2017
- Greenemeier, Larry (2016): Is Pokémon GO Really Augmented Reality?, in: <https://www.scientificamerican.com/article/is-pokemon-go-really-augmented-reality/>, accessed 11.4.2017
- Guttentag, Daniel A. (2008): Virtual reality: Applications and implications for tourism, in: *Tourism Management* 31 (2010), 637–651.

Hongkiat, in: <http://www.hongkiat.com>, accessed 11.4.2017

IntelligentHQ 2016. Real World Tourism Embracing Virtual Reality, in: <http://www.intelligenthq.com/innovation-management/real-world-tourism-embracing-virtual-reality/>, accessed 18.4.2017

Isalska, Anita (2014): Top 10 travel trends of the future, in: <https://www.lonelyplanet.com/travel-tips-and-articles/top-10-travel-trends-of-the-future>, accessed 21.4.2017

Kourouthanassis, Panos, Boletsis, Costas, Bardaki, Cleopatra & Chasanidou, Dimitra (2014): Tourists responses to mobile augmented reality travel guides: The role of emotions on adoption behavior, in: *Pervasive and Mobile Computing* 18 (2015) 71–87.

Kozak, Metin & Baloglu, Seyhmus (2011): *Managing and marketing tourist destinations*. Routledge 2011.

Krau, Aurélie (2016): Virtual Reality: What potential for the travel industry?, in: <http://www.travel-think.com/virtual-reality-what-potential-for-the-travel-industry>, accessed 7.3.2017

Lane, Mandy, (2007): The Visitor Journey: the new road to success, in: *International Journal of Contemporary Hospitality Management*, Vol. 19 Iss 3, p. 248 – 254.

LifeWire, in: <http://www.lifewire.com>

Linnanmäki. Linnunrata eXtra, in: <https://www.linnanmaki.fi/laitteet-ja-pelit/linnunrata>, accessed 13.4.2017

Livermore, Nick (2016): Virtual reality primed to become a tourism marketing reality, in: <https://www.tnooz.com/article/virtual-reality-tourism-marketing/>, originally in: <http://digitalvisitor.com/why-virtual-reality-is-the-most-exciting-innovation-in-tourism-marketing/>, accessed 14.4.2017

Medlik, S. (1993): *Dictionary of Travel, Tourism and Hospitality*. Butterworth-Heinemann Ltd. 1993.

Morrison, Alastair M. (2013): Marketing and managing tourism destinations. Routledge 2013.

MOT Oxford Dictionary of English, accessed 7.3.2017

Museum of London, in: <http://www.museumoflondon.org.uk/Resources/app/you-are-here-app/noflash/no-flash.html>, accessed 13.4.2017

Orbit World Travel 2016. 7 Ways Virtual Reality Will Shape the Travel Industry, in: <https://www.orbitworldtravel.com.au/7-ways-virtual-reality-will-shape-travel-industry/>

Pearce, Philip L. (1991): Analysing Tourist Attractions, in: The Journal of Tourism Studies, Vol. 2, No. 1, May 1991, 46-55.

PhocusWright (2016): From Sharing to Booking: Exploring the Role of UGC on Travel Shopping. 2nd June 2016.

Pike, Steven (2016): Destination Marketing: Essentials. Routledge 2016.

Pine, Joseph B. II & Korn, Kim C. (2011): Infinite possibility: Creating customer value on the digital frontier. Berrett-Koehler Publishers 2011.

Rae, Juno & Edwards, Lizzie (2016): Virtual reality at the British Museum: What is the value of virtual reality environments for learning by children and young people, schools, and families?, in: <http://mw2016.museumsandtheweb.com/paper/virtual-reality-at-the-british-museum-what-is-the-value-of-virtual-reality-environments-for-learning-by-children-and-young-people-schools-and-families/>, accessed 13.4.2016

Rogers, Charlotte (2016): Consumers are most drawn to travel and music experiences on virtual reality, in: <https://www.marketingweek.com/2016/06/09/consumers-are-most-drawn-to-travel-and-music-experiences-on-virtual-reality/>, accessed 14.4.2017

Saunders, Mark, Lewis, Philip & Thornhill, Adrian (1997): Research Methods for Business Studies. Pearson Education Limited 1997.

Sheikh, Knvul (2016): Beyond Gaming: 10 Other Fascinating Uses for Virtual-Reality Tech, in: <http://www.livescience.com/53392-virtual-reality-tech-uses-beyond-gaming.html>, accessed 10.4.2016

Statista (2016): Number of mobile-only monthly active Facebook users as of 3rd quarter 2016 (in millions), in: <https://www.statista.com/statistics/281600/number-of-mobile-onlyfacebook-users/>, accessed 27th December 2016.

Stein, Andi (2015): Attracting Attention: Promotion and Marketing for Tourism Attractions. Peter Lang Publishing, Inc., New York 2015.

Steinicke, Frank (2016): Being Really Virtual: Immersive Natives and the Future of Virtual Reality. Springer International Publishing Switzerland 2016

Strickland, Jonathan (2007): How Virtual Reality Works, in: <http://electronics.howstuffworks.com/gadgets/other-gadgets/virtual-reality.htm>, accessed 6.4.2017

Sun, Leo (2016): 12 Virtual Reality Stats That Will Blow You Away, in: <https://www.fool.com/investing/2016/06/06/12-virtual-reality-stats-that-will-blow-you-away.aspx>, accessed 13.3.2017

Sun, Leo (2016): What if Virtual Reality Isn't the Next Computing Platform?, in: <https://www.fool.com/investing/2016/05/25/what-if-virtual-reality-isnt-the-next-computing-pl.aspx>, accessed 20.4.2017

Survey finds VR needs to overcome its image problem (2016), in: <https://www.ipsos-mori.com/researchpublications/researcharchive/3755/Survey-finds-VR-needs-to-overcome-its-image-problem.aspx>, accessed 20.4.2017

Ting, Deanna (2016): Best Western Goes All In on Its Virtual Reality Marketing Move, in: <https://skift.com/2016/05/23/best-western-goes-all-in-on-its-virtual-reality-marketing-move>, accessed 7.3.2017

UNWTO (2014): Handbook on E-marketing for Tourism Destinations. World Tourism Organization and the European Travel Commission 2014.

UNWTO (2016): Report of the Committee on Tourism and Competitiveness, Annex I., in: <http://cf.cdn.unwto.org/sites/all/files/docpdf/generalprogrammeofworkdmgt.pdf>, accessed 17.3.2017.

WhatIs.com 2016. CAVE (Cave Automatic Virtual Environment), in: <http://whatIs.tech-target.com/definition/CAVE-Cave-Automatic-Virtual-Environment>, accessed 6.4.2017

World Tourism Organisation: Tourism Satellite Account - Why do we have it and what does it do?, in: http://statistics.unwto.org/sites/all/files/pdf/unwto_tsa_1.pdf, accessed 20.4.2017

Zuckerberg, Mark (2014) in:

<https://www.facebook.com/zuck/posts/10101319050523971>, accessed 4.4.2017

Appendix 1. The questionnaire for travellers

Virtual reality in destination marketing

Thank you already in advance for your answers! It takes maximum 10 minutes to complete the survey. Among the respondents there will be a draw of a gift card to Hotel Katajanokka in Helsinki; one night stay for 2 persons in double/twin room, including breakfast. The contact details will be used only for the draw, and not connected to the answers at all. However, the draw is not obligatory, you can also answer the questionnaire without leaving the contact details. The draw will be held latest in the beginning of September.

Thank you for the participation!!

1. Gender *

- Female
- Male

2. Age *

- 15-18 years
- 19-25 years
- 26-35 years
- 36-45 years
- 46-55 years
- over 55 years

3. Socioeconomic group *

- Pupil / Student
- Employee
- Unemployed
- Entrepreneur

Pensioner

4. How many times in a year do you usually travel for a leisure trip, in your home country or abroad? (Leisure trip here = over 50 km from home, visiting relatives or friends does not count.) *

- 1-2 times a year
- 3-5 times a year
- 6-8 times a year
- over 8 times a year

5. From where do you usually purchase your leisure trip services? *

- Directly from the service provider (airline company, hotel, tourist attraction...)
- Via third party (for example Booking.com, Ebookers...)
- From a tour operator (TUI, Dertour, Tjäreborg...)

6. When you are planning your leisure trip, or choosing the travel destination / services in the destination, how do you familiarize yourself with different options and search for information? Please choose 1-4 options. *

- Search engines (Google, Yahoo...)
- Experiences of other consumers (relatives, friends...)
- Review pages (TripAdvisor, Yelp...)
- Social media (Facebook, Instagram...)
- Video portals (YouTube, Vimeo...)
- Tour operators' services (TUI, Dertour, Tjäreborg...)
- Travel-related websites (VisitFinland, germany.travel, Lonely Planet...)
- Service providers' own websites
- Travel blogs or diaries online

Other, please indicate:

7. In a scale from 1 to 4, please evaluate how influential the following sources are to your decisions, when planning your leisure trip or choosing a trip destination:

1 = not influential at all

2 = slightly influential

3 = quite influential

4 = highly influential

	1	2	3	4
Brochures of the destination with pictures and information *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Videos of the destination (generated by other travellers or professionals) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Photos of the destination online (generated by other travellers or professionals) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virtual tours (360° videos, tours in the attractions, hotel properties etc.) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If you don't use any of these, please indicate why: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In short, virtual reality (VR) means computer-generated environments where the user can immerse and with which the user can interact. With the help of certain devices, the virtual world can be made to seem "real". Many systems use head-mounted displays (HMDs), with which the user can be fully absorbed into a virtual environment, and the user only observes the environment which is displayed; the distractions from outside are blocked. Nowadays large technology companies offer their HMDs, as an example Oculus Rift HMD or Samsung GEAR. VR is becoming to the tourism industry as well. With VR applications the user can "travel" to different places around the world. (Picture 1)

Augmented reality (AR) adds elements to the "normal" reality. This means that when walking around, with the aid of certain AR displays, informative graphics will appear in the field of view, and also audio elements are possible. And the view will refresh continually when moving, and reflect the movements of the head. There are travel applications using AR available for smartphones, which by using the device's camera and GPS, show information on the screen about the area where user is, for example restaurants, or perhaps the history of the building that the user sees. (Picture 2)



Picture 1



Picture 2

8. Have you ever experienced: *

- | | Yes | No | I'm not sure |
|----------------------------------------------|--------------------------|--------------------------|--------------------------|
| a) virtual reality (Picture 1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) augmented reality techniques? (Picture 2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

9. Have you seen virtual or augmented reality techniques applied in travel / tourism-related situations? *

No

Yes, please indicate how and when:

10. Do you think that experiencing the possible travel destinations or services (hotels, attractions...) in virtual reality could be useful in your travel planning? *

Not useful at all

Slightly useful

Quite useful

Highly useful

11. Do you think that experiencing the possible travel destinations or services (hotels, attractions...) in virtual reality could bring added value to your travel planning, or are you satisfied with the current technologies (video, pictures etc.)? *

- No added value, I am satisfied
- Could bring slightly added value
- Could bring quite a lot added value
- Would bring a lot of value

12. If you would have a possibility to experience the travel destination or services (hotels, attractions...) in advance in virtual reality, would it encourage your decision to travel there? *

- I don't think so
- Probably not
- Probably yes
- For sure

13. If you would have a possibility to experience a travel destination or attraction in virtual reality, would you feel that there is no need to travel there anymore? *

- I don't think so
- Probably not
- Probably yes
- For sure

14. Would you be interested in actively approaching virtual reality possibilities to support your travel planning / destination choice? *

- No
- Yes

15. If you answered Yes to question number 14, how would you be willing to do that?

- Travel agents' / tour operators' offices
- Travel fairs etc. events

I could buy the equipment for myself (HMD glasses + suitable smartphone/computer)

Other, please indicate:

16. Would you be interested in using augmented reality applications during your trip, when searching places or exploring the surroundings? (Picture 2 earlier) *

No

Yes, please explain how:

17. Lastly, please share your possible thoughts about virtual and augmented reality in travel/tourism, and/or provide feedback about this research:

18. If you wish to participate to the draw of the gift voucher to Hotel Katajanokka, please leave your contact details. The winner will be contacted by e-mail.

Name _____

Lastname _____

Email _____

Appendix 2. The interview questions for attractions and DMOs

Interview: Virtual reality in destination marketing

Thank you for your participation in this short interview! I would kindly ask you to answer the following eight questions about virtual reality in destination / attraction marketing.

If you would like to read a short text about virtual and augmented reality before answering the questions, please scroll down first; after the questions there is a short information provided.

All the replies and results are processed with strict confidence. The data analysis is confidential and no individual data will be shared with any third parties. The Thesis will be published in Theseus, a website for Theses of Finnish Universities of Applied Sciences. All respondents will remain anonymous, and if you do not wish your company name to be seen in the report, please mention only the region of your company below.

Thank you in advance and best regards,

Pia Tiusanen

Company name and/or region

1. Which digital marketing tools your company uses at the moment?

2. What are the most important marketing tools for your company (digital or other)?

3. Do you see virtual reality as a potential marketing tool in general? Please explain your answer.

4. Do you think that virtual reality will be a common marketing tool in your branch in the (near) future? Please explain your answer.

5. Has your company considered including virtual reality to the selection of the marketing tools in the (near) future?

- If yes or maybe, please explain why?

- If no, please explain why?

- If your company is already using virtual reality as a marketing tool, has it provided added value to your marketing? Please explain how?

6. Is there a process in marketing which could be replaced with virtual reality technologies (for example introduction brochures or videos), or would it be a good addition to the existing ones?

7. Has your company considered using augmented reality technologies in tourism services in the (near) future?

- If yes or maybe, please explain why?

- If no, please explain why?

- If your company is already using augmented reality in tourism services, has it provided added value to you? Please explain how?

8. Do you think that if travellers could experience the travel destination or attractions in advance in virtual reality, would it encourage their decision to travel there? Or opposite; they would not want to travel anymore?

Thank you for your kind answers!

In short, virtual reality (VR) means computer-generated environments where the user can immerse and with which the user can interact. With the help of certain devices, the virtual world can be made to seem “real”. Many systems use head-mounted displays (HMDs), with which the user can be fully absorbed into a virtual environment, and the user only observes the environment which is displayed; the distractions from outside are blocked. Nowadays large technology companies offer their HMDs, as an example Oculus Rift HMD or Samsung GEAR. VR is becoming to the tourism industry as well. With VR applications the user can “travel” to different places around the world. (Picture 1)

Augmented reality (AR) adds elements to the “normal” reality. This means that when walking around, with the aid of certain AR displays, informative graphics will appear in the field of view, and also audio elements are possible. And the view will refresh continually when moving, and reflect the movements of the head. There are travel applications using AR available for smartphones, which by using the device’s camera and GPS, show information on the screen about the area where user is, for example restaurants, or perhaps the history of the building that the user sees. (Picture 2)



Picture 1



Picture 2

Appendix 3. Open answers to the questionnaire's question number 16.

How to use AR:

- To search restaurants or attractions
- By using my phone or computer to find restaurants or hotels or other information during my trip
- Finding relevant services (e.g. restaurants, public toilets) nearby; finding my way back to the hotel
- Checking the area what else is possibly there and how to get there
- To get recommendations of restaurants or places to visit according to my own choice of criteria.
- Choosing attractions and restaurants
- Looking for Restaurants, Hotels
- to search for restaurants and other not so well known sights (small museums, ruins etc)
- If I need to find something; a shop or toilet etc.
- Finding good restaurants and sights
- finding attractions, restaurants..
- To place the surroundings and find the places I am interested in!
- I would search some attractions and restaurants.
- With an app to give more insights to where you are
- searching good restaurants

- Restaurant reviews, info on sites and scenery, route planning / navigation
- For finding sights, restaurants, buildings etc and get information about them.
- If I don't have any guide, it could be nice to have stories and facts about buildings etc
- For example for getting information on the history of certain place/building without having to read a guide book or brochure.
- Familiarizing with the history and attractions. Getting to know the locations of good restaurants, bars etc services
- History about the place or restaurants or other spots that need to be visited
- It would be quite interesting and useful when visiting for example historical or cultural places to provide information and see how the people lived there in former times.
- Telling information about history of buildings or the neighborhood, maybe about restaurants etc.
- Info about the history could be presented by augmented reality
- I would use it for getting information about my surroundings if such an app would be available for my phone. Getting info at some historical site would be interesting.

- Antaa kätevää, mahdollisesti kiinnostavaa lisätietoa kohteista/asioista/historiasta/mistä-vain helposti

With which to use AR:

- If they would be really easy available like in hotelroom
- by phone
- Through some travel app maybe?
- With phone
- augmented reality in glasses

Unawares:

- I don't know yet.
- No idea
- Pitäisi ensin opetella käyttämään tällaista fiitsöriä ennenkuin tietäisin kuinka :)

Appendix 4. Open answers to the questionnaire's question number 17.

VR is interesting:

- You can preview quickly and easily surroundings, views and interiors of your selected destination.
- To some extent, VR experiences of attractions that are difficult and/or expensive to reach could serve as a substitute for the real thing (although I probably still would want to actually go there if I had the means)
- It is definitely something new and exciting and will shape the future of the travel industry. Something new such as virtual or augmented reality should be explored further in travel experiences.
- I think its a useful method for planning a trip, during the trip I would rather prefer to see the "real world". However there is the risk that people have too high expectations and will be dissappointed when seeing the real world.
- It will be useful in the future.
- Big thing in the future
- VR rocks and has endless possibilities. I have two VR glasses (Oculus VR and a stand alone) which are great but they are in desperate need of more content, other than moronic games and short rollercoaster videos.
- I think AR could really help people find places better when they are abroad and VR definitely would help me decide my travel destination and hotel.
- In my opinion, virtual reality in travel and tourism industry offers first new possibilities to explore travel destinations in advance when making the travel decision. As pointed out in the research, augmented reality could be also implemented while travelling to provide information to travellers through virtual signs and boards and therefore add value to sites. Augmented reality could be also used for site-related games to entertain people while giving them an understanding of the site at the same time. I like the future orientation of the topic and I am quite excited about new developments in technology. I am only concerned that prices will be quite high for example for virtual reality glasses and that authenticity of places might get lost due to technology overload. The questionnaire is easy to understand and very thoughtful!
- Huge possibilities for the whole industry
- I think I could use services when I am searching the destination and planning the trip, but normally when I am in holidays, I want to live quite free from any technical devices.
- I think it is a super interesting field and enhances your insights. Concerning augmented reality, I think it will make travelling around easier as you have the possibility to get added information. Concerning virtual reality, I think it might help to decide where to go but will

never substitute a trip in real life. Those tools should only be additives and you should not rely exclusively on them.

VR is not interesting:

- Itse en kaipaa virtuaalitodellisuutta matkailuun, mutta jollekin se voi olla ratkaiseva tekijä, kun suunnittelee kohdetta. Itse menen mieluummin ensiksi paikan päälle ja ehkä jälkikäteen matkaa muistelllessa tai muille siitä kertoessa voisin harkita virtuaalitodellisuutta. Ollisihan se kiva elää uudelleen paikan tunnelma, sillä kaikkea ei voi muistaa. Ja onhan virtuaalitodellisuus valokuvia monipuolisempi tapa palata takaisin paikan tunnelmaan. Silti matkustan mieluummin tuntemattomaan eli ilman tarkkaa mielikuvaa kohteesta.

- I think that the virtual reality need to develop a lot more until it would be really an interesting alternative when familiarizing with the destinations etc. Augmented is something which I could be more ready to start using right away.

- I do enjoy my human experience of the universe in my human body. I do not think the constant immersion in technology does us any good. One of the best things about traveling is that it often provides a way to snap out of the everyday intelligence technology. I like to have even camera-free days when abroad, as I value my experiences without a gadget separating me from the world :)

- I prefer experience myself before using VR or AR since I think these two techniques is more suitable for recalling memories after the trips. Otherwise, they can be reasons for high expectations and disappointment afterwards.

- I think the idea of any virtual and/or augmented reality sounds scary for me and I rather see and experience things like they are without any extra electronics involved.. the world is already full of different kind of electronic devices and I don't need any more of those. :) I hope I will win the gift card and good luck with your thesis!!

- Interesting research and most likely growing side of travel and holiday business but personally not interested in 360 tours

- I don't see how virtual reality is much different than watching a video. For me, videos are enough. I don't think experiencing it in advance will really make more likely to go to a certain destination. Augmented reality seems very interesting though. If it makes finding certain places easier or getting info about a place then I think it would improve the travel experience.

- IMO pictures and description of service give enough information, I have no need to experience the service more in advance.

- I'm not using even videos that much so the idea to use these methods to find about places does not feel familiar but I could see myself using augmented reality apps when traveling to get information.

- Could be easier than maps and just a smartphone. All in one. But could these virtual reality equipments make your trip a bit boring, you know where you are and what places are near, you don't need to explore so much anymore
- I'm not a big fan of virtual / augmented reality. I think seeing / experiencing the real things beats technology, and that using it can provide a "wrong image" of the destination or a product
- I think there is no need anymore to visit a place where you already know all about. Also I think that expectations are higher after the use of augmented reality.

Something in between:

- Sounds like a good idea. Although I try not to use my phone too much when traveling, AR could be quite useful for getting information about my surroundings. However, HMDs don't interest me except for fun when at some travel fairs.
- In a way I would be interested to explore destination by VR but in a way I also like to keep the surprise momentum.
- Interesting possibility, but you will never experience the same through digital equipment while actually traveling.
- I might be old-fashioned, but I think that experiencing virtual/augmented reality might take away some excitement of exploring a new place on site. On the other hand, it could be useful to see some crucial places (hotels, stations etc.) in advance.
- I don't think VR/AR will ever replace actual travel for me. Only exception might be places that I would desperately want to experience but travelling there would be impossible/too risky. Pyramids in Egypt could be one of these as tourists have been attacked more often there recently making it a bit off-putting to travel there especially with kids. Also, it's comforting to know that if I ever lose my ability to travel, I can still experience some places through VR.

General comments:

- Offline use is a must have for applications for me. Combined travelguide and maps/navigation system would be most useful.
- Since I do not have any experience on VR or AR it is in my opinion quite difficult to imagine the possibilities.
- So new to me, don't have enough information to be able to give feedback.
- Should be really, really good. Please don't do it if it's not really, really good.
- This research is timely and focusing on a very relevant matter. Virtual reality is part of the future and companies as well as consumers have many possibilities to utilize this in every aspect of their life. Näytä vastaaja

Feedback:

- Nice, short research!

- Kysymyksessä nro 4 olisi ehkä hyvä olla vaihtoehtona myös, ettei joka vuosi matkustele.

Muuten hyvä kysymyspaletti!

- Very useful research!

- Terkkuja! :)