

The potential of virtual and augmented reality on the Finnish tourism market

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<p>Name of the thesis The potential of virtual and augmented reality on the Finnish tourism market</p>	<p>Pages and attachments 70 + 3</p>
<p>This thesis focuses on the transition and the impact of combining technology and tourism. It is viewed from the aspects of marketing, customer behaviour, purchasing as well as experiences in the context of Finnish tourism market. The research is conducted with the use of qualitative methods. The most important data acquisition practises are desk research and interviews. The interviews are conducted to 10 Finnish consumers and four tourism operators from different sectors. The process took place from June 2017 to the end of October 2017.</p> <p>Businesses globally are going through major changes due to the intertwining of IT and tourism. New technologies allow tourism to be extended from the physical world to a virtual one as services are no longer limited on-site. This thesis focuses on virtual reality (VR) and augmented reality (AR). VR is a computer generated artificial replication of, e.g. a real-life environment, which is provided with a headset. AR, on the other hand, is created by overlaying a real-life scene with virtual information, which can be transmitted with a smartphone.</p> <p>The theoretical framework discusses tourism experiences through experience frameworks, such as The Experience Realms and The Experience Pyramid. Additionally, other topics that are presented are marketing tourism experiences, experiential marketing, customer behaviour and customer journey. The thesis also covers the research methods that are used and background theories that are relevant to our research, for instance phenomenological research and phenomenography as well as interviewing as a data acquisition method. In addition, reliability, credibility and validity are scrutinized. The research progress is illustrated with a timeline as well as the interviewees are presented with a couple of tables.</p> <p>The results and conclusions are displayed and presented from the point of view of both consumers and businesses. The results show that the current demand of the technologies is rather low, for instance due to the lack of general awareness regarding the technologies as well as their weaknesses. They are expected to have potential in the future, if they are developed. VR and AR could somewhat assist creating meaningful experiences, yet their characteristics have loopholes, which is why experiences cannot reach the absolute sweet spot where all elements bind together evenly. The thesis highlights the development ideas for the technologies and for further processing of the research.</p>	
<p>Keywords virtual reality, augmented reality, experiences, marketing, customer behavior</p>	

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1 Introduction

New technologies have enabled that tourism experiences no longer stay restricted to services, which occur on-site, yet, they are extended as well as dynamically created in both spaces; physical and virtual. Virtual reality (VR) is one of the technologies, which is changing the habits of consumers. For instance, it can be exploited in tourism organizations for management, marketing, accessibility, education, entertainment and other similar matters. It helps to construct an incredible visitor experience that improves the success of a destination. Additionally, augmented reality (AR) plays an important part enhancing real world experiences with mainstream technologies. New technologies such as, VR and AR have brought new aspects to experience design and marketing, which is essential for enhancing tourism experiences.

The purpose of this thesis is to analyse, as a research, the meaning of VR and AR on Finnish tourism market from the perspectives of companies and consumers. Similarly, one aim is to find out how they are operated in Finland, and to explore the tourism industry and companies around the world, that have introduced these technologies – exploiting international and domestic examples. One of the research question is, how do the technologies' demand and tourism encounter in Finns' travel habits. Furthermore, also how the technologies support and influence the experience design and marketing.

The purpose of the thesis is to create a research, which will be beneficial for Finnish tourism industry in general – bringing application and novelty value to the industry. This thesis does not include a commissioner. Therefore, it is a generally useful for the public good. English language allows a wider audience to exploit the research and its outcome. The topic was chosen as it is a current issue, interesting and innovative as well as it is a relatively unexplored topic in Finland for the time being. Additionally, behind the selection of the topic of the study are the experience of previous courses in Haaga-Helia.

The research questions for tourism industry companies mainly emphasise VR and AR and how they are seen in the organization as well as in marketing. Has the company used these technologies? Have the technologies added value to the company? How have they or how could they affect their customers or travellers in general? Could Finland as a travel destination benefit from these technologies? How could VR and AR influence the experiential aspect of travel? How do you see the future of these technologies in the Finnish tourism market?

The questionnaire for consumers contains the same theme than the company interviews, however the perspective varies. Moreover, the questions examine the consumers' conception and experiences about the technologies as well as if VR and AR influenced their purchasing decision and bring added value to travelling in general. What thoughts do the technologies awake? And in which situations of a trip could the interviewee see himself/herself using these technologies? Some of the questions in both questionnaires were based on The Experience Pyramid and The Experience Realms to obtain more profound outlooks from the interviewees. For instance; do you see yourself using these technologies in an entertaining or educational purpose when travelling? How could you see VR and AR influencing e.g. the authenticity of a trip? Could you see them influencing the user's needs/wants/feelings etc.?

The focus of the research is on qualitative methods as they enable a more in-depth understanding of these technological phenomena and their potential. And since VR and AR are rather new phenomena, interviewing Finnish tourism companies as well as Finnish consumers, makes it possible to clarify the current situation of VR and AR within Finnish tourism market – to discover whether these phenomena are known, whether there are expectations and needs towards these technologies and whether they have already been tested and experienced in travel.

In the first chapter, Finland's tourism in general is presented, VR and AR are defined, as well as how they are influencing the tourism industry in Finland and abroad. The SWOT-approach is utilized to discover the strengths, weaknesses, opportunities and threats of these technologies in the tourism industry. Moreover, the theory of this thesis consists of experience design and marketing, different experience frameworks as well as customer behaviour, which includes approaches such as customer journey. The next part in this thesis, is the description of the research process, methodology and data acquisition. The final chapters comprise the results of the research as well as conclusions and discussion, which are based on these results. Here, the concepts of reliability, credibility and validity are implemented to this research.

2 Virtual and augmented reality influencing the tourism industry

Information technology (IT) and tourism are two of the largest and most evolving industries worldwide. Together and separately they are altering society's way of operating. Since the middle of the 1990s, information technologies have inflected almost all sectors in tourism. (Beckendorff, Sheldon & Fesenmaier 2014, xxiii, xxv.) Consequently, with the significant potential of technology implementation through the whole customer journey (pre- during- and post-travel), they have altered the characteristics of modern-day tourism experiences (Buhalis & Neuhofer 2013, 1). This chapter elaborates on the current situation of modern technologies in tourism globally and in Finland. The chapter also presents virtual and augmented reality, the newest revolutions in tourism; what are they, how do they work, where have they been used and how do they differ from each other. Additionally, illustrations worldwide demonstrate how the technologies work in practise.

Now, the world is going through some of its history's most dramatic social changes – organizations, societies, countries and people are connecting as well as borders are dissolving due to IT and tourism. It is also shown that IT influences travel organizations' way of adding value to their products and services. Especially aviation sector has been the most innovative user of IT. However, other tourism sectors have awakened to IT innovations as well. (Beckendorff et al. 2014, 1, 5; Buhalis & Neuhofer 2013, 2.) Internet has also enabled that a huge amount of information is found from the pockets of every smartphone owner. Consequently, virtual and augmented reality are predicted to do the same for experiences in the future. Within ten years, these technologies will bring new experiences to everyone's reach as well as they already enable completely new experiences in marketing as well. (Pänkäläinen 2017.)

2.1 Tourism in Finland in general

At present, tourism is a growing export sector and a major employer in Finland. In 2016, total tourism demand reached just over 3.8 billion euros with 7.7 million foreign tourists and 5.8 million overnight stays. Overall, there was 20.3 million overnight stays, which includes domestic tourism statistics. The number of Russian and Chinese tourists play the biggest parts in Finland's tourism as they bring loads of money to the country. The main areas for tourism are Uusimaa region as well as Lapland. (Visit Finland 2016.)

According to a survey made by TAK Oy, Finland has especially attracted interest amongst Chinese, who do not shy away from spending money in their trips. It is also noticeable that group travel is slowly shifting into individual travel. There is an ever-growing group of

travellers who are interested in Finland, for instance, they are attracted to the clean environment. In the same manner, Finland is trying to reach Indian travellers after successfully reaching other countries from Asia, such as China, Japan and Korea. (Latvala 2017.)

The main tourism factors in Finland are the beautiful clean nature, culture, architecture and it being somewhat exotic place to foreigners. Not having a famous monument such as Eiffel Tower or Big Ben, Finland still attracts people from all over the world – Finland's attraction as a travel destination is growing all the time. Unfortunately, the interest of tourists is random compared to other famous destinations. (Shikeben 2013.) However, Helsinki has been able to raise the profile as an urban event destination (Latvala 2017).



Figure 1. The amount of Finland's domestic as well as foreign tourism in millions between 2012 and 2017 (Statistics Finland 2017a)

In the first semester of 2017, Finns aged 15-84 made 11.2 million trips, including all domestic and foreign leisure, business and meeting trips (figure 1). The trips were principally made to the neighbour countries Estonia (640 000) and Sweden (470 000). Travels and cruises, which included an overnight visit to e.g. Stockholm, decreased slightly from the previous year. On the other hand, day trips to Sweden, without staying overnight, have increased. (Statistics Finland 2017a.)

2.1.1 Domestic tourism

Finland's domestic tourism is largely based on skiing centres and urban attractions – the tourism is mainly focused on the summertime. Nowadays, tourists are seeking for experiences as well as activities, even in the Finnish markets, since e.g. megatrends of health and well-being are becoming more prominent. Additionally, people want to be participants, not just spectators. Furthermore, 75 % of the country's total tourism revenue comes from domestic tourism and in North Savo the share is even more significant. Domestic customers are extremely important regionally. (Jauhiainen 2015.)

According to the preliminary data from Statistics Finland, Finns travelled slightly more in the beginning of 2017 than in the spring 2016. Destinations such as Lapland as well as Pirkanmaa increased their popularity. Leisure trips, which included an overnight stay, reached to 7 million between January and April. April was the country's most popular domestic travel month as people made 0.5 million trips with paid accommodations and 1.6 million free accommodation vacations. Moreover, 23 % of the trips in April were directed to either Northern Ostrobothnia or Lapland. In addition to leisure trips, 1.4 million business and conference trips were made in 2016. (Tilastokeskus 2017.)

2.1.2 Inbound tourism

Finland's share of overnight stays in the Nordic countries is 14 % (5.8 million overnight stays). The largest share of the foreign market came from Sweden, which included the total of 14.1 million overnight stays (figure 2). The most tourists from foreign countries come from Russia, Germany and Sweden; however, the most grown segments were the Chinese, Spanish and Americans. (Visit Finland 2017a; Visit Finland 2017b.)

Nordic countries' share for overnight stays in 2016

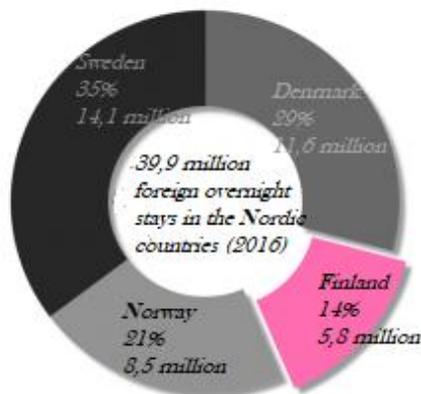


Figure 2. Overnight stays in the Nordic countries in 2016 (Visit Finland 2017a)

In Helsinki, the overnight stays are most evenly distributed among the different countries of origin, where most of the visitors came from Germany, China and Russia, even though tourism from Russia has slowed down by 11 % compared to 2015. On the coast and the archipelago, most of overnight stay visitors appeared to come from Sweden, the lake region of Finland's visitors from Russia and Lapland tourism was reigned by the British. Nevertheless, German visitors reached to top three in all main tourism areas in Finland. Overall, half of the foreign overnight stays originate from the EU-countries. (Visit Finland 2017b; Visit Finland 2017c.)

Finnish tourism companies want their share of Chinese tourists rushing to the Nordic countries. In the first half of the year, Chinese people spent overnight stays 60,000 times in Finland, which is about 50 % more than last year's reference period. The reason for this change is the internationalized Chinese middle-class who grew up in big cities: the millennials, which is a rapidly growing tourism group. The new generation of Chinese tourists pay for unique experiences. Conversely, there are limited flights between Finland and China. Especially the winter period is in fact full, because other countries are also interested in Lapland. Furthermore, Finland's tourism business is finally developing at the same pace with other Nordic countries. (Liimatainen 2017, 26.)

The most visited months in Finland by foreign tourists were July, August as well as December. However, the calmer months (November-April) are on the rise. Moreover, 54% of the stays are taken place in the summertime, whereas wintertime holds less than a half of the stays, which is 46 % in 2016 (Visit Finland 2017c). Overall, the number of foreign tourists in Finland has been growing rapidly in the early part of the year. In January-April, the number of international overnight stays grew by about a fifth compared to last year's corresponding period, says MaRa, representative of tourism and restaurant businesses. Similarly, the number of Russian tourists is increasing due to the strengthened rouble. (Taloussanomat 2017.)

2.1.3 Outbound tourism

As mentioned, outbound tourism is mainly focused to Estonia, Spain and Sweden and Estonia is the number one favourite around the year for Finns. Trips to Estonia, which include an overnight stay, have increased in early 2017. Demand for day and night cruises have remained the same as in the corresponding period of the previous year. Similarly, there was 330 000 trips made to Spain in the beginning of the year, more specifically 63 % of them to Finnish people's all-time favourite, the Canary Islands. Furthermore, the number of Canary Islands travel increased by 18 %, whereas trips to Spain's mainland

and Balearic Islands decreased. Additionally, March was the most popular month regarding travel to the Canary Islands. There were 0.6 million business and conference trips abroad, which included overnight trips, cruises and day trips. However, trips abroad were made less than a year earlier. (Statistics Finland 2017b.)

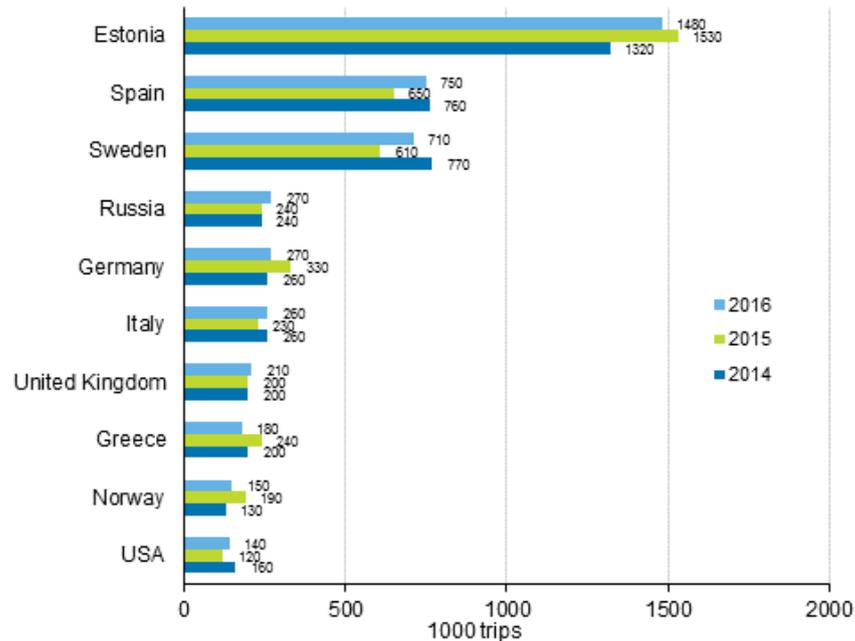


Figure 3. Finnish residents' most popular destinations for leisure trips with an overnight stay in the destination country in 2016, 2015 and 2014 (Statistics Finland 2017b)

According to figure 3, between 2014 and 2016, Finnish residents travelled mainly to Estonia. Outbound to other countries on the list such as Germany, Italy, United Kingdom and Greece remained rather similar throughout the years. The number of trips heading outside Europe was increased to the USA. In turn, trips to Asia lost some of its popularity as a leisure destination for Finns. (Statistics Finland 2017b.)

2.2 Definition of Virtual Reality (VR)

Virtual reality (VR), or virtuality, is an artificial replication of a real-life situation or environment, generated by a computer – a world that does not exist but feels real enough to have a sense of place. This kind of reality can be created through coding that is called Virtual Reality Modelling Language (VRML). In a nutshell, with VRML it is possible to produce a set of pictures as well as determine what types of interactions they can execute. As the name “virtual reality” refers, the point is to immerse the users and convince them that they have entered a completely new reality – principally by stimulating their hearing and vision with the use of headsets. (Pine & Korn 2011, 83; Lindsay 2015; T.C. 2016.)

The headsets (image 1) block out the surrounding world and, making use of stereoscopy, show slightly different images of each to a user's eyes. That fools the brain into creating an illusion of depth, transforming the pair of images into a single experience of a fully three-dimensional world. Motion trackers keep track of the user's head, updating the view as he moves it around, whereas, optional hand controllers allow the user to interact with virtual objects. The result is a reasonably convincing illusion of being somewhere else entirely. (Lindsay 2015; T.C. 2016.) Furthermore, one of the main reasons for the level of engagement of a virtual experience, is the impression of flow (Pine & Korn 2011, 85).



Image 1. VR stimulates vision and hearing with a headset (Couch 2016)

VR, the realm of [No-Time – No-Space – No-Matter] or [autonomous-virtual-bits] (as in figure 4), is a part of the Multiverse that is not limited by real physical places; it does not exist in the real world but in cyberspace (the term arises from *cybernetics*, the study of communication or control), or in the ethereal world of the Internet. In cyberspace, it is mainly the mind of an individual that steers, not the body. Furthermore, VR is not bound to actual time either, as it unlocks to former times of the world's history, the fictitious times of the world's possible futures and fictional times in *cosmos incognito* – “times that never were, are not, and never will be other than in our imagination”, as described by Pine & Korn (2011). In VR, mental activity ascends whilst physicality recedes and understanding actual time disappears. (Pine & Korn 2011, 83-84.)



Figure 4. The realms, variables and dimensions of the Multiverse (Dager 2011)

VR can be utilized to e.g. generate and improve an imaginary reality for entertainment and gaming (e.g. 3D-movies or video games), or to improve training for real-life situations by creating a replication of the situation where individuals can rehearse in advance (e.g. flight simulators for aviators) – as the technology was initially in the favour of e.g. gamers (Lindsay 2015; Pänkäläinen 2017). Currently, the technology is also used in other ways – for instance, in the tourism sector to e.g. arouse travel inspiration or to give a taste of a tourism experience before purchasing it (Beckendorff et al. 2014, 319) Additionally, 360-degree videos are commonly used in VR experiences as well (BBC 2014). Currently, both businesses and consumers are able to film 360-degree videos as two- or three-dimensional videos. 3D videos are suitable both to mobile devices and VR glasses, whereas 2D only for mobile devices. (Kuha 2015.)

2.3 Definition of Augmented Reality (AR)

Augmented reality (AR), the realm of [Time – Space – No-Matter] or [actual – real – bits] (figure 4), is used to enhance the experience of the physical world with the use of virtual information overlaying a real-life scene. There are countless applications that utilize this technology in different fields – anywhere between travel and the military purposes. Similarly, there are countless of platforms which it is possible to create AR content with, for instance commonly used platforms are Aurasma and Layar. People can increasingly augment their reality with whatever smartphone they carry with, as AR can be experienced through e.g. mobile devices' real-world camera view. (Beckendorff et al. 2014, 168-169; Pine & Korn 2011, 19, 36.) Moreover, some predict that AR will become a much larger market than VR (Pänkäläinen 2017).

AR technology is rapidly becoming mainstream as well as it is advancing in the same manner. It can be used to e.g. pop out for instance three-dimensional (3D) photos or e-mails on mobile devices, or to show score overlays on televised sports games – basically, even the sky is not the limit anymore. Thus, AR enables doing revolutionary things with motion activated commands and holograms – which is common especially among leaders of the technology industry. (Lindsay 2015.) Furthermore, AR also delivers sensory information flow as well as a better experience to its user. AR devices can be categorized as prosthetics that extend not only vision and mind but increasingly also other senses. Once contemplated through digital prosthetic lenses, this experience realm creates also noteworthy potential for changing our very selves. (Pine & Korn 2011, 45.)

This technology can be used not only with smartphones but also with wearable devices, as several companies, such as Google, have already invented rather simple glasses that

can project flat images for their users. For instance, in 2013 Google launched its “Glass” headsets (image 2) to a selected segment of the public. However, creating a smart piece of technology has not meant the same as unquestionably leading a revolution. The design has awakened thoughts of sinister, silly look as well as worry that the user is secretly filming everyone they encountered. (The Economist 2017a.)



Image 2. Google Glass allows users to experience AR through glasses (Edudemic 2017)

One of the best-known AR example is the utilization of the GPS car navigation system that provides directions and thus, relieves stress in an unfamiliar environment. It functions on the principle that it overlays the real scene outside the windshield with a digital replication of it on the dashboard. This way it enhances or augments the driving experience. (Pine & Korn 2011, 19-20.) Other known application is Pokémon Go (image 3), an AR game that quickly seized the attention of everyone. The game gave people a motive to go out and to walk around searching for Pokémon. Basically, the game works with the use of the GPS system on a smartphone to tag the user's location, and to move his/her in-game avatar, while the smartphone's camera displays the found Pokémon in the real world. (Widder 2017.)



Image 3. Pokémon Go uses Pokémon-themed layers on the real-life scene (Widder 2017)

2.4 Differences between VR and AR

Researchers Paul Milgram, Fumio Kishino, Haruo Takemura and Akira Utsumi published in the 1990s The Reality-Virtuality (RV) Continuum framework (figure 5) that was designed to present mixed reality – the term has generally fallen out of use – and to demonstrate the era’s technologies. The researchers defined mixed reality environments as those in which real and virtual world matters are mixed and presented together. Their characterisation of mixed reality functioned as an umbrella term that incorporated both VR and AR technologies. (Khullani 2016.) As noticeable, VR and AR are close cousins to each other. However, there is a central difference between them – the almost opposite meanings as both are associated with the term ‘reality’. (The Economist 2017b.)

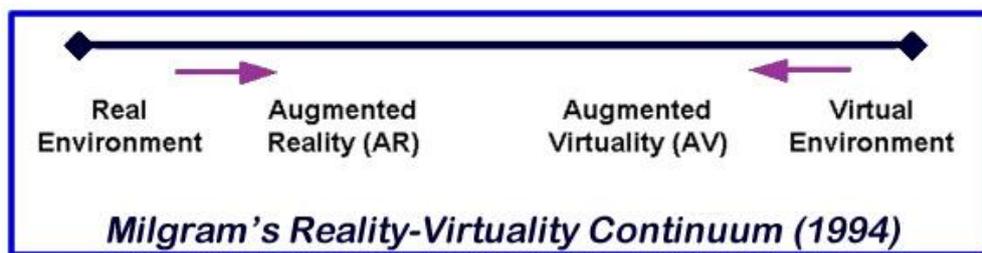


Figure 5. Milgram's Reality-Virtuality (RV) Continuum defines mixed reality environments as those where real world and virtual world objects are presented together (Lindsay 2015)

There are three main principles that divide these technologies; the depth of immersion, purpose and delivery method. As mentioned before, VR offers a computer-generated recreation of a real-life situation, aiming to drop its users into an artificial, but convincing world. By contrast, AR delivers useful or entertaining virtual data as an overlay to the real world. (Lindsay 2015; The Economist 2017b.) When it comes to the immersive aspect, VR is immersive by its very nature, as the headsets block out the surrounding, external world. Whereas, the headset is not necessary when using AR – by design, the connection between the user and the real world is maintained. (T.C. 2016.)

Furthermore, whilst VR creates a reality of its own, which is entirely produced and driven by a computer, AR improves experiences through supplementary computer-generated components (e.g. pictures, sensations or graphics) as a layer that interacts with the real world. Additionally, the delivery method of the technologies differs from each other; while AR is increasingly exploited on mobile devices (e.g. laptops, tablets or smart phones), VR is typically delivered via a handheld or head-mounted controller. (Lindsay 2015.)

The confrontation VR vs. AR is not always necessary as they are sometimes merged together to create more immersing experiences. For instance, haptic feedback (the

sensation of vibration that interacts with graphics) that is classified as an augmentation, is also used in VR situations to create more realistic experiences through touch. Whether they operate together or separately, they certainly open new worlds. (Lindsay 2015.)

2.5 VR and AR in global tourism

Information technology has changed the tourism industry; the ways travel organizations in all sectors e.g. communicate with clientele, the way they plan their strategies, compete, save costs as well as add value to their products and services (Buhalis & Law 2008 in Beckendorff et al. 2014, 5). Similarly, travellers are also gaining benefit from developments in IT. For instance, social media and mobile technologies give them access to information about travel organizations, destinations and experiences regardless of the time or place. Additionally, IT is present in all stages of travel; pre-trip, in-trip and post-trip – pictures, videos and mobile apps, to mention a few, play a big role in these stages. (Beckendorff et al. 2014, 6-9.)



Figure 6. IT's impact on different industries' marketing and production (McCarthy 2015)

Figure 6 shows the industries, including tourism sectors, where information technology has an influence on the production and marketing. It suggests that the industries located further along on the horizontal axis tend to be the ones where e.g. pricing, customer tastes and preferences are somewhat unpredictable. Similarly, industries at the high end of the vertical axis tend to have high technology implanted to the product, for instance if cost and time savings are possible through automation. Furthermore, particularly airlines, travel agents, tour operators, hotels and attractions are strongly influenced by IT when marketing their tourism products. (Beckendorff et al. 2014, 12-13.)

Due to the high technological nature, the airline sector is located at the highest ends of both dimensions – comprising e.g. design and maintenance of aircraft, as well as the fact that new technologies are constantly being implemented to develop the transportation and the experience. When it comes to travel operators and other intermediaries, they are less technological in production as they count on information, not a physical product. Accommodation sector comprises technological reservation systems including systems that also assist with marketing, therefore it is located rather high in the horizontal axis. However, its effect on the production is rather low. Technology is continuously being installed into the operations of accommodation units globally. Attractions, on the other hand, are more difficult to position on the frame as some attractions are highly technological (e.g. amusement parks) and some are none (e.g. natural attractions). (Beckendorff et al. 2014, 13-14.)

IT can be used in several ways in tourist experiences, for instance, as an enabler, creator, attractor, enhancer, protector, educator, substitute, facilitator, reminder and destroyer. Where, especially VR and AR are used as attractors, enhancers and educators. (Beckendorff et al. 2014, 262-265.) Over the coming years, VR and AR devices are expected to change several industries of the economy, together with the travel industry (Graham 2016; THINK! STAFF 2017). Travel industry's main applications take in VR and AR for e.g. marketing, interpretation, providing visitor information, translation and gamification (Beckendorff et al. 2014, 168). Moreover, the unique advantage of using these technologies for instance in marketing is that people tend to remember better an experience instead of a seen commercial (Pänkäläinen 2016).

It is important for destinations' success to create unforgettable and exquisite visitor experiences. As mentioned, AR has started to improve experiences through mainstream technologies, and therefore, it has a significant part to play in destinations' success. AR has been integrated into applications for e.g. education, translation, commerce, the arts, etc. Furthermore, it has potential to support tourism related experiences with innovative approaches of storytelling, visitor servicing and gamification. (THINK! STAFF 2017; Beckendorff et al. 2014, 168-169.)

Principally, AR can be utilized for instance to help travellers in their own language, to provide guides or maps, to offer supplementary historical or cultural context to an experience (e.g. historic scenes and characters), or design games for educational purposes (e.g. to learn about an area's wildlife, culture, history, etc.) or to illustrate how destinations look like during different times of year – which is also possible with VR. (THINK! STAFF 2017; Beckendorff et al. 2014 168-169.) Moreover, the first application

that was created especially for travel purposes was Tuscany+ (image 4). The app was designed to be an interactive, real-time guide for travellers in Tuscany, Italy. It was meant to boost the user's travel experience by providing directions and information in real-time. (THINK! STAFF 2017.)



Image 4. Tuscany+ was one of the first applications that was designed specifically for tourism as a real-time and interactive travel guide (THINK! STAFF 2017)

When experiencing destinations virtually, it eliminates e.g. the need for long flights, exposure to unfamiliar and possibly unsafe environments as well as the inconvenience of problematic situations regarding foreign languages and currency exchange. Also, it has an influence on sustainability, as the user does not physically travel to the destination; it reduces carbon emissions and damage to the natural environment – meaning that the user settles for the virtual experience of the destination. Since, VR may never simulate a real-life experience entirely as it somewhat pales in comparison to actual reality - particularly when it comes to creating memories regarding travel experiences - it is difficult to say how VR will replace tourism in the future. However, it offers a viable alternative for traditional travelling, which cannot always be taken for granted, as earth's resources are becoming increasingly depleted and travel more expensive as well as safety and security concerns will continue. (Beckendorff et al. 2014, 319-320; Las Vegas 2016.)

AR is expected to be valuable for travellers in the future as well, as it enables easy access to inspiration, information, translation, navigation and education as well as since everything can be found in one application. It is predicted that travellers will use this technology when choosing the travel destination and activities before and during the trip. Eventually, planning and travelling could be experienced in a more interactive, inspiring and educational way that could feel like a journey of its own. (THINK! STAFF 2017.) Similarly, the features of AR, regarding interpretative and information delivery, can change

travellers' behaviour and choices towards more sustainable direction (Beckendorff et al. 2014, 320).

According to Collins and Quinby (2016), VR will change tourism and other important areas. The main transformation will take place while customers are planning about where to travel. VR's significant effect is that it can assist consumers in making their decisions regarding travel destinations, accommodation etc. Hereby, tourists can have somewhat of a "taste" before purchasing a product or a service. (Beckendorff et al. 2014, 168, 319). Due to the change, it can also be extremely valuable to destinations, which do not have top-tier sights or attractions, but have potential natural and cultural attractions that can give tourists confidence to choose it. For example, virtual tours, which allow customers to see the destination pre-booking. Applications, such as Ascape by iPhone, enable customers to convey the feel of travel experience before the actual trip using 360-degree videos. (Graham 2016.)

Similarly, travel agents can benefit from offering immersive experiences such as seeing a destination with VR glasses. Another example is British travel agent Thomas Cook, who collaborated with Samsung as well as VR filmmakers Visualise and created a series of short films of some destinations. This way customer visiting the store in UK, Belgium and Germany could experience the virtual short films before making the decision to book a trip. (Graham 2016.)

Marriot Hotels launched VRoom Service, where customers could experience VR postcards. By using a VR device from the hotel, they could visit Chile, Rwanda and Beijing. Matthew Carroll, the vice president of Marriot Hotels, stated that travel expands people's minds and their imagination. Likewise, VRoom combines two important things for the next traveller generations; storytelling and technology. (Graham 2016.) Most of the VR and AR content is in 360-degree videos, which only allows limited interaction and restricted immersion, apart from Marriot Hotels. They have created a teleporter that enables an easier engagement by the provision of 4D elements for instance wind, heat and moving floors. (Beck 2017.)

In addition to Marriot Hotels' VR experience, Expedia is working on a project, where a customer can walk around a hotel room and use the controllers to open doors and wardrobes as well as look down from the balcony. Expedia enables customers to explore their hotel rooms with VR prior to booking, which makes the traveller secure about his/her decision and reducing a risk of a failure – so far, it is only a demo version. (Beck 2017.)

The Lufthansa Group uses 360-degree videos to show customers their cabin classes, airplanes and its potential travel destinations. The application takes place in e.g. New York and Tokyo, where viewers can virtually stand, for instance at the Brooklyn Bridge. As seen in figure 7, Eurowings brings 360-degree video into the open from a long-haul airplane, which also gives information on screen sizes, touchscreens as well as USB power supply. (Lufthansa Group 2017.)

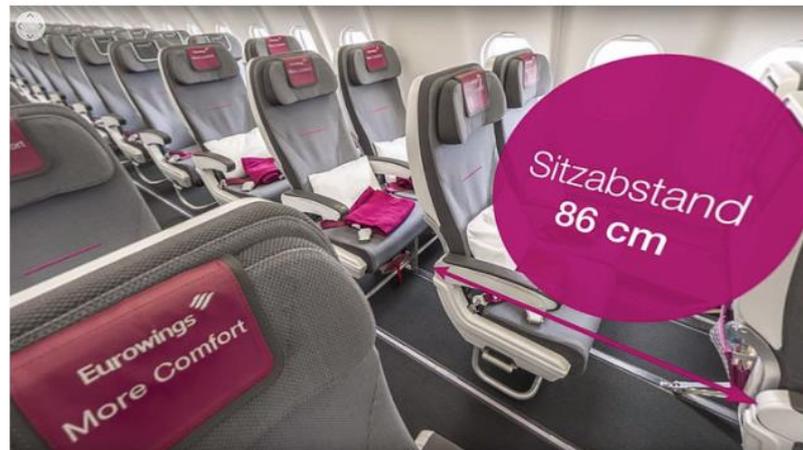


Figure 7. 360-degree view of the inside of a Eurowings' airplane (Lufthansa Group 2017.)

The analytics of YouVisit - a technology focused company that enables organizations to e.g. convert and engage viewers through 360-degree experiences - illustrate that at least 13 % of people who experience a VR tour of a destination, have awakened their curiosity enough to take the next step in the planning process. It can be booking the trip and/or the accommodation or learning more about e.g. the destination. (Las Vegas 2016; YouVisit 2017.)

2.6 VR and AR in Finnish tourism currently

Virtual holidays with applications and 360-degree videos are becoming a common sight in Finnish tourism. In a travel fair in Finland, it has been possible for customers to experience different destinations with VR glasses, for example a family destination in the Canary Islands. Tour operator Sun Tours has published six virtual holidays for customers to experience before purchasing one. They believe that 360-degree videos have a big influence in future markets as they play a vast part in inspiring potential customers. All in all, Finland holds a lot of expertise in the field of VR and AR technologies and they are currently being exploited in many industries. (Uusi Teknologia 2016.)

Travel agency Tjäreborg, which operates in Finland, has launched an interactive mobile marketing campaign with 360-degree videos and video streams of the destinations and

even hotel rooms. The videos take customers to see and experience London and New York virtually, which brings consumer experience to the next level by immerse remote experiences – “For most travellers the holiday of dreams starts online”. Tjäreborg offers a possibility of experiencing city tours and even moving within the videos. The idea is to get a glimpse of a real holiday in the end of a busy week of working. According to Anu Koskinen from Tjäreborg, VR combined with storytelling gives marketers powerful tools to stand out from ordinary advertising. Moreover, this way customers spend more time with the brand and its products whilst they look into their holiday dreams. (Tjäreborg 2015.) Similarly, Tjäreborg offers 360-videos from their Caribbean cruise, where the viewer can see exactly what the journey contains (Tjäreborg 2016).

As a good example of a smaller usage of AR, a Finnish company called Partybooth Oy provides a photo booth experience, which allows the customers to add the background themselves from the theme selection. Images can also be shared in real-time with social media or email. The booth is mainly used in events and parties. (Partybooth Oy 2017.) Additionally, the fair centre in Helsinki took AR applications widely into use as the first in the world during the annual travel fair. Customers could walk around the centre with AR via tablet or smartphone and experience a whole new dimension. (Rissanen 2017.)

2.7 The potential of VR and AR in tourism

SWOT-analysis is a valuable technique that can be used for understanding and identifying the strengths, weaknesses, opportunities and threats, also called as the internal and external factors of e.g. an organization or a travel destination. Strengths define the internal characteristics and resources that support a positive outcome. Correspondingly, weaknesses deal with internal points that are working against a successful outcome. Opportunities and threats both describe external factors but opportunities for advantage and threats for disadvantage. Once the factors are identified, it should be clearer to understand how to make the scrutinized matter successful. (Investopedia 2017.) In this chapter, it is examined how VR and AR are implemented and carried out in the tourism industry. The analysis includes the main points of each aspect, as seen in table 1.

Table 1. SWOT-analysis of VR and AR used in tourism and the main points

Strengths	Weaknesses
Unique way of marketing /Travel inspiration /Assisting travellers / Enhancing the experience / Attracting potential travellers / 360-videos / Instructive /Sustainable value	Loses in comparison to actual reality / Cyber-sickness / Confusing / Costly
Opportunities	Threats
Link experiences together / Potential of going mainstream / One of the biggest trends / Becoming more affordable / Creating more revenue / Sustainable	Size of the consumer market & demand / Unrevealed potential / Passing trend / Authenticity of the initial setting and experience

2.7.1 Strengths

One of VR's strengths in the tourism industry is, that it enables a unique way of marketing. VR brings value to the sector as people tend to remember better an experience than a traditional commercial – virtuality adds visual richness and multisensory. In the same manner, key applications for the industry implement also AR for marketing purposes. Moreover, a strong perk of the modern technologies is also the capability of arousing travel inspiration and assisting travellers with making decisions where to travel. (Beckendorff et al. 2014, 168, 268; Pänkäläinen 2016.) AR also helps travellers during the trip, for instance by providing directions and translation – simultaneously enhancing the experience (Lindsay 2015).

From destinations' point of view, VR plays an important role in attracting potential travellers to destinations that are not e.g. mainstream or traditional holiday destinations (Graham 2016). Additionally, as many travel brands are testing VR travel experiences, it has been noticed that VR's most popular content is shaped by 360-videos as they have gained the widest audience – due to the support of YouTube and Facebook that provide and enable these kinds of virtual experiences. Travel brands Thomas Cook and Marriott have created successful virtual experiences with 360-videos. (Kressmann 2017.)

Studies show that people remember 10 % of readings, 20 % of their hearings, 30 % of what they have seen, as well as 90 % of what they have done when carrying out a task. Similarly, VR enables learning by doing in a simulation of a real situation. Therefore, one

of the strengths of VR is, that it can teach the user in a unique and memorable way. (Pänkäläinen 2016.) From the aspect of tourism, it can be used to teach the users about e.g. a destination, its history, traditions, etc. Thus, VR brings sustainable value to the industry. Nevertheless, as it enables visiting a destination without physically stepping into the area, it supports the sustainable nature of the technology. Hereby, carbon emissions and damage to the environment is not caused. (Beckendorff et al. 2014, 319-320.) Similarly, AR supports sustainability as it can be used for providing information and therefore, for educational purposes, e.g. by adding information layers on historical sites (Beckendorff et al. 2014, 168).

2.7.2 Weaknesses

One of the weaknesses of VR is that it loses in comparison to actual reality, especially regarding making memories that are inherently linked to the real-life travelling experiences – it is impossible to replicate the unique physically visited experience in VR (Las Vegas 2016). Moreover, VR is not suitable for everybody as using a VR device can cause cyber-sickness. A moving image rather than the motion itself cause it and the symptoms are e.g. nausea, vomiting, pallor, sweating as well as disorientation and drowsiness. (Freefly VR 2017.) Likewise, there is a risk of distraction and injury if users are not paying attention to the warnings and cues (Beckendorff et al. 2014, 268).

Along with the relatively low demand for VR equipment and software, consumers are ambiguous about their interest in the experiences from VR. Nevertheless, there is no doubt that virtual travel experiences evoke strong enthusiasm. However, many are confused what it means and emphasize that it needs to be tried out in person to construct a better opinion about VR – which determines their decision to purchase or use such devices. Another problem is the wide range of VR software formats and devices, which can complicate the production process as well as distribution choices for sellers. (Kressmann 2017.) Presently, there are considerable barriers to entry for the average individuals as high-quality VR equipment and devices are rather costly and unattainable, which is a major issue (Neiger 2016).

2.7.3 Opportunities

Opportunities are a combination of different conditions that offer positive outcomes, which in this case are different factors regarding e.g. experience, trend, customer behaviour and price. Firstly, VR and AR can link pre-trip, on-site and post-trip experiences together as the technologies combine all the phases to a unified experience (Beckendorff et al. 2014, 268). Secondly, VR might go mainstream in the upcoming years. Event planners as well

as travel brands are exploiting the demand to engage audiences even more effectively, which is proving to cause higher conversion rates (Oates 2017).

Thirdly, because of the growing popularity, VR and AR reality could become one of the biggest trends over the next year. Applications related to the technologies will become more evident due to the tech improvement and lower prices. It is expected that VR and AR will have the potential to increase empathy, which could lead to more authentic and deeper connection with the users and audiences. (Cavanaugh 2017.) Fourthly, technology is getting more affordable in the future, thus, anyone can purchase and use it (Adams 2016).

Fifthly, travel brands are hoping that VR and AR will help produce new bookings and activities as well as provide entertainment, which will all create more revenue. Furthermore, the immersive experiences are expected to produce \$150 billion in revenue in the future (\$120 billion from AR and \$30 billion from VR) (Gaggioli 2016). Sixthly, the attributes of AR, especially interpretative and informative provision, are set to change travellers' behaviour as well as choices towards more sustainable way (Beckendorff et al. 2014, 320).

2.7.4 Threats

Many executives in the travel industry are thrilled about the potential of VR devices. However, the size of the consumer market for VR and demand are rather low. (Kressmann 2017.) As VR and AR have not developed as mainstream and the technological trend is perceived to be still in its infancy in the hospitality industry, the technologies' potential is not entirely revealed (Gaggioli 2016). Therefore, the threat of not achieving high popularity and the peak of success, is existing. VR might turn out to be a passing trend (Forbes Agency Council 2017a). Similarly, as VR may never entirely simulate a real travel experience, it is difficult to predict the future of the technology in the tourism industry (Beckendorff et al. 2014, 320).

As AR is already mainstream and it is predicted to keep developing (Forbes Agency Council 2017a), the threat of influencing a travel experience in a negative way is existing. If people carry technology all around the world as well as increasingly tend to view everything through the screen of a mobile device rather than without, the authenticity of the initial setting and experience could become alienated.

3 Designing and marketing tourism experiences

VR and AR have opened a new virtual dimension in experiences and marketing. Therefore, the concept of experience and its different approaches are relevant to this thesis. This chapter presents different definitions of experiences as well as approaches of progression of economic value, The Four Experience Realms as well as The Experience Pyramid. Additionally, the change towards virtual experiences has altered also the marketing of tourism experiences and somewhat increased experiential marketing. The last chapters scrutinize purchasing and marketing from consumers' point of view.

Experiences with different tourist typologies and forms of tourism have been studied broadly. Although, each of the studies pay attention on a specific type of tourist's experience, together they offer empirical and theoretical analysis of the matter and perceptions for the thought of 'tourist experience'. (Scott, Laws & Boksberger 2010, 14.) Furthermore, social and mobile technologies increasingly control, simplify and co-create tourism experiences, due to the development of technologies and the increase of customer centricity. As technology has a major implementation throughout the entire customer journey, it has transformed the nature of modern tourism experiences. (Neuhofer & Buhalis 2017, 1.)

The term 'experience' has been defined in different ways over time. For instance, Holbrook and Hirschman (1982, in Scott et al. 2010, 15) defined an experience as "a steady flow of fantasies, feelings, and fun", whereas Hoch (2002, in Scott et al. 2010, 15) defines it as "the act of living through an observation of events and also refers to training and the subsequent knowledge and skill acquired". Another definition of the term, according to Van Boven and Gilowich (2003, in Scott e al. 2010, 3), is that the primary need and intention to acquire a life experience (e.g. an event or series of events) leads to an experiential purchase. Additionally, according to Pine and Gilmore (1999, in Scott et al. 2010 16) an experience is created when a company uses services as a stage, so to speak, and goods as the event. Designing experiences involves the combination of two core sets of determinant features that control customers' experiences; the technical resources that produce the service and the method how the service is distributed to the client. (Scott et al. 2010, 3, 8, 15-16.)

3.1 Experience frameworks

According to Pine and Gilmore (2011), experiences are the resulting point in what is called 'the progression of economic value'. They have been ever-present, yet consumers and

businesses have pushed them into the service sector. Because consumers have started to demand experiences, businesses have responded by designing and promoting them. Presently, in service economy, many companies compound experiences with their products or service repertoire to increase their sales. Correspondingly, as businesses frame different kinds of experiences, also differentiating from the competition becomes easier. (Pine & Gilmore 2011, 1-3, 34-35; Pine & Gilmore 1998.)

Consumers have begun to invest their money and time in more highly valued and unforgettable experiences rather than just on services and products (figure 8). Hereby, they are willing to spend more on experiences than for the plain commodities, since the experience is more relevant to what customers want. Consequently, businesses do not offer just goods or services anymore, but also experiences that produce sensations within each client. As stated in Pine & Gilmore (2011) “commodities are fungible, goods tangible, and services intangible, experiences are memorable”. Hereby, the experiences’ value stays in the participated individual’s memory. (Pine & Gilmore 2011, 17-18.)

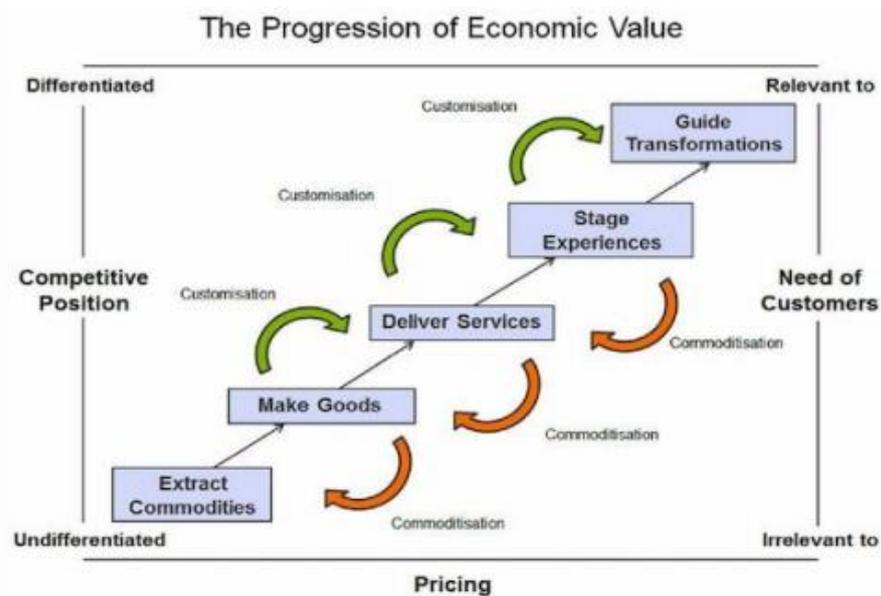


Figure 8. The Progression of economic value by Pine & Gilmore (2011)

3.1.1 The Experience Realms

Two central dimensions in which customers can be engaged in, are the environmental connection or relationship that bonds customers with the event (vertical axis) as well as guest participation (horizontal axis) (figure 9). At the other end of the horizontal axis, stands passive participation. Here, the customer does not directly influence the event. Whereas, active participation at the other end, refers to the degree with which the customer affects the event that causes the experience. Absorption on the vertical axis,

refers to the situation where the customer's attention is engaged by means of absorbing the experience from a distance. Immersion, on the other hand, reflects the phenomenon where the participator merges into the experience virtually or physically. For example, when watching television, the individual typically absorbs the experience, although when playing a computer-generated game, the individual becomes immersed by the experience. (Pine & Gilmore 2011, 45-46.)



Figure 9. The Experience Realms (Pine & Gilmore 1998)

As the Four Realms of an Experience framework illustrates, the joining of previously mentioned dimensions forms the realms of entertainment, educational, esthetic and escapist. Entertainment, to begin with, is described as not only one of the oldest forms of experience but also the most developed one. Nowadays, the realm is also described as the best-known and the most common one. When it comes to the connection between the participating person and the unfolding events, in entertainment and educational experiences the person absorbs the events. Yet, in contrast to entertainment, educational experiences involve an active role from the participating individual. By combining the two realms together, education, which is considered as a serious business, can become fun. (Pine & Gilmore 2011, 47-49.)

Compared to educational and entertainment experiences, escapist experiences embrace a greater level of immersion; the participating individual becomes completely immersed. Hereby, the escapist realm is the very opposite of the entertainment realm. During an esthetic experience, the individual becomes immersed by the event or environment. Typically, the environments of esthetic experiences are left untouched as the experiences have none or a little influence on them. For example, a visit to Grand Canyon can be

categorized as an esthetic experience, whilst gambling in a casino as an escapist one. (Pine & Gilmore 2011, 49-50, 53-55.)

Several experiences engage mainly through only one of the previously mentioned realms, yet most experiences cross the boundaries. Moreover, in order to increase the experience's authenticity, businesses blur the lines between the realms. For instance, Virgin America has created an animated movie to show the safety instructions during flights as well as to modify the cabin's atmosphere, the airline has installed mood lighting to their fleet. These are somewhat esthetic and entertaining solutions to traditional air transportation. The richest experiences include all four realms, which occurs as the *sweet spot* in the middle of The Experience Realms frame. (Pine & Gilmore 2011, 56-59.)

3.1.2 The Experience Pyramid

The Experience Pyramid is an alternative model, which can be applied when analysing the content of a tourism experience (see figure 10). It displays elements on different levels that are deliberated as needed when creating a meaningful experience. Similarly, the levels are scrutinized from two perspectives; participator's own experience (vertical) as well as the specific elements of products (horizontal). All the elements and levels would be included in an ideal product. (Tarssanen 2009, 11-12.)

Scrutinized elements are individuality, authenticity, story, multi-sensory perception, contrast as well as interaction. Firstly, individuality refers to the exclusivity of a product – there is no other product available that is alike or the exact same. Secondly, authenticity refers to the credibility of the culture and lifestyle that are supported by the product. Thirdly, a story that is credible and authentic, enhances the product's content and creates meaning – suitable storytelling also makes the experience coherent. Therefore, customers will have a sufficient reason to experience it. (Tarssanen 2009, 12-13.)

Fourthly, multi-sensory perception reflects the senses and feelings that are stimulated during an experience, which simultaneously supports immersion. The product's theme is also usually designed to be supported by all the sensory perceptions. Consequently, if too many irritating sensory perceptions occur, it might hinder the experience. Fifthly, the contrast element means the customers' viewpoint where the product differs from their everyday lives. Hereby, the customers ought to experience something new, exotic and abnormal. Lastly, interaction designates the communication between for example, service providers and their clientele. Hence, the community's spirit plays a great role in interaction – customers experience something together as a group. (Tarssanen 2009, 13-14.)

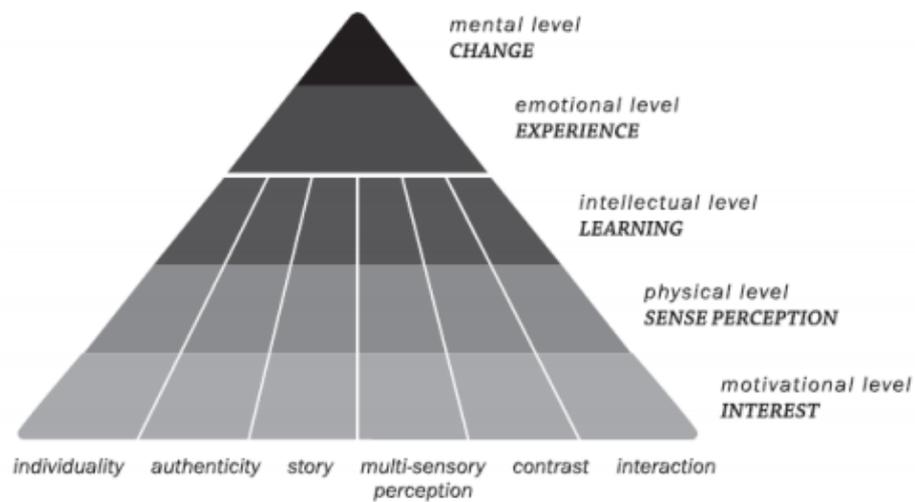


Figure 10. Different levels and perceptions of The Experience Pyramid (Tarssanen 2009, 11)

The vertical axis of The Experience Pyramid, reveals the pathway of an experience, which is processed from the initial interest towards the experience and leads to a meaningful experience. During the motivational level, the interest of the customer is woken – the expectations towards a product are the outcome of marketing. It should accomplish as much of the basic elements regarding a meaningful experience as possible. On the following level, which is the physical level, customers use their senses to experience the product. Whereas, on the intellectual level, customers decide themselves if the product is satisfactory. (Tarssanen 2009, 15.)

Moreover, a meaningful experience influences the customers on the emotional level as well, which almost certainly generates positive sensations, such as excitement and delight. Yet, it is not easy to neither control nor know the possible reactions. In the same manner, a strong emotional experience might cause a personal change, where the customer’s state of mind or lifestyle will permanently transform. When an experience becomes meaningful for the participator, he/she has changed or developed as a person and possibly even adapted a new state of mind. (Tarssanen 2009, 15-16.)

3.2 Marketing tourism experiences

The co-creation of an experience, where the client participates actively, should be emphasised when marketing experiences – rather than viewing the client as an inactive observer. Hereby, the interaction between staff and customers become urgent. In addition, Pine and Gilmore (2004, in Scott et al. 2010, 8) propose that the requirement for advertising is rarer and the need for marketing through direct experiences is higher.

Another topic of discussion for experiential marketing is creating a narrative in the communicated messages, for instance, with the use of symbols. (Scott et al. 2010, 7-8.)

According to Schmitt (1999, in Scott et al. 2010, 7), experiential marketing is distinct in four key ways; treating consumption as a holistic event, concentrating on consumer experience, recognising consumption's emotional and rational motivators as well as utilizing eclectic practices. Focusing on experiences facilitates highlighting the emotional aspect of consumer decision making, rather than the rational perception in consumption choices alone. With regard to experience economy, success is about satisfying aspirations, desire and fantasies and thereby, creating value and meaning. Thus, customers alter into emphasising hedonic experiences instead of picking products to fulfil requirements, according to Simon (1956, in Scott et al. 2010, 8).

Moreover, Internet has changed marketing communications as it provides a better way of communicating with the customers than conventional media. Traditional marketing communications have the capability of reaching potential and existing customers, but does not indicate any interaction between the organization and individual customers. Whereas, with digital marketing communications, that take place in computer-mediated environments, consumers actively make the decision to approach the organizations through digital touch-points and exercise unrepresented control over the content. Therefore, communication between organizations and customers (B2C), customers to customers (C2C) as well as organizations to organizations (B2B) has created a flow that becomes more like a web of conversations. (Beckendorff et al. 2014, 105.)

Augmented reality marketing (ARM) is becoming one of the most spoken trends in advertising industries and marketing, since the technology has remarkably grown its popularity over the recent years. It is an innovative and creative component of digital marketing, which is used to connect with customers, enhance what consumers see around them as well as to increase engagement. (Forbes Agency Council 2017b.) This is possible when merging virtual data to the real, physical world by utilizing augmented reality applications (ARPs). Since it is possible to produce unforgettable content with AR, it can be specified as a form of experiential marketing as well. Additionally, ARM is rather versatile as it is possible to insert the applications into websites, magazines and in stores. It can also be linked not only to pre-purchase phase but also to other phases as well. However, the efficiency is questioned by many authors; the excitement around AR could mostly arise from the "wow" factor or the novelty of the technology. (Ylinen 2012, 14-16.)

Additionally, VR has also drawn the attention of marketers; they are trying to solve the best ways to exploit virtual reality marketing (VRM) in order to accomplish brand objectives. Moreover, VRM enables demonstrating features, functionality and other product attributes, creating a more immersive dimension of storytelling, increasing trust for the brand and therefore, enabling faster decision making for consumers – to mention a few of the characteristics. Furthermore, due to the immersive nature of VRM, storytelling has evolved into the concept of story-living. Hereby, the consumers experience the stories as well as brand messages. (Mitchell 2016; Greenwald 2016; Greenwald 2017.)

3.3 Customer behaviour

Customer behaviour can be described as a study of individuals and organizations and the process of selecting and using services and products. It focuses on psychology, motivations as well as behaviours. Some of the focus points are, for instance, what consumers think about different brands, how they reason and pick between alternatives, behaviour while shopping, and the impact of the environment regarding purchasing decisions and how market campaigns influence the consumer. These kinds of considerations are influenced by three factors: personal, psychological and social factors. (Smith 2016.) Likewise, a mutual characterisation “The dynamic interaction of affect and cognition, behaviour and the environment by which human beings conduct the exchange aspects of their lives” is often used of the term ‘customer behaviour” (Ekström 2010, 32).

According to Kotler and Keller (2011), consumer behaviour is an important part of marketing and it is a study of the ways of buying and disposing goods, ideas, services and experiences by individuals, organizations and groups. They buy and dispose goods to satisfy their needs and wants. Similarly, Kotler and Keller (2011), highlight the importance of understanding consumer behaviour as well as the ways in which buyers select their purchases and services and the impact it has on manufacturers. At times, consumers’ purchasing decisions are difficult to identify, as it might be a result based on their emotional beliefs, which they are not even aware of. (Dudovskiy 2013.)

The consumption process can be approached not only from the traditional angle, where tangible and verbal matters works as stimuli, utility and value maximisation are the goals or satisfaction evaluates the purchase afterwards, but also from experiential angle. Here, sensorial, non-verbal matters act as stimuli, maximising emotional benefits is the goal, as well as the post-purchase evaluation is made by the caused pleasure and memory. Emotions and feelings play big roles in experiential vision of the consumption process. (Frochot & Batat 2013, 24-25.)

Three stages of the purchase process is required in consumer psychology: pre-purchase, purchase, acquisition and post-purchase. In each of the steps tourism, hospitality and leisure (THL), behaviour is one of a kind. (Crouch & Perdue 2004, 3.) According to Foxall and Goldsmith (1994, in Swarbrooke & Horner 2016, 48) there is an added stage, where the initial need is woken. Travel has become a high-spend part of the tourism industry; thus, the decision-making process contains a high-risk factor. (Swarbrooke & Horner 2016, 48-50.)

Firstly, the pre-purchase stage refers to actions, which happen beforehand. Furthermore, it involves choosing between intangible options as well as making decisions from noticeable distances. The entire decision-making process might take some time, but then again, many customers receive joy from the steps leading up to the upcoming journey. (Crouch & Perdue 2004, 3.)

Secondly, purchase and acquisition stage contains the trip itself – it is the core of the benefit. Lastly, pleasure continues in the post-purchase stage as the consumer returns home with life-long memories to share via e.g. photos and stories from travel experience. Hence, tourists' satisfaction is born in the last stage. (Crouch & Perdue 2004, 4.) Nevertheless, the experience might result in repeating the purchase or disposing the product afterwards (Swarbrooke & Horner 2016, 48).

In tourism, influencers, motivators and determinants are classified in different ways and one typology is to scrutinize personal, physical, cultural and emotional motivators as well as personal development and status. Cultural motivators are e.g. sightseeing and experiencing new cultures. Whereas, health, exercise and relaxation are physical motivators. Consequently, romance, escapism and nostalgia are considered as emotional motivators, and visiting relatives or friends and making new ones, as personal motives. Learning a new skill is an example of a personal development motivator. Yet, exclusivity and trendiness of a destination are motives regarding status. (Swarbrooke & Horner 2016, 76.)

Mayo and Jarvis (1981, in Pizam & Mansfeld 2000, 22) state that it is required to be aware of the social and psychological structures that influence individual travellers' choices, in order to understand how they make decisions. The motivators mentioned previously, external forces and influencers such as the culture where the person is originally from, family and reference groups, have a significant impact on the individual's travel behaviour. (Pizam & Mansfeld, 2000, 21-22.) Further external determinants are for instance, the

effects of social media as well as technological factors (Swarbrooke & Horner 2016, 96). Internal and social influencers, such as attitudes, personality, motives and perception, have and influence on travel behaviour as well (Pizam & Mansfeld 2000, 21-22).

3.4 Customer journey

Customer journey is used to describe the current relationship between a product, brand or company and a consumer. In the same manner, the term can refer to both B2B and B2C as well as it can include experiences across channels and departments within a company. The customer journey begins before they even realize the relationship has started, for instance, when a product etc. has made an impression the customer journey has begun. (Marketing cloud 2017.) Figure 11 shows the practical guide to tourism destination management; the customer journey by UNWTO. It has five stages, which are dream, plan, book, experience and remember. They all play a part in the journey, where customer experiences a product or service. (Patikas 2013.)

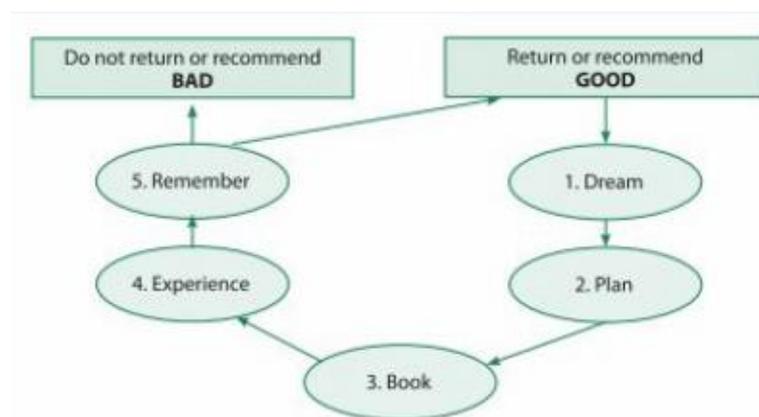


Figure 11. The Customer Journey according to the UNWTO (Patikas 2013)

Customer journey from awareness to advocacy contains of seven phases and differs with each customer throughout the process – depending on his/her needs. Hence, delivering constant engagement for customers at every stage is vital for businesses. The customer journey does not start when a customer enters a store, it starts when a need initiates. All the seven phases are shown in figure 12 and how they are connected to each other in order to form the full customer journey.



Figure 12. The seven phases of the customer journey (Wrede 2016)

The first phase is called awareness, where the customer is passive, since they are not yet aware of their needs – until triggering action occurs. The action can be external or a realization and many are beyond the customers’ control. The second phase, discovery, occurs when a customer realizes about his/her needs, and they begin to determine, whether the need is perceived or real and is it worth pursuing – given their financial situation and time. Moreover, before purchasing, the customers are evaluating the options and their research is generally based on their need rather than a specific business or brand. Ultimately, they are trying to get a sense of their requirements by doing research and talking to other people about the upcoming decision in order to exploring their need as well as potential ways to obtain it. (Wrede 2016.)

In phase three, interest, customer gathers all his/her options and evaluates them to decide if some of them can be ruled out. Initially, the goal is to consider all the options and narrow them down pre-purchase decision. In this phase, the customer is active and tries to collect plenty of information about each option to decide whether to keep them on the list. Comparing solutions, reading third-party reviews and researching companies are part of the phase as the customer gathers data points and adds new evaluating factors, which they did not consider previously – the input of friends and family is important as well. (Wrede 2016.)

Next up is the fourth part, consideration, where the customer is aggressively seeking information to determine the most suitable option – hence, using pros and cons is a rather common way. Furthermore, customers often pursue, for instance, hands-on experience, interview service providers, watch demonstrations and engage with the salespeople. The phase can vary in length, depending on the list, the amount of key decision criteria, size of

the purchase etc. The fifth part, action, is where the purchase occurs. After the customer has decided to go forward with the decision, he/she is moving to execute the purchase transaction. It can vary from swiping a credit card to complex procurements, where the customer will learn about the sales process, terms negotiations and the finalized price. (Wrede 2016.)

Use is the sixth phase, where customers are actively using their product or service, post-purchase. This way customers form their opinions on the purchase and decide if the company's promise has fulfilled as well if they are satisfied with the product or service – it is usually the longest part of customer journey. Additionally, the phase is critical for brand loyalty and positive customer advocacy. If their reaction is positive, customers are expected to purchase more products, if the reaction is negative, customers will decide whether to make a complaint or move on to another vendor – depending on the experience. (Wrede 2016.)

Lastly, the advocacy phase refers to customers sharing their opinions online or in person. The opinions are based primarily on the experience during stages five and six and are consumed by others on their customer journey. Thereupon, customers will have concrete feelings about the product or service and will share it with their friends and family or post reviews for other shoppers to see. Nevertheless, it is critical for the brand as this phase is the most publicly visible and if a mistake was made, other shoppers will hear about it as well. (Wrede 2016.)

4 Research implementation

Because it is possible to gain more in-depth understanding of behaviour with qualitative approaches as well as since interviewing is a common method, which helps to understand e.g. digital tourists (Beckendorff et al. 2014, 40), they are suitable for this thesis.

Therefore, the research is conducted as a qualitative research with the use of semi-structured interviews that are implemented with Finnish companies as well as with Finnish consumers. In this chapter, the theoretical aspect of important concepts, methodologies, data acquisition methods as well as the ways to utilize and analyse the gathered data are presented. Additionally, in the final chapter, the actual research process is described with an illustrating timeline.

Firstly, the theory assists in conducting the study. According to Silverman (1993, in Metsämuuronen 2006, 83), it is a collection of explanatory terms. Secondly, the hypothesis examines the allegations made, which makes it relevant when testing the accurateness of the claim. Thirdly, methodology refers to the general approach towards the study of research themes. Therefore, it is relevant when it supports the practical research. Lastly, method refers to a research technique that is beneficial as it can link the previously mentioned concepts. (Metsämuuronen 2006, 83.)

In a qualitative study, a vital starting point is to conduct a research plan. The plan may need rephrasing during the data acquisition and when writing the thesis, as well as returning to the original material may also be required. Furthermore, the research plan is as its finest when it lives along with the project. An open plan highlights the intertwining of the study's different steps – the data collection, analysis, interpretation and reporting. Similarly, a characteristic of a qualitative research is to not have a locked hypothesis. (Eskola & Suoranta 2008, 15-16, 19.)

4.1 Methodology

The best-known strategies of qualitative research are phenomenological research, case study, ethnographic research, grounded theory, operational research, discourse analysis as well as narratology and phenomenography (Metsämuuronen 2006, 90). Since this research explores the of Finnish companies and consumers perceptions regarding VR and AR in Finnish tourism market, phenomenological research and phenomenography are key methodologies used in this research.

Phenomenological research is a part of philosophy that studies the phenomena as well as their interpretation. The idea is to study structures of conscious experience from the first-person point of view, along with relevant circumstances of experience. Furthermore, phenomenography refers to writing about a phenomenon or describing one. Additionally, it explores how the world appears as well as is based on the consciousness of people. In a nutshell: the idea is to explore people's perceptions of topics. However, the experience of people, age, gender, etc. can change perceptions due to it being a dynamic phenomenon. (Metsämuuronen 2006, 92-93, 108-109.)

4.2 Data acquisition

Qualitative data is text at its simplest, for instance letters, autobiographies, interviews and observations. The data is created either depending on a researcher or regardless of it. As the name refers, the quality of the data sets the scientific criteria for qualitative information, not the amount. As the emphasis is on a relatively small amount of cases, it is necessary to analyse them as thoroughly as possible. If the researcher seeks to maintain the phenomenon as it is without manipulating the research situation, it can be referred as a naturalistic grip on the study. Here, the attempt is to reach the subject's own perspective. (Eskola & Suoranta 2008, 15-22.) To collect good-quality data it is essential to use a sense of criticism as well as to pay attention to the suitability of the used material. (Metsämuuronen 2006, 118).

In Finland, the most common method for collecting qualitative data is interviewing. The purpose is to solve and clarify, what the subject has in mind. Interviews are increasingly shifting from the traditional question-answer-type form to a more conversational one. A recorder is a useful aid as it enables better focus on the interview situation and it eliminates the need to take notes during the interview. Without the interviewee's permission to use a recorder, it must be considered whether the researcher's own notes are sufficient enough. (Eskola & Suoranta 2008, 85-94.)

There are four types of interviews that can be used in a qualitative research: structured, semi-structured, theme interview and open/non-structured interview. Briefly, structured interviews have a specific order for each question and the design, whereas semi-structured do not. Because theme interviews are built on a specific theme, they do not by necessity have the questions in an exact order. A more conversation-like interaction on a topic is typical for an open/non-structured interview. (Eskola & Suoranta 2008, 86; Metsämuuronen 2006, 115). From all the interview types, semi-structured is relevant to this research.

Typically, an interview is planned beforehand as well as it is controlled by the interviewer – central tasks are to maintain the conversation and to motivate the interviewee. The degree of controlling and motivation depends on the interview type. For instance, structured interview does not require as much conversation maintaining from the interviewer as an open/non-structured interview. Furthermore, the interviewer must also know his/her role and gain the interviewee's trust, in matter that everything said during the interview will be confidential. (Eskola & Suoranta 2008, 85-86; Metsämuuronen 2006, 113-115.)

4.3 The analysis and interpretation of qualitative data

There are two different ways to approach qualitative material. Firstly, the analysis can be initiated from a perspective where the material explains the reality distorting it and with different methods, there is the possibility of obtaining truthful information of the reality. Secondly, the materials can be approached more relatively and thought to be more organized as they are in each case for a specific purpose. The researcher's own interest and goals towards the research determines the way of approach. There are at least two principles in the coding of the material; one way is to start without any theoretical pre-assumptions. The second approach takes advantage of a theory or deliberately takes a theoretically justified viewpoint. (Eskola & Suoranta 2008, 151-152.)

The acquisition and analysis of data happen at the same time. In the analysing phase, the combination of analysis and synthesis occurs. Additionally, there are quite a few methods to analyse qualitative data with and they are constantly being developed – the essentials in this thesis are e.g. theorizing and finding typologies i.e. clustering. The analysis of collected data can theoretically be broken up into parts and with synthesis, the parts are brought together as scientific conclusions. This process is called abstraction. Before abstraction, it is vital to get the material to such a form and level that the analysis is possible. Thus, the notes and interviews should be transcribed. (Eskola & Suoranta 2008, 160; Metsämuuronen 2006, 121-122)

Theorizing refers to highlighting the issues and themes illustrating the research problem. This enables the comparison of the occurrence and appearance of certain themes in the material. Correspondingly, in the typology approach, similarities in the responses are highlighted. It requires the interaction between theory and empiricism, which is reflected in the text of the research as interlinking them. Quote collections are often made in the name of thematization, which are often an interesting addition. However, they do not provide far-reaching analysis and conclusions. (Eskola & Suoranta 2001, 174-175, 181.)

4.4 Reliability, credibility & validity

Reliability refers to dependability, replicability and consistency over groups of respondents, instruments and time as well as it observes precision and accuracy. For a research to be reliable, it must e.g. be able to demonstrate the same results with a different yet similar group of respondents in a comparable setting. (Cohen, Manion & Morrison 2011, 199.) The rules of reliability and its different types vary in qualitative and quantitative research. Qualitative research does not always guarantee reliability nor is it irrelevant in qualitative research. (Cohen, Manion & Morrison 2011, 199-200.)

There are several types of reliability; equivalent form, internal consistency, inter-rater as well as test-retest reliability. Equivalent form of reliability often involves testing two forms of e.g. questionnaire in a pilot situation and measuring whether they produce similar results. When scrutinizing reliability from the perspective of internal consistency, the consistency of the language and concepts used are considered. Inter-rater reliability reflects the similar assumptions that are made, for instance when two individuals manage to gather similar themes and insights from many interview transcripts. Test-retest reliability means the concept that the instrument should generate similar results twice with approximately same group of respondents. (Mayo 2014, 149.)

Credibility measures the research's depth of trust; which the researcher can affect with clarity of the presentation as well as the focus and logic of arguments. The researcher must commit with honesty and integrity to appear legitimate and convince the audience and potential supporters. Therefore, the researcher should support the statements by providing evidence and reliable sources. Consistency of the presentation's structure indicates that the researcher has mastered the subject. Another part of credibility oozes from the quality of the literature review. (Mayo 2014, 138-139.)

Validity is a vital necessity for a successful study, in other words, a study without validity is considered as valueless. However, when it comes to qualitative research data, the respondents' opinions, different perspectives and attitudes jointly form subjective perceptions. Thus, validity is not an absolute state but rather a matter of degree. (Cohen et al. 2011, 179)

There are variety of dimensions to validity, which are for instance, construct, content, congruent and statistical validity. Investigators have adapted synonyms regarding validity; including rigor, quality and trustworthiness. However, the central issue is to determine to what extent the statement is true. Basic concept behind validity is the notion of accuracy

and honesty of the author and the statement – a valid statement is honest and can be supported and backed up. The concept comprises internal and external validity. Internal validity refers to the research design’s focus, clarity and integrity. In qualitative research, the threats concerning internal validity can be determined in various ways, for instance, using low-inference descriptors, multiple researchers, participant researchers, peer examination of data or mechanical means to record, store and retrieve data. Consequently, external validity derives from the research’s context – corresponding with other work regarding the topic. (Cohen et al. 2011, 180, 183, 186; Mayo 2014, 139-140.)

4.5 The research process

The figure 13 illustrates the timeline of this thesis’ progress, highlighting the important points. All started in June with drafting the research plan, and the finishing touches were made by the end of October. A mentionable feature of the research is that the original research plan was reformed and altered throughout the research process, especially the schedule. Hereby, it was an open research plan.

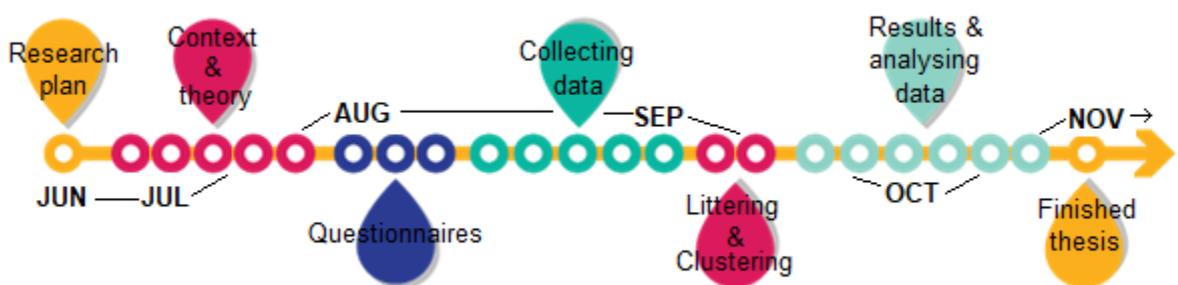


Figure 13. The research’s timeline

While writing the research chapter, began the contacting of potential companies, including companies from different tourism sectors, marketing, accommodation, transportation as well as from IT sector. However, in the end, there were only a few affirmative responses. The aim was to gather data from different sectors as technology affects them differently (see chapter 2.5). The interviews took place in the late summer and fall – more in chapter 4.5.2.

Two different questionnaires were created; one for businesses (Appendix 2) and one for consumers (Appendix 3). The basic idea was to come up with questions that could not only clarify the potential of VR and AR on Finnish tourism but also that the two interviews had comparable questions, in order to find similarities between businesses’ and consumers’ interviews. Furthermore, B3’s interview (see table 2) was conducted for a

company that was so different from the others, that the questionnaire needed tailoring. For instance, the questions handled the company's founding, development and customer segments. Similarly, the focus was on VR as it is B3's product. After conducting the interviews and before analysing them, they all were littered and clustered.

4.5.1 The interview situations

The interviews were executed in different places; companies' interviews at their offices (B1 and B3), as a phone conversation (B2) or as an e-mail conversation (B4), as well as consumers' interviews mostly at their homes or school. During the interviews, there were a few changes in some of the questions as well as some extra questions were asked – depending on the interviewee's answers and knowledge. Similarly, the consumer interviews required somewhat maintaining of conversation as some were more conversational type.



Image 5. The consumer interviews were carried out with the use of MyFoneKit VR glasses (Verkkokauppa 2017)

The consumer interviews included the testing of VR glasses. The device used was MyFoneKit (retail price 39.90 €) that did not have built-in audio (image 5). Therefore, audio was added with the use of a separate sound system in order to create a more immersive experience. Similarly, the glasses did not have built-in screen, so a smartphone needed to be inserted. Additionally, the content was from the application VR Travel as well as the shown content was about nature e.g. beach, fountains, mountains, ocean and river sights.

4.5.2 The interviewees

Table 2 illustrates the company interviewees and the interview situations, whereas table 3 the interviews with consumers; B refers to business and C to consumer. The companies were chosen in order to gather data from different sectors as technology influences them differently (as stated in chapter 2.5.). B1 represents a tourism marketing company, which has recently taken VR and AR into operation, but still they are in the testing phase. B2 is an accommodation company chain that operates mainly in Finland and does not have experience of these technologies yet, whereas B3 has a significant experience as their product is based on entertainment with the use of VR. B4 represents a ferry company, which has not used neither AR nor VR in their actions. However, it could be possible in the future.

Table 2. The company interviews

Code	Date	Duration	Place	Field	Experience
B1	21.8.2017	00:35:03	Helsinki	Marketing	Yes
B2	7.9.2017	00:24:36	Phone interview	Accommodation	No
B3	19.9.2017	00:10:31	Vantaa	Entertainment	Yes
B4	29.9.2017	-	E-mail	Transportation	No

The consumer interviewees were also somewhat chosen, not randomly picked. The idea was to interview people with different travel habits as well as with other background or knowledge that could bring different aspects. C1 represents the consumer interviewee, who travels approximately once a year – sometimes more, sometimes less. C1 also stated to have no experience with VR and AR beforehand. C2 stated to travel once or less yearly, as well as he/she did not either have experience of AR or VR.

C3 stated to travel rather frequently, a few times each year. Additionally, C3 had recently spent a long period in exchange abroad. Moreover, C3 had experience of VR glasses. AR, on the other hand, was not so familiar. Also, C4 had spent recently an exchange abroad and stated to travel several times a year anywhere in the world, in a quite extempore manner. C4 had also experience of VR from working life as well as AR was familiar from Snapchat. Additionally, C5 travels once or twice a year and had no experience of VR.

Table 3. The consumer interviews

Code	Date	Duration	Place	Experience of VR (& AR)	Annual travel(s)
C1	8.9.2017	00:26:24	Helsinki	No	±Once
C2	9.9.2017	00:22:06	Iitti	No	None/Once
C3	12.9.2017	00:27:31	Helsinki	Yes	Several
C4	13.9.2017	00:21:10	Porvoo	Yes	Several
C5	17.9.2017	00:24:18	Vantaa	No	Once
C6	18.9.2017	00:22:26	Kotka	Yes	Several
C7	18.9.2017	00:21:30	Kotka	No	Once
C8	20.9.2017	00:16:01	Kotka	No	Twice
C9	20.9.2017	00:26:32	Vantaa	Yes	Twice/ Several
C10	21.9.2017	00:20:18	Kotka	No	Once

C6 travels at least twice a year, usually even three times or more. C6 also has tried VR before and AR in Snapchat. C7 travels approximately once a year and in Finland. C7 also understands what is VR but had no experience with it or with AR. C8 travels approximately twice a year and did not understand the concepts of either VR nor AR. C9 travels usually twice a year – one trip is most likely a shorter city trip and the other a longer beach holiday. C9 also has plenty of experience with VR and AR; at C9's work they have VR equipment and C9 has tried AR HoloLens. C10 aims to travel every year at least once, and had no experience with VR or AR. However, after enlightening each interviewee about AR its principles, it turned out that C1, C3, C5, C7, C8 and C10 also use e.g. Snapchat, which filters are considered as augmentation.

5 Results

This chapter presents the results of the interviews from the perspective of businesses and consumers. The results are drawn from processing the qualitative data. Moreover, the results are enlivened with a quote collection. The similarities and differences between these two perspectives are scrutinized in the conclusions chapter.

5.1 Businesses

To begin with, the business interviewees were asked about their perception of VR and AR besides their usage in Finland and abroad. Most of the considered them to be a growing phenomenon. However, companies in Finland still have not learned how to utilize them fully in their businesses. Nonetheless, the popularity of VR and AR has increased in Finland. (B1, B2 & B4.) That being said, the technologies play a greater part in other parts of the world, for example Asia (China) and Northern America (USA) (B1 & B3). In the future, the technologies will surely be shown a lot more than what they are currently. (B1, B2, B3 & B4). “VR and AR are great ways to introduce products that cannot be put on the spot, such as tourist destinations” (B4).

5.1.1 Experience and marketing

When asked about their experience in using VR and AR, the answers were evenly distributed; two companies have got experience (B1 & B3) and the other two have not (B2 & B4). However, the companies that have not utilized the technologies before were extremely interested in using them in their marketing plan in the future (B2 & B4). All the interviewees stated that VR and AR will add value when marketing Finland as a destination (B1, B2, B3 & B4).

Moreover, it was mentioned multiple times that exhibitions and travel fairs around the world create opportunities for companies to exploit the technologies and market their businesses to, e.g. potential customers by utilizing them (B1, B2 & B4). Especially, when marketing Finland to foreigners, who have not seen much of it before, via VR glasses (B1, B2 & B3). For instance, showing Finland’s nature to someone who has never seen snow before (B1). On the other hand, most of the interviewees could not say much about marketing Finland with AR (B1, B2 & B3).

Their opinions on the increasing use of technologies in tourism showed resemblances as all four said it to be a positive thing (B1, B2, B3 & B4). Additionally, it was said to be an important aspect of the marketing palette (B1 & B2). “It is vital that the use increases”

(B2). One of the most important things in marketing with VR and AR was not to show, e.g. just a pretty scenery to consumers but to create a good vision – a simple wow-effect will not be enough anymore (B1 & B2).

5.1.2 Current situation and understanding what they are all about

3 out of 4 interviewees claimed Finns and tourists to show positive responses to VR and AR (B2, B3 & B4). Similarly, VR is said to create a wow-effect in the users (B1 & B3). The technologies provide an opportunity to stand out from other corporations that do not use them (B1). The comparison of Finland and other countries divided opinions and presented two completely different perspectives: “My personal opinion is that we are one of them who are pretty much in the lead” (B1); “I have not bumped into them in the Finnish tourism businesses that they would use them. Almost not at all.” (B3.) This demonstrates the division in their thoughts that different Finnish companies have of the current situation. In addition to the opinions, Finland was stated to utilize these technologies, e.g. in aviation sector and travel fairs (B1, B2 & B4), however, not on a large scale and not completely (B2 & B4).

In general, the tourism industry is good at operating the technologies (B1 & B4) as VR glasses are becoming much more popular (B1, B2) due to the lowering prices of the equipment (B2 & B3). When compared VR and AR, VR is more prominent than AR (B1, B2 & B4). Overall, both will surely arrive to the tourism industry one way or another (B1, B2, B3 & B4).

From the technology industry, it is easier to exploit virtual reality as the transition is smaller from computers to VR. If you think about travelling and from there to VR, the gap is bigger. (B3.)

When asked whether Finns understand what the technologies are all about, the interviewees came up with interesting statements that implicated that Finns may not solely understand their meaning (B1 & B3). Though, when they become more common, it will be easier to tempt people into using them (B1). One of the confusing factors is using both Finnish and English, when referring to VR and AR (B1). The whole VR world revolves around the English language quite well for the time being, but then again, many Finnish speak English nowadays (B3).

The concepts might be a bit tricky when there are augmented and virtual realities in Finnish and also some people talk about them in their English names, so it is probably going to be too confusing at that point (B1).

5.1.3 Adding extra value

According to B1, B2 and B4 VR and AR add extra value to travel. Before the trip they are used in order to get the feeling and inspiration to travelling as well as exploring the destination and its surroundings – the basis for the experience can be generated with technology (B1, B2 & B4). It was stated that both VR and AR are useful before, during and after trip (B1), but VR has a greater meaning in the process (B2 & B4). During a trip, the main purpose is to improve the experience, for instance virtual Northern lights (B4) as well as informative use such as scanning a guide book with AR in different languages, which can help tourists from all over the world to enjoy the experience more (B1). After trip, the focus is on sharing content such as photos and videos on social media and why not with, e.g. VR glasses (B1 & B4). Overall, these innovations have the biggest impacts before and during the trip (B1). “That company wins who creates the best experience and ensemble. It is important that these technologies are a part of functioning package.” (B2.)

The interviewees could not completely see from eye to eye on this matter as they stated that affecting customer behaviour is partly difficult (B1) but they are proven to have an impact as it is mainly for entertainment and a way to spend time (B2). In the best-case scenario, they can change the way a customer sees a product (B3). The next question covered The Experience Pyramid as well as The Experience Realms. Both techs fulfil somewhat aspects of these approaches (B1, B3 & B4). For instance, with AR a person could scan a poster and it would display the amazing Northern lights and with VR glasses and headset (activating vision and hearing) the customer could become immersed into a totally different world – reaching authenticity and marketing the “real” thing would be successful via VR glasses. Additionally, as it can be hard to describe e.g. the Finnish nature to someone who has never seen anything like it before, the easiest way is to show them (B1). Also, an experience with VR glasses can be so intense and convincing that it can change how the users see things, e.g. a destination. (B1, B2 & B3).

3 out of 4 interviewees said to believe in the potential of storification (B1, B2 & B3); there is always need for a good story and throughout the years people always want to hear them (B2). Some aspects of The Experience Pyramid as well as The Experience Realms go hand in hand, for example feelings, needs and wants all affect the purchasing decision, therefore they must be sustained (B1 & B2). Customers can be taught with VR and AR (B1 & B3), for example if a person wants to travel to place X, why not do research with VR glasses beforehand. Thus, it would not feel like learning at school but more as entertainment. Correspondingly, a destination’s history could be learned the same way. In

the same manner, aesthetics and entertainment play vast parts in these technologies as they basically are the gist of it. (B2 & B3.)

The interviewees were asked if VR and AR bring competitive advantage to a company and they answered: *not sure* (B2 & B4) and *yes, it brings advantage when compared to companies who do not use them* (B1). The equipment is believed to be more suitable and appealing to the young rather than the elderly (B1, B3 & B4) but that might not always be the case (B1 & B2). Likewise, people who do not want to travel or cannot travel due to health reasons can get a good experience from, e.g. VR glasses (B1).

Of course, the elderly can be a bit baffled of them. Everything should be easy and accessible... Maybe a quite a few of us would not be capable of climbing Mt. Everest so the VR game can give an idea of it. (B3.)

With VR glasses, you can, for example provide older people, who are inert and disabled, great experiences, so that they could visit a summer cabin, where they could not maybe visit anymore (B1).

5.1.4 The future prospects

All business interviewees mentioned that they have very positive expectations for the technologies in the Finnish tourism market (B1, B2, B3 & B4). However, harnessing technology as such, can turn out to be a very costly project, especially for smaller companies (B1 & B2). It is important to have operators who help other inexperienced companies in the initialization process (B1 & B2). VR and AR are expected to increase their popularity in Finland in the upcoming years, especially there are high hopes for VR (B1, B2 & B3). Similarly, Finland has many good VR and AR companies who could show other companies the best way to exploit them (B1). Nevertheless, it can be a challenge to make the best out of both technologies, as they are mostly in the pilot phase. The breakthrough requires a good internet connection and WiFi, which is not a problem here in Finland. (B1.) Overall, it will not replace travelling (B3).

5.2 Consumers

The consumer interviewees were asked, what is the significance of photos and videos for them before, during and after a trip. Almost unanimously it turned out that photos are important before the trip (C1, C2, C3, C4, C5, C6, C7, C8 & C10). Photos are important especially, when booking a hotel (C1, C3, C5, C8 & C9), when wanted to see what the destination area/region is like (C1, C3, C9 & C10) or to generally arouse travel inspiration

(C1 & C6). Platforms, such as Instagram and Google were mentioned to be important sources of travel photos (C1, C6, C7 & C9). Nevertheless, videos do not play as a big role, since only two stated to watch travel related videos beforehand (C5 & C8) as well as some highlighted to *never* or *very unlikely* to watch them before a trip (C3 & C9).

During a trip, it is almost certain that consumers focus on photographing themselves than exploring other people's photos or videos, since all interviewees were unanimous with this (C1, C2, C3, C4, C5, C6, C7, C8, C9 & C10). However, some mentioned that, if they have not made and locked all plans beforehand or oriented themselves thoroughly to the destination, they might still, in that case, seek help or inspiration from other photos (C1, C2 & C4). Similarly, after the trip, consumers most likely look at their own photos and videos than someone else's, as almost every interviewee stated to act in this manner (C1, C2, C3, C4, C5, C6, C7 & C9). Some mentioned that it is common for them to share their travel photos on social media (C1, C3, C4, C5, C7 & C8) and some mentioned to share photos not so conscientiously – only one or two photos (C9 & C10). Again, Instagram was mentioned to be one important platform, where photos are shared (C3, C4, C7 & C9). When it comes to sharing videos, it is less common. A few interviewees stated to share videos *rarely* or *not at all* (C1, C3 & C9) and one shares them sometimes (C4).

5.2.1 Expectations and experiences

When asked, do the interviewees have experience of AR or VR, some stated to have experience of VR glasses. Those interviewees, who tend to travel several times (more than twice) yearly, were the ones who had experience of the technology. (C3, C4, C6 & C9.) Before trying VR glasses for the very first time, for instance C1 had an impression about them; "I guess it is more lifelike to watch with those" (C1). Correspondingly, C4 who had experienced the glasses before said; "You get a different impression than just viewing pictures and videos – the vibes are more authentic". However, C3 and C9, who also had experience of the glasses, saw the weaknesses of e.g. the graphics as well; "Quite cool but still quite undeveloped. The graphics are not as good as they could be" (C3). C9 mentioned the content to be still "rather monotonous and undeveloped".

Defining AR experiences, on the other hand, were not as clear as defining VR experiences. Some mentioned to have no experience of AR, however, it turned out that they have used e.g. Snapchat and its filters (C1, C3, C4, C5 & C6). Nevertheless, Snapchat turned out to be the best-known AR application. Also, some did not have any idea, what the term AR means (C8 & C10). Therefore, VR as a concept was proven to be more familiar to consumers.

After trying the VR glasses and watching videos regarding travel during the interview, almost all interviewees mentioned it to be a positive experience. For instance, C7 stated that he/she could try them again in the future. In contrast, C5 did not see himself/herself using them at all. The thoughts about the experience was, that it felt more lifelike than viewing ordinary pictures or videos, as well as some interviewees mentioned to get a more comprehensive picture of the presented destination (C1, C4 & C6). Some said that the experience evoked feelings in them. For instance, C2 felt relaxed, whereas C7 said that it raised feelings of excitement. Additionally, C3 saw special potential in VR in the tourism context, and awaits that all major travel destinations will have a VR presentation of them in the future. Nevertheless, the experience left some interviewees cold with the fact that they could not move in the VR world (C3 & C9). Nonetheless, when it comes to the opinions about AR, C8 was the only one to mention that it seems fun.

5.2.2 The potential before, during and after travel

The interviewees were asked, in which situations they could see themselves using AR or VR before a trip. All who saw themselves using either one of the technologies before a trip, saw the potential mainly in VR only (C1, C3, C4, C5, C6, C7 & C9). VR could be useful especially, when planning the travel destination (C1, C4 & C7), when booking a hotel (C5 & C9) as well as for exploring the area of the travel destination of a trip that is already booked (C3, C6 & C9). Some interviewees also saw themselves using VR, when visiting travel fairs (C1 & C4). Additionally, the potential of using VR in airplanes for entertainment or for educating the user about the travel destination, emerged from the answers as well (C1 C4, C5 & C9).

When booking a trip, VR could can affect the purchasing decision (C1, C2, C3, C4, C5, C6, C7 & C8). Many saw the potential since there is the possibility of perceiving a more realistic and comprehensive picture than from ordinary pictures or videos (C1, C3, C4, C5, C6 & C7). C7 rationalized the statement by saying; "Pictures can be edited easily, whereas videos not so much". Additionally, C2 mentioned that VR could appeal to emotions and therefore, it could influence the purchasing decision. Currently, the technological aspect does not affect the decision, if consumers had to choose between a company that has successfully utilized AR or VR and a company that does not use them at all (C2, C3, C4, C5, C9 & C10).

I think there are other things that determine – rather than does some company use a specific technology. For instance, location or price are more important matters. Okay, it is a good addition but it is not the determinant. (C5.)

For the actual trip, AR could be suitable and useful, as several interviewees saw the potential there (C1, C3, C4, C5, C7, C9 & C10). Features that seemed interesting were, for instance filters that are used in Snapchat (C5 & C10) or the informative way of utilizing the technology e.g. in museums or for translation etc. (C1, C3, C4, C5, C7 & C9). When it comes to VR, taking the glasses to the trip did not seem as a pleasant thing for the interviewees, as a few mentioned not to be willing to do so (C3, C5, C7 & C9). “The problem is that if I should carry the headset with me – I do not think so” (C9). However, VR could be used more likely *after* the trip for looking back on it (C3, C4, C5, C6 & C9). Especially, if the material was recorded by the user himself/herself, it would be interesting to watch afterwards as memorabilia (C3, C5, C6 & C9).

Well, if I could record VR material myself, then it could be kind of cool - if the place would have been nice and you have had your friends there with you - to return to that moment (C5).

When asked, what extra value VR and AR could bring to the interviewees' own travels, it turned out that there is no clear red line. Some mentioned that VR would add value to the planning phase of the trip. It would ease the process of choosing accommodation and activities. (C2, C3, C5 & C9.) Additionally, AR could e.g. increase the informative aspect (C1 & C9) as well as the possibility of sharing visited locations or cities with filters (as in Snapchat), would be valuable (C6 & C7). On the other hand, some of the interviewees did not see the technologies adding any value to their own travels in the end (C4, C6, C7, C8 & C10). Nevertheless, some see more potential in the future (C3 & C4).

5.2.3 Consumers' vision

The general opinions about tourism companies using AR and/or VR in their operations, were evaluated from consumers' point of view. The opinions were rather scattered; it is seen as a positive and useful development step by some (C1, C2, C3, C6 & C8), then again, some could also highlight the weak spots of companies (C1, C2 & C6). Furthermore, some interviewees said that the potential is there, yet it depends, whether the technologies are properly exploited (C4 & C5). For instance, AR and/or VR are seen to help in differentiating from the competition (C3, C5, C6, C7 & C8) as well as consumers who favour technological advancements could find them important (C3, C9 & C10).

Some could bring their own thing out better, for instance adventure travel companies. So that, instead of having only pictures, people could put the VR glasses on and go on the tour...Adventure travel, like fishing, hunting, snorkelling,

diving. It would be nicer to see beforehand what it is like with VR glasses rather than from photos. (C2.)

Some smaller, not so well-known attractions could get better visibility. Also, some could present different things better, which cannot be so easily presented with ordinary photos or videos. (C5.)

C1 and C6 mentioned that the weak spot of marketing tourism related products and services with VR glasses could occur, if customers experience it lifelike enough to feel that they have already experienced it and therefore, not purchase the actual product. Additionally, C1 stated that VR could discriminate against destinations that do not look as esthetic or appealing as others. Also, C2 stated that VR could transfer the expectation towards the destination for the worse, and therefore, the purchase could be neglected.

The interviewees were also asked, how they see VR and AR influencing Finland's marketing as a travel destination, what kind of content would be suitable and for whom this kind of marketing could appeal to. The answers focused on the potential of utilizing VR in marketing, which was visualised to have a positive effect on Finland's image (C1, C2, C3, C4, C5 & C6).

The furthest potential was seen in Finnish nature. Nearly all saw that VR material, especially from Lapland, could create valuable content (C1, C2, C3, C4, C5, C6, C7, C8 & C10). Also, winter scenery (C2, C3, C4 & C7), Northern Lights (C1, C2, C3 & C6), fall colours (C2, C4 & C6), forests and silence (C4, C6 & C7) as well as water scenery, such as archipelago and white water (C4 & C9), were pictured to create memorable and inspiring content for VR glasses. The target group, that could appreciate VRM and the above-mentioned content, was envisioned to be Asians, as they are expected to be particularly technology enthusiastic (C1, C3, C4, C6 & C7). Additionally, this kind of marketing is seen to be more appropriate to youngsters or young adults (C6, C7 & C8) and not for elderly (C6 & C7).

5.2.4 The potential in creating experiences

There is potential on increasing experiential aspect of travel with VR and AR, since many interviewees stated to see a positive impact on different phases of travel and purchase. VR will likely improve the experience *before* a trip (C1, C2, C4, C7 & C9), whereas AR *during* the trip (C1, C3, C4 & C7). For instance, the possibility of AR to add information and to show e.g. extinct animals during a savannah tour, were seen as enhancers (C1 & C3). However, some interviewees did not see any kind of improvement on the experiential

aspect with neither one of the technologies (C5, C6 & C10). “Experiences transpire specifically from when I am there myself and do things myself” (C6).

The interviewees were asked, how AR/VR influences the user himself/herself, feelings, learning etc. AR is seen to increase learning (C1 & C7) and somewhat addict the user (C7). VR, again influences the user’s feelings more deeply than pictures and videos (C1, C2, C3, C4 & C5) as everything surrounding is blocked out (C5). VR can change attitudes and expectations towards e.g. a destination (C1), increase the “travel fever” (C2, C4, C6, C7 & C8), provoke feelings that lead to purchasing (C2), increase generally good vibe (C8) and calm down (C2 & C9). VR can also teach the user in a unique way (C6).

The perception on, how VR and AR influence the authenticity of a trip or a travel experience, is rather dispersed – it depends on the environment and situation, where the technology is used. For instance, AR in a museum, could increase the authenticity of the experience, if it provides more information about e.g. the arts (C2, C4, C5 & C9) or if it could show, how a historic place has looked like (C3). Adding technology is also seen as a negative influence on travel experiences (C3, C7, C8 & C10). “Nothing compares to the real experience” (C10). Similarly, VR has the risk of creating a distorted image of a destination (C1, C4 & C6). “Well, if you watch a video that is filmed in a beautiful weather and then, if it is not the same when you go on the spot. It could slightly change the opinion.” (C1.)

Most of the interviewees stated to believe that VR and AR can create stories that intertwine to travel and increase storytelling aspect (C1, C3, C5, C6, C7 & C9). However, only a few would use the technologies in this manner (C3, C5, C6 & C9). For instance, a VR promotion or presentation video, which would awaken travel fever, is designated interesting (C3 & C9).

Additionally, VR and AR are anticipated to decrease interaction when travelling (C1, C2, C3, C6, C7 & C8). VR’s characteristic of isolating the user from the surrounding world (C3, C6 & C7) as well as AR’s capability of providing information, lessens the need to interact other people e.g. with guides (C1 & C2). Additionally, when using AR, the user focuses on e.g. their mobile phone, which also is seen as an interaction blocker (C3 & C7). However, some of the interviewees believe the technologies to create discussion about e.g. the technologies themselves (C4, C5 & C6).

According to the consumer interviews, VR is considered more entertaining than AR. Interviewees saw VR’s entertainment potential in each phase of travel; before, during and

after. Booking a trip and exploring destinations could become more entertaining (C1 & C10), VR could keep travellers entertained in an airplane (C1, C4, C5 & C7) as well as watching self-recorded VR videos afterwards (C2) are considered as entertaining ways to utilize the technology. Additionally, C3 could imagine VR easing the irritation of becoming sick during a trip, if the traveller watched something entertaining with the glasses. Similarly, C4 and C9 showed their interest towards watching travel VR videos; “Well, I would rather watch things like that; different destinations and landscapes and travelled a little bit around the world, than bad reality-tv” (C4), “If I could buy virtual tour videos for VR glasses for instance from Netflix, I probably would” (C9).

The potential of using in AR in educating the user something regarding travel and tourism (C1, C2 & C4) and VR in the same way (C2, C3, C6, C7 & C9), was visible in the consumer interviews. Some saw themselves using the technologies in this manner at some point of travel (C1, C3, C4, C6 & C9). The interviewees saw AR educating travellers in e.g. museums, attractions and landmarks about the arts and attractions themselves (C4 & C9). Moreover, potential topics for both technologies would be also history (C3 & C5), safety (C2 & C6) and culture (C3, C7 & C10). However, some think that young people and children could be especially receptive to such ways of teaching (C1 & C8).

Yes, for example, if you travel to Asia, where the culture is so different. So, it could educate before trip. So, when you are sitting home at the table and then it (VR glasses) teach for example about Asian food culture...The travellers could be educated in advance about the culture and their way of thinking...I would use it myself. (C3.)

5.2.5 Authenticity of VR; pros and cons

The interviewees were asked, would it be possible to create an authentic other world with VR, where the user forgets about the real one, according to the interviewees' VR experience before and during the interviews. The answers were rather dispersed as some thought that *yes for a little while* (C1, C4, C6, C7 & C9), some thought *no, at least not yet* (C2, C3, C5 & C10) and only one thought that *yes* (C8). For instance, C4 stated that an escapist moment is very likely – emphasising the word moment. Nevertheless, some believe that it is more likely possible in the future, as the technology develops (C2, C3, C5 & C9).

Yes, I would like to at least believe so, since they (VR glasses) came quite suddenly out of nowhere. But it depends, do people like them and want to spend money on

them. If nobody does, then nobody wants to develop them. That is somewhat of a problem with them. (C9.)

In order to create a more authentic experience with VR, consumers yearn not only great graphics and sounds (C1 & C6) but also sensory stimulation (C2, C4 & C5). For instance, the sensation of warmth (C5), humidity (C3) as well as the feeling of having toes in the sand (C2 & C7), would transform the VR experience.

Well, it would increase it (authenticity), if you are watching a video of some warm beach destination, that you would feel warm. At that point, I believe the feeling sensation would be quite important. However, quite much can be done with the stimulation of vision and hearing only. (C5.)

VR is seen authentic enough to somewhat fulfil the need to travel for some people for a while (C1, C2, C3, C4, C7 & C9). For instance, rarely travelling people (C6), comfort-loving people (C4) or people, who travel to see beautiful scenery (C4 & C9) could be satisfied by travelling virtually. However, the interviewees did not see VR fulfilling their own need to travel most likely (C3, C4, C5, C6, C9 & C10), e.g. due to the lack of interaction (C4 & C9) or as VR would more likely *increase* the need to travel (C6, C8 & C10). Additionally, some did not see VR fulfilling the need to travel for anyone (C5, C8 & C10).

Currently it is quite unlikely for VR to decrease the need to travel, it is expected to become one of VR's negative influences on travel in the future (C1, C2, C3, C4, C6, C7 & C9). Some interviewees also started to envision the further impacts of this option. Similarly, not being present when using VR and AR, is seen as a negative impact of the technologies (C6, C7 & C8). Moreover, AR's negative impact could also be, that someone could upload false information in an application (C1).

But it is a bad thing as it is away from the locals. So that the business is under a huge technology company that films it (VR video). The locals do not necessarily profit from it at all. (C2.)

For people, it could mean reduction of cultural intelligence, because people do not travel anymore. And then, it is not possible to interact with local people on the premises, and then people do not learn new things. It could create a negative impact on how Finns perceive, for instance Cambodian people. (C3.)

5.2.6 The demand for VR

Currently, the demand, especially for VR seems rather low, when it comes to the outcome of the interviews. As some of the interviewees were asked, would they buy VR glasses for themselves, the conclusion was either hesitant or negative (C1, C7, C8 & C10). "I would not, but if I got them as a present, I would probably use them for a week or two" (C1). Correspondingly, the interviewees who stated to own VR glasses, mentioned to never use them (C5 & C9). Nonetheless, C3 was somewhat interested in them – however, for movies and gaming purpose.

Some of the interviewees could imagine people, who cannot physically travel for some reason, as a potential target group. For instance, people who are disabled or sick, or elderly. (C1, C3 & C5.)

I think that the glasses could be good in the manner that - as I have two second cousins who are severely disabled – that I could imagine that to be really great for them. As they do not have other possibilities to go. Therefore, I could imagine that it would have a greater meaning for people who cannot physically travel than for myself. (C5.)

6 Conclusions

Here, the encounter of supply and demand (B&C) is analysed with the use of the thesis' context and theory. The conclusions are scrutinized from the aspects of; the potential in different phases of purchasing and travel, marketing, target customer segment, risks and the potential in creating experiences (the four realms of an experience and The Experience Pyramid) (see table 4). Some conclusions regarding the technologies' forthcoming potential, are drawn with the basic idea of what is possible *after* they are utilized successfully, whereas some focus on *how* to make them successful in the Finnish markets.

Table 4. VR's and AR's areas of development and potential

AREAS OF DEVELOPMENT/POTENTIAL	VIRTUAL REALITY	AUGMENTED REALITY
AWARENESS / DEMAND	Currently minor / Better-known than AR / Potential exists	Term AR unfamiliar / Popular applications (Snapchat)
PRE- / DURING- / POST-TRIP	Before; Inspiration, information, decision-making / During; self-filming / After; Memorabilia, post-purchase satisfaction	During; informative purpose
MARKETING FINLAND	Nature / Lapland / Archipelago / Northern Lights / Year-round tourism	–
TARGET GROUP(S)	Youngsters / Young adults / (Elderly)	–
RISKS	Distorted image / Unrealistic expectations / Lack of interaction	Addictive / Lack of interaction / Distraction
FEATURES	Resolution / Lack of interaction / Price / Impractical size / Unpleasant to eyes	Lack of interaction
SWEET SPOT	Immersive / Negilient participation / Educational / Entertaining / Esthetic / Escapist / History & Culture / Sensory stimulation	Absorbtion / Negilient participation / Entertaining / Educational / History & Culture
CREATING A MEANINGFUL EXPERIENCE	Weak foundation / Sensory stimulation / Authenticity / Learning / Positive emotions / Wow-feeling / Mental level superficial / Storytelling in marketing / (Interaction)	Weak foundation / Authenticity / Learning / Positive emotions / Storytelling / Interaction
FUTURE	Fulfilling need to travel / Potential in Finland	–

6.1 Potential in different phases of purchasing and travel

Because the awareness of the technologies turned out to be rather minor as well as some consumers have no idea what AR is (B1, C8 & C10), it is vital to increase the awareness of the technologies for them to thrive in Finnish tourism market. Since VR is already more popular (B1) and more familiar (C3, C4, C6 & C9) than AR, it could be easier to lump it into the Finnish tourism market. Also, as all interviewees saw the technologies as a positive matter, it eases the possible revolution. However, because the demand especially for VR seems rather low as well as due to the lack of interest towards e.g. buying VR glasses (C1, C5, C7, C8, C9 & C10), the process and attempt of making the technologies success could be complicated. Nevertheless, as the framework of the progressions of economic value amplifies (see chapter 3.1), if the technologies somehow become more relevant to consumers' needs, consumers could not only become interested in the technologies but they could also be willing to pay more.

As mentioned in chapter 2.2, VR has potential in arousing travel inspiration and giving a taste before purchasing (Beckendorff et al. 2014). It is also noticeable in both businesses' and consumers' results. The results show that it is important for a customer to source information of the destination and its surroundings before the trip or just to seek inspiration to travel with the help of photos and videos (B1, B2, B4, C1, C3, C4, C5, C6, C7, C9 & C10). Therefore, VR has potential on Finnish tourism market. Similarly, VR could play an important role in the customer journey, in the before purchase -phase. Additionally, as the decision-making process could take some time, yet provides customers joy (Crouch & Perdue 2004, 3), VR's entertaining aspect would support this.

The results show that one of the best places to exploit VR in marketing purposes, is at travel fairs (B1, B2, B4, C1 & C4). There businesses could gather plenty of new customers, as the results also show that VR could affect the purchasing decision when booking a trip (B1, B3, C1, C2, C3, C4, C5, C6, C7 & C8). Also, the results show that VR and AR could help companies differentiate from the competition if they are used properly (B1, C1, C2, C3, C6 & C8). Thus, the technologies can otherwise be beneficial for companies' marketing palette as well. Then again, there is the risk of unintentionally highlighting the weaknesses of the company itself (C1, C2 & C6). Nevertheless, as the demand for marketing through direct experiences is increasing (Scott et al. 2010, 8), VR could alter e.g. Finland's marketing as a travel destination, towards a more experiential direction.

As in the advocacy phase (as in chapter 3.4.1), consumers commonly share photos and videos on social media and to their friends and family (B1, B4, C1, C3, C4, C5, C7 & C8), there is potential for VR to penetrate that market as well. Also, as many of the interviewees brought up Instagram as their favourite channel to share photos and videos post-trip (C3, C4, C7 & C9), Instagram could be a valuable platform. Social media in general provides a worldwide platform for photos and videos to go viral.

As written in chapter 2.2, nowadays it is possible for consumers to film VR material by themselves (Kuha 2015). Therefore, it is vital to make the equipment more accessible and appealing for the consumers. VR could play a big role not only *before* the trip but also *during* and *after*. Though, currently it would not be so convenient to take the glasses on the trip, which was seen in the results. If the glasses were developed to be e.g. smaller, the gap to take them along, could also become smaller. AR turned out to be more suitable for the occasion as AR applications such as Snapchat only requires a smartphone. (C1, C3, C4, C5, C7, C9 & C10.)

Furthermore, as it is possible for consumers to record VR material during their trip, it enables a new way of looking back to the trip. Therefore, the technology is capable of increasing value to the post-purchase phase as well, as e.g. having souvenirs as well as sharing stories and photos, provide the sense of satisfaction (Crouch & Perdue 2004). Due to VR's characteristic of showing more than ordinary photos and videos, it is more likely also that tourists would recommend and repurchase a trip, for instance from the same provider – as UNWTO's customer journey figure implicates in chapter 3.4. (Patikas 2013).

As the results indicated, the use of VR and AR are not determinants in the final choosing process, when choosing between two similar companies (company X that successfully uses both technologies and company Y that does not use them at all) (C2, C3, C4, C5, C9 & C10). Therefore, customer behaviour; what consumers think about different brands, how they reason and pick between alternatives (Ekström 2010, 32) are not affected by the technologies. Then again, because a business interviewee thought that the technologies affect the choice (B1), there is a possibility that companies could exploit AR and/or VR just for the sake of it, or just to show pretty sights. There should be a vision and a deeper meaning whilst using them to convince the consumers, which was also mentioned by companies B1 and B2. For instance, providing information would be a meaningful purpose, which was also recognized by both interviewees. AR has potential in this manner, as there was interest in utilizing it in a form of a scanned digital guide, e.g. in

museums or help translating a foreign language (B1, C1, C3, C4, C5, C7 & C9), teaching about history (B3).

6.2 Marketing Finland and target groups

The results of both interviewees' aspects show that marketing Finland to foreigners could be improved with the technologies (B1, B2, B3, B4, C1, C2, C3, C4, C5 & C6). The Finnish nature, such as Lapland (B1, C1, C2, C3, C4, C5, C6, C7, C8 & C10), Archipelago (B1, C4 & C9) and the Northern lights (B1, B4, C1, C2, C3 & C6) showed the most potential according to the results, which complies with the themes that were already raised chapter 2.5.1. Additionally, as said in the chapter 2.5.2, the number of Chinese tourists have increased, yet they do not form the top-three tourist segment. Because Asians are a potential segment for VRM (Virtual Reality Marketing) and as they have already a high interest towards Finland (B1, C1, C3, C4, C6 & C7), they have a possibility to rise into the Finland's top-three tourist segment.

Another potential target group turned out to be youngsters or young adults as the equipment is seen more suitable for the more adaptive ages (B1, B3, B4 C6, C7 & C8). The elderly, on the other hand, is not seen as a potential segment (B1, B3, B4, C6 & C7). Yet, the results show that VR would enable a new way to travel for people who cannot physically travel, including disabled, elderly and people who cannot travel due to sickness (B1, C1, C3 & C5). Similarly, places that are out of reach for ordinary travellers can be visited virtually, for example Mt. Everest (B3). Travelling virtually opens doors not only to traditional destinations but also to extreme destinations – making it possible for almost anyone to see the world.

There is also potential in increasing domestic tourism in Lapland. As mentioned in chapter 2.5.1, Lapland is the biggest domestic tourism attraction. Hereby, a larger the number of young Finns could be interested to travel there, if the area would be marketed with VR – if owning the equipment was already a trend. Nevertheless, VR could also increase inbound tourism throughout the year as it could highlight each season's charms. Currently, July, August and December are the most visited months (Taloussanommat 2017). Furthermore, outbound tourism could be increased or altered towards destinations that are not top-tier or traditional destinations in the same manner. As it was said in chapter 2.5 as well as by consumer C5, VRM could give better visibility and affect the attraction of destinations that are not top-tier.

6.3 Risks

As an experience with VR glasses can be rather intense and convincing, it can have an influence in consumers' perspectives, e.g. of a destination (B1, B2 & B3). There also lies the risk of creating a distorted image (C1, C4 & C6), which businesses did not consider in their interviews. Therefore, as businesses exploit the technology, there is a risk of not realising the possibility of creating an inaccurate image. Thus, it can affect the purchasing decision and change the way tourists see a destination. If the image of a destination is created to be unrealistically positive in advance, some aspects of a trip can be disappointing for the traveller as the expectations have been too high.

Another difference came to light when asked if VR and AR would add extra value to travelling. Companies B1, B2 and B4 claimed it would *definitely* add value, whereas some consumers (C4, C6, C7, C8 & C10) disagreed with that statement and alleged it would add value a little or not at all. According to the results, VR adds generally more value than AR (B2, B4, C2, C3, C5 & C9). Similarly, businesses think that VR is more important than AR when it comes to travel but failed to consider applications such as Snapchat, which is rather intensively present in many consumers' daily lives (B1, B2, B4, C1, C3, C5, C7, C8 & C10). Although, it is relatively clear that the technologies somewhat increase value, there is a contradiction that consumers might not be aware of it, thus, there might be lack of interest in exploiting them.

On the other hand, intertwining technology and travel can have a negative impact as it can decrease the need to travel (C1, C2, C3, C4, C5, C6, C7 & C9), AR can addict the user (C7) as well as both, VR and AR can decrease interaction with other people when travelling (C1, C2, C3, C6, C7 & C8) according to consumers. Businesses saw the technologies only as a positive issue. This brings us to the assumption that businesses could become blind to the negative effects as the business interviewees excluded them. Especially consumers are aware of VR's weaknesses such as low quality in resolution, it can be impractical to carry the VR glasses, e.g. while travelling as well as it can be very unpleasant to the user's eyes (C3, C5, C7 & C9). After the flaws are fixed, it is possible that the demand will increase. However, as C9 mentioned, if the premise is that there is not enough demand, no one wants to develop the technology – which creates a continuum.

6.4 Potential in achieving the sweet spot

Some interviewees stated that with VR headset it is possible to get immersed into a virtual world (B1) and somewhat forget the surrounding reality (C1, C4, C6, C7, C8 & C9) – or at

least block out the surroundings (C5). Therefore, VR is immersive by its very nature, whereas AR will more likely only absorb the user's attention (C7). By combining these technologies into a trip, approaching the sweet spot in the overall experience, is somewhat possible (see chapter 3.1.1). However, participation can be negligent and the user might become distracted from the actual travel experience (C6, C7 & C8). Hereby, the experience cannot reach the absolute sweet spot, where all elements bind together evenly.

Especially VR contains elements from the four realms of an experience; entertainment, education, esthetic and escapist. The educational aspect can be beneficial, especially when done in a unique way (B1, B3 & C6), however, it can also include false information (C1). Potential topics to be taught with these technologies and that would appeal to Finnish consumers, would be e.g. history and culture (B2, B3, C2, C3, C5, C6, C7 & C10). Educating with VR and AR would provide a way of teaching that would not feel forced but more as an entertainment (B2 & B3) – the aspects somewhat overlap each other.

As mentioned in the previous chapter, some interviewees stated that VR headset somewhat enables immersion into a virtual world (B1, C1, C4, C5, C6, C7, C8 & C9). Whereas, this enables a short escapist moment. Since consumers felt that they needed more sensory stimulation - more about this in chapter 6.1.2 - VR glasses alone cannot entirely fulfil the escapist realm. The esthetic aspect, on the other hand, is in a major role with both technologies (B2 & B3). Though, some consumers felt that it is not satisfying enough to watch only beautiful scenery (C1, C3 & C5). Additionally, VR is generally more entertaining than AR by consumers (C1, C2, C4, C5 & C7), while some businesses thought it to be an interesting way to spend time (B1, B2 & B4).

6.5 Potential in creating a meaningful experience

At present, as the demand for the technologies is low, the foundation in creating a meaningful experience is rather weak. Technologies should be developed to become more interesting and attracting so that they could exceed the motivational level to use e.g. VR. On the physical level, customers yearned more sensory stimulation (C2, C3, C4, C5 & C7), which is a target of development. Hereby, also consumers' interest in purchasing a trip can be influenced if the technology is operated successfully. When it comes to the travel experience, VR can add sense perception into the experience before the trip. Both VR and AR enable a new way of learning, which was proven to be interesting for consumers, according to the results. This adds certain depth into the experience, which increases the possibility for customer satisfaction. According to the chapter 3.1.2,

intellectual level plays a big part in the level of satisfactory. The joy of learning causes positive emotions, which leads to the emotional level that is part of a meaningful experience. Correspondingly, some of the consumer interviewees noted that the usage of VR glasses created positive feelings (C1, C2, C3, C4 & C5). According to the results, VR influences the user's feelings in a deeper level than pictures and videos and it creates a *wow-feeling* (B1, B3, C1, C2, C3, C4 & C5).

As of the mental level, for instance the changes and developments in the consumer himself/herself, the effect of VR remains superficial. B1 stated that the mental level occurs as a minor change in the user, since it is merely related to the learning of the use of new technology. Similarly, consumers did not mention it to affect them in such a deep level. The feelings that VR generates are not strong enough to create a snowball effect that leads to personal change. Hence, just now, this kind of technology itself cannot provide a meaningful experience. What happens on a trip will more likely to affect the mental level than any technology.

The impact of VR and AR on the authenticity of travel and travel experiences divided opinions as some said it to be positive: for example, making the trip more authentic and that people crave for it as well as also that additional information would increase the authenticity of the trip (B1, C2, C4, C5 & C9). Similarly, negative aspects came up as well: the authenticity suffers from VR and AR (C3, C7, C8 & C10) as nothing will compare to the real experience as it will beat the virtual one (C10). As said in chapter 2.7.2, VR could distract tourists – the same feature is also recognized in AR (C6, C7 & C8).

Over half of the interviewees were of one mind on VR and AR creating successful storytelling, which intertwines with travel (B1, B2, B3, C1, C3, C5, C6, C7 & C9). Exploiting storytelling in marketing is one of the most useful ways to combine it to VR. As mentioned in chapter 3, VRM can change travel marketing concept towards story-living as well as storytelling makes the whole travel experience coherent. Also, B2 stated that there will always be demand for a good story. However, only a few consumers were interested in using the technology in this manner (C3, C5 & C6).

Since most of the consumer interviewees claimed that VR and AR will affect interaction in a negative way when travelling (C1, C2, C3, C6, C7 & C8), this might be the biggest weakness when combining the technologies with travel. For example, AR can decrease interaction with e.g. a guide in a museum (C1 & C2). Instead of strengthening and reaching the meaningful experience, the combination more likely drives them two further

apart. As interaction is one of the components of The Experience Pyramid, the lack of it affects the whole experience.

Currently, consumers think that VR could satisfy the need to travel for some people only for a moment (C1, C2, C3, C4, C7 & C9), however not their own urge to travel (C3, C4, C5, C6, C9 & C10). If the technologies are successfully developed to create a more in-depth as well as meaningful experience, there is the possibility that VR satisfies better the need to travel. Whether this kind of outcome is reached, it affects the tourism industry in multiple ways such as the increase of travelling and people's cultural intelligence. As the technologies are expected to develop, some interviewees have got high hopes for them in the future (B1, B2, B3, C2, C3, C4, C5 & C9).

7 Discussion

This chapter focuses on the reliability, credibility and validity of the research, how it succeeded, further development ideas for the technologies and companies as well as evaluation of the research process and our own development. Some of the development ideas evolved during the research and others in the end, after the results were analysed. We also look over a few problems that occurred during the process.

7.1 The reliability, credibility and validity of the research

The number of consumer interviewees provided an in-depth look at the current situation of VR and AR regarding demand, tourism and general opinions. However, there could have been more business interviews. Because it turned out to be difficult to get affirmative replies from them, we should have contacted companies earlier than we did. If we would have conducted more interviews, it would have improved the research's outcome. Additionally, the fact that two interviews were not recorded and littered, decreases their scientific value. The other one was conducted via phone and simultaneously we took notes. Hereby, some of the data could have been left out. The other interview was conducted via e-mail, which turned out to provide rather brief answers that were more a scratch to the topic's surface rather than an in-depth overlook.

There is a clear possibility that the results regarding AR could have been different with a few changes in the consumer interviews. For instance, the insight to AR relied on the examples that we told. If the interviewees got to try an AR application by themselves, the results could have included more opinions about AR. Also, they could have understood better, what the technology is capable of. As now during the interviews, we had to ask extra questions to receive some perception of the technology.

We believe that the interview questions were designed to gather a thorough overlook on the topics. However, it turned out that not all interviewees understood all the questions. There is also the possibility that the interviewees did not completely understand, how the e.g. AR works in practice – even though, it was explained rather distinctly. As we already had a clear understanding of how it works, there is the chance that we could not explain it so that a person who hears about AR for the first time, would understand it. The phrases and concepts are not necessarily as easy to understand if they are heard for the first time.

We also were left thinking that, would better VR equipment and more interesting videos have changed the opinions regarding VR to a more positive way. As now, the glasses

were the cheapest ones in the market as well as the phone used inside them, did not have the best resolution or quality. If we would have used professional equipment, the consumers could have had a more immersing and intensive VR experience. We were convinced of the technology as we got to try professional equipment including the headset (vision and audio) and the controllers, as well as we could walk in the virtual world. Hereby, we received a wow-experience as well as felt the experience quite intense – which we were also expecting in the consumer interviews. Additionally, the shown videos could have been somewhat more attracting. Now, some of the interviewees mentioned the video to be e.g. boring or too fast tempo.

The consumer interviews were conducted in different environments; some were ideal for the interviews as they were silent, but some were in noisy spaces. The interviews that were executed in noisy places could have distracted the interviewees as there were other people as well. The two business interviews were in ideal spaces as they were in the companies' offices. Additionally, some interviews required more maintaining of the conversation as well as adding extra questions. Therefore, there is the chance that the questions could have directed the answers towards what we wanted to hear. Similarly, the honesty of the interviewees can be somewhat questioned; did they speak 100 % their own opinions or did they respond in the way, what they thought that we wanted to hear.

7.2 Development ideas

After the interviews and analysing the data, we have come up with some development ideas regarding the technologies. Especially, from the consumer interviews became clear that VR glasses need to be developed further to become more appealing and interesting to the users. Similarly, while developing the glasses, the prices need to come down. It will possibly raise new kind of interest as the technology would be more accessible for everyone. On the other hand, consumers need to show their interest so that companies want to develop them. The situation, which could be a never-ending loophole, needs a push to create a hype among customers. Otherwise, technology businesses need to take a leap of faith in the development process as well as rely that it will be successful in the future.

As mentioned, companies should somehow draw consumers' attention and highlight how they would benefit from purchasing the technologies, creating a fuller and coherent travel experience overall. It would be time for Finnish tourism companies to utilize the technologies in their organisations as the current situation shows they are progressing slowly. The progress requires studying their target market and what kind of content they

want to see, hereby start to create meaningful content and not to use the techs just for the sake of it. Moreover, taking full advantage of the potential, these technologies provide, e.g. using storytelling, entertainment and learning as an incentive. These aspects drew the consumers' attention and they started to imagine possible ways to use them. Overall, thinking outside the box can create opportunities.

Another development idea is that companies should do benchmarking of other similar companies, learn from their examples as well as mystery shop. Thus, they could find out how they are exerted in Finland and abroad. As seen in the business interviews that cooperating with companies, who have experience in the field could be beneficial as they could guide the rookie companies to the world of VR and AR. There is a chance to be a forerunner as it is rather unknown in most places, especially among consumers.

As mentioned in chapter 7.1, AR was left on the background in our research. To get a better picture of it within the Finnish tourism market, it would require conducting a brand-new study, which would focus on AR only. It cannot be as limited as this research shows and there must be more potential to it.

7.3 Evaluation of the research process and ourselves

As we chose both VR and AR as the objective for our thesis, the research swelled too far for our schedule – as the technologies turned out to be dissimilar in the end. Therefore, AR was left in the shadow of VR. It could have been more convenient to choose only one of them and focus on it more thoroughly in the research. Also, at some point our research, we should have taken our schedule into consideration more frequently as there was no progress for a few weeks. Yet, the thesis was finished before the planned deadline.

For us, this research should light into the current situation of VR and AR in Finland; on what level consumers' knowledge is, the motivation and plans for tourism companies to exploit them in their organisations, expectations of VR and AR in the future and how the demand and supply encounter. We also got to see VR in action with expensive professional equipment. We also bought our own VR glasses, which are more suitable and accessible for ordinary consumers. This way we could compare them and spot differences as well as get a better overall perspective. Moreover, we developed as writers as well as learned to create a fluent report and thorough research without much guidance. For the future, we have a lot more confidence to create a research from scratch and produce significant information for companies to exploit, in this case the Finnish tourism market. Overall, we developed as better writers, team members and researchers.

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Appendix

Appendix 1. Timetable plan

Timetable and organizing

Timetable	
Week 24	Research plan
Week 25-30	Defining theoretical issues & defining qualitative methods
Week 31-32	Planning the interviews & Testing interviews (Contacting potential companies for interviews)
Week 33-35	Collecting data; Interviewing consumers (& companies) *
Week 35-37	Littering & Clustering data
Week 38-40	Analysing data
Week 41-42	Conclusions and results
Week 43	Finished thesis

*Company interviews will be executed with an own schedule

Appendix 2. Interview questions for companies

Interview - Companies

1. What is your idea and perception of AR and VR technologies in tourism globally/in Finland?
2. **What kind of experiences with AR and VR do you have as a company?** (Where/How/What programs or devices/etc.)
 - a. **If previous experience;**
 - i. Why have you taken it/them into use?
 - ii. What kind of reception have they had and what has the feedback been like?
 - iii. Have there been any differences between Finns' and foreigners' feedback?
 - iv. Have they brought any added value or benefits?
 - v. Has the content focused on abroad destinations/Finnish destinations/ generally travelling?
 - b. **If none experience;**
 - i. Have thought about taking these technologies into use? Why?
3. What kind of added value AR and VR could bring when marketing Finland as a travel destination?
4. What is your opinion about the increasing utilization of these technologies in tourism?
 - i. How Finns/tourists reacts to this?
5. At what point do you think that Finland is regarding the usage of VR and AR in tourism compared to other countries?
 - a. Are they been successfully taken into use?
 - b. Is other used more than other?
 - c. Is there some particular sector (accommodation/aviation/etc.) that has been able to utilize these technologies?
 - d. Do Finnish consumers understand what AR and VR actually are?
 - e. What features in AR and VR could Finns especially appreciate?
6. What extra value can AR and VR bring to a travel experience, when the destination is Finland;
 - a. pre-trip?
 - b. during trip?
 - c. post-trip?
7. Can VR and AR affect consumer behaviour? How?
 - i. Has demand towards these technologies already been developed? If yes, does the demand between different age groups differ from each other?
8. How AR and VR influence the experiential aspect of travel? (**Aspects; Experience Pyramid;** authenticity/story/individuality/contrast/interaction; and **Experience Realms;** educational/entertainment/aesthetic/escapist)
 - a. How do they affect the traveller himself/herself? (feelings/needs/wants/learning/mental change)
9. Do you believe these technologies give competitive advantage and help to differentiate from the competitors who don't use them? If yes, why?
10. How do you see the future of VR and AR technologies in the Finnish tourism market?

Appendix 3. Interview questions for Finnish consumers

Interview - Consumers

1. Describe yourself as a traveller. (How often/Where/Budget/etc.)
2. What is the significance of photos and videos before you travel / during / after a trip?
3. Do you have any experience of virtual reality, VR / added reality, AR? (Do you understand what VR and AR are?)
 - a. If yes, in what context?
 - b. If not, do you have some kind of image of the technologies?

WE WILL INFORM THE INTERVIEWEE OF VR AND AR'S PRINCIPLE AND USE IN TOURISM (All the possible content depending on the application. Informative features such as text translation or museums + guidance/ filters/ info's + GPS or QR codes + internet/ Wi-Fi.) WE WILL SHOW A VIDEO/WITH THE VR EQUIPMENT, HOW VR & AR WORK

4. What comes to mind about these technologies
5. In what situations would you expect to see these technologies? (before/during/after trip)?
6. Do you feel that these technologies could affect your purchasing decision (travel)?
7. What kind of added value do you believe these technologies can bring to travel? Or do you feel that they do not add value? Added value to your own travel habits?
8. How do you feel that these technologies can influence Finland's marketing as a travel destination? Is there a certain destination? Who could agree with such marketing?
9. What do you think about the use of such technologies for tourism companies?
(Advantages/disadvantages/value/differentiation/etc.)
10. Can VR & AR improve the travel experience?
 - a. If yes, could you imagine them impact the user's; feelings/needs/desires/learning/cause a change in the user (e.g. a new way of thinking)?
 - b. What emotions did you feel with your experiment?
11. How do you believe these technologies will impact a trip's;
 - a. authenticity?
 - b. storification?
 - c. diversity (vs. other journeys where no such technologies are involved)?
 - d. In contrast to so-called normal life?
 - e. Engaging with other people?

12. Do you feel that these technologies could be successfully used for entertainment purposes in tourism? If yes, how?
13. Do you feel that these technologies could be used successfully for educational purposes in tourism? If yes, how?
14. Do you feel that these technologies succeed in creating a credible and interesting second reality in which to forget the true reality?
 - a. Do you feel that VR and AR would be able to satisfy the need to travel briefly or long-term?
15. Do you feel that these technologies could have a negative impact on tourism? If yes, why?