

# Comparing the Effects of a 2D Video to a Multisensory Video on a Destination Image – Case Study of Dubai

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<p>Tourism industry is moving away from offering just services and focusing more on creating experiences. With this in mind, the ways of marketing are changing as well, and the industry needs to find more innovative ways in communicating their messages to consumers. National Tourism Organisations have traditionally had an essential role in promoting their destinations and increasing the income gained through tourism. They also have their vision for the destinations' image and design their marketing efforts accordingly.</p> <p>In this Bachelor's thesis, the focus is on two areas: multisensory marketing video and destination image. Dubai was selected as the research destination since it relies heavily on tourism and has an active National Tourism Organisation, Visit Dubai.</p> <p>A research was carried out to find out whether seeing a marketing video of Dubai in a multisensory setting has any affect on the eagerness to travel there compared to watching the same video from a traditional 2D computer screen. The multisensory marketing video was placed in The Box laboratory at Haaga-Helia's campus. Another aim for the research was to answer whether the image pursued by Visit Dubai matched with the one general public has of it.</p> <p>The findings concluded that The Box setting increased the eagerness to travel to Dubai more as well as increasing the overall interest to travel compared to a 2D screen. The image pursued by Visit Dubai correlated in the sense that people link skyscrapers, sun and luxury to Dubai. Differences occurred in Islam and oil industry, both of which people connect to Dubai but aren't mentioned in Visit Dubai's marketing efforts.</p> <p>The thesis is divided into theoretical framework and research sections. The theoretical part provides the reader with background information about the most essential subjects, such as destination image and marketing, experiences and virtual reality. In the research part, the focus is on the quantitative research method and the results generated through the process.</p>	
<b>Keywords</b> Destination image, multisensory marketing, experience, The Box, video marketing	

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# 1 Introduction

This thesis centres largely on tourism image as well as multisensory experiences with Dubai as the focus destination. In this work, we aim to compare the effects of a traditional marketing video to a 270-degree video enhanced with sensory elements. The multisensory video takes form in The Box laboratory located at the Haag-Helia University of Applied Sciences' Haag campus. In addition, we examine how the image generated by a National Tourism Organisation correlates with that of general people.

In other words, this thesis has two research questions:

1. How does watching a marketing video of Dubai in The Box setting affect the eagerness to travel to Dubai as comparison to watching the same video from a 2D screen?
2. How does the image that general people have of Dubai correlate with the image Dubai's National Tourism Organisation, Visit Dubai, seeks to portray?

To answer these questions, we utilise the quantitative research method to collect data from focus groups. The research process consists of showing the same marketing video of Dubai to test groups using a normal laptop and utilising The Box laboratory with sensory elements. We also collect data by asking general audience to name attributes they link to Dubai and utilise this information in the research to further gain knowledge about Dubai's image.

This thesis is divided into theoretical framework and quantitative research parts. In the theoretical framework section, we will introduce tourism and its key aspects, discuss destination image as well as destination marketing, National Tourism Organisations, Augmented Reality and experiences. In the research part, we will explain the research process in detail, present the results and finally conclude and offer suggestions for further studies.

## 2 Tourism

Tourism has a central role in this thesis and for this reason it is vital to discuss its different aspects to gain a better understanding of this multi-layered industry. In this section, we will briefly introduce tourism as a product by offering some selected definitions on it, discuss its importance as an industry as well as glance at the current threats and trends in tourism.

### 2.1 Tourism Definitions

'Tourism' is a broad subject, so in this section, we aim to open up the concept of tourism in order to shed light on what this term actually entails. However, tourism is not a term easily defined and there have been many different opinions on the subject. We will introduce a few of these definitions while understanding that the concept of tourism might be too broad of a subject to ever be fully defined to complete satisfaction.

Tourism can be approached from a variety of angles, some emphasizing business, environmental or socio-cultural aspects. For instance, Tribe (1997, 640) defined tourism as follows:

Tourism is essentially an activity engaged in by human beings and the minimum necessary features that need to exist for it to be said to have occurred include the act of travel from one place to another, a particular set of motives for engaging in that travel (excluding commuting to work), and the engagement in activity at the destination (Tribe 1997, 640).

Ryan (1991, 5) sets out to define tourism with an emphasis on its business aspect, suggesting that tourism is "a study of the demand for and supply of accommodation and supportive services for those staying away from home, and the resultant patterns of expenditure, income creation, and employment". This definition takes the economic effects into account, but it fails to include some of the other elements that cannot be measured in financial figures.

The most known definition comes from Leiper (1979, 403–404), who many recognise as one of the most prominent contributors in the study of tourism. He defines tourism as follows:

It is the system involving the discretionary travel and temporary stay of persons away from their usual place of residence for one or more nights, excepting tours made for the primary purpose of earning remuneration from points en route. The elements of the system are tourists, generating regions, transit routes, destination regions and a tourist industry. These five elements are arranged in spatial and func-

tional connections. Having the characteristics of an open system, the organization of five elements operates within broader environments: physical, cultural, social, economic, political, technological with which it interacts. (Leiper 1979, 403–404)

This Leiper’s Tourism System Model as described above has been essential in developing the concept of tourism and its position in tourism studies and the academic field. This system is so significant because it ties all the different elements (the geographical elements, the tourist and the tourism industry) together instead of just examining them separately.

Bornhorst, Ritchie and Sheehan (2010, 572) offer a definition for tourism destinations as “a geographical region, political jurisdiction, or major attraction, which seeks to provide visitors with a range of satisfying to memorable visitation experiences”. This is an interesting definition for it includes a quality demand for the visit: “satisfying to memorable”.

As for the term “tourism industry”, there have been discussions whether or not it is suitable to speak about it as one industry when in reality it is a combination of many different industries. For example, Leiper (2008, 237) argued whether it is misleading to speak about ‘tourism industry’ as the plural form would be more accurate since tourism has different types of service and transportation industries that co-exist and overlap. However, tourism industry is an established term and it is being used in dialog without larger confusion.

Lastly, from all the definitions available, we still consider the Statistical Office of The EU’s (Eurostat) to be one of the most concise and accurate ones, and it suits our purposes the best:

Tourism means the activity of visitors taking a trip to a main destination outside the usual environment, for less than a year, for any main purpose, including business, leisure or other personal purpose, other than to be employed by a resident entity in the place visited (Eurostat 2014).

This definition is concise, offers a specific time limitation (less than a year) for a tourism trip and excludes employment purposes from tourism.

All these tourism definitions exclude commuting to work as part of tourism as well as stating that the stay is temporary and the destination is not a part of the usual environment. Definitions in general are challenging to form in the way that would include everything essential, but we hope that these examples of tourism definitions provide some framework for the research section of this thesis.

## **2.2 Tourism Industry**

As an industry, tourism is highly valuable: according to The World Tourism Organization (2017), international tourism receipts earned by destinations have grown from 2 billion US dollars in 1950 to 1,220 billion in 2016. It is one of the fastest growing economic fields as the size of the tourism sector equals, or even exceeds, for example that of oil exports. International tourist arrivals have increased from 25 million in 1950 to 1,2 billion in 2016. It offers employment to millions of people worldwide, and is especially important as a source of income in the poorer developing countries. Tourism also helps to develop and grow destinations thus fastening and spurring socio-economic growth in the areas, and the ever-growing sustainable tourism helps to preserve and better cultural and natural heritages (UNWTO 2017).

## **2.3 Threats for Tourism**

Like any industry, tourism has its own impediments and they ought to be discussed as to understand some of the risk factors involved in modern tourism. Even though tourism has enjoyed growth in recent years with international tourist arrivals growing by 3.9% in 2016 (UNWTO 2017), it is still useful to take a glance at the possible threats in the world's political and financial stage that might affect tourism industry. Tourism is not indifferent to economic, political and socio-cultural factors and surroundings, but highly vulnerable to the current situation in the world. It is also a sensitive field of business in the sense that travel decisions rely heavily on consumers' feelings, so fears might weaken the desire to book holidays and trips.

Recessions and other poor economic situations take their toll on tourism. Holidays and trips are luxury services that are one of the first ones to be given up when consumers must draw tighter budgets. For example, the economic crisis of 2008 had direct impact on tourism: the number of international tourist arrivals dropped by 4 % and international tourism receipts by 6 %. However, by 2010, international arrivals had grown by 7 %, demonstrating the resilient nature of tourism (United Nations 2011).

It also seems that there has been a growing desire amongst some countries to separate themselves, and if this current trend of nationalism keeps spreading and bringing the likes of 'Brexit' (Britain's withdrawal from the European Union) with it, it might restrict the freedom as well as the motivation to travel thus hurting the whole tourism industry. Brexit might result in higher airfares and fewer routes since the affordable airlines and the large variety of different routes are mainly enabled by the EU (The Telegraph 2017). Brexit could also restrict the British citizens' freedom to work in the EU (The Telegraph 2017).

This affects tourism for example in the sense that many young British tourists fund their tours around Europe by working throughout their vacation.

The increased reportage of terrorist attacks in recent years can also affect the consumers negatively. When the news feed is filled with stories of various terrorist attacks, the feeling of world not being a safe place might put off potential customers. They can feel uneasy booking trips to big tourist destinations, as many of the ISIS and other terror attacks have occurred at popular sites with large crowds, such were for example the Paris and Nice incidents in 2015 and 2016. These attacks (together with some floods and strikes) have been estimated to cost Paris approximately 750 million euros in tourism income (The Independent 2016). However, isolated incidents tend to be forgotten rather quickly, and it is more the constant states of threat that have a bigger impact on tourists, such as Egypt's restless and prolonged situation (BBC 2017).

## **2.4 Trends in Tourism**

Tourism is always developing and reflects the drifts of the world, and since one of the aspects of this thesis is the changing nature of tourism marketing, it is important to introduce new trends in tourism to achieve some framework for the current situation in the field. Below we discuss a few examples of tourism trends that we find the most central.

Package holidays that were once popular have lost their appeal since digitalisation has brought cheap flights and unlimited lodging options to be booked straight by the consumers from their own laptops and smartphones. Consumers have endless amount of information about holiday and accommodation options on Internet's different blog and social media sites. This "more widespread access to the Internet across the globe has shifted the balance of power from the providers of tourism services to consumers and facilitated a move to self-guided holidays and independent travel, even in more remote tourist regions" (OECD 2014, 26). One great example of how consumers have embraced digitalisation and peer-to-peer market in tourism is Airbnb. This is also known as "sharing economy" (Byers, Proserpio, & Zervas 2017, 687) and firms such as Airbnb act as the middleman between consumers wanting to lend and the ones seeking to rent. Airbnb has brought more options for the traditional hotel/hostel market and provides more unique lodging options, thus adding more authenticity to the trip.

Another new trend in tourism is 'bleisure travel' where business travellers mix leisure into their work trips. According to the The Bleisure Report (2014) by BridgeStreet Global Hos-



pitality, 83 % of their respondents take the advantage to explore the cities they travel for business purposes. The report raises a point that it would be critical to communicate tourism offerings to business customers as well. That is to say, businesses would be wise to take this blurred style of traveling into account in designing services and marketing efforts, and “neologisms such as ‘bleisure’ can help companies think more carefully about how to attract certain subsets of customers” (The Economist, 2015). Bleisure traveling is not a new phenomenon, but recognising it as a separate form of travel and giving it its own term is.

Another emerging trend in tourism is ‘localhood’ – the idea where instead of tourists, travellers would become temporary locals instead. The term was created by Wonderful Copenhagen, the National Tourism Organisation (NTO) of Copenhagen, who have declared “an end for tourism as we know it” in their 2020 strategy. In this strategy, they recognise that the modern type of traveller wants to avoid “tourist traps” and seeks real-life experiences alongside with local people. Wonderful Copenhagen is taking a step back from the traditional role of an NTO in offering one-size-fits-all, official destination recommendations and instead “enabling others to build experiences” and to enter an era where hosts and guests interact together creating a “shared experience of localhood”. Locals are seen more as an attraction themselves rather than just surrounding masses of people – they make the experience unique and ‘real’. Tourists should be seen more like guests and recognise their diversity and complex natures instead of focusing on one demographic identifier. Branding is different as well with localhood since it is not just promoting the usual brand messages but “brand stories” told by right mediums to larger public: the “role is shifting towards developing and spotlighting the right kind of experiences and engaging the right people at the right time to tell the right stories about the destination based on a shared strategic branding framework”. This innovative way of perceiving tourism leads to more authentic and satisfying experiences and it is a great new way of engaging in modern marketing. We discuss the role of NTO’s more thoroughly later in this thesis.

### **3 Destination Image**

Image is one of the most influential assets of a tourism destination affecting consumers' attitudes and in the end their buying decisions (Ferreira Lopes 2011, 311). As O'Leary and Deegan put it, "tourism images are critical to the success of any destination" (2005, 247). One of the objectives for this thesis is to find out how Dubai's destination image correlates with the image their National Tourism Organisation pursues. Therefore, in this section we aim to define destination image and to illustrate how it is formed as well as to explain its importance to promoting destinations.

Baloglu and McCleary (1999, 870) define image "as an attitudinal construct consisting of an individual's mental representation of knowledge (beliefs), feelings and global impression about object or destination". Bigné, Sánchez and Sánchez (2001, 607) again state that destination image is a tourist's subjective interpretation of reality. Echtner and Ritchie (2003, 43-44) add that destination image consists of both functional and psychological characters, and so it is not just the tourist's perception of the destination but the holistic impression as well. All of these definitions emphasise the subjective nature of destination image: destinations can create perfect marketing images, but the end result is always affected by the receiver's personal factors. These and other elements influencing destination image are discussed in more detail in the next section.

#### **3.1 Destination Image Formation**

It is useful to understand how consumers form an image in order to plan marketing actions as efficiently as possible. In this section, we discuss the destination image formation process and the factors involved in it. According to Baloglu and McCleary (1999, 870) there are two major forces affecting the destination image formation: stimulus factors and personal factors. Stimulus factors derive from tangible objects and external influences whereas personal factors cover both sociodemographic and psychological characteristics of the perceiver. Baloglu and McCleary (1999, 875) agree that the most important sociodemographic factors affecting destination image formation process are age and the level of education. Other sociodemographic factors are for instance income and marital status. Psychological personal factors are for example personality, values and motivations. Both sociodemographic and psychological personal factors affect the cognitive and affective evaluation processes through which stimulus factors are assessed. (Baloglu & McCleary 1999, 875.) Stimulus factors include possible previous experience and different information sources, such as literature, news, movies and social media (Ferreira Lopes 2011, 309).

The overall destination image is formed when stimulus factors are filtered through perceptual or cognitive and affective evaluations (Baloglu & McCleary 1999, 870). Perceptual or cognitive evaluation refers to the knowledge and beliefs a person has about the destination. Affective evaluation again refers to the feelings a person relates to the destination (Gartner 1994, 193). Pan (2011, 171) elaborates that affective evaluation creates the value to the cognitive image based on the travel benefits the prospective visitor is seeking.

Both cognitive and affective evaluations influence directly the formation of overall destination image, but cognitive evaluation has also an indirect influence on it through affective evaluation (Baloglu & McCleary 1999, 873). In other words, the facts that a person has learnt from the destination affect the person's feelings about the destination. Information sources are assessed through cognitive evaluation, but the type and amount of information also affect the cognitive evaluation (Gartner 1993, 196). This means that previously acquired knowledge influences the evaluation process of new information. Information sources do not have a similar direct impact to affective evaluation, but they again influence it indirectly through cognitive evaluation. Therefore, cognitive evaluation works as an intermediary between affective evaluation and overall destination image but between affective evaluation and information sources as well. (Holbrook 1978, 548.) Even though cognitive evaluation has a significant and diverse role in destination image formation, affective evaluation is the one that has more impact to the final destination image (Baloglu & McCleary 1999, 874).

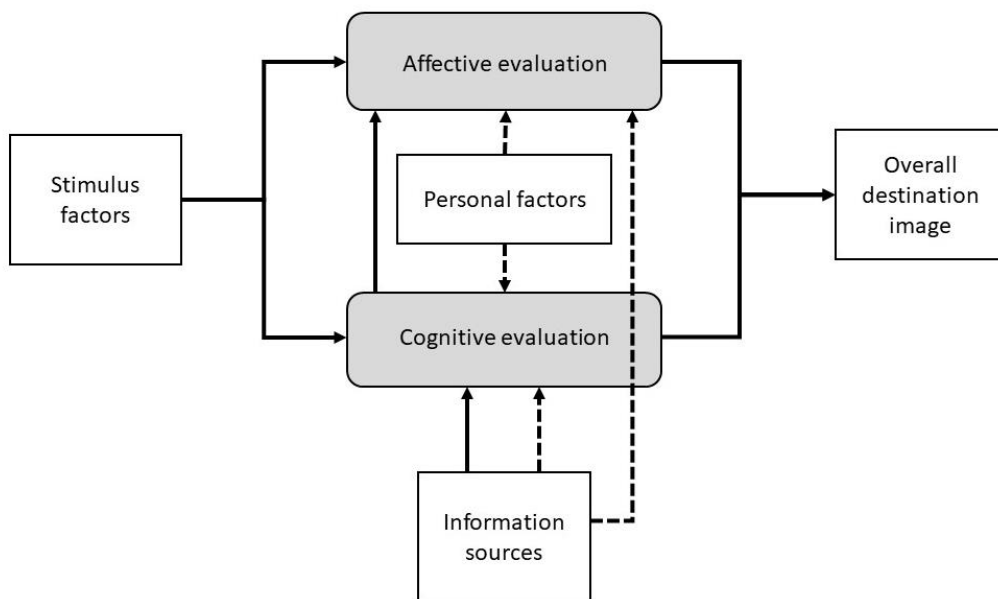


Figure 1. Destination image formation process, adapted from Baloglu & McCleary (1999, 870-871)

### **3.2 Induced and Organic Image**

A destination image based on different information sources, created without actual experiences about the destination, is called a secondary image. After visiting a destination, one can have a primary image of that destination. A secondary image can be divided into two different categories: an organic image and an induced image. An organic image is created based on objective, unbiased information sources that have no connections to that destination, such as news or schoolbooks. Friends' or relatives' personal experiences are also considered as an organic source of information and they are the ones that people usually rely on the most. An induced image is influenced by marketing messages from the destination. Induced information sources are for example television commercials, brochures and billboards. (Ferreira Lopes 2011, 311; Sussmann & Ünel 1999, 211.) As Gartner (1994, 196) concludes "the key difference between organic and induced image formation agents is the control the destination area has over what is presented".

## 4 Destination Marketing

As mentioned earlier in the thesis, tourism is an intangible product that relies heavily on images and as such marketing it means appealing to consumers' feelings and perceptions rather than logic and rationalisation. In this section, we will take a brief look on destination marketing, discuss the role of National Tourism Organisations and Visit Dubai's marketing efforts, and introduce Augmented Reality in tourism and The Box project.

The purpose of destination marketing is to increase the number of visitors and maximise the economic gain in the area (Wang 2011, 3). In the essence of destination marketing is the assumption that people's travel motives can be activated through affective images (Pan 2011, 173). Destination marketers strive to recognise different target groups and their preferences. They seek to create a corresponding destination image and promote the benefits the destination can offer to these prospective visitors. Marketers choose the most attractive and memory-evoking attributes of the destination and highlight those while leaving out the unfavourable ones. These images are then communicated to prospective visitors through different media channels. (Bramwell & Rawding 1996, 202; Pan 2011, 172.) When choosing images, destinations utilise tools such as surveys done on previous visitors and the expertise of target markets' advertising agencies (Scarles 2004, 50).

Digital revolution and the emerging of the Internet have also had their impact on tourism industry (Gretzel, Yuan & Fesenmaier 2000, 146), and a great deal of destination marketing occurs online and especially on social media. Tourism organisations and travel agencies are not the only sources of destination information anymore. Destinations are competing not only against each other, but also against regular people sharing their experiences and opinions on different social media platforms (Wang 2011, 4). However, social media has also created new possibilities for marketers to promote their destinations. For instance, YouTube is a platform that many National Tourism Organisations and Destination Marketing Organisations utilise for sharing their marketing videos. Videos are an effective tool for destination marketers, since they offer a platform for prospective visitors to dream and fantasise about the destination (Pan, Tsai & Lee 2011, 597). Also Dubai's National Tourism Organisation, Visit Dubai, has a wide range of high quality marketing videos available on its YouTube channel. This and other marketing efforts of Visit Dubai are discussed in more detail in the next subsection.

#### 4.1 The Role of National Tourism Organisations and Visit Dubai

In this thesis, we selected Dubai as our research destination and the marketing video used in this process was provided by Visit Dubai, which is Dubai's National tourism organisation (NTO). We also explored how the NTO's pursued image of Dubai correlates with the actual image people have of it. Therefore it is useful to discuss the role of NTOs on a general level and glance at Visit Dubai's present marketing efforts.

NTOs have an important part in marketing destinations: they claim the main responsibilities for the destination's marketing efforts, aiming to increase the amount of visitors and thus building up the income generated through tourism. However, nowadays with Internet enabling endless information sources, blog posts and social media platforms, "the perception of 'trusted sources' of information has shifted from NTO's and service providers to networks of self-appointed and often anonymous reviewers" (OECD 2014, 26). Therefore NTOs must seek modern ways of communicating their agendas to potential consumers, such as producing interesting content like blog posts, videos and Facebook and Instagram posts. A great example of this is Copenhagen's NTO, Wonderful Copenhagen, that we discussed previously in chapter 2.4 Tourism Trends.

Visit Dubai seeks to develop Dubai to become one of the world's most visited destinations and has an agenda how to do it. Dubai's Department of Tourism and Commerce Marketing (DTCM) describes its main duties as follows:

The Department of Tourism and Commerce Marketing (DTCM) is the principal authority for the planning, supervision, development and marketing of tourism in Dubai. We also market and promote the emirate's commerce sector, and are responsible for the licensing and classification of all tourism services, including hotels establishments, tour operators, travel agents, and all other tourism services. (Visit Dubai 2017)

Dubai aims to reach 20 million annual visitors by 2020 and a part of the strategy to achieve this involves "adapting a marketing approach to showcase Dubai to a wider audience and increasing awareness and conversion of flight and hotel bookings" (Visit Dubai 2017).

Based on their website, Visit Dubai's marketing efforts seem to mainly highlight its sunny weather, shopping malls and spas along with extreme sports and family activities. On the website's front page, there are slogans such as "high-end style meets old world charm", "ultimate family break", "dine with more than 200 cultures", "a world of relaxation", "sun, sand and surf in the city", "let the past meet the future" and "where rush hour is truly a

rush". Dubai is portrayed as a well-rounded destination suitable for honeymooners, adrenaline junkies, foodies and families all alike.

Visit Dubai is also active on social media, having active accounts on Instagram, Facebook and Twitter. From a brief look, it seems that Dubai's Facebook posts are slightly more focused on family activities, whereas Instagram has more emphasis on inspiring landscape photos, but this is only suitable considering that Facebook and Instagram differ in their styles. Dubai's Twitter account is active and versatile in its feeds, for example posting content on the newest restaurants and the top things to do in Dubai. In 2015, Dubai even won a prestigious marketing award in travel and leisure category at the SABRE awards (Visit Dubai 2015).

Video marketing is increasing its popularity as a marketing tool, and Visit Dubai has produced a fair number of marketing videos compared to some other destinations, and this was one of the reasons that encouraged us to choose Dubai as our research destination. The videos are rather traditional tourism videos but made with high quality.

Issam Kazim, the CEO of the Dubai Corporation for Tourism and Commerce Marketing, discussed the changing nature of consumer interests in Arabian Business's article (2016) and recognised that tourists are losing interest in polished destination images preferring more real content. Kazim also underlined that Dubai must not limit itself in being solely a family resort or expensive luxury holiday, but to also emphasise that it is "an adventure and culture destination for all ages and budgets". For example, Dubai wants to draw more attention to its art scene in Dubai Design District and events like Dubai Food Festival.

## **4.2 Augmented Reality in Marketing and Tourism**

Augmented Reality (AR) has an important role in this thesis, since it is present in The Box project and the way it functions, and thus it is useful to introduce the term and what it involves.

AR mixes technological advancements into the real world creating interesting possibilities, for example, for marketing purposes. An important factor differentiating AR from Virtual Reality (VR) is the fact that VR does not include real surroundings in it, but only immerses the participant in a completely virtual setting (Kipper and Rampolla 2012, 1). Whereas AR utilises the actual space as well as implementing virtual components in it:

Augmented Reality is taking digital or computer generated information, whether it be images, audio, video, and touch or haptic sensations and overlaying them over in a real-time environment. Augmented Reality technically can be used to enhance all five senses, but its most common present-day use is visual. (Kipper and Rampolla 2012, 1)

In tourism, AR can be utilised in a variety of ways. For instance, there are apps for mobile phones that can reveal information about the real surroundings, providing visitors with useful information for instance about the history and interesting facts. One of the first apps for AR in tourism was Tuscany+, where a visitor points their phone's camera to a real life monument/ sightseeing point and the app reveals information about it thus enhancing the experience (Visit Tuscany 2017).

Another major app for AR is Pokémon Go that was launched in 2016 and immediately gained enormous popularity. Many tourism destinations and local businesses have utilised this by advertising good Pokémon spots at their locations and producing Pokémon-related content for visitors (Destination Think! 2017). Pokémon Go's frenzy has since slightly faded, but AR apps like this will most likely be utilised more and more in the future.

AR apps have other possibilities for tourism destinations as well, since they could be used to provide translations, maps and games. The app could show how a specific historical event took place and reveal what the destination looked like decades ago or how it will appear in other seasons (Destination Think! 2017). All of these functions enrich the visitor's experience and deepen the understanding of the cultural and historical content as well as help with language barriers and navigating.

In the context of AR, it is also beneficial to discuss about Mixed Reality (MR). Mixed Reality is largely like AR in the sense the user can see the real world and it also has virtual elements like VR, but "it anchors those virtual objects to a point in real space" (Recode 2016). This should result in a more believable experience.

In this thesis, we utilised Augmented, or maybe more precisely, Mixed Reality in creating the surroundings to watch a marketing video of Dubai. We projected video image on the three walls of The Box, and stimulated the senses with not only the visual content but also with specific audio track, tastes and fragrances to enhance the feeling of Dubai. In the future, spaces like The Box could be utilised more and more in tourism marketing efforts. By creating a more layered marketing experience with AR and MR, the appeal towards a destination can rise remarkably. We will take a closer look at The Box in the next subsection.



### 4.3 The Box

The Box project plays an essential role in this thesis as the research is based on examining the potentials of multisensory video experiences. The Box is an experience simulator in which chromatic atmospheres can be created. It utilises the practices of both Virtual Reality and Augmented Reality and combines them into Mixed Reality environments (The Box 2016). The Box is, quite literally, a box: a movable room that has the possibility of projecting video image in 270 degrees on three of its four walls. Senses can also be stimulated by immersive soundscapes, inducing different kinds of fragrances to enhance the desired atmosphere and using structures with haptic feedback. The Box project aims to “define the optimal chromatic atmospheres for increasing the customer value in variety of hospitality, tourism, and experience settings” (The Box 2016).

For the time being, The Box project exists as a service laboratory at Haaga-Helia University of Applied Sciences’ Haaga campus, but the goal is to extend its use for example to hotel rooms so that the customer could modify the room’s atmosphere and to develop it even further to portable units with endless possibilities (The Box 2016). So far The Box has already acted for instance as Santa Claus’s shop with live video stream from Korvainturi and as a Starbucks cafe. It has also been tried out at different food festivals (Gastro Helsinki and Sauce). Furthermore, Ähtäri Zoo has used The Box in creating a virtual zoo where visitors are educated about endangered species (The Box 2016).

## **5 Experiences**

Tourism industry is moving more and more away from glossy destination images and packaged options to experiences. In this thesis, experiences are in a pivotal position, and that is why in this section, we will focus on the nature of experiences as to gain more knowledge of their key elements.

Consumers seek new “authentic” and “real” activities to engage in during their trips, and they are more responsive to information that comes from peer reviews than NTO’s official marketing broadcasts. Like tourism, experiences are also a sensitive product to manage and market since they’re highly dependent on the feelings and images they evoke in consumers.

When aiming to create a positive experience for consumers, it is important to consider the experience as a whole instead of concentrating on separate parts of it (Berry, Carbone & Haeckel 2002, 5). With increasingly competitive markets, it is essential to build a relationship with customers and this can be achieved by “applying the principles and tools of customer-experience management” (Berry & al. 2002, 5). Seeing services more as experiences helps to increase customer satisfaction and provides the company with competitive elements that are hard to replicate by others.

### **5.1 Sensory Elements in Experiences**

This subsection focuses on an important part of experiences: senses. When creating an experience, special attention should be drawn not only to the activities but also to the sensory elements – vision, scent, touch, sound and taste. They have a vital role in creating and managing successful experiences since their absence evidently results in flatter results.

Scents can easily be overlooked when creating services and experiences, but they should not be, since scents are a useful tool in a well-balanced experience. Goldkuhl and Styvén (2007, 1298-1300) identify four key aspects in using scents: presence (or absence), pleasantness (or unpleasantness), congruity and the relationship between memory and scents. That is to say, scents should actually be present to evoke positive responses (although allergies should be considered), their perceived pleasantness has been shown to result in higher money expenditure and returning rate, scents should be compatible with the product and/or situation, and lastly, scents are a powerful tool to trigger memories and this should be kept in mind when planning experience settings.

Sound is a powerful component in an experience that can easily modify the whole atmosphere. Retailers have been playing songs in shops for a long time to create a welcoming place to stay longer and, of course, spend more money. Garlin and Owen (2006, 761) concluded in their study that not only do familiar and liked songs have a positive impact on customers, but that the sheer presence of music actually helps to create a more positive response. They also stated that the slower the tempo and the lower and more familiar the music, the longer the customers tend to stay. These are issues that should be considered when adding sounds to experiences as well.

As for vision, touch and taste, they all have an important role to play in an experience. Vision is “the most powerful one for discovering changes and differences in the environment and is the most common sense in perceiving goods or services” (Hultén 2011, 259). We rely on our sight so it is only natural that a large emphasis should be placed on the visual side of experiences. Out of the five senses, taste and touch might often be slightly overlooked but they definitely add dimensions to an experience. Taste could be described as “the most distinct emotional sense” whereas touch “is the tactile one, related to information and feelings about a product through physical and psychological interactions” (Hultén 2011, 259).

By focusing on all the five senses, experiences become more vibrant and interesting which can result in deeper emotional connection and memories. In the next section, we will discuss experiences in a more conceptual level.

## **5.2 Experience Realms**

In this subsection, we discuss Pine and Gilmore’s (1999, 30–38) Experience Realms since this is one of the key concepts in the theory of experiences. In this concept, Pine and Gilmore identify different dimensions in experiences. As seen from Figure 2, they differentiate between passive and active participation and absorption and immersion. Based on these combinations, the experience can be categorised to be entertainment, educational, aesthetic or escapist.

Passive participations occur when a customer does not engage in the activity, and these experiences can be either entertainment or aesthetic. They can also be either absorbed or immersed into. If a passive participation experience is absorbed, the participant engages in entertainment where he merely observes. An example of this would be watching a play.

However, if the participant were immersed but passive, they would be engaged in an aesthetic experience, such as visiting an art gallery.

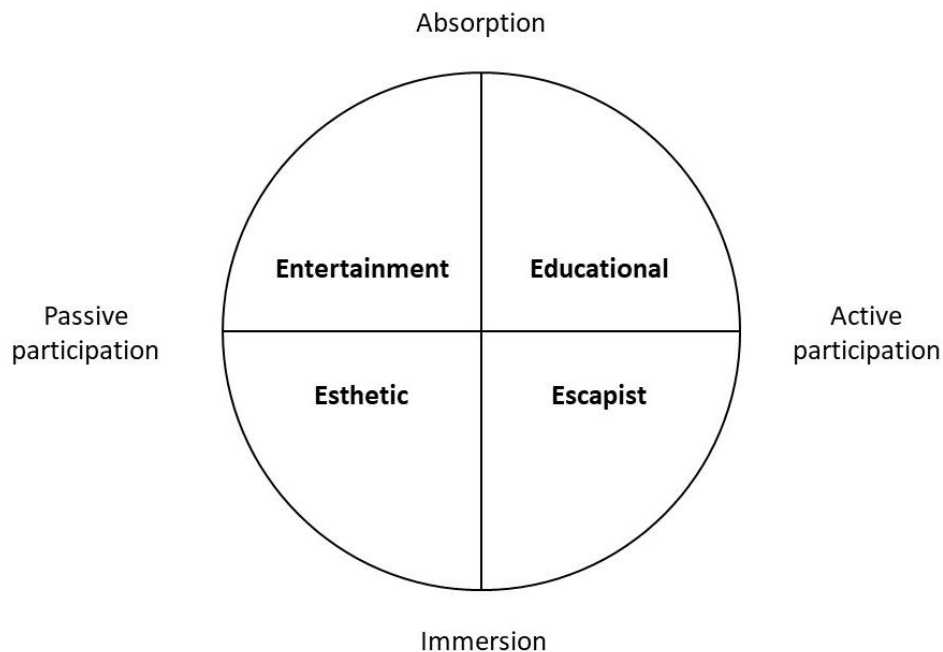


Figure 2. The Experience Realms by Pine and Gilmore (1999, 30)

Active participation requires the participant to engage in the experience at hand, but it can be either absorbed or immersed. If the activity is educational, the participant is active and absorbs the experience, which in most cases would be a lesson of some sort. If the experience requires active participation and is immersed, it would be categorised as an escapist experience. An example of this is an experience where the participant is escaping the surrounding world, like when using virtual reality headsets or attending a theme park.

By extinguishing these experience realms, Pine and Gilmore have set the ground for analysing different types of experiences and making it easier to design well-balanced experiences.

This concludes the theory part of this thesis, and we will move on to examining the research part of this work.

## 6 Research Process

In this section, we will go through the different phases of the research process from choosing the topic and defining the objectives to the implementation of the actual study.

We knew from the start that we wanted to utilise The Box in our thesis, since that was very distinctive for us as Experience and Wellness Management students. We considered multiple different research topics, but landed finally on destination image for its multi-layered nature and marketing point of view. We wanted to explore how the destination image of a chosen tourism destination correlates with the one that the destination itself is promoting and how the presentation method affects the transmission of the destination image. We wanted to know whether there are differences between the image that the chosen destination communicates to prospective visitors and the image people actually have. In addition, we examined whether the destination image came across differently if it is experienced in The Box or seen from a traditional 2D screen and does the device affect the effectiveness of the message.

To evaluate the correlation between people's destination image and the promoted image, we decided to adapt the importance-performance analysis (IPA). IPA is a tool to create or evaluate the elements of a destination marketing program and it was introduced in 1977 by Martilla and James in their article Importance-Performance Analysis. The IPA process has three phases, and in the first phase, destination attributes are defined through techniques such as free elicitation and literature reviews. In the second phase, people are asked to rate the defined attributes or qualities based on how important they consider them to be. This is asked before visiting the destination. After the visit, the participants are again asked to rate these qualities based on how well they actually performed in the destination. In the third phase, importance and performance scores are calculated. Each attribute is given an x and y coordinate and they are placed in a two-dimensional matrix called an IPA grid. This matrix reveals the qualities or attributes the destination performs well and where the performance should be improved. The possible outcomes of the IPA grid are as follows:

- The attribute is considered highly important, but it performs poorly. This is something the destination should concentrate on more.
- The attribute is considered important and it also performs well. This is something the destination should keep on doing.
- The attribute has both low importance and low performance score. This is something the destination does not really need to focus on.

- The attribute is not considered important, but it performs really well. This is called “possible overkill” and is something the destination should consider cutting back. (O’Leary & Deegan 2005, 249.)

Instead of comparing the importance and performance of the actual qualities of a destination, we decided to compare the prevalence of the qualities and their performance in the marketing image. In other words, we focused on examining whether the destination image people have correlate with the image that the destination is promoting.

Selecting the actual research destination occurred quite late in the process. Using The Box and examining its possibilities was more important to us and it did not really matter what the destination was. The destination’s National Tourism Organisation had to be of high quality, with at least 1080p video material available. The destination also had to be familiar enough to Finnish people so that the participants would have some kind of image of it. We considered several destinations such as Ireland and British Columbia, but finally chose Dubai because it is a commonly known destination but still not necessarily visited by majority of participants. Dubai’s NTO, Visit Dubai, also had a lot of high quality marketing videos available that suited our purposes. By choosing a video produced by Dubai’s NTO, we assume that it represents the image that Dubai as a destination seeks to promote. We chose a 360-degree video, because it worked the best in The Box setup. We also tried to choose a video that shows as many different aspects of Dubai as possible.

In the first phase of the study, we defined the attributes we were going to use later. We used free elicitation technique by interviewing 100 randomly selected students from Haa-ga campus and asked them to name three things or qualities that first came to their minds about Dubai. From these interviews we gained the attributes then used in the second phase of the study. The interviews returned 295 valid answers with 70 different attributes, and out of these we chose the attributes that appeared five or more times. This resulted in 16 attributes: luxury, expensive, hot climate, money, oil industry, skyscrapers, sun, shopping, artificial, rich people, sand, Islam, expensive cars, vacation, desert and luxury hotels. Based on the theory presented earlier in this thesis, we designed a two-part questionnaire, which included background questions, rating of the attributes and questions about the appeal and travel interest to Dubai.

The second phase of the study included the actual The Box experiment and the equivalent test with the traditional marketing video. In this phase, the participants were shown the chosen marketing video either in The Box or from a 2D screen. Before showing the video, the participants answered the first part of the questionnaire, where it was asked to

rate how strongly they related the 16 attributes to Dubai. There were also some background questions to figure out respondents' personal factors and where they had heard about Dubai to gain information whether their image about Dubai was organic or induced. In the end of the first part, the participants were asked how appealing they found Dubai as a travel destination and would they actually travel to Dubai during the following year.

After answering the first part of the questionnaire, the participants were asked to watch the marketing video either in the Box or from a normal screen. In The Box, the video was projected on its three walls that are 270 degrees around the viewer. Music was played from four different speakers and an oriental 'scentscape' was created in The Box. The scentscape was built by combining different scents that would together create an atmosphere of an oriental flair. We used fragrances of cognac, warm bread, orange and some spices. The scent of cognac was spread in The Box from a scenting machine, while the other scents were sprayed into air. Additionally, spices were sprinkled on the floor, and to stimulate all the five senses, the experience was enhanced with a serving of hot tea flavoured with mint and spices. To finalise the atmosphere, The Box was decorated with lanterns and cushions and an oriental carpet on the floor. The 2D screen was either a school pc or laptop or a participant's personal device (a smartphone or tablet). The traditional video experiment did not have any sensory enhancements.

After visiting The Box or watching the marketing video from a normal screen, the participants were asked to answer the second part of the questionnaire. In this part, the respondents rated how well the 16 attributes performed or were presented in the video they just saw. It was also asked once again how appealing they found Dubai as a travel destination and would they travel to Dubai during the following year. To evaluate the experience itself, we asked how strongly the participants felt that the different senses were stimulated and how immersed they felt during the experience.

The Box experiment was conducted in May 2017 at Haaga campus of Haaga-Helia University of Applied Sciences. The 2D video study was conducted at Pasila campus in May and September 2017, and also as an online survey during the summer of 2017. The participants of both of studies were mostly students, but some faculty members and other members of staff participated as well. Participants were partly randomly and partly non-randomly. We asked randomly selected teachers, who happened to have classes at the time of the study to bring their students to The Box and participate in the experiment. Most of the respondents were from these randomly selected students, but we also took some volunteer participants from the school cafeteria. Most of the respondents to the 2D marketing video study were randomly sampled as well: we requested randomly selected

teachers to allow us to visit their classes and perform the test. The survey was also shared in Haaga and Pasila campuses' Facebook groups, so some of the respondents of the 2D video part of the study were volunteers as well. The studies were conducted at two different campuses, because we wanted different people to participate to each test. We feared that the test results might have been biased if the participants would have seen the video from a normal screen before watching it in The Box and vice versa.



## 7 Results

In this section, we will present the findings of The Box experience and the 2D marketing video study. 133 respondents visited The Box and completed the questionnaire. 131 of the answers were valid and used in the final analysis. 145 respondents watched the marketing video from a 2D screen and answered the questionnaire. 140 of these answers were valid. The sample size was calculated based on the population of Haaga campus, 1000 students and had the confidence interval of 8 on confidence level 95%. The valid answers were analysed with statistical analysis software, SPSS.

### 7.1 The Box Experience

As mentioned previously in this thesis, researchers commonly consider age and the level of education to be the factors that influence the destination image formation process the most. Most of The Box visitors were hospitality students from Haaga-Helia University of Applied Sciences' Haaga campus, which makes them a relatively homogeneous group. The respondents were born between 1959 and 1998, the majority representing the Millennials. Most common year of birth was 1995, as 17,1 percent of the respondents were born in that year. The majority (74%) of the respondents had graduated either from high school or vocational school. 68 percent of the respondents were female, 31 percent were male and one respondent was of other gender.

The majority of people who visited The Box had not visited Dubai: 11,5 percent had visited Dubai more than 12 months ago and only 5 respondents (3,8%) stated they had visited Dubai during previous year. Generally, The Box visitors were eager to travel: almost 40 percent stated they travel more than twice a year and only 13,7 percent of the respondents travelled less than once a year.

All the respondents had some kind of an image of Dubai before entering The Box, since all of them said they had heard about Dubai during the past year. The most common source of information was social media, as 77,1 percent of the respondents had heard about Dubai through it. Another popular source of information was friends' and relatives' experiences (71,8 %), which, according to several studies, people consider to be the most trustworthy source of information. These two above-mentioned information sources were clearly the most common ones, which were followed by YouTube (43,5%), travel agencies' web pages (42,7%), newspapers and magazines (42%), movies (38,2%) and tourism organisations' web pages (37,4%). Out of these information sources, travel agencies' and tourism organisations' web pages are purely induced sources, whereas friends'

and relatives' experiences are the only purely organic sources. Social media and YouTube have both organic and induced contents and without further knowledge, it is difficult to say if the image gotten from these sources is organic or induced. Newspapers, magazines and movies are here considered to be relatively organic sources of information, even though they might also contain paid advertisements and product placements.

The respondents considered Dubai to be a fairly appealing travel destination before visiting The Box. The appeal was rated on a five-level Likert-type scale, in which 5 stood for "very appealing" and 1 "not appealing at all". 76,9 percent of the respondents considered Dubai at least somewhat appealing and 42,3 percent stated that Dubai was appealing or very appealing. The mean from all the answers before watching the marketing video was 3,31. The question of appeal was asked again after the participants had visited The Box. This time 80,9 percent of the respondents said Dubai was at least somewhat appealing and 51,1 percent considered it appealing or very appealing. The mean increased by 0,17 points to 3,48. One of the objectives of this thesis was to find out if watching a marketing video increases the appeal of the chosen destination. Based on these findings, it can be said that experiencing the marketing video in The Box had a positive impact on the appeal of Dubai as a travel destination.

Table 1. Appeal of Dubai before and after The Box experience

	Before (%)	After (%)	Difference (%)
Not appealing at all	5.3	6.1	0.8
Slightly appealing	17.6	13.0	-4.6
Somewhat appealing	34.6	29.8	-4.8
Appealing	25.4	29.0	3.6
Very appealing	16.9	22.1	5.2

In addition to finding out if the attractiveness of the destination would increase, we wanted to know if watching a marketing video had an impact to the actual travel intention. Before watching the video, 19 respondents said they would travel to Dubai during following 12 months. 40,8 percent stated they might travel to Dubai and 44,6 percent said they will not travel at all or they will travel somewhere else during the following year. After visiting The Box, the question of travel intent was asked again. The amount of "yes" answers remained the same, but the amount of "maybes" rose from 40,8 percent to 48,9 percent.

Notable was also the fact that the amount of “no, I will not travel anywhere” answers decreased from 3,1 to 1,5 percent. This could be interpreted in a way that The Box experience did not only increase the appeal of Dubai as a destination, but the general willingness to travel as well.

Table 2. Travel intention before and after The Box experience

	Before (%)	After (%)	Difference (%)
Yes	14.6	14.5	-0.1
Maybe	40.8	48.9	8.1
No, I will travel somewhere else	41.5	35.1	-6.4
No, I will not travel anywhere	3.1	1.5	-1.6

### 7.1.1 Image Correlation – The Box

In the first part of the questionnaire, which was filled before entering The Box, we asked how strongly the respondents related the 16 pre-selected attributes to Dubai. The scale was a five-level Likert-type scale in which 1 was “not at all” and 5 was “very strongly”. This way we aimed to find out what kind of image the respondents had about Dubai. The mean scores of the attributes varied between 3,63 and 4,76, so it is fair to say that all the attributes described Dubai quite well. Luxury hotels had the highest score of 4,76, so it is the strongest relation to Dubai in respondents’ minds. Respondents also related sun (4,65) and general luxury (4,63) very strongly to Dubai. Islam got the lowest score of 3,63, but which was still quite high.

In the second part of the questionnaire, we asked how well the 16 attributes were presented in the video the participants had just seen. We wanted to know whether these answers corresponded with the ones that represented the participants’ own image of Dubai. That is to say, does the marketing image of Dubai correlate with the destination image the test group has. The scale was again a five-level Likert-type scale in which 1 was “not at all” and 5 was “very well”. The mean scores of the attributes varied between 1,82 and 4,26. Oil industry was not well presented and had the lowest score of 1,82. Islam (1,87) and expensive cars (2,30) were not well presented either. Even though Islam got the lowest score (3,63) in the first part of the questionnaire, people still related it to Dubai more strongly than it was marketed. People also expected to see more expensive cars as it

scored 4,18 in the first part. Shopping was also presented less (2,83) than in respondents' images (4,13).

Skyscrapers were best presented in the marketing image getting the highest score of 4,26. This corresponded quite well with the destination image the respondents had (4,54). Sun (4,07) and general luxury (4,14) were also well presented and corresponded with the people's image quite well. Luxury hotels that were most strongly related to Dubai (4,76) were a little less present in the marketing image (3,79) than in the participants' minds. In general, almost all attributes scored higher in the respondents' destination image than in the marketing image. The only exception was vacation, which respondents related to Dubai a little less (3,80) than what they considered to be shown in the marketing material (4,12).

Table 3. Attribute scores, The Box

	Destination image (mean)	Marketing image (mean)	Difference between destination image and marketing image
Luxury	4.63	4.14	-0.49
Expensive	4.26	3.76	-0.50
Hot climate	4.46	3.67	-0.79
Money	4.55	3.78	-0.77
Oil industry	4.03	1.82	-2.21
Skyscrapers	4.54	4.26	-0.28
Sun	4.65	4.07	-0.58
Shopping	4.13	2.83	-1.30
Artificial	3.79	3.23	-0.56
Rich people	4.31	3.33	-0.98
Sand	4.20	3.09	-1.11
Islam	3.63	1.87	-1.76
Expensive cars	4.18	2.30	-1.88
Vacation	3.80	4.12	0.32
Desert	4.03	2.85	-1.18
Luxury hotels	4.76	3.97	-0.79

The attribute scores from The Box experiment are presented on a modified IPA grid below. The vertical axis represents the destination image the participants had and the horizontal axis represents the image Visit Dubai promotes through the chosen marketing video. It can be seen from the matrix that all the scores are placed on the top half of the vertical axis, which means the participants related them to Dubai strongly. The attributes in the top right corner also performed well in the marketing material. The ones in the top left corner are attributes that were presented on the video little or not at all. Because of the pre-selection of the attributes, there were no qualities people would have not related to Dubai at all.

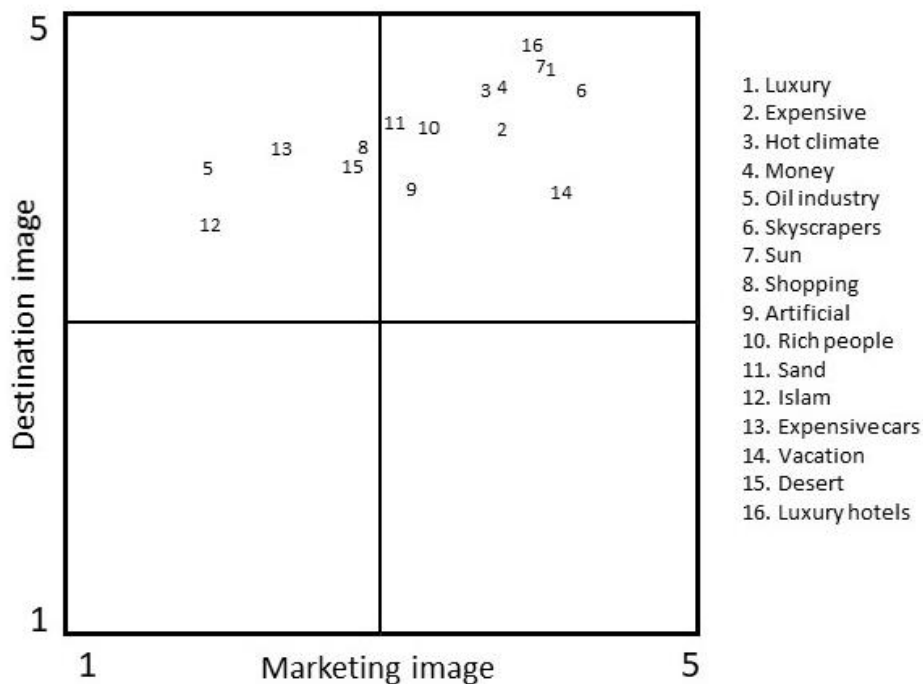


Figure 3. IPA grid, The Box

## 7.2 2D Screen Study

Most of the participants of the 2D screen part of the research were business students from Pasila campus of Haaga-Helia University of Applied Sciences. They were born between 1965 and 2000, and the majority were Millennials. Almost one third (29,5%) of all the respondents were born in 1995 and 1996, and 75 percent had completed either high school or vocational school. 59,7 percent of the respondents were female, 39,6 percent were male and one respondent was of other gender.

The Box group and the 2D screen group were similar what comes to age, education and gender. The most notable difference between the two groups was in their eagerness to

travel. Where 62,6 percent of The Box visitors said they travel two or more times per year, only one third (33,6%) of the 2D screen respondents travelled more than once a year. 35,7 percent of this group stated they travel once a year and 30,7 travelled less often. There was also a little less Dubai visitors in the 2D screen group: 7,9 percent had visited Dubai more than 12 months ago and only two respondents (1,4%) had been in Dubai during the previous year. The difference might be explained with the fact that most of The Box visitors were students who study hospitality and tourism. They have probably become interested in travelling through their studies or they have chosen tourism studies because of their interest to travel. We consider this difference significant and are aware that it might affect the overall results of the study to some extent.

Almost all the respondents had heard about Dubai during the previous year. Only 4 respondents stated they had not heard about Dubai at all during the past 12 months. Most common source of information in this group was also social media, as 63,6 percent had heard about Dubai through it. As in The Box group, the second most common information source was friends' and relatives' stories, as 52,9 percent of the respondents had heard about Dubai from their acquaintances. These two sources were followed by YouTube (40%), travel agencies' web pages (34,3%), movies (32,9%), newspapers and magazines (32,1%) and tourism organisation's web pages (25,7%). Both The Box group and the 2D screen group had quite similar information bases with similar ratio of induced and organic sources, but The Box group had more information about Dubai in general. This might be due to their tourism studies and interest in travelling.

In the 2D screen group, Dubai was considered less appealing as a travel destination than in The Box group. The mean score of the answers before watching the marketing video on a 1 to 5 Likert-type scale was 2,91, whereas in The Box group it was 3,31. 60,8 percent considered Dubai at least somewhat appealing and 37,9 percent considered Dubai appealing or very appealing. Notable was that 17,9 percent stated that Dubai was not appealing at all, where in The Box group this percentage was only 5,3. The 2D group's destination image was clearly more negative than The Box group's. There was no significant difference between the information sources the two groups had, but then again, their attitude towards travelling in general was different. The 2D screen group was clearly less enthusiastic about travelling in general, so this might also explain their cautious attitude towards a single travel destination. After watching the marketing video from their screens, the participants answered the question of appeal again. This time the mean was 2,94: a little, but not significantly higher than before watching the video. 65,1 percent considered Dubai at least somewhat appealing and 37,2 percent considered Dubai appealing or very

appealing, which was actually a little, but not significantly less than before watching the video.

Table 4. Appeal of Dubai before and after 2D screen experience

	Before (%)	After (%)	Difference (%)
Not appealing at all	17.9	17.1	-0.8
Slightly appealing	21.4	17.9	-3.5
Somewhat appealing	22.9	27.9	5.0
Appealing	27.9	28.6	0.7
Very appealing	10.0	8.6	-1.4

The question of travel intention was asked before and after watching the Dubai marketing video. This question also showed significant differences between the two research groups. In The Box group, 14,6 percent of the respondents said they would travel to Dubai during the next 12 months before watching the video. The corresponding figure in the 2D screen group was only 5,0, and 25,7 percent said they would maybe travel to Dubai and 69,2 stated they will not travel at all or they will travel somewhere else. This was significantly more than in The Box group where the percentage was 44,6. After watching the marketing video, 3,6 percent of the respondents said they would travel to Dubai during the following year, and 30,7 percent said they would maybe travel to Dubai. Unlike in The Box group, in the 2D screen group the amount of “yes” answers actually decreased. Also the amount of “no, I won’t travel anywhere” increased from 12,1 to 13,6 percent after watching the video. The decrease of interest to travel to Dubai, or anywhere, after watching the video from a 2D screen could be explained by the increasing amount of time and information the participants spent on focusing on Dubai and their travel intentions. That is to say, when filling the first part of the questionnaire, the participants perhaps had not yet fully considered their interest for Dubai and future travel plans, but after watching the video their minds had had to focus on the subject more. So it could be that after giving the subject more thought, the participants simply faced realities and Dubai, or any travelling at all, was ruled out.

Table 5. Travel intention before and after 2D screen experience

	Before (%)	After (%)	Difference (%)
Yes	5	3.6	-1.4
Maybe	25.7	30.7	5
No, I will travel somewhere else	57.1	52.1	-5
No, I will not travel anywhere	12.1	13.6	1.5

### 7.2.1 Image Correlation – 2D Screen

There were no significant differences between The Box group and the 2D screen group what comes to the destination image they had about Dubai before seeing the marketing video. Scores the 2D group gave had little but not notably less variation as they varied between 3,72 and 4,57. Skyscrapers got the highest score of 4,57 and were most strongly related to Dubai. They were followed by luxury hotels (4,56) and sun (4,54). Desert got the lowest, but still relatively high score of 3,72.

Attribute scores given after seeing the marketing video were also quite similar to the ones in The Box group. The scores varied between 1,91 and 4,34, which has no notable difference compared to The Box group. This suggests that the device does not affect how the image components are passed on, but just the general attractiveness. Skyscrapers were best presented and got the highest score of 4,34. This corresponds well with the image the participants had about Dubai. After the skyscrapers, sun and luxury were presented the best, both of which scored 4,07. Luxury hotels got a score of 4,00, which was a little less than what people expected. Islam (1,91) and oil industry (2,17) got again the lowest scores as they did in The Box group. Both attributes scored a lot higher (3,87 and 4,13) in people's expectations, so for this part it can be said that the destination image and the marketing image contradict. Visit Dubai does not articulate Islam or oil industry on their website or social media channels either, so it is fair to say they are features Dubai deliberately does not want to promote even though people relate them to Dubai strongly.



Table 6. Attribute scores, 2D screen

	Destination image (mean)	Marketing image (mean)	Difference between destination image and marketing image
Luxury	4.43	4.07	-0.36
Expensive	4.29	3.80	-0.49
Hot climate	4.40	3.65	-0.75
Money	4.48	3.93	-0.55
Oil industry	4.13	2.17	-1.96
Skyscrapers	4.57	4.34	-0.23
Sun	4.54	4.07	-0.47
Shopping	4.09	3.17	-0.92
Artificial	3.67	3.47	-0.20
Rich people	4.20	3.63	-0.57
Sand	3.99	3.06	-0.93
Islam	3.87	1.91	-1.96
Expensive cars	4.26	2.79	-1.47
Vacation	3.86	3.94	0.08
Desert	3.72	2.94	-0.78
Luxury hotels	4.56	4.00	-0.56

The IPA grid from the 2D screen is presented below. Again, the vertical axis represents destination image the participants had and the horizontal axis represents the marketing image of Dubai. The matrix is very similar to the one created from The Box group's scores, with only minor differences.

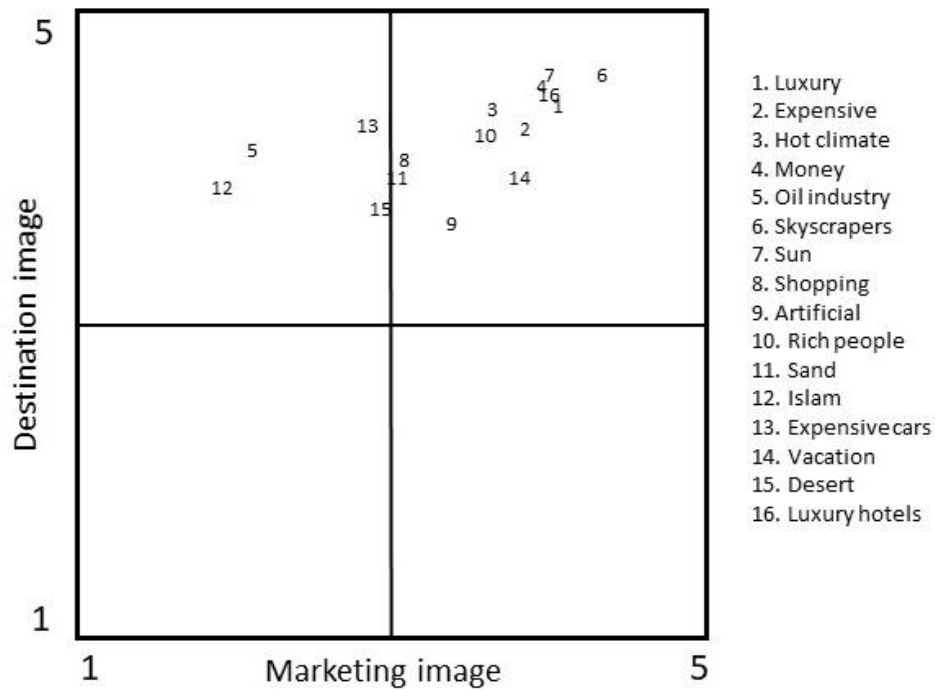


Figure 4. IPA grid, 2D screen

### 7.3 Sensory Experience

To get some insight what could cause possible different outcomes between the two devices, The Box and a 2D screen, we included questions about sensory stimulation and immersion on the second part of the questionnaire. We asked to what degree different senses (vision, hear, smell, taste and touch) were stimulated during the video experience. Stimulation was rated on a five-level Likert-type scale in which 1 was “not at all” and 5 was “extremely stimulated”. We also asked how immersed did the participants feel during the experience. Immersion was as well rated on a five-level Likert-type scale in which 1 was “not immersed at all” and 5 was “very immersed”. Like mentioned before, The Box experience was enhanced with different sensory elements to increase the stimulation of all five senses. The 2D screen experience did not have any enhancements. The mean scores for sensory stimulation for both devices are presented in the following table.

Table 7. Sensory stimulation

	Box (mean)	Screen (mean)	Difference
Vision	4.46	3.96	-0.50
Hear	3.99	2.88	-1.11
Smell	3.43	1.43	-2.00
Taste	2.98	1.54	-1.44
Touch	1.84	1.70	-0.14

Vision was expectedly the most stimulated sense for both devices: 89 percent of the Box visitors said their vision was very or extremely stimulated. Hearing was also well stimulated in The Box as 73,4 percent stated their hearing was very or extremely stimulated. The least stimulated was the sense of touch, as 53,9 percent of the respondents said their tactile sense was not stimulated at all. This might be due to the constant stimulation of the sense of touch: people are so used to touching things and sensing our surroundings through the tactile sense, that they did not consider sitting on a soft cushion or holding a warm tea cup as stimulation for touch. One fifth of The Box visitors also stated that their taste was not stimulated at all. Reason for this might be that some of the visitors did not want to have tea even though it was offered to all the participants.

Vision was the most stimulated sense also in the 2D screen group: 74,1 percent of the group said that their vision was very or extremely stimulated. Hearing was a little less stimulated, 55,8 percent of the respondents stated that their hearing was only slightly or somewhat stimulated. The biggest difference between the two devices was in the sense of smell.

The amount of immersion also varied a lot, as was expected. Where almost half (47,3%) of The Box visitors said they felt immersed or very immersed, only one fifth of the 2D screen group felt the same. To explain the increased appeal of Dubai after experiencing the marketing video in The Box, we suggest that the multisensory stimulation and deeper immersion were the key factors. As noted in the theory part, the more senses are stimulated, the more immersive and emotionally engaging the experience is, and that probably resulted in the increased attractiveness of Dubai in The Box group.

Table 8. Immersion

	The Box (%)	Screen (%)	Difference (%)
Very immersed	10.7	4.3	6.4
Immersed	36.6	15.7	20.9
Somewhat immersed	39.7	40.0	-0.3
Slightly immersed	6.9	27.9	-21
Not immersed at all	6.1	12.1	-6

#### 7.4 Validity and reliability

All researches have their challenges and limitations, and now we are going to take a brief glance at the ones present in this one. This study was conducted at Haaga-Helia University of Applied Sciences' premises, thus resulting in rather homogeneous participant groups. Even though multiple different nationalities participated, the fact remains that students tend to be of similar age group and, since campuses are divided based on major subjects, have similar interests and values. Differences between Haaga and Pasila campus became apparent in analysing the data: Haaga campus facilitates tourism, hospitality and restaurant students who seemed to be keener to travel than the business and IT oriented students at Pasila. However, it would have been very challenging to get other than the hospitality students to visit The Box, since it is physically located at Haaga campus.

Another validity issue lies in choosing participants. In quantitative based research, selecting participants should occur by asking people to participate in random, for example trying to engage every third person that passes the survey point. However, due to the relatively small sizes of both of the campuses, the most effective way to gain participants was to visit different lectures. This meant that the whole classroom of students would participate at once, which enabled us to gather enough results to a valid sample size. Nonetheless, the lectures we visited were chosen by random, so in this sense this requirement is fulfilled.

## 8 Conclusions

In this section, we will summarise the most notable findings of our study. The study had two objectives. One was to compare a traditional 2D marketing video's and a multisensory video experience's effects on the travel interest and attractiveness of Dubai as a destination. The other one was to find out how well the marketing image of Dubai correlates with the destination image of actual people.

The study showed that there were notable differences between the two devices used to present the marketing video. The Box experience was more immersive and more stimulating to all the five senses and it clearly increased the appeal of Dubai as a travel destination, but also the participants' general willingness to travel. The traditional 2D marketing video was less immersive and did not have the same effect as The Box. However, the device did not affect the different components of the marketing image, just the general attractiveness of the destination.

It was also interesting how different the two study groups were. Even though they were similar in a sociodemographic sense and the only difference was the major of their studies, their attitude towards travelling was significantly different. For further research and to eliminate the effects of the study field, the research could be conducted the other way around to see how the business students would experience The Box and vice versa.

The Box is an interesting project that has tremendous potential for multiple different uses. As our results showed, multisensory marketing is a more effective way to communicate marketing messages than the basic 2D screens, and this kind of sensory marketing will probably become more and more popular in the future as the technology keeps on developing.

## 9 References

- Arabian Business, 2016. Introducing the 'real' Dubai: Tourism chief unveils plan to market the emirate to the world. URL: <http://www.arabianbusiness.com/introducing-the-real-dubai-676463.html> Accessed: 7 November 2017
- Baloglu, S. & McCleary, K.W. 1999. A model of destination image formation. *Annals of Tourism Research*, 26, 4, pp. 868–897.
- BBC 2017. URL: <http://www.bbc.com/news/magazine-33310217> Accessed: 2 November.
- Berry, L., Carbone, L. & Haeckel, S. 2002. Managing the total customer experience. *MIT Sloan Management Review*, 43, 3. pp 1–6.
- Bigné, E., Sánchez, M.I. & Sánchez, J. 2001. Tourism image, evaluation variables and after purchase behaviour: inter-relationship. *Tourism Management*, 22, 6, pp. 607–616.
- The Bleisure Report 2014. URL: <http://skift.com/wp-content/uploads/2014/10/BGH-Bleisure-Report-2014.pdf> Accessed: 19 November 2017.
- Bornhorst, T., Ritchie, J. & Sheehan, L. 2010. Determinants of tourism success for DMOs & destinations: An empirical examination of stakeholders' perspectives. *Tourism Management*, 31, 5, pp. 572–589.
- The Box 2016. URL: <http://www.thebox.fi/>. Accessed: 11 November 2016.
- Bramwell, B. & Rawding, L. 1996. Tourism marketing images of industrial cities. *Annals of Tourism Research*, 23, 1, pp. 201–221.
- Byers, J., Proserpio, D., & Zervas, G. 2017. The rise of the sharing economy: estimating the impact of airbnb on the hotel industry. *Journal of Marketing Research*, 54, 5. pp. 687–705.
- Destination Think! 2017. URL: <https://destinationthink.com/augmented-reality-tourism-experience>. Accessed: 29 September 2017.
- Echtner, C.M. & Ritchie, J.R. 2003. The meaning and measurement of destination image. *Journal of Tourism Studies*, 14, 1, pp. 37–48.
- The Economist 2015. "Bleisure", really? Mixing business with leisure. URL: <https://www.economist.com/blogs/gulliver/2015/03/mixing-business-and-leisure> Accessed: 19 November 2017
- Eurostat 2014. URL: <http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Tourism> Accessed: 4 November 2017.
- Ferreira Lopes, S.D. 2011. Destination image: Origins, developments and implications. *PASOS. Revista de Turismoy Patrimonia Cultural*, 9, 2, pp. 305–315.
- Garlin, F. & Owen, K. 2006. Setting the tone with the tune: A meta-analytic review of the effects of background music in retail settings. *Journal of Business Research*, 59, pp. 755–764.

- Gartner, W.C. 1994. Image formation process. *Journal of Travel & Tourism Marketing*, 2, 2–3. pp. 191–216.
- Gilmore, J. & Pine B. 1999. *The Experience economy: Work is theatre & every business a stage*. Harvard Business School Press, Massachusetts.
- Goldkuhl, L. & Styvén, M. 2007. Sensing the scent of service success. *European Journal of Marketing*, 41, 11/12, pp. 1297–1305.
- Gretzel, U., Yuan, Y. & Fesenmaier, D.R. 2000. Preparing for the new economy: Advertising strategies and change in destination marketing organizations. *Journal of Travel Research*, 39, pp.146–156.
- Holbrook. M. B. 1978. Beyond attitude structure. Toward the informational determinants of attitude. *Journal of Marketing Research*, 15, 4, pp. 545–556.
- Hultén, B. 2011. Sensory marketing: The multi-sensory brand-experience concept. *European Business Review*, 23, 3, pp. 256–273.
- The Independent, 2017. URL: <http://www.independent.co.uk/news/business/news/parisis-tourism-attacks-impact-money-lost-aftermath-a7205121.html> Accessed: 2 November 2017
- Kipper, G. & Rampolla, J. 2012. *Augmented Reality: An emerging technologies guide to AR*. Syngress, Waltham, Massachusetts USA.
- Leiper, N. 1979. The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry. *Annals of Tourism Research*, 6, 4, pp. 390–407.
- Leiper, N. 2008. Why 'the tourism industry' is misleading as a generic expression: The case for the plural variation, 'tourism industries'. *Tourism Management*, 29, 2, pp. 237–251.
- OECD, 2014. *Tourism Trends and Policies*. URL: [http://www.oecd-ilibrary.org/industry-and-services/oecd-tourism-trends-and-policies-2014\\_tour-2014-en](http://www.oecd-ilibrary.org/industry-and-services/oecd-tourism-trends-and-policies-2014_tour-2014-en) Accessed: 5 November 2017.
- Pan, S. 2011. The Role of TV commercial visuals in forming memorable and impressive destination images. *Journal of Travel Research*, 50, 2, pp. 171–185.
- Pan, S., Tsai, H. & Lee, J. 2011. Framing New Zealand: understanding tourism TV commercials. *Tourism Management*, 32, pp. 596–603.
- Recode 2016. URL: <https://www.recode.net/2015/7/27/11615046/whats-the-difference-between-virtual-augmented-and-mixed-reality> Accessed: 11 December 2017.
- Ryan, C. 1991. *Recreational tourism: A social science perspective*. Routledge, London.
- Scarles, C. 2004. Mediating landscapes: the processes and practices of image construction in tourist brochure of Scotland. *Tourist Studies*, 4, 1, pp. 43–67.
- Sussmann, S. & Ünel, A. 1999. Destination image and its modification after travel: an empirical study on Turkey. In Pizam A. & Mansfeld Y. *Consumer Behavior in Travel and Tourism*. pp. 207–226. Haworth Hospitality. New York.

The Telegraph 2017. 10 ways Brexit could hit UK travellers. URL: <http://www.telegraph.co.uk/travel/comment/what-would-brexit-mean-for-travellers/> Accessed: 11 December 2017.

Tribe, J. 1997. The Indiscipline of tourism. *Annals of Tourism Research*, 24, 3, pp. 638–657.

Visit Tuscany. URL: <https://www.visittuscany.com/en/ideas/4aa26c34-5119-11e7-87d1-c25849f3fc0c/>. Accessed: 29 September 2017.

United Nations, 2011. URL: <https://www.unglobalpulse.org/projects/rivaf-research-economic-crisis-tourism-decline-and-its-impact-poor> Accessed: 3 November 2017.

UNWTO 2017. Tourism Highlights: 2017 edition. URL: <http://www.e-unwto.org/doi/pdf/10.18111/9789284419029> Accessed: 2 November 2017.

Visit Dubai 2015. URL: <https://www.visitdubai.com/en/department-of-tourism/press-centre/press-releases/dubai-tourism-campaign-wins-gold%20in-the-travel-and-leisure> Accessed: 11 December 2017

Visit Dubai 2017. URL: <https://www.visitdubai.com/en/department-of-tourism/about-dtcm> Accessed: 1st Oct 2017

Wang, Y. 2011. Destination marketing and management: Scope, definition and structures. In Wang, Y. & Pizam, A. *Destination marketing and management: Theories and applications*, pp. 1–20. CABI. Preston.

Wonderful Copenhagen, 2017. URL: <http://localhood.wonderfulcopenhagen.dk> Accessed: 6 November 2017



## 10 Appendices

### Appendix 1. Questionnaire

#### Part 1 (*before the video/the Box experience*)

**1. Year of birth**

\_\_\_\_\_

**2. Gender**

- male
- female
- other

**3. Nationality**

\_\_\_\_\_

**4. What is the highest level of education you have completed?**

- high school or equivalent
- vocational school
- bachelor's degree
- master's degree
- doctoral degree
- other \_\_\_\_\_

**5. How often do you travel?**

- every few years
- once every two years
- once a year
- twice a year
- more than twice a year

**6. Have you visited Dubai before?**

- yes, in the last 12 months
- yes, more than 12 months ago
- no

**7. During the last 12 months, where have you heard about Dubai?**

- television commercials
- fictional television series
- documentaries
- movies
- Youtube
- blogs
- social media
- travel agencies' web/social media pages
- tourism organizations' web/social media pages
- other web sites
- tourism brochures
- newspapers/magazines
- books
- from friends or relatives
- other, where \_\_\_\_\_

**8. How strongly do you relate following features to Dubai?  
(1=not at all, 5=very strongly)**

- luxury
- expensive
- hot climate
- money
- oil industry
- skyscrapers
- sun
- shopping
- artificial
- rich people
- sand
- Islam
- expensive cars
- vacation
- desert
- luxury hotels

**9. How appealing do you find Dubai as a destination at the moment?**

- 5 (very appealing)
- 4
- 3
- 2
- 1 (not appealing at all)

**10. Would you travel to Dubai in the next 12 months?**

- yes
- maybe
- no, I will travel somewhere else
- no, I won't travel anywhere in the next 12 months

**Part 2 (after the video/the Box experience)**

**11. Have you seen the video shown to you before?**

- no
- yes
  - when? \_\_\_\_\_
  - in which context? \_\_\_\_\_

**12. How well were the following features presented in the video you just saw?  
(1=not at all, 5=very well)**

- luxury
- expensive
- hot climate
- money
- oil industry
- skyscrapers
- sun
- shopping
- artificial
- rich people
- sand
- Islam

- expensive cars
- vacation
- desert
- luxury hotels

**13. To what degree were the following senses stimulated during your video experience?**

**(1=not at all, 5=extremely stimulated)**

- vision
- hearing
- smell
- taste
- touch

**14. Describe your sensory experience with own words?**

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**15. How immersed did you feel during your video experience?**

- 5 (very immersed)
- 4
- 3
- 2
- 1 (not immersed at all)

**16. How appealing do you find Dubai as a destination at the moment?**

- 5 (very appealing)
- 4
- 3
- 2
- 1 (not appealing at all)

**17. Would you travel to Dubai during next 12 months?**

- yes
- maybe
- no, I will travel somewhere else
- no, I won't travel anywhere in the next 12 months