# CHAPTER II LITERATURE REVIEW

### 2.1 Tourism

Tourism is a recreational activity outside of domicile to break away from daily activity or look for different circumstances. Based on UU No. tahun 1990 is an activity to visit some places in short time with purpose to enjoy the tourism object. In addition, Richardson and Fluker (2004) state that tourism comprises the activities or persons, travelling to and staying in place outside their usual environment for not more than one consecutive year for leisure, business and other purpose. Franklin (2003) states that tourism becomes absolutely everything associable with acts of tourist or put into its proper tantological form "tourism is tourist". Moreover, Andrew (2008, p.17) defines that tourism is the act of travel away from home, mostly for the purpose of recreation or leisure. Based on the explanation from several experts above, it can be concluded tourism is the activities of people traveling to and staying in places outside their usual environment for leisure, business or other purposes for not more than one consecutive year

### 2.1.1 Kinds of Tourism

Kinds of tourism can be divided into several aspects. According to Spillane (1982 cited in Mutaqqin, 2013, p.1), there are six kinds of tourism based on the motive of travel destination. They are pleasure tourism, recreational tourism, cultural tourism, sports tourism, business tourism and convention tourism.

1. Pleasure tourism

Pleasure tourism is for people to holiday, get some fresh air, fulfill the curiousity, relax the muscles, look at something new, enjoy the beautiful scenery, get information about folk tale and quiteness.

### 2. Recreational tourism

Recreational tourism is using for relaxing minds, recovering the physical and spiritual fitness, refreshing the fatigue and exhaustion. This type of tourism can be done at the destination like the foreshore, mountain, health center or resort. Tourism has recognized that many visitors specifically attracted by recreational offerings. In support of recreational activities government has taken an important role in a creation, maintenance, and organization and whole industries have developed merchandise or service.

### 3. Cultural tourism

Cultural tourism is signed by a set of motivation, such as studying at research center, learning the mores, foundation, and the different way of life of the society, visiting the historical monument, the artifacts of the past, culture and religion center music festival, theater, folk dance, etc.

### 4. Sports tourism

Sports tourism can be divided into two parts such as big sports event and sporting tourism of the practioners. Big sport event is the biggest sport events like Olympiade Games, World Ski Championship, Boxing Championship and other events to attract the visitors or fans. In addition, sporting tourism of the practitioners is sport tourism for people who wants to learn and practice by themselves like climbing the mountain, riding the horses, hunting, fishing, etc.

5. Business tourism

Business tourism is kind of professional travel or travel because it is related to the job or position of someone who cannot changed to choose the purpose or the time. While Convention tourism is the most choosen by the countries because when a convention or a meeting is held, so the visitiors will come more than before to stay along in that country. The most visitable country will build the supporting building for convention tourism.

### 2.1.2 Elements of Tourism

There are several things that tourists consider before visiting tourism destinations. According to Ezeani (2014) there are eight elements of tourism.

They are pleasing weather, scenic attractions, historical and cultural factors, accessibility, amenities, accommodation, safety and security, and other factors.

1. Pleasing weather

Pleasing weather is something like fine weather with the warm sun shine. Good weather plays an important role in making a holiday pleasant or an unpleasant experience. Tourist from countries with extremes of weather Visit Sea beaches in search of fine weather and sunshine. Due to this many spas and resorts along the sea coasts come into existence. In Europe, countries like Italy, Spain and Greece have developed beautiful beach resorts. There are many such resorts along the coasts of Mediterranean sea India, Sri Lanka, Thailand , Indonesia, Australia, Philippines and some other countries have beautiful sea beaches with fine weather are best examples where weather has played a prominent in attracting tourists. In some countries hill station resorts' have been developed to cater for the needs of tourist.

### 2. Scenic attractions

Scenic attractions are also very important factor in tourism. Scenery consisting of mountains, lakes, waterfalls, glaciers, forests, desserts, are strong forces attracting people to visit them.

# 3. Historical and cultural interest

Historical and cultural interest exercised tremendous influence over travelers. Large numbers of tourists are attracted every year by the great drawing power of Stratford on avon in England because of its association with Shakespeare, or the city of Agra in India because of its famous leaning tower. Large number of Americans and Canadians visit London because of its historical and cultural attractions. So also the world famous caves of Ajanta and Ellora in India are visited by tourists because of its architecture and painting

4. Accessibility

Accessibility is another important factor of tourism. There should be accessibility for each and every location of tourist attractions. If their locations are inaccessible by the normal means of transport, it would be of little importance. All kinds of transport facilities are to be made available for such locations. The distance factor also plays an important role in determining a tourist's choice of a destination. Longer distance cost much than to short distances.

5. Facilities

Facilities are very essential for any tourist centre. They are considered necessary aid to the tourist centre. For a seaside resort facilities like swimming, boating, yachting surf riding and such other facilities like deeming recreations and amusements is an important feature. There are two types of amenities viz. natural and man-made. Beaches, sea-bathing, fishing, climbing, trekking, viewing etc. are come under the former category. Various types of entertainments and facilities which cater for the special needs of the tourists come under the latter category.

6. Accommodation

The need and necessity of accommodation cannot be ignored in tourist destination. Accommodation plays a vital role in this field. Many changes have taken place in accommodation recently. New types of accommodation, particularly, holiday villages, apartment houses camping and caravan sites and tourist cottage etc, have become very popular. Usually a large number of tourists visit a particular spot simply because there is a first class hotel with excellent facilities. Today Switzerland, Holland, Austria and the Netherlands have gained reputation for good cuisine, comfort and cleanliness.

7. Safety and security

Safety and security are vital to provides quality in tourism. More than any other economic activity, the success or failure of a tourism destination depends on being able to provide a safe and secure environment for visitors

8. Other factors

Besides the above factors, hospitality is one such factor among the variety of factors. It is the duty of the host country to be hospitable towards tourists. For this French and Indian governments have done a lot. A series of short films on various themes like "being courteous", "cleanliness" and "welcoming" a visitor" were prepared and exhibited through a wide network cinema theatres all over the country. Slogans like "welcome a visitor- send back a friend" were displayed at various important exists and entry points like railway stations, airports and seaports. Following the above methods, many other countries launched "Be nice" campaigns. It means that the tourists must be treated as friends.

### 2.1.3 Tourism Potency

The definition of tourism potency according to Mariotti (1983 cited in Bayu 2012) is everything you get in the tourism destination and the attractive place of people who wants to come there. Sukardi (1998 cited in Bayu 2012) also reveals that everything the place is has and useful to develop the tourism industry at the area. In this research, tourism potency is divided into three. They are natural potency, cultural potency, and human potency as described below:

1. Natural Potency

Natural potency means that the condition of flora and fauna, the landscape of the area such as forest, beach. The advantage and disadvantage of that area, if it develops, it will increase the visitors to come to the object.

2. Cultural Potency

Cultural potency means that all of the outcome, feel, human initiative like mores, craft, art, the ancestor heritage like building, monument, etc. There are ten cultural elements into a tourist attraction such as craft, tradition, the history of a place/area, architecture, local food/traditional, art and music, way of life of a society, religion, language, and local clothing/traditional.

3. Human Potency

Human is also potentially useful for tourism object from dance move show and cultural art show of that area.

#### 2.2 Technology in Tourism

Technology is reflected in every part of our lives. Chakraborty (2013, p.1) states that technology, has played an important role in achieving economic growth by garnering economic means for consumers to travel. The development and contribution of air travel as a means of transporting tourists to different locations is an important contribution of technology to the tourism and travel industry. The significant development of low cost carriers is another means of successful

technological applications to the tourism and travel industry. According to Aldbert, Dang & Longhi (2011 cited in Chakraborty, 2013, p.1), the tourism industry is often defined as the sectored system of innovation and production. This sectored system in tourism is extremely complex. It is given the fact that the tourism products and actors changes due to changes in the external forces. The evolvement and progress of information technology has therefore had a tremendous impact in tourism.

Among the cyclical succession of symbolic terms that have become part of global tourism discourse, 'innovation' and 'technological change' have started to occupy a privileged place and it is highly likely that they are here to stay (Blanco in UNWTO, 2011, p.6). It is not surprising, since both are central to improving business and destination competitiveness and as such, to improving the tourist's experience. According to tomorrowtourist.com (2012) the breakneck speed of digital development and technological innovation continues to impact the travel sector. For example, e-tourism related to the application of information technology. It becomes a way to promote tourism objects itself through social media (blog, facebook, twitter, tumblr, etc) animation video, e-magazine of tourism and others.

#### 2.3 Video Mapping

Video mapping is actually known as projection mapping or spatial augmented reality. According to Berna (2011, p.11) video mapping is a technique of beaming video with a standard video projector onto 3D (three-dimensional) objects like historical building and adjusting and masking the image till it seems to follow the shape of target object instead of spilling out onto walls. The aim of video mapping is to create a physical illusion of images by combining audio-visual element. Catanese (2013, p.165) states that video mapping is emerging as a projection technique that transforms any surface like building, or all kind of complex surfaces such as three-dimensional objects in a dynamic display (from large image on monuments of facades, up to virtual worlds. Thus, it can concluded that video mapping is as projection technique on 3D surfaces that

allows to explore creative potential digital technologies as something meaningful and have high selling point as a digital work art.

### 2.3.1 How to Make Video Mapping

Catanese (2013, p.167) says that there are at least two ways to make video mapping. First step is preparation. Prepare the images to be projected on a surface/façade. The images can be projected using the building as a huge flat screen. The building itself creates a mask. The second step is working on masking for example preparing masks like kind of opaque pattern with exact shape and position of the various elements of the surface/façade. The video projected on the masks or in the space between the masks, using a simple alpha-channel technique (the way to specify the degree of opacity of clip). However, according to Ahmad (2013, p.2) there are some steps to make video mapping. The steps include preparation, blue print, setting up the tools, calibration of the photo, creating the masks, and animating the video as described below:

### 1. Preparation

Best way to work is next to your video projector but that is not always possible. In any case there are different ways to go. Resolution approach is to consider the specs of your video projector and match your project with the maximum resolution of the projector. Video approach is to set the work/project on PAL/NTSC standards (for example 720X576) or HD in case to work with an HD projector.

# 2. Blue Print

Next thing would be in most cases to take a picture of the building or the object you are going to project on. This image will be used to get a layout to create masks or 3D references for the projection points. This is the most delicate part of the process. It needs to use a camera lens that has the same ratio as the projector lens. Then, place the camera beside or on top of the projector lens, and make the photo. The important point is that the camera lens is in exactly the same position as the projector lens.

### 3. Setting Up the Tools

Video-mappers are like vampires. They should work at night. If that is not possible, try to make the projection area as dark as possible. Setting up the tools or equipment consumes a great deal of the time. First of all, video-mappers have to place the projector exactly in front of the object because side projections are very unlikely to work. The video-mappers might need a distance measuring laser tool and can also use a bubble level to make sure that the position of the video projector lens is perfectly horizontal and that matches the camera lens position. Once the video projector is placed, and the cables have been carefully taped and protected, they can start their testing. It is also important to know that a projector is very sensitive to vibrations and weather conditions.

#### 4. Calibration of the Photo

After having the right position then calibrated image by opening a photo editing software like Photoshop, and set the image size to the resolution of the projector. After that set the display to 100% then projecting the image back to the object, and it will be seen clearly if the image is calibrated (every element in an image in accordance with the actual building).

# 5. Creating the Masks

This step can be done with any program that is familiar as with Adobe After Effects, Adobe Illustrator, and Adobe Photoshop. There are hundreds of tutorials in the world wide web about how to create a mask for the video mapping

#### 6. Animating the Video

Now the real fun begins on this step. After having the masks then it is time now to decide what we are going to do with them. Video-mapping is not restricted to any particular software at all. Video-mappers should just use the program that is used for your animation/film/video stuff such as Adobe After Effects, Modul8, Resolume, Final Cut, Adobe Premiere, Macromedia Flash.

In addition, Joreg (2013) states that If the projection target is a flat surface, like a wall and the projector is at an arbitrary position, not exactly facing the part of the wall as wanted to project to, the projected image looks distorted. It can easily pre-distort the image project using Homography (Transform 2d) so that it appears undistorted on the surface. It can always get a correctly looking projected image on a flat surface independent of the projector position, orientation to the surface and its lens characteristic. When projecting onto an arbitrary threedimensional surface, no matter how the projector is positioned and oriented towards the surface, the resulting image will mostly look distorted. There is one point from which the projected image looks perfectly aligned, that is the position of the projector. So in order to achieve an undistorted look on an arbitrary surface, it simply have to provide the projector with an image that depicts a view onto that surface from its own (the projectors) position. In other words, consider the real projector being a camera in virtual space, viewing a virtual replica of the real projection surface.

Three-dimensional effect could created by using multiple projectors because it calibrated along the surface that acts as a display and properly driven. Unless using a single projector to make it has two-dimensional image not aligned to the surface. Basically a performance of video mapping is prepared in six steps, data acquisition (display), data processing (display/projector), creation (sound/video design), test (possibly on the display) reworking, projection.

The most important equipment for the video mapping is the projector. Its power must be proper for example small object or environments needs at least brightness of 5,600 lumens and up to 20,000 lumens for clear and precise images over large areas or long distances. A camera with a good lens also becomes part of important things because it needed to adjust the lens to match as much as possible to the lens of projector in order to control the tilt of the lens and angle of view. It should be place on or very close to the projector, located on the front area.

The most important parameter is the maximum resolution of the projector, depending on the distance and size of the image, to be taken as a guideline for the entire project. The next step, the most delicate and difficult of the workflow, is the production of a model of the surface that will be the dynamic display of the screening, with its reference points. Instead the most creative phase is defines visual design and sound design. Then, check that the wanted effects will be correctly seen and perceived by the user, by studying carefully the positioning of the projector and the audio speakers. Therefore, in order to realize a video mapping project, there should a preliminary feasibility research, then specific skills (video design, sound design, interactive design) and a deep knowledge of compositing, 3D graphics, 3D polygonal modeling, video editing, motion graphics, texturing, lighting e rendering, and also basic knowledge of cinema and photography.

But the entire management of a project needs to deal with external relations (customer, supplier, copyright holdings, institutions, sponsors), involving also other skills.

## 2.3.2 Tips to Leverage Video Mapping

Smith (2014) states that there are five tips to leverage video mapping. They are described in five points; content and craft, technical enhancements, movement, storytelling, and interactivity

1. Content and Craft

The success of a project inspires the makers to upgrade their video assets while content can be enhanced and rendered again. Alternatively, one can upgrade the content along with better renderings, better animation and illustrations, giving more emphasis on 3D content and better accuracy in the details. The enhanced approach always drives audience response and consumer behaviour to a positive result.

2. Technical Enhancements

With more and more sophisticated technology doing the rounds, one needs to ascertain if some technology limits content development and functionality. The enhanced experience for future projects needs to work in reducing those limits. It helps if the media server and technology is upgraded, and the projection quality can be enhanced to deliver more intensity, resolution and clarity.

3. Movement

With environmental elements which move naturally, presentations can make a terrific impact and an exciting experience. Projections can follow moving targets which heightens the visual experience for the audience. Also, since the technology is not utilized before, the newness factor creates a strong impact.

4. Storytelling

A video mapping production delivers a sparkling spectacle like the fireworks display. For the audience to have a strong repeat value, it is essential to have newness in it, every time it is rendered. With strong storytelling elements including mood and tone, marketing brands can play with audience expectations and eventually fulfill them with different elements of conflict and resolution. The creative process should be strong enough around the project, with powerful content in accordance to the venue, target audience and strategic context of the product or service.

5. Interactivity

Most people tend to have memories about past experiences when they are part of it. By introducing several interactive elements along with projection mapping, event marketers can build emotional resonance and visual impact. A multi-user interface is required to interact and manipulate elements and this can be done without shelling out ludicrous amount of money.

## 2.3.3 Steps of Virtual Replica of Video Mapping Real Scene

According to Joreg (2013) there are three steps of virtual replica of real scene of video mapping as described below:

1. Define the origin for real worlds coordinate system which will match with axis and grid (DX9)



Picture 1: Real Scene For Real Coordinate System Source: http://vvv.org

- 2. Create the target projection surface as a 3D model and place it correctly in virtual scene regarding the coordinate system origin.
- 3. Measure the position, orientation, and lens-characteristic of the projector.



Picture 2: Projector Measure Source: http://vvv.org

The result of the simulation of implementation based on the theory above is displayed on the pictures below:

1. Flat texture aligned to flat surface

Here it is the goal to project images in a way that they feel like a property of the target surface, ie. Like they where a texture of the object. The textures should look exactly the same, from whatever position view the surface/sculpture and certainly independent of the projectors position.



Picture 9: Flat textures aligned to the surface Source: http://vvv.org

2. Projecting on two sides 3D model with one perspective

Knowing that those effects only work from one perspective a spectators view was chosen from which both sides of the surface can be seen. That is in the middle of the two real projectors to be used.



Picture 3: Projecting with one perspective Source: http://vvv.org



Picture 4: The Simulation of Implementation Result Sources: http://vvv.org

The above picture demonstrates that the 3d-illusion only works from the specified virtual camera/spectator position.

# 2.4 Event

Event is defines as an activity that is held to celebrate the important things of human life including culture, customs, religion for certain purposes. Shone and Parry (2002 cited in Noor, 2013, p.8) defines an event as below:

Special events are that phenomenon arising from those non-routines occasion which have leisure, cultural, personal, or organizational objective set apart from the normal activity of daily life, whose purpose is to enlighten, celebrate, entertain, or challenge the experience of a group of people

According to Noor (2013, p.9) the special event is divided into four categories. They are special event, leisure event, cultural event, personal event, and organizational event as described below:



Chart 1: Special Event Categories Sources: Noor (2012, p.9)

# 1. Leisure Event

Leisure event has grown since the Romans held a *gladiator*. Leisure event that existed at the time is the match that held in the Coliseum, Rome, Italy with the theater seating arrangement and shows all the fighters of *Gladiator* match. Nowadays, there are so many development of leisure event based on sports activities. It includes all of the activities that have elements of matches in and bring many visitors on that event.

2. Cultural Event

Cultural event becomes a category that is built a special event. Culture is always identical with traditional ceremony and tradition that have a high social value in social life; therefore its implementation becomes important. The implementation of this event will be more attractive with the various development of technology.

### 3. Personal Event

The events that included in the category of personal events are all activities in which family members or friends involved. Many aspects of contemporary life have transformed the personal event such as birthday parties, weddings and even other private celebrations.

#### 4. Organizational Event

Organizational event is a big activity in each organization. The form of organizational event is adapted to the goals of the organizations such as conferences, exhibitions, expo and others.

### 2.5 Dul Muluk Theater

Dul Muluk is one of traditional art performance in South Sumatra. It is usually performed on special occasion like the celebration of Palembang anniversary, the celebration of Indonesia Independence day, circumcision rites or on entertainment stage. The story of Dul Mulk performance is usually about palace life. It is told the number of characters such as king, a royal army commander, royal guards and royal maids. In 1960, Dul Muluk was performed for seven days and nights with pauses in between. Today, Dul Muluk performance last only two to three hours. There is something unique in Dul Muluk, there are no actress during the performance means that female character in the story played by a male actor made up and dressed like a woman. In addition, even though Dul Muluk is usually performed in Palembang, most of troupes come from Pemulutan village in a suburban area of Palembang.

Ediruslan and Hasan (1993) state that around 1919 a teacher introduced a performing art of Dul Muluk for the first time in Tebing Abang, a village situated 80 kilometers from Palembang, in the sub of sub district of Banyuasin III (three). The teacher's name is Hasan from Talang Pangeran sub district of Pemulutan, the district of Ogan Komering Ilir. The people from Pemulutan were those who played significant role in the formation of Dul Muluk performing art. The consequence that should be taken by the player of Dul Muluk is required to have singing ability and high-skills of stage performance to the actor of wayang bangsawan.

Similar to most of performing arts in Indonesia, Dul Muluk also experiences difficult time regarding modernity. In its own period, this performing art has taken good places in the heart of its supporters, not only in its original place but also in its surroundings.