The Phenomenon of Crisis Management Development on Tourism Destination

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Abstract

In every destination, crisis could be affecting the global tourism industry sector. Gurtner (2007) asserted that crisis management as a science, is still in its infancy largely due to the difficulties in standardizing, measuring, and comparing one crisis situation with another. Crisis usually related to political issues, economic or social situation at the destination and distributed all over the world through numerous media channels. This paper aimed at providing a combination concept of crisis management and ergonomic perspective. A model came to this study to answer the phenomenon of crisis management on tourist destination. By providing a literature-based overview on how a decline in visitor numbers due to crisis management and the destination do not implement the ergonomic components; an integrative model designed to know the answer why the numbers of visitor declined to tourist destination and why the income from tourism sectors decreased. The results of this paper will try to describe and to emphasize particular types of tourism crisis and accordingly, possibilities to improve and manage them. Some literatures-based theoretical and it implementation to Bali as tourist destination used to elaborate tourism condition such as: (1) the type of tourism crisis in Bali as a favourite tourist destination; (2) the tourism product and services of Bali tourism from ergonomic perspective; (3) the relationship of crisis and its supporting product and services for Bali tourism from ergonomic perspective; (4) the phenomenon crisis and its tourism development from ergonomic perspectives to quality and sustainability of Bali tourism.

Keywords: Tourism Crisis; Ergonomic Destination; Tourism Development; Travel Management.

INTRODUCTION

Background

A big country with a diverse culture is the identity of the Indonesia. However, this strength has not been able to make the development and growth of Indonesian tourism at the forefront of bringing in foreign tourists compared to Thailand, Singapore and Malaysia. The crisis of trust from the world community came to Indonesia due to the lack of updated information on security, comfort and services in the tourism sector. A tourism crisis is defined as any unforeseen tourism event that affects tourists' confidence in a destination that
interferes with its ability to operate normally. The tourism crisis describes conditions that can threaten the normal operation and conduct of tourism businesses; damage the tourist destination as a whole including the reputation of safety, attractiveness, comfort; thus affecting the perception of the destination which in turn causes a decline in the local tourism and travel economy, affects the tourism business and affects tourist visits and expenditures (Sonmez, Apostolopoulus, Tarlow, 1999; WTO, 2003; King and Cottrel, 2007). No tourist destination is completely immune from the crisis but to minimize the vulnerability of the crisis, stakeholders in tourist destinations need to implement greater initiatives in managing their tourist destinations (Bierman, 2003). Ergonomics-based on destination management can make Bali as a quality and sustainable destination. The government, as the highest stakeholder in tourism management, needs to provide crisis management knowledge to the community after the COVID-19 pandemic.

More systematic input from human resources was identified as a way to assist tourism businesses in preparing for and dealing with crisis (Pforr and Hosie, 2008). Bali and even Indonesia need to prioritize destination development on ergonomic destination management and the placement of human resources that are competent in developing their tourism. This can create a sense of security, comfort and excellent service for destinations.

During covid 19, Bali experienced a decrease in the number of tourist visit, both domestic and international. Based on hotel occupancy in Bali, in April – August 2020, the Bali hotel occupancy become 0%, it is means no visitor or tourist stay at hotel, and no arrival at the airport. On December 2019, the hotel occupancy only became 62.55%; in 2020 is 19.00% and hotel occupancy target on December 2021 is 30% (Bali Tourism Authority, 2021).

From another data recorded, crisis in Bali came from tragedy Bali bomb blast in 2002 and 2005. The tourism sector in Bali decreased in tourist arrival on 2003 and 2006. Fluctuation in the number of foreign tourists occurred in the range 1997 to 2007; from 1997 to 1998 and 1999, the number of visits to Indonesia decreased by about 500 thousand tourists (down 11 percent). The decline tourists visiting Bali only 3 percent. After political situation in 1998; the number of tourists visiting Bali rise steadily. The decline tourists again occurred in 2003 and in 2006. As well known in 2002 and 2005 as the tragedy Bali bombings. In Bali, the number of tourists fell from 1,28 million to 99 thousand.

Learn from experienced the fluctuation Bali tourism, and compared to Asia tourist destination; Bali need to improve the services including the policy, security, safety, coordination and information (UNDP, et.al., 2003; Prideaux, 2005; Mahadewi, et.al., 2014; Diaz and Rodrigues, 2016; Olivaud and Haxton, 2019; McKercher, et.al., 2021).

**Research Objectives**

The research objectives of this study were as follows: (1) To identify the type of tourism crisis in Bali as a tourist destination; (2) To identify the tourism product and services of Bali tourism from ergonomic perspective; (3) To identify the relationship of crisis and supporting product and services for Bali tourism from ergonomic perspective; (4) To construct of phenomenon crisis and its tourism development from ergonomic perspectives to quality and sustainability of Bali tourism.

**LITERATURE REVIEW**

**Crisis Management and Its Important to Tourism Industry**

Martens, et.al. (2016) wrote the importance of crisis management for the
tourism industry. Tourists or visitor came or not come to visit a specific tourism destination is because its image. Image is pictures, figure, portrait that many people have about personal, company, organization, or product. Image as part of behavior of an individual or self-image (Schiffman & Kanuk, 2008 on Mahadewi, et.al, 2014). The destination image differs from other image types since it is inevitably linked to the destination image is also highly influenced through non tourism related information sources (Echtner and Ritchie, 2003). By getting the impression, that the destination is not safe to visit, potential tourists will exclude the destination from their list of places considered for a visit (Glaesser, 2003).

Crisis classification based on Sausmarez, 2007 on Martens, et.al (2016) put into three types: (1) potential crisis; (2) latent crisis, (3) acute crisis (see figure 1). Potential crisis included (1) crisis communication; (2) crisis management; (3) crisis preparedness; (4) crisis prevention.

**Ergonomic to Tourist Destination**

Ergonomics is a multidisciplinary field that examines human activities and their environment with the principles of fitting the job to the person (Grandjean and Kroemer, 2000). Ergonomic is about designing for people, and terminology of ‘workplace’ replaced to ‘comfort zone’ to easier implementation to tourism destination perspectives. Ergonomic is defined as the science of fitting a workplace to the user’s needs, ergonomics aims to increase efficiency and productivity and reduce discomfort. In a tourist destination, implementation of ergonomic ideally used in every facility and supporting tourist attraction. Capacity of roads, pedestrian area, tourist capacity in tourist objects, bus or transport composition, stairs in every accommodation or in tourist object, all need to be assessed when creating a workspace or comfort zone, whether it is at the indoor or at outdoor (Manuaba, 2006; Irwanti and Mahadewi, 2019).

**Figure 1.** The Temporal Classification of Crisis

**Ergonomics Information, Communication, Technology**

Current technology developments as a tool for tourist to access information. The Ministry of Communication and Information (2019), used the information technology to support tourist destinations which include 3 stages: (1) Planning: tourists need planning before traveling to tourist destinations by searching for
information through the web, page or social media which is then continued by making online reservations from flight ticket reservations to lodging; (2) on the way to tourist destinations (on tourism system we called ‘bridging element’), tourists use mobile phones to access tourist objects, culinary, tourist attractions, and others; (3) after traveling, tourists share experiences through the media social. The use of information technology in this digital era is very important.

To support the process of delivering information precisely and accurately, it is necessary to apply the display principle. The display principle used on the web, page and social media is a form of ergonomics implementation that makes it easier for tourists to get information about the tourist destinations they are going to. The display principle has a function to avoid errors in information, is easy to remember, interesting to read, avoids fatigue and boredom of the content that is displayed, and so on. Font arrangement, spacing, layout, color, animation, and content are the basic principles of using displays. (Manuaba, 2016; Sever, 2019; Sethi, 2020).

**Ergonomics in tourist activities**

Tourist activities are tourist activities carried out while in tourist destinations. Various tourist activities carried out by tourists include cycling, tracking, jogging, walking in the rice field, rafting and so on. In carrying out tourism activities, it is always strived to keep tourists healthy, safe and comfortable.

The application of ergonomic principles in creating safety and comfort in carrying out tourist activities is very important, in this case it needs to be considered: 1) the type of tourism activities carried out (whether in the category of activities with heavy, medium or light loads), 2) the equipment used whether it meets the safe and comfortable rules, and 3) the use of time in carrying out activities does not exceed the physical and psychological capacity of tourists. For example, before carrying out cycling or tracking activities, tourists who participate in these activities must meet the provisions of 1) the suitability of capacity with tourism activities in terms of age, gender, physical fitness and physical capacity, 2) determination of mileage and 3) rest time, rest needed when the physical load increases which is characterized by an increase in pulse rate (Genaldy, et. al., 2007; Shackel, 2007; Manuaba, 2016; Lintangsari, et.al., 2020).

**Tourism Development**

Tourism is the set of relationships that determine people’s temporary and not habitual displacement, including at least one overnight stay in a location other than the usual residence (Andreis & Carioni, 2019). Tourism comprises a complex, collaborative, interrelationship of suppliers organization and destinations. Destination managers and leader of the organization facilitate destination-level partnership between various stakeholders. Destination managers also mitigate risks, crisis and risk perceptions to establish a positive image and increase the attractiveness of tourist destinations. Despite the interest in crisis impacts, a paucity of research exists on understanding how destination leaders or managers address crisis at the local level (Fyall, Garrod & Wang, 2012; Fyall et.al, 2012; Chew & Bahari, 2014; Becken & Hughey, 2013 on Todman-Lewis, 2017).

**RESEARCH METHODS**

This research used systematic and integrative literature review. Systematic review is a synthesis of the available research and experiment which concentrate on a specific research problem. This type of review helps the researchers to overcome likely biases by adopting some

methods (De Souza, 2010). An integrative literature review is a non-experimental design. The researchers objectively put critique, summarize and make conclusions about subject matter through a systematic search, categorization and thematic analysis of past qualitative and quantitative research studies on the subject (LoBiondo-Wood and Haber, 2010; Sparbel and Anderson, 2000; Torocco, 2005., on Dela and Janet, 2017). An integrative review, a comprehensive and inclusive methodology permits the inclusion of both quantitative and qualitative research articles (Whittemore and Knaff, 2005). Secondary data collected from literature related topic crisis management, tourism, destination, ergonomic; and a content analysis was conducted to documents.

RESULT AND DISCUSSION

From some literatures which been used for this study; show that crisis is a condition or event intensified by flawed managerial structures or resistance to change (Gurtner, 2007; Fyall, Garrod and Wang, 2012; Martens, et.al., 2016; Todman-Lewis, 2017; Rossi, 2020; Bandoi, et.al. 2020; McKercher, et.al. 2021). Bali as a tourist destination have experienced in crisis who affected tourism sectors, such as political events, natural disasters, Bali bomb blast and pandemic covid 19. To provide an overview of chosen literature the used publications are designed as an integrated model in figure 2.

CRISIS ON TRAVEL & TOURISM

Figure 2. The Integrative Research Model
The Crisis Management on Tourism and Ergonomic Perspectives on Destination- Study Case: Bali
(Adopted from Gurtner, Y., 2007; Fyall, Garrod and Wang, 2012; Martens, et.al., 2016; Todman-Lewis, 2017; Rossi, 2020; Bandoi, et.al. 2020; McKercher, et.al. 2021)
The figure shows the integrative theory concept and its implementation to condition of Bali tourism. This figure as the answer of the all objective research. Potential crisis could become from lack of service, lack of design of infrastructures, facilities or services. Latent crisis usually came from political issue and terrorism. And pandemic covid 19 as part of acute crisis for destination.

There are four types of ergonomic called as a total ergonomic, it can be described into: (1) ‘physical ergonomic’ examines the relationship between physical activity and human anatomy, anthropometry, physiology and biomechanics; (2) ‘Cognitive ergonomics’ examines the human relationship with memory, mental process, perception, reasoning and motor responses. It relates to decision making, human and computer interaction, mental works, workload, training, stress.; (3) ‘Organizational ergonomics’ examines the relationship between humans and organizations, policies, working time, working conditions, participation and team work are important components in the organization (Manuaba, 2006). And (4) environmental aspect included clean, safety, hygiene.

Aspects of security and comfort in tourist destinations need to be considered, not only for tourists but also for managers and even all tourism stakeholders. Safe conditions which are avoiding the risk of harm while being comfortable means the fulfillment of one’s physical and psychological needs based on each individual’s perception. Safe and comfortable conditions are part of an ergonomic study that considers physical, cognitive, and environmental aspects. Some things that need to be considered in supporting aspects of security and comfort in tourist destinations are infrastructure and facilities. In general, tourist destination facilities do not have ergonomic standards that refer to appropriate technology (a) Economical, the technology used must take into account the benefits to be obtained, b) technical, the technology chosen does not absorb much energy, c) ergonomic, useful technology and does not have a negative impact on physical and mental health, d) socio culture, tourist needs are adjusted to culture and aesthetic values, e) energy saving, excessive use of energy can damage the existing order, f) does not damage the environment, the technology used does not have a negative impact on the environment. Ergonomic standards that refer to appropriate technology can be used as the basis for building facilities to foster a sense of security and comfort for tourists. The development of facilities and infrastructure as well as supporting facilities in tourist destinations already has a reference standard but has not been implemented comprehensively.


One of the provisions for the construction of infrastructure facilities made in this regulation refers to the capacity and needs of users (tourists) such as using the dimensions of the human body (anthropometry) to determine comfort and safety in using the facilities. Anthropometry is one of the fields of study in ergonomics. Anthropometric data is used for various purposes, such as work station design, work facilities, and product design in order to obtain appropriate and appropriate sizes with the dimensions of the human limbs that will use them (Wingjosoebroto, 2008).

So that the use of anthropometric measurements is not only used in designing infrastructure and facilities but also used to design every product produced in tourist destinations, including hotel products such as hotel design, room design, hotel equipment design and including souvenir designs. In addition to anthropometry, the use of the principle of visual display in ergonomics in tourist areas is important. For example the placement of identity gates, displays or directional signs, maps and certain signs to find locations in tourist areas. Determination of viewing distance, typeface, character size, color selection, placement will minimize tourist errors in receiving information (Irwanti & Mahadewi, 2019).

As a destination, not all of tourism aspect used of ergonomic procedures and rules. When the destination managers or leaders do not stand and follow the ergonomic component; it can become crisis in all aspect of facilities, infrastructures, services related tourism. A crisis, especially in its early stages, tends to generate a situation of chaos, panic, uncertainty and general confusion. In order to increase the probability of recovery strategy success, it is equally essential managing human and financial resources and fostering an adequate level of cooperation between all stakeholders, from public to private sectors, from tourism central bodies to local offices. It will help destination to make an image. The physical damage caused by tourism crisis can be managed and restored quickly, but the damage done to the image of the destination might be more complicated to rebuild and strengthen (Minar, L. 2019). The destination image can play a crucial role in tourism behavior and intention to travel (Mahadewi, et.al., 2014).

Bali as a small island that had suffered from a man-made crisis all had different impacts on tourism behavior. Bali reported the declining tourist arrival during crisis on 2003, 2006 (see figure 1 and 2). Table 1 show that crisis happen in 2021 when the arrival of tourist (dominant domestic market) going to decrease. The condition of destination of Bali took place as potential and acute crisis. It will become two option: positive impact and negative impact. McKercher, et.al (2021) mention on their research, Bali as premier tourism destination. This statement gave positive impact to Bali. Another impact came from covid 19 and affected economic sector. Economic crisis affecting tourism include global recession, weak national economies, and sudden changes in exchange rates. All these can result in a loss of tourist or consumer confidence and alter the propensity to travel. Any crisis in the categories reviewed as figure 4, will damage the tourism sector’s ability to operate normally, either because of damage to transport and other infrastructure and facilities, or because of the perception that the destination is unsecure or unsafe. Sensitivity to destination development disturbances can be caused by the inability of the destination to implement ergonomic rules, which should have a good impact to Bali as a tourist destination.
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Table 1. Bali Tourists Arrival 2018-2021

<table>
<thead>
<tr>
<th>Month</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>743,456</td>
<td>793,527</td>
<td>879,702</td>
<td>282,248</td>
</tr>
<tr>
<td>February</td>
<td>655,719</td>
<td>692,113</td>
<td>721,105</td>
<td>240,608</td>
</tr>
<tr>
<td>March</td>
<td>762,622</td>
<td>787,616</td>
<td>567,452</td>
<td>305,579</td>
</tr>
<tr>
<td>April</td>
<td>777,287</td>
<td>795,997</td>
<td>175,120</td>
<td>330,593</td>
</tr>
<tr>
<td>May</td>
<td>682,521</td>
<td>656,082</td>
<td>101,948</td>
<td>363,959</td>
</tr>
<tr>
<td>June</td>
<td>1,156,151</td>
<td>1,287,877</td>
<td>137,395</td>
<td>498,852</td>
</tr>
<tr>
<td>July</td>
<td>906,347</td>
<td>935,930</td>
<td>229,112</td>
<td>166,718</td>
</tr>
<tr>
<td>August</td>
<td>770,364</td>
<td>925,360</td>
<td>355,732</td>
<td>202,187</td>
</tr>
<tr>
<td>September</td>
<td>774,144</td>
<td>812,003</td>
<td>283,349</td>
<td>298,950</td>
</tr>
<tr>
<td>October</td>
<td>762,124</td>
<td>853,007</td>
<td>337,304</td>
<td>468,826</td>
</tr>
<tr>
<td>November</td>
<td>806,397</td>
<td>852,626</td>
<td>425,097</td>
<td>No data yet</td>
</tr>
<tr>
<td>December</td>
<td>960,859</td>
<td>1,152,901</td>
<td>382,841</td>
<td>No data yet</td>
</tr>
<tr>
<td>Total</td>
<td>9,757,991</td>
<td>10,545,039</td>
<td>4,596,157</td>
<td>3,158,520</td>
</tr>
</tbody>
</table>

Source: Bali Tourism Authority (5 November 2021).

CONCLUSION

The results of the study may be significant to the effective practice for policy maker by helping destination managers identify factors affiliated with crisis and with ergonomic preparedness to facilitate the continuation of core business activities before, during, and following crisis. The results offered guidance to destination leaders or managers on improving readiness at the local level. Other contribution of the study to policy maker, destination leaders, destination business to adopt a proactive approach to planning and managing for possible risks affecting tourism destination and its business operations.

The conclusions that could be taken from this study are: (1) The type of tourism crisis in Bali as a tourist destination during the pandemic covid-19 were identified as acute crisis; (2) The tourism product and services of Bali tourism need to be improved from ergonomic perspective; (3) The relationship of crisis and supporting

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product services for Bali tourism from ergonomic perspective were positively impact to the growth of Bali tourism destination development; (4) The coordination and cooperation of tourism stakeholders is needed to develop Bali tourism destination development. Leaders or managers can handle crisis effectively by knowing which preparedness strategies are best suited for specific risks by using ergonomic approach; and how to identify qualified individuals to collaborate with when handling emergencies.

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