Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Management

Diploma Thesis

The impact of natural disaster on hotel marketing with focus on digital marketing

Author: Bc. Kateřina HRUBÁ

Supervisor: Ing. Richard SELBY, Ph.D.

CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

DIPLOMA THESIS ASSIGNMENT

Bc. Kateřina Hrubá

Economics and Management
European Agrarian Diplomacy

Thesis title

The impact of natural disaster on hotel marketing, with focus on digital marketing

---

Objectives of thesis

The main objective of the diploma thesis is to analyse digital marketing of hotels that have undergone a natural disaster and identify whether the event had any influence on the way they promote themselves on digital platforms.

On the basis of the research, the thesis will make recommendations to a certain hotel regarding their whole approach to marketing.

Methodology

This thesis is presented in two main parts: Theoretical and Practical.

The theoretical part is mainly a review of current literature, with a focus on the hospitality industry, natural disasters and digital marketing.

The practical part commences with a study of background information regarding the situation of the areas that were hit by any natural disaster.

This is followed by a number of structured interviews with hotels that experienced natural disaster. The interview questions to be focused on the marketing of chosen hotels after they reopened. During the interviews, emphasis to be on use of digital marketing including social medias and other ways of digital promotion.

Interviews to be analysed and salient points identified to reach the conclusion.

The proposed extent of the thesis

Approx 60-70 pages

Keywords

Natural disaster, Marketing, Digital marketing, Hotel industry, Hotel, Resort, Hostel, Social media

---

Recommended information sources

Dabrowski D., et al., (2019), Market orientation and hotel performance: The mediating effect of creative marketing programs. Journal of Hospitality and Tourism Management. Vol. 41. December 2019, pp: 175-183

Field C., et al., (2012), Managing the risks of extreme events and disasters to advance climate change adaptation, New York, NY. USA.: Cambridge University Press. ISBN 978-1-107-60780-4.

Helmer M., Hilhorst D.J.M. (2006), 'Natural disasters and climate change', Disasters, vol. 30, no. 1, pp. 1-4. https://doi.org/10.1111/j.1467-9523.2006.00302.x

Kotler P., (2016), Marketing Management, Harlow UK., Pearson Education, 832pp, ISBN-13: 978-9332557185

Reid R.D., Bojanic D.C., (2010), Hospitality marketing management. 5th ed. Hoboken USA.: Wiley. 672pp.,ISBN 978-0-470-08858-6.

Expected date of thesis defence

2019/20 SS – FEM

The Diploma Thesis Supervisor

Ing. Richard Selby, Ph.D.

Supervising department

Department of Management

Electronic approval: 31. 3. 2020

prof. Ing. Ivana Tichá, Ph.D.

Head of department

Electronic approval: 31. 3. 2020

Ing. Martin Pelikán, Ph.D.

Dean

Prague on 05. 04. 2020

Declaration

I declare that I have worked on my diploma thesis titled **"The impact of natural disaster on hotel marketing with focus on digital marketing"** by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on April 6th 2020   _____

Acknowledgement

I would like to thank my supervisor Ing. Richard Selby, Ph.D. for his advices, all hotels that agreed to be a part of this thesis and their representatives. I would like to dedicate this thesis to both my grandfathers who have been my role models whole my life, unfortunately, none of them can be here with me.

The impact of natural disaster on hotel marketing with focus on digital marketing

Abstract

Diploma thesis is focused on marketing of hotels, namely after they experienced natural disaster. The main aim of this thesis is to analyze marketing strategies of selected hotels and find whether the strategy has been changed as a consequence of natural disaster. Thesis is divided into two parts – theoretical and practical. The theoretical part deals with term *natural disaster* and its determinants. Furthermore, provides data and statistics related to natural disaster. Marketing and its new forms are discussed in theoretical part as well as use of new technologies and their advantages in hotel industry. The second part of thesis contains the analysis of selected hotels via short form where hotels provide basic information and information related to their marketing and natural disaster they faced. According to interviews done with all selected hotels, it is possible to make suggestions and recommendations in marketing process of a selected hotel that is in the same situation now.

Keywords: Natural disaster, Marketing, Digital marketing, Hotel industry, Hotel, Resort, Hostel, Social media

Dopad přírodní katastrofy na hotelový marketing se zaměřením na digitální marketing

Abstrakt

Diplomová práce je zaměřena na marketing hotelů, konkrétně poté, co zažily přírodní katastrofu. Hlavním cílem této práce je analyzovat marketingové strategie vybraných hotelů a zjistit, zda došlo ke změně strategie v důsledku přírodních katastrof. Práce je rozdělena na dvě části - teoretickou a praktickou. Teoretická část se zabývá pojmem přírodní katastrofa a její determinanty. Dále poskytuje údaje a statistiky týkající se přírodních katastrof. Následná teoretická část je věnována marketingu a jeho novým formám, využití nových technologií a jejich výhod v hotelnictví. Druhá část práce obsahuje analýzu vybraných hotelů prostřednictvím krátkého dotazníku, kde hotely poskytují základní informace a informace týkající se jejich marketingu a přírodních katastrof, kterým byly vystaveny. Podle rozhovorů se všemi vybranými hotely je možné navrhnout a doporučit kroky pro vybranému hotelu, který je nyní ve stejné situaci jako dotazované hotely.

Klíčová slova: Přírodní katastrofa, Marketing, Digitální marketing, Hotel, Rezort, Hotelové služby, Sociální síť

Table of content

1 List of Pictures

2 List of Figures

3 List of Tables

1. Introduction

Natural disasters and environmental hazards pose enormous risks to humans, not only in the immediate danger of life, property, but also due to subsequent consequences in the form of further damage or disasters.

People are afraid of these risks and try to eliminate them, especially by warning and information systems. For some natural disasters and environmental hazards, the elimination and minimization of damage is possible, for others the onset and impact are rapid and overwhelming. People are helpless against them and they have no choice but to get used to this risk or move out of vulnerable areas. Natural disasters do not only affect people's lives but basically everything – politics, infrastructure, trade, businesses, services, etc.

Highly vulnerable area to a natural disaster are hostility services, hotels in particular. Hotels are highly dependent on the flow of guests and seasonality. In some areas of the world seasonality does not play a role, because the weather is more less steady throughout the whole year. However, when the natural disaster happens, hotels are powerless against it. Depending on the intensity of disaster, hotels may be able to restart with success, but they may shut down for good. There are several factors that influence the result and marketing is one important part of that.

The thesis looks into the situation when hotels opened again after they were impacted by natural disaster and analyses whether marketing played crucial role. First part discusses natural disaster and marketing separately, lays basic information for better understanding of the second part of the thesis which is research focused on digital marketing of hotels after natural disaster.

The aim of the thesis is to introduce basis data about natural disasters, show new interesting ways of marketing in 21st century and provide answers whether the marketing is impacted and how hotels deal with the situation of reopening, whether they switch to a new marketing strategy or use the same method as before.

2. Objectives and Methodology

In order to analyse marketing of hotels after natural disaster there are objectives that should be reached by chosen methods. Description of objectives and methodology is written below.

2.1 Objectives

The main objective of the diploma thesis is to analyse digital marketing of hotels that have undergone natural disaster and if the event had influence on the way how hotels promote themselves on digital platforms. Furthermore, the thesis will make recommendations to a certain hotel based on the results of the research. Besides that, thesis describes what is understood under the term *natural disaster*, provides statistics and introduces main trends in digital marketing in the hostility services.

2.2 Methodology

The literature review of the thesis is processed on a basis of available scientific articles and books with a focus on the natural disasters and digital marketing.

The research strategy for this thesis begins by gathering and studying background information regarding the situation of the areas that were hit by any natural disaster. To narrow the analysed area time period was set for the years 2000 – 2019. After the analysis is done, the second part of the whole research starts. Interviews with hotels that experienced natural disaster are held. The interview questions are focused on the marketing of chosen hotels after they reopened, the emphasis during interview is on use of digital marketing including social medias and other ways of digital promotion. To collect diverse answers and to be able to see different ways of marketing, different categories of hotels were included such as luxurious resorts, low-cost hostels and semi-priced hotels.

3. Literature Review

3.1 Characteristics of natural disaster

Every year natural disasters kill around 90 000 people and affect close to 160 million people worldwide. Natural disasters include earthquakes, tsunamis, volcanic eruptions, landslides, hurricanes, floods, wildfires, heat waves and droughts. They have an immediate impact on human lives and often result in the destruction of the physical, biological and social environment of the affected people, therefore having a longer-term impact on their health, well-being and even survival (WTO, 2019).

This introductory chapter gives a general overview of the situation regarding natural disasters, defines important terms and assesses factors determining natural disaster risk and possible increases.

3.1.1 The cornerstones of (natural) disaster

In the words of Blaikie, Cannon, Davies and Wisner (1994) "disasters occur when hazards meet vulnerability". To comprehend the definition, it is necessary to explain what is hazard and vulnerability and for the future understanding also terms disaster risk and exposure.

3.1.1.1 Hazard

Natural Hazards (and the resulting disasters) are the results of naturally occurring processes that have operated throughout Earth's history. Such processes are beneficial to humans because they are responsible for things that make the Earth a habitable planet for life. For example, volcanism has been responsible for producing much of the water present on the surface, and for producing the atmosphere (Nelson, 2018).

Under term hazard is understood the probability of a sudden event or a chain of sudden events that have the potential to cause loss of life or property (IFRC). The presence of people is a key otherwise we talk only about natural event. A natural hazard escalates into a natural disaster when an extreme event caused harm in significant amounts and overwhelms the capability of people to cope and respond.

Natural hazards and the natural disasters that result can be divided into several different categories that are discussed in the chapter *Defining natural disaster* .

Professor Nelson (2018) defines three types of hazardous effects - primary, secondary, and tertiary effects. Primary effects occur as a result of the process itself. For example,

water damage during a flood or collapse of buildings during an earthquake. Secondary effects are caused only by primary effects. For example, fires ignited as a result of earthquakes, disruption of electrical power and water service as a result of an earthquake, flood, or hurricane, or flooding caused by a landslide into a lake or river. The last, tertiary, effects are long-term effects that are set off as a result of an event itself. These include things like loss of habitat caused by a flood, permanent changes in the position of river channel caused by flood, crop failure caused by a volcanic eruption, etc.

3.1.1.2   Vulnerability

The concept of vulnerability encompasses a variety of definitions. In general, vulnerability means the potential to be harmed and refers to any kind of weakness (Pennstate, 2018). In the context of natural disaster, vulnerability can be defined as the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard.

IFCR analysis found that vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure and defenceless in the face of risk, shock or stress.

Vulnerability is not simply about poverty, extensive research over the past 30 years has revealed that it is generally the poor who tend to suffer worst from disasters (Twigg, 2004; Wisner et al., 2004; UNISDR, 2009). Poverty is both a driver and consequence of disaster risk because economic pressures force people to live in unsafe locations and conditions (Wisner et al., 2004). PreventionWeb (2015) says that poverty and the other factors and drivers that create vulnerability mean that defencelessness to the impacts of hazards is often associated with certain groups such as women, children, the elderly, the disabled, migrants and displaced populations.

Vulnerability is affected by several factors, mainly by (PreventionWeb, 2015):

- social factors (e.g. poverty, inequality, marginalisation, social exclusion, discrimination by gender, social status),
- environmental factors (e.g. poor environmental management, overconsumption of natural resources, decline of risk regulating ecosystem services, climate change),
- physical factors (e.g. poor design and construction of buildings, unregulated land use),

- economic factors (e.g. the uninsured informal sector, dependence on single industries, globalisation of business and supply chains)

Levels of vulnerability help to explain why some non-extreme hazards can lead to extreme impacts and disasters, while some extreme events do not (Field, 2012).

3.1.1.2.1 Measuring the vulnerability

There is no one single method for assessing vulnerability. According to PreventionWeb (2015), any assessment should adopt a holistic approach to assessing vulnerability. However, in reality, methods are usually divided into those that consider physical (or built environment) vulnerability and those that consider socio-economic vulnerability. Assessing the vulnerability of the built environment to hazards is important in assessing potential consequences of an event and for mainstreaming disaster risk reduction into the local development planning process. Understanding the response of existing structures to potential hazards, such as ground shaking from earthquakes and wind from tropical cyclones, requires the knowledge of building materials and engineering practices (UNISDR, 2013).

Quantifying socio-economic vulnerability and poverty remains limited, and information of this kind is rarely integrated into risk assessments (GFDRR, 2014). But indicators and indices to measure social vulnerability have been created (quantified and descriptive), ranging from global indicators to those that are applied at the community level. These indicators are usually used to track changes in vulnerability over time. Qualitative approaches to vulnerability assessment have focused on the assessment of the capacity of communities to cope with natural events (PreventionWeb,2015).

3.1.1.3 Exposure

Exposure is one of the defining components of disaster risk. It is the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas (UNISDR). This could include individuals, dwellings or households and communities, buildings and structures, public facilities and infrastructure assets, agricultural commodities, environmental assets, and business activity. As it was stated above, if a hazard occurs in an area of no exposure (non built-up area where people do not live or stay), then there is no risk.

Exposure information is about the location and characteristics, or attributes, of each of the elements and is therefore about what is at risk. This information feeds into a natural hazard risk analysis to identify what elements at risk are in the location, and enough information about each of the elements to help understand how they are likely to behave when subjected to natural and artificial hazards (GA, 2017).

3.1.1.4   Disaster risk

Risk is characteristic of the relationship between humans and geologic processes. Regarding to disaster risk, there is no commonly accepted definition. According to the United Kingdom's Royal Society (1992), risk is "the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge". Contrary, UNDRR's (formerly known as UNISDR) definition (2017) of disaster risk is "the potential loss of life, injury, destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity". In the technical sense, it is defined through the combination of three terms mentioned above, also known as Sendai element.

All elements described above can be transferred into numerical equation that is used to determine the risk of natural disaster in particular areas. Picture 1 summarises the definition of disaster risk as a function of exposure to natural hazards, elements at risk, and vulnerability. Sometimes the equation includes insurance penetration (the proportion of insured values at risk). However, it does not have any significant effect on the result, therefore it can be omitted from the equation.

Picture 1: Disaster risk, natural hazard, exposure and vulnerability
Source: https://www.preventionweb.net/risk/disaster-risk

All factors that determine the risk are variable. While the occurrence and intensity of a natural phenomenon cannot be influenced by man, control of the exposure by avoiding hazard-prone areas is possible. Vulnerability can be reduced by increasing the structural resistance of objects, with measures depending on specific hazards. A higher insurance penetration generally increases the geographical spread of risks but may also increase the probability of higher accumulation losses (Munich RE).

To better understand the relation among components following figures show how hazard, exposure and vulnerability produce risk. The striped area in Picture 2 indicates risk of the analysed area.
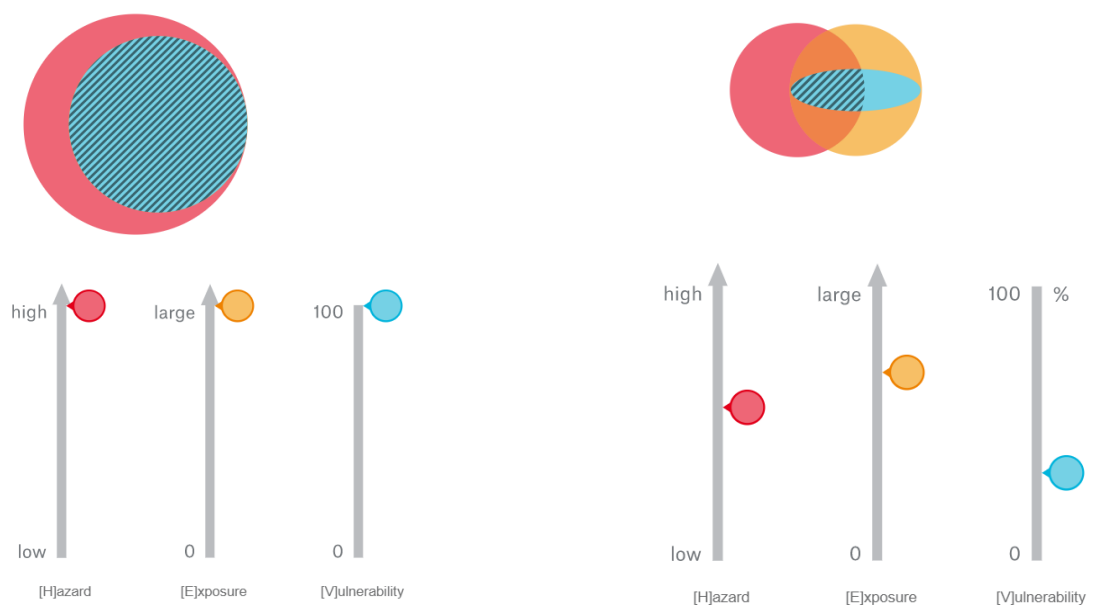
Picture 2: Relation among hazard, exposure and vulnerability
Source: https://www.munichre.com

3.2 Defining natural disaster

The new classification distinguishes two general disaster groups: natural and technological disasters. A natural disaster may occur in any part of the world at any time. World Health Organization's author Assar (1981) defines natural disaster as an act of nature of such magnitude as to create a catastrophic situation in which the day-to-day patterns of life are suddenly disrupted and people are plunged into helplessness and suffering, and, as a result, need food, clothing, shelter, medical and nursing care and other necessities of life, and protection against unfavourable environmental factors and conditions.

When impacts exceed an affected region's coping capacity by that means necessitating interregional or international help, a large disaster is said to have occurred. Large disaster can be defined by following criteria (Smith, 2004):

- More than 1% of an impacted population of a country is harmed, or
- economic damage excesses of 1% gross national product (GNP), or
- casualties surpass 100

3.2.1 Classification

There are several ways of classification. Říha (2011) divides natural disasters according to the place of origin. This is the so-called genetic classification, and it divides disasters according to their relationship to the Earth's surface as follows:

- Disasters occurring below the Earth's surface (earthquake, volcanic activity),
- disasters occurring on the Earth's surface (slope movement, flood, tsunami), and
- disasters occurring above the Earth's surface (tropical cyclone, tornado, meteorite impact)

Disasters can also be categorized by territorial scope:

- Global disasters
- Territorial disasters
- Local disasters

However, the essence of all natural disasters are four main processes (Říha, 2011):

- Rapid mass movements (earthquakes, slope movements),

- release of deep earth energy and its transfer to the surface (earthquake, volcanic activity),
- increase in water levels of rivers, lakes or seas (floods, sea floods, tsunami), and
- equalization of temperature differences in the atmosphere (hurricanes, tropical cyclones)

Another classification states that the natural disaster category is divided into six disaster groups: biological, geophysical, meteorological, hydrological, climatological and extra-terrestrial. Each group covers different disaster main types, and each has different disaster sub-types (Below et al., 2009).

3.2.1.1 Biological

A hazard caused by the exposure to living organisms and their toxic substances (e.g. venom, mold) or vector-borne diseases that they may carry. Examples are venomous wildlife and insects, poisonous plants, and mosquitoes carrying disease-causing agents such as parasites, bacteria, or viruses (e.g. malaria).

3.2.1.2 Geophysical

A hazard originating from solid earth. This term is used interchangeably with the term geological hazard.

3.2.1.3 Meteorological

A hazard caused by short-lived, micro- to meso-scale extreme weather and atmospheric conditions that last from minutes to days.

3.2.1.4 Hydrological

A hazard caused by the occurrence, movement, and distribution of surface and subsurface freshwater and saltwater.

3.2.1.5 Climatological

A hazard caused by long-lived, meso- to macro-scale atmospheric processes ranging from intra-seasonal to multi-decadal climate variability.

3.2.1.6   Extra-terrestrial

A hazard caused by asteroids, meteoroids, and comets as they pass near-earth, enter the Earth's atmosphere, and/or strike the Earth, and by changes in interplanetary conditions that affect the Earth's magnetosphere, ionosphere, and thermosphere (EM-DAT, 2009).

Deeper classification of natural disaster is shown in the following picture created by The International Disaster Database (EM-DAT) that was developed with the initial support of the World Health Organisation (WHO) and the Belgian Government.
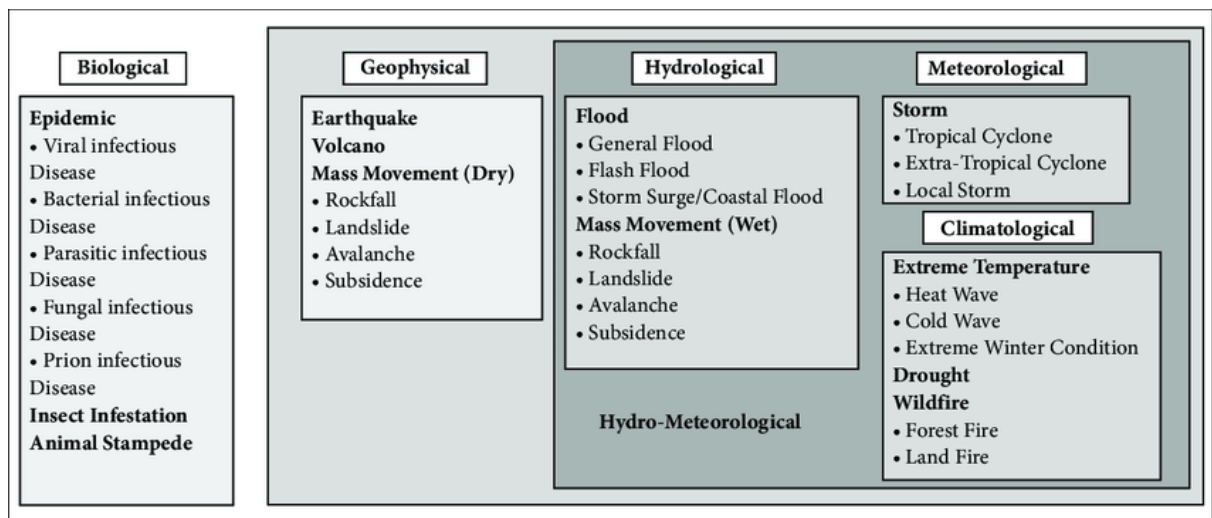
Picture 3: Classification of natural disasters within EM-DAT database
Source: Below, Wirtz and Guha-Sapir, 2009

Natural hazards (disasters) can also be divided according to the time scale. Rapid onset hazards, such as volcanic eruptions, earthquakes, flash floods, landslides, etc., develop with little warning and strike rapidly. On the contrary, slow onset hazards, like drought, insect infestations, and disease epidemics take years to develop (Nelson, 2018).

3.3 Statistics of natural disasters

For as long as historical records of extreme events in the natural environment have been kept, statistics indicate an increasing frequency of disasters. In the second half of the 20th century the number of large natural catastrophes doubled and yearly damages in monetary terms increased by more than five times (Below et al., 2009).

There have been statistically significant trends in the number of heavy precipitation events in some regions. It is likely that more of these regions have experienced increases than decreases, although there are strong regional and sub-regional variations in these trends. There is evidence that some extremes have changed as a result of anthropogenic influences, including increases in atmospheric concentrations of greenhouse gases (Field et al., 2012).

3.3.1 Disaster trends

Figure 1: Number of natural disaster events
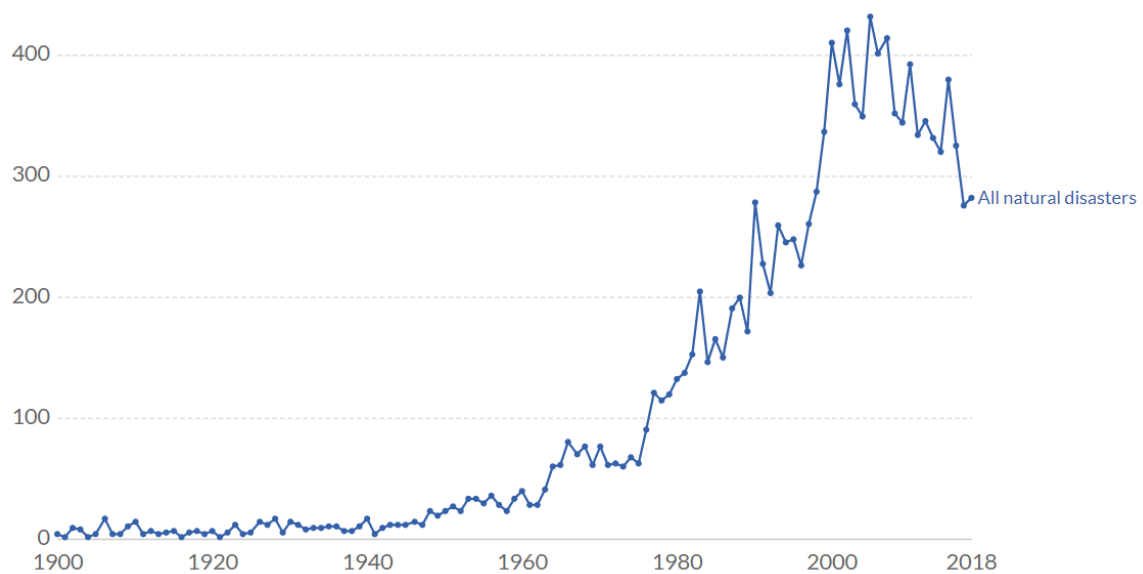
Source: EMDAT (2019): OFDA/CRED International Disaster Database, Université catholique de Louvain – Brussels – Belgium

The data presented in Figure 1 includes all categories classified as natural disasters within years 1900 and 2018. This includes those from drought, floods, extreme weather, extreme temperature, landslides, dry mass movements, wildfires, volcanic activity

and earthquakes. In 1900 there were just 5 events recorded while in 2018 EMDAT registered 282 natural disaster events. Earth might seem like a more active and dangerous place nowadays but a broader view reveals that it is not necessarily activity of nature that has changed. According to Than (2005), people are moving to disaster-prone areas due to undeveloped land and fertile soil. This creates a situation in which ordinary events like earthquakes and hurricanes become elevated to the level of natural disasters that cause losses in human life and property. Guha-Sapir (2004) says that a portion of that increase is artificial, due in part to better media reports and advances in communications. Another reason is that in the beginning of 1980s, agencies like CRED and the US Agency for International Development (USAID) began actively looking for natural disasters. However, "about two-thirds of the increase is real and the result of rises in so-called hydro-meteorological disasters" claims Guha-Sapir (2004). These disasters include droughts, tsunamis, hurricanes, typhoons and floods. In contrast, geologic disasters, such as volcanic eruptions, earthquakes, landslides and avalanches have remained steady throughout the years (Than, 2005) as seen in Figure 2.
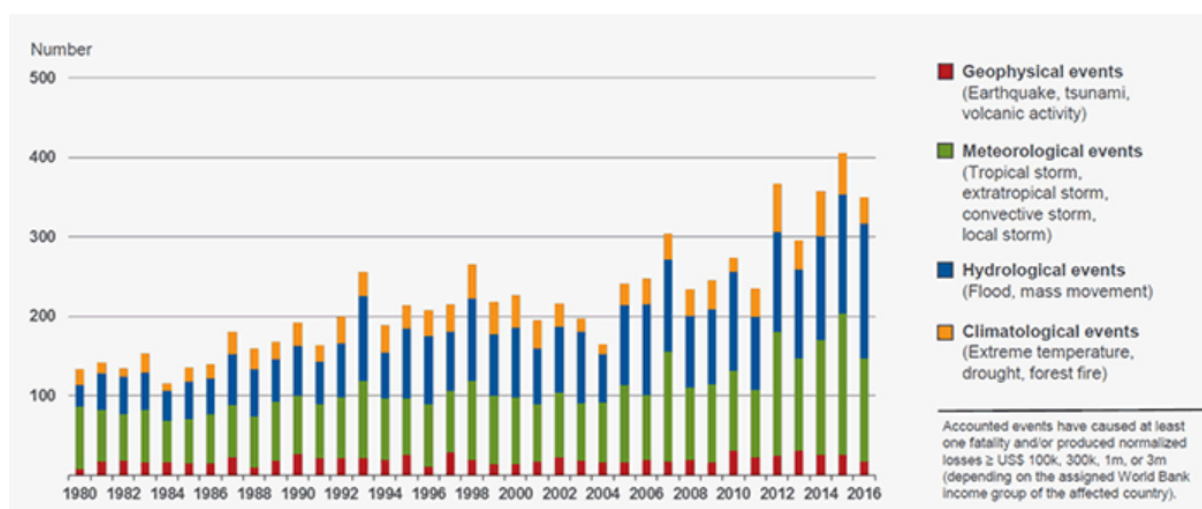
Figure 2: Global reported natural disasters by type
Source: 2016 Munich Re, Geo Risks Research, NatCatSERVICE

Guha-Sapir (2004) believes the increase in hydro-meteorological disasters is due to a combination of natural and made-made factors. Global warming is increasing the temperatures of the Earth's oceans and atmosphere, leading to more intense storms of all types, including hurricanes. Moreover, according to Than (2005), people rapidly

urbanize the flood-prone regions, increasing the likelihood that towns and villages will be affected by flash floods and coastal floods. The runoff from the water cannot get absorbed by the soil anymore, hence it keeps collecting and rushing down, getting heavier and faster, resulting in heavy floods.

3.3.2 Economic patterns in disasters data

According to CRED (The Centre for Research on the Epidemiology of Disasters), throughout the period 1998-2017, economic losses data only exist for 37% of disasters. The direct cost of the majority of disasters (63%) is unknown or not well documented. However, global weather- and climate-related disaster losses reported over the last few decades reflect mainly monetized direct damages to assets, and are unequally distributed (Field et al., 2012). Estimates of annual losses have ranged since 1980 from 32 US$ billion to above 100 billion US$ in 2018.
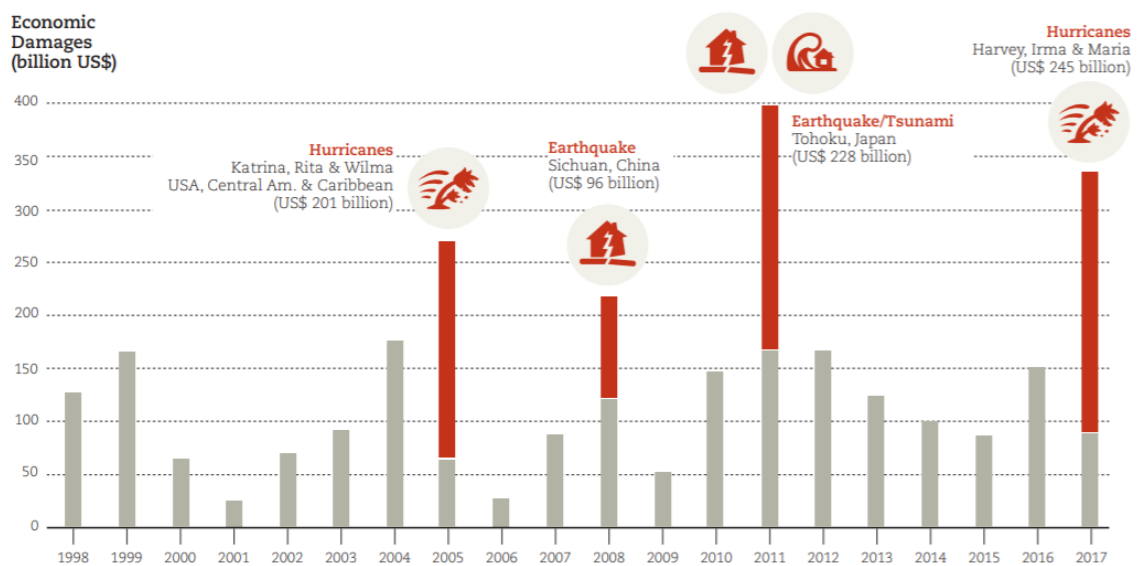
Figure 3: Total reported economic losses per year, with major events highlighted 1998-2017
Source: CRED, EM-DAT a UNISDR, 2018. Economic Losses, Poverty and Disasters: 1998-2017

In Figure 3, the peak year of 2011 reflects the immense damage caused by the Great East Japan Earthquake and Tsunami, with the consequent shut down of the Fukushima nuclear energy plant, with losses totalling US$ 228 billion (CRED, 2018). In 2008, the earthquake in Sichuan, China, cost US$ 96 billion and affected 46 million people. The other two peak years in terms of reported cost (2005 and 2017) are explained by the multiple storms

that battered the Americas. In the year 2017, the hurricane season was remarkable in terms of the number of Category 5 tropical cyclones that crossed numerous, vulnerable Caribbean island states and made landfall in Central and North America as well (CRED, 2018).

In absolute terms, aggregated losses in lower income countries remain below those in higher income countries, due to lower asset values. Anyway, lost crops and damaged agricultural land also impact hardest on the poorest, with chronic long-term consequences. Malnutrition and stunted growth are both high in areas of repeated flooding in India, for instance (Rodriguez-Llanes, 2011).

As the research made by CRED, UNISDR and EM-DAT in 2018 shows, the economic burden of disasters weighs more on lower income countries than higher income nations, with the percentage losses increasing step by step as a proportion of GDP as national income levels decline (Figure 4).
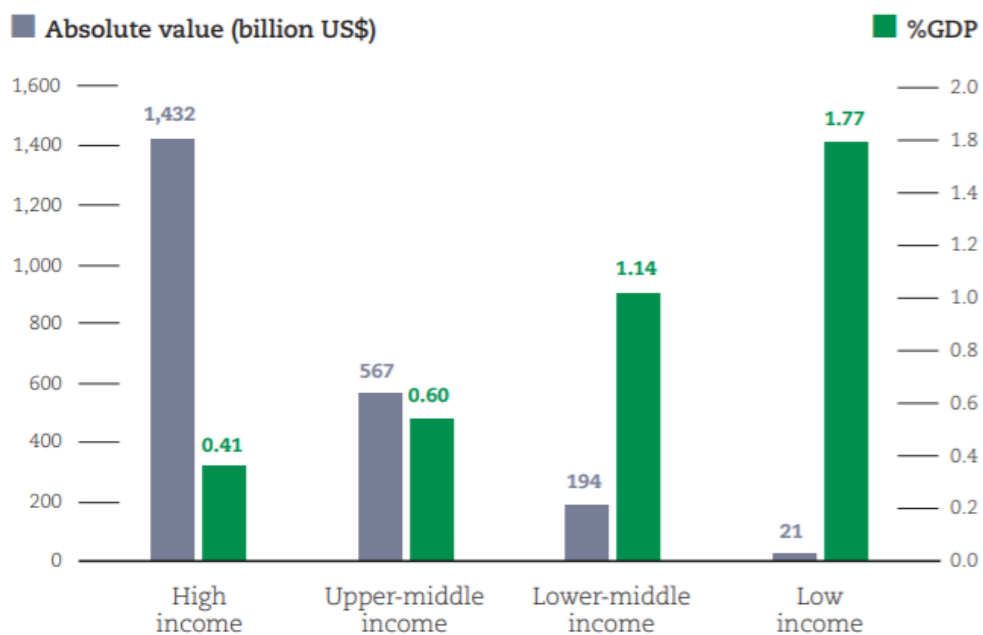
Figure 4: Climate-related disaster losses per income group compared to GDP losses 1998-2017
Source: CRED, EM-DAT a UNISDR, 2018. Economic Losses, Poverty and Disasters: 1998-2017

While high income countries reported US$ 1,432 billion in climate-related disaster losses (65% of the global total), it only represented 0.41% of their GDP. The US$ 21 billion in climate-related disaster losses recorded by low income countries amounted to almost

1.8% of the GDP. That is well above the International Monetary Fund's threshold for a major economic disaster of 0.5%.

3.3.3 Human cost of disasters

In EM-DAT (2018) the human cost of disasters is measured by two main parameters: the number of people killed, missing or presumed dead, and the number of people affected by the events, meaning people in need of immediate assistance for basic survival needs (food, water, shelter, sanitation, medical assistance). The affected totals also include people injured, made homeless, displaced or evacuated during the emergency phase of a disaster.

CRED (2016) finds more than a million people have been killed in more than 7,000 natural disasters stretching over a 20-year period. An analysis (CRED, 2016) shows earthquakes and tsunamis are the biggest overall killers, followed closely by climate-related disasters, which have more than doubled over the period. The report, however, notices over the last 15 years, weather-related disasters including drought, heat waves, floods and storms have become the main cause of loss of life.

The following figure shows annual deaths caused by two major disaster categories - climate related (brown) and geophysical (grey).
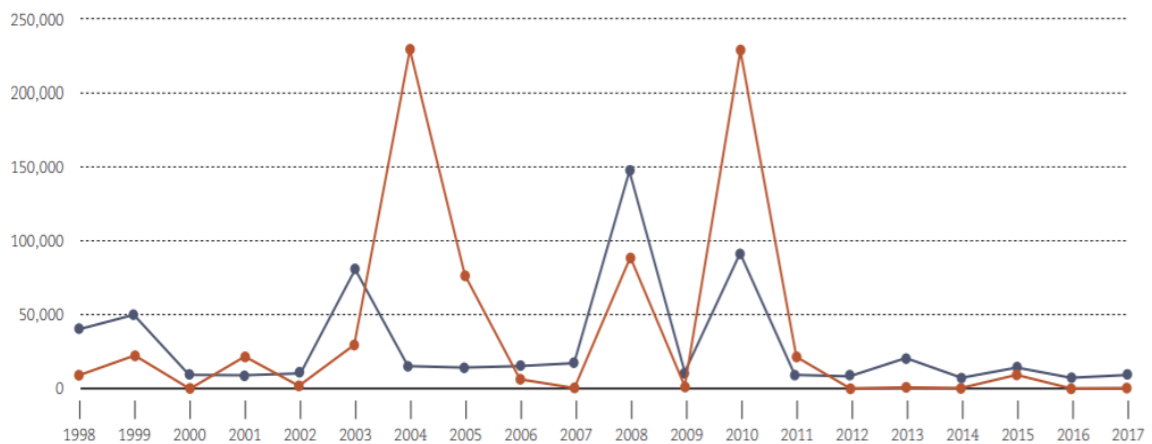
Figure 5: Annual disaster deaths by major disaster category 1998-2017

Source: CRED, EM-DAT a UNISDR, 2018. Economic Losses, Poverty and Disasters: 1998-2017

CRED's report (2018) explains that fatalities from climate-related disasters also reflect vulnerabilities rather than being a crude function of the rising number of occurrences. "Unlike earthquakes, populations vulnerable to extreme weather events are more evenly

spread around the globe". The spike year of 2003 (blue), for example, includes 72,000 killed in heatwaves in Europe that year. The 2008 peak (blue) was caused by the 138,000 deaths from Cyclone Nargis in Myanmar. In 2010 (blue), 56,000 Russians died due to a heatwave and 20,000 Somalis because of drought.

CRED (2016) says that 90 percent of disaster deaths occur in low- and middle-income countries. Haiti tops the list of the 10 countries with the most disaster deaths (Table 1 and 2) while no rich country appears on this list, yet wealthy countries suffer the greatest economic losses from natural disasters. Table 1 shows top 10 countries in absolute number of deaths between years 1996 and 2015 and in table 2, deaths per 100,000 habitants are shown. Different colours represent different income group - low income (dark orange), lower middle income (light orange) and upper middle income (green).

Country	Deaths in absolute number
Haiti	229,699
Indonesia	182,136
Myanmar (Burma)	139,515
China	123,937
India	97,691
Pakistan	85,400
Russian Federation	58,545
Sri Lanka	36,433
Iran	32,181
Venezuela	30,319

Country	Deaths per 100,000 inhabitants
Haiti	2,461
Myanmar (Burma)	280
Somalia	268
Nicaragua	217
Sri Lanka	185
Venezuela	113
Indonesia	80
Honduras	70
Afghanistan	57
Pakistan	55

Table 1: Top 10 countries for disaster deaths, 1996-2015

Table 2: Top 10 countries for disaster deaths, 1996-2015

(own elaboration according to CRED's statistics

3.4   Disaster prone areas

A disaster area, or disaster prone area, is a region, heavily damaged by either natural, technological or social hazards. Disaster areas affect the population living in the community by dramatic increase in expenses, losses of energy, food and services; and finally increase the risk of disease for citizens.

3.4.1   Tropical cyclone areas

Hurricanes, typhoons, cyclones. Where is the difference? The difference is only in location. The terms hurricane and typhoon are regionally specific names for a strong tropical cyclone.

As NOAA defines if the wind reaches 74 mph (119 kph) or more the tropical storm is called a Hurricane in the Atlantic and the eastern North Pacific or a Typhoon in the western North Pacific (Picture 4). In other parts of the world, such as the Indian Ocean and South Pacific the term Cyclone or Tropical Cyclone is used. Areas most affected by cyclones regarding to numbers of cyclones per year are located along by the Tropic of Cancer. Those areas are west coast of Asia where up to 26 Typhoons hit throughout the year, Central America with average of 13 Hurricanes during the year and Mexican gulf with Florida coast faces 9 Hurricanes per year.
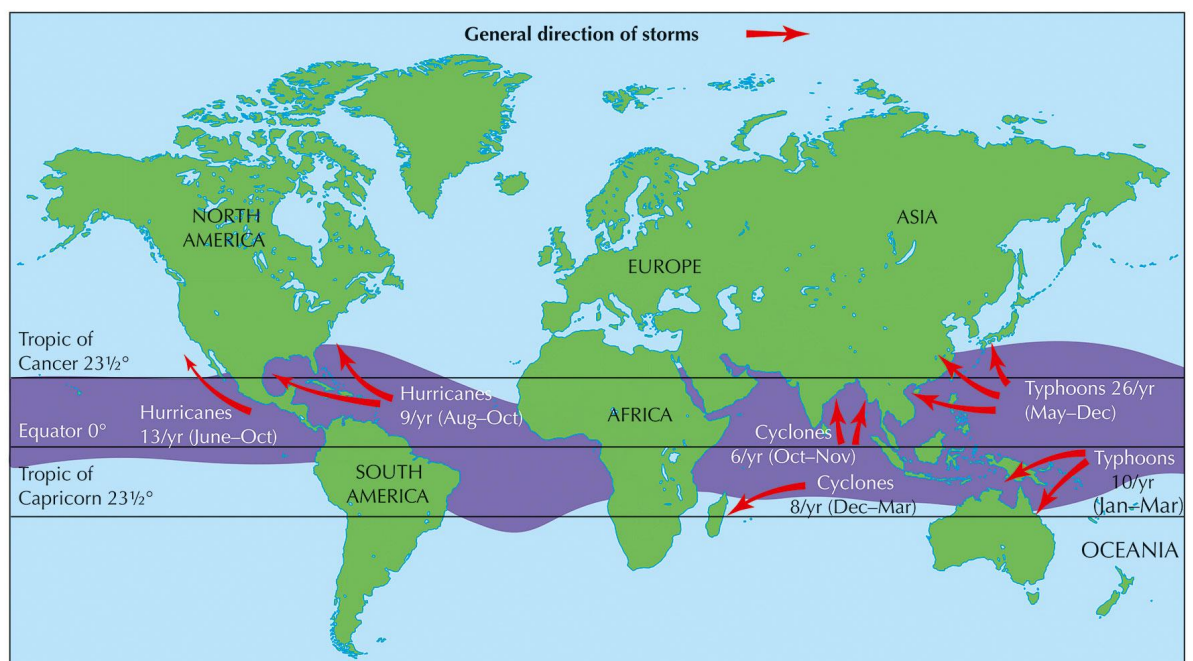
Picture 4: Tropical cyclone world map

Source: https://www.arcgis.com/apps/MapJournal

National Oceanic and Atmospheric Administration (NOAA) provides data about all the hurricanes, typhoons and cyclones caught on radars. According to NOAA (2018), the deadliest tropical cyclone ever recorded hit Bangladesh in 1970. Result of this cyclone was approximately 300,000 dead people. On the other hand, the most costly hurricane stroke United States in 2005 with estimated damage of $108 billion mainly in Mississippi and Louisiana. It also caused 1,500 deaths. Hurricane from the year 2017, also known as Harvey, was the wettest hurricane to hit the USA with an observing station in Texas recording over 1640 mm rain (NOAA, 2018). The strongest tropical cyclone based on the speed of wind occurred in the year 1961, its route started in west pacific and by the time its reached the land (Japan), it had lost the intensity and caused 200 loses on life with damages with approximate cost $500 million (Means, 2020).

3.4.2 "Ring of fire"

Also known as the Circum-Pacific Belt, the Ring of Fire traces the meeting points of many tectonic plates, including the Eurasian, North American, Juan de Fuca, Cocos, Caribbean, Nazca, Antarctic, Indian, Australian, Philippine, and other smaller plates, which all encircle the large Pacific Plate. The Ring of Fire is 40,000 km horseshoe-shaped area stretching from New Zealand northward along the eastern edge of Asia, then east across the Aleutian Islands of Alaska, and then south along the western coasts of North and South America (Picture 5).
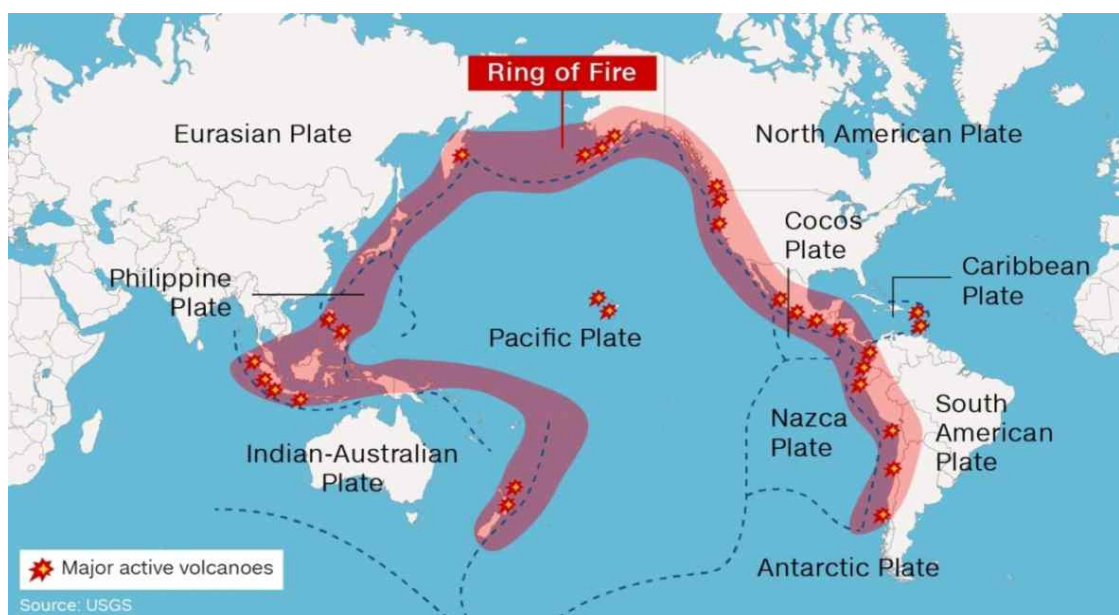
Picture 5: Ring of fire map
Source: http://www.geologyin.com

Whole area includes 75% of world's active volcanoes and overall 452 volcanoes with dormant ones, furthermore, 90% of world's earthquakes come from this zone (GeologyIN, 2018). All but three of the world's 25 largest volcanic eruptions of the last 11,000 years occurred at volcanoes in the Ring of Fire. In the Table 3 are volcanic eruptions ranked by number of estimated casualties. As seen, most of them happened in the area of the Ring of fire (dark pink) or close to that area (light pink). Only 2 eruptions (blue) occurred in the location that does not have disposition to volcanic activity – Europe. The second table (Table 4) shows 10 strongest earthquakes according to Richter magnitude scale and events catalysed by them. Again, most of the earthquakes happened in the Ring of fire and only one outside that area.

Country	Volcano	Deaths	Date
Indonesia	Mount Tambora	100,000	1815
Indonesia	Krakatoa	36,000	1883
Italy	Mount Vesuvius	16,000	79
Martinique	Mount Pelée	29,000	1902
Colombia	Nevado del Ruiz	23,000	1985
Japan	Mount Unzen	15,000	1792
Indonesia	Mount Kelud	5,000	1919
Iceland	Laki	9,350	1783
Guatemala	Santa Maria	6,000	1902
Philippines	Mount Mayon		2018

Country	Richter Magnitude	Date	Events connected with the earthquake
Chile	9.5	1960	tsunami reaching Hawaii, Japan, Philippines, Puyehue erupted
USA (Alaska)	9.2	1964	earthquake reached to Canada, tsunami reaching Hawaii
Indonesia	9.1	2004	tsunami reaching 14 countries in South Asia and West Africa
Japan	9	2011	tsunami, shutting down Fokushima nuclear reactors
Russian Federation	9	1952	tsunami reaching Hawaii
Chile	8.8	2010	tsunami reaching San Diego
Ecuador	8.8	1906	tsunami reaching San Francisco, Hawaii and Japan
USA (Alaska)	8.7	1965	tsunami, floods on Amchitka Island
Indonesia	8.6	2005	tsunami reaching Sri Lanka
Tibet	8.6	1950	oscillation reaching Norway

Table 29: 10 deadliest volcanic eruptions in the history

Table 30: 10 strongest earthquakes (since 1900)

(own elaboration according Geoscience News and Information data)

3.5   Marketing of hotel services

Marketing is an essential element in running any business. Although it is proven to be an important factor which determines the success of any hotel unit, yet it is a phenomenon which is often taken for granted. This chapter gives a definition of marketing and explains different marketing styles used in the hospitality industry. It will also briefly describe new trends in the hotel marketing industry that have been ruling in recent years.

3.5.1   Defining marketing

Hotel marketing encompasses a huge array of topics, skills, and strategies that hoteliers need to be aware of. Effective hotel marketing means potential guests and customers alike will be impacted by brand wherever and however they choose to research, plan, and book their trip. The modern path to purchase for travellers is now so broad, hotels have to put a lot more focus on exactly who they are trying to attract.

Kötler and Amstrong (2010) give a definition of marketing as "a social and managerial process by which individuals and organizations obtain what they need and want through creating and exchanging value with others". They go further to explain it by referring to marketing as a process by which companies create value for customers and build strong customer relationships in order to capture value from customers in return.

A different perspective to the definition of marketing is given by Grönroos (2016) when he puts more emphasis on the customer in his definition. To him marketing is "a customer focus that permeates organizational functions and processes and geared towards marketing through value proposition, enabling the fulfilment of individual expectations created by such promises and fulfilling such expectations through support to customers' value-generating process, thereby supporting value creation in the firm's as well as its customers' and other stakeholders' processes".

Hotel marketing is now predominantly done online, given consumers no longer rely on offline advertisements like billboards, posters or television and radio advertisements. In the past the equation was much simpler, but in recent years there has been an explosion of complexities. Firstly, just the concept of online hotel advertising, and now the diverse range of ways to explore this option and execute strategies.

3.5.2 Marketing in hotel industry

Hotel marketing (also called hospitality marketing) is centred on thinking about the business in terms of customer needs and their satisfaction. Hospitality marketing observes how different sectors of the hospitality industry (for example, accommodations, food and drink, tourism and travel) develop marketing strategies to promote their products or services, resulting in an increase in revenue. Since the hospitality industry mainly focuses on creating and maintaining positive customer experience and relationship, marketing becomes an important part of ensuring the industry's success (Revfine, 2019).

Hospitality sales are different from consumer goods sales because marketers must sell tangible as well as intangible products. In many cases this means that they are marketing services rather than goods, and success is determined by creating the right feeling in the consumer (Hussung, 2016). To attract more customers, hotel needs to efficiently advertise on different digital channels and be where the niche audience is.

According to Morrison (1996) hotel services marketing in contrast to other sectors has several features that are unique for this particular industry such as shorter experience with the services, easier copying of services and more emphasis on off-peak promotion, better emphasis on structure and imagery and more emotional buying appeals. Williams (2006) phrases that marketing in the hospitality and tourism sector differs from that of other businesses since purchase decision are based on perceptions and projected images rather than prior experience.

In the last few years hospitality and tourism has become a very powerful sector not based not only on the amount of people working for this industry but also because of growing expectation regarding the use of leisure time (Kötler, 2006).

Because the hospitality industry is mostly made up of tourism and other experiential services, a consistent brand identity is also very important. Repeat customers bring in a sizeable portion of revenue, so marketing strategy must be split between maintaining relationships with past customers while seeking out new ones. According to Dabrowski and spol. (2019) marketing capabilities, consumer engagement, customer value, crowdsourcing, innovation capability, customer loyalty and customer satisfaction, job satisfaction, service quality, revenue management, and corporate social responsibility are mediators between market orientation and company performance. Authors (Dabrowski, et al., 2019) also assume that creative marketing programs are an important consequence of a hotel's market orientation and that these programs, in turn, yield good performance.

3.5.3 Marketing mix in the hotel industry

The classical marketing mix model known as the 4Ps is the cornerstone of any marketing activity. The known form of the marketing mix was structured by McCarthy in the 1975. It consists of price, product, place, and promotion (Pictures 6 and 7). These four elements construct the tools of any marketing manager. However, hotel service is dynamic industry with its own specifics, therefore the classical marketing mix with 4 elements is not enough. In 2006, Möller highlighted that the Mix is void of theoretical content and "it works primarily as a simplistic device focusing the attention of management". The Mix does not offer help for personification of marketing activities. Salman and spol. (2017) showed that the mix does not take into consideration the unique elements of services marketing such as customer behaviour and sees them in passive position. Furthermore, 4Ps do not allow interaction and cannot capture relationships (Salman, et al., 2017).

The traditional marketing mix was also criticized for ignoring the impacts of the external environment on marketing decisions. Moreover, there are differences between product and service that should be taken into consideration. For example, Services have four major characteristics that affect the design of marketing programs: intangibility, inseparability and variability (Zeithaml, et al., 1985).

Because of the reasons stated above, the new model that suits better to the service environment was introduced. The classical marketing mix 4Ps was expanded to 7Ps which should reflect the nature of the hotel industry in more relevant way (Reid, 2010). The current marketing mix includes (Picture 8):

- Product
- Price
- Placement
- Promotion
- People
- Process
- Physical evidence

The people element of the marketing mix refers to all personnel involved in service processes, where on one side are employees and on the other are service consumers as co-producers and other consumers, as people who can influence the overall perception.

Process deals with all processes within the organization, those are procedures, mechanisms and flow of activities by which services are delivered to customers. The final added element the physical evidence is about a theme or a characteristic that distinguish the product and make it sellable. The category of physical evidence implies to an environment that facilitates service transactions or affects the perception, and those are ambient conditions, spatial layout, signs and symbols, etc. In other words, the existing high level of interaction between the process of services and the nature of services has affected the traditional concept of marketing mix by expanding the service area through adding elements (Salman, et al., 2017). However, Salman (2017) argues about its unawareness of the use of technological sophistication that can be a very strong tool in today's market. A further point is the lack of the element of partnership. Hence, the new model was proposed based on research done in 2017.

The new proposed model "12 Ps" (Picture 9) by Salman (2017) differentiates the internal and external factors (Picture 10). The internal elements consist of place, price, product, promotion, process, policy and programming. While the external are people, policy, promotion, perception, partnership and purse string. Because factors people, process and promotion are considered as internal and external in the same time, they are included in both categories.

3.5.3.1   Partnership

Considers the parties that co-operate and brands that operate together to reach new customers through mutually beneficial campaigns. Partnership marketing is used as a strategic and effective tool in the marketing mix in the context of a service industry where consumers and technology are constantly evolving.

3.5.3.2   Perception

Perception of the customers differs for the same product or service. A customer perception of the marketing offering varies from what the service provider intends to offer. Globalization allows everyone to expose to more various information than before and that may be serious problem, nowadays. If the customer's perception of marketing offering is an unfavorable one, it will not get another opportunity to make a better impression. Thus, competition is getting more and more intensive.

Therefore, perception is considered the key value for attracting customer by reacting to their needs better than the competitor.

3.5.3.3   Physical evidence

Physical evidence is the tangible component of the service offering. Through that, the intangible product can be perceived as tangible. A variety of tangible features are assessed by the target market of a hostility service, ranging from the materials to the appearance of the buildings and facilities provided.

3.5.3.4   Policy

Policy reflects involvement of the higher institutions and policy makers. Including the importance of spread of information in the overall organizational goal; to support customers and protect employees' from being maltreated by the employers and to be committed to labor laws.

3.5.3.5   Processes

Processes are all the directorial and routine functions of the service business – from the handling of enquiries to guests check in, check out and the attached procedures. A service involves payment prior to consumption. Meanwhile the hotel guest enjoys the accommodation, processes need to be set in motion to ensure that there is the best service provided.

3.5.3.6   Programming

Marketing decision and technique expected to influence service business choice because of the timing customer spend to finish all his requirements and of course affect the customer decision making process especially by the way of creating targeted benefits for the customers. Special programming can address such preferences and draw in potential customers.

3.5.3.7   Purse string

The term purse string indicates a funding for the product and/or service offered by the service industry, its development and its sustainability in the long run. Promoting,

influencing, and presenting results that fit in with the interests of the supporting parties to gain customer retention and loyalty.

3.5.4 Digital marketing in the hotel industry

Digital marketing has made a remarkable change in marketing industry and opened new channels for selling products, like social media marketing (SMM), by internet and mobile applications and search engine optimization (SEO), to advertising on Google and online magazines by search engine marketing (SEM) competition from intermediaries like travel agents (Shaik, et al., 2018). It is an enhancing source to get more familiar with customers and clear about the facilities that may be provided on various digital platforms of the hotel. Hotels are interested in making required steps to customize their approach in guest interaction to develop a new marketing competence and as it is helpful in enhancing guest satisfaction.

3.5.4.1   Social media marketing

Social Media has transformed the way firms relate to their markets. Term *social media* Hansen (2011) describes as "set of online tools that supports social interaction between users, facilitating the creation and sharing of knowledge, and transforming monologue into dialog". Hotels all over the world are increasingly using these tools, integrating them into their Customer Relationship Management (CRM) strategies to engage customers in an active conversation. The use of social networking and review sites (like TripAdvisor), has become a crucial part, and hotels are investing large sums of money in engaging customers via social media (Garrido-Moreno, 2018).

Creating a social media marketing strategy comprises many parts, including which social media channels to use. The choice of media channel is a key and before making the decision, it is important to know what social media channel is target audience using (for example, according to research done by Pew Research Center, 90% of LinkedIn users also use Facebook). Other important aspect that should be considered is what social media channel are the competitors using and looking at the competition will also give an idea of the typical content in industry or niche. Lastly, it is necessary to know what resources are available (Hartshorne, 2019).

The figure below shows which social media channels exist and which are most popular in terms of monthly active users as of April 2019. Most of the networks have a global

appeal. However, there are some that are specific for a certain country (WeChat and Qzone in China).
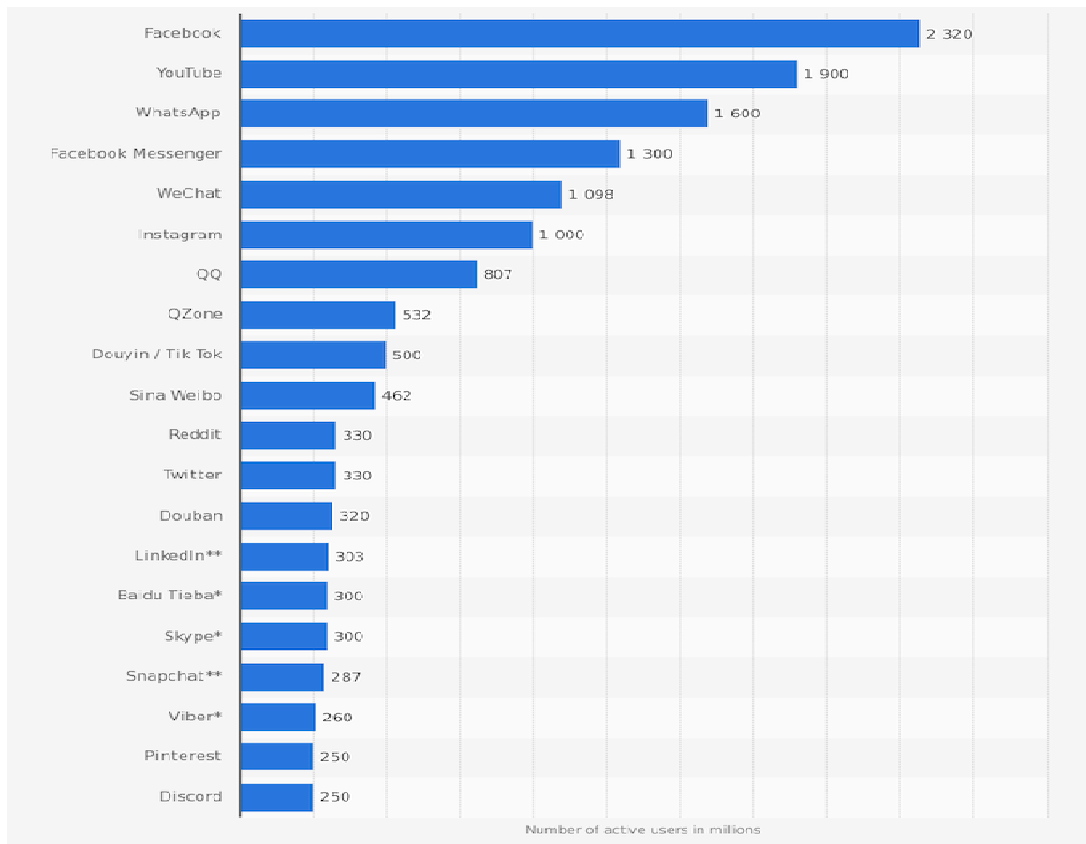
Figure 6: Most popular social networks worldwide ranked by number of users (in millions)
Source: Statista, 2019

3.5.4.2 Search engine optimization

Websites and search engine optimization (SEO) play a vital role in promoting tourism at international level. Yalçın (2010) defines Search engine as "kind of software, which collects data about web sites". At this point, the collected data includes the web site URL, some keywords or keyword groups that define the content of the web site, the code structure that forms the web page, and also links provided on the web site.

Search engines must be taken into consideration while designing a web site. Optimization of a search engine can be performed in two separate groups. One of them is internal web site optimization. Internal web site optimization includes web site design, meta tags, keywords that are necessary for the web site, page names, pictures, links, content texts in each page and styles that are used for the related texts, pages in different language and

many more. The second group is external web site optimization which includes adding web site to the site guide, using social media factors, using links from other optimized web sites to the related web page, etc. (Yalçın, 2010).

3.5.4.3   Search engine marketing

Search engine marketing (SEM) is one of the most effective ways to grow the business in an increasingly competitive marketplace, spread awareness and attract possible customers.

SEM is a marketing practice that businesses pay to create advertisements that appear on search engine results pages (SERPs). Advertisers bid on keywords that users of services might enter when looking for certain products or services (WordStream). The ranking and prices paid per click depend on keyword auctions. Google and Yahoo, the two market leaders, use system where advertisers submit a bid for each keyword at the price, they are willing to pay for each click (Zhou, 2006).

The mechanism supporting SEM works like this: a user types a keyword or words into a search engine and receives two types of results – the unsponsored and sponsored or in other words – free and paid advertisement. The lower part of the screen shows unsponsored search results, whose ranking reflects the relevance that the search algorithm assigns to these different results. The top presents sponsored search results. The display of the unsponsored, also known as organic, search results is free of charge, whereas advertisers pay for each click on their ads that appears among the sponsored (paid) search results (Abou Nabout, 2012).

3.5.5   Hotel marketing trends

Hospitality industry characterized as customer-oriented and information intensive has been taking a full advantage of the Internet for decades. For instance, in the 1990s hospitality companies could become pioneers in their industry by nothing more than having a website for their marketing strategy (Li, et al., 2015). Nevertheless, since nowadays most of the hospitality companies utilize various media channels.

Hotel companies can take advantage of their websites to broadcast information, to interact and establish long-term customer relationship through e-communication, and to complete orders online through e-transaction (Meroño-Cerdan, 2017). According to the statistical information provided by Statistic Brain (2017) 65% of online booking were executed

via hotel websites, whereas nearly 20% came from merchant websites such as Hotels.com, 11% of users made the reservation from not well-known websites that claim to have best deals, and 3.7% used retail websites.

Active use of media to obtain reliable information about quality of service has become a trend for travellers and hotel customers (Kim, 2012). More specifically, 81% travellers find reviews from previous clients vital and 49% will not book a hotel without any reviews (Statistic Brain, 2017). Reviews include various information and recommendations for the future visitors. Further, active users of social media share their own experiences publicly through pictures and videos on social media platforms (e.g. Instagram, Facebook, Tripadvisor) (Israeli, et al.,2017). According to Chu (2015) social media have transformed customer from being passive observers to active players who create so called *user-generated content* (UGC) in order to disseminate so called *electronic word-of-mouth* (eWOM). Israeli (2017) states that when it comes to decision making process, UGC is one of the most influential factors. Moreover, it is proved that events and promotions shared on social networks are key elements that promote customer satisfaction and purchase. Therefore, not only major hotel brands but small hotel chains or even budget hostels have started to put more emphasis on social media as channel for communication and information (Lim, et al., 2019).

3.5.5.1   Word-of-mouth marketing

Since the launch of Amazon in 1995, which first allowed online shoppers to post product feedback, online consumer reviews have become increasingly popular and widespread. Li and spol. (2010) defines word-of-mouth marketing as "new marketing method that uses electronic communications to trigger brand messages throughout a widespread network of buyers". Although electronic word-of-mouth (eWOM) is perceived as being less reliable than off-line world-of-mouth, it is considered more credible than information created by the service providers themselves (Manes, 2018).

Enterprises waste many resources on invalid online marketing. WOM marketing is a new and effective marketing method that is based on the power of "word of mouth" for saving many resources and avoiding possible trouble in mass marketing. Finding potential reviewers who are powerful to others and willing to spread positive product impressions efficiently is the key to WOM marketing (Li, et al., 2010). Nevertheless, research (Litvin, et al., 2008) in the tourism area has demonstrated the influence of both positive and

negative WOM upon tourism products. Negative WOM can have an overwhelming impact upon a destination's image, as dissatisfied visitors spread unflattering comments related to their experiences.

WOM marketing trends that are followed by majority of hotels include mainly social medias.

3.5.5.1.1 Hashtag

One of the latest tools to positively boost the hotel business is hashtag (#). Hashtags are now used on almost every social platform, including Twitter, Facebook and Instagram. By creating an official hashtag, hotel will make it easy for social followers to monitor its progress, activities and new online. Additionally, guests will likely use this hashtag when they share photos from the property of hotel, and it can also be used on every social post which is created for the brand (Little Hotelier). For instance, Holiday Inn created its own hashtag #BeThereIRL and encourages visitors to use it while they share photos or videos from any Holiday Inn hotel in the world. Another example is hashtag #LetYourMindTravel. When searching this hashtag, most of the photos, posts and comments are related with Marriot hotels group.

3.5.5.1.2 Visual triggers

Designing visual spaces that encourage guests to take and share photos and videos, officially referred to as *visual triggers*, are another way how to increase awareness of the hotel. Either it is marvelous view, rare piece of furniture or painting on the wall, it can attract much more visitors. The recent study (2019) found Instagram has replaced travel brochures as the main inspiration for travelers who are picking their next destination. 55% of participants confessed they booked the hotel purely based on images they had seen on the social media platform. Moreover, 32% admitted the biggest motivation when choosing a location was how good the photos will look on their own feed (Wright, 2019).

The impact of social media, especially Instagram, on deciding the location and hotel itself, is reflected in *The World's Most Instagrammable Hostels* list issued annually by Hostelworld. All hostels involved in the list have witnessed increase in bookings as well as in revenues (Agha, 2017).

3.5.5.1.3 Travel influencers

Travel Influencers are the new generation of reviewers who can provide a real-life experience of the hotel. They reach future customers by engaging on a personal level and building durable and trustworthy relationships with their followers.

Influencer Marketing has facilitated greater competition in the market where small independent hotel brands now have greater potential to compete with larger chains. As an example, John Fowler Holiday Parks have family-oriented parks with diverse offer of accommodation – from cabins to luxurious suits. After they established a partnership with influencer, the revenues increased of 67% and return on investment (ROI) rose of 630% (Agha, 2017).

3.5.5.2 Video marketing

Video marketing is one of the most powerful hotel marketing strategies, helping to target marketing messages towards potential customers in a way that is convenient to them. Video content is especially popular on social media platforms, and it has the ability to combine visual and audio elements.

Revfine (2019) explains how the growing prevalence of 360 degree video also opens up greater opportunities to fully immerse audiences. Before, hotel websites and pages on other platforms had to rely on photographs to show what the hotel is actually like. With 360 video hotel tours, users can actually experience what a hotel is like for themselves. As a result, they can make a booking with a bigger confidence.

3.5.5.3 Virtual reality (VR)

One of the most innovative options is to highlight the features of the hotel with the help of a VR. A VR hotel tour provides potential visitors with a means to obtain a digital first-person point of view. This is particularly useful when presenting the rooms that hotel has to offer, as customers will be able to obtain a feel for what is in store. Revfine (2019) points that after the experience, travellers are able of illustrating the dimensions of a room even how to navigate throughout the property itself.

3.5.5.4 Remarketing

Remarketing is a way to reach out to users who have already visited the hotel website or interacted with the brand on social media. Research (Revfine, 2019) indicates a large

number of people begin to make a hotel booking, before stopping. This could be because they have become distracted, or because they want to carry out further research. Remarketing allows these users to be targeted with specific marketing messages, such as an image of the exact hotel room they were booking, reminding them of their interaction.

A major advantage of remarketing over other forms of digital advertising is that hotels already know these users have shown some degree of interest.

4. Practical Part

The practical part of thesis contains qualitative research done through forms and interviews with respondents who represent different group of hotels. Hotels are represented either by managers or PR department or some by owners depending on the size of the hotel or hotel brand. Interviews were executed in various ways and because of the distance issue, none of the interviews was face-to-face. The communication channels used to obtain answers were mostly e-mail correspondence or skype video call.

The structured interview consists of open questions to be answered by individual interviewees. In this type of interview the questions are clearly worded in advance. The big advantage of structured interview is its easy evaluation, on the other hand, the impossibility of natural communication during interviewing can be considered as a disadvantage.

4.1 The sample description

26 hostility facilities that successfully re-opened after they were hit by a natural disaster, joined the research. To make the research more accurate and diverse, hotels involved are from different locations, were affected by different natural disasters, attract different age groups, etc.

The information about samples was collected throughout forms. The answered questions were analysed and quantified. Following chapter contains basic information about the sample such as main characteristics of selected hotels, description of natural disasters that affected selected hotels and last part shows use of digital marketing of selected hotels.

4.1.1 Main characteristics

4.1.1.1 Location

Most of the hotels that are analysed are located in Asia (15 out of 26) as seen in the table below - India, Thailand, Philippines and Indonesia. Since Caribbean area consists of hundreds of small islands, they were all included in one group – Caribbean. The category also contains 1 hotel located in Florida, Miami Beach.

Location	Hotels
Caribbean	8
Mexico	4
India	3
Thailand	2
Philippines	3
Indonesia	3

4.1.1.2 Hotel category

The quality of hotel services is determined by hotel classification, the most common is so called star-rating. The star-rating says what guests can generally expect from motels, hotels, and resorts. According to Expedia, there are 5 major categories within the rating, from 1-star to 5-stars. The representation of each group in research is shown in the table. As seen, five-stars category has a major representation with 7 hotel resorts, on the other hand, the lowest number have hostels and dormitories evaluated with 1 star.

Star rating	Hotels
One-star	2
Two-stars	5
Three-stars	4
Four-stars	5
Five-stars	7

One-star

These basic motels, hostels, and dormitories offer no-frills accommodations with minimal on-site facilities. Public access and guest reception may not be in operation 24 hours. Daily housekeeping service may not be offered. Guestrooms are small and functional, but may not have private bathrooms, TVs, or in-room telephones.

Accommodation in this classification sometimes customarily offers additional amenities such as billiard games, Internet stations, and conversational seating areas.

Two-stars

These budget properties offer clean accommodations. Most offer 24-hour reception, daily housekeeping service, TVs, telephones, clothes racks or small closets, and private bathrooms—possibly with showers only. On-site dining is usually limited to a Continental breakfast.

Three-stars

Properties in this classification place a greater emphasis on comfort and service, with many offering an on-site restaurant and bar. Baggage assistance is often available. Guestrooms typically feature more space, comfortable seating, and better quality bedding. Bathrooms are often larger, with shower/tub combinations and expanded counter space.

Four-stars

Lobbies typically offer upscale decor and multiple conversational areas. Services often include a dedicated concierge, valet parking, turndown service by request, and 24-hour room service. Guestrooms usually feature superior amenities such as large beds, additional seating, minibars, laptop-compatible safes, pillowtop mattresses, bathrobes, and upscale bath products. Decorative features such as crown molding, bathroom artwork, and granite or marble accents may appear. Resorts customarily feature full-service spas, tennis courts, golf access, child-care services, and upgraded pools with poolside food servers.

Five-stars

Amenities typically include gourmet dining, luxury spas, and full-service health. Features may include upgraded check-in, a welcome amenity, and butler service on all or select floors. Electronic features sometimes include bedside controls for drapes, lighting, and surround-sound. Oversized bathrooms are often clad in marble, with premium, custom-

built features, dual-sink vanities, enclosed toilets, premium spa-brand toiletries, and fresh flowers or live plants. Five-star resorts typically offer signature golf courses, tennis centers with choice of playing surfaces, health clubs with personal trainers, luxurious spas, cultural activities, and children's day camps.

4.1.1.3   Main purpose of visit

In general, main purpose of visit is vacation. That is basically reason why hotels exist. However, the research is more specific and divides vacation to 3 different groups. The family vacation means that at least one adult with one child stays in the hotel facility. Under term couple vacation is understood 2 adults, while single traveler as name indicates means that the reservation is done only for one person. None of the analyzed hotels is mainly used for business trips. And 1 hotel states that main purpose of visit is a group vacation.

Main purpose of visit	Hotels
Family vacation	9
Couple vacation	10
Single traveler	3
Business trip	0
Other	1

4.1.1.4   Age of visitors

For marketing it is highly important to know what generation of clients visits the hotel to create a strategy which corresponds with each age group. As listed in table below, main age groups visiting analyzed hotels were divided into 3 categories – young, adult, senior. Under young visitors belong people who reached maximum age of 30 years. Travelers belonging to the adult group (31-55 years) represent the majority of all three groups. 5 hotels say that their clients are mostly seniors – individuals who access the age of 55 years.

Age category	Hotels
Young (up to 30)	8
Adult (31-55)	10
Senior (56 and above)	5

4.1.2 Natural disasters related characteristics

This part describes natural disaster related characteristics of the research such as type of the natural disaster that impacted analysed hotels, the degree of damage of hotels, how long did it take to open and welcome customers.

4.1.2.1 Type of natural disaster

Hotels experienced 4 different types of disaster – earthquake, floods, tsunami and hurricane. The theoretical part of thesis explains and gives a statistic about each type. It also explains that hurricane, typhoon and cyclone are all the same - tropical storm and the only difference is in their location (see the page 28). 12 hotels experienced either hurricane or typhoon or cyclone. The same number of hotels struggled with floods or earthquake - 4 hotels. Although the earthquake very often results in tsunami the analysis focuses on areas that were impacted by tsunami without being impacted by earthquake. The same is applied in the case of hurricanes and floods – hurricanes in most cases cause floods in the area of impact, however, this research separates these two events and floods are those that occurred naturally, for example, by the river overflow.

Natural event	Hotels
Hurricane/Typhoon/Cyclone	12
Tsunami	3
Earthquake	4
Floods	4

4.1.2.2 Degree of damage

Scale used in this research to measure damages of selected hotels was created by Architectural Institute of Japan. The scale describes damages caused by natural events and includes 6 levels from no damage to total collapse of building.

- *Rank 0*: No damage
- *Rank 1*: Negligible damage (Hair line cracks in columns and beams of frame)
- *Rank 2*: Slight damage (Shear cracks in non-structural walls)
- *Rank 3*: Moderate damage (Shear cracks in columns and beams and in structural walls)
- *Rank 4*: Major damage (Spalling of concrete cover, buckling of reinforced rods)
- *Rank 5*: Collapse (Collapse of total or parts of building)

Level of Damage	Hotels
Rank 0	0
Rank 1	2
Rank 2	4
Rank 3	6
Rank 4	9
Rank 5	2

The table shows that most of the selected hotels registered the level of damage as *major damage* which means that the building itself did not collapse, yet the damages caused by natural disaster were serious. 2 hotels reported total collapse of building and had to be built again. Moderate damage (rank 3) occurred in 6 cases.

4.1.2.3   Recuperation

Recuperation relates to level of damage. The bigger destruction, the longer time of renovation. As recuperation is understood how long it took to each hotel to fully operate again after the disaster.

There is only 1 hotel that welcomed guests after time shorter than a month. It is also hotel that stated, the damage reached only rank 1. On the contrary, revitalisation of the complex lasting over a year was done by 3 hotels – 2 fully destroyed and 1 with major damages. 11 hotels registered serious damages that led to reparation time longer than 6 months.

Time period	Hotels
Less than month	1
1 - 3 months	3
3 - 6 months	5
6-12 months	11
More than year	3

4.1.3   Digital marketing related characteristic

For the future development of thesis, it is necessary to know more about the marketing strategies of selected hotels. Since the thesis is focused on digital marketing, the following figures show the utilization of current trends in hotel digital marketing.

4.1.3.1   Social media marketing

Social medias have become inseparable part of marketing and as shown in the figure, some are already essential. Although, hundreds of different social medias exist, the research have chosen the world-wide known and most common, such as Facebook, Instagram or Twitter. Pinterest[1] is included as well because larger hotelier brands use it to create their own content based on their services. From 23 analysed hotels 4 use Pinterest as part of their marketing. All 4 belong under the large global brands. That means, the account is operated not by the particular hotel but by the brand. However, it is involved in the analysis. Youtube account is run by 8 hotels, and again, these are offshoots of the large company that has hotels in many countries. Companies share advertising spots there along with videos introducing amenities, services and events. Facebook and Twitter work on the same basis – sharing texts and photos. Yet, Facebook seems more popular than Twitter with 21 account against 16. Most of the hotels with Twitter account fit in "luxurious" group of hotels. The reason is that Twitter is seen as more sophisticated and serious social media than Facebook. There are 2 social media channels that are used by all 23 hotels – TripAdvisor and Instagram. TripAdvisor is very important for every hotel from the analysis. It is number one review web site where clients can make reservations and share their experience.

Instagram is ranked as number 6 social media in terms of number of users. Hotels can collaborate with other Instagram users and increase their visibility. Each hotel has its own approach of creating the content. For example, small hostel in India use the account for sharing their happy guests and their stories, on the other hand, luxurious 5-star hotel resort in Caribbean shares photos that highlight the extraordinary experience each guest can experience.

---

[1] What is Pinterest? It is social media web based on visual bookmarking that allows users to collect photos, pictures, articles, etc. according to areas of interest.
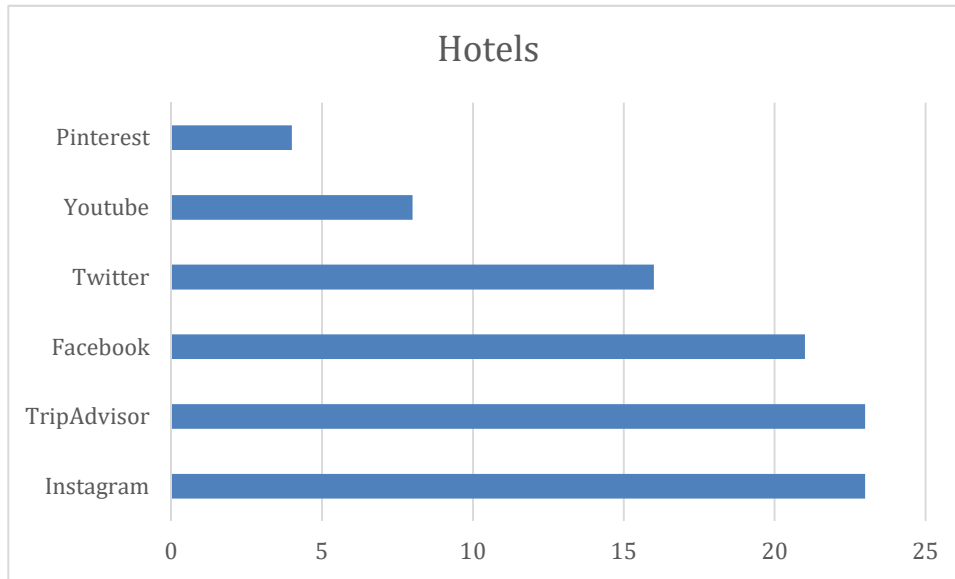
Figure 7: Use of social medias (own elaboration)

4.1.3.2   Use of current trends

New trends that were discussed in theoretical part of thesis play bigger and bigger role in marketing. Most of them are tightly connected with social medias like visual triggers. Every hotel uses any visual trigger to attract customers. For example, hostel in Mexico added a neon sign on the wall and adjusted the whole lobby area to make the sign pop out. After sharing this new concept on their Instagram, the bookings have risen enormously. Another example is hotel located in Thailand with pool bar on the top deck that was awarded as one of the "Most Instagrammable hostels for 2019" by Hostelworld. Speaking of Instagram, one of main features are hashtags. Hashtags are widely used all over social media and 21 hotels from the research have created their own hashtag that use with every photo or message they publish on their accounts. Besides their own hashtags, every hotel uses industry related hashtags such as #hotel, #travel, #vacation, and more. Using these hashtags hotels appear in more shared posts and have bigger chance of being seen more. For example, photos shared with hashtag #travel exceeded the amount of 480,000,000 and each second is growing.

20 hotels collaborated at least once with influencers, either Instagram or YouTube influencers. And the rest (3) stated that they considered this option at some point. Specially after the re-opening to help boost the business and spread the information. Majority of hotels confirmed that they received optimistic echoes after joining forces with influencers

and registered increases in bookings from people who fit in the category that knows influencers and relates to them.

11 hotel use remarketing method. All of them have their official website where people can make reservation. The rest of hotels either do not have official website or find it unnecessary.

Both, video marketing and virtual reality help potential clients visit the hotel from home. Video marketing includes advertising spots, videos made in collaboration with influencers, etc. 10 hotels admitted use of video marketing and only 6 provide VR tour. Again, all are from the 4 or 5-star rated category.
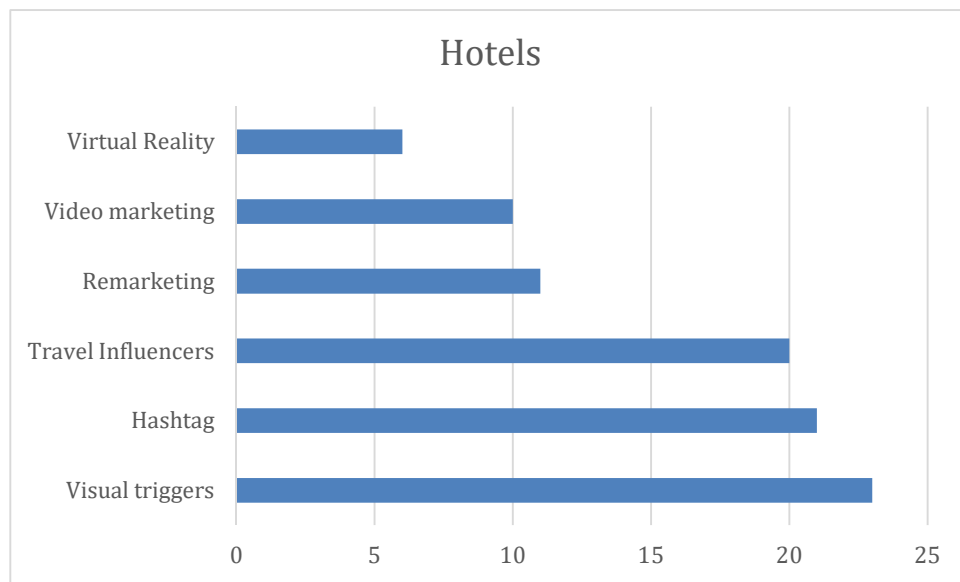

Figure 8: Use of marketing trends (own elaboration)

4.2 The interview

Following pages contain answers from selected hotels when each is from differs from the rest. Each hotel has diffrent price category and experienced different natural disaster. Hotels were also selected according to the size – small local hotel, hotel that is part of wordlwide chain of hotels and luxurious resort that belongs to a small group of hotels. Hotels demanded to stay anonymous, therefore there will not be names mentioned.

4.2.1 Hotel 1

The first hostel belongs to 2-star category, does not belong under any hotelier brand and is located in India where it was damaged by floods in 2017. The discussion was with the owner of hostel.

Q1: Was the impact of the natural disaster noticeable in the numbers of visitors after re-opening?
A1: Oh yeah, we had tough months, but it was in whole region.

Q2: After the event, had to the hotel change its marketing strategy to attract clients?
A2: We didn't have any particular strategy. It is a small hostel for young people, so we started to be more active on Instagram.

Q3: Is/was the marketing more intense than before the event?
A3: Sure, it was. As I said before, we posted almost daily on Instagram, asked our guests to share our hostel on their social medias.

Q4: Is/Was there new way of promotion of the hotel applied?
A4: I wouldn't say a new, but more intense. Well, we've changed posts on Instagram. We started to share pictures of travelers who stay in hostel with some of their comments. I saw it on different account and gave it a try. It works well, it shows more of "real life" than art pictures of coffee on the balcony. People see other people.

Q5: Has the hotel changed its target market?

A5: No, who else would stay in hostel and share their room with other people than backpacker? We are not luxurious hotel with beach and spa, we provide basic services like bed, shower and breakfast.

Q6: If the hotel underwent some reconstruction, was it used either to change the style or create something new or modernize it?

A6: We changed the layout of rooms and we had to buy basically everything – beds, chairs, tables, etc. When we started the reconstruction, we decided to give it a new "face".

Q7: What is the most used marketing tool now and was it the same before the natural disaster?

A7: Instagram. It's free and everyone has this app. We share almost every day on stories.

Q8: Did the hotel noticed negative comments or rating related with the disaster?

A8: No, people were surprised because of the change of design, but it was in positive way.

Q9: Has hotel used the natural disaster in the marketing?

A9: We just shared that we closed due to floods and then reconstruction. Later we shared new face of hostel and that we are open again.

Q10: Had to the hotel assure potential clients about its safety? Was it included somehow in the promotion of the hotel?

A10: I don't think so. The thing is, we can't command the weather. That's the main problem.

Q11: Did/Does the hotel invest more in the promotion after the event than before the event?

A11: We didn't invest in promotion but in the reconstruction. We trust our guests spread the word about us and we rely on good reviews on TripAdvisor and Booking.

Q12: After the natural disaster, did hotel lose its regular clients? If yes, did you apply any special actions?

A12: We don't have regular guests. From time to time, some people come back, but the rotation is high, people stay usually 1 to 3 nights and then move.

4.2.2 Hotel 2

The second hotel is 5-star resort with residencies, it is part of small group of hotels all located in Thailand. It was seriously damaged in 2004 when tsunami hit Thailand and other countries, however after 11 months opened for guests again with 5-star rating. PR department of hotel provided answers for the interview.

Q1: Was the impact of the natural disaster noticeable in the numbers of visitors after re-opening?
A1: The first weeks we had few rooms empty, but I think we proved our services are the same or even better than before.

Q2: After the event, had to the hotel change its marketing strategy to attract clients?
A2: It was necessary restore confidence with partners and we did hold rates high at 5-star level to confirm that all was OK for a holiday.

Q3: Is/was the marketing more intense than before the event?
A3: Yes, it was.

Q4: Is/Was there new way of promotion of the hotel applied?
A4: We introduced 2 new strategies which brought us very good results. First was person to person sales trips overseas when our representative visited our partners and discussed business. And the second, we offered family trips for business partners to see the product was good and area around acceptable for guests to book a holiday.

Q5: Has the hotel changed its target market?
A5: No, we continued with the same business model and target group.

Q6: If the hotel underwent some reconstruction, was it used either to change the style or create something new or modernize it?

A6: We rebuilt the resort as it was before the tsunami. The insurance would not accept a design change and would not pay out 100%.

Q7: What is the most used marketing tool now and was it the same before the natural disaster?

A7: Our hotel has really good reputation and is well known, hence we did not apply any new tool and continued with the same model as before - business partners and guests verbal recommendation, but we added the overseas sales team. Hotel had Instagram and Twitter account before, so we continued with the same content there as well.

Q8: Did the hotel noticed negative comments or rating related with the disaster?

A8: No, we haven't noticed any negativity connected with tsunami.

Q9: Has hotel used the natural disaster in the marketing?

A9: No, we prefer to show our potential guest positive and joyful aspects of our services.

Q10: Had to the hotel assure potential clients about its safety? Was it included somehow in the promotion of the hotel?

A10: Yes, we clarified safety band emergency procedures on arrival and educated staff as to the nature of the event and science behind it. Now, in case of emergency, our staff knows what to do and can provide help to our guests.

Q11: Did/Does the hotel invest more in the promotion after the event than before the event?

A11: We have strict budget to keep up to, so no.

Q12: After the natural disaster, did hotel lose its regular clients? If yes, did you apply any special actions?

A12: 25% of our guest are the regulars and the rest usually come for holiday. We didn't register drop in this number.

4.2.3 Hotel 3

The third published interview is with manager of hotel from Mexico City that experienced destructive earthquake in September 2017. The hotel is located in part of the city which was affected the most. It belongs to the chain of hotels operating all around the world with rooms and apartments from different price categories. Guest can stay in 5-star suit or book simple 3-star room.[2]

Q1: Was the impact of the natural disaster noticeable in the numbers of visitors after re-opening?
A1: Yes, it was noticeable in whole city, but our hotel is part of well-known brand, thus we did not struggle as much as the other small independent hotels.

Q2: After the event, had the hotel change its marketing strategy to attract clients?
A2: We did some small changes that were within the company's policy. Every change has to be approved by leaders. Company made promo video about the city to attract more people and ensure them not to be scared visit this metropolis and of course, stay in the hotel, because there are 3 hotels in the city, the focus was on the city itself, not on one particular hotel.

Q3: Is/was the marketing more intense than before the event?
A3: The whole company promoted Mexico City with higher intensity than before.

Q4: Is/Was there new way of promotion of the hotel applied?
A4: No, we have steady strategy. Although, we promoted city more.

Q5: Has the hotel changed its target market?
A5: There was no need to change our target clients, we host all of the age categories and provide wide range of services that satisfy people who look for luxury but also one-night stay.

---

[2] The interview was in Spanish, therefore there may be slight changes in translation, however, the core message was kept.

Q6: If the hotel underwent some reconstruction, was it used either to change the style or create something new or modernize it?

A6: Our hotels have specific features that have to be same everywhere, nevertheless we made some changes in the hotel lobby and enlarged our rooftop terrace.

Q7: What is the most used marketing tool now and was it the same before the natural disaster?

A7: We rely a lot on social medias now. Marketing team decided to put more emphasis on Instagram and Twitter. We used to share a lot on Facebook, but we feel that it is not the main channel as it used to be, all has shifted on Instagram and influencers now have a big role in advertising. That's why we started cooperation with some Mexican influencers.

Q8: Did the hotel noticed negative comments or rating related with the disaster?

A8: No, there were no negative comments related with the earthquake. Although, we had to cancel hundreds of reservations, our clients are understanding, we returned money and offered them discount for future visit.

Q9: Has hotel used the natural disaster in the marketing?

A9: No, we did not involve disaster in our marketing.

Q10: Had to the hotel assure potential clients about its safety? Was it included somehow in the promotion of the hotel?

A10: Yes, hotel obtained safety certificate which declares hotel is safe and we shared it on our website.

Q11: Did/Does the hotel invest more in the promotion after the event than before the event?

A11: The hotel itself didn't, the company used more than usual for area of Mexico City.

Q12: After the natural disaster, did hotel lose its regular clients? If yes, did you apply any special actions?

A12: Our hotel hosts many events like conferences or reunions, this didn't change at all thanks to our rooms that are suitable for these occasions. In general, our regular guests are

faithful to us. And as I said before, we offered discount for people who had to cancel their trip to Mexico City.

5. Results and Discussion

Nowadays, it may seem that world experiences one natural disaster after another. Most recently there have been enormous wildfires in United States and in Australia and just after they got under control, new disaster emerged – COVID-19. As explained in the theoretical part, chapter 3.2.1 Classification, disease is also type of disaster (biological to be precise) if occurs among population and may be carried. Also figures provided in chapter 3.3 Statistics of natural disaster show that there was a slight increase in presence of natural disasters in the world, however it is clearly explained why. First of all, the access to information is much easier these days and transport of communication as well, thus we know what is happening on the other side of planet within minutes even seconds. Decades back when the transmission of information took much more time, people did not register that there had been earthquake or floods in other countries.

Secondly, the population of planet is increasing, therefore people colonise new inhabited areas. And natural disaster, as explained in the first chapter, can be called natural disaster when it somehow affects lives of people. So now, with higher number of populated areas, more natural disasters happen. When there is a hurricane in the middle of ocean, it is not considered as natural disaster.

And lastly, although there is an increase, the most important data decreases each year. Number of deaths rapidly falls annually. New technologies can predict changes in weather and inform locals about upcoming event. Governments also have improved strategies that deal with emergencies and the response is very quick.

In the second part of theory, thesis discussed different ways of marketing for hotels. The new 7 and 12 Ps models were explained which suit better to services and hostility business. Because customers do not leave with physical object after purchase, it is necessary to take this uniqueness in account. Whole hotel industry has special nature in comparison with goods that are sold in shops or online, hence the marketing strategies must apply different approaches. With a boom of social medias, the whole marketing has changed. Now, campaigns are dictated by trends on Instagram, Twitter or YouTube. Bloggers, video makers, Instagram celebrities – known also as influencers – play major roles in marketing strategies. This was also proven by research done in thesis.

The practical part of thesis wanted to show the impact of natural disaster on marketing and as a result from interviews, it is visible that social medias are crucial part of marketing strategies for each of 26 hotels. The research took in account the most utilized medias all over the world and omitted the ones that are specific for a certain region (just like QZone in China). Chatting medias like Whatsapp and Messenger by Facebook were also excluded because they serve for direct communication like text messages or e-mails. As observed in the sample description, TripAdvisor and Instagram are intensively used by every hotel. It could be opposed that TripAdvisor is not social media but reservation system, however, it is a platform where people are in touch with other people and commercial bodies like hotels, restaurants, and so on, people have discussions and make recommendations. Therefore, it is considered as a social media, though it has different approach than Instagram and Facebook. No matter what price category the hotel was or what was the size of the hotel, the trends are more less the same for whole industry. Though, there were several differences in marketing method, marketing in digital form has taken over and advertising in magazines or television has become the past. The lowest utilized social media within selected hotels was Pinterest. It is not very popular media among hoteliers because, as stated one 5-star hotel representative, "*so far it hasn't reached such a level of credibility and professionality as we see in other social medias*".

Current trends from digital marketing mirror the technology development. With increase of popularity of Virtual media, some hotels play along and incorporated this technology in their marketing strategy. To create clear and impressive VR, the investment is quite big, thus only big brand hotels are using it now. The low-cost hostels agreed that it does not pay off for them because the VR is better for big scale hotels with large rooms and spaces.

To answer main question of research "what is the impact of natural disaster on marketing of hotel", let's analyse answers from interviews. There is noticeable gap between the small independent hostel and hotel that is part of the large brand. There is positive and negative aspect of being independent hotel. As the owner of the first interviewed hostel stated, it was possible to change the design of hostel as desired, there were no restrictions from company, hence the options were limitless if the budget is omitted. On the other hand, the negative aspect of being independent hotel is the fact that there is no company name that stand behind. When hotel belongs to well-known brand, it is a guarantee that level of services is the same as in the rest of hotels from that brand. Furthermore, most people are

willing to stay in that hotel even though they have never been there, because of the brand. Because of that, selected hotels for research did not have problems to restart and the campaign was not adjusted to attract more guests. Contrary, smaller hotels without any branding found it difficult to address new clients after they opened. The budget plays a major role here. The hotel that are part of big-name company have automatically much bigger budget than hostels who work with much lower one. Great example of marketing on budget is the first interviewed hotel from India. The owner decided to use the power of social medias and adapted the content according to target group – young travellers also known as backpackers.

Special group of hotels is the second interviewed hotel. is a luxurious hotel resort with private beach and is a member of a small group of luxurious hotels that are located only in Thailand. Even though it does not belong to a worldwide chain of hotels, it has acquired its reputation throughout the years of operation and gained clients who always come back. From interview it is apparent that the hotel had to intensify its marketing, nevertheless it did not focus as much on digital marketing but person to person marketing, when the hotel sales representatives created personal connections with business partners of hotel. Personal contact, as seen, is still important for business and in this case was the key aspect of the successful marketing strategy.

6. Conclusion

This thesis focused on impact of natural disasters on hotels, especially on their digital marketing. The thesis included theoretical part where the term natural disaster was explained in detail along with closer look on statistics. First part of thesis also discussed marketing in services with focus on hotels and their possibilities with modern technology. New trends in marketing and their advantages were described while emphasis on social medias was put.

Based on the answers obtained by interviews on previous pages, it is possible to generate marketing strategy for a hotel that have the same experience as analyzed hotels, meaning the natural disaster. It is needed to know basic characteristic of the hotel which are explained below.

The hotel is located in Mexico in city Puebla and alike Mexican hotels selected for this thesis was hit by earthquake in 2017. It is a small independent hostel with capacity of 36 people, with breakfast for extra charge. According to TripAdvisor, the hostel has 2 stars, does not have its own website, has Instagram and Facebook accounts. As the owner stated, *"the hostel is great for people who like to meet new people, do not search for luxury. I recommend it to people who are on budget. It's better for short-term stay, let's say 1 to 5 nights*." The owner also said that with the money spent on renovations, there is almost nothing left for marketing and that he did not want to pay any sponsored advertisement on Booking.com nor Google.

The best match for this hostel is the interviewed hostel in India, they have basically the same features – small independent low-cost hotel that suits for short-term stay. Therefore, the promotion used by Indian hostel may suit the Mexican one. Utilization of social medias is crucial in this case. Intense activity and use of hashtags related to traveling worked for Indian hostel, thus it may work for this hostel as well. Besides Instagram, Twitter was proven to be also very helpful with maintaining the contact with potential guests and thanks to hashtags, both social media can be linked. Big obstacle that was found regarding to social medias is the hostel's account on TripAdvisor. According to research, it is extremely useful platform for those hotels who do not have their own website as they can provide all information there such as prices, transportation possibilities, nearby activities and other information that are not usually shared on other social medias. Hence,

TripAdvisor account should be updated because the hostel is still marked as closed and because of that people are not interested in this hostel.

Creation of some visual trigger would increase the interest of young travelers, and it can be even something very simple like colorful wall which is, according to Hostelworld, most favorite visual trigger among social media users. Since vibrant colors are trendy now and Mexico is well known for its colorful lifestyle, it is a great connection of current trends and culture.

With very limited budget, as the owner stated, creating virtual reality or professional advertising video is nearly impossible and also useless since the hostel is much smaller than resorts that use the VR tours and both – VR tour and video advertising – require high cost if done precisely.

Natural disasters for sure have impact on hotel marketing. The key factor in marketing strategy after natural disaster is the status of the hotel as resulted from research. Big-name hotels that are well-known did not have to change the marketing strategy as much as small hotels to attract clients because their name already means something in hostility services. Contrary, hotels that are not under the big brands had troubles after reopening, hence their marketing had to be more instense and strong. Most of these hotels are run on low budget and rely on spread of good word-of-mouth (WOM) among the travelers and free marketing channels which are more and more taking seriously and used by big hotel companies.

7. References

A. ISRAELI, Aviad, Seonjeong Ally LEE and Aryn C. KARPINSKI, 2017. *Investigating the Dynamics and the Content of Customers' Social Media Reporting after a Restaurant Service Failure.* Journal of Hospitality Marketing and Management. Routledge, 26(6), 606-626. DOI: 10.1080/19368623.2017.1281193. ISSN 1936-8623.

ABOU NABOUT, Nadia and Bernd SKIERA, 2012. *Return on Quality Improvements in Search Engine Marketing.* Journal of Interactive Marketing. Frankfurt, 23(3), 141-154. DOI: 10.1016/j.intmar.2011.11.001.

AGHA, Alexandra, 2017. *Influencer Marketing for the Hotel Marketing Industry.* Hotel Marketing Association [online]. 2017 [cit. 2020-02-01]. Available at: https://hotelmarketingassociation.com/blog/free-gdpr-seminar-brought-cvent/

ASSAR M.S.S.E., M., 1981. *Guide to sanitation in natural disasters.* 3rd ed. Geneva: World Health Organization. Available at: https://apps.who.int/iris/handle/10665/41031.

BELOW, R., WIRTZ, A. & GUHA-SAPIR, D., 2009. *Disaster Category Classification and peril Terminology for Operational Purposes.* Working paper. Munich.

BLAIKIE, P., CANNON, T., DAVIS, I. & WISNER, B., 1994. *At Risk: Natural Hazards, People Vulnerability and Disasters.* 1st ed. ISBN 10.4324/9780203428764.

CHU, Shu-Chuan and Yoojung KIM, 2015. *Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites.* International Journal of Advertising. 30(1), 47-75. DOI: 10.2501/IJA-30-1-047-075. ISSN 0265-0487.

CRED, EM-DAT & UNISDR, 2016. *Poverty & Death: Disaster Mortality 1996-2015.* Université Catholique de Louvain.

CRED, EM-DAT & UNISDR, 2018. *Economic Losses, Poverty and Disasters: 1998-2017.* Université catholique de Louvain.

DABROWSKI, Dariusz, et al., 2019. *Market orientation and hotel performance: The mediating effect of creative marketing programs*. Journal of Hospitality and Tourism Management. Vol. 41.

EM-DAT, 2009. *General Classification*. EM-DAT: International Disaster Database [online]. Available at: https://www.emdat.be/classification [cit. 2019-10-20].

EXPEDIA, *Star Ratings (hotel class)*. Expedia [online]. [cit. 2020-03-01]. Available at: https://www.expedia.com/Hotel-Star-Rating-Information

FIELD, Christopher B., V. BARROS, T.F. STOCKER, et al., 2012. *Managing the risks of extreme events and disasters to advance climate change adaptation: special report of the Intergovernmental Panel on Climate Change*. New York, NY: Cambridge University Press. ISBN 978-1-107-60780-4.

GA, 2017. *Risk and Impact*. Australian Government: Community Safety [online]. [cit. 2019-11-15]. Available at: https://www.ga.gov.au/scientific-topics/community-safety/risk-and-impact.

GARRIDO-MORENO, Aurora, Víctor J. GARCÍA-MORALES, Nigel LOCKETT and Stephen KING, 2018. *The missing link: Creating value with Social Media use in hotels*. International Journal of Hospitality Management. (75), 94-104. DOI: 10.1016/j.ijhm.2018.03.008.

GeologyIN, 2018. *The Ring of Fire*. GeologyIN. Available at: http://www.geologyin.com/2018/01/the-ring-of-fire.html [cit. 2019-11-01].

GFDRR, 2014. *Understanding Risk in an Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment*. Washington: World Bank & GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY.

GRÖNROOS, Christian, 2016. *On defining marketing: finding a new roadmap for marketing*. Marketing Theory [online]. 6(4), 395-417. DOI: 10.1177/1470593106069930. ISSN 1470-5931.

GUHA-SAPIR, D., D. HARGITT & P. HOYOIS, 2004. *Thirty Years of Natural Disasters 1974-2003: The Numbers*. Brussels: Presses Universitaires de Louvain. ISBN 2-930344-71-7.

HANSEN, Derek L., Ben SHNEIDERMAN and Marc A. SMITH, 2011. *Analyzing social media networks with NodeXL: insights from a connected world.* Burlington: Morgan Kaufmann. ISBN 978-0-12-382229-1.

HARTSHORNE, David, 2019. *The Best Social Media Channels for Your Brand's Marketing Goals.* Sendible [online]. 2019 [cit. 2020-01-28]. Available at: https://www.sendible.com/insights/social-media-channels.

HUSSUNG, Tricia, 2016. *The Importance of Marketing in the Hospitality Industry.* Concordia St. Paul. [Online] 2016. [cit. 2020-01-20]. Available at: https://online.csp.edu/blog/business/the-importance-of-marketing-in-the-hospitality-industry.

IFRC. *What is vulnerability?* The International Federation of Red Cross. Available at: https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/what-is-vulnerability [cit. 2019-10-20].

Kim, S.H., 2012. *A Study on Social Media Activities and Brand Equity of a Hotel: Focused on Users of Five-star Hotels' Facebook Page*s (Doctoral dissertation, Master's dissertation. Kyonggi University).

KÖTLER, Philip and Gary ARMSTRONG, 2006. *Principles of marketing.* New Jersey: Upper Saddle River. DOI: 9780137006694.

KÖTLER, Philip and Kevin Lane KELLER, 2006. *Marketing management*. 12th ed. Upper Saddle River: Pearson. ISBN 01-314-5757-8.

LI, Xu, Youcheng WANG and Yixiu YU, 2015. *Present and future hotel website marketing activities: Change propensity analysis*. International Journal of Hospitality Management. 47, 131-139. DOI: 10.1016/j.ijhm.2015.02.007.

LI, Yung-Ming, Chia-Hao LIN and Cheng-Yang LAI, 2010. *Identifying influential reviewers for word-of-mouth marketing*. Electronic Commerce Research and Applications. 9(4), 294-304. DOI: 10.1016/j.elerap.2010.02.004. ISSN 15674223.

LIM, Hyekyung, Jeong-Gil CHOI, Armigon AKHMEDOV and Jellna CHUNG, 2019. *Predicting future trends of media elements in hotel marketing by using Change Propensity Analysis*. International Journal of Hospitality Management. 82, 270-277. DOI: 10.1016/j.ijhm.2018.10.001. ISSN 02784319.

LITTLE HOTELIER, *Is word-of-mouth still a way to get bookings at your B&B?* Little Hotelier [online]. [cit. 2020-01-31]. Available at: https://www.littlehotelier.com/r/revenue-management/strategies/word-mouth-bookings-bb/

LITVIN, Stephen W., Ronald E. GOLDSMITH and Bing PAN, 2008. *Electronic word-of-mouth in hospitality and tourism management*. Tourism Management. 29(3), 458-468. DOI: 10.1016/j.tourman.2007.05.011. ISSN 02615177.

MANES, Eran and Anat TCHETCHIK, 2018. *The role of electronic word of mouth in reducing information asymmetry: An empirical investigation of online hotel booking*. Journal of Business Research. 85, 185-196. DOI: 10.1016/j.jbusres.2017.12.019. ISSN 01482963.

MEANS, Tiffany, 2020. *The 10 Most Powerful Hurricanes, Cyclones, and Typhoons in History*. ThoughtCo. [online]. 2020 [cit. 2020-01-27]. Available at: https://www.thoughtco.com/most-powerful-hurricanes-and-typhoons-in-world-history-3443613.

MEROÑO-CERDAN, Angel L and Pedro SOTO-ACOSTA, 2017. *External Web content and its influence on organizational performance.* European Journal of Information Systems. 16(1), 66-80. DOI: 10.1057/palgrave.ejis.3000656. ISSN 0960-085X.

MET Office. *Tropical cyclone facts*. MET Office. Available at: https://www.metoffice.gov.uk/research/weather/tropical-cyclones/facts [cit. 2019-11-01].

MÖLLER, K., 2006. *Comment on: The marketing mix revisited: Towards the 21st century marketing.* Journal of Marketing Management. 22(3), 439-450.

MORRISON, Alison J. and Neil WEARNE, 1996. *Hospitality Marketing*. Routledge. ISBN 9780750626880.

Munich RE. *Risk factors: What is risk*. Munich RE: Australia. Available at: https://www.munichre.com/australia/australia-risk-factors/understanding-risk/index.html [cit. 2019-10-15].

NELSON, Stephen A., 2018. *Natural Disasters & Assessing Hazards and Risk: Natural Hazards and Natural Disasters*. Tulane University [online]. 2018 [cit. 2019-11]. Available at: https://www.tulane.edu/~sanelson/Natural_Disasters/introduction.htm

NOAA, 2018. *TROPICAL CYCLONE RECORDS*. NOAA [online]. [cit. 2020-01-28]. Available at: https://www.aoml.noaa.gov/hrd/tcfaq/tcfaqE.html.

PENNSTATE, 2018. *Environment and Society in a Changing World: Vulnerability to Natural Hazards*. Pennstate: Department of Geography [online]. 2018 [cit. 2019-11-15]. Available at: https://www.e-education.psu.edu/geog30/node/379.

PREVENTIONWEB, 2015. *Component of Risk: Vulnerability*. PreventionWeb [online]. [cit. 2019-11-15]. Available at: https://www.preventionweb.net/risk/vulnerability.

REID, R. Dan and David C. BOJANIC, 2010. *Hospitality marketing management*. 5th ed. Hoboken: Wiley. ISBN 978-0-470-08858-6.

REVFINE, 2019. *Latest Hospitality Marketing Trends*. Revfine. [Online]. [cit. 2020-01-20.] Available at: https://www.revfine.com/hospitality-marketing/.

ŘÍHA, Milan, 2011. *Živelní pohromy*. 2nd ed. Prague: Armex. ISBN 978-80-86795-97-3.

RODRIGUEZ-LLANES, J.M., RANJAN-DASH, S., DEGOMME, O., MUKHOPADHYAY, A., GUHA-SAPIR, D., 2011. *Child malnutrition and recurrent flooding in rural eastern India: a community-based survey*. Available at : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3208901/.

SALMAN, Doaa, et al., 2017. *A new marketing mix model to rescue the hospitality industry: Evidence from Egypt after the Arab Spring.*, Future Business Journal, Vol. 3, pp. 47-69.

SHAIK, Javed, MOYEENUDIN, Hm, SAHAYADHAS, Arun, R, Anandan and JANAHAN, Senthil Kumar. 2018. *Digital marketing in hotel industry*. International Journal of Engineering & Technology. 7 (288). DOI: 10.14419/ijet.v7i2.21.12383.

SMITH, Keith, 2004. *Environmental hazards: assessing risk and reducing disaster*. 4th ed. New York: Routledge. ISBN 04-153-1804-1.

STATISTIC BRAIN, 2017. *Internet travel hotel booking statistics* [online]. [cit. 2020-01-31]. Available at: https://www.statisticbrain.com/internet-travel-hotel-booking-statistics.

THAN, K., 2004. *Scientists: Natural Disasters Becoming More Common*. Live Science. Available at: https://www.livescience.com/414-scientists-natural-disasters-common.html [cit. 2019-11-01].

THE ROYAL SOCIETY, 1992. *Risk: Analysis, Perception and Management*. ISBN 978-0854034673.

TWIGG, John, 2004. *Disaster risk reduction: Mitigation and preparedness in development and emergency programming*. London: Overseas Development Institute. ISBN 0-85003-694-1.

UNISDR. Disaster risk: Exposure, *UNISDR: Prevention Web* [online]. Available on: https://www.preventionweb.net/risk/exposure [cit. 2019-10-20].

UNISDR, 2009. *Terminology on disaster risk reduction*. United Nations: Geneva.

UNISDR, 2013. *Global Assessment Report on Disaster Risk Reduction*. Geneva: United Nations. ISBN 978-92-1-132038-1.

UNISDR, *Terminology*. The UN Office for Disaster Risk Reduction. Available at: https://www.unisdr.org/we/inform/terminology [cit. 2019-10-20].

WILLIAMS, John and Tony CURTIS, 2006. *Marketing Management in Practice*. Routledge. ISBN 0750680113.

WISNER, B., Blaikie, P., Cannon, T. and Davis, I. 2004. *At risk: natural hazards, people's vulnerability and disasters.* London: Routledge.

WORDSTREAM, *Search Engine Marketing (SEM): What It Is & How to Do It Right*. WordStream [online]. Boston [cit. 2020-01-30]. Available at: https://www.wordstream.com/search-engine-marketing.

WRIGHT, Mike, 2019. *Instagram replacing travel brochures as survey finds social media influencing half of holidaymakers' choices*. The Telegraph [online]. 2019 [cit. 2020-02-10]. Available at: https://www.telegraph.co.uk/news/2019/04/25/instagram-replacing-travel-brochures-survey-finds-social-media/.

YALÇIN, Nursel and Utku KÖSE, 2010. *What is search engine optimization: SEO?* Procedia - Social and Behavioral Sciences. 2010, (9), 487-493. DOI: 10.1016/j.sbspro.2010.12.185.

ZEITHAML, Valerie, PARASURAMAN, A. and Leonard L. BERRY, 1985. *Problems and strategies in services marketing*. Journal of Marketing. 49(2), 33-46.

ZHOU, Yunhong and Rajan LUKOSE, 2006. *Vindictive Bidding in Keyword Auctions* [online]. Ann Arbor [cit. 2020-01-30]. DOI: 10.1145/1282100.1282130. Academic paper. University of Michigan.

8. Appendices
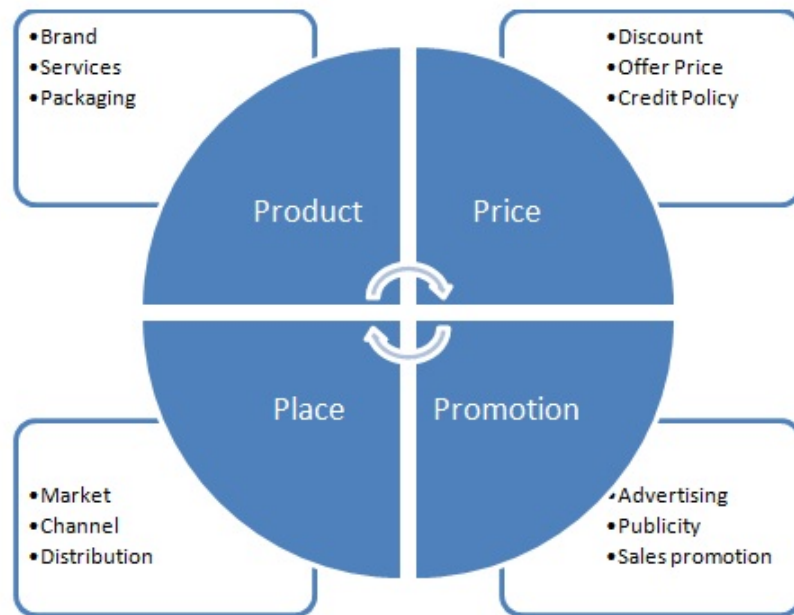
Picture 30: 4Ps Marketing mix model
Source: https:// wordpress.com
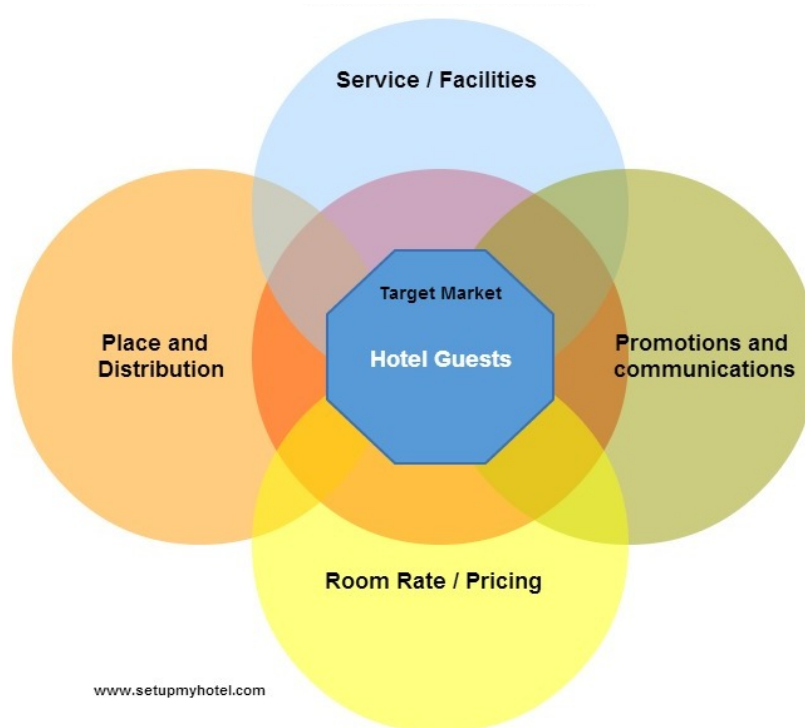
Picture 21: 4Ps Marketing mix for hotel

industry

Picture 31: 7Ps Marketing mix
Source: https://wordpress.com
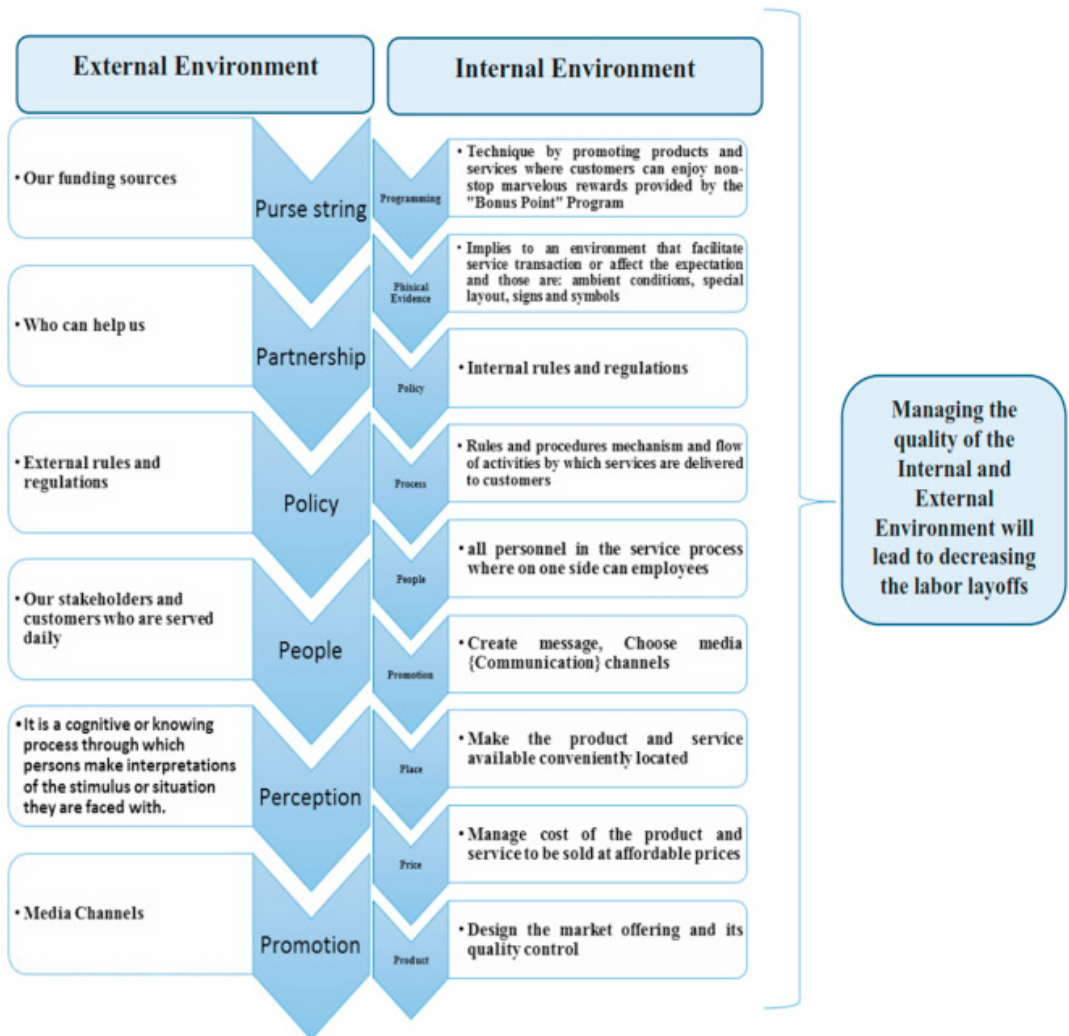
Picture 32: The proposed 12Ps Marketing mix by
Salman
Source: Salman, et al., 2017

Picture 33: Salman's external and internal factors in Marketing mix
Source: Salman, et al., 2017

Form - questions for hotels:

1. **Basic information about the hotel:**
    a. Name of the hotel (can be anonymous)
    b. Hotel capacity and number of rooms
    c. Main visitors age range:
        i.   young (up to 30)
        ii. adult (31-55)
        iii. senior (56 and above)
    d. Main purpose of visit: Family vacation
        i.   Couple vacation
        ii. Single traveler
        iii. Business trip
        iv. Other
    e. Star rating
    f. Average price of the room (for 2 people)
    g. Location

2. **Information about the natural disaster:**
    a. Type of the natural disaster
    b. Year of the event
    c. Level of damages Rank
        i.   0: No damage
        ii. Rank 1: Negligible damage (Hair line cracks in columns and beams of frame)
        iii. Rank 2: Slight damage (Shear cracks in non-structural walls)
        iv. Rank 3: Moderate damage (Shear cracks in columns and beams and in structural walls)
        v.   Rank 4: Major damage (Spalling of concrete cover, Buckling of reinforced rods)
        vi. Rank 5: Collapse (Collapse of total or parts of building)

    d. Hotel re-opened after:

        i. Less than month

        ii. 1-3 months

        iii. 3-6 months

        iv. 6-12 months

        v. More than a year

3. Information about marketing:

    a. What social media does hotel use? (check all)

        i. Facebook

        ii. Instagram

        iii. Pinterest

        iv. TripAdvisor

        v. Twitter

        vi. YouTube

    b. Does hotel use any of these in marketing? (check which one and specify)

        i. Hashtag

        ii. Remarketing

        iii. Travel Influencers

        iv. Video marketing

        v. Virtual Reality

        vi. Visual triggers