Analyse an Effective Recovery Plan for the Sustainable Development of the Hotel Industry in Yangon During Covid – 19

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Abstract

The health crisis brought on by the pandemic COVID-19 has been so severe that the decline in business and travel in the majority of countries is causing an economic crisis with effects that are still hard to measure. The current study examines the causes and progression of the coronavirus pandemic and surveys the literature on its effects and response plans for earlier crises that had an influence on Yangon, Myanmar's hotel sector. Based on tourism indicators, the significance of tourism for this nation, and the significance of Myanmar as a top worldwide tourist destination, Myanmar was chosen as the study's focus country.

In-depth research is done on how the epidemic has affected Myanmar's hospitality business and, more specifically, the hospitality sector. Finally, the response and recovery strategies of the five biggest hotel chains are discussed in order to ensure a COVID-19-free stay in their facilities and to restore the lodging industry. These strategies have been implemented on a global, Asian, and national level to support the tourism and hospitality sector.

In this research, the researcher mainly used an online survey. In this research paper, the recovery plan for hotels in the hotel industry during and after the covid 19 period is analyzed using descriptive & inferential statistics. Demographic information is presented using graphic methods. Variables are also analyzed with Means. In addition, using inferential statistics, the hypothesis was calculated using simple linear regression. The calculation is mainly done using SPSS. In addition, to make it stronger, we have also calculated and analyzed it with excel. In the final answer to the calculation, it should be found that the 2 dependent variables, the backup plan and the emergency plan, are affected by the independent variable, which is sustainable. Difficulties encountered when collecting research and how to successfully collect this research, acknowledgement, The researchers who will collect more in the future will also mention what research titles should be collected again.

Introduction

In late 2019, the Covid-19 virus began to spread to the globe through the city of Wuhan. This virus started spreading around the world and entered Myanmar in early 2020 and even died people in Myanmar. After entering the country of Myanmar, the hospitality and tourism industry began to experience health disasters when it came to the tourist season in Myanmar. As a result of the crisis, most people stopped travelling and changed their lifestyles by staying at home. The hotel industry, a sub-segment of the Hospitality and Tourism industry, has been greatly affected by the covid-19 crisis. To prevent the crisis, the management-

level employees in the hotel industry had to start thinking about the recovery plan and their sustainable development (ElHajjar, 2020) .

Due to the spread of the covid-19 disease in Myanmar, it has become difficult for the hotel industry to continue to exist. The main reasons why the survival of the hotel industry is difficult are: 1) People mainly use hotels for leisure. 2) Hotel is used because it is safer than other places. First of all, people are facing difficulties due to the impact of Covid-19 on their businesses. Along with the difficulties, the income is not good anymore. Then the recreation can no longer work properly. After the covid-19 disease in Myanmar and the military coup also occurred. This occurrence is also related to security, and the hotel industry can easily collapse. Because of the crisis caused by Covid-19 and the military coup, if the hotel industry does not have a recovery plan, it will not be able to sustain itself in the long term. As lifestyles change to the health crisis, the hotel industry needs to consider and review recovery plans to retain many employees and sustain the business in the long term. Therefore, the recovery plan and sustainability of the hotel industry enhance an attractive research topic.

In order to think about and protect the recovery plan, this research paper is being prepared. This research paper will study **how 4-star and 5 stars hotels in Yangon** Region use recovery plans. There are no other researchers on the recovery plan for the hotel industry in Yangon, Myanmar. Most of the researchers, according to the (Daphne, 2020), (Chu, 2020) are from abroad and are not related to the hotel industry in Myanmar. Also, their research is not related to covid-19 and they have not made a recovery plan. The purpose of this study can find the best recovery plan for the hotel industry in Yangon, Myanmar and give good recommendations and suggestions.

1. Research Aim and Objective

The aim of this research is to examine the impact of the recovery plan on the sustainable development of the Hotel Industry in Yangon, Myanmar.

Objectives are as follows:

- To analyse the sustainable development of the hostel industry during Covid -19
- To evaluate the emergency plan in the hotel industry during Covid -19
- To assess the backup plan in the hotel industry during Covid-19

2. Research Question

The research questions are as follows:

1) How does sustainable development affect the hotel industry during Covid -19?
2) How should the emergency plan be done in the hotel industry during Covid -19?
3) What kind of backup plan should the hotel industry have during Covid 19?

3. Conceptual Framework

A conceptual framework shows how the variables should be related to one another. It outlines how the research process' pertinent goals fit together to produce comprehensible conclusions (Sharon M. Ravitch, 2016). The conceptual framework for this study works stems from how the contribute recovery plans such as emergency plan and backup plan with the sustainable development hotel industry.
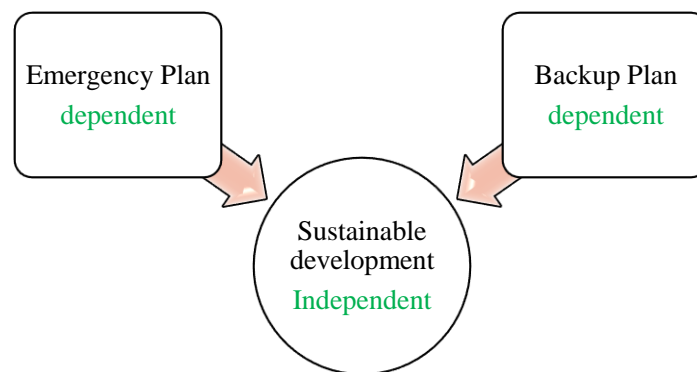
Figures (4.1) Conceptual Framework of the study

4. Hypothesis Development

H_1: Emergency Plan impacts on sustainable development

H_2: Backup Plan impacts on sustainable development

5. Finding in the Literature review (Theory Review, Imperial review)

5.1 Recovery Plan

(Buchanan, 2011) assumed that every sort of calamity has a different recovery strategy. An organisation should set up planning committees, each of which should be in charge of a specific type of recovery, to prepare for the disaster recovery plan. As the world advances, it suffers from various disasters. Then the recovery plan for the economy became very popular among researchers.

(Gustin, 2013) reported an organisation controlling levels such as the CEO, MD, and senior staff in the business can also use recovery planning. It supports corporate operations while maintaining the business community, and that is where its relevance resides. It is a crucial component of a company's long-term plan. Employees, residents, investors, other corporate entities, consumers, clients, and the overall community all benefit strategically from a good disaster and recovery strategy.

For a number of reasons, the effectiveness of emergency preparation needs to be tracked, assessed, and improved. First, disaster planners lack proper training and specialised knowledge since emergency management is not yet a fully-fledged profession (Crews, 2001). The second is ineffective emergency planning, which leads to inconsistencies between protocols and resources that are in line with ongoing emergency needs. Third, since emergency planning has become static, it will evolve and become dysfunctional. It should instead be a dynamic, ongoing process (Perry & Lindell, 2003). According to Paton's 2003 argument, emergency planning is not a continuous process and should be viewed as having come to a stop on its own. Alexander (2005) defended this claim and made the case that it needed to be handled dynamically to ensure functionality.

5.2 Relationships between Emergency Plan and Sustainable Development

(Buchanan, 2011) assumed that the next stage is to adhere to the backup plan once the emergency plan's procedures have been carried out. The backup strategy outlines how an organisation will resume processing information using backup files and hardware. In the event that the organization's regular location is damaged or rendered useless, the backup plan should outline the location of an alternative computing facility.

Effective planning serves a sufficient purpose in disaster management, according to Fink (1986). He argued that in order to manage the current situation, emergency preparation is crucial. It also displays the intention to identify the crisis warning signals and is a way to avert dangers like hotel fires. Hotels have

been labelled as high-risk structures, particularly for fires, due to the presence of highly flammable materials and the potential for smoke and fire to spread throughout the entire structure, or even to nearby structures (Hassanain, 2009). Ellis (1981) made clear the need for personnel to obtain enough training on how to deal with fires and other risks, while Subramaniam (2004) discussed enhancing knowledge that enables practitioners to grasp hotel fire characteristics.

According to Furness and Muckett (2007), a hotel's ability to evacuate injured guests in an emergency may be hampered by a concentration of guests close to exits. Also, crucial to consider is the number of things that can ignite and serve as fire fuel (Goodson & Murnane, 2008). Additionally, the hotel's architecture, which places the guest rooms on the upper levels and the high-risk areas on the lower floors, is problematic and could block the exits in the event of an emergency (Roberts & Chan, 2000). All aspects of hotel operations, including the front desk, reservations, restaurants, accounting, housekeeping, and wireless networks in the hotel's public spaces, have recently been impacted by information technology (IT).

5.3 Relationship between Backup Plan and Sustainable development

(Gustin, 2013) reported that actions that need to be taken immediately after a calamity specify an emergency plan. The disaster categories included in the emergency plan, such as fire, flood, and earthquake, are categorised. The steps taken in an emergency will vary depending on the type and scope of the disaster. After carrying out the steps in the emergency response plan, the backup plan should be followed. The backup strategy outlines how an organization will resume information processing using backup files and hardware. In the event that the organization's regular location is damaged or rendered useless, the backup plan should outline the location of an alternative result of technology. (Reuter, 2021) assumed that in a further COVID-19 backup plan that the government is not yet actively implementing, the British health minister indicated on Wednesday that hotels might be utilized for patients who no longer require full hospital care. This would clearly be an additional backup plan... We weigh all of our alternatives, told the BBC, Matt Hancock. This is for step-down patients, or those who have been hospitalized but no longer require in-depth hospital care but aren't quite ready to return home.

5.4 Previous Studies Analysis

The goal of crisis management is to foresee crises or at the very least to spot their warning signs and plan a suitable reaction. According to Santana (1999), crisis management is an ongoing, integrated effort to first comprehend a problem before attempting to prevent it. This endeavour considers the preparation, training, and interest of stakeholders in three phases, namely, prior to the crisis, during the crisis, and after the crisis. Plans, activities, and preparedness lists are implemented when there are indications of a crisis. According to (Peter,2020), when things start to change, a crisis can be averted, and when one does, these strategies and actions help to reduce loss. Action plans are also put into motion when there are indications of recovery, giving firms the chance to prepare themselves and swiftly resume operations. Being shielded from dangers is the first thing tourists think about when it comes to safety and security when travelling. The most important aspects of coping with disasters are emergency preparation and crisis readiness.

No	Author's Name (Years)	Independent Variable	Dependent Variable	Finding
1	(Peter, 2020)	crisis plan	sustainability	This paper offers some reflections on changes in the relationships between sustainability of hospitality industry during covid -19

2	(Ahmad Rasmi & Puad ,2020)	Disasters and Crises plan	Emergency preparedness	In this paper, authors proposals on details plan of disasters and how to fulfil gap in hotel industry during covid and post covid.
3	(Basak,2020)	crisis plan	managing organization	This paper proposals some considerations on changes in the relationships between crisis plan and managing organization hospitality industry during covid -19
4	Santana (1999),	Disasters plan	Business continues	In this paper, the authors pitch facts plan of disasters and how to fulfil business continues in the hotel industry post covid.
5	(Jose Miguel,2020)	Business Sustainability	Recovery Strategies	This paper submissions specific reflections on changes in the relationships between sustainability and recovery strategies of the hospitality industry during covid -19 in Spain

(Jose Miguel, 2020) assumed that there has not been much research focusing on hospitality responses and recovery instead, the focus has been on destination response and recovery. Furthermore, the scant amount of research that has reached a consensus has revealed that the hospitality sector is significantly impacted by emergency situations. Pandemics and natural disasters cause longer-lasting crises. Thus, they require more time to recover than economic crises. The essential elements for crisis recovery in such circumstances have been summarized by some authors. A crisis management and recovery strategy, market analysis, recovery development, recovery cooperation, and human resources management are among the elements, according to these authors. The competitiveness and existence of hotels may be seriously threatened by this.

The (Basak,2020) empirical study on the effects of COVID-19 that has been published to date revealed sharp declines in revenue per room and hotel occupancy. In actuality, the most concerned COVID-19-related challenges for the hotel industry are monetary concerns, uncertainty regarding the pandemic's longevity, and tourist apprehension. In order to build trust with tourists, advise improvements to revenue production, post-lockdown planning, and health protection measures. In this regard, encouraged employers to strengthen staff health and safety measures to ensure that no one becomes a part of the issue caused by a new coronavirus outbreak until there is a vacuum.

1. Research Methodology

7.1 Research Design

A thoughtful research design helps to guarantee that the methodologies are appropriate for the study objectives and that the proper type of analysis is used for the data. The researcher may be required to write up a study design as a separate assignment, a component of another project, or a broader research proposal. In each situation, the research should carefully assess the best and practical approaches for resolving the issue at involvement (Creswell, 2014).

When carrying out the research, the researcher has a choice between an inductive and a deductive strategy. However, the deductive strategy would be more effective in this investigation. Using field data collecting and observation in the hotel business, this study will evaluate the relationship between flexibility and employee engagement. The methodology used to determine if job flexibility actually has an effect on

employee engagement is based on theories and research. This study will adhere to a quantitative positivist worldview.

In order to identify links between engagement and flexibility, this research's findings require exact measurement and observable data. Additionally, positivism will aid in the measurement of this research through statistical analysis and the ability to understand observable and quantitative data. The strategy to gather data and analyse it will be survey research, which has researcher independence and quantitative data. This research study is related to the use of positive philosophy using structured data collections, a detective approach to testing the theory with collected data and quantitative choice.

The quantitative strategy is the one that was chosen for the study because it can quickly and efficiently cover a large sample size while saving money by transforming and interpreting data using statistical models. Because this research is being done for academic purposes and has a short time frame, it will be a cross-sectional study that analyses data at a particular time.

7.2 Target Population

The target population will be in in 4-star & 5-star hotels in Yangon with the total number of 50 supervisors level employees and because of the population size was already known, the sample size will be formulated with following methods

$$n = N/(1+N e^2)$$

Where, n- Sample Size   N- Target population, e- margin of error

5%margin of error, 95% confidence level,

N = 50/ [(1+ 50 (0.05) (0.05)] = 44

The target audience for this study is determined by the management level of the company in the hotel sector. The total population is 50 supervisors in the hotel industry, in Yangon, Myanmar. In the target population, the research paper is focused on sustainable and recovery plans. Therefore, the researcher focuses not only on supervisors but also on upper managing levels who work in 4-star & 5-star hotels in Yangon.

7.3 Sample Size

The number of observations used to calculate estimates for a specific population is known as the sample size. The sample size was determined by drawing from the population. Sampling is the practice of choosing a portion of the population from which to conclude the characteristics of the entire population. A subset of people is selected for study based on the number of entities in it (Health, 2008).

The intended sample size for this study is 50 people. Probability and non-probability sampling are used for this analysis because researchers know the population size. Fifty people make up the research's sample size. This sample outcome is based on a 95% degree of confidence and a 0.5% margin of error. Simple random sampling will be used for this research paper's sampling method.

7.4 Sampling Technique

All sample units have equality of opportunity, this method does not require specialised knowledge, and the researcher may easily understand the procedure. But sampling errors and sample precision are important considerations for researchers. Participants in this study must be at least supervisory-level employees in the hospitality sector. For the data gathering, the researcher used both primary and secondary sources. A researcher will gather preliminary data through techniques like surveys, interviews, or experiments. Information derived from studies, surveys, or tests carried out by others or for other research reasons is secondary data. For this study report, the researcher evaluates PDF documents from other prior researchers and academic articles from websites like Google Scholar.

7.5 Data Collecting Method

Primary data, which survey questionnaires will gather, will be used in this study. Respondents will receive questionnaires via a remote mechanism, Due to the researcher's lack of expertise in the topic. Email and Facebook will be used to send questionnaires to chosen responders from Yangon. Secondary data, such as published works from the past, journal articles, and books from google scholar, research gate and emerald sight.

7.6 Data Analysis

In the data analysis implementation, the study constructed five Likert scales of validity for the quantitative evaluation of opinions. The researcher employs both descriptive and inferential statistics. Descriptive statistics are preferred over inferential statistics because they better capture the fundamental characteristics of the data in a study. They summarise the sample. Along with charts for the respondent profile and sample visual analyses like frequency, they are the foundation for almost all quantitative data studies.

Use means and standard deviation when presenting the responses as well. Inferential statistics will also be employed to measure the validity of the hypothesis. Inferential statistics, such as correlation tests, are necessary to define the link between the dependent and independent variables because this research conclusion is based on the relationship between two separate variables. Regression analysis will be employed in this study, and research objectives incorporate findings of the causes and effects of a variable.

2. Ethical considerations

During COVID-19, the study is carried out for the hotel industry. Due to the nature of the research, the participant's organisation will be fully informed of ethical implications. Participants' permissions and the use of their data will be explained to them by the researcher, who will also keep their private information confidential and anonymous. Harvard references will be used in this study to properly acknowledge the authors and prevent plagiarism and other forms of academic fraud. While gathering data, the researcher will perform the interview fairly and equally without ever using coercion or harassment. Interviewee responses and available information will never be made public, and data will only be used to conduct research.

3. Testing Reliability and Validity

Regarding to the (Twycross, 2015), a measure's reliability is related to its consistency. Despite the fact that reliability cannot be calculated precisely, it can be estimated using a variety of techniques. The degree to which a concept is precisely quantified in a quantitative investigation is known as validity. Reliability, or the accuracy of an instrument, is the second criterion for evaluating the quality of a quantitative study. In other words, the degree to which a study tool consistently produces the same outcomes when applied to the same circumstance repeatedly. Concepts like validity and reliability are used to rate the integrity of studies. They serve as an indicator of how precisely a methodology, method, or test measures something. The validity and consistency of a measure are related, while the precision of a measurement is related to reliability. According to the (Barker, 2002), a reliability of 0.8 and validity of 0.5 is the good stage of research, a reliability of 0.7 and validity of 0.3 is the acceptance phase of research, a reliability 0.6 and a validity of 0.2 is the marginal stage of research and reliability 0.5 and validity 0.1 is the poor stage of research analysis. So, researchers also use Cronbach's alpha to make their research stronger. According to (Saleh, 2018)In Cronbach's Alpha, more than 0.9 reliability is an excellent level. Reliability between the range 0.8-0.89 is a good level and the 0.7-0.79 range level is an acceptable level. Then, the reliability

level between 0.6-0.69 is only in the questionable stage, the 0.5-0.59 stage is the poor stage, and the variable less than 0.59 is in the unacceptable stage. Due to its widely used and considered suitable when using Likert scales, Cronbach's Alpha is used to determine the internal consistency of variables.

Variable	Number of Items	Cronbach's Alpha	Relationship
Emergency Plan	7	0.766	$0.7 \leq \alpha < 0.8$ (Acceptable)
Backup Plan	7	0.714	$0.7 \leq \alpha < 0.8$ (Acceptable)
Sustainable	7	0.804	$0.8 \leq \alpha < 0.9$ (Good)

Table (9.1) Reliability and Validity Statistics for variable

The numeral of items and questions in each variable is surveyed from respondents of every 4 stars or 5 stars hotel in Yangon, Myanmar. According to the table (9.1), Cronbach's Alpha value of the independent variable is 0.804 and the values of the dependent variables are 0.766 and 0.714. Therefore, these are greater than and equal to 0.7 which means these variables are very reliable in nature because according to the variables, relationships are good and acceptable. And also, all questionnaires are in suitable arrangement and can reliably cover this research's aim and objectives. The validity of the factors and components is indicated with the Kasir-Meyer-Olkin Measure of sampling adequacy (KMO), as presented following in table (9.2).

9.1 KMO Factor analysis

The data's suitability for factor analysis is determined using the Kaiser-Meyer-Olkin (KMO) Test. The test evaluates the model's overall sampling efficiency as well as the sampling efficiency for each variable. The statistic is a representation of how much of the variance among the variables may be a common variance.

The more suitable your data is for factor analysis, the lower the proportion. KMO returns values ranging from 0 to 1. KMO values between 0.8 and 1 denote that the sampling was acceptable, according to general criteria for interpreting the statistic. KMO values below 0.6 signify insufficient sampling, and corrective action should be taken. Use your best judgment when determining values between 0.5 and 0.6 because some writers set this value at 0.5 (Gonick, 1993).

No/variable	Statement	Factor Loading
Emergency Plan		KMO = 0.674
	The hotel has opened a hotel restaurant in order to sustain the business during the Covid-19 period.	0.502
	The hotel has planned a place for employees who may be infected with Covid -19.	0.306
	The hotel had to reduce staff due to Covid-19 due to the budget situation.	0.684
	During the covid period, the hotel has doctors on hand to quickly treat travelers who are infected with the disease.	0.783
		0.711

	The hotel is also conducting health awareness activities during covid.	0.693
	The hotel is developing financial budget plans for the business budget situation during covid-19.	0.668
	The hotel has stricter rules than before in order to implement emergency plans in a timely manner during covid-19.	
2.Backup Plan		KMO = 0.689
	The hotel has kept enough protective equipment to prevent the spread of the disease during the stay of tourists during the Covid-19 period.	0.254
	The hotel buys insurance for employees related to the epidemic of covid -19.	0.558
	In order to attract tourists during the Covid-19 period, the hotel often advertises on social media that the hotel takes strict precautions against infection.	0.474
	In Covid-19, the hotel is also working on other businesses that can be operated to be able to stand comfortably financially.	0.780
	The hotel is planning marketing with new packages in order to be able to resume operations after the end of the Covid-19 disease.	
	The hotel is connected with other partner hotels to be able to operate during the Covid-19 period.	0.655
	The hotel provides other services as a backup plan for business operations during Covid-19. (Example – quarantine center)	
		0.617
		0.763
Sustainable development		KMO = 0.756
	The hotel is working on additional services to sustain.	0.535
	The hotel is making investments with other partners to sustain itself during Covid-19.	0.767
	The hotel is also planning new packages in order to immediately turn around in the post-Covid period.	0.624
	The hotel is doing covid -19 related CSR activities for 6sustainability.	0.711
	The hotel is also doing social media marketing during the covid period in order to be sustainable and not lose its branding.	0.676
	The hotel is also doing environmental maintenance for sustainability.	
	The hotel is conducting educational activities related to health during covid-19 for awareness.	0.712
		0.718

Table (9.2) KMO factor analysisAccording to the table (9.2), the KMO value of the emergency plan, the backup plan and the sustainable are 0.67, 0.68 and 0.756 separately. According to (Cronbach, 1916), if the value of KMO is greater than 0.65, the testing is acceptable. In the component substance, component 1 is the most valid and suitable for advanced study with some rejection. By using KMO, the research respondent variable that has weak validity and reliability, which is response no (2) in the emergency plan, response no (1), (3) in the backup plan and response no (1) in sustainable, will be removed and will continue to be examined in the analysis that will be further examined. Then it will become a stronger research paper.

4. Descriptive analysis of variable

10.1 Demographic Information Analysis

10.1.1 Analysis of Frequency Distribution with Graphical Method

Sr. No	Category (Hotel)	Frequency	Percentage
1	Awei Metta	1	1.9 %
2	Best Western Chinatown Hotel	1	1.9 %
3	Best Western Green Hill Hotel	1	1.9 %
4	Chatrium Hotel Royal Lake Yangon	3	5.6 %
5	Hlaine Tet Hotel	2	3.7 %
6	Hotel G Yangon	2	3.7 %
7	Hoya International Hotel Yangon	2	3.7 %
8	Jasmine Palace Hotel	1	1.9 %
9	Kandawgyi Palace Hotel Yangon	2	3.7 %
10	Lotte	1	1.9 %
11	Merchant Art Boutique Hotel	3	5.6 %
12	Mercure Yangon Kaba Aye	3	5.6 %
13	Novotel Yangon Max	1	1.9 %
14	Prince Hotel	2	3.7 %
15	Rose Garden Hotel	1	1.9 %
16	Sayar San Hotel Yangon	2	3.7 %
17	Sedona Hotel Yangon	2	3.7 %
18	Sky Star Hotel	2	3.7 %
19	Spring Line Hotel	1	1.9 %
20	Sule Shangri-La	2	3.7 %
21	Summit Parkview Yangon	2	3.7 %
22	Super Hotel Thilawa	2	3.7 %
23	Swan hotel	3	5.6 %
24	Taw Win Garden Hotel	2	3.7 %
25	The Strand Yangon	1	1.9 %
26	Vintage Luxury Yacht Hotel	3	5.6 %
27	Wyndham Grand Yangon	2	3.7 %
28	Wyne Hotel	2	3.7 %
29	Yuzana Garden Hotel	2	3.7 %

	Total	54	100 %

Table (10.1) Table of respondents by 4 stars / 5 stars hotel name
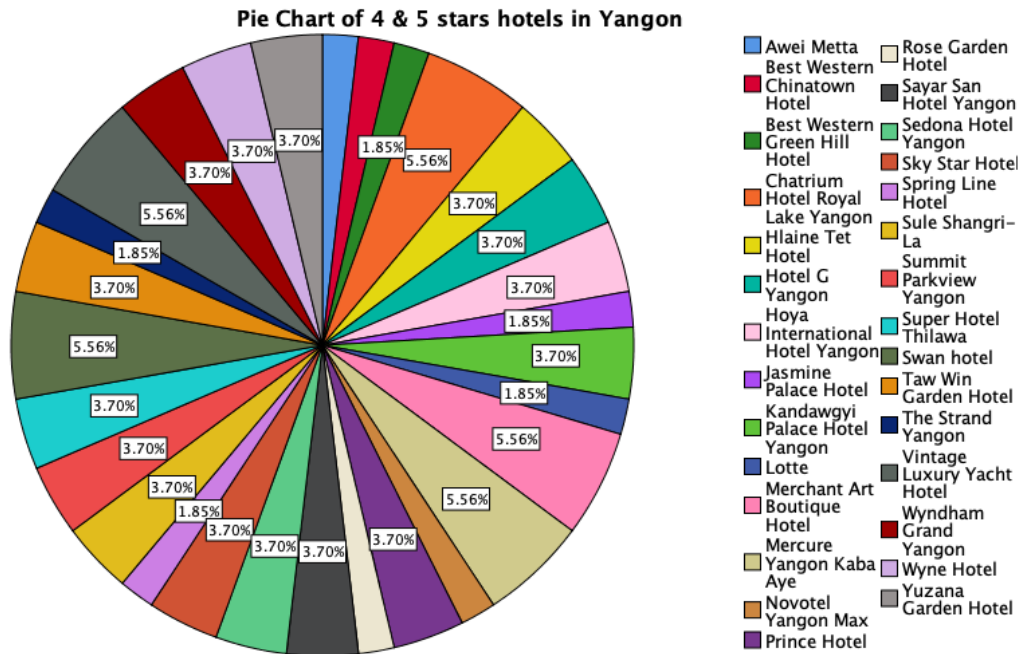

Figure (10.1) Pie Chart of 4- & 5-star hotels in Yangon

According to table (10.1) and figures, the study surveyed 54 supervision-level positions (CEO, Manager, First Line Manager) who worked in 4- & 5-star 29 hotels in Yangon, Myanmar. There are the main and important parts of this research paper. In the pie chart, the study shows the specific hotel and respondents.

Sr. No	Gender	Frequency	Percentage
1	Male	33	61.1 %
2	Female	21	38.9 %
	Total	54	100 %

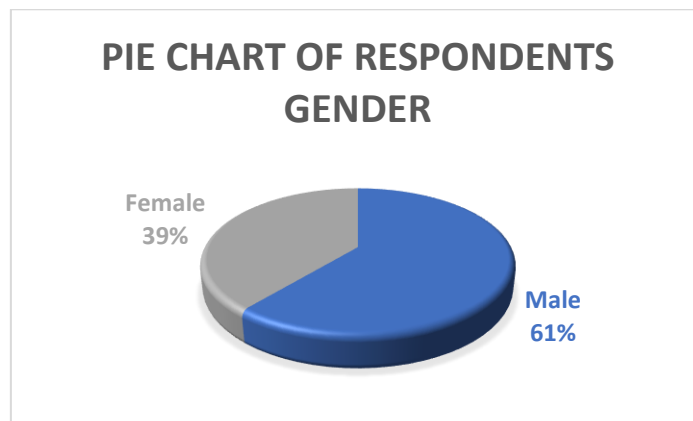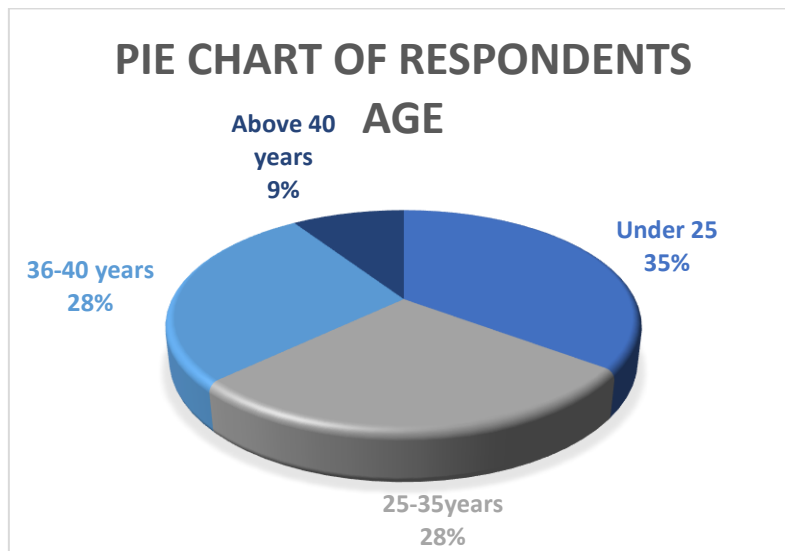**Table (10.2) Gender of Respondents**

Figure (10.2) Pie Chart of respondent's gender

As the qualitative, it is represented by a pie chart figure (10.2) and table (10.2). In this primary data, 39% of female respondents and 61 % are male respondents. Thus, the male respondents are more than the female respondents.

| Sr. No	Age	Frequency	Percentage
1	Under 25	19	35.2 %
2	25-35years	15	27.8 %
3	36-40 years	15	27.8 %
4	Above 40 years	5	9.3 %
	Total	54	100 %

Table (10.3) Age of Respondents

Figure (10.3) Pie Chart of respondents' age

As the qualitative, it is represented by a pie chart figure (10.3) and table (10.3). In this primary data of respondents' age, 39% of respondents are under-25 age, 28% of respondents are 25-35 years, 28% of respondents are 36-40 years and 9% of respondents are above 40 years. Thus, most respondents age are under 25 and the lowest respondents are above 40 years old.

Sr. No	Job Position	Frequency	Percentage
1	Upper Managing Level (Director, CEO, Founder)	5	9.3 %
2	Manager	24	44.4 %
3	First Line Manager (Supervisor)	25	46.3 %
	Total	54	100 %

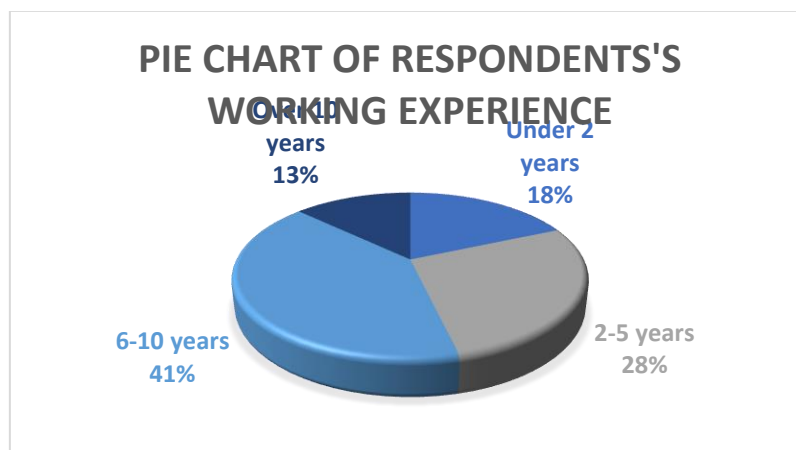**Table (10.4) Job Position of Respondents**
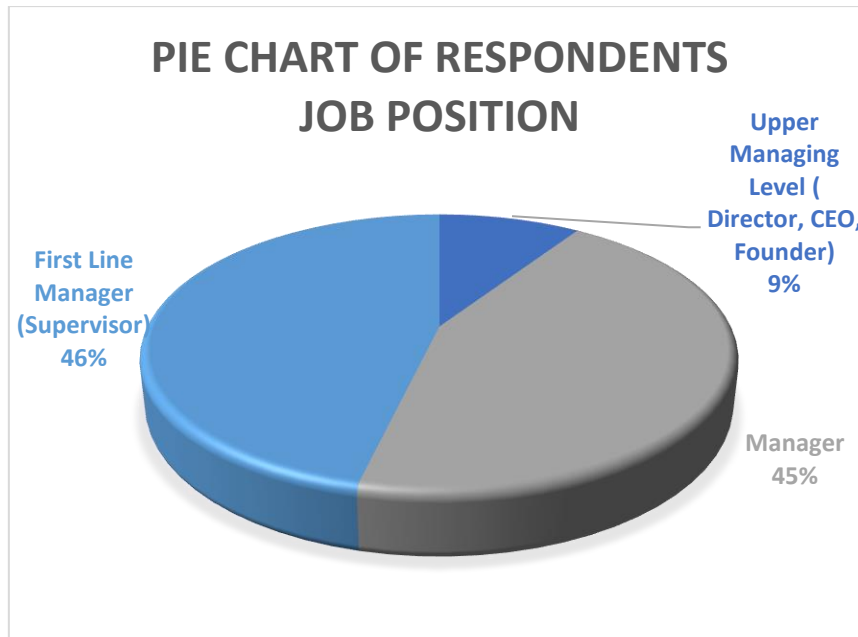
Figure (10.4) Pie Chart of respondents' job position

As the qualitative, it is represented by a pie chart figure (10.4) and table (10.4). In this primary data of respondents' job position, 46% of respondents are the first-line manager (supervisor), 45% of respondents are the manager and 9% of respondents are upper managing level (Director, CEO, founders). Thus, most respondents age are under 25 and the lowest respondents are above 40 years old.

Sr. No	Working Experience	Frequency	Percentage
1	Under 2 years	10	18.5 %
2	2-5 years	15	27.8 %
3	6-10 years	22	40.7 %
4	Over 10 years	7	13.0 %
	Total	54	100 %

**Table (10.5) Working Experience of Respondents**

Figure (10.5) Pie Chart of respondent's working experience

As the qualitative, it is represented by a pie chart figure (10.5) and table (10.4). In this primary data of respondents' working experience, 18% of respondents are under 2 years, 28% of respondents are 2-5 years, 41 % of respondents are 6-10 years and 13% of respondents are over 10 years. Thus, the longest respondents of working experience are 6-10 years and the shortest respondents' working experience is under 2 years.

| Sr. No	Monthly Income	Frequency	Percentage
1	300,001 – 500,000 MMK	4	7.4 %
2	500,001 – 700,000 MMK	21	38.9 %
3	More than 700,001 MMK	29	53.7 %
	Total	54	100 %

Table (10.6) Monthly Income of Respondents
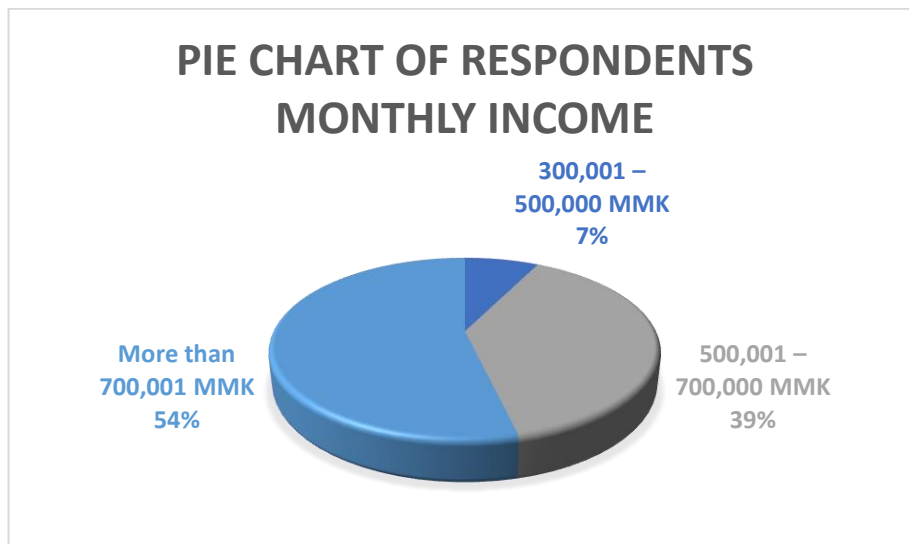
Figure (10.6) Pie Chart of respondent's monthly income

As the qualitative, it is represented by a pie chart figure (10.6) and table (10.6). In this primary data of respondents' monthly income, 7% of respondents are between 300,001 and 500,000 MMK income, 39% 7% of respondents are between 500,001 and 700,000 MMK income 54% of respondents are more than 700,001 MMK income. Thus, the highest respondents of monthly income are more than 700,001 MMK and the lowest respondents' monthly income is 300,001-500,000 MMK.

Sr. No	Marital Status	Frequency	Percentage
1	Married	16	29.6 %
2	Single	38	70.4 %
	Total	54	100 %

Table (10.7) Marital Status of Respondents
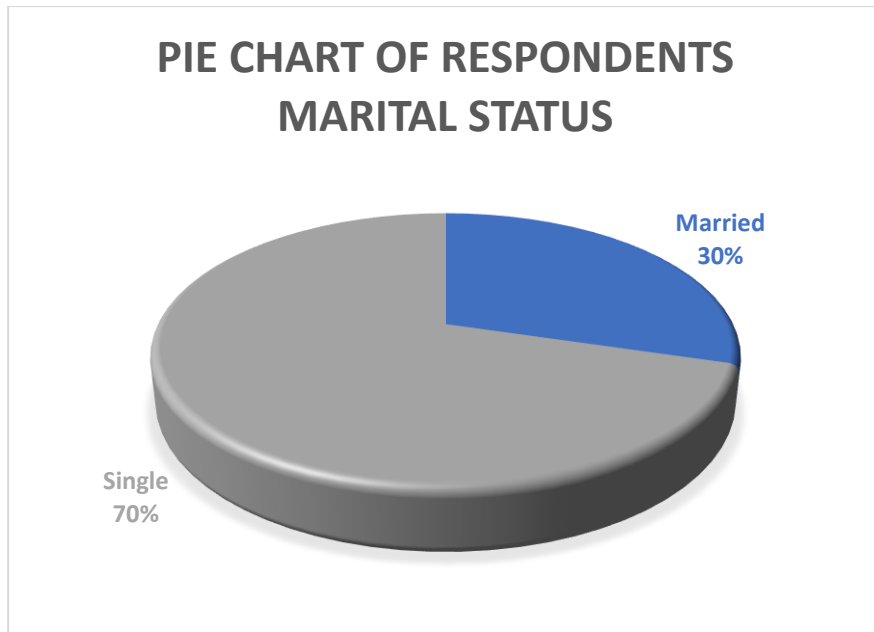
Figure (10.7) Pie Chart of respondent's marital status

As the qualitative, it is represented by a pie chart figure (10.7) and table (10.7). In this primary data, 70% of respondents are single and 30% of respondents are married. Thus, the single respondents are more than the married respondents.

a. Numerical methods analysis of variable (Mean & Standard Deviations)
In the discussion of these results, the variable value was defined by the level of satisfaction and agreement as follows:

 (Strongly disagree = 1, disagree =2, neutral =3, agree =4, strongly agree =5).

According to the (Pariwat Imsa-ard, 2021) defined criteria to measure the level of the variable using five-level Liker's scale items were interpreted as follows :

A score of 1.00 – 1.90 means strongly disagree

A score of 1.81 – 2.60 means disagree

A score of 2.61 – 3.40 means neither agree nor disagree

A score of 3.41 – 4.20 means agree

A score of 4.21 - 5.00 means strongly agree

Emergency Plan

Sr. No.	Description	Mean	Standard Deviations
1.	The hotel has opened a hotel restaurant in order to sustain the business during the Covid-19 period.	**3.12**	0.51
2.	The hotel had to reduce staff due to Covid-19 due to the budget situation.	3.37	0.59
3.	During the covid period, the hotel has doctors on hand to quickly treat travelers who are infected with the disease.	3.38	0.52

4.	The hotel is also conducting health awareness activities during covid.	3.37	0.52
5.	The hotel is developing financial budget plans for the business budget situation during covid-19.	**3.42**	0.68
6.	The hotel has stricter rules than before in order to implement emergency plans in a timely manner during covid-19.	3.38	0.59
	Total	3.7	0.46

Table (10.8) Analysis of single mean and standard deviation on the emergency plan

Regarding table (10.8), In the 4-star and 5-star hotel industry in Yangon, the overall mean number of emergency plans for sustainability is 3.7. According to the specifications of the researchers, the mean value of 3.7 is where it is agreed. According to the emergency plans in the tables above, the hotel industry's financial budget plans prepared during the covid-19 period have the highest mean value of 3.42, which is the strongest value. This means the minimum value is the plan for hotels to open a new restaurant to survive in the covid-19 period. The mean value for this plan is 3.12 which is the minimum value. The minimum value is also an acceptable value. In summary, all the mean values in the emergency plan are at the agreed level. The difference is that no mean value is found to strongly agree with the emergency plan.

Backup Plan

Sr. No.	Description	Mean	Standard Deviations
1.	The hotel buys insurance for employees related to the epidemic of covid -19.	4.62	0.48
2.	In Covid-19, the hotel is also working on other businesses that can be operated to be able to stand comfortably financially.	4.61	0.59
3.	The hotel is planning marketing with new packages in order to be able to resume operations after the end of the Covid-19 disease.	**4.59**	0.56
4.	The hotel is connected with other partner hotels to be able to operate during the Covid-19 period.	4.64	0.55
5.	The hotel provides other services as a backup plan for business operations during Covid-19. (Example – quarantine center)	**4.79**	0.49
	Total	4.5	0.40

Table (10.9) Analysis of single mean and standard deviation on the Backup plan

Considering table (10.9), In the 4-star and 5-star hotel business in Yangon, the overall mean number of backup plans for sustainability is 4.5. According to the specifications of the researchers, the mean value of 4.79 is where it is strongly agreed. According to the backup plans in the tables above, the hotel provides other services as the quarantine center for business operations during Covid-19 has the highest mean value of 4.79. According to observation, this is something that many people in the hotel industry do during Covid-19, and this research shows that it is very useful in a business's comprehensive backup plan. The minimum mean value in the Backup Plan is 4.59, which is a statement that the hotel intends to give to customers by playing new packages during the covid 19 period. In summary, regarding the Mean analysis, all statements in the contingency plan are above 4.5 and all strongly agree according to the criteria.

Sustainable

Sr. No.	Description	Mean	Standard Deviations
1.	The hotel is making investments with other partners to sustain itself during Covid-19.	**4.61**	0.68
2.	The hotel is making investments with other partners to sustain itself during Covid-19.	4.55	0.57
3.	The hotel is also planning new packages in order to immediately turn around in the post-Covid period.	**4.50**	0.63
4.	The hotel is doing covid -19 related CSR activities for sustainability.	4.53	0.57
5.	The hotel is also doing social media marketing during the covid period in order to be sustainable and not lose its branding.	4.51	0.66
6.	The hotel is also doing environmental maintenance for sustainability.	4.57	0.63
	The hotel is conducting educational activities related to health during covid-19 for awareness.	4.5	0.44

Table (10.10) Analysis of single mean and standard deviation on the sustainable

Regarding table (10.10), In the 4-star and 5-star hotel business in Yangon, the overall mean number of sustainable developments with recovery plans is 4.5. Agreeing with the qualifications of the researchers, the mean value of 4.61 is where it is strongly agreed means stage. For the sustainable development of the hotel, the statement that new packages must be introduced and sold immediately post-Covid has only a 4.5 mean value. However, it is included in the strongly agree level. The maximum mean value is 4.61, which is a statement that the hotel must invest with other partners for a sustainable plan.

5. Inferential Statistics of Variable

11.1 Hypothesis Testing
11.1.1 Simple linear Regression
11.1.1.1 Association of sustainable development and emergency plan
o   P value = 9.57235E-50
o   Significant Level $\alpha = 0.01$
o   P value < Significant Level: Accepted (H1) Rejected $H1_0$
o   P value , 9.57235E-50 < Significant Level: Accepted (H1) Rejected $H1_0$
According to the Hypothesis,
H1: Emergency Plan impacts on Sustainable Development
$H1_0$: Emergency Plan does not impact Sustainable Development
According to the simple linear regression and analysis of calculation, the P value (9.57235E-50) is less than the significant level (0.01) so the result is accepted (H1) and rejected $H1_0$. Therefore, an emergency plan impacts sustainable development at 1% of significant level.
11.1.1.2 Association of sustainable development and backup plan
o   P value = 2.0185E-57
o   Significant Level $\alpha = 0.01$

o   P value < Significant Level : Accept H2 (Rejected $H2_0$)

o   P value, 2.0185E-57 < Significant Level : Accept H2 (Rejected $H2_0$)

According to the Hypothesis,

H2: Backup Plan impacts on Sustainable Development

$H2_0$: Backup Plan does not impact Sustainable Development

According to the simple linear regression and analysis of calculation, the P value (2.0185E-57) is less than the significant level (0.01) so the result is accepted (H1) and rejected $H1_0$. Therefore, a backup plan impacts sustainable development at 1% of significant level.

Sr.No	Description	R	R-square	t	Sig	P value	Decision
1.	Sustainable - Emergency	0.140	0.020	4.715	0.312	9.57235E-50	Positive

Table (11.1) Hypothesis Testing

(The null hypothesis is rejected when $\alpha = < 0.05$)

R = coefficient of correlation, R square = coefficient of determination

According to the results of table (11.1), there is a weakly positive link between an emergency plan and sustainable development, with assertion 1 of coefficient R being 0.140. The relationship R-square is equal to 0.02, which indicates that sustainable development contributes 2% to emergency preparations and that other variables account for 99.98% of the variance. The p-value for a simple linear regression that examines how sustainable development (the independent variable) affects the emergency plan (the dependent variable) is 9.57235E-50, which is below the threshold of significance of 0.01. This demonstrates that the emergency plan has a 0.01 significance level positive impact on sustainable development. However, the result is just marginally positive.

Sr.No	Description	R	R-square	t	Sig	P value	Decision
1.	Sustainable - Backup	0.830	0.688	10.718	0.000	2.0185E-57	Positive

Table (11.2) Hypothesis Testing

(The null hypothesis is rejected when $\alpha = < 0.05$)

R = coefficient of correlation, R square = coefficient of determination

According to the results of table (11.2), there is a strong positive link between a backup plan and sustainable development, with assertion 2 of coefficient R being 0.83. The relationship R-square is equal to 0.688, which indicates that sustainable development contributes 68% to emergency preparations and that other variables account for 32% of the variance. The p-value for a simple linear regression examining how sustainable development (the independent variable) affects the emergency plan (the dependent variable) is 2.0185E-57, which is below the significance threshold of 0.01. This demonstrates that the emergency plan has a 0.01 significance level positive impact on sustainable development. However, the result is very strongly positive.

6. Findings and Discussions

In this research, such emergency plans and backup plans during Covid -19 Pandemic have an impact on sustainability of hotel industry. In this hypothesis testing, one factor is the emergency plan, a weak positive relationship with sustainability. And another factor is the backup plan, a strongly relationship with sustainability. However, both factors are affected on sustainability of hotel industry during and post covid.

According to the mean, the study known the detail, in this research which variables and which statement of variables are more reliability and useful. In emergency plan, the hotel industry's financial budget plans must be prepared during the covid-19 period. The study known more clear financial budget plans is very vital part of the sustainable hotel industry. The study also wants to suggest who read in this research paper and who working in hotel industry should use this kind of emergency plan. The researcher hope that kind of plans are very will be useful. In backup plan, the hotel must be providing other services as the quarantine center for business operations during Covid-19. Most of responses are very strongly agreed for this statement. In comparing backup plans and emergency plans, backup plans are stronger agreed than emergency plan.

7. Theoretical and Practical implications

Regarding to the (Peter, 2020), for sustainability, crisis plan is very important. But the researcher did not explain clear which kind of crisis plan is more effective and efficient for sustainably of hotel industry and Covid-19. In reality after my research, which crisis plan is more effective for sustainability and how to improve and modify for that research. (Jose Miguel,2020) assumed that specific reflections on changes in the relationships between sustainability and recovery strategies of the hospitality industry during covid -19 in Spain. This research paper is very similar with my research. However, this researcher focuses on Spain. My focus slope of research is Yangon 4 stars and 5 stars hotels. That is the big different point of for this research and my research can be covered south east Asia related hotel industry. In theoretically (Reuter, 2021), recovery plan such as emergency plans and back plans are very important and vital part of sustainability during covid -19. In practical implication, this research shows backup plans are more reliable emergency plans for sustainability during covid -19.

8. Conclusion

In this research paper, the study will be learned in detail about recovery plans for the sustainability of 4-star and 5-star hotels in the hotel industry during the Covid-19 pandemic. In addition, the study realized that the backup plan was more accurate. Then the study learned which statement was more powerful in each statement in each plan. In conclusion, during the period of Covid-19, the hotel industry has found and studied the practical use of plans for long-term sustainability, so I think this research paper will be very valuable and useful.

9. Limitations of research and Suggestions for Further Studies

It is strongly advised for new researchers to look at additional plans, such as more in-depth marketing plans, human resource plans, and financial plans for during and after a crisis, in order to overcome and be sustainable not just in the hotel sector but also in the tourism industry. In addition, other dependent factors, such as crisis and catastrophe plans, can be explored in future research as dependent variables for business continuity plans. Additionally, only quantitative approaches were used in this research due to the limited 6-month time span. To give further suggestions for the hotel industry and other industries conducting its recovery, if future studies have more time, in-depth interviews should also be done.

Also, since this research paper only uses quantitative data, it may be a little weak to get more accurate results. As the next researcher, if the qualitative data is included and collected, it will become better research than the current one, and it will become more useful in real life. This research is remote research

conducted using an online system, and the researcher who will be conducting it would like to write a further recommendation to include field studies.

10. Self-Reflection

I conduct remote research during this project, which is something I have never done before. I researched earlier studies online before approaching the hotel industry. In order to get practical backing for the idea of the hotel industry, I had to meet with the research topic teacher and supervisor several times throughout this study. With conversations on the selection of the research technique and the creation of my research questions and aims, the main focus of my first meeting with my teacher was outlining my expectations for the research experience.

The introduction, Literature perspectives, and other materials were finished by the time of my following consultation with my supervisor, and I had received a thorough analysis of these study articles. As explained previously, I had no prior knowledge of this research. So, after carefully considering what I am able of, I have chosen this research project. I thoroughly examine all the information on website pages before creating a literature review, carefully select the best articles for my research, and receive advice from my teacher and supervisor. After I discussed the research topic with the teacher, I got the topic to write a precise, simple and useful research from real life: I was able to write the research proposal without difficulty and it was approved once. Then I had to start research. First of all, I had to pick it up online with a remote system, so I encountered difficulties. But later, I connected with the hotel department and got the hotel's list and e-mail, and it was easy to pick up through e-mail and messenger. When we got 54 responses, we stopped collecting research and started preparing to run the data with SPSS & Excel. The first problem was that the software size of SPSS was too big and I couldn't do it with my laptop. Later, I still have to send the laptop to the repair shop.

After that, with the guidance of my teacher and supervisor, I obtained the best answer results and was able to present the data as a good research paper. This research was the biggest research of my life and I got many memories. Therefore, I am satisfied because I have gained new experience and diversity from this research.

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