Hotel Revival Strategy Planning with SWOT-Fuzzy AHP-TOPSIS: A Case Study of 4-star Hotel

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Abstract

The pandemic COVID-19 had caused a health crisis, which is negatively affecting the tourist activity in most countries, therefore generating a decline in hotel occupancy and revenues. The hotel recovery process's complexity requires a systematic approach to analyze various internal and external environmental factors. This paper aims to design an alternative strategy to revive hotel revenue because of pandemic. The method used in this study is a combination of SWOT analysis, Fuzzy Analytic Hierarchy Process (F-AHP), and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS). SWOT analysis identifies the hotel's internal and external factors, which can then be grouped into strengths, weaknesses, opportunities, and threats. Subsequently, SWOT factors are used to construct alternative recovery strategies using the TOWS matrix. Finally, a fuzzy AHP approach is employed to obtain the weight of SWOT factors, and TOPSIS is conducted to prioritize alternative hotel revival strategies based on the weighted SWOT factors. This research results a prioritized strategy to revive hotel revenue in one of Indonesia's 4-star hotels.

Keywords
Pandemic, Hotel, SWOT Analysis, Fuzzy Analytic Hierarchy Process, TOPSIS

1. Introduction

Global tourism has continued to grow over the past few decades. International tourist arrivals increase by 5% annually, reaching 1.4 billion arrivals in 2019. This remarkable growth has brought tourism sector as the third-largest contributing sector to global exports after the chemical and oil & gas industry (UNWTO 2019). Indonesia has rich and diverse natural assets whose potential for tourism development. In recent years, Indonesia's tourism sector has expanded and has a crucial role in supporting the country's economic growth. In the last five years, the number of international tourist arrivals to Indonesia shown an increasing trend. At the national level, the number of international tourist arrivals increased 1.88 percent to 16.11 million arrivals in 2019 (Central Bureau of Indonesia Statistic, 2020). The increasing of tourist visits has implications to trigger more foreign exchange earnings, increase the local revenue, and expand the the employment and business opportunities. In 2019, foreign exchange earnings reached USD 17.6 billion, with an average tourist expenditure of USD 1220 per arrival. Based on the expenditure structure, hotels and accommodation had the largest proportion (42%), followed by restaurants (20%) and domestic transportation (13%) (The Ministry of Tourism Republic of Indonesia 2015).

Despite the fact that tourism is one of the largest and fastest-growing economic sector, tourism remains fragile and vulnerable to both natural or man-made disasters (Wickramasinghe and Takano 2009). Recent catastrophic events, the SARS virus outbreak in 2003 and the global economic crisis in 2009, have negatively transformed international tourists' arrival. In 2009, the global tourism sector suffered a loss of 88 billion USD.

The beginning of the year 2020, the world was shocked by the Coronavirus (COVID-19) outbreak. This virus was first identified in Wuhan, China and then spread to nearly 215 countries, including Indonesia (World Health Organization 2020). The COVID-19 case in Indonesia continues to exhibit an increasing trend since the end of the year 2020. In response to the COVID-19 outbreak, all destinations worldwide started to introduce restrictions on travel. Without a doubt, it impacted a decline in tourist arrivals, further affecting hoteliers in Indonesia. The Ministry of Tourism and Creative Economy Republic of Indonesia on Figure 1 states that the room occupancy rate of star-classified hotels in Indonesia experienced a sharp decline in April 2020 compared to the room occupancy rate in April 2019.

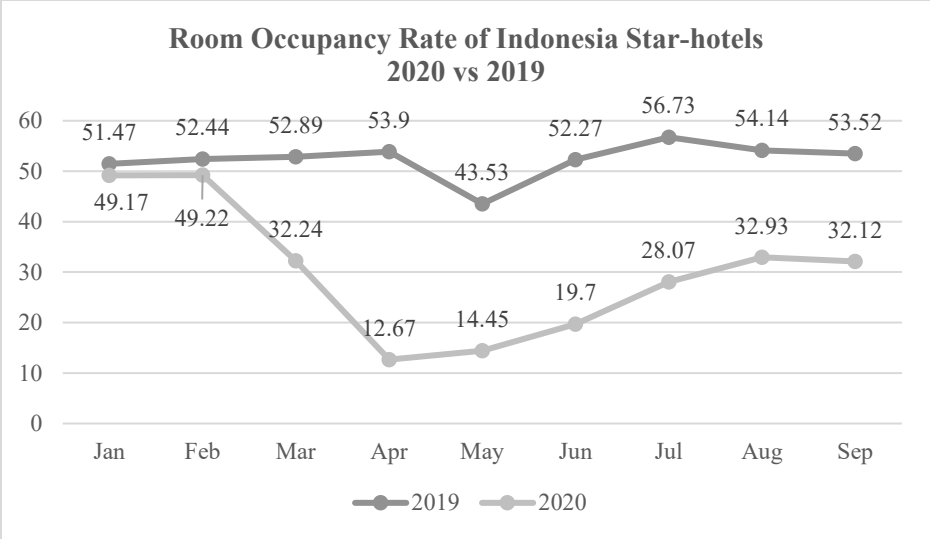

Figure 1. Room Occupancy Rate of Indonesia Star-hotels (2019-2020)
Source: (The Ministry of Tourism and Creative Economy Republic of Indonesia 2020)

Since the social distance relaxations and people are still avoiding international travels, domestic tourists start to travel locally. Nevertheless, demand-side recovery for travel and hospitality sector will take a longer period of time despite higher interest from domestic travelers (Eloksari 2020). The recovery process is complicated to carry out because re-operation based on many complex and uncertain factors such as travel motivation, security and safety perceptions, the magnitude of the disaster, the risk management capacity of potential visitors, regional conditions, and the company's brand image (Wickramasinghe and Takano 2009). The hospitality sector recovery process's complexity requires a systematic approach with a detailed analysis of various internal and external environmental factors.

Hotel X is a four-star modern hotel rich with historical culture and values. This hotel targets the middle to upper-class customer segment, which focuses on meetings, training, seminars, and conference arrangements. Pandemic situation in Indonesia had caused a sharp decline in the Room Occupancy Rate of Hotel X and decreased revenue by more than a half. Therefore, the research aims to help Hotel X in designing strategies to revive hotel revenue that can be implemented by considering internal and external conditions: strengths, weaknesses, opportunities, and threats of the hotel with combination of Fuzzy Analytic Hierarchy Process (F-AHP) and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) method.

2. Literature Review

2.1 Strategic Management

Strategic management is a process of evaluation, planning, and implementation to maintain or strengthen company's competitive advantage. The evaluation phase deals with the internal and external company's environment. Planning phase involves developing business models, competitive strategy, corporate direction, and acquisitions & collaborative action. The implementation phase requires leadership to build a suitable organizational structure, process strategic control, develop a management culture, and direct the organization through corporate governance (Gomes 2010). Strategic management is also defined as a set of managerial decisions and decision-making actions to achieve long-range objectives. Strategic management includes external & internal environment analysis, strategy formulation, strategy implementation, and evaluation & control (Hunger 2012).

2.2 SWOT Analysis

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, which are the strategic factors for organizations (Hunger 2012). SWOT analysis is a strategic management essential tool to help decision-makers develop a full awareness about the current state of the organization and formulate appropriate strategies in the future (Mirzakhani et al. 2014). In general, SWOT analysis has two main steps: the identification of SWOT and formulation of the strategies using TOWS matrix (Cayir Ervural et al. 2018). The identification of SWOT is constructed by listing internal strengths and weaknesses, thus external opportunities and threats. TOWS matrix can clearly describe how external opportunities

and threats of an organization can adjust according to its internal strengths and weaknesses. As shown in Table 1, after identifying the strengths, weaknesses, opportunities, and threats, the TOWS matrix is developed based on their combination of four strategic pairs specifically, SO strategy (aggressive strategy), WO strategy (conservative strategy), ST strategy (competitive strategy), and WT strategy (defensive strategy).

Table 1. TOWS Matrix

		Internal Factors	
		Strengths (S)	Weaknesses (W)
External Factors	Opportunities (O)	**SO Strategy: "Maxi-Maxi" Strategy** Strategies that take advantage of existing strengths and opportunities.	**WO Strategy: "Mini-Maxi" Strategy** Strategies that taking advantage of existing opportunities to overcome weaknesses.
	Threats (T)	**ST Strategy: "Maxi-Mini" Strategy** Strategies that utilize strengths to avoid threats.	**WT Strategy: "Mini-Mini" Strategy** Strategies that overcome existing weaknesses and avoid threats.

2.3 Fuzzy Analytic Hierarchy Process

The Analytic Hierarchy Process (AHP) was first developed by Thomas E. Saaty in 1970 (Dachyar et al., 2013). AHP, as one of multi-criteria decision making (MCDM) methods, considers a set of evaluation criteria and a set of alternatives between the best decisions to be made (Dachyar and Sijabat 2019). The AHP method is based on three principles: (1) decomposition, (2) comparative judgments, and (3) synthesis of the priorities (Saaty 2008). First, decomposition is applied to break down a complex problem into hierarchy, working downward from the main goal, criteria, subcriteria, and so on. Second, each element's relative importance in the hierarchy is determined by constructing pairwise comparisons with respect to a shared criterion the level above. Third, synthesized element's priorities from the second level down by multiplying local priorities with the level above criterion priority, producing the global priorities. Finally, the consistency of pairwise comparison matrix can be evaluated using consistency ratios (Turcksin et al. 2011). The main advantage of AHP is structured and intuitive. However, in many practical situations, AHP is ineffective because unable to accommodate ambiguous problems (Javanbarg et al. 2012).

Lotfi A. Zadeh introduced the theory of fuzzy sets in 1965. This theory is a mathematical structure used to represent vagueness, uncertainty, non-accuracy, and information deficiency using a range between numbers by providing a lower and upper limit of judgment. Vagueness can be used to describe something related to the uncertainty given in the form of linguistic information. In fuzzy set theory, the main component which is very influential is the membership function. Triangular Fuzzy Number (TFN) is used to describe linguistic variables with certainty. TFN consists of 3 membership functions: the lower value, mean value, and upper value denoted by $(l; m; u)$. The membership functions are as follows:

$$\mu\left(\frac{x}{M}\right) = \begin{cases} \dfrac{x-l}{m-l} & ,l \le x \le m \\ \dfrac{u-x}{u-m} & ,m \le x \le u \\ 0 & ,the\ other\ x \end{cases}$$

2.4 Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS)

TOPSIS is a well-known technique in classic MCDM introduced by Hwang and Yoon in 1981. TOPSIS generates alternative ranking based on the closeness from an ideal solution (Dachyar and Maharani 2019). The best-chosen alternative has the closest Euclidean distance from the positive ideal solution and the most significant Euclidean distance from the negative ideal solution. The positive ideal solution consists of all the best scores that can be achieved for each factor, while the negative ideal solution consists of all the worst scores achieved for each factor. TOPSIS has been applied in various research applications because it represents rational human choice and offers a simple calculation procedure (Łatuszyńska 2014).

3. Material and Methods

The proposed model in this paper uses an combined method of SWOT analysis, fuzzy AHP, and TOPSIS to establish a framework for ranking the hotel revival strategies. The first step to implement this framework is to analyze the hotel business environment by identifying its internal and external factors. In the present work, four experts from high-level managers of Hotel X are interviewed and their inputs were used as a basis for pairwise comparison. The interview stage used Business Model Canvas framework to identify the internal hotel business environment, thus PEST (Political, Economic, Social, and Technology) and Porter's 5 Forces to identify the external hotel business environment. By considering the interview results, SWOT analysis was prepared to generate a list of strengths, weaknesses, opportunities, and threats of Hotel X. The SWOT analysis that has been obtained previously is then used as input for designing alternative hotel revival strategies using the TOWS Matrix.

Fuzzy Analytic Hierarchy Process (Fuzzy AHP) is used to obtain the importance level of internal strengths and weaknesses factors, thus external opportunities and threats factors that affect the hotel business performance. The weighting of SWOT factors was carried out with five expert judgments: marketing manager, operational manager, IT manager, purchasing manager, and human resources manager. The experts will fill out pairwise comparison questionnaire, which will then be processed using the Fuzzy AHP method. The results of processing the questionnaire with Fuzzy AHP are the weighted values for each factor in the SWOT analysis. In order to rate each revival strategy, TOPSIS generates closeness coefficient with respect to SWOT factors weighted value and ranks the strategy performance.

4. Results

The interview process with high-level managers yielded 6 strengths, 3 weaknesses, 3 opportunities, and 5 threats of SWOT analysis for Hotel X. To examine the validity of the subfactors that will be listed in SWOT analysis, these subfactors were verified through several previous studies, which stated that these subfactors are also enabler and barrier factors in hotel performance business (presented in Table 2).

Table 2 SWOT analysis subfactor verified with previous research

No.	Factor	Subfactor	Reference
1.	Strengths	Strategic location	(De Jorge & Suárez 2014; S. K. Lee & Jang 2015)
2.		Heritage value	(Hussein & Hapsari 2020; See & Goh 2019)
3.		Technology innovation	(Langvinienė & Daunoravičiūtė 2015; Shin & Kang 2020; Zhong et al. 2020)
4.		Staff service quality	(Alvarez-Ferrer et al. 2018; Choi & Chu 2001)
5.		General amenities	(Choi & Chu 2001; Shanka & Taylor 2013)
6.		Hygiene and sanitation standards	(Awan et al. 2020; Jiang & Wen 2020; Lai & Wong 2020)
7.	Weaknesses	Old-fashioned building	(Henderson 2001; Subakti et al. 2015)
8.		Hotel area	(Barsky 1992; Maršanić & Mrnjavac 2015; Pizam & Ellis 1999)
9.		Capacity of ballroom	(Akbaba 2006; Choi & Chu 2001)
10.	Opportunities	Bogor tourism sector	(K. W. Lee et al. 2010)
11.		Staycation trend	(Awan et al. 2020; Napierała et al. 2020)
12.		Evolving information technology	(Chathoth 2007; Langvinienė and Daunoravičiūtė 2015)
13.	Threats	Hotel competition environment	(Qiu & Wei 2017; Tavmergen & Ozdemir 2001; Yu & Gu 2005)
14.		Travel motivation	(Wickramasinghe & Takano 2009)
15.		Political regulations	(Pregled 2006; Yu & Gu 2005)

No.	Factor	Subfactor	Reference
16.		MICE segmentation	(Campiranon & Arcodia 2007; Rwigema 2020)
17.		The rate spread of COVID-19	(Hao et al. 2020; Jiang & Wen 2020; Napierała et al. 2020)

After identifying the strengths, weaknesses, opportunities, and threats, ten strategies are developed with experts' guidance, previous literature, and industry experiences in the past. As shown in Table 3, the formulation of alternative strategies conducted with TOWS matrix and then used as considerations in decision-making.

Table 3. TOWS Matrix

Internal Factors / **External Factors**	**Strengths** S1: Strategic location S2: Heritage value S3: Technology innovation S4: Staff service quality S5: General amenities S6: Hygiene and sanitation standards	**Weaknesses** W1: Old-fashioned building W2: Narrow hotel area W3: Limited capacity of ballroom
Opportunities O1: The development of Bogor tourism sector O2: Staycation trend O3: Evolving information technology	**S-O Strategy** SO1: Offer healthy staycation experience package (S1, O1, O2) SO2: Practice contactless service (S3, S6, O3) SO3: Collaboration with travel and tourism agents (S1, O1)	**W-O Strategy** WO1: Enhancing hotel brand image through digital marketing strategies (W1, O1, O2, O3)
Threats T1: Hotel competition environment T2: Declining of travel motivation T3: Political regulations T4: Decreased MICE segmentation T5: The rate spread of COVID-19	**S-T Strategy** ST1: Launch of the COVID-19 prevention communication program (S4, S6, T1, T2, T5) ST2: Implement flexible cancellation policies (S3, S4, T2, T5) ST3: Extend the loyalty program membership (S4, T1, T2, T5) ST4: F&B Tenant program (S1, S4, T1, T2)	**W-T Strategy** WT1: Develop full attractive educational products for heritage tourism (W1, T1) WT2: Offer location for Hybrid Events (W2, W3, T4)

Pairwise comparisons between SWOT factors was performed within every SWOT clusters using 1-5 fuzzy triangular scale (Ayhan, 2013). All pairwise comparisons are determined with the inputs of five experts. Fuzzy AHP method is used to obtain the factor and subfactor weight, and the global weight of the subfactor that can be obtained by multiplying the factor weight with the subfactor weight (Gupta & Barua, 2018).

From Table 4, the overall weight for factors and subfactors of SWOT analysis are presented, resulting threats has the most significant weight value, with an overall priority value of 0.385. This result indicates that threats is the most important factor of all. The rate spread of COVID-19 (T5), a subfactor of threats, is in the highest priority with a priority value of 0.141. Meanwhile, the heritage value (S2) is in the lowest ranked with a weight value of 0.021.

Table 4. The results of weighting the factors and sub-factors of the SWOT analysis

Factor	**Factor weight**	**Subfactor**	**Local weight**	**Global weight**	**Rank**
Strengths	0,304	Strategic location (S1)	0,103	0,031	15
		Historical value (S2)	0,069	0,021	17

Factor	Factor weight	Subfactor	Local weight	Global weight	Rank
Weaknesses	0,117	Innovation in technology (S3)	0,140	0,043	12
		Staff service quality (S4)	0,200	0,061	8
		Adequate facilities (S5)	0,209	0,064	7
		Hygiene and sanitation standards (S6)	0,279	0,085	3
		Old-fashioned building (W1)	0,209	0,025	16
		Hotel area (W2)	0,353	0,041	13
		Capacity of ballroom (W3)	0,438	0,051	10
Opportunities	0,193	Bogor tourism sector (O1)	0,286	0,055	9
		Staycation trend (O2)	0,331	0,064	6
		Evolving information technology (O3)	0,383	0,074	4
Threats	0,385	Hotel competitiveness (T1)	0,107	0,041	14
		Travel motivation (T2)	0,127	0,049	11
		Political policy (T3)	0,171	0,066	5
		MICE segmentation (T4)	0,229	0,088	2
		The spreading of COVID-19 (T5)	0,366	0,141	1

The performance evaluation of alternative revival strategies for Hotel X is carried out based on the evaluated SWOT factors. At this step, a decision matrix was established with the same expert group from the previous step. The evaluation was collected through questionnaires with 5-Likert point scale and processed with TOPSIS method to produce each revival strategy's performance scores that were presented in closeness coefficient (CC_i). The weighted performance score and rank for each strategy is shown in Table 5.

Table 5. Closeness coefficient (CC_i) for each revival strategy

Alternatives	CC_i	Rank
SO1	0,344	7
SO2	0,468	3
SO3	0,208	10
ST1	0,458	4
ST2	0,455	5
ST3	0,490	2
ST4	0,309	8
WO1	0,375	6
WT1	0,253	9
WT2	0,574	1

As presented in Table 5, the ranking of the alternatives in descending order is WT2 – ST2 – SO2 – ST1 – ST2 – WO1 – SO1 – ST4 – WT1 – SO3. Alternative WT2, offer location for Hybrid Events, ranks as the first priority with a closeness coefficient value (CC_i) of 0.574. This result indicates WT2 is the best alternative revival strategy among the others. The strategy with the lowest score is collaboration with travel and tourism agents (SO3), where the alternative strategy has a closeness coefficient (CC_i) of 0.208.

To investigate the influence of factor weights on the ranking of alternatives, we examine a set of recovery scenarios for Indonesia hotels. Based on Deloitte's research, there are four possible scenarios for the COVID-19 pandemic situation that significantly impacted the tourism and hospitality industry (Deloitte, 2020). Deloitte stated that two indicators cause uncertainty in pandemic situations: severity of the pandemic and the level of collaboration between government and related institutions. However, this study only focuses on two of four scenarios provided considering the suitability of pandemic situation in Indonesia.

In the first scenario, pandemic spread is controlled because the government and related institutions' actions have become increasingly responsive and proactive. COVID-19 can be eradicated earlier than expected due to coordinated steps by the government to spread awareness and implement various best practices in dealing with the impact of pandemic. This scenario is also driven by the availability of vaccination reaching 21-50% of Indonesia's total population (World Health Organization 2020b). With these steps in place, economic activity is predicted to fully recover in the second half of 2021 as consumers have the confidence to expense and travel.

Along with the increasing measures in response to COVID-19, the priority value of the rate spread of COVID-19 (T5) and political regulations (T3) is reduced by 75%. According to data reported by Google Trends, the percentage of searches for the keyword "Staycation" is less than before the COVID-19 pandemic by 40%. In scenario 1, there is also a weight reduction for the staycation trend subfactor (O2). Also, several sub-factors related to the pandemic situation, such as travel motivation (T2) of Free Individual Travelers and revenue from the MICE segmentation (T4), decreased the importance of 55% and 70% in the selection of alternative recovery strategies.

In the second scenario, pandemic is not handled properly due to the government and related institutions' weak and slow actions. COVID-19 lasted longer than expected as the government could not take decisive action to prevent the spread of COVID-19 at an early stage. This scenario is also driven by vaccination's availability limited to 1-10% of Indonesia's total population (World Health Organization 2020b). With these steps in place, economic activity is predicted to fully recover in mid-2022.

As the spread of COVID-19 worsens, the priority value of the rate spread of COVID-19 (T5) and political regulations (T3) are increased by 75%. According to data reported by Google Trends, the percentage of searches for the keyword "Staycation" during the Jakarta travel restrictions phase II in September was less than during the transitional travel restrictions of 10% so that in scenario 2, the weight reduction for the staycation trend subfactor (O2) was reduced by 10%. Besides, several sub-factors related to the pandemic situation, such as travel motivation (T2) and revenue from the MICE segmentation (T4), also increased the importance level of 55% and 70% in the selection of alternative recovery strategies.

As stated in Table 6, where the new scenarios are compared against the baseline. In Scenario 1, the order of alternative SO2, ST2, ST3, WO1 has changed while in Scenario 2, the order of alternative ST1, ST2, ST3, and WT2 has changed.

Table 6. The priority results of hotel recovery strategy alternatives

Strategy	Base Scenario		Scenario 1		Scenario 2	
	CC_i	Rank	CC_i	Rank	CC_i	Rank
Offer healthy staycation experience package (SO1)	0,344	7	0,355	7	0,335	7
Practice contactless service (SO2)	0,468	3	0,473	2	0,466	3
Collaboration with travel and tourism agents (SO3)	0,208	10	0,234	10	0,205	10
Launch of the COVID-19 prevention communication program (ST1)	0,458	4	0,433	4	0,462	5
Implement flexible cancellation policies (ST2)	0,455	5	0,395	6	0,463	4
Extend the loyalty program membership (ST3)	0,490	2	0,446	3	0,500	1
F&B Tenant program (ST4)	0,309	8	0,319	8	0,310	8
Enhancing hotel brand image through digital marketing strategies (WO1)	0,375	6	0,426	5	0,369	6

Develop full attractive educational products for heritage tourism (WT1)	0,253	9	0,277	9	0,246	9
Offer location for Hybrid Events (WT2)	0,574	1	0,577	1	0,489	2

The changing priority ranks of alternative revival strategies indicate that the strategy selection is slightly sensitive with the weight adjustments in several subfactors: staycation trend (O2), travel motivation (T2), political regulations (T3), MICE segmentation (T4), and the rate spread of COVID-19 (T5).

5. Discussion

This study proposed an integrated framework for choosing the best hotel revival strategy in Indonesia using the SWOT analysis combined with fuzzy AHP method to obtain factor weights and TOPSIS to rank alternative revival strategy. According to the results of the SWOT-fuzzy AHP-TOPSIS methodology, offering hotel location for Hybrid Events (WT2) ranks as the first priority in base scenario. As the hotel focuses on the MICE customer segmentation, they need to figure out how they can attract customers to organize meetings, conferences, or events in their place. The rising health and safety risks while conducting face-to-face events encourage event organizers to explore virtual or hybrid formats as the other option to live meetings. Virtual events are run entirely online, while hybrid events combine in-person and online activities. In hybrid format, presenters or interviewees are at a physical location while the audiences mostly attend the event remotely. To offer this package, the hotel provides some audiovisual (A/V) needs for live coverage such as stage, camera, sound system, LED screen, and recording & live streaming services. Hybrid events have several substantial advantages. First, event organizers can reach more participants through digital platform, especially social media. These also enable audiences to access events using a hassle-free platform using their gadgets. Second, event organizers can minimize participants' expenses by holding hybrid events, such as catering, material supplies, transportation, etc. Third, Hybrid MICE technology can also offer real-time feedback that can be used for future improvement (Disimulacion 2020). Therefore, the opportunity to hold MICE activities in a hybrid manner is still wide open for hotels.

Even though the positive cases of COVID-19 were under control and the travel restriction policy was lifted in scenario 1, there were still many people who still felt uncomfortable attending MICE activities on a large scale because of the potential risks that might arise (Ho & Sia 2020). According to a survey conducted by ICCA (International Congress and Convention Association) (2020), as many as 84% of associatiosn members intend to incorporate virtual and hybrid elements into future MICE activities.

In scenario 2, the priority recovery strategy is the extend the loyalty program membership (ST3). When the COVID-19 pandemic situation starts to get out of hand, some consumers tend to cancel their travel plans, including staying at hotels (Mastrogiacomo, 2020). In this situation, it is essential for hotels to maintain their customer relationships. They can apply a policy of extending the loyalty membership program period. Since customers cannot fully use the loyalty program's benefits during the pandemic, hotels can provide gift memberships for loyalty program members. This strategy is implemented by several international hotels, including Hyatt, Accor, and Hilton. They extended their membership programs as well up to a year (Hao et al. 2020).

6. Conclusions

In this study, the SWOT and MCDM methods are introduced to formulate a recovery strategy for star-hotels. Fuzzy AHP is used in determining the level of importance between the factors and subfactors of the SWOT analysis. In contrast, TOPSIS is used to assess the performance of each alternative recovery strategy. Based on the expert's opinion, it is obtained that 6 sub-factors strengths, 3 sub-factors weaknesses, 3 subfactors opportunities, and 5 sub-factors threat in the SWOT analysis to choose alternative recovery strategies in the hotel. Based on the level of importance of the factors and sub-factors SWOT analysis, it was found that the threat factor and the rate spread of COVID-19 sub-factor (T5) were the factors and sub-factors that had the highest level of importance. Hybrid events location offering (WT2) is the chosen alternative revival strategy with the highest performance score based on TOPSIS method. This choosen alternative strategy is also applied in scenario 1, when the COVID-19 pandemic situation increasingly recovered. Meanwhile, in scenario 2, when the COVID-19 pandemic situation gets out of control, the strategy prioritized is Extend the loyalty program membership (ST3).

This research is limited to the formulation of a SWOT analysis and an assessment of the importance of the SWOT factors and subfactors, which only involve internal parties. Further research is expected to involve customers to find out Voice of Customers (VoC) and external experts in the hotel industry to gain more comprehensive knowledge about

the company's external SWOT analysis. In weighting the factors and sub-factors of the SWOT analysis, the study did not consider the interactions or dependencies between the listed factors and subfactors. Future research is expected to develop SWOT-MCDM integration using a method that can consider these interactions between factors, namely the Analytic Network Process (ANP).

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