

## **FORMULATING PRICING STRATEGY OF HOTEL ONLINE DISTRIBUTION CHANNEL**

**Risris Rismayani** 

School of Economic and Business, Telkom University, Indonesia

[risrisrismayani@gmail.com](mailto:risrisrismayani@gmail.com)

**Cahyo Wicaksono**

School of Economic and Business, Telkom University, Indonesia

[cahyo.wicaksono@rocketmail.com](mailto:cahyo.wicaksono@rocketmail.com)

### **Abstract**

*This paper aims to discover how consumers perceive the price of hotel, specifically in online distribution channel. The importance of knowing the factors, which influence price fairness perception, will help the company to understand how consumers assess the product offered and to formulate business strategy. The paper opted for quantitative research that analyzes data from questionnaire, gathered with non-probability sampling technique. The data analyzed using variant-based statistical model, the Partial Least Square (PLS) model. Additional descriptive analysis also used upon understanding respondent characteristics. The statistical result found that how consumer perceived the fairness of given price will significantly affecting their satisfaction towards the price. Descriptive analysis towards the questionnaire also found the price deemed as fair for consumer. On the basis of empirical results, the paper recommendations hotel to adjust their pricing into the range that perceived as fair by consumer to maximize their satisfaction. Due to limitation of research object, data, and variables, the research results may lack the generality. Therefore, researchers are encouraged to develop the findings further. The paper includes the implication for the formulation, development, and management of hotel pricing strategy in online distribution channel. This paper fulfilled the need to discover how consumer perceive price of hotel room in distribution channel as fair, therefore enabling hotel to consider it as a factor to determine room pricing strategy.*

**Keywords:** *Online Hotel Booking, Price Fairness Perception, Partial Least Square, Indonesia*

## INTRODUCTION

The number of Internet user in Indonesia grows significantly during the period of 1988-2015 and will continue to grow according to APJII, who state that the number of Internet user in Indonesia at the end of 2015 is 139 million. With a massive number of Internet-aware user whom still growing in number, Indonesia becomes a potential market for online travel agent (OTA) to develop their business (Jamaludin, 2015). Data from Phocuswright and Expedia also support the previous statement, as they said that predicted value of hotel reservation through OTA in Indonesia is USD 200 million with average growth of 200-300% per year. Customers in Indonesia are adapting online purchasing behavior quite rapidly. Country Manager of Visa Indonesia, Ellyana Fuad, said that online buyers are feeling more pleasant shopping through the internet rather than going to the physical store because they can easily manage their time in shopping and freely compare prices over various stores (Rahayu, 2014).

Price fairness perception becomes more important, due to the Internet, now seller can differentiate price based on consumer sensitivity and consumer can easily compare prices from one store to another. This phenomenon underlies price fairness on consumer interpretation of value exchange behind consumer decision (Andrés-Martínez, et al., 2014). When consumer judges the price fairness, there are questions to be considered, such as what they paid, what others paid, and how's the price setting (Taylor & Kimes, 2010).

The hotels can charge different prices based on its various services and features. Apparently, by implementing the method, when consumers feel the pricing policy isn't fair, it will affect their satisfaction and volume of negative response in the future. Therefore, pricing strategy plays a major significant role in the hotel industry to adjust the fair price of goods and service in the market, then finally increase short and long-term revenue (Falalieiev, 2015).

By taking the previous statement by Falalieiev (2015) into consideration, grasping the influencing factors and consequences or implication of price fairness perception will support the comprehension of how consumer value the offered products. Furthermore, it can also be used as an alternative strategy to formulate profit-maximizing price. With consumer being accustomed to accessing information of hotel prices easily and growing numbers of a new entrant, price fairness perception as pricing strategy in hotel online distribution channel becomes an interesting as a research subject.

Results from this research will be able to aid hotel managers to implement strategies that increase hotel occupancy and revenue.

## METHODOLOGY

This research can be categorized as quantitative research. The population of this research is all consumer who had done online booking stay at the hotel according to booked date. Due to large number of population, a non-probabilistic sampling technique is implemented, specifically the purposive sampling method, to determine the number of samples. Afterward, questionnaires were distributed to 318 respondents, which from the part of research sample from the population.

Measurement scale used for the questionnaire response is 4-point Likert scale. The questionnaire contains 34 question items acting as the indicator of the research variables. The product moment correlation equation (Sugiyono, 2013) were used to validate each questionnaire items. Overall, the value of total correlation of each questionnaire items ( $r_{\text{statistic}}$ ) was higher than the value of  $r_{\text{critical}}$ , therefore indicating the validity of questionnaire items (Appendix A). Alpha Cronbach equation used to test the reliability of questionnaire. Overall, the reliability coefficient value of each variables is higher than 0.70, indicating the acceptable reliability of each variables (Appendix B).

Partial Least Square (PLS) method implemented as statistic method for data analysis. PLS is one of variance-based structural equation modeling (SEM) statistic method designed to solve multiple regression when there are specific troubles with the data, such as a small number of sample, missing value of data, and multicollinearity. There are several advantages in using PLS such as, it can model ample number of dependent and independent variables, sturdy result even with missing or abnormal data, can generate independent latent variable directly based on cross-product involving latent dependent variables as prediction strength, can be used on reflective and formative construct, does not require normal distribution data, and can be used on data with different measurement type (nominal, ordinal, or continuous).

In this research, influencing aspects of price fairness and the result from the perception are investigated. Variables for research construct are adapted from Martinez, et al (2014) and Bassey (2014). Those variables are influencing factors of price fairness perception, such as reference price ( $X_1$ ), familiarity with online booking hotel ( $X_2$ ), search of fairness ( $X_3$ ). Then, the influence of price fairness perception ( $Z_1$ ) on perceived price fairness ( $Z_2$ ) is also investigated. This research also studies the influence of perceived price fairness towards decision confidence ( $Z_3$ ) and price satisfaction ( $Z_4$ ), which ultimately both will influence customer loyalty ( $Y$ ). Figure 1 depicts the theoretical framework of this research.

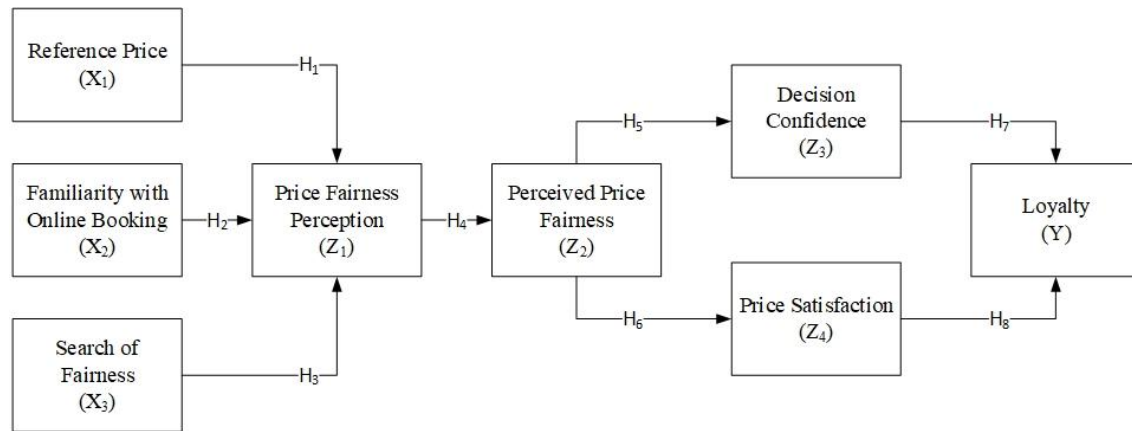


Figure 1 Theoretical Framework (Adapted from Martinez, et al, 2014 and Bassey, 2014)

From the theoretical framework depicted in Figure 1, we proposed several hypotheses for this research.

H<sub>1</sub>: There is significant influence from reference price (X<sub>1</sub>) to price fairness perception (Z<sub>1</sub>) of the consumer using online booking reservation in hotel X.

H<sub>2</sub>: There is significant influence from familiarity with online booking hotel (X<sub>2</sub>) to price fairness perception (Z<sub>1</sub>) of the consumer using online booking reservation in hotel X.

H<sub>3</sub>: There is significant influence from search of fairness (X<sub>3</sub>) to price fairness perception (Z<sub>1</sub>) of the consumer using online booking reservation in hotel X.

H<sub>4</sub>: There is significant influence from price fairness perception (Z<sub>1</sub>) to perceived price fairness (Z<sub>2</sub>) of the consumer using online booking reservation in hotel X.

H<sub>5</sub>: There is significant influence from perceived price fairness (Z<sub>2</sub>) to decision confidence (Z<sub>3</sub>) of the consumer using online booking reservation in hotel X.

H<sub>6</sub>: There is significant influence from perceived price fairness (Z<sub>2</sub>) to price satisfaction (Z<sub>4</sub>) of the consumer using online booking reservation in hotel X.

H<sub>7</sub>: There is significant influence from decision confidence (Z<sub>3</sub>) to loyalty (Y) of the consumer using online booking reservation in hotel X.

H<sub>8</sub>: There is significant influence from price satisfaction (Z<sub>4</sub>) to loyalty (Y) of the consumer using online booking reservation in hotel X.

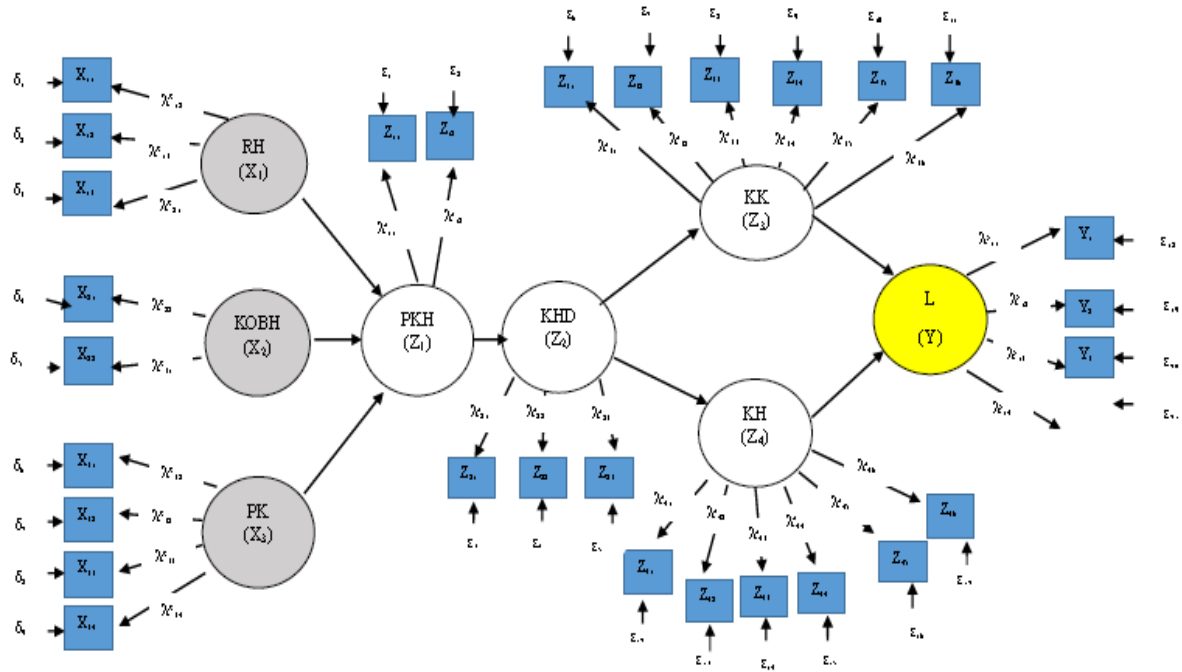


Figure 2 Structural Equation Model

Data in this research are analyzed using Partial Least Square. PLS is one of variance-based SEM statistic method who, in examination, divided into two models, namely the outer model and the inner model. The outer model consists of convergent validity, discriminant validity, and composite reliability. While the inner model consists of path coefficient and coefficient determination  $R^2$ . The structural equation model from PLS designed for this research depicted on Figure 2.

The notations used are:

$\xi$  = Exogenous latent variable;

$\eta$  = Endogenous latent variable;

$\lambda_x$  = Loading factor of exogenous latent variable;

$\lambda_y$  = Loading factor of endogenous latent variable;

$\Lambda_x$  = Loading factor matrix of exogenous latent variable;

$\Lambda_y$  = Loading factor matrix of endogenous latent variable;

$\beta$  = Coefficient of endogenous variable influence to endogenous variable;

$\gamma$  = Coefficient of exogenous variable influence to endogenous variable;

$\zeta$  = Model error;

$\delta$  = Measurement error on manifest variable for exogenous latent variable;

$\varepsilon$  = Measurement error on the manifest variable for the endogenous latent variable;

## RESULTS AND DISCUSSION

### Respondent characteristics

Questionnaire result reveals several descriptive characteristics of consumers who had done online booking at hotel X. First thing revealed is that consumers who had done online reservation are mostly men with the percentage of 52%. By the age, most respondents are aged between 25-30 years old. Next, 74% of respondents' highest education is at Diploma/Bachelor degree. Then, most respondents are working as private companies' worker with most of them having an average monthly income ranging from IDR 3 million to IDR 4 million. The questionnaire also reveals the visit purpose of the consumers. This shown by the majority of the respondent, namely 88% of them, booked the hotel room for vacation purpose and 45% of all respondents mainly choose Deluxe room type. These characteristics found from questionnaire hopefully will help in understanding what kind of consumers play a major role in determining this research's result.

### Statistical results

Bootstrapping method towards the sample was implemented in PLS hypothesis testing. Hypothesis testing conducted by comparing t value measured by the model ( $t_{\text{statistic}}$ ) with t value from t value ( $t_{\text{table}}$ ) from the table. If a  $t_{\text{statistic}}$  value greater that  $t_{\text{table}}$ , then the relationship between latent variables can be stated as significant.

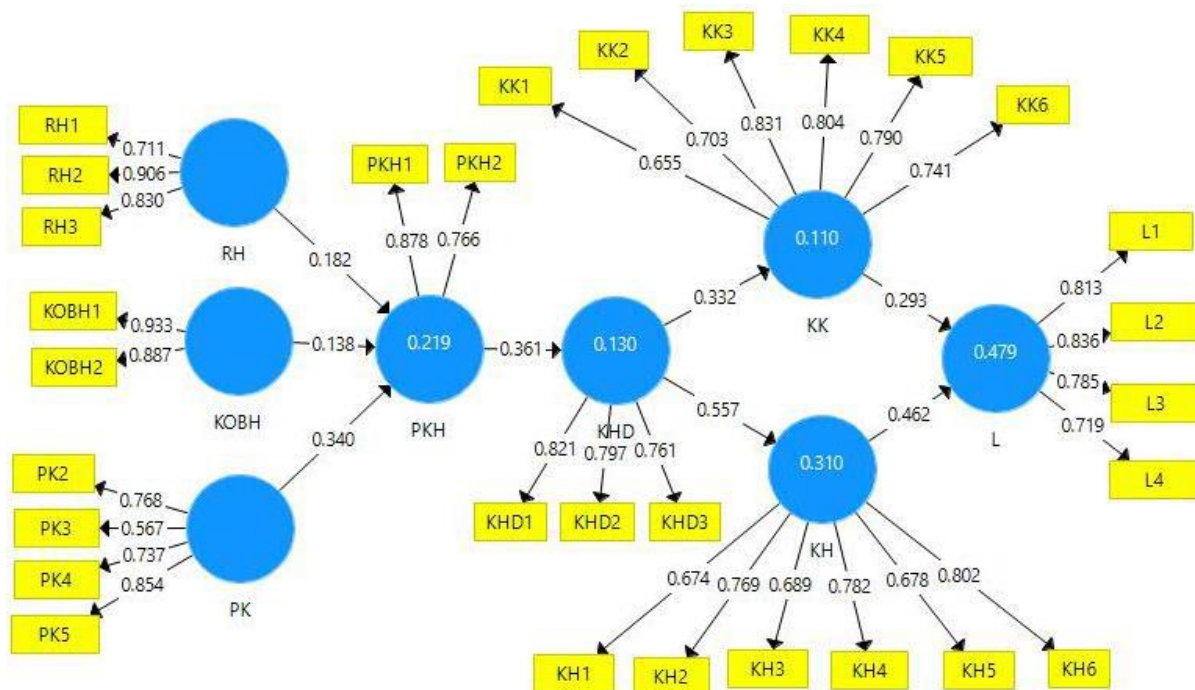


Figure 3 PLS Algorithm Result



Table 1 describes 8 paths which represent 8 hypotheses from this research. Path defines the relationship between one indicator with the others. Path coefficient shows independent latent variables influence by analyzing its coefficient in path analysis (Fig. 4).  $t_{\text{statistic}}$  values are parameters of prediction effect significance between latent variables. Then, the  $\alpha(t_{\text{table}})$  value for 5% significance from the table is 1.96. By comparing the value of  $t_{\text{statistic}}$  and  $t_{\text{table}}$ , the action needed for each hypothesis can be determined. In this research, the action for all hypotheses is to reject  $H_0$ . It means that all statement stated in  $H_1$ - $H_8$  are accepted, or basically they are proven to be correct. From all significantly influencing relationships, the relationship between Perceived Price Fairness and Price Satisfaction is the most significant, based on its path coefficient value.

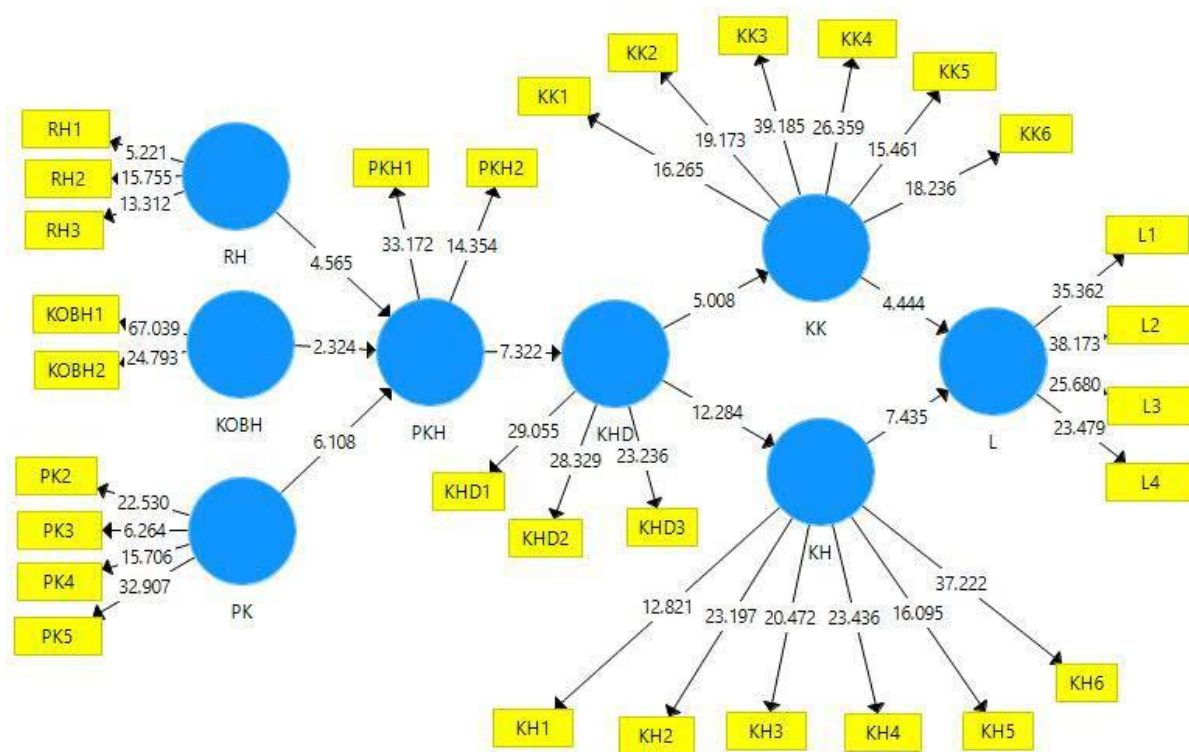


Figure 4 Bootstrapping Result

Statement in  $H_1$ - $H_3$  proven by hypothesis testing to be correct. It means that Reference Price, Familiarity with Online Booking Hotel, and Search of Fairness proven to having a significant influence on Price Fairness Perception. With Reference Price including maximum price per night, maximum affordable price, and minimal price per night can influence price fairness perception. In this case, consumers judge the price comparison in the online distribution channel. While Familiarity with Online Booking Hotel means the effect that came from the frequency of conducting online reservation and knowledge of online reservation process. Lastly,

Search of Fairness includes several indicators such as competitor price, previous experience, external information source, and recommendation, can influence Price Fairness Perception based on the purpose to find more suitable/fair price or to evaluate fairness.

In this research, Price Fairness Perception was statistically proven to have a significant influence on Perceived Price Fairness. The result supports the statement that restriction towards customer when they are unable to cancel lowest price offering and establishment time of higher price on the weekend can influence Perceived Price Fairness, which is an evaluation about whether money paid by the customer is suitable with goods and service production cost or not.

The result of hypothesis testing in Table 1 shows that Perceived Price Fairness is having a significant influence on Decision Confidence and Price Satisfaction. For Decision Confidence, the result means that hotel pricing policy can give significant influence on customer's confidence in making a decision, which is customer's perception of the sales transaction and fair and sensible outcome. While for Price Satisfaction, the result means that hotel pricing policy can also give significant influence on customer satisfaction of the price, which involved evaluation of transaction outcome.

Table 1 Hypothesis Testing Result

Hypothesis	Path	Path Coefficient (Fig. 3)	$t_{\text{statistic}}$ (Fig. 4)	$t_{\text{table}}$	Action
H <sub>1</sub>	$X_1 - Z_1$	0.182	4.565	1.96	Reject H <sub>0</sub>
H <sub>2</sub>	$X_2 - Z_1$	0.138	2.324	1.96	Reject H <sub>0</sub>
H <sub>3</sub>	$X_3 - Z_1$	0.340	6.108	1.96	Reject H <sub>0</sub>
H <sub>4</sub>	$Z_1 - Z_2$	0.361	7.322	1.96	Reject H <sub>0</sub>
H <sub>5</sub>	$Z_2 - Z_3$	0.332	5.008	1.96	Reject H <sub>0</sub>
H <sub>6</sub>	$Z_2 - Z_4$	0.557	12.284	1.96	Reject H <sub>0</sub>
H <sub>7</sub>	$Z_3 - Y$	0.293	4.444	1.96	Reject H <sub>0</sub>
H <sub>8</sub>	$Z_4 - Y$	0.462	7.435	1.96	Reject H <sub>0</sub>

The last two relationships explained in Table 1, is relationships between variable Decision Confidence and Price Satisfaction to Loyalty. Both variables, Decision Confidence and Price Satisfaction, are statistically proven to be having a significant influence on Loyalty. The influencing relationship between Decision Confidence and Loyalty means that acquisition and processing information, determination of consideration, and social and private effect has a significant effect on customer's loyalty towards the certain hotel. While in relationship between Price Satisfaction and Loyalty means that price quality ratio (ratio of service quality per



expenses), price transparency (clear and detailed current information), relative price (comparison between offered price of hotel and competitors), confidence in price (profitable offered price certainty), price reliability (increasing price adjustment) and price fairness (consumer perception whether the socially accepted price is reasonable or not) can give significant influence on customer's loyalty, as in emotional reaction generated from interaction caused by experience on different price dimension.

### Formulating pricing strategy

More insights gained from questionnaire were the minimum price per night for 3-star hotel according to consumer, maximum price per night for 3-star hotel according to consumer, and affordable price per night for 3-star hotel according to consumer. The minimum price per night for 3-star hotel according to customer is ranged from Rp400.000 to Rp450.000, while for maximum and affordable price per night for 3-star hotel according to customer is ranged from Rp500.001 to Rp600.000. To complete these insights, an interview was conducted with hotel X management. Based on the interview, this research found that hotel X implemented BAR (Best Available Rate) system on their online travel agent (OTA) distribution channel. It is a practice of yield management, a mechanism of pricing strategy based on demand (Andrés-Martínez, et al., 2014). The strategy leads the demand by manipulating tariff and available capacity simultaneously. With BAR pricing system, this research found that hotel X set their price at the range of Rp499.000 to Rp749.000 for a room per night in weekdays. Lastly, based on observation towards three trustworthy OTA distribution channels, this research found that the price per night for hotel X in OTA distribution channels is ranged from Rp523.101 to Rp749.000. Table 2 shows the comparison between the prices for hotel X.

Table 2 Price Comparison

Description	Price Range
BAR System Price ( <i>weekdays</i> )	Rp499.000 – Rp749.000
Applied OTA Price	Rp523.101 – Rp749.000
Maximum Price ( <i>according to customer</i> )	Rp500.001 – Rp600.000
Affordable Price ( <i>according to customer</i> )	Rp500.001 – Rp600.000
Minimum Price ( <i>according to customer</i> )	Rp400.000 – Rp450.000

Hotel X price based on BAR system is aligned with offered price on OTA, but are not yet aligned with customer's expectation. Price rated by consumer for 3-star hotel is proper, because they are accustomed with online reservation and have the knowledge to do it. Hotel X should take

into consideration competitor price, consumer's history, information from internet forum, social media, and recommendation website because consumers seek information of price offerings and compare them. Pricing that considers accepted limitation and differentiation based on time to achieve suitable price according to consumer's rating is proper. Consumers are certain by the time they do online reservation because offered price fit their budget. When a consumer is feeling certain and satisfied, consumer will endorse his/her choice and won't easily affected by competitor's offered price.

To compete with other competitors in hotel industry, hotel X has been implementing strategy for their pricing policy. Hotel X does not fixate on one pricing method, but they always have several factors that determine their price, such as cost, demand, and competition. They manage to determine their pricing that suitable with market condition, while taking into consideration cost per room.

## CONCLUSION AND SUGGESTIONS

Pricing strategy based on cost, demand, and competition implemented by hotel X shows competitive price among its competitor. Questionnaire also reveal maximum and affordable price per night according to consumers, which ranged from Rp500.001 to Rp600.000. Furthermore, analysis from questionnaire also shows that consumers are not mind paying more if their cost is in accordance or even more than what they expected.

Referring to regulation set by Minister of Tourism and Creative Economy of Republic of Indonesia number PM.53/HM.001/MPEK/2013 about Hotel Business Standards, hotel X fulfill the absolute standard of starred hotel in terms of product and service. The unfulfilled standard for not absolute criteria is special service for disabled guests. For the not absolute standard of 4-star hotel fulfilled by hotel X in terms of service is the availability of duty manager and VIP treatment service. While in terms of products is the availability of business center.

In this research, we analyzed pricing strategy in online distribution channel of 3-star hotel in West Java, Indonesia, with the use of Price Fairness Perception framework adapted from Martinez, et al (2014) and Bassey (2014). The most influencing relationship is between Perceived Price Fairness towards Price Satisfaction. In achieving customer loyalty, the deciding factor is Perceived Price Fairness, which is the pricing policy who give the best price capable of fulfilling customer's needs. Giving priority to benefit for customer with certain limitation, providing room option information, and variating offered price on online distribution channel will ease the customer in processing the information. Hotel X should manage positive and negative response from their guest so that they ultimately endorse their positive review about their experience with

hotel X. Consistent improvement of service will also give customer satisfaction in transacting with online reservation, which eventually leads to repurchase and recommendation intention.

## REFERENCES

- Andrés-Martínez, M., Gómez-Borja, M. & Mondéjar-Jiménez, J., 2014. A model to evaluate the effects of price fairness perception in online hotel booking. *Electronic Commerce Research*, 14(2), pp. 171-187.
- Bassey, F. O., 2014. The Effect of Perceived Price Fairness on Customer Satisfaction and Loyalty, Famagusta: Eastern Mediterranean University.
- Falalieiev, A., 2015. Exploration of Pricing Strategies in North Cyprus Hotels, Famagusta: Eastern Mediterranean University.
- Jamaludin, F., 2015. Merdeka: Begini potensi pasar online travel di Indonesia. [Online] Available at: <https://www.merdeka.com/teknologi/begini-potensi-pasar-online-travel-di-indonesia.html> [Accessed 30 May 2016].
- Rahayu, E. M., 2014. SWA Indonesia: Studi Visa: Makin Banyak Orang Indonesia Belanja Online Perjalanan Wisata. [Online] Available at: <https://swa.co.id/swa/trends/business-research/studi-visa-makin-banyak-orang-indonesia-belanja-online-perjalanan-wisata> [Accessed 16 October 2016].
- Sugiyono, 2013. Metode Penelitian Manajemen. Bandung: Alfabeta.
- Taylor, W. J. & Kimes, S. E., 2010. How hotel guests perceive the fairness of differential room pricing. *Cornell Hospitality Report*, 10(2), pp. 6-13.

## APPENDICES

### Appendix A

#### Questionnaire Validity Testing Result

Variables	No. Item	Corrected Item – Total Correlation	$r_{critical}$	Notes
Reference price	1	0.403	0.361	Valid
	2	0.477		Valid
	3	0.475		Valid
Familiarity with online booking	4	0.366		Valid
	5	0.412		Valid
Search of fairness	6	0.420		Valid
	7	0.611		Valid
	8	0.405		Valid
	9	0.569		Valid
	10	0.659		Valid
Price fairness perception	11	0.655		Valid
	12	0.627		Valid
	13	0.416		Valid
	14	0.566		Valid
	15	0.486		Valid
Perceived price fairness	16	0.530		Valid

	17	0.637	Valid
	18	0.527	Valid
Decision confidence	19	0.539	Valid
	20	0.602	Valid
	21	0.659	Valid
	22	0.677	Valid
	23	0.531	Valid
	24	0.503	Valid
Price satisfaction	25	0.567	Valid
	26	0.581	Valid
	27	0.386	Valid
	28	0.646	Valid
	29	0.703	Valid
	30	0.737	Valid
Loyalty	31	0.696	Valid
	32	0.731	Valid
	33	0.495	Valid
	34	0.634	Valid

## Appendix B

### Questionnaire Reliability Testing Result

Variables	Cronbach Alpha	N of items
Reference price	0.722	3
Familiarity with online booking	0.711	2
Search of fairness	0.762	5
Price fairness perception	0.765	5
Perceived price fairness	0.722	3
Decision confidence	0.904	6
Price satisfaction	0.795	6
Loyalty	0.863	4