The implementation of e-commerce dynamic rate To generate room revenue

by Ni Gusti Nyoman Murni

The implementation of e-commerce dynamic rate
To generate room revenue

Putu Rian Arde Surya[1], Dewa Made Suria Antara[2],
Ni Gst Nym Suci Murni[3], Ni Luh Ayu Kartika Yuniastari Sarja[4]
[1]Tourism Business Entrepreneur, Indonesia,
[2,3,4]Tourism Department, Politeknik Negeri Bali, Indonesia
email: [1]rianarde@gmail.com, [2]dwsuria@yahoo.com,
[3]gstnymsucimurni@pnb.ac.id, [4]yuniastari@pnb.ac.id

Abstract

This study aims to determine the e-commerce dynamic rate structure to generate room revenue and the better implementation between dynamic rate and the static rate at a 3 star hotel in Kuta, Bali. Data collection methods used in this research as follows: interviews, observation, and documentation. The data analysis technique used is the mean analysis technique, dynamic pricing method, profit margin ratio, and descriptive analysis techniques. The results of the study showed the step by step of dynamic rate structure determination and the dynamic rate is better than the static rate. This is indicated by the results of the average profit margin ratio in 2016-2018 on the dynamic rate at 39.41% compared to the static rate at 2.00%. Based on the results of the analysis, any efforts that can be made are paying attention to the dynamic rate during decreasing the Price Points (PP), thus avoiding complaints from offline travel agents and implement the dynamic rates for offline travel agents, hence generate profits with a greater profit margin ratio for the hotel.

Keywords: dynamic rate, static rate, room revenue.

Introduction

Bali as a tourist destination, having tourist visits which increase every year when viewed from the Bali Provincial Government Tourism Office statistics in the last 3 years the number of tourist visits in 2016 there were 13.571.617 persons and the last one in 2017 experienced a significant increase of 14.433.372 persons and in the year of 2018 significant increase of 15.828.464 persons. From his data show the tourism business shown growth from year to year and become the potential part of the economic sector to gain more income.

The hotel is 3-star boutique hotel located in Jalan Pantai Kuta, Kuta, Badung, Bali. Located in the behind of one-stop shopping mall Beach Walk, the hotel has been operated for almost 9 years. This hotel has 50 rooms available which are divided into 5 rooms category, they are Superior Room, Superior Room with Pool View, Deluxe Room with Pool View, Deluxe Room with Pool Access and Family Suites. Hence, the room should be occupied and get the market share from the tight

competition in every season from year to years, such as low season, high season, and peak season in the Kuta area with the different demand on a certain date in every season.

According to Wawira (2016) the hotel industry is characterized by seasonality, which plays a major role in determining customer behavior. Seasons are categorized as Low Season, High Season (Green), and Peak Season, with each associated with different expectations and demands. The result to variation in tourists' arrivals both domestic and foreign to destinations ranging from beaches, safaris, parks, that always depend on the destination, not just the country or geographic location or latitude, but the type of vacation destination it is. Therefore, the hotel divides its seasonal period consist of low season period on 06th January – 15th June and 15th September-22nd December, high season period on 16th June – 15th September and peak season period 23rd December – 05th January.

The Sales and Marketing staff will do the contracting (static contract) that based on the seasonal period for one year (an annual contract that starting on 01st April – 31st March in the following year). The challenge of the Sales and Marketing Department in the hotel is during selling the room on the low demand in the high season and to gain the maximum revenue in the high demand in the low season. Hence, the Sales and Marketing Department staff should do more analytic from this to create the best strategy to gain more revenue at the hotel in every season of the year. Below will be shown the room occupancy production from 2016 until 2018 as Table 1.

Table 1

The Room Occupancy for 2016 – 2019

Month	2016		2018		2019	
	Room Night (RN)	Occupancy (%)	Room Night (RN)	Occupancy (%)	Room Night (RN)	Occupancy (%)
January	1.138	71,35	947	62,92	934	63,89
February	978	67,26	697	50,95	949	74,14
March	1.022	67,02	929	61,93	1.024	74,26
April	854	56,90	1.002	72,40	922	66,09
May	1.039	66,39	1.067	72,98	944	67,72
June	906	60,56	937	64,09	1.030	73,78
July	1.084	69,35	975	65,92	1.166	79,37
August	1.229	79,96	1.153	78,17	1.077	72,87
September	1.114	75,94	988	68,33	1.035	71,83
October	1.170	78,42	832	62,18	956	64,77
November	1.022	71,87	965	71,27	909	61,46
December	1.047	70,22	822	54,69	805	52,14
Total	12.603	69,60	11.314	65,49	11.751	68,53

(Source: Sales and Marketing Department, 2019).

Table 1 shows the room occupancy by monthly on 2016 – 2018. Total room occupancy in the year 2016 at 69.6% with 12,603 Room Nights (RNs). Room occupancy in the year 2017 at 65,49% with 11,314 RNs and for the year of 2018 with occupancy at 68,53% with 11,715 RNs.

Based on the data from Sales and Marketing Department, there is a high demand for March 2016 with room occupancy at 67.02%, April 2017 with room occupancy 72.40% and May 2018 with room occupancy at 67.72% which is that period on low seasons with the lowest price set up on the annual contract rate. Besides that, the above table shows us for the low demand on the high seasons such us Jule 2016 with room occupancy at 69.35%, June 2017 with room occupancy at 64.09%.

From the above problem, the Sales and Marketing Department creates a strategy based on the market demand by date to gain maximum revenue in every season of the hotel. According to Shpanya (2014) dynamic pricing, also referred to as surcharge pricing, demand pricing, or time-based pricing is a pricing strategy in which businesses set flexible prices for products or services based on current market demands. Businesses can change prices based on algorithms that take into account competitor pricing, supply and demand, and other external factors in the market. The rates, and all other rate planes, basically adjust as yield is applied (up or down) to the pricing of the hotel. Meanwhile, according to Tucker (2013), hotels and other players in the hospitality industry use dynamic pricing to adjust the cost of rooms and

packages based on the supply and demand needs at a particular moment. The goal of dynamic pricing in this industry is to find the highest price that consumers are willing to pay. Another name for dynamic pricing in the industry is demand pricing. This form of price discrimination is used to try to maximize revenue based on the willingness to pay of different market segments. It features price increases when demand is high and decreases to stimulate demand when it is low. Having a variety of prices based on the demand at each point in the day makes it possible for hotels to generate more revenue by bringing in customers at the different price points they are willing to pay.. This strategy will be applied as well to generate hotel revenue, especially room revenue in the tight competition. From this strategy, sales, revenue and e-commerce staff could adjust the rate and availability that suitable with the market condition and hotel occupancy. Table 2 shows regarding the table of dynamic and static rate contribution from the year 2016 until 2018.

Table 2
Dynamic and Static Rate Contribution

Year	Dynamic Rate		Static Rate		Year to Date	
	Occupancy (RNs)	Revenue (IDR)	Occupancy (RNs)	Revenue (IDR)	Occupancy (RNs)	Revenue (IDR)
2016	12,631	4.369.470.727	422	113.940.032	13,053	4.483.410.759
2017	10,846	3.606.544.009	508	180.810.371	11,354	3.786.941.157
2018	10,125	3.578.635.456	1,647	483.043.443	11,772	4.061.678.899

(Source: Sales and Marketing Department, 2019).

In Table 2, the writer could get data from the last 3 years ago. From the year of 2016, dynamic rate contribution at 12,631 room nights with total room revenue at IDR 4,369,470,727and static rate 0ccupancy at 422 room nights with room revenue at IDR 113,940,032 from total production on the year 2016 for occupancy at 13,053 room nights with total room revenue at IDR 4,483,410,759. From the year of 2017, dynamic rate contribution for occupancy at 10,846 room nights with room revenue at IDR 3,606,544,009 and static rate occupancy at 508 room nights with room revenue at 180,810,371 from total production on the year 2017 for occupancy at 11,354 room nights with room revenue at 3,786,941,157. After that, form the year of 2018, dynamic rate contribution for occupancy at 10,125 room night with room revenue at IDR 3,578,635,456 and static rate contribution for occupancy at 1,647 room nights with room revenue at IDR 483,043,443from total occupancy at 11,772 room nights with total room revenue at IDR 4,061,678,899 for the year 2018. Dakota Boutique

Hotel conducted the dynamic rate to OTAs, B2B System and for the static rate conducted to the static annual contract rate.

The implementation of dynamic rate the hotel using channel manager to distribute to any channels distribution as follows: Agoda.com, Booking.com, Traveloka.com, Expedia.com, Hotel Website, Tiket.com, Pegipegi.com, Airbnb, and Asiatravel.com, Direct Reservation, Walk-In Guest and Owner Relatives. Besides that, implemented of static rate distribution from a static contract as follow: Ctrip.com (static contract), Zen rooms, PT. Jika, Isamaya Group, Elevation Travel, Mitra Adi Perkasa, MG Holiday, My Prime Solution, Antavaya, PT. Garam Tour & Consulting, Sodexo, GTA, PT. Fensury Bali Mandiri, Millenium Indo Wisata, Bayu Buana Travel, and Darmawisata Indonesia. Therefore to get more share from any segment of the guest, the e-commerce dynamic rate will be implemented to generate room revenue based on market demands in the current tight competition.

According to Metcalfe (2017), any data or factors that consider determining the dynamic rate implementation as follow: 1)supply and demand on locality area, meaning that Supply means the number of available rooms in the locality area. The supply will become to the consideration of data during the determination of dynamic rate to gain more guest in the tight competition. 2) Segmented Dynamic Pricing meaning that Segmented is divided into or composed of segments or sections of the parts into which something naturally separates. (Webster, 2019). Therefore, segmented dynamic pricing is the dynamic pricing that which naturally separated or divided based on historical occupancy, market demand and the seasons of the hotel. The seasons of the hotel will be referred to as the static contract issued annually from the Sales and Marketing Department. The static rate at has called by Leisure Distribution Rate (LDR) that spread out to the offline travel agent period 01st November 2018 – 31st October 2019 or 01st April 2019 – 31st March 2020 based on the contracting period and their market. 3) Time-based dynamic pricing will be considered how price point that will be offered during a certain period in the limited time offer. The time based for dynamic pricing based on the occupancy in every day and decided become to ten (10) Price Point (PP). 4) Peak pricing is a form of congestion pricing where customers pay an additional fee during periods of high demand (Kenton, 2019). Peak pricing is most frequently implemented by the companies who charge higher rates during times of the year when demand is the highest. The purpose of peak pricing is to regulate demand so that it stays within a

manageable level of what can be supplied to optimize the revenue growth. 5) Competitor pricing is people, companies or product that have a business or similar product characteristic with our product, so that in the field we have to compete to win the competition, so buyers will buy our products and not buy competitor product (Jatmiko, 2015). To gain market advantage, a company should outclass competitors in either quality or cost or quick response, or a combination of one or more. The company should have specific characters of product that more valuable to a competitor. 6) Customer behavior involves the study of how people either individually or in groups acquire, use, experience, discard and make decisions about goods, services, or even lifestyle practices such as traveling period, hotel or room type, leisure responsibility, healthy food and sports activities (Perner, 2018). The decisions of guest are related to the dynamic rate determination from the hotel historical could be seen from the Length of Stay (LOS) and Booking Lead Time (BLT).

The dynamic rate is the implementation of revenue management. According to Cross (1997) revenue management is the application of disciplined analytics that predicts consumer behavior at the micro-market levels and optimizes product availability and price to maximize revenue growth. The primary aim of revenue management is selling the right product to the right customer at the right time for the right price and with the right pack. The essence of this discipline is in understanding customer's perception of product value and accurately aligning product prices, placement, and availability with each customer segment. Dynamic pricing is one of the most useful tools in e-commerce toolbox and a logical next step for companies that want to grow revenue and improve conversion rates (Metcalfe, 2017). The ability to laser-target specific consumers gives companies that employ dynamic pricing a huge edge over the competition. It allows them to be more flexible, and price their inventory for the attainment of specific organizational goals. While dynamic pricing uses data in its implementation, it also produces a large amount of new, useful data that can be used to further inform your pricing strategies.

According to Metcalfe (2017), dynamic pricing has become critical in e-commerce, mostly due to automation. Whereas in a store, employees would have to physically change the pricing on thousands of items (as well as create new pricing display information), online the price of an item can be dynamically adjusted without much cost to the business. Some of the benefits that dynamic pricing provides to E-Commerce businesses as follows: Quicker, More Profitable Sales, Ability to Adjust to

Competition Pricing, Improved Flexibility, Improved Trend Understanding, Better Inventory Management, Higher Up-sell Conversion Rates. Therefore, the e-commerce dynamic rate implementation will do to generate room revenue.

RESEARCH METHODS

This research uses the mean analysis technique, dynamic pricing method, profit margin ratio, and descriptive-analysis techniques. Data were collected through observation at the hotel as Sales Executive and E-Commerce staff. The research instrument was researching the researchers assisted with research instruments in the form of voice recorders to conduct in-depth interviews with respondents. So the data collection techniques used in this study were by conducting observations, documentation, and in-depth interviews with the staff in the Sales and Marketing Department. In addition, to complete the observation the researcher collected by day to day the data from the system at Sales and Marketing Department to create the dynamic rate structure and the better implementation between the dynamic rate and static rate to generate room revenue at the hotel.

Discussion

The determination of e-commerce dynamic rate structure to generate room revenue

Sales and Marketing Department staff got the hotel budget from the Accounting Department staff for one year from January until December in the whole year. A budget is a financial plan for a defined period, often one year. It may also include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. Companies, governments, families and other organizations use it to express strategic plans of activities or events in measurable terms (Ross, 2008). In this budget will be shown the number of days in every month, room ready to sold per day, number of rooms available per month, number of room occupancy, no of guests, percentage of occupancy, percentage of double occupancy, and Average Room Rate (ARR). From this budget could analyse the target of room revenue at IDR 4.766.046.510 exclude 21% VAT or IDR 5.766.916.277 inclusive 21%VAT. Meanwhile, the target of room occupancy at 78.09% for year to date and further, for the ARR target at IDR 348.294 exlcude 21% VAT or IDR 440.878 inclusive 21% VAT.

Automated dynamic pricing can take a lot of data into account when setting prices. The largest retailers use a combination of data in their algorithms to determine the final price of an item (Metcalfe, 2017). Some of the different data types that can be used in dynamic pricing strategies as follows: supply and demand based on the locality area, segmented dynamic pricing, time-based dynammic pricing, peak pricing, competitor pricing, and customer behavior.

According to Bloomenthal (2019) electronic commerce or E-Commerce is a business model that lets firms and individuals conduct business over electronic networks, most notably: the Internet. The process of transactions carried out by buyers and sellers in buying and selling various products electronically from companies to other companies by using computers as an intermediary for business transactions while according to Prarama (2015) e-commerce is the process of delivering information, products, services, and payment processes, through telephone cables, internet connections and other digital access. In the other word, E-Commerce is a process of transactions carried out by buyers and sellers in buying and selling various products electronically from companies to other companies by using computers as an intermediary for business transactions through mobile devices, e-mail, mobile connected devices, on the internet and intranet networks. E-Commerce dynamic rate at the hotel has distributed to any channels either Business to Business (B2B) or Business to Customer (B2C). The Business to Business means an activity to sell hotel rooms through online on the internet between the hotel and the distributor who has cooperated between both parties through a price agreement according to the contract rate, profit, and payment system. The implementation of Business to Business (B2B) at the hotel through Agoda, Expedia, and Ctrip as a wholesales to the other small online travel agent. In the other hands, Business to Customer (B2C) is an activity to sell hotel rooms online through the internet between the hotel to consumers to meet directly on interacting online and electronically by utilizing existing features without using distributor services as an intermediary. The implementation of the dynamic rate at Business to Customer (B2C) at the hotel through Agoda.com, Booking.com, Traveloka.com, Expedia.com, Tiket.com and the other Online Travel Agent (OTA).

The E-Commerce dynamic rate implementation in the Online Travel Agent (OTA) call Best Rate Available (BAR). The meaning of BAR is a pricing model, commonly used by hotels to provide the lowest possible rate to a consumer on a

given date (Howell, 2015). Best Room Available has called Price Point (PP). This involves hotels analyzing the current market conditions such as demand in a certain area and time of stay, to price a room accordingly. As this pricing strategy is based on ever-changing variables, the price of a room can fluctuate throughout a day. Best available rates essentially provide consumers with the most appropriate room cost at any given time by predicting the demand for rooms and lowering or raising the price accordingly.

The value of price point that distributed to Business to Customer (B2C) such as Online Travel Agent (OTA) is not the same as the hotel received. The value of room rate which is booked by the guest at the Online Travel Agent (OTA) is not the same as the hotel received value. In case book through Online Travel Agent, the guest will get an additional discount at 10% as a member or book through mobile application, also get additional discount at 10% for the guest as Online Travel Agent repeater such as on booking.com, the repeater guest called genius booker meaning that booking minimum five (5) reservation per year for their self and deduct commission at 23% for Online Travel Agent free. Hence, the rate of value will decrease slightly.

Any promotion or offer in the Online Travel Agent that has created by the Sales and Marketing Department especially by the e-commerce staff to make more attractive and as a marketing value that makes the guest willing to book. Sales and Marketing Department consider any data or factors during creating the promotion like customer behavior either booking lead time or length of stay from the guest as the previous mentioned. The guest that makes a booking for 7 days prior to arrival will get last minute booking with additional discount at 40% off. Further, the guest habits to book the room in advance will get advance promotion such as the guest book 30 days prior to arrival will get an additional discount at 43% off and the guest who willing to book 60 days or more prior to arrival will get 46% off an additional discount. The length of stay also considered gaining booking with longer guest stay. Based on the data, the Sales and Marketing Department create the minimum stay at 4 days will get additional discount 43% off which is this promotion is applicable to any time without booking in advance as previously mentioned. Any promotion created by the e-commerce staff is completed by the restriction, term, and condition in each promotion to secure the revenue and make the guest feel fair value and comfort.

According to the Leisure Distribution Rate (LDR) for the static annual contract at an offline travel agent, the segmented period becomes to low season, high season and peak season. The rate plan available is Room Only (RO) and Room with Daily Breakfast for 2 persons (RB). In the other hand, room only at dynamic rate has said RA and room with breakfast for 2 persons has said RB at a dynamic rate. The restriction at dynamic rate will be symbol by "1" means flexible cancellation which is if the guest would like to book, the guest should not settle the payment upon make booking. However, it based on the cancellation policy which is 14 days or 7 days prior to arrival the guest should settle the payment for one (one) night deposit from the total booking amount. Furthermore, the symbol of "2" means prepaid and nonrefundable as the same as term and condition at static contract, which is if the guest willing to book the room, the guest should be settled the total payment in advance and the full payment will not be refunded if the guest would like to cancel, modify, no show or shorten stay. This condition will be fair due to the guest who book the rate with prepaid and nonrefundable conditions will get the lower price if compared to the rate with flexible term and condition. Then, the value of the static rate should be smaller than the dynamic rate at Online Travel Agent. In case there is any guest would like to book through an offline travel agent, the guest will compare the price with an online travel agent. Hence, if the guest sees the price on an offline travel agent is a lower tan online travel agent, meaning that the guest will book through the offline travel agent. Therefore, the offline travel agent still gets profit from the gap between the static rate and agent offered (markup). This becomes a win-win solution between the hotel and offline travel agent for better cooperation and sustainable business each other from year to year.

The relation between the static rate and the dynamic rate is very tight and lock each other. Low season rate for Superior Room at static rate will exist at Price Point Eight (PP8) for Superior Room in dynamic rate. High season rate for Superior Room at static rate will meet to Price Point Five (PP5) at the dynamic rate and further, for Peak Season at static rate will lock at Price Point Two (PP2) on the dynamic rate. Superior Room rate at static contract at IDR 450.000 and this meet with the value of PP8 after promotion, OTA member or mobile, OTA repeater and OTA commission. Hence, the value of PP8 at IDR 1.190.000 (calculation as above example) for Superior Room with breakfast for 2 persons at IDR 445.321 inclusive of 11% tax and 10% service charge. This value is related to the target of ARR at IDR

440,878 inclusive of 11% tax and 10% service charge. The position of PP8 as Figure 1.

SUPERIOR ROOM												
SPD / SPT	**PRICE POINT (PP)**	**PP 1**	**PP 2**	**PP 3**	**PP 4**	**PP 5**	**PP 6**	**PP 7**	**PP 8**	**PP 9**	**PP 10**	
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %	
RA1	Room Only Flexible								1.040.000			
RB1	Room 2 ABF Flexible								1.190.000			

Last Minute 7 Days	40%											
RA2	Room Only Prepaid NR								624.000			
RB2	Room 2 ABF Prepaid NR								714.000			

Figure 1 The Placement of PP8 Value for Superior Room at Dynamic Rate Structure (Source: Sales and Marketing Department, 2019).

The Price Point Eight (PP8) is available for room only with flexible cancellation (RA1) at IDR 1.040.000 and room with breakfast for 2 persons with flexible cancellation (RB1) at IDR 1.190.000. The surcharge for additional breakfast for 2 persons at IDR 150.000 and this will changeable based on the number of promotion. For the last minute promotion at 40% off, room only with prepaid and nonrefundable cancellation (RA2) at IDR 624.000 and room with breakfast for 2 persons with prepaid and nonrefundable cancellation (RB2) at IDR 714.000. Hence, the gap between RA2 and RB2 at IDR 90.000.

The movement dynamic rate is based on the occupancy as shown in Table 3 Price Point (PP) at the hotel. The fluctuation from PP8 to PP7 (increasing) or from PP8 to PP9 (decreasing) will adjust by percentage from the PP8 as the benchmark. The value of PP5 meet with the room rate at high season and the value of PP2 meet with the peak season period at Leisure Distribution Rate (LDR). Therefore from PP8 to PP5 is increasing at 26% with value for RA1 at IDR 1.310.400 and for RB1 at IDR 1.460.400. After last-minute promotion 40% off, OTA member, OTA repeater and OTA commission, hence the value of PP5 for RA2 at IDR 490.377 and for RB2 at IDR 546.510. This PP5 value is mirroring with the static contract as Leisure Distribution Rate for the high season period. The same regulation for PP2 which is mirroring to the value at peak season on the static contract. The increment from PP8 to PP2 at 76%, meaning that the RA1 at IDR 1.830.400 and RB1 at IDR 1.980.400 with flexible cancellation. After last-minute promotion, 40% off, OTA member, OTA repeater and OTA commission, hence the value of PP2 for RA2 at IDR 684.972 and RB2 at IDR 741.150 which is the value is mirroring with the static rate as Leisure Distribution Rate in Figure 2.

SUPERIOR ROOM

SPD / SPT	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %
RA1	Room Only Flexible		1.830.400			1.310.400			1.040.000		
RB1	Room 2 ABF Flexible		1.980.400			1.450.400			1.190.000		

Last Minute 7 Days	40%										
RA2	Room Only Prepaid NR		1.098.240			786.240			624.000		
RB2	Room 2 ABF Prepaid NR		1.188.240			876.240			714.000		

Figure 2 The Mapping of LDR with Superior Room Price Point at Dynamic Rate
(Source: Sales and Marketing Department, 2019).

After the dynamic rate and static rate has synchronized each other, the rest price point will determine based on the experience, knowledge and intuition or feeling of Sales and Marketing Department staff. The movement from one PP to the other PP could not have clashed each other. Sales and Marketing Department staff determine an 8% increase from PP8 to PP7 and a 16% increase from PP8 to PP6, hence the value of PP7 and PP6 have remained lower than PP5. The movement from PP8 to PP9 at -15% decreases and from PP8 to PP10 at -30% decreases. This condition could be happening on the low demand or the hotel needs based for occupancy which still takes a look for the Average Room Rate (ARR). This is related to Table 4, that the Target of ARR for the year to date at IDR 440.878 inclusive of 11% tax and 10% service charge. Meanwhile, the Table 3, the target of room occupancy for the year to date at 78.09%, meaning Sales and Marketing Department staff will adjust the price point value of the target ARR on the half of this target occupancy, which is 39.045%. on the low demand and high supply, Sales and Marketing staff will offer the PP10 until PP 7 as a based occupancy. After that, the adjustment from PP5 to PP4 at 34% increase from PP8 and for PP3 at 44% increase from PP8. The value of PP4 and PP3 are above PP5 and below PP2. Besides that, the movement from PP2 to PP1 at 100% increase from PP8 as the top of peak period with very high demand. The fluctuation of price point will be shown in Figure 3.

SUPERIOR ROOM

SPD /SPT	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	% Occupancy / day	90% - 100%	80% - 90%	70% - 80%	60% - 70%	50% - 60%	40% - 50%	30% - 40%	20% - 30%	10% - 20%	0% - 10%
		100,00%	76,00%	44,00%	34,00%	26,00%	16,00%	8,00%		-15,00%	-30,00%
RA1	Room Only Flexible	2.080.000	1.830.400	1.497.600	1.393.600	1.310.400	1.206.400	1.123.200	1.040.000	884.000	728.000
RB1	Room 2 ABF Flexible	2.230.000	1.980.400	1.647.600	1.543.600	1.460.400	1.356.400	1.273.200	1.190.000	1.034.000	878.000
Last Minute 7 Days	40%										
RA2	Room Only Prepaid NR	1.248.000	1.098.240	898.560	836.160	786.240	723.840	673.920	624.000	530.400	436.800
RB2	Room ABF Prepaid NR	1.338.000	1.188.240	988.560	926.160	876.240	813.840	763.920	714.000	620.400	526.800

Figure 3 The Determination of Superior Room Price Point at Dynamic Rate Structure
(Source: Sales and Marketing Department, 2019).

The Sales and Marketing Department create any promotion related to customers behaviors from the price point. This promotion will attract customer to make a booking based on their habits to book either booking lead time and length of stay. The promotion for booking in advance 60 days prior to arrival will get the bigger discount with the reason to make the guest feel fair and gain based occupancy with advance booking. After that, the price point will increase step by step based on the holding occupancy and market demand. The promotion offered to the guest will be shown in Figure 4.

SUPERIOR ROOM

SPD / SPT	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100% - 90%	90% - 80%	80% - 70%	70% - 60%	60% - 50%	50% - 40%	40% - 30%	30% - 20%	20% - 10%	10% - 0%
RA1	Room Only Flexible	2.080.000	1.830.400	1.497.600	1.393.600	1.310.400	1.206.400	1.123.200	1.040.000	884.000	728.000
RB1	Room 2 ABF Flexible	2.230.000	1.980.400	1.647.600	1.543.600	1.460.400	1.356.400	1.273.200	1.190.000	1.034.000	878.000
Last Minute 7 Days	40%										
RA2	Room Only Prepaid NR	1.248.000	1.098.240	898.560	836.160	786.240	723.840	673.920	624.000	530.400	436.800
RB2	Room 2 ABF Prepaid NR	1.338.000	1.188.240	988.560	926.160	876.240	813.840	763.920	714.000	620.400	526.800
Hot Deal	37%										
RA2	Room Only Prepaid NR	1.310.400	1.153.152	943.488	877.968	825.552	760.032	707.616	655.200	556.920	458.640
RB2	Room 2 ABF Prepaid NR	1.404.900	1.247.652	1.037.988	972.468	920.052	854.532	802.116	749.700	651.420	553.140
Advance Booking 30 Days	43%										
RA2	Room Only Prepaid NR	1.185.600	1.043.328	853.632	794.352	746.928	687.648	640.224	592.800	503.880	414.960
RB2	Room 2 ABF Prepaid NR	1.271.100	1.128.828	939.132	879.852	832.428	773.148	725.724	678.300	589.380	500.460
Advance Booking 60 Days	46%										
RA2	Room Only Prepaid NR	1.123.200	988.416	808.704	752.544	707.616	651.456	606.528	561.600	477.360	393.120
RB2	Room 2 ABF Prepaid NR	1.204.200	1.069.416	889.704	833.544	788.616	732.456	687.528	642.600	558.360	474.120

Figure 4 The Determination of Promotion Value at Dynamic Rate Structure
(Source: Sales and Marketing Department, 2019).

There are five (5) room types. Superior Room as a benchmark during dynamic rate determination to the other room categories. There are a supplement or additional surcharge from Superior Room to the other room category which is from Superior Room to Superior Room with Pool View, Deluxe Room with Pool View, Deluxe Room with Pool Access and Family Room with Pool Access. The table supplement for the year 2019 in Table 3.

Table 3
The Supplement from Superior Room to Other Room Type

Supplement 2019		
Room Code	**Room Type**	**Inc. 21% VAT**
RA	Room Only	0
RB	Room with Breakfast (RA + 2 ABF)	150.000
SPD	Superior Double Room	0
SPT	Superior Twin Room	0
SVD	Superior Double Room with Pool View	100.000
SVT	Superior Twin Room with Pool View	100.000
DLXVD	Deluxe Double Room with Pool View	200.000
DLXVT	Deluxe Twin Room with Pool View	200.000
DLXAD	Deluxe Double Room with Pool Access	300.000
FAMR	Family Room with Pool Access	1.000.000

Source: Sales & Marketing Department, 2019

This additional surcharge will be imparted by the other room category. From the Superior Room dynamic rate, the other room has been created with additional surcharge or supplement as above. The aim of this supplement as the effort from the Sales and Marketing Department to increase the Average Room Rate (ARR) from day to day. The rate structure at for the year 2019 as Figure 5.

SUPERIOR ROOM WITH POOL VIEW

SVD / SVT	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %
RA1	Room Only Flexible	2.280.000	2.006.400	1.641.600	1.527.600	1.436.400	1.322.400	1.231.200	1.140.000	969.000	798.000
RB1	Room 2 ABF Flexible	2.430.000	2.156.400	1.791.600	1.677.600	1.586.400	1.472.400	1.381.200	1.290.000	1.119.000	948.000

Last Minute 7 Days	40%										
RA2	Room Only Prepaid NR	1.368.000	1.203.840	984.960	916.560	861.840	793.440	738.720	684.000	581.400	478.800
RB2	Room 2 ABF Prepaid NR	1.458.000	1.293.840	1.074.960	1.006.560	951.840	883.440	828.720	774.000	671.400	568.800

Hot Deal	37%										
RA2	Room Only Prepaid NR	1.436.400	1.264.032	1.034.208	962.388	904.932	833.112	775.656	718.200	610.470	502.740
RB2	Room 2 ABF Prepaid NR	1.530.900	1.358.532	1.128.708	1.056.888	999.432	927.612	870.156	812.700	704.970	597.240

Advance Booking 30 Days	43%										
RA2	Room Only Prepaid NR	1.299.600	1.143.648	935.712	870.732	818.748	753.768	701.784	649.800	552.330	454.860
RB2	Room 2 ABF Prepaid NR	1.385.100	1.229.148	1.021.212	956.232	904.248	839.268	787.284	735.300	637.830	540.360

Advance Booking 60 Days	46%										
RA2	Room Only Prepaid NR	1.231.200	1.083.456	886.464	824.904	775.656	714.096	664.848	615.600	523.260	430.920
RB2	Room 2 ABF Prepaid NR	1.312.200	1.164.456	967.464	905.904	856.656	795.096	745.848	696.600	604.260	511.920

DELUXE ROOM WITH POOL VIEW

DLXVD / DLXVT	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %
RA1	Room Only Flexible	2.480.000	2.182.400	1.785.600	1.661.600	1.562.400	1.438.400	1.339.200	1.240.000	1.054.000	868.000
RB1	Room 2 ABF Flexible	2.630.000	2.332.400	1.935.600	1.811.600	1.712.400	1.588.400	1.489.200	1.390.000	1.204.000	1.018.000

Last Minute 7 days	40%										
RA2	Room Only Prepaid NR	1.488.000	1.309.440	1.071.360	996.960	937.440	863.040	803.520	744.000	632.400	520.800
RB2	Room 2 ABF Prepaid NR	1.578.000	1.399.440	1.161.360	1.086.960	1.027.440	953.040	893.520	834.000	722.400	610.800

Hot Deal	37%										
RA2	Room Only Prepaid NR	1.562.400	1.374.912	1.124.928	1.046.808	984.312	906.192	843.696	781.200	664.020	546.840
RB2	Room 2 ABF Prepaid NR	1.656.900	1.469.412	1.219.428	1.141.308	1.078.812	1.000.692	938.196	875.700	758.520	641.340

Advance Booking 30 days	43%										
RA2	Room Only Prepaid NR	1.413.600	1.243.968	1.017.792	947.112	890.568	819.888	763.344	706.800	600.780	494.760
RB2	Room 2 ABF Prepaid NR	1.499.100	1.329.468	1.103.292	1.032.612	976.068	905.388	848.844	792.300	686.280	580.260

Advance Booking 60 days	46%										
RA2	Room Only Prepaid NR	1.339.200	1.178.496	964.224	897.264	843.696	776.736	723.168	669.600	569.160	468.720
RB2	Room 2 ABF Prepaid NR	1.420.200	1.259.496	1.045.224	978.264	924.696	857.736	804.168	750.600	650.160	549.720

DELUXE ROOM WITH POOL ACCESS

DLXAD	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %
RA1	Room Only Flexible	2.680.000	2.358.400	1.929.600	1.795.600	1.688.400	1.554.400	1.447.200	1.340.000	1.139.000	938.000
RB1	Room 2 ABF Flexible	2.830.000	2.508.400	2.079.600	1.945.600	1.838.400	1.704.400	1.597.200	1.490.000	1.289.000	1.088.000

Last Minute 7 days	40%										
RA2	Room Only Prepaid NR	1.608.000	1.415.040	1.157.760	1.077.360	1.013.040	932.640	868.320	804.000	683.400	562.800
RB2	Room 2 ABF Prepaid NR	1.698.000	1.505.040	1.247.760	1.167.360	1.103.040	1.022.640	958.320	894.000	773.400	652.800

Hot Deal	37%										
RA2	Room Only Prepaid NR	1.688.400	1.485.792	1.215.648	1.131.228	1.063.692	979.272	911.736	844.200	717.570	590.940
RB2	Room 2 ABF Prepaid NR	1.782.900	1.580.292	1.310.148	1.225.728	1.158.192	1.073.772	1.006.236	938.700	812.070	685.440

Advance Booking 30 days	43%										
RA2	Room Only Prepaid NR	1.527.600	2.358.400	1.929.600	1.795.600	1.688.400	1.554.400	1.447.200	1.340.000	1.139.000	938.000
RB2	Room 2 ABF Prepaid NR	1.613.100	1.429.788	1.185.372	1.108.992	1.047.888	971.508	910.404	849.300	734.730	620.160

Advance Booking 60 days	46%										
RA2	Room Only Prepaid NR	1.447.200	1.273.536	1.041.984	969.624	911.736	839.376	781.488	723.600	615.060	506.520
RB2	Room 2 ABF Prepaid NR	1.528.200	1.354.536	1.122.984	1.050.624	992.736	920.376	862.488	804.600	696.060	587.520

FAMILY ROOM WITH POOL ACCESS

FAMR	PRICE POINT (PP)	PP 1	PP 2	PP 3	PP 4	PP 5	PP 6	PP 7	PP 8	PP 9	PP 10
	Occupancy / Day (%)	100 % - 90 %	90 % - 80 %	80 % - 70 %	70 % - 60 %	60 % - 50 %	50 % - 40 %	40 % - 30 %	30% - 20%	20 % - 10 %	10 % - 0 %
RA1	Room Only Flexible	4.080.000	3.590.400	2.937.600	2.733.600	2.570.400	2.366.400	2.203.200	2.040.000	1.734.000	1.428.000
RB1	Room 2 ABF Flexible	4.380.000	3.890.400	3.237.600	3.033.600	2.870.400	2.666.400	2.503.200	2.340.000	2.034.000	1.728.000

Last Minute 7 days	40%										
RA2	Room Only Prepaid NR	2.448.000	2.154.240	1.762.560	1.640.160	1.542.240	1.419.840	1.321.920	1.224.000	1.040.400	856.800
RB2	Room 2 ABF Prepaid NR	2.628.000	2.334.240	1.942.560	1.820.160	1.722.240	1.599.840	1.501.920	1.404.000	1.220.400	1.036.800

Hot Deal	37%										
RA2	Room Only Prepaid NR	2.570.400	2.261.952	1.850.688	1.722.168	1.619.352	1.490.832	1.388.016	1.285.200	1.092.420	899.640
RB2	Room 2 ABF Prepaid NR	2.759.400	2.450.952	2.039.688	1.911.168	1.808.352	1.679.832	1.577.016	1.474.200	1.281.420	1.088.640

Advance Booking 30 days	43%										
RA2	Room Only Prepaid NR	2.325.600	2.046.528	1.674.432	1.558.152	1.465.128	1.348.848	1.255.824	1.162.800	988.380	813.960
RB2	Room 2 ABF Prepaid NR	2.496.600	2.217.528	1.845.432	1.729.152	1.636.128	1.519.848	1.426.824	1.333.800	1.159.380	984.960

Advance Booking 60 days	46%										
RA2	Room Only Prepaid NR	2.203.200	1.938.816	1.586.304	1.476.144	1.388.016	1.277.856	1.189.728	1.101.600	936.380	771.120
RB2	Room 2 ABF Prepaid NR	2.365.200	2.100.816	1.748.304	1.638.144	1.550.016	1.439.856	1.351.728	1.263.600	1.098.360	933.120
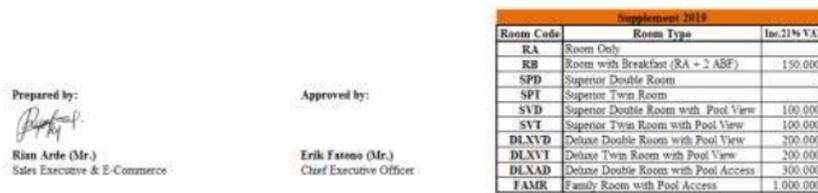
Figure 5 The Dynamic Rate Structure on 2019-2020
(Source: Sales and Marketing Department, 2019).

According to the Figure 5, the dynamic rate structure will be implemented to e-commerce channels distribution either in Business to Business (B2B) and Business to Customers (B2C) that will contribute to room night production. The dynamic rate in Business to Business (B2B) such as Hotelbeds, MG Bedbank, and Mandira Abadi Reservation, CTrip. For the implementation of the dynamic rate at Business to Customer (B2C) as follows: Agoda.com, Booking.com, Expedia.com, Traveloka.com, Tiket.com, Pegpegi.com, Asiatravel.com, Rajakamar.com, Hoterip.com, Orbitz Worldwide, and Budgetplace.com.

During the implementation of e-commerce dynamic rate to channels, distribution should take concern for the parity rate as fair treatment. According to Ros (2016), Rate parity is a legal agreement between a hotel and the OTA, providing the same rates for the same room on all the distribution channels. In the case of OTAs – it provides the same rates on all the booking platforms as well as on the hotel's own website. That means the hotel has to have the same price for a room, no matter where the client books it and no matter the commission the hotel pays to the OTA. The higher that commission is, the less money the hoteliers earn. The OTAs want rate parity to make sure the hotels will not give any discounts to the customers, and therefore in a way "steal" them. But on the other hand, from the hoteliers' point of view, rate parity is a way the OTAs ensure that the hotels don't have any weapon to attract direct bookings. It is just as bad for them as the name bidding policy. If customers knew that the rates on the hotels' websites could be lower, they would surely more often go to those websites.

The better implementation between the dynamic rate and stratic rate

Sales and Marketing Department involves the use of performance data and analytics, which serve more accurately, predict demand and other consumer

behaviors. This allows making more sensible decisions regarding pricing and distribution, in order to maximize revenue and results which is referred to the company profits. As a concept, revenue management actually began in the airline industry, where companies found ways to anticipate consumer demand in order to introduce dynamic pricing. However, it is applicable in any industry where different customers are willing to pay different prices for the same product, where there is only a certain amount of that product to be sold, and where that product must be sold before a certain point in time

  To carry out effective production of the Sales and Marketing Department, a business must also have some way of forecasting demand and consumer spending habits, hence informed adjustments can be made. For instance, hotels can use past data or history of the hotel, existing bookings, weather forecasts, and other industry data to inform their revenue management strategy. Businesses and individuals across the globe perform for-profit economic activities with an aim to generate profits. Several different quantitative measures are used to compute the gains (or losses) a business generates, which make it easier to assess the performance of a business over different time periods or compare it against competitors.

  Profit margin is a profitability ratio that measures the amount of net income earned of sales generated by comparing the net income and net sales of a company (Shaun, 2019). In the context of profit margin calculations, net profit and net income are used interchangeably. The profit margin ratio directly measures what percentage of sales is made up of net income. In other words, it measures how much profits are produced at a certain level of sales. This ratio also indirectly measures how well a company manages its expenses relative to its net sales. That is why companies strive to achieve higher ratios. They can do this by either generating more revenues why keeping expenses constant or keep revenues constant and lower expenses. From the results of room nigh production from the dynamic rate and the static rate. The contribution of the dynamic rate and static rate will be shown in Table 4.

Year	Dynamic Rate					Static Rate					Year to Date	
	Room Nights (RNs)	Room Revenue (IDR)	Room Expenses (IDR)	Net Income (IDR)	Profit Margin (%)	Room Nigths (RNs)	Room Revenue (IDR)	Room Expenses (IDR)	Net Income (IDR)	Profit Margin (%)	Room Nigths (RNs)	Total Room Revenue (IDR)
2016	12,618	4,353,409,270	2,523,600,000	1,829,809,270	40.83%	347	128,174,118	69,400,000	58,774,118	1.31%	12,965	4,481,583,388
2017	10,893	3,619,135,779	2,178,600,000	1,440,535,779	38.04%	461	168,053,312	92,200,000	75,853,312	2.00%	11,354	3,787,189,091
2018	10,932	3,784,996,195	2,186,400,000	1,598,596,195	39.36%	838	276,682,704	167,600,000	109,082,704	2.69%	11,770	4,061,678,899
Total	34,443	11,757,541,244	6,888,600,000	4,868,941,244		1,646	572,910,134	329,200,000	243,710,134		36,089	12,330,451,378
Average	11,481	3,919,180,415	2,296,200,000	1,622,980,415	39.41%	549	190,970,045	109,733,333	81,236,711	2.00%	12,030	4,110,150,459

Figure 6. Room Night Production from Dynamic Rate and Static Rate
(Source: Sales and Marketing Department, 2019).

Figure 6 shows the room night production from dynamic rate and static rate that contribution from the year 2016 until 2018. The dynamic rate contribution is higher than the static rate. On the year 2016, total revenue for the dynamic rate at IDR 4.353.409.270 and for the static rate at IDR 128.174118. Further, on the year 2017, the total room revenue for the dynamic rate at IDR 3.619.135.779 and for the static rate at IDR 168.053.312 and then on the year 2018 for the dynamic rate at IDR 3.784.996.195 and for the static rate at IDR 276.682.704. From this data, the Sales and Marketing Department could analyze which one the most profitable and better to be implemented will be shown in Figure 7.

Year	Dynamic Rate		Static Rate		Year to Date
	Net Income (IDR)	Profit Margin (%)	Net Income (IDR)	Profit Margin (%)	Net Room Sale (IDR)
2016	1,829,809,270	40.83%	58,774,118	1.31%	4,481,583,388
2017	1,440,535,779	38.04%	75,853,312	2.00%	3,787,189,091
2018	1,598,596,195	39.36%	109,082,704	2.69%	4,061,678,899
Total	4,868,941,244		243,710,134		12,330,451,378
Average	1,622,980,415	39.41%	81,236,711	2.00%	4,110,150,459

Figure 7 The Better Implementation between Dynamic Rate and Static Rate
(Source: Sales and Marketing Department, 2019).

According to Figure 7, the better implementation is the dynamic rate with profit margin ration in three (3) year at 39.41% compared to the static rate at 2.00%. From year to year, the production of dynamic rate is higher than the static rate and it refers to the higher profit margin ratio of dynamic rate compared to the static rate by year to date. The profit margin ratio for the year 2016 at 40.83% compared to static rate at 1.31%, further the profit margin on the year 2017 for dynamic rate at 38.04%

compared to static rate at 2.00% and then on the year 2018, the profit margin ration for dynamic becomes at 39.36% compared to static rate at 2.69%. Therefore, the dynamic rate is profitable for the hotel, meaning that dynamic rate implementation is better than the static rate for sustainable business from year to year.

Conclusion

The Determination of E-Commerce Dynamic Rate Structure to Generate Room Revenue at the hotel depends on the budget from the company and analyze through the target of revenue, the target of occupancy and the target of Average Room Rate (ARR) for the year to date in average. Further, any data or factors that consider determining the rate structure as follows: supply and demand based on the locality area, segmented dynamic pricing, time-based dynamic pricing, peak pricing, competitor pricing, and customer behavior. The Sales and Marketing staff do the Superior Room as the benchmark for the other room category as Figure 1. Furthermore, the dynamic rate is better than the static rate. According to the data from the year 2016 – 2019, the average profit margin ratio of the dynamic rate at 39.41% compared to the static rate at 2.00%. Therefore, the dynamic rate is profitable for the hotel, meaning that dynamic rate implementation is better than the static rate for sustainable business from year to year.

References

Badan Pusat Statistik Kabupaten Badung. Tingkat Penghunian Kamar Hotel Berbintang Menurut Bulan di Kabupaten Badung. (cited on 24th June 2019). Available from: Source URL: https://badungkab.bps.go.id/dynamictable/2017/06/24/87/tingkat-penghunian-kamar-hotel-berbintang-menurut-bulan-di-kabupaten-badung-2006-2018.html.

Badan Pusat Statistik Kabupaten Badung. Jumlah Wisatawan Asing ke Bali Menurut Bulan. (cited on 24th June 2019). Available from: Source URL: https://bali.bps.go.id/statictable/2018/02/09/21/jumlah-wisatawan-asing-ke-bali-menurut-bulan-1982-2019.html.

Baker, Sue. 1994. *Principle of Hotel Front Office Operation*. Great Britain: The Bath Press.

Bagyono. 2005. *Pengetahuan Dasar Pariwisata dan Perhotelan*. Bandung: Alfabeta.

Bippert, D. 2009. *Simultaneously maximizing consumer value and company profit from beginning to end. Presentation to 5th Annual Revenue Management & Price Optimization Conference*. Atlanta: GA. Shikander.

Black, Henry Campbell. 2019. The Law Dictionary Featuring Black's Law Dictionary Free Online Legal Dictionary 2nd Ed., (cited on 20th June 2019) URL: https://thelawdictionary.org/occupancy/.

Bloomenthal, Andrew. 2019. Electronic Commerce (e-commerce)., (cited on 22nd June 2019). Available from: Source URL: https://www.investopedia.com/terms/e/ecommerce.asp.

Boahen. 2013. Assessing the Benefits of Yield Management in the Hospitality Industry in the Kumasi Metropolis of Ghana., (cited 30th March 2019). URL: https://thejournalofbusiness.org/index.php/site/article/view/277.

Chen, James. 2019. Profit Margin., (cited on 25th March 2019) Source URL: https://www.investopedia.com/terms/p/profitmargin.asp.

Cross, R. 1997. Revenue Management: *Hard-Core Tactics for Market Domination*. New York, NY: Broadway Books.

Duncan, Tom. 2005. *Principles of Advertising & IMC, Second Edition*. McGraw-Hill, Inc.

Hanks, R., Cross, R., and Noland, R. 1992. *Discounting in the hotel industry a new approach*. Cornell Hotel and Restaurant; Administration Quarterly.

Hargrave, Marshall. 2019. Average Daily Rate (ADR) Difinition., (cited 26th June 2019). URL: https://www.investopedia.com/terms/a/average-daily-rate.asp.

Howell, Sergio Cabrera. 2015. The Definition of Best Available Rate., (Cited 26th June 2019). Available from: https://www.clicktravel.com/blog/the-definition-of-best-available-rates-in-under-100-words/.

Jatmiko, Heru. 2015. Kompetitor., (cited 26th June 2019). Available URL: https://www.kompasiana.com/heru_j/551733a0a333113407b65978/kompetit or.

Kenton, Will. 2019. Peak Pricing., (cited 22nd June 2019). Available from: URL: https://www.investopedia.com/terms/p/peak-pricing.asp.

Kotler, Philip. 2009. *Manajemen Pemasaran, Edisi Milenium*,(alih bahasa: Drs.

Benjamin Molan, HendraTeguh, SE, dan Ronny A Rusli, SE) Prentice-Hall. Jakarta: PT INDEKS Kelompok Gramedia.

Kotler, Philip. 2000. *Manajemen Pemasaran dengan Pemasaran Efektif dan Profitable*. Gramedia Pusat Utama: Jakarta.

Kurniawati, Rina. 2013. Strategi Penetapan Harga Hotel., (cited 05th April 2019) Source URL: https://rinakurniawati.wordpress.com/2013/01/04/strategi-penetapan-harga-kamar-hotel/.

Marriott, Jr., J. and Cross, R. 2000. *Room at the revenue in. In Book of Management Wisdom*. New York: Wiley.

McGill, J. and van Ryzin. 1999. *Revenue management: research overview and prospects*. Transportation Science.

Metcalfe, Luke. 2017. What Is Dynamic Pricing and IS It Important.., (cited 10 April 2019). Source URL: https://crealytics.com/dynamic-pricing-important/.

Irwin, Neil. 2017. *Why Surge Prices Make Us So Mad: What Springsteen Home Depot and a Nobel Winner Know*. New York: New York Times.

O'Sullivan, Arthur; Sheffrin, Steven M. 2003. *Principles in Action*. New Jersey: Pearson Prentice Hall.

Perner, lars. 2019. Customer Behavior: the Psychology of Marketing., (cited 23rd June 2019). Source URL: https://www.consumerpsychologist.com/.

Phillips, R. 2005. Pricing and Revenue Optimization. Stanford: Stanford Business Books.

Pratama, I Putu Agus Eka. 2015. E-Commerce, E-Business dan Mobile. Jakarta.

Pratap. 2013. Types of Rate Codes used in hotels. (cited on 25th May 2019). Available from: URL: https://setupmyhotel.com/train-my-hotel-staff/front-office-training/178-types-of-room-rates-used-in-hotels.html.

Ros, Michael. 2016. What is rate parity and why is it dangerous to the hotel industry?, (cited 26th June 2019). Available from: URL: https://insights.ehotelier.com/insights/2016/08/31/rate-parity-dangerous-hotel-industry/.

Ross, Louise. 2008. Budgeting: Topic Gateway Series No. 27. United Kingdom: The Chartered Institute of Management Accountants (CIMA).

Sari, Mayank. 2015. Strategi E-Commerce Terhadap Tingkat Hunian Kamar Di Hotel Melia Bali Indonesia. Badung: Politeknik Negeri Bali.

Shaun. 2019. Profit Margin Ratio., (cited 26th June 2019). Available from: URL: https://www.myaccountingcourse.com/financial-ratios/profit-margin-ratio.

Shite, Richard, 2000. *Hotel Manajemen (Pengelolaan Hotel)*. Surabaya: SIC.

Shpanya, Arie. 2014. Why Dynamic Pricing is a Must for E-Commerce Retailers. (cited 29th March 2019). Available from: Source URL: https://econsultancy.com/why-dynamic-pricing-is-a-must-for-ecommerce-retailers/.

Sugiyono. 2017. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Yogyakarta:

LaksBang PRESSindo.

Sulastiyono, Agus. 2011. *Manajemen Penyelenggaraan Hotel*. Bandung: Alfabeta.

Trisna Yulianti, I Guti Ayu Nyoman. 2018. Model Penerapan E-Commerce Dalam Meningkatkan Tingkat Hunian Kamar Di Hotel Grand Inna Kuta. Badung; Politeknik Negeri Bali.

Tucker, Cummings. 2013. Everything You Need to Know about Dynamic Pricing., (cited 25th March 2019) Available from Source URL: www.hospitality.net.

Wawira, Josephine. 2016. Understanding Seasonality in the Hotel Industry., (cited on 29th June 2019). Available from: URL: https://www.hospitalitynet.org/opinion/4079842.html.

Webster, Merriam. 2019. Segmented., (cited 25th June 2019). Available from: URL: https://www.merriam-webster.com/dictionary/segmented.

The implementation of e-commerce dynamic rate To generate room revenue

Media LLC, 2022
Publication

6   N. Karunakaran, Devasia MD, Vishnu Prathap M. "Public expenditure of India: Trend and effects", Journal of Management Research and Analysis, 2020
Publication
<1 %

7   Robert G Cross, Jon A Higbie, Zachary N Cross. "Milestones in the application of analytical pricing and revenue management", Journal of Revenue and Pricing Management, 2010
Publication
<1 %

8   Cláudia Abreu, Inês Soares, Leonel Oliveira, David Rua, Paulo Machado, Leonel Carvalho, Joao A. Peças Lopes. "Application of genetic algorithms and the cross‐entropy method in practical home energy management systems", IET Renewable Power Generation, 2019
Publication
<1 %

9   Dimitrios Kelesakis, Konstantinos N. Vavliakis, Andreas L. Symeonidis. "Personalized Dynamic Pricing with RFM Modeling", Proceedings of the 2021 7th International Conference on e-Society, e-Learning and e-Technologies, 2021
Publication
<1 %

10   Baines, Paul, Antonetti, Paolo, Rosengren, Sara. "Marketing", Marketing, 2022
Publication

<1 %

11   Marulak Pardede. "Initiating The ASEAN Arbitration Board as a Forum for Settlement of Investment Legal Disputes in The Framework of Integration of The ASEAN Economic Community (AEC) Region", Jurnal Penelitian Hukum De Jure, 2022
Publication

<1 %

12   Benjamin Ezugwu Onodi, Oti Ibiam, Jane Chinyere Akujor. "Management Accounting Information System and the Financial Performance of Consumer Goods Firms in Nigeria", European Journal of Business and Management Research, 2021
Publication

<1 %

13   Mandala Faldini. "ANALISIS MANAJEMEN HOTEL SYARIAH YASMIN HOTEL AND RESTAURANT DI KABUPATEN BANGKA BARAT (TINJAUAN FATWA DSN MUI NO: 108/DSN-MUI/X/2016)", ASY SYAR'IYYAH: JURNAL ILMU SYARI'AH DAN PERBANKAN ISLAM, 2018
Publication

<1 %

14   Kevin Pak, Nanda Piersma. "overview of OR techniques for airline revenue management", Statistica Neerlandica, 2002
Publication

<1 %

15 Egidijus Rytas VAIDOGAS. "Statistical Analysis of the Dynamic Performance of Reinforcement Steel at Elevated Temperatures: The Case of Johnson-Cook Model", Mechanics, 2022

Publication

<1 %

Exclude quotes   On

Exclude bibliography   On

Exclude matches   < 1 words