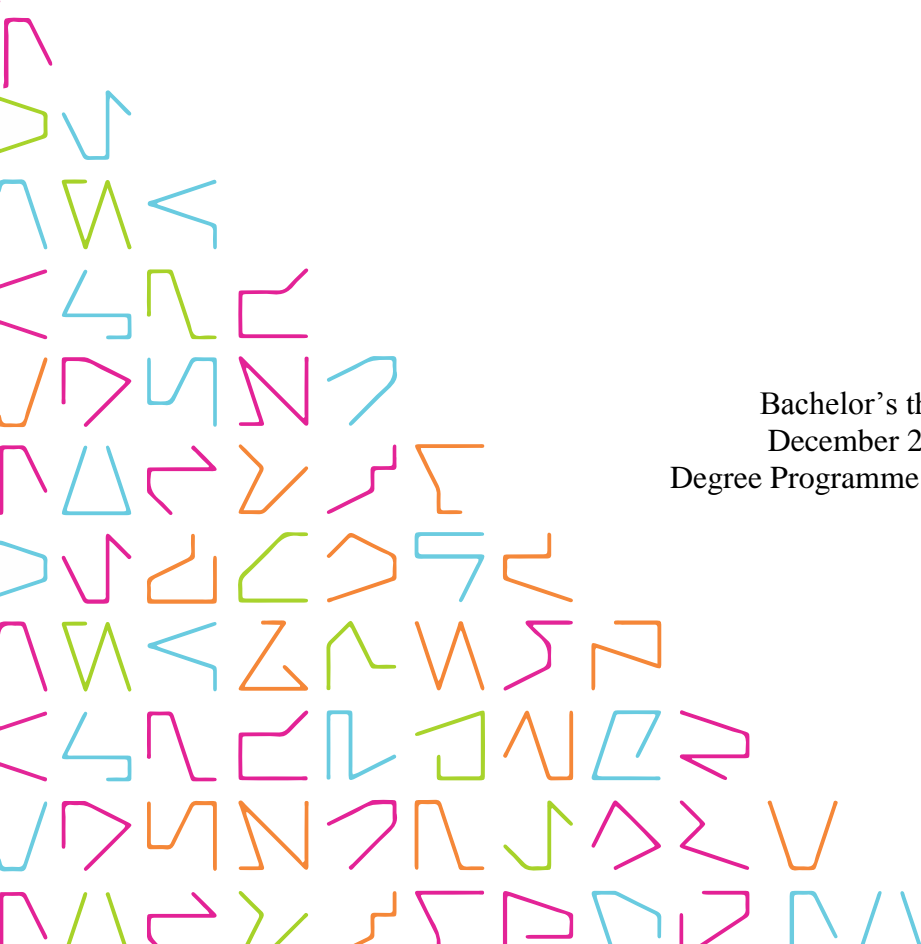


PRICING MODEL AND STRATEGY FOR A WATER PARK USING REVE- NUE MANAGEMENT TACTICS

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Bachelor's thesis
December 2016
Degree Programme in Tourism



ABSTRACT

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Bachelor's thesis 63 pages, appendices 25 pages
December 2016

At present, a multitude of industries benefit from the application of analytics data. This data and its use takes a variety of forms, and is used in a variety of disciplines across industries. The discipline known as revenue management utilizes data to anticipate consumer behavior, specifically consumer demand, and adjust pricing models and plans accordingly in order to maximize revenue. In the tourism industry revenue management is a widespread practice, but in some areas of tourism it has not been adopted as efficiently as possible. One area of the tourism industry which may be currently under-utilizing revenue management is the water park sector.

Through the course of academic research a central hypothesis relating to the performance of water parks was explored. The purpose of said research was to determine if a water park can utilize revenue management tactics and techniques to improve performance, increase revenue, and improve business outcomes.

Data was compiled through the course of this research-based theoretical exploration. The compiled data indicated that performance improvements, increased revenue, and improved business outcomes can, indeed, result from the successful application of the aforementioned techniques. This data was utilized to develop plans and strategies for a specific case study referred to as Company X. Further, the gathered data and resultant revenue management plans and strategies indicated that specific techniques which can be utilized by Company X, based upon Company X's current situation, competitive position, and present or attainable resources, will likely result in increased revenue. As an industry, taking actionable steps toward implementing a revenue management approach will result in a greater chance of reaping the benefits associated with said actions. These benefits may include, but are not limited to: higher revenue, competitive advantage, and creation of new market segments.

Key words: revenue management, pricing model, strategy

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1 INTRODUCTION

At present, a multitude of industries benefit from the application of analytics data. This data and its use takes a variety of forms, and is used in a variety of disciplines across industries. One such discipline utilizes data to anticipate consumer behavior (specifically consumer demand) at a micro-market level, and adjust pricing models and plans accordingly in order to maximize revenue. This discipline is known as revenue management. While many industries utilize this practice, many companies within a given industry may undervalue its contribution, or in rare cases be unaware of its existence. In the tourism industry, for example, revenue management is a widespread practice. This does not, however, mean that all companies operating in this field utilize (or are even aware of) said practice.

One area of the tourism industry which may be presently underutilizing revenue management is the water park sector. One such specific example is Company X, for which this thesis was commissioned. Company X operates under a different title, but will be referred to as such in order to maintain confidentiality, and adherence to a non-disclosure agreement in regards to sensitive data, policies, or other trade secrets. Company X is a water park operator based in Finland, which, at present, does not utilize large-scale revenue management strategies, techniques, and tactics to maximize profit for their existing water park operations. The purpose of this thesis was to analyze current practices in use at Company X, analyze the past customer and sales data, and to then utilize this data to craft a comprehensive revenue management plan, specifically a theoretical pricing model for use at Company X's water park facility. The goal of this pricing model was to provide Company X with useful information and data regarding their water park facility. This data and information will hopefully be used in the future in the implementation of a revenue management plan for the water park.

2 REVENUE MANAGEMENT

2.1 The concept of revenue management

Revenue management is defined (in basic terms) as selling the right type of space to the right customer segment at the right price at the right time so as to increase revenue or contribution margin as much as possible (Kimes and Singh 2008, 83). Revenue management became widely used due to the Airline Deregulation Act of 1978. Due to changes in American law, pricing restrictions were modified in the airline industry. Revenue management became a standard practice in this field. After it was commended as highly useful in the airline industry, the hotel industry followed soon after, implementing this practice in their own business strategies. Other industries, including companies operating in the car rental business and cruise line business, have followed what is now an industry standard in the airline and hotel industries. It spread to other industries due to its success in creating higher revenues and therefore more thriving businesses.

2.2 History of revenue management

The history of revenue management started in the United States of America with the Airline Deregulation Act of 1978 (Tranter, Stuart-Hill, and Parker 2008, 20). Before this deregulation, airline ticket prices had been strictly regulated and standardized. With this critical deregulation of the industry, airlines had the freedom to change their prices, schedules, and services without the necessitation of obtaining permission from the United States Civil Aviation Board (CAB) (Talluri and Van Ryzin 2004, 6). This newly discovered freedom within the industry triggered a fare war between airlines, each attempting to remain competitive with the others, while maximizing their own revenue, maintaining consumer confidence, and upholding brand values and company goals. Around the same time, many charter and low-cost airlines entered into the market. These low-cost airlines posed a threat to the more traditional airlines within the leisure traveler segment of the travel market. There was a clear shift within the leisure segment to choose a cheaper airline due to the price sensitivity of the segment. This shift created cumulative losses in profit for various major airlines.

American Airlines, one of the pioneers of RM, came up with a solution to deal with the low prices of their competitors. They used a combination of purchase restrictions and capacity-controlled fares to sell their “surplus” seats that would have otherwise remained unsold. At the same time American Airlines was still capable of collecting high revenue from their business segment. (Talluri and Van Ryzin 2004, 8.)

Airlines with large amounts of capital goods sped up the development of computerized reservation systems (CRSs) and global distribution systems (GDSs). The development of these systems, specifically the GDSs, became highly profitable, yet it made pricing and operations much more complicated processes as well. Yield management (later to be known as Revenue Management) tactics and techniques started to spread and be implemented within the airline industry. American Airlines are cited as the forerunners in the industry due to the development and use of revenue management methods, as well as taking advantage of their computerized distribution system, Sabre, which was the first in the world. (Legohérel, Poutier and Fyall, 2013, 3.)

Due to the fact that RM’s history is heavily based around one industry, other industries have both gained and suffered from it. In the modern world none of the airlines would be able to have profitable operations without RM practices. The success of RM in the airline industry has validated the economic importance of RM. It has also shown that RM can be implemented in a complex business environment. The success of RM in the airline industry also has its downside. Research and implementation of RM in other industries has been made quite difficult due to the airline biased terms and vocabulary. Pricing is another problem. The constantly changing prices in relation to demand have gained a somewhat bad reputation within the customer base. (Talluri and Van Ryzin, 2004, 10.)

2.3 Conditions for revenue management

In order for an industry to be able to utilize revenue management there are several conditions which must be met. It is important that these conditions are met to make the most use of revenue management. If one or more conditions are not met, it might make sense to utilize other tactics. The conditions required for the successful application of revenue management tactics and strategies are: fixed capacity, perishable inventory, variable demand, high fixed costs and low variable costs (Kimes and Singh 2008, 83–84). These

conditions, due to their high importance in understanding revenue management, will be explained below.

2.3.1 Fixed capacity

Fixed capacity businesses have a specific number of “units” that they may sell (Légoherel, Poutier and Fyall 2013, 5). Great examples of industries which have fixed capacity are airlines and hotels. Both have a capacity that cannot be altered in the short term. Airplanes have a set number of seats available, and hotels have a specific number of rooms that can be sold. The capacity remains the same if no long-term constructions are made (i.e. remodeling an airplane or building a totally new wing to a hotel).

Fixed capacity is an essential part of revenue management. It is important to realize that without fixed or at least half-fixed capacity, revenue management becomes obsolete. An example of half-fixed capacity are restaurants where it is possible to rearrange tables to create more room temporarily. It is important to take advantage of fixed capacity in revenue management to maximize revenue and to keep occupancy levels as high as possible. If fixed capacity is ignored or it has not been recognized, revenue management tactics cannot be used effectively.

2.3.2 Perishable inventory

Perishable inventory points to inventory which cannot be restocked. If the inventory unit is not sold before its time of use, it will disappear forever and an opportunity has been lost (Okumus, Altinay and Chathoth 2010, 27).

A good example, yet again, of perishable inventory are seats on an airplane or hotel rooms. If an airline cannot sell all of the seats on its flight, those seats will remain empty for the whole duration of a flight, therefore losing possible revenue. The same can be said, in principle, for hotel rooms. If the hotel does not sell all of its rooms, the rooms will remain empty for the night and thus the opportunity to have a higher occupancy and to create more revenue has been lost.

The airline and hotel industries specifically, have made their businesses considerably more successful and profitable after they started considering the importance of perishable inventory in revenue management.

2.3.3 Variable demand

Demand can be defined as a desire to purchase something while also having the amount of income and disposable resources to do so. Variable demand occurs when market segments with differential price elasticities are willing to pay different prices for the same product. If many people desire to have a given product or service, demand is said to be high. If few people desire to have a given product or service, demand is said to be low. If demand shifts constantly, or changes due to season, market segment specific price elasticity, cultural events, economic situation, or a variety of other factors, demand is then said to be variable in nature. Demand may vary depending on the day, week, or month (Kimes, Chase, Choi, Lee and Ngonzi 1998, 34).

The tourism industry as a whole is a great example of an industry with high levels of variable demand. The demand shifts constantly due to the changing nature of the business.

2.3.4 High fixed costs, low variable costs

Revenue management works well in industries where the fixed costs are high and the variable costs are low (Kimes et al. 1998, 33). Fixed costs do not change depending on the increase or the decrease in the amount of sales of a service, they stay the same regardless of whatever factors may fluctuate. Therefore, despite the amount you sell, you will still have the same overhead costs. This is why it is crucial to use revenue management tactics to determine what to charge the customers so that you stay profitable despite the volume of sales. The service (or, in other cases, a product) itself is considered to be part of the variable costs. The volume of sales determines the amount of variable costs. The higher the sales the higher the variable costs are as well.

The hotel industry is a great example of a business where the fixed costs are high (the rent of a given piece of property or land, maintenance costs, electricity etc.) and the variable costs are low (selling an extra room or an extra bed only affects the costs of having the rooms cleaned and ready to use). Because one is already paying the rent and the maintenance fees of the hotel building itself, the more rooms that are sold per day at a net gain rate, the more profit can be made within a day.

2.4 Strategic levers of revenue management

2.4.1 Pricing

Pricing is an important strategic variable in revenue management. Recently its importance has only increased and it has been considered to be the most significant and the most effective way to increase profit (Kohlmayr 2010, 1). Nevertheless, pricing does not exist in a vacuum. Instead it needs to fit into a larger strategy which needs to include and have carefully considered the effects of marketing choices, adaptation to client segments, and appraising and monitoring the competition (Legohérel, Poutier, and Fyall 2013, 21–22).

As stated previously, pricing is a pivotal portion of revenue management due to the price sensitivity of consumers, the need to stay competitive, and the need for optimal pricing policies (Kimes 1998, 163). Having a proper price mix is crucial to any company within the tourism field. A logical mix of prices must be offered to the customers, otherwise they might not view the price quoted as fair. Pricing should not concentrate on competition alone. Factors, such as price sensitivity should be taken into account when creating a potential price mix. Price sensitivity relates to the amount of money different types of customers are willing to pay for a specific service. Some customer groups are extremely price sensitive, while others are not (for example budget travellers versus business travellers).

Staying competitive within one's field is extremely important. The widespread use of information and communication technologies has created shifts in the mentalities and practices businesses use when they approach pursuing revenue (Legohérel et al. 2013, 170). Benchmarking and analysing one's competition is a fundamental part of revenue

management. Forecasting the potential moves of the competing businesses is of pivotal importance and has an effect on how the company should go about creating their pricing policy.

Pricing policy

Pricing policy refers to how a business sets its prices. Pricing policy can be modified to fit various strategic goals. There are a wide variety of pricing strategies, and a wide variety of situations and factors which merit them. Some of the most useful pricing strategies in the revenue management field are demand-based variable pricing, differential pricing, and dynamic pricing.

Demand-based variable pricing

Demand-based pricing is a strategy in which revenue managers take into account peak and off-peak demand, then adjust prices accordingly in order to keep their model profitable regardless of the amount of customers they receive. When utilizing demand-based pricing strategies, care must be taken so as not to allow for too much fluctuation in pricing, which may confuse customers if it appears that there is price uncertainty on behalf of the product or service provider. Fluctuating prices may also result in a changing reference price, and could thereby hinder future booking behavior or give a perception of unfair practices or belligerent price hiking, which could be viewed negatively by said consumers.

Differential pricing

Demand is not homogenous, and thus different customer segments will have different expectations and will react to price, and price changes, differently. Differential pricing has many rules, which include the need to account for price sensitivity, the need to segment markets into hermetically-sealed segments, flexibility, and degressive pricing (Legohérel et al. 2013, 23–24).

Customer segments must include multiple levels of price sensitivity in the differential pricing strategy. This is so that one can have product or service offerings at all levels of the price sensitivity scale and therefore make more profit by appealing to a wider range

of customer segments. Customer segments must also be hermetically-sealed for this strategy to be effective, so that each customer is part of only one group and therefore one price target. If the customers categorized in a certain segment try to “escape” into another segment, different types of measures can be taken to try to prevent this from happening. A good example is a business traveller who is trying to purchase a service (e.g. a seat on a flight) with a rate which is typically reserved for leisure travellers. The airline is most likely offering the leisure price with rate fences that require a Friday to Saturday overnight stay, therefore business travellers will most likely choose not to use the cheaper fare because their trip will already come to an end on a Friday. This is a single example, among many available examples, of methods used to prevent customers from escaping their intended segment.

Being flexible with pricing is also important in differential pricing. A company must be able to react to unforeseen events, changes in demand, and the competition’s actions and still be able to make profit. Degressive pricing is a significant part of differential pricing. The prices should not be vastly different from each other. It is important that the customers choose the slightly higher price if the price that they are looking for is not available, rather than the lower of these options. Customers who are capable of paying a specific price or somewhat more, should never pay less. This is important to ensure the highest profit possible.

Dynamic pricing

Dynamic pricing revolves around BAR or the “Best Available Rate”. The best available rate is, as the name suggests, the best possible price on a given day. Information given to customers has changed. Instead of giving the customers the highest price (or rack rate) they will receive the best available rate for the day or the duration that they are searching for. Receiving information on each night that the customer booked was deemed fairer than an average price combined (Kimes 2002, 24). Prices are adjusted in real time and change according to the time of the day, week, month, and year. This is due to changes in the macro environment, season, events, and the actions of the competition.

2.4.2 Time

Time is a lever that is much more difficult to control in comparison to price. If controlled properly and effectively, it could improve the efficacy of revenue management greatly. Implementation of duration controls would help companies in maximising revenue for all the time periods, not just the peak season. Industries traditionally associated with revenue management use variable pricing and the duration spent using the service is highly predictable (Kimes and Chase 1998, 160). Other industries could most definitely take advantage of this successful model and try to move closer to being able to predict duration and use variable pricing, if possible, within their industry. To increase the control over duration multiple different internal and external measures must be completed. These measures include the redefinition of what duration truly is, reduction in the uncertainty of arrival, reduction in the uncertainty of the duration, and reduction in the time between customers (Kimes et al. 1998, 160).

Duration can be considered to be the time (number of nights or hours) a customer uses a given service. On the other hand, it can also be defined as an event (a meal in a restaurant, or the undefined period of time spent at a recreational amusement pool area).

When duration is defined as an event, it is much more difficult to forecast the length of said duration. Therefore, defining duration as a time instead would most likely result in higher revenue due to being able to make more clear forecasts regarding the use of resources and manpower, and thereby using resources more wisely.

Uncertainty of arrival

It is important to reduce the uncertainty of arrival because inventory is perishable. No-shows and late arrivals are harmful to any business and negatively impact potential revenue. Therefore it is of critical importance to utilize both internal (not involving customers) and external (involving customers) measures to prevent harmful customer behaviour.

A popular internal approach in the capacity-constrained service businesses is overbooking (Kimes et al. 1998, 161). To have a successful overbooking policy, it is of utmost importance to have accurate data about the past no-shows and cancellations. Without any arrival data, it is impossible to make accurate forecasts about the future ones. Once

an overbooking policy is set up, it is also important to educate the staff (whether it is a hotel, a cruise line, or an airline) about proper ways to deal with displaced customers. It is similarly important to keep customers happy, and to make the displacement decision in a manner that will be the most beneficial for one's business.

To move the responsibility of appreciating the reservation to the customer, external approaches such as requiring deposits, or having penalties in place in case the customers cancel their reservation can be used.

Uncertainty of duration

Duration is a complicated component, because there are very few concrete things that can be done to decrease the inherent uncertainty of it. Some of the internal approaches used to decrease the uncertainty of duration are accurate forecasting of the length of use, the number of early and late arrivals and departures, and improving the consistency of service delivery utilizing analytics and a variety of data points. (Kimes et al. 1998, 161.)

It is of utmost importance to use the internal approaches to deal with the uncertainty of duration. By having a trusted past data on the arrival and departure patterns, it would be easier for the managers and business owners to make decisions regarding reservation requests. When forecasting customer duration, specifically hotels have to take into account that forecasting has to happen by day of arrival, length of stay, and possible rate classes (Kimes et al. 1998, 162).

Even though the internal measures are preferred, there are some external measures that can be used if deemed necessary. These external measures include deposits and penalties that can show themselves as early arrival and late departure fees, or as penalization regarding where and when one purchases an airline ticket or books a hotel room.

Reduction of time between customers

Even though reducing the changeover time, or the time between customers, is not traditionally considered to be a revenue management technique, it is indeed a method that can be used to increase the amount of revenue created per available inventory unit (Kimes et al. 1998, 162). When the time between customers is reduced, it is possible to

serve more customers within a shorter time span, and therefore create a larger amount of profit. Although it is important to reduce the changeover times, it is also of the essence to keep the customers happy. Therefore techniques and tactics which do not make the customer feel like he/she is treated unjustly should be considered. If the customers decide to stay for a longer period of time than has been anticipated, it will create a problem for the revenue manager, and the operation as a whole.

In quadrant two industries, such as hotels, it is easier to deal with customers who are willing to stay for a longer period of time. It is easier to tell the customers that their stay has come to an end, and that they cannot stay longer because the hotel is already fully booked for the extra day that they wish to stay. It is much more difficult to tell customers of a restaurant to leave because their “dining time” has come to an end. Businesses that sell time implicitly might not have control over how long customers use the service and sometimes they cannot even ask customers how long they plan to use the service. (Kimes 2013, 31.)

TABLE 1. Typical pricing and duration positioning of selected service industries (Kimes and Chase 1998)

		Price	
		Fixed	Variable
Duration	Predictable	Quadrant 1: Movies Stadiums/Arenas Convention Centers	Quadrant 2: Hotels Airlines Rental Cars Cruise Lines
	Unpredictable	Quadrant 3: Restaurants Golf Courses Internet Service Providers	Quadrant 4: Continuing Care Hospitals

2.4.3 Space

Price and time have been considered the strategic levers of revenue management since some of the earliest research on revenue or yield management. In the modern era, space

has been added to be one of the levers of revenue management, and rightly so. The capacity of a physical space is relatively fixed which makes the decisions regarding the consideration and design of space very important (Kimes and Wirtz 2015, 34).

The physical environment of a given space should be carefully considered, as it plays a huge part in both staff and customer satisfaction, represents the company, helps the customers and the company reach the goals they are aiming towards, and differentiates the company from other, possibly similar, companies (Bitner 1992, 63). Space has an effect on a multitude of variables, therefore it is of utmost importance to manage it properly using revenue management techniques. Managing only price and time is not enough anymore, and neglecting the third lever of revenue management, space, cannot happen in successful revenue management.

Space and time are inherently connected to one another. The interaction between the two strategic levers affects the way companies position themselves, and how they generate revenue (Kimes et al. 2015, 32). Potential revenue becomes higher when companies have more control of time and space. This implies that time has to be sold explicitly and space implicitly (Kimes et al. 2015, 32). In practice this means that there will be more control over the time the customers are using a specific space, and more control of how a specific space will be defined.

Different businesses can be categorised into different slots considering how they sell their time and space. According to Kimes and Wirtz (2015), there are four different types of categories that different businesses fall in, considering how they sell and control time and space.

TABLE 2. Strategic interplay of space and time (Kimes and Wirtz 2015)

		Time	
		Implicit	Explicit
Space	Implicit	Category 1: • Restaurants • Golf courses • Stadiums/arenas • Airlines	Category 2: • Hotels • Rental car • Spa
	Explicit	Category 3: • N/A	Category 4: • Self-storage • Moving vans • Gas pipelines • Advertising space

Category one businesses include restaurants, golf courses, stadiums, and airlines. These types of companies control both time and space implicitly. This means that it is quite easy for them to control the space that is occupied by customers, but the time poses some challenges as it cannot be controlled as easily without running into trouble with customer satisfaction.

Category two industries include hotels, rental car businesses and treatment spas. Companies in category two industries control their time explicitly and their space implicitly. This is the most attractive category from the revenue management perspective due to the high possibility for control regarding both time and space. A myriad of sophisticated revenue management tools have found their way into this specific category and added even more control, and therefore more revenue generating potential to this category.

Category three industries are not discussed further because they do not have potential when it comes to revenue management tactics. Industries that fall under this category sell their time implicitly and their space explicitly. This means that there are practically no revenue management-based revenue-generating possibilities because companies that cannot control time nor space have a very small chance to survive.

Category four includes businesses such as self-storage units, moving vans, gas pipelines, and advertising space. These types of businesses sell both time and space explicitly. This means that these companies cannot control the amount of space the customer is using, only how long they can use it for. Therefore there is little to no room to differentiate themselves from similar types of businesses.

It is quite obvious that all industries should aim to sell and control their time explicitly, and their space implicitly, like the category two businesses. This gives the most control over both time and space, and the largest amount of possibilities to gain larger amounts of profit. Companies in all categories should make the most of the revenue management techniques concerning space. This is crucial to making the most out of the space available. There are five different types of tools that companies can incorporate into their revenue management agenda regarding space. These tools consist of selection of inventory types, space configuration, space ambience, ancillary revenue sources, and increasing productive use of space (Kimes et al. 2015, 34).

Selection of inventory types

Different types of businesses have different selections of inventory units available. Hotels have a variety of room sizes, airlines offer coach, business and first class seats, and treatment spas offer their treatments in a variety of different rooms. Ancillary services are a big part in the differentiation of inventory units in comparison to the competition. Offering something outside the industry standard can positively affect the company's position against its competitive set.

It is important for a business to determine how much demand there is for different types of inventory units. Research of this variety is important to carry out, so that the company in question can offer the most attractive selection of inventory types for its customers, and thus also differentiate themselves from their near competitors.

Space configuration

After a business has decided which type of inventory types it wants to sell, space should be configured and the amount of flexibility these spaces have should be decided upon.

Space configuration, which is also called the supply mix, has an effect on how much revenue each customer will generate for the company (Kimes et al. 2015, 35).

The supply mix should be carefully considered. In the event that the supply mix is ignored, even the most sophisticated and complex revenue management systems cannot create the most optimal revenue possible. According to Kimes et al. (2015), determining the optimal supply mix requires that the managers balance customer demand for different space types with the space and time requirements of each space type, the revenue correlated to each space type and the desired space flexibility. The optimal supply mix changes depending on the type of business, and this is why it is important to take the individual properties of a business into account when planning, and when determining what the optimal supply will be.

Space ambience

Creating the right type of ambience for one's customers is important and has an effect on potential revenue earned and the retention/return rate of customers. In some cases one wants the customers to remain longer and buy more, and in other cases one wants the customers to stay for a very short amount of time and leave quickly to free up space for new customers, and therefore more revenue.

Three components of the environmental elements that specifically have a direct effect on the space ambience are ambient elements that may affect the senses such as lighting, music, and temperature, design elements such as colour, furnishings and spatial layout, and social elements such as employee visibility and customer interaction (Baker and Cameron 1996, 340).

Ancillary revenue sources

Ancillary revenue sources include services and products that are not part of the main service or product that a company is offering. Ancillary services are often offered on the side to either differentiate the main service or enhance it in some meaningful and wanted manner. Ancillary revenue sources can have an incredibly significant impact on the total revenue created for a given company, and thus should therefore be carefully

considered. The fundamental point is to determine which services and/or products to offer while also understanding customers' needs and deciding how to offer services and/or products in a profitable manner. Ancillary revenue sources are not necessarily sought after if they affect how long customers are to use the space during peak times. (Kimes et al. 2015, 38.)

Increasing productive use of space

Businesses have four different methods that they can utilize to increase the productive use of their available space. These four methods include reducing the amount of idle time between customers or events, extending the time the space is used, offering multiple uses of one space, and offloading non-revenue producing activities (Kimes et al. 2015, 39).

Reducing the idle time between customers or events is of critical importance. Any time that a space is not being actively used, results in a lost opportunity in creating revenue from that space. Therefore it is extremely important to reduce the idle time and create more revenue generating potential. One must be careful when extending the time the space is used. Some industries do not want the customers to extend the time they are using the service during busy periods because it does not have a positive effect on the revenue amounts which are created (e.g. hotels, restaurants). Industries that exclusively sell experiences can take advantage of extending the time the space is used. Industries like performing arts centres and sports stadiums can easily organise pre-events and post-events that can easily increase the productive use of their space and therefore increase the amount of revenue which is created as a result of a single event.

A large physical space is also a large fixed cost. When using revenue management tactics, it is important to offer multiple uses for a given space, or have the space at its desired use as much as possible. If it is not possible to occupy the space by the most desirable user, an alternate use for the space should be invented. This ensures that the revenue streams stay continuous and a high fixed cost asset stays profitable.

Offloading non-revenue producing activities should be considered to create even more profit. Offloading of the activities that do not produce any revenue should be conducted in a way that ensures they do not take up valuable space from the high fixed cost assets.

The key to successfully executing this procedure is to keep as much of the revenue-creating space available for customers instead of staff, maintenance, or other back-of-house functions (Kimes et al. 2015, 40).

2.5 Revenue management in indoor water park environment

There is only a fairly small amount of data and information concerning revenue management technique usage within the indoor water park business environment. This area is still vastly under-researched, and thus the available data is quite limited. According to Sangree (2015) the water park industry has continued to grow year over year, and an increased number of indoor and outdoor water parks are being developed in the United States and Canada. Both urban and suburban locations have benefitted from the eagerness to develop new water parks (Sangree and Keller 2008). Likely, this trend continues among other nations, though empirical data is insufficient for a concrete conclusion in this regard. Revenue-generating attractions can be added to differentiate one's business from others, and also to give an advantage in comparison to one's competition. Resorts with adjoining indoor water parks have the potential to earn more income by providing additional revenue generating amenities such as restaurants, bars, nightclubs, coffee shops, retail stores, day spas and wellness centers, family entertainment facilities, and multipurpose theaters which have a multitude of different usages. (Sangree et al. 2008.)

To a certain extent, water parks can be directly compared to amusement parks. Both water parks and amusement parks sell space implicitly. Amusement parks sell admissions to their customers, this admission allows the customers to use the space in a way they see fit, within safe and acceptable usage restrictions. The space is divided into different types of attractions that all act as revenue creating streams for the amusement park. It is quite beneficial to have a multitude of revenue streams to increase the amount of profit created. In addition to admissions, revenue streams in amusement parks include food and beverage, merchandise, games, parking, and sponsorship funding from external advertisers. To generate more revenue, amusement parks have created a vast variety of pricing options for a myriad of market segments due to the large amount of revenue that is derived from admission fees. Different types of admission pricing strategies include pay-as-you-go pricing, pay-one-price pricing, and consumer segmentation-based pricing. (Legohérel, Poutier and Fyall 2013, 145–148.)

Amusement parks, just like water parks, sell their time explicitly. This time can be controlled by days, weeks, months, or years (Blogs.cornell.edu 2012). When it comes to controlling time, extending the length of time spent in an amusement park is of critical importance. Revenue strategies aiming to increase the number of days visitors spend in amusement parks were implemented as a result of amusement park development in the United States in the 1970s (Legohérel et al. 2013, 149). Seasonal pricing, enhanced customer segmentation, and taking advantage of advance sales are innovative revenue maximization strategies that can be used within the amusement park industry instead of some of the traditional revenue management techniques that would not necessarily work due to the unique characteristics that amusement parks have (Legohérel et al. 2013, 152–154). Due to the similar characteristics of amusement parks and water parks, some of these innovative revenue management strategies could also work within the water park industry, but large scale testings resulting in empirical evidence have not been conducted.

3 RESEARCH

3.1 Research process and methodology

The point of this thesis was to find out whether or not traditional and/or innovative revenue management techniques could be used within the water park industry and in so doing, create a sustainable and profitable pricing model for the water park offering of Company X.

When the behaviours, feelings, experiences, or opinions of a person or a group of people are being researched, one of the distinct paths will be followed no matter what the field of study is. These two paths consist of quantitative research or qualitative research. Quantitative research draws from the scientific tradition. Qualitative research is reflective or even experiential in its very nature. Both use some similar research skills, though not always in the same order. Both methods deliver informative and useful results if done skillfully, but each of them serve rather different purposes. (Davies 2007, 9.)

Qualitative research is mainly exploratory research. Discovering underlying reasons, opinions, and motivations are the motives for qualitative research. It is used to provide insights into the problem, uncover trends in thoughts and opinions, help to develop hypotheses for potential quantitative research, and look deeper into the problem. Data collection methods vary using either unstructured or semi-structured techniques. Some of the most common methods of qualitative research include focus groups, individual interviews, and observations. (Wyse 2011.)

A method of qualitative research used in this thesis consists of a short interview concerning revenue management directed at the management of the water park X. The interview was short in nature and only included open answer questions. The individual interview in question was chosen as one of the primary methods of data collection in order to get information from an inside expert about the current practices of revenue management in the water park, and to obtain information regarding the perception of said practices from the perspective of this particular management-level member of the water park's staff.

Quantitative research quantifies a problem by generating numerical data that can be used to quantify attitudes, opinions, and behaviours. Data collection methods which can be classified as quantitative are typically seen to be more structured than qualitative data collection methods. Methodologies of data collection which can be said to be quantitative in nature include various forms of interviews, surveys, polls, and systematic observations. (Wyse 2011.)

Quantitative research played a larger part in this thesis. Systematic observations were collected in the form of customer data stored in the water park's customer relationship management (CRM) system. The data collected included information regarding the amount of visitors and the amount of revenue created by said visitors and sales data for rental extras and ancillary offerings available at water park X. The collection of data was time consuming due to the system's lack of grouping options. Each day had to be individually analyzed and each piece of data had to be individually picked from a specific date. After the initial data was collected from the water park, the data was sorted manually into a comprehensive Excel spreadsheet document and manually prepared and arranged for optimal analysis. The Excel extension Pivot was utilized for data visualization purposes once the data was compiled in its entirety.

3.2 Research validity

The validity of research conducted is of utmost importance in maintaining both academic and professional standards of the highest variety. It is also pivotal in ensuring that the proposals and suggestions contained within a given academic research document are of usable quality, and contain well-informed and well-reasoned suggestions of the highest possible quality and relevance (Creswell 2008, 169).

The data, in nearly every applicable scenario, obtained from Company X was utilized under the assumption that it is true and accurate, and will lead to valid inferences, and that said data has been confirmed as true by the collectors. In these compiled reports, any anomalous data which has appeared as inconsistent in its nature, beyond a reasonable margin of error, has been appropriately annotated therein. In primary source data, it is also assumed that the managerial subject of the interview which was conducted has

answered in an honest, open, and accurate manner, and that the information there provided is of unquestionable and unimpeachable authenticity.

4 ANALYSES

4.1 Market analysis and customer behaviour

Determining the characteristics that are specific to one's particular market and analyzing all relevant, gathered information is important in conducting a market analysis for one's business. Conducting a market analysis is helpful for promoting positive business outcomes, specifically when one has gathered scientifically valuable data. Data will help in getting to know one's customers, determining appropriate pricing, and benchmarking competition accordingly. (Kerr 2014.)

According to Kerr (2014), it is important that a market analysis should include an overview of the industry one is working within, target market segmentation, competitor analysis, projections for the business, and any applicable regulations which may need to be taken into account.

There is only some data concerning how much the indoor water park/spa industry has grown in Finland in the past decade. If it is assumed that the current worldwide trend is also relevant in Finland, the industry has grown and will likely keep growing in the coming years. In Finland there is a myriad of different types of water parks and spas that range from large family oriented amusement park -like locations to small, intimate, and relaxing spas. They often have multiple similarities but differentiate from each other with specializations that can vary from specialty pools to different types of adjoining attractions. Customer segmentation in different locations also differs, but larger locations can often cater to a larger target market. Benchmarking oneself in comparison to one's competition is also important, and having something special to offer to one's customers can differentiate the business from its competitive set in either the positive or the negative light. Creating a competitive pricing policy is also imperative, thus it should work hand in hand with monitoring competition. When analyses concerning the industry as a whole, customer segmentation, and competitors have been conducted, the future of the business should be considered in the form of projections. Evaluating past behaviour is important to give as accurate a forecast of the future as possible.

According to Perner (2002), customer behaviour is considered to be "the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society." It is important to understand what drives one's potential customers. Service industry does not have a tangible product that can be held. The product is often an experience. Therefore it is important to offer experiences that the customers will appreciate and want to repeat. Consumers are often seeking to obtain the best value possible. This is something that should be taken into consideration when deeming what is the experience, service, or product one wants to offer.

There are different types of internal and external factors that have an effect on how consumers will behave, how they make decisions regarding purchases, and what are the motivations behind the decisions they make. These internal and external factors include personal and psychological factors such as age, income, lifestyle, occupation, motivation, perception, beliefs, and attitudes and cultural and social factors such as culture, social class, family, reference group, role, and status. (Patidar 2014.)

As listed above, it can be seen that there is a multitude of factors that have an effect on the consumer behaviour. Businesses have to do their best to consider these factors and offer value to consumers with differentiating behaviors. This applies to the water park and spa industry as well. Collecting data on the past behaviour of one's customers needs to be done in order to forecast what the consumer behavior will be like in the future.

4.2 Benchmarking

Benchmarking is a type of process that obtains a measure, called a benchmark. This measure may be used to analyze one's internal processes and/or the behaviour of competition, in order to achieve a competitive advantage (Stroud 2006). According to Stroud (2006), there are three different types of benchmarking. These three different types are as follows:

Internal benchmarking is used when collecting comparative data from similar units within one's business. Data may be limited, but it is important to make comparisons if a company has multiple units and some are outperforming the others.

Benchmarking with competitors involves comparison with similar types of businesses in the same field. Data is collected in order to evaluate what is the position of the business compared to its competition. Industry leaders should also be recognised in order to apply performance targets.

Strategic benchmarking requires gathering information from businesses with the same or similar processes, although they may operate in a different field. World-class performance identification is imperative to ensure the best possible results.

By benchmarking it is possible to find out what businesses perform well and have practices that are adaptable to one's own business. It is also possible to find the businesses that will be the most compatible to benchmark with (Benchnet.com 2007).

4.3 SWOT analysis

SWOT analysis identifies the strengths and weaknesses a business has, opportunities that it can take advantage of, and threats it needs to be aware of, presently and in the future. A SWOT analysis provides useful information that a business can use when planning its future endeavours and objectives. (Holloway 2004, 30.) The strengths and weaknesses are found within the internal environment of a company as opposed to the opportunities and threats which are found within the external environment.

Armstrong and Kotler (2012, 58) explain SWOT as follows:

Strengths are internal capabilities that could help a business reach its goals and objectives.

Weaknesses are the internal limitations that, contrarily, could interfere with the ability of a business to achieve its goals and objectives.

Opportunities refer to the external factors that the business could be able to take advantage of while initiating new prospective and favourable possibilities.

Threats refer to the current and emerging external factors that are not directly in the control of a business and may challenge its performance.

Factors relating to the internal and external environment of a company are of utmost importance when taking actions concerning a company's position within a given market (Okumus, Altinay and Chathoth 2010, 9, 43.) A comprehensive SWOT analysis for Company X has been conducted, but (as with many elements of this thesis) the particulars are of a highly confidential nature, and thus can not be discussed in unsecured or public channels (such as a publicly available thesis) due to the importance of maintaining company secrets and competitiveness. Thus, this confidential analysis will be made available within the attached appendices in order to ensure appropriate handling of sensitive data is maintained. For more information regarding the analysis of strengths, weaknesses, opportunities and threats of Company X, please refer to the attached document labelled "Appendix 1".

5 PRICING MODEL

5.1 Data analysis

The process of systematically applying statistical techniques to evaluate data is what data analysis is in its core. According to Shamo and Resnik (2003, 32), a variety of procedures of analytic nature “provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data”.

Data analysis for Company X was carried out qualitatively in the form of an open ended interview, with questions being presented to and answered by a managerial level employee of the company (Appendix 2). Quantitative research was also carried out in the form of secondary data manually collected from the customer relationship management (CRM) system of Company X. The data was comprised into a spreadsheet using Excel and it was modified furthermore in Pivot data summarization tool to present the data visually as graphs and charts. The graphs and the charts, including the Excel spreadsheet comprised of two years of information about Company X’s sales and customer history and will be discussed in detail in relation to the pricing model (Appendix 3).

5.2 BAR based rates

Best Available Rate (BAR) is the price used by many different types of operators (particularly popular within the hotel industry and often called a rack rate). Best Available Rate allows customers to search for the best rate possible online for the day of their visit. The BAR is dictated by reservation dates, pricing level, and price elasticity. (Legohérel, Poutier, and Fyall 2013, 26.) Specifically in the hotel industry, when customers have multiple-night stays, BAR pricing attempts to reduce confusion. It also has a higher guarantee that the customer is charged the lowest available rate for each night of their stay. (Kimes and Rohlfs 2005, 4.)

Best Available Rates are a significant part of revenue management, specifically in the hotel industry, yet they have many advantages that can benefit other industries as well.

Industries such as rental car providers, golf courses, health spas, and amusement parks among others have already taken steps towards beneficial revenue management plans.

A detailed Best Available Rate pricing model has been provided for Company X (Appendix 3). The pricing model uses the principles of BAR pricing. Due to the sensitive nature of the information shared in relation to the pricing model, it will not be published, in order to protect Company X's privileged information and competitive position.

5.3 Development proposals

Proposals related to the business development of Company X are (similarly to many aspects of this thesis) not able to be shared with the general public, due to the competitive positioning of Company X within their market. In order to protect trade secrets which may be revealed through the publishing of these development proposals, the suggestions will be included only within the confines of the physical manuscript of this thesis. Relevant development proposals were generated by analyzing the data provided and identifying problem areas where revenue has not been maximized, then applying revenue management tactics and techniques to solve the individual problems themselves. The efficacy of these development proposals may vary due to Company X's capability of execution, and thus must be independently measured at a later date.

6 CONCLUSIONS AND DISCUSSION

The purpose of this bachelor's thesis was to create a pricing plan for Company X's water park facility. A theoretical framework was utilized as a frame of reference while conducting the pricing plan and the strategical elements. Revenue management theory was heavily utilized in the creation of the pricing model.

Best Available Pricing was the most discussed method of revenue management in relation to possible techniques used within the water park facility of Company X. The conditions and strategic levers of revenue management have also been discussed in correlation to Company X and how their business is categorized within the larger field of revenue management. Company X is categorized as a business that can take advantage of revenue management due to the interrelation of time and space. Companies that control their time explicitly and their space implicitly are the most attractive from a revenue management perspective. Company X's water park facility does not quite reach this level of attractiveness due to the fact that both time and space are controlled implicitly. If more control were to be implemented in terms of time, revenue management tactics could be used with more efficiency.

Answers to the questions in the short interview were assessed, and analyzed. The interview was deemed useful, because it gave an insider look into the frame of reference of a managerial-level employee about possible future revenue management implementations. Quantitative research was also carried out in the form of secondary data manually collected from the customer relationship management system (CRM) of Company X. This data was analyzed in detail and both oral and visual representation of the results have been encased within the appendix titled "appendix 3".

In conclusion, as is evidenced by the reasoning in the appendices, it is possible, and incredibly likely, that a company operating in the water park industry (specifically, Company X, as the analysis provided implies) can increase revenue and performance by applying revenue management practices and tactics to their industry and operations.

In the case of Company X, the advisable path forward is delineated in the appendices provided. As an industry, taking actionable steps toward implementing a revenue management approach will result in a greater chance of reaping the benefits associated with

said actions. These benefits may include, but are not limited to: higher revenue, competitive advantage, and creation of new market segments. Therefore, it is indicated that the appropriate use of revenue management tactics and strategies will (in no uncertain terms) positively affect business performance of companies operating in the water park industry.

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APPENDICES

Appendix 1. SWOT analysis of Company X

Appendix 2. Translated questions and answers for the water park/spa manager

Appendix 3. Data analysis and BAR based pricing model

Appendix 4. Sales data spreadsheet of Company X