

DYNAMIC TICKET PRICING: HOW CONSUMER PERCEPTIONS OF FAIRNESS AFFECT PURCHASE DECISIONS

A theoretical study to understand the effect of consumer perceptions of fairness in dynamic ticket pricing.

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Abstract

Dynamic pricing has existed as a phenomenon already for decades, especially in hotel and airline industries. It is a pricing strategy, which involves maximizing revenue by adjusting the prices based on demand and other factors even on a real-time basis. In the event industry, it is a rather new idea and ticketing companies have mainly utilized it only in sports events.

While this pricing strategy can increase revenue and help ticket sellers better manage their product sales, it has also been criticized for potentially being unfair to consumers. Consumers might perceive dynamic ticket pricing unfair if they believe prices are not transparent enough, if they feel that they do not match the perceived value of the event or if they believe other customers are given an advantage.

It is important to research this area to understand consumers' actions and decisions. Previous research in dynamic ticket pricing has focused on sports events, the financial side of them and the consumer's experience with the events. Research on consumer perceptions is quite extensive, however there seems to be hardly any research focusing generally on the event industry.

Through a literature review, this thesis aims to form an understanding of the main theories and frameworks behind the phenomenon and contribute to the academic discussion on consumers' perception of fairness in dynamic ticket pricing. However, it is not the objective of this thesis to examine through every single factor in fairness perceptions but to examine the most important ones.

The results seem to indicate that consumer's perception of fairness is one of the most important factors in purchase decision with value, quality, and price perceptions. Factors contributing to the fairness perceptions are complex and multi-layered, such as pricing transparency, pricing timing, buyer-seller relationship, reference prices and general knowledge of the prices and market. Compared to fixed pricing, the unclarity of the pricing mechanism might complicate the fairness perception and for instance the trust and history between buyer and seller might be more important.

This thesis aims to constitute a solid understanding of the main theories behind fairness perceptions. For future research, the objectives could be to examine other perceptions or different layers of fairness perceptions. For practical implications, this thesis aims additionally to help ticket sellers understand consumer fairness perceptions and their increasing importance in the era of personalized pricing.

Keywords dynamic ticket pricing, consumers' perception of fairness, event industry

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1 Introduction

One of the most fundamental parts of sustainable sales strategies for different businesses is a well-working pricing strategy. For decades, different industries have tried to keep up with fluctuating levels of demand (Drayer et. al., 2012). One of the most famous strategies is called dynamic pricing, also known as yield management or revenue management in different contexts. Dynamic pricing refers to flexible goods or services pricing that shifts based on, firstly with supply and demand, and secondly with factors known to influence supply and demand (Kimes, 2000). Historically in the airline industries, the term “yield management” has been more commonly attributed to dynamic pricing. In addition to airline industries, hotel industry and event industry have implemented dynamic pricing as a major tool in their strategies.

According to McAfee and Te Velde (2006), dynamic pricing is a mixture of different pricing strategies aimed at increasing profits and can be established best when two product characteristics are met. Firstly, the product expires at some point in time. Secondly, capacity is fixed well in advance and possible changes to the capacity come with relatively high marginal cost. Both of these characteristics mentioned by the authors can very well be implemented and used not only with airlines and hotels but also in the events ticket industry. As event tickets do expire on their respective day, and venue capacities are well known in advance, the usage of dynamic pricing is possible.

Consumers' perception of fairness is a crucial factor that affects their purchasing decisions, particularly in the context of dynamic ticket pricing. Dynamic pricing, which involves adjusting ticket prices in real-time based on demand and other factors, has become increasingly popular in the event industry. While dynamic pricing can help event organizers maximize revenue and optimize ticket sales, consumers often question the fairness of this pricing strategy. Consumers may perceive dynamic pricing as unfair if they feel that prices are too high or that they are being unfairly targeted based on their demographics or buying history.

Due to rise of data and business analytics and the technological advancements in real-time dynamic pricing, the interest in the scientific community and the research around the theme of dynamic ticket pricing has grown to a greater extent in the recent years (Goli & Haghighinasab, 2022). This paper conducts a literature review on dynamic ticket pricing and consumers' perception of fairness examining the possible connection on purchase decisions. The literature review will examine how consumers perceive the

fairness of dynamic ticket pricing compared to fixed pricing, the factors that contribute to consumers' perceptions of fairness in dynamic ticket pricing, and the extent to which consumers' perceptions of fairness affect their willingness to purchase dynamic-priced tickets. The area should be researched more as the existing body of knowledge focuses mainly on traditional industries. New research could expand the understanding of dynamic pricing, especially in the entertainment industry, and lead to the development of practical implications, such as more efficient sports events markets.

1.1 Research objectives and research questions

The objective of this thesis is to examine consumers' perceptions of fairness in the context of dynamic ticket pricing through a literature review. By synthesizing existing research on these topics, this review will provide insights into the relationship between consumers' perceptions of fairness and their purchasing decisions in the context of dynamic ticket pricing. Ultimately, this review aims to contribute to a better understanding of how event organizers and ticket sellers can use dynamic pricing strategies in ways that are perceived as fair and equitable by consumers.

The exact research questions in this thesis are:

- 1) To what extent do consumers' perceptions of fairness affect their willingness to purchase dynamic-priced tickets?
- 2) What factors contribute to consumers' perceptions of fairness in dynamic ticket pricing?
- 3) How do consumers perceive the fairness of dynamic ticket pricing compared to fixed pricing?

With these questions setting out the process, this thesis aims to form a clear picture of fairness perceptions' impact on dynamic ticket pricing.

1.2 Scope of research

The focus of this literature review is on consumer perceptions of fairness in the context of dynamic ticket pricing. Academic articles, books, and other relevant literature published on this topic over the past decades are examined. A variety of perspectives on dynamic pricing will be considered, including studies of different types of events (e.g., sports, concerts), different pricing models such as e.g., surge pricing or variable pricing, and different consumer demographics, for example age or income level. The research also considers a range of factors that may influence consumer perceptions of fairness, such as pricing transparency, the role of third-party vendors, and the use of personalized pricing. However, this research is not intended to provide an exhaustive analysis of all possible factors that may influence consumer perceptions of fairness in dynamic ticket pricing. Rather, it focuses on identifying key themes and concepts in the literature that can shed light on the research questions outlined in the research objectives.

1.3 Methodology

This literature review will take a generic approach to searching for and selecting relevant articles and other sources. The search will be conducted in various academic databases, including Google Scholar, Web of Science and Scopus. Search terms will include keywords related to dynamic ticket pricing and fairness, such as "dynamic pricing", "variable pricing", "surge pricing", "fairness" and "consumer perceptions". The search will be focused on articles, books, and other sources published in the last ten years to ensure that the research is based on the most recent information. However, as some main acclaimed academic papers are published before, exceptions can be made, especially in the theme of consumer's value of fairness. Some relevant news articles can also be critically used to examine a rather new phenomenon where there has not been any academic research published.

The selection process will follow several steps. First, titles and abstracts are reviewed for their relevance to the research questions outlined in the research objectives. Articles and other sources deemed irrelevant are excluded. Second, the full text of the selected articles will be reviewed to ensure that they meet the inclusion criteria. Articles that do not meet the inclusion criteria will be excluded. Finally, the references of the selected articles are reviewed to identify additional sources that may be relevant to the research questions.

The quality of the selected sources will be evaluated based on several criteria, including relevance to the research question, reliability and validity of the data, rigor of the methodology, and credibility of the authors. The selected sources will be categorized based on the themes and concepts that appear in the literature. The analysis and synthesis of the literature will be used to answer the research questions outlined in the research objectives.

1.4 Structure of the research

This thesis is divided into a total of five chapters. After the introduction, the second chapter reviews the literature on events using dynamic ticket pricing and presents the main theories and frameworks related to pricing models. The chapter additionally introduces other pricing models such as fixed pricing, variable pricing, and surge pricing and discusses the main differences between these models.

Chapter three of this research paper provides an overview of consumer perceptions of value and, more importantly, fairness. Key literature from the past few decades is presented and reviewed. The literature may be older because this subject has been studied for a longer amount of time than dynamic ticket pricing.

The fourth chapter presents the link between the two aforementioned topics and discusses the main factors that contribute to price fairness in dynamic ticket pricing. In addition, this chapter discusses possible solutions to the problem of unfairness in dynamic ticket pricing.

Finally, the last chapter contains a discussion of the results and conclusions of the study. Practical implications of the findings are explored, and possible limitations of the study are discussed. Also, possible areas for future research are suggested to further deepen the understanding of the topic.

2 Dynamic ticket pricing

In this chapter of the thesis, pertinent theories and frameworks of dynamic ticket pricing, also known as DTP, are reviewed and examined. The first part introduces and reviews literature on events in general and how DTP is used in different kinds of events. The second part introduces other dynamic pricing models, such as variable ticket pricing and surge pricing. Lastly, the chapter compares the differences to fixed pricing.

2.1 Foundations of DTP

As mentioned before, DTP stands for a pricing strategy where ticket prices fluctuate based on demand and other external factors known to influence demand, such as weather. These price changes can happen weekly, daily or even in real-time based on the traffic on the ticket seller's website. The main goal of using this strategy is to minimize price inefficiencies and sell out the whole stadium. This way other means of income can be properly executed, such as chargeable parking, selling fan merchandise, food and drinks in the stadium. A simplified version on the advantages of multiple ticket selling prices, or "points" can be seen in Figure 1, originally published in MIT Sloan Management Review, by Sahay (2007).

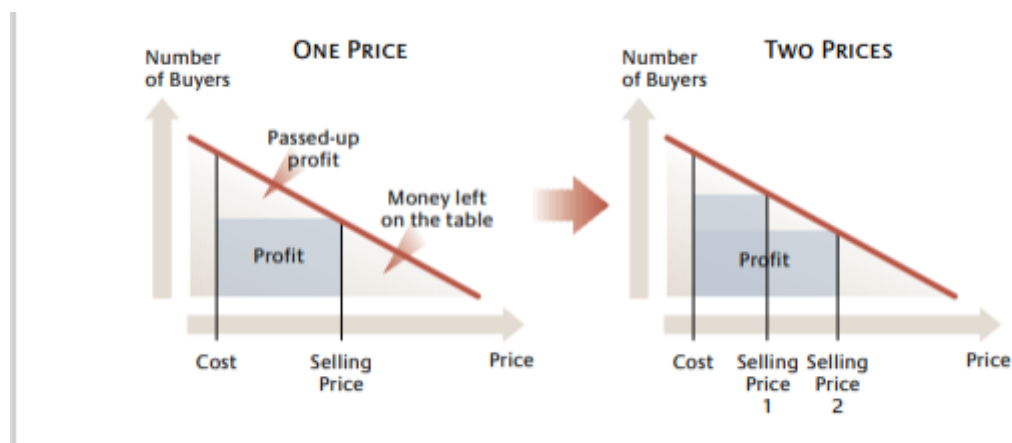


Figure 1: Simplified version of the advantages of DTP (Sahay, 2007)

The usage of dynamic ticket pricing has been increasing over the decade. Bouchet et. al. (2016) examined the usage of DTP in professional sport organizations in the USA and

almost every sport executive perceived that their organization used business analytics very frequently or always in their business. However, 70 percent of respondents answered that they only update their prices weekly or less frequently. It could be argued if a similar survey were conducted today, the results might differ. In the same study, almost 70 percent of the executives answered that DTP is something to invest resources in. When adding in the development of data management and business analytics in the last 8 years, the percentage of organizations using daily price changes might be significantly higher.

2.2 Events and their implementation of DTP

In the entertainment industry, events can be distinguished from each other based on what the event contains and presents to the ticket-buying audience. These can be for example, sports, concerts, theater, or festivals. The usage of dynamic ticket pricing has mainly been focused on sports events. However, in recent years, the live music industry has also started to use dynamic models. This has raised some resistance, as consumers have perceived the prices too expensive and unfair (Rafi Mohammed, HBR 2022).

In the past 30 years the importance of sports events has grown rapidly, both economically and socially. The monetary value of the sports business has increased severely due to many different factors, such as player salaries, TV-deal values, sponsorships, and other monetary factors including inflation. The impact can be seen best with professional sports leagues, where sports have been modified to consumer's liking of entertainment. The professionalization and consumerization of sports leagues has developed matches into professional entertainment events.

This has brought different kinds of events closer together. The content of the event can be less relevant, but dynamic ticket pricing can be used all the same. In the late 20th century, Kimes (1989) and Kimes et. al (1998) identified the 6+1 most important criteria for revenue management pricing strategy, or in other words dynamic pricing, to work properly (Drayer et. al., 2012). The criteria included:

1. The ability to segment markets.
2. Perishable inventory.
3. Product sold in advance.
4. Low marginal sales costs.
5. High marginal production costs.
6. Fluctuating demand and
7. Predictable demand.

Drayer et. al. (2012) found out that this framework can be appropriately applied with every single point in the sports ticket context. As professional sports events do resemble other professional entertainment events, framework can also be applied to other events, such as live music. With the help of real-time data being picked up by ticket sales websites, companies can predict the demand much easier. Complex algorithms and possible AI usage can help the seller to successfully forecast, monitor and execute dynamic ticket pricing for different kinds of events.

The first major sport organization to use dynamic ticket pricing with their home game tickets was San Francisco Giants in the 2009-2010 season (Dreyer et, al., 2012). In this strategy, ticket prices fluctuated daily based not only on demand, but on other external factors such as team performance and weather, which could have affected ticket demand. The club saw a 7 percent increase in revenue in the season after expanding the system to all of their stadium seats (“Forty under 40: Barry Kahn”, 2011). This very example has worked as a pioneering case study in the event industry and many organizations have straightforwardly followed Giants’ footsteps.

When it comes to pricing events, the goal of optimizing the ticket pricing can become very vital when afterwards evaluating the success rates of events and their economic and social impacts. Scarcity in the stadiums can have a massive impact on the media coverage for the events additional to the obvious financial downturns. In the case of sports events, fans, the athletes, and the event hosts can consider the event a failure if the seats are empty due to too expensive ticket prices even though athletically and from a pure sporting perspective the event would have been a success. For example, this can be seen with the recent FIS Nordic World Ski Championships, where the tickets were priced too high compared to the local income level (Helsingin Sanomat, 2023).

In addition to the economic aspects, events can also produce other meaningful aims and benefits. Events can impact the local society in a positive way with increased tourism, media coverage and in the case of sports events, athletic success. Gratton et. al. (2006) presented a “balanced scorecard” approach to evaluating events which can be seen in Figure 2. The scorecard suggests that sports events can be evaluated on 4 different criteria: Economic impact, Media & Sponsor Valuation, Sports Development and Place Marketing Effects. All of these externalities can have an effect on each other, but the overall causalities can be hard to trace (Gratton et. al., 2006). Kavetsos & Szymanski (2010) were the first to quantitatively measure the “feelgood” factors associated with hosting sports events. They found out very limited support for athletic success impact on life satisfaction. However, they found that hosting major sports events, such as global

football events can be associated with increased life satisfaction in the period following the event (Kavetsos & Szymanski, 2010).

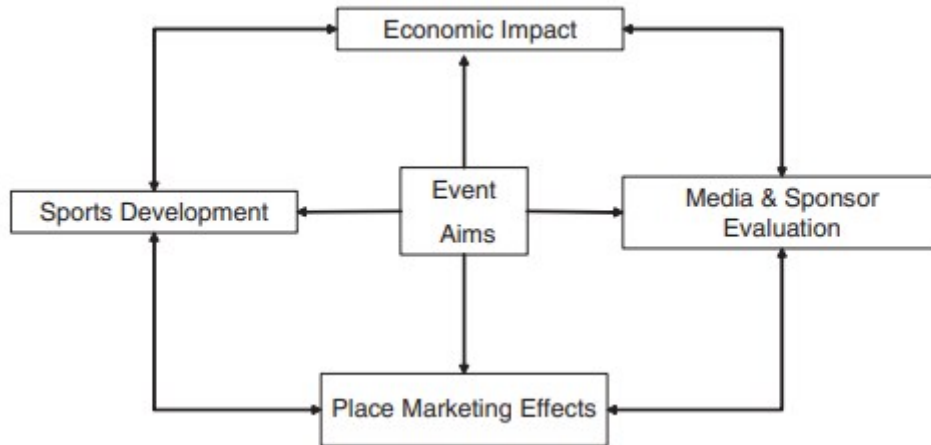


Figure 2: Gratton et. al., (2006) scorecard for evaluating the effects of sports events.

2.3 Other dynamic models

Another approach to dynamic pricing in the event industry is called variable ticket pricing, or VTP. Rascher et. al. (2007) described VTP as changing the ticket prices to the expected demand for that exact event. In turn, Drayer et. al. (2012) theorized that the main difference between DTP and VTP is that in VTP the variables known to influence demand are set well in advance. These factors can be for example certain day of the week or opponent. However, as these variables are set well before the actual game, price inefficiencies can be significant as the seller can bid up the price before the game without a negative reaction from the fans (Drayer et. al., 2012). In the same paper, Drayer et. al (2012) informed that VTP was first introduced in the late 1990s by Colorado Rockies. Before this, sports events were mainly using fixed-price strategies, where price fluctuation was rather insignificant in the primary market. As pricing strategies developed, the transition from VTP to DTP has been clearer, as companies prefer the opportunity to change the variables in real-time. There has not been a great deal of academic research on specifically VTP, as the difference between these two models is inconstant between researchers. As dynamic models have developed, the academic discussion has weighed towards dynamic pricing as a more including term.

When it comes to “surge pricing”, a term introduced by the ride-platform company Uber, there has been hardly any implications in the event industry. Chen & Sheldon (2015) described surge pricing as any way of dynamic pricing where the dynamism comes from certain geographical areas and variables coherent to the area, such as traffic. In addition, the fee for the driver varies with the surge multiplier. In the traditional hotel industry, where dynamic pricing has been actively used for decades, the new shared platform players such as Airbnb, instead have not decided to utilize dynamic pricing in their business model, as Gibbs et. al. (2018) found out. Too low demand and the uncertainty between the agents have not enabled dynamic pricing or any kind of surge pricing to work properly in the shared economy hotel industry. In the case of events, there seems to be hardly any need for geographical variety or “surging”, as the venues are stable settings, and the demand is more stable than in rides. In addition, the possible price change variable is based on, for example, the opponent rather than the stadium.

However, surge pricing could be theoretically used in the event industry with different kinds of fees, such as labor. The idea of a shared platform could be implemented if event workers would be theorized as independent agents. Then, events needing more work could be priced accordingly to “event surge multiplier”. There has been evidence suggesting that dynamic pricing could enhance the gig labor markets to a more efficient one, especially in the cases where “-jobs are widely distributed across workers - and market conditions can fluctuate across time and location” Chen & Sheldon (2015). Theoretically, the same could be implemented in the event industry. However, as event demand tends to be more stable than car rides, the fluctuation could be insufficient for similar model to work efficiently.

2.4 Fixed pricing

In the last millennium, before the implementation of VTP or DTP in sports events, event ticket prices were mainly fixed with the only difference being special unique sales and offers. However, to this day fixed prices are used for example in music events, such as festivals where the weekend price can stay the same for the whole sales period. In sports, season tickets are usually fixed and have no opportunity to respond to fluctuation in demand (Drayer & Shapiro, 2012). Season ticket holders are a major source of revenue for sports teams, as they consume other products, such as fan merchandise and food in the games. Additionally, they can present their fanaticism for a specific team which in turn contemporarily is a positive public phenomenon for the team.

Fixed prices could be better for risk-averse consumers as the prices would be even for everyone and therefore balancing the fairness and value of the ticket. As research shows, the usage of DTP seems to elevate the prices upwards first and in turn fluctuate them downwards just before the game (Drayer et. al., 2012, Drayer & Shapiro 2012). This in turn allows the consumers to “bargain hunt” cheaper tickets just before the game. Additionally, ticket sellers can better segment their markets based on consumer preferences and demographics (Drayer & Shapiro 2012). There seems to be rather low amount, if any evidence suggesting that fixed ticket pricing could enhance the efficiency of ticket markets. According to Simon (1997), it is unrealistic for a single consumer to compare all alternatives of utility maximization, which in turn leads to accepting the given price, even if the utility needs are not met perfectly with higher dynamic prices (Shapiro et. al., 2016).

3 Consumers' perceptions

3.1 Consumer perceptions of fairness

The notion of fairness could be defined as a subjective assessment of the price paid in relation to the perceived worth of the service or product. There has been several academic research published on consumer's likings and perceptions of value, fairness, and other product attributes, such as articles by Kahneman et. al. (1986), Carmon & Ariely (2000) and Bolton et. al. (2003). While some theories of product pricing cannot be directly associated with ticket pricing, the main theories can additionally be established on events. Famous research by Zeithaml (1988) introduces a central means-end model relating price, quality, and value for a purchase. The framework can be seen in Figure 3. Consumers organize information on multiple levels of abstraction from simple product attributes to complex personal values (Zeithaml, 1988). When applying this to event tickets, personal values can have a rather big impact on the perceived value of a ticket. For example, fans of a specific football team can be ready to purchase the ticket for a higher price than a normal sport enjoyer. The fans are usually aware of ticket supply and the market and asymmetric information is very much present in ticket markets. This is one of the main ideas in sports pricing, where the customer asymmetries allow different prices for different customers, as discussed also in paper published by Paul & Weinbach (2013). Discussion using this framework is continued in chapter 4.

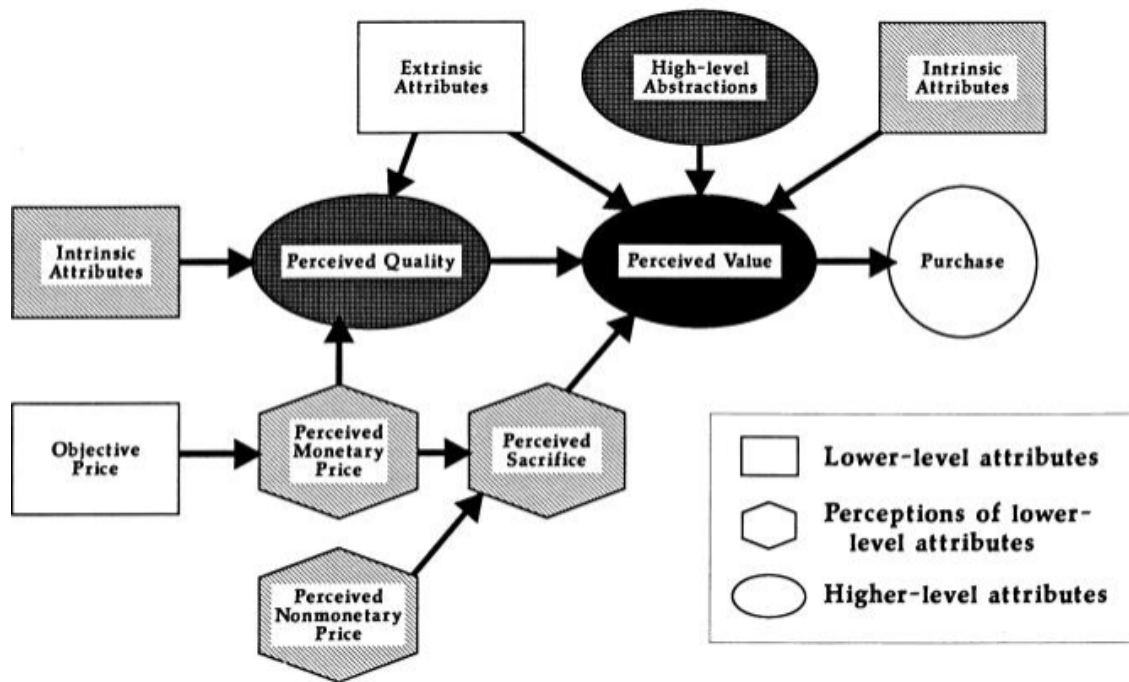


Figure 1: Zeithaml's (1988) model of relation for price, quality, and value.

The consumer's perception of price fairness is a fundamental part of ticket pricing in addition to the value. As mentioned before, the research on price (un)fairness and on the consumer's price perception is quite extensive, such as by Kahneman et. al. (1991), Bolton et. al. (2003), and by Haws & Bearden (2006). Kahneman et. al. (1986) identified evidence suggesting that companies focusing on just maximizing their profit will usually be punished in the long run. This is a straight-forward repercussion of dual entitlement, an idea introduced in the same paper by Kahneman et. al. (1986) and afterwards discussed in many academic papers, such as Urbany et. al (1989). Dual entitlement theory suggests that consumers must understand that a firm is entitled to a fair profit the same way firms must understand that consumers are entitled to a fair price (Kahneman et. al., 1986, Shapiro et. al., 2016). If fairness is not monitored, dynamic ticket pricing can corrode fan loyalty (Tripathi, 2013, Shapiro et. al., 2016).

In the case of sports events, the ticket market is usually oligopolistic, where the companies could potentially have more flexibility in their sales strategies, but the same fundamental rules apply to them too. Bolton et. al. (2003) discovered that consumers usually underestimate inflation's effect on prices and hence could view the prices unfair. Same research also found out that consumers consider, usually inaccurately, the

companies' profit margin a much more important factor than risen costs effecting the higher prices. In ticket sales, the production costs are based mainly on staff costs and the operating costs of the stadium, such as electricity prices. The consumer's perception of fairness can be twisted when not appropriately having the information on cost allocation. The impact of fairness perceptions plays a major role in customer-oriented industries, such as event industries (Wirtz et al., 2003). In dynamic ticket pricing, the perception of fairness can be a significant factor on the purchase decision, especially in the cases where consumer has access to usually asymmetric market information. This can be the case with passionate fans, where they could have been following ticket prices for a significant period of time.

According to Shapiro et. al. (2016), fairness perceptions and comprehensions in the event industry could be swayed by many factors. These factors could be the origin of the ticket (primary or secondary market), comparisons to a reference price (one's memories and knowledge of prices) or familiarity with ticket pricing strategy. In the same manner, Xia & Monroe (2004) argued that reference point can be one of the most important factors. However, it can be hard to validate where exactly the reference point originates. According to Thaler (1985), reference price is a "set standard based on previous purchases and external stimuli (Shapiro et. al., 2016). As discussed before, additional to the reference point, cost and profit knowledge and trust may have an effect with the feeling of fairness. Xia & Monroe (2004) introduced a conceptual framework for price fairness, which can be seen in Figure 4. The framework can be a useful tool for examining the event industry and hence this thesis will utilize it in chapter 4.

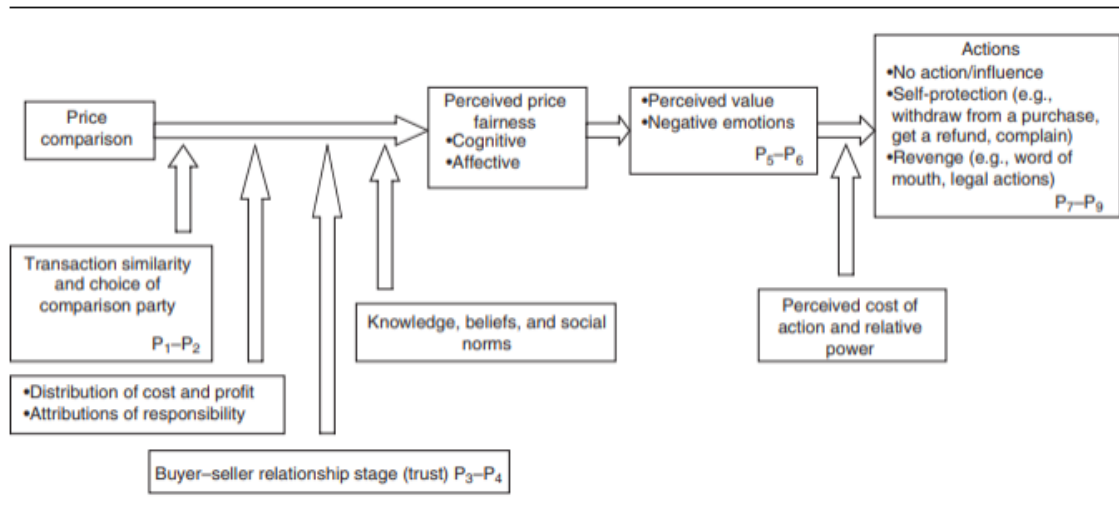


Figure 2: Xia & Monroe's (2004) framework of price fairness

3.2 Consumers' perception of value and price

Ajzen & Peterson (1988) defined the economic value of a commodity as “-no more, and no less, than the amount of money a person is willing to give up to get the commodity, or the amount of money the person requires as compensation for loss of the commodity”. Consumer's perception of value is ultimately the leading point to the perception of fairness. If a consumer perceives a product valuable for its current price, it can be distinguished as a fair purchase.

Considerable amount of research (e.g., Kahneman et. al., 1986; Carmon & Ariely, 2000) has been published on the consumer's willingness to pay (WTP) and consumer's willingness to accept compensation (WTA). The research suggests that there is a gap between the prices and WTA is almost always higher than WTP (Drayer & Shapiro, 2011). This is what is called the endowment effect (Thaler, 1980; Kahneman et. al., 1990). Theory suggests that the consumer requires a higher compensation to give up something than to acquire something new. Drayer & Shapiro (2011) found out using contingent valuation method (CVM) that the endowment effect is to be found significant in National Basketball Association ticket markets. Both the seller's and the buyer's view on the value of the product can be swayed by many external factors, such as their loyalty to the team, team success or the seller's motivation to overestimate the selling price.

In events, the prices might be closer to the “actual value” compared to flight tickets or hotel industry prices as there might be more factors contributing to the overall value

perception. Firstly, Carmon & Ariely (2000) established evidence that WTP is affected more by the base value of the ticket while WTA is affected by other significance of the ticket, consisting of factors such as fan-ness or game's seasonal importance. Secondly, another difference of event ticket companies' revenue management compared to airline companies' yield management is asymmetric information. Airline customers do not possess the same kind of knowledge of available tickets as consumers might have in sports. (Bouchet et. al., 2016). This gives the information advantage to airlines and ability to maximize the profit while simultaneously increasing the market inefficiency. And lastly, there is no significant secondary market in the airline or hotel industry (Bouchet et. al., 2016). These factors might be significant when examining the price efficiencies and value perceptions between industries.

3.3 Consumer demographics

There is a paucity of academic literature that explores the relationship between consumer demographics and their perceptions of price fairness. Despite the significance of price fairness in consumer behavior research, little attention has been devoted to investigating the moderating effect of demographic variables on this relationship. A study conducted by Horowitz & McConnell (2002) suggests that for college students the WTA/WTP ratios are substantially lower than for non-students for non-ordinary goods. Maxwell (1995 & 1999) discovered evidence indicating that both economic and social components affect determinations of price fairness. For example, in more collectivist communities price changes to friends seem fairer than in more individualistic societies, where price fairness comes from fixed prices (Maxwell, 1995).

According to the literature, other factors unrelated to demographics have more effect. Lee et. al. (2010) conducted a study that suggested two factors to have a significant relationship with price fairness in dynamic pricing: Illusion of control and lateral consumer relationship. Both factors have been studied in both heuristic studies such as Thompson (1999) and Vaidyanathan & Aggarwal (2003) and socially comparative studies such as Kulik & Ambrose (1992) (Lee et. al., 2010). A consumer is more likely to perceive a purchase fairer if they believe they are in control of the purchase and they find positive comparisons with other similar buyers. In dynamic ticket pricing, the factor of fanaticism might additionally be important, as examined in research by Shapiro et. al (2016) and Carmon & Ariely (2000).

4 Perception of fairness in dynamic ticket pricing

4.1 Applying fairness theory to DTP in the event industry

Consumer's perception of fairness is a vital component in a sustainable sales strategy using dynamic ticket pricing. Given the significance of consumers' perceptions of fairness in dynamic ticket pricing, organizations must understand the specific aspects that drive this view. Whether or not the dynamic prices are seen as discriminatory depends on the perceived fairness perception which consequently based itself on a great deal of factors. Xia et. al. (2004) argued for 4 factor groups to have a significant effect on unfairness perception. These being price comparisons, pricing reasoning information, previous experiences, and consumer's general knowledge. In the same manner, this thesis discusses a couple of factors influencing fairness perception. Conversely, due to the nature of the thesis, there are limitations for examining through every single factor. The following factors could be argued to significantly influence the perception of fairness in DTP according to the literature.

The first factor to influence consumer's perception of fairness is pricing transparency. Pricing transparency refers to the amount of information the customer receives from the selling organization regarding the pricing process and factors that may affect the price. Research (Ferguson & Ellen, 2013; Miao & Mattila, 2007) has shown that high information transparency increases consumer's judgmental confidence in their fairness perceptions. Furthermore, in the case of a more transparent selling event, consumers' WTP is more vulnerable to external pricing information. However, organizations must disclose their pricing processes themselves instead of external sources disclosing them in order to maintain fairness perception in price changes (Ferguson & Ellen, 2013). According to Shapiro et. al. (2016), transparency in transactions leads to increased familiarity, which lessens the possible feelings of injustice. In the same study, Shapiro et. al. (2016) concluded familiarity to play a significant role in fairness perceptions. In the same manner, Drayer et. al. (2012) argued for this phenomenon to exist in general with DTP in sport events. As discussed before, as the development of the event industry has brought different events more closely together, there is evidence for pricing transparency to be a significant factor in other entertainment industry events utilizing DTP, such as music concerts.

The second factor to influence perceptions of fairness is the level of personalization in the pricing process. Personalized pricing refers to the degree of which sellers tailor the

pricing to individual customers based on their behaviors and characteristics. In the modern era of tailored advertising using for example cookie technology, companies are able to collect data much easier on their customers. Richards et. al (2016) found evidence suggesting that consumers perception is constructed by “self-interested inequity aversion” where purchase probabilities fall if the buyer sees their personalized price being higher than others. However, some of this effect can be alleviated by allowing the consumer to participate in the price-setting process. In dynamic ticket pricing, this could be implemented by allowing the consumer to access more favorable prices by for example purchasing the tickets earlier. Additionally, the level of personalization could increase due to fanaticism allocating to a specific sports team or a music artist. As Shapiro et. al. (2016) and Carmon & Ariely (2000) discussed, fanaticism might play a significant role on the consumer’s perception of value. To be in line with the dual entitlement theory forementioned in Chapter 3 (Kahneman et. al., 1986), sellers must differentiate the prices for consumers in order to maintain fairness perceptions. At the same time, fair profits could be received from personalized prices.

The third factor shaping fairness perceptions is the timing in the pricing and purchase process. Dwyer et. al (2013) found evidence indicating that the effect of time had a significant influence on the hockey game ticket purchase decision process. As the game date got closer, the perceived likelihood of finding a better-valued ticket increased (Shapiro et. al., 2016). Research by Drayer & Shapiro (2009) indicated that prices do decrease as the event drew nearer. There is a possibility that a group of “bargain hunters” may exploit the price inefficiencies in the market to find the best deal available. However, there is quite a low amount of academic research concentrating on this group (Drayer et. al., 2012). In the same paper, Drayer et. al. (2012) discuss the impact of time as a variable in dynamic ticket pricing. They conclude that DTP might not ever be able to hold time fully as an accountable variable, as the volatility of late-time ticket sales is too random. However, they suggest that sellers should keep a floor price even in the late sales, as consumers perception of value might decrease. In dynamic ticket pricing, the perception of fairness is not exclusive to the perception of value and vice versa. As the price goes down, consumers might reason the price to be fair while pondering the question of reasoning behind the price decrease. In short, timing might have a larger effect on the fairness perception than on value perception.

Consequently, when adding in reference prices, level of competition in the market and consumer’s familiarity with past and current prices, by both first-party and third-party

vendors, the concept of fairness perceptions can be fully implemented in dynamic ticket pricing.

Reference prices could be the consumer's own historical purchases, their familiarity with other consumers' purchases or their view of the market prices, both in the primary and in the re-sales market. If the market is very competitive, there might be less price inefficiencies and price changes might be insignificant. However, in the event industry the market is usually oligopolistic with few players controlling the primary market. Nevertheless, the secondary market for event tickets can be rather large. For this reason, the differences in reference prices might appear clearer in the re-sale market. Shapiro et. al (2016) observed evidence indicating that consumers with a primary market ticket price offers perceive the offers fairer than purchasing tickets on the resale market. This might be explained for instance by the consumer's perception of historic trust with primary sales company, the information on the source of ticket or the distrust of purchase intentions between third party vendors. Consumers might observe re-sale market sellers as profit hunters and according to endowment effect and transaction utility theory, consider their selling intentions as unfair profit seeking. On the whole, this factor can additionally be applied to every event using dynamic ticket pricing.

4.2 Applying the theoretical models to DTP

With the help of theoretical models introduced in chapter 3, we can examine dynamic priced tickets and consumers' fairness perceptions of them more comprehensively. In her means-end model, relating price, quality and value, Zeithaml (1988) argues that purchase decision consists of lower-level, perceptions of lower-level and higher-level attributes. These attributes can be perceived, intrinsic, extrinsic or a combination.

Applying this model to tickets, we could potentially differentiate fair-priced tickets to those perceived unfair. The perceived quality of a ticket can consist of intrinsic attributes such as fanaticism for an artist, extrinsic attributes such as highly-valued playoff game and perceived monetary price which the consumer is willing to pay for the ticket. Consumer's WTP consists of objective price, perceived non-monetary price such as experiences and perceived sacrifice such as time. In turn, perceived value consists of perceived quality and other attributes and higher-level abstractions such as the common appreciation for the event. As a result of perceived value, the consumer completes the purchase decision. However, Zeithaml does not include perceived fairness as a constructing part in her model. One way of including fairness to the model could be to

set it as an intrinsic attribute which consequently would affect both perceived quality and value. Hence, we could label and differentiate fairness perception as a consumer's intrinsic attribute consisting of many factors forementioned, such as reference prices or pricing transparency. Compared to fixed pricing, the intrinsic and extrinsic attributes of quality and price variance might play a more significant role in dynamic ticket pricing.

In turn, Xia & Monroe's (2004) model includes perceived fairness as a major step in the purchase decision. In the same manner, they have included perceived value but have decided not to include perceived quality as its own. In their model, fairness consists of price comparison and other attributes. The attributes are transaction similarity, distribution of cost and profit, buyer-seller trust and knowledge, beliefs, and social norms. The factors are similar compared to the research this thesis has discussed. As the knowledge of cost and profit distribution is usually misunderstood (Bolton et. al., 2003) the importance of buyer-seller trust, comparison parties and common knowledge of prices increases. In dynamic ticket pricing, the trust of the relationship might be more important, as knowledge of dynamic pricing mechanisms can be unknown, excluding for fanatic consumers, who can possess a significant amount of asymmetric information.

Neither of these models can be successfully implemented to dynamic ticket pricing in the event industry on their own. However, by combining the models and adding in other attributes such as timing of the pricing we can more efficiently theorize which factors could be the most important in fairness perceptions. Compared to fixed pricing, the factors attributing to the knowledge of pricing mechanisms and cost distributions can be unclear and understood incorrectly, which in turn increases the complexity of fairness perceptions.

5 Discussion and conclusions

The objective of this research was to identify factors contributing to the consumer's perception of fairness in dynamic ticket purchase decisions through a literature review. In addition, the goal was to contribute to a better understanding of how event organizers and ticket sellers can use dynamic pricing strategies in fair-perceived ways. The exact research questions were:

1) To what extent do consumers' perceptions of fairness affect their willingness to purchase dynamic-priced tickets?

Through an extent literature review on events, dynamic pricing, pricing perceptions and consumer behavior, we can conclude answers to the research questions. Consumers' perception of fairness affects the purchase decision considerably. The perception of fairness is one of the major factors along price, quality, and value perceptions. Whether or not dynamic pricing is seen as discriminatory, depends on the individual consumer's fairness perceptions.

2) What factors contribute to consumers' perceptions of fairness in dynamic ticket pricing?

Accordingly, the factors contributing to consumers' perceptions of fairness construct a complex entity consisting of variety of variables. For instance, the factors could consist of reference prices, buyer-seller relationship trust, pricing transparency, level of personalization, timing of the pricing and general knowledge. The factors vary with every individual consumer. However, there has not been academic research conducted specifically to consumer demographics contributing to fairness perceptions.

3) How do consumers perceive the fairness of dynamic ticket pricing compared to fixed pricing?

Compared to fixed pricing, the mechanisms of dynamic pricing could complicate the forming of fairness perceptions. For risk-averse consumers, fixed prices can be seen as fairer, as the willingness to avoid risk over precedes other attributes. On the contrary, for fanatic consumers the amount of event-specific information, such as game importance, might make the usage of dynamic ticket pricing more suitable and fairer.

5.1 Implications to research

The existing research on dynamic ticket pricing has focused mainly on sports events. This could be explained by the fact that the music industry has started to use DTP more widely in the last years. However, the theories could fluently be implemented to other events in the entertainment industry as the overall similarities between events are significant. The existing research on consumer perception is, in turn, quite extensive. Many standpoints can be taken, for instance through behavioral consumer psychology or marketing analytics. As stated before, the research on consumer demographics affecting perceptions is rather limited. Literature seems to suggest that for instance fanaticism might be more significant compared to traditional demographics such as age or income level. In DTP, different theories are needed to fully understand the implications both from the seller and buyer point of view. This research contributes to the existing literature by highlighting the role of fairness perceptions in explaining consumer behavior in the context of purchase decisions in DTP.

5.2 Implications to practice

In DTP, there is an incentive for ticketing companies and event organizers to maximize the amount of sold tickets in order to maximize revenue through other products, such as fan merchandise. An understanding of the consumer's perception of fairness is obligatory for the seller to avoid empty venues, bad reputation and misunderstandings on the value of the ticket. Additionally, managers of ticket companies must study the subject in order to design a sustainable plan for dynamic prices to avoid third-party vendors causing price inefficiencies and revenue loss. By constructing a thorough analysis of consumer perceptions, additional market segments can also be formed and personalized pricing can be implemented in a more efficient way. Furthermore, companies can implement this knowledge to communicate the fairness of their pricing policies to consumers, which can increase customer satisfaction and loyalty. To conclude, by incorporating fairness considerations into their pricing strategies, companies can enhance their reputation and improve customer trust.

5.3 Limitations and future research

While this study contributes to the general knowledge of consumer perceptions of fairness in dynamic ticket pricing, there are limitations that should be addressed in

future research. Due to the nature of this thesis, the limitations in research question forming were apparent as questions had to be focused on a limited area. Additionally, there are factors contributing to fairness perceptions not mentioned in this study, such as procedural and distributive fairness dimensions. The goal of the study was not to provide a comprehensive analysis of all possible factors. Rather, the objective was to focus on identifying the key themes and concepts in the literature that can help form analysis on the research questions. For future research, there are many riveting standpoints possible to explore. Future research could for instance explore the demographic factors' effect, such as age or income, other dimensions of fairness or other consumer perceptions focusing on dynamic ticket pricing.

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