Yield Management and Recognition Programs – How Do They Influence Travellers' Choices?

Track: Services Marketing

Abstract

Capacity constrained service firms simultaneously employ customer centric marketing (CCM) and perishable asset revenue management (PARM), which can create conflicts and perceived unfairness for the consumer. We first introduce a conceptual model to explain variations in customer demand as a result of fairness judgements. According to our model, purchase decisions for services are based on a) utility judgements of their product and price attributes, and b) a coding phase to adjust for any fairness issues. Focus group research provides first empirical support for all but two constructs of the model, and clarifies which PARM and CCM attributes matter most for airline travellers.

Keywords: customer-centric marketing, revenue management, fairness, demand

Introduction

The aim of any marketing activity is to influence demand in such a way as to maximise return on marketing expenditures (Rust et al. 2004, p. 105). Two of the most prevalent marketing investments in service firms are customer centric marketing (CCM) and perishable asset revenue (yield) management (PARM). CCM relies on customer relationships in order to maximise the lifetime value of current and potential customers (Rust et al. 2004), and usually takes shape in loyalty programs or other forms of beneficial customer treatments. PARM, on the other hand, allocates perishable inventory units to existing demand to maximise revenues using price discrimination (Kimes 2000). PARM practices become visible as availabilities of different fares, and associated restrictions (cf. Kimes and Wirtz 2003).

Customers in CCM programmes, who enjoy preferential treatment, may at the same time experience unanticipated consequences originating from PARM initiatives, such as unfavourable restrictions, and limited access to preferred rates or availabilities for award bookings. These conflicting outcomes of PARM and CCM can reduce demand for travel services. Service firms would hence benefit from a better understanding on how precisely these practices affect consumer choices and hence demand.

We first introduce a conceptual model of consumer choices in the light of simultaneous CCM and PARM, a practice that has the potential to create perceived unfairness and to impact consumers' choices. The objectives of this paper are to (a) undertake some preliminary empirical assessment employing focus group research to examine the nomological validity of our theoretically derived model; and (b) to provide initial insight into the design and wording of choice experiments to measure traveller's choices under fairness considerations.

Background

Literature on CCM and related marketing techniques is rather fragmented and inconsistent, but is built around the core notion of establishing and maintaining profitable customer relationships (Paas and Kuijlen 2001; Parvatiyar and Sheth 2001; Reinartz et al. 2004; Zablah et al. 2004). Not all customers have equally desirable lifetime values, and acquisition and retention strategies are tailored accordingly (Blattberg et al. 2001). This provides the basis for preferential treatment of a loyalty program member with a relatively high estimated lifetime value.

The fundamental idea of PARM is to efficiently use fixed, perishable capacities by charging different prices for the same service product to different customers in an attempt to balance demand and revenues per capacity unit (Kimes 1989; McGill and van Ryzin 1999) . The extensive research in the field of PARM is mainly concerned with improvements to forecasting methods, and the heuristics and algorithms to best approximate the optimal allocation of capacity units to existing demand (Weatherford and Bodily 1992), but does not question the underlying assumption that such capacity allocation is the sole approach to maximise revenues in capacity constrained industries.

Treated as competing marketing investments, PARM and CCM limit their respective revenue maximisation potentials because the have the potential to create customer conflict. The main difference between PARM and CCM is the time horizon for revenue maximisation. PARM maximises the revenue from a single transaction, i.e. the revenues per capacity unit, but fails to consider possible long-term gains from individual customers (Noone et al. 2003; Shoemaker 2003). CCM on the other hand is based on the premise that "revenue

management is fundamentally about making the right short-term trade-offs to increase long-term revenues and profits" (Lieberman 1993, p. 105) and focuses on the lifetime revenues per customer. Secondly, customer segmentation in PARM is based on price elasticities (Kimes 1989), while CCM distinguishes customers based on their lifetime profitability (Jain and Singh 2002). Current research does not address how to manage profitable customers in capacity constrained service industries, although in reality even a very profitable customer can show high price elasticity for a particular booking.

The consequences originating from CCM and PARM initiatives affect a customer's evaluation of services and can lead to perceived unfairness and customer alienation, which in turn influences customers' likelihood to repurchase. Despite the potential effects of yield pricing on fairness and hence customers' willingness to (re-) purchase, existing research, with a few sparse exceptions (cf. Kimes 1994; Kimes and Wirtz 2003), fails to adequately address these issues. In the next section, we will present a theoretical model of consumer choices in the light of fairness issues.

A Research Model of Consumers' Choices and Fairness

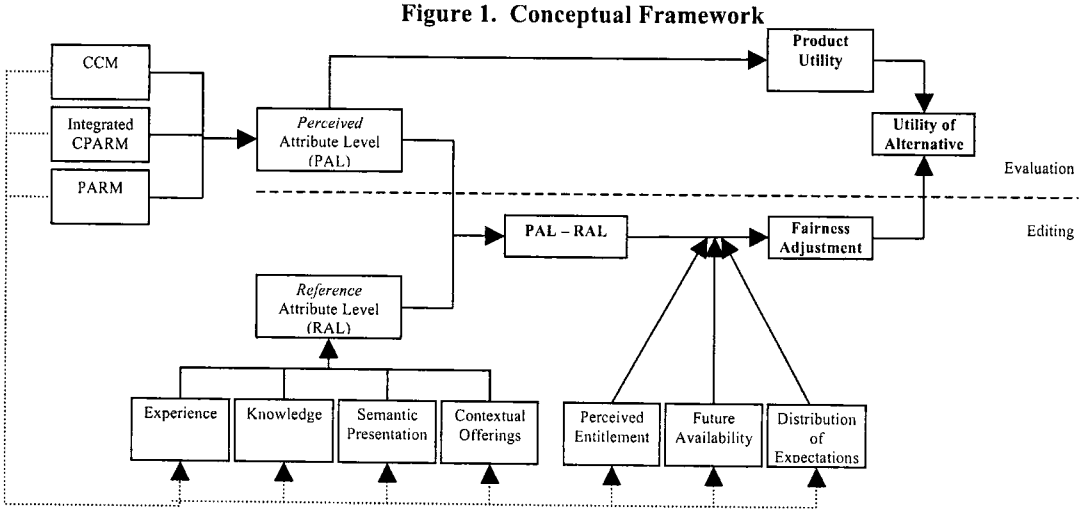
Our conceptualisation of customer demand is based on expected utility theory with the actual evaluation phase being preceded by a fairness coding phase (Kahneman and Tversky 1979). Expected utility theory makes the assumption that individuals assess their options and select the alternative with the highest utility resulting from price and product/service attributes (Thaler 1980). In our formalisation, customer n obtains a certain level of utility u_{nj} from each available, mutually exclusive alternative j =[1;...J].

$$U_{nj} = v_{nj} + \varepsilon_{nj}, \tag{1}$$

where v_{nj} is the systematic and ε_{nj} the random component of utility (Louviere et al. 2000).

Consumers' real life choices, however, regularly violate the predictions of expected utility theory, and might be better captured by choice theories that account for a coding phase which precedes the actual evaluation and choice phase. The rationale underlying this coding phase is embedded in a set of theories from behavioural decision making and psychology, and embedded in the decision model illustrated in Figure 1.

Figure 1. Conceptual Framework



Prospect theory (Kahneman and Tversky 1979), and the more general reference-dependent preference theory (Munro and Sugden 2003), explain how alternatives are coded relative to a reference point. Adaptation-level theory elaborates on how reference points of perception are formed (Helson 1948), and the fairness and justice literature further informs which mechanisms individuals use in setting reference points and prices, and in editing alternatives as fair or unfair. In fact, fairness has been found to explain a large part of deviations from utility maximisation (Konow 2003). Distributive justice or equity of outcomes (Arino and Ring 2003; Konow 2003; Xia et al. 2004), fair cost-profit distribution and general procedural justice built on the principle of dual entitlement and attribution theory (Kahneman et al. 1986; Maxwell 2002), and interactional or transaction justice (Bolton et al. 2003; Huppertz et al. 1978) underlie the fairness constructs of our decision model.

PARM techniques, and especially the contradictory nature of CCM and PARM activities, implies that offerings are likely to be negatively edited as a result of perceived unfairness (Kimes and Wirtz 2003). It is therefore proposed that consumer choices are affected by a perceived fairness component. The systematic utility component can be rewritten as:

$$v_{nj} = \alpha_{nj} + \beta_{1nj} PP_{nj} + \beta_{2nj} FA_{nj}, \tag{2}$$

where α_{nj} is a consumer and alternative specific constant, PP_{nj} is the utility component derived from the alternative's price and product/service attributes (PAL_{njx}), and FA_{nj} captures the utility changes created by fairness-based coding of these attributes PAL_{njx}. The term representing the fairness adjustments to overall utility can be specified as follows:

$$FA_{nj} = \sum_{x} w_{njx} * (PAL_{njx} - RAL_{nx}) \tag{3}$$

PAL_{njx} is the perceived level of attribute x of alternative j, RAL_{nx} is the generic reference attribute level for all alternatives, and w_{njx} is the importance weight of PAL_{njx}.- RAL_{nx}.

The Role of Reference Attribute Levels

Fairness adjustments are firstly a result of a comparison of the perceived attribute level PAL_{njx} for each attribute x with the corresponding reference level RAL_{nx} (Frey and Pommerehne 1993; Kahneman et al. 1986; Maxwell 2002; Xia et al. 2004). This means alternatives are coded relative to a reference point (Kahneman and Tversky 1979; Köszegi and Rabin 2004; Munro and Sugden 2003), which is the result of the following four factors.

Reference Experiences. Customers rely on their personal experiences with a specific product/service category and/or suppliers, because consumers' memory for chosen as opposed to rejected options is particularly strong (Briesch et al. 1997).

Reference Knowledge. Customers also include knowledge about offerings that they have not chosen in the past (Kalyanaram and Winer 1995). This knowledge is a result of past observations and personal experiences of peers. Equity theory in fact substantiates that consumers look at their own past experiences and comparative others to ensure equality of outcomes (Xia et al. 2004).

Semantic Presentation. The way in which objective differences in offerings are presented also has an influence on the perceived utility, i.e. whether they are communicated as gains or losses (Burton and Babin 1989; Kahneman and Tversky 1979).

Contextual Offerings. Firms using PARM might advertise a range of price-product combinations at any given time. Although other present stimuli have an effect on perception

(Helson 1948) and reference price formation (Rajendran and Tellis 1994), this effect has been neglected in previous studies.

Importance of Perceived Differences

Not every discrepancy between the actual attribute level and the reference attribute level PAL_{njx} - RAL_{nx} is equally prevailing in an individual's fairness judgements. Due to the subjectiveness of fairness judgements (Maxwell 2002), the difference is subject to an importance weighting w_{njx} which comprises of three elements.

pe_{njx} Perceived Entitlement. Procedural justice argues that a customer's knowledge about price setting and bundling procedures, i.e. a firm's entitlement to charge a given price, influences how an offering is perceived (Kachelmeier et al. 1991; Maxwell 2002).

fa_{njx} Future Availability. Customers differ in both their willingness to postpone decisions under uncertainty, and their knowledge and experience about whether an offer is still likely to be available in the near future (Kalyanaram and Winer 1995). Speculations about future choices, a special case of determining probabilities of outcomes under uncertainty (Kahneman and Tversky 1979), are expected to impact consumers' perception of current offerings.

de_{njx} Distribution of Expectations. The chances of perceived unfairness increase with the closeness and frequency of transactions (Huppertz et al. 1978), as argued in interactional justice theory. The more consistent experiences a customer has with a product/service category and/or supplier, the more rigid and narrow becomes his decision frames.

Research Method

Focus group research with airline passengers was conducted to examine empirically our proposed theoretical model accounting for fairness prior to testing it with choice experiments. Participants were MBA students, including a mix of frequent flyer members and non-members who had purchased at least one airline ticket during the last 12 months, in order to account for any differences in decision making between casual and repeat customers. Travel experiences included business and leisure travelling, and frequency ranged from once a week to once a year.

The focus group discussion explored a) which aspects of revenue management are most apparent to the consumer, including negative experiences; b) which factors of frequent flyer programs travellers value most; and c) the typical decision making process of air travellers.

Results and Implications

The findings are structured around the PARM and CCM attributes that have an effect on customers' utility, and the key fairness constructs of the research model outlined in Figure 1.

Airline passengers are heavily exposed to the consequences of PARM and seem to be most aware of its implications for prices, fare restrictions and the availability of special rates. While most respondents expect airlines to charge different rates for the same seat, the majority also noted that cheap rates and frequent traveller seats are always booked out: "No one ever seems to get the special deals". The abundance of rates has also educated travellers to extend their search until they know that the seemingly best deal is in fact the cheapest available rate ("The person next to you paid half the price – how on earth did they do that?"), and to be aware of deliberately lacking price transparency in travel packages. Restrictions

and surcharges for time and date changes and cancellations are generally accepted, although most respondents have had negative experiences with the over-enforcement of these rules.

Respondents were asked to name the most important features of frequent flyer programs and rate them according to their importance. Not surprisingly, award flights are unanimously the most crucial feature. Preferential treatment such as priority check-in, lounge-access, upgrades, and priority baggage handling emerged as the most important benefits. Beyond these tangible benefits, frequent travellers wanted to be "treated well". The biggest concern is the practice of charging fees for memberships.

Empirical support for the fairness constructs of the proposed model were gained by asking respondents to describe their standard decision making process upon deciding to take a leisure or business trip. The role of personal travel experiences, "previous quotes" obtained, and the experiences of others seem to be strong and twofold. They act as information sources and evaluation criteria. The availability of other offers (contextual offerings) is considered during the evaluation of alternatives, with the majority of people using the internet and/or travel agent for comprehensive comparisons. The semantic presentation of offerings did not seem to be influential, while the number of frequent flyer points to be earned or required is an important aspect.

Regarding fairness moderators, respondents seem well informed about the effect of the time between booking and travel on available rates. A longer lead time is generally associated with cheaper prices, and "means we have more time to search for a good deal". The distribution of expectations reflecting the frequency and consistency of past travel experiences was not explicitly mentioned, although previous experiences as such stimulated a lively discussion. To probe the role of perceived entitlement, respondents were asked why they think airlines charge different rates and impose restrictions. Surprisingly, landing rights and legal restrictions, distribution channels ("travel agencies buy in bulk"), positioning strategy, and the airline's cost-profit structure came to mind first as the main reasons. Customers' are also aware of airlines' aim to maximise capacity utilisation, but associate it mainly with filling excess capacities.

Conclusion

We presented a conceptual model of traveller's choice behaviour when confronted with the fairness implications of simultaneous CCM and PARM. The focus group research confirmed the relevance of most constructs within our proposed theoretical model, with the exception of semantic presentation and distribution of expectation. It also helped to determine which CCM and PARM attributes should be included in experiments to describe alternative travel alternatives and model travellers' choices. A second series of focus groups will be conducted with airline and also hotel customers' to fortify the preliminary results prior to quantitative empirical testing.

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