Full Length Research Paper

What drives college-age generation Y’s perceived value on high speed rail

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The need for efficient and sustainable transport infrastructure has led to significant growth in the development of high-speed rail networks. However, the central question for advocates of sustainable transport is how to increase the use of high speed rail. Generation Y (Gen Y) has emerged with youthful values which will rival Baby Boomers’ market dominance. The concept of perceived value is closely linked to customers’ satisfaction, loyalty, repurchase and profitability. Therefore, the objective of this research is to identify and describe the perceived value drivers of generation Y’s perceived value on high speed rail. The data collection in this study was conducted through a series of focus group discussions. Researchers have explored Gen Y members’ perceived value and grouped into five dimensions: (1) functional value; (2) social value; (3) emotional value; (4) epistemic value; and (5) conditional value. In this endeavor, the values of this study could offer high speed rail marketers initial insight to encourage Generation Y’s use of high speed rail, and further applying in other public transit for the development of sustainable transportation.

Key words: College-age generation Y, perceived value, high speed rail.

INTRODUCTION

Sustainable development has been a critical issue around the world. Concern about sustainability is rooted in the growing awareness that human activities can impose economic, social and ecological costs. Many approaches and policies to implement sustainable transport trends have been proposed in the recent literature (Banister, 2008; Hull, 2008; Richardson, 2005). The need for efficient and sustainable transport infrastructure has led to the development of high speed rail in Taiwan. High speed rail offers competitive door-to-door travel times and reduces traffic congestion on heavily used routes. Rail also helps to reduce the environmental impact of transport and contributes to a low-carbon economy. However, the central concern for advocating sustainable transport relies on increasing the use of high speed rail. High speed rail related research has predominately examined the behaviors and attitudes of adults while virtually ignoring the perceptions of younger passengers. While members of Baby Boomers have gradually entered retirement age and their spending has shifted from trendy goods to need-driven products, Generation Y (Gen Y) has emerged with youthful values which will rival Baby Boomers’ market dominance (Cortes, 2004). Gen Y comprises heterogeneous individuals aged between 15 and 32 years with diverse needs (Noble et al., 2009). This wide age range makes generalizing findings across the entire generation very difficult. The college-age Gen Y represents the wealthiest group among the age cohorts of Gen Y (Martin and Turley, 2004). However, little is known about marketplace behaviors and consumption patterns of college-aged members of Gen Y (Martin and Turley, 2004). With strong buying power annually, college-age Gen Y passengers represent a significant opportunity for the development of high speed rail today. In view of this, this study pays attention to a narrower group of Gen Y, specifically college-age individuals.

Considering that customers are value-driven (Levy, 1999), the study aim to explore college-age Gen Y’s...
perceived value of purchasing high speed rail service. The concept of perceived value is closely linked to customer satisfaction (McDougall and Levesque, 2000), repurchase intentions (Cronin et al., 2000) and loyalty (Wen et al., 2005). Perceived value is claimed to be a major tool to help the service provider to gain a better competitive position in the market (Cronin et al., 2000; Dodds et al., 1991; Huber et al., 2001; Parasuraman, 1997; Stahl et al., 1999; Woodruff, 1997; Zeithaml, 1988). The post-purchase perceived value of transit service has been studied. However, very limited researches measure the overall perceived value of a purchase, where passengers evaluate not only the experience of taking transit but also the purchase experience. Therefore, this study makes an overall post-purchase evaluation, taking into account both aspects relating to the transit service purchased and those relating to the stations where the purchase was made. In this endeavor, business will be able to apply initial insight in the management of passenger relations, and develop appropriate strategy for the target market.

LITERATURE REVIEW

The consumer behavior of Generation Y (Gen Y)

Kupperschmidt (2000) defined a generation as an identifiable group that shares birth years, age location and significant life events at critical developmental stages. A generation is a cohort of people that share similar social or historical experiences, which affect the way members view and interpret the world, and these interpretations have a relatively stable effect on their lives (Westerman and Yamamura, 2006). Gen Y born between the year of (approximately) 1977 and 1994 (Loughlin and Barling, 2001; Martin, 2005; Smola and Sutton, 2002). In 20 years, this group will represent the bulk of the adult population (McCleneghan, 2005). The characteristics of Gen Y vary greatly from previous generation members. This new generation is extremely technologically literate, self-reliant, independent and looking for instant rewards (Martin, 2005). Gen Y has been characterized as media and internet savvy, trend-setting in fashion, being receptive to new products and having the potential to become lifelong customers (Bush et al., 2004). They have also been described as consumers that "love adventure and expect immediate gratification" (Cortes, 2004). From a marketing vantage, Gen Y is considered as a consumer, and emerging topics relate to brands and corporate responsibility (Yan, 2003), expenditure patterns (Norum, 2003) and the internet as a marketing medium (Peattie, 2007). Considering the consumer behavior, Gen Y is financially equipped and enjoys spending. Especially the older Gen Y consumers possess a tremendous amount of disposable income (Martin and Turley, 2004). Due to the population of Gen Y and high level of spending power, more and more marketers have put their attention on this consumer segment. Wolburg and Pokrywczynski (2001) also suggested the long-held view of the college market as one of the most coveted consumer segments as result of the market's size, college students' role as trendsetters, the lifelong brand loyalties acquired during these formative years, their position as early-adopters, their influence over parental purchases and the probability of a higher standard of living associated with a college degree.

The concept of perceived value

Perceived value has been defined as the consumer overall assessment of the utility of a product based on the perceptions of what is received and what is given (Zeithaml, 1988). The concept of perceived value has been widely applied in academics and the business environment because it is a key strategic variable to explain customer behavior, loyalty and relationship commitment. Woodruff and Gardial (1996) have argued that one-dimensional measures of perceived value lack validity. Similarly, Kotler (2000) proposed the concept of perceived value to be multi-dimensional to capture adequate dimensions of the construct. Sweeney and Soutar (2001) identified five consumption values (social, emotional, functional, conditional and epistemic) influencing consumer choice behavior. They defined functional value as a perceived utility acquired from functional, utilitarian, or physical performance. Social value is the perceived utility acquired through association with positively or negatively stereotyped demographic, socioeconomic and cultural-ethnic groups. Emotional value consists of the feelings or the affective states generated by the experience. Epistemic value is the capacity of the product or service to arouse curiosity, provide novelty, or satisfy the desire for knowledge. Conditional value refers to the perceived utility acquired as the result of the specific situation. Parasuraman and Grewal (2000) suggested that perceived value is made up of four dimensions: (1) acquisition value is the benefits consumers believe they are getting by acquiring a product/service; (2) transaction value is the pleasure of getting a good deal; (3) in-use value refers to the utility derived from using the product/service; and (4) redemption value is residual benefit at the time of trade-in or end of life (for products) or termination (for services). Sweeney and Soutar (2001) developed a multiple scale with four value dimensions: emotional value, social value (the enhancement of social self-concept), functional value (price/value for money) and functional value (performance/quality). In a similar vein, Sacnchez et al. (2006) identify six dimensions of perceived value. Four of them correspond to dimensions of functional value: functional value of the establishment (installations), functional value of the contact personnel (professionalism), functional value of the service
purchased (quality) and functional value price. The two remaining dimensions refer to emotional value and social value. In summary, the dimensions of perceived value vary from the studies and are usually defined within its context. To develop a comprehensive and practical construct of perceived value, it is necessary to determine what dimensions might be defined in transit service context.

The perceived value of transit service

The measurement of perceived value has been broadly conducted on transit service. Park (2007) investigated the relation between air passengers’ perceptions and their buying behavior. The concept of perceived value in this study refers to the transaction between the ticket price and services offering. The perceived value simultaneously consider the reasonableness of the ticket price. In a similar vein, Chen (2008) investigated structural relationships between service quality, perceived value, satisfaction and behavioral intentions for air passengers. Wen et al. (2005) investigates passenger loyalty to intercity bus services and identifies important factors influencing loyalty. In addition to the money passenger gave, the researchers consider the time bus service took in the concept of perceived value. Jen and Hu (2003) established the perceived value model to identify the factors affecting the passengers’ repurchase intentions on city bus. In their study, perceived value is a trade-off between perceived benefits and perceived costs. Service quality is used in this study as an exogenous variable for perceived benefits. In the meantime, perceived costs include both non-monetary and monetary prices. Monetary costs simply refer to the money passengers spend in taking a bus while the non-monetary price includes time costs, search costs and the psychological costs. Similar concept was conducted by other researchers (Jen et al., 2010; Lin et al., 2008) to investigate passenger behavior intention. Park et al. (2004) established a model that considers service expectation, service perception, perceived service value, passenger satisfaction, airline image and behavioral intentions simultaneously to improve our understanding of air passengers’ decision-making processes. In addition to passengers’ perceptions of what is received and what is given, the authors added psychological dimension (for example, I have always had a good impression of this airline) to measure air passengers’ perceived service value. As mentioned above, multidimensional approach to perceived value has been broadly applied in many fields (Lapierre, 2000; Sweeney and Soutar, 2001; Palmer and Ponsonby, 2002). However, the measurement of perceived value on transit service is mainly limited in the functional dimension (for example, price, service quality). In this sense, the functional dimension refers to passengers’ rational and economic evaluations. The affective dimension (passengers’ internal emotions or feelings) and social dimension (social effect relating to passengers’ behavior) are less considered. Consequently, the study attempts to construct and identify the perceived value dimensions which could reflect passengers’ overall perceived value on high speed rail service.

METHODS

The purpose of this research was to explore and identify the Gen Y’ perceived value on high speed rail service. The data collection in this study was conducted through a series of focus group discussions to achieve a common understanding and provide greater insights into the issues. Participants of the study are college-age Gen Y passengers who have ever taken Taiwan High Speed Rail. A total of three focus group discussions were conducted comprising of five to six participants in each group. The focus group discussions were conducted during February 2011 in Taiwan and the duration of the discussions lasted approximately 50 to 60 min, depending on the length of the responses. The participants were informed about the purpose of the study and the sessions were being taped. To gain the most appropriate information and ensure the content is relevant to the research purpose, each focus group discussions were conducted by one moderator. Veal (1997) recommends that a third party should be used to transcribe the tapes to enhance reliability by ensuring that the researchers do not impose their perceptions upon the process of transcription. Thus, each set of tape recordings was transcribed by a separate research assistant. In addition, transcripts from both research assistants were compared by researchers to make sure that there were no mistakes and discrepancies.

RESULTS

Data analysis was conducted based on the research objective, in which the data from the transcriptions were examined by researchers to group responses into meaningful dimensions. The data obtained were analysed using a descriptive approach to acquire a more complete and in-depth understanding of the data. From there, researchers analyzed responses by looking for key words, phrases and themes. This process resulted in identification of dimensions of key words, phrases and themes that revolves around the issues. Finally, five dimensions of perceived value were identified as Table 1.

DISCUSSION

Social value

Choices involving highly visible products or services to be shared with others are often driven by social value (Sheth et al., 1991). High speed rail service may possess more conspicuous consumption value or social image in excess of its functional utility for Gen Y passengers. Some respondents mentioned that they take high speed rail is influenced by reference group or social trends (for example, energy saving and carbon reducing policy that...
Table 1. Value dimension of Gen Y’s perceived value.

<table>
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<tr>
<th>Value dimension</th>
<th>Definition</th>
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<tr>
<td>Social</td>
<td>The utility derived from high speed rail service’s ability to enhance social self-concept</td>
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<tr>
<td>Functional</td>
<td>Facility The utility derived from installation or establishment of high speed rail station and carriage.</td>
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<td></td>
<td>Professionalism The utility derived from contact personnel’s’ qualities that are connected with training and management.</td>
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<td>Quality The utility derived from the perceived quality of high speed rail service.</td>
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<td></td>
<td>Price The utility derived from high speed rail service due to the reduction of its perceived costs.</td>
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<tr>
<td>Emotional</td>
<td>The utility derived from the feelings or affective states that high speed rail service generates</td>
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<tr>
<td>Epistemic</td>
<td>The utility of high speed rail service to arouse curiosity or provide novelty</td>
</tr>
<tr>
<td>Conditional</td>
<td>The utility derived as the result of the specific situation to take high speed rail</td>
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government advocate). Some indicated that they acquired assurance from others of their own worth through taking high speed rail.

Functional value

Functional value is the primary driver of passenger choice. The basic assumption underlies functional value is in terms of rational passenger. An alternative’s functional value is usually resulted of its attributes (Ferber, 1973). The finding indicated that time is a significant factor which drives Gen Y passengers to choose high speed rail (for example, saving much travel time, frequent and on time rail trains). In addition, Gen Y passengers acquire professionalism functional value from high speed rail personnel’s’ qualities which are relating to training and management. Offering prompt service, trying best to solve passengers’ problem, and being glad to serve or assist passengers reveal personnel’s service quality. Moreover, high speed rail personnel are up-to-date about new products (for example, package tour, promotion news) and explain the product in detail could offer passengers knowledge and reliability. The results are similar to previous study that older Gen Y customers expect more personal attention (for example, courteous and knowledgeable employees) and reliability (for example, error free records and secure transactions) (Ma and Niehm, 2006).

Nearly all participants who treated the ticket price were the main criterion for taking of the high speed rail decision. The result is in accordance with Ma and Niehm’s (2006) research who stated that Gen Y customers will use price to guide their service standards and expectations. Although, the ticket price of high speed rail is much higher than any other public transit, the traveling time saving and service offering still make Gen Y thinks the high speed rail ticket was reasonably priced. This finding also proven by Ma and Niehm (2006) that older Gen Y customers are a demanding group who expect all of their service needs to be consistently met at the right price.

Emotional value

Public transit is generally thought to be functional or utilitarian. However, services are usually associated with emotional responses. Dichter (1947) indicated that consumer choice might be driven by non-cognitive or unconscious motives. MacKay (1999) also noted that emotions play a part in every purchase decision. The finding indicated that high speed rail arouse Gen Y passengers’ feeling of comfort in addition to functional utility. Many respondents mentioned that they liked and enjoyed in high speed rail service. They were comfortable with high speed rail facility and they felt relaxed when took high speed rail. Moreover, an interesting finding showed that good-looking and young personnel were significant drivers which bring Gen Y passengers’ positive feelings.

Epistemic value

Rogers and Shoemaker (1971) suggested that consumers have propensity to adopt new products. Epistemic value is acquired through new experiences or a change of way. Gen Y passengers chose to take high speed rail because they are bored with other transits and
they desire to try a new type of transit service. The multiple package tour and advertisement might arouse Gen Y passengers’ curiosity or interest to take high speed rail.

**Conditional value**

Consumer behavior cannot be accurately predicted on the basis of attitude or intention (Sheth, 1974). Results indicated that Gen Y passengers took high speed rail depend on situation. For example, some respondents indicated that they took high speed rail in emergency situations (for example, rushing to meeting), some took high speed rail to avoid uncertainty (for example, avoid a traffic jam in holidays) and some took high speed rail due to fare subsidy (for example, to be on a business trip at public expense).

**Conclusions**

In consumer marketing, creating customer value means meeting customers’ needs and increasing customer satisfaction (Porter, 1985). This study has enabled us to expand existing knowledge of the value perceived by the passenger in general. Unlike previous measures, our finding includes both utilitarian and hedonic components. Gen Y passengers’ behavior should not be seen from a purely rational point of view. Cognitive factors such as quality and price play a fundamental role. Our results show the importance of emotional value on Gen Y passengers’ willingness to buy in the transit service category normally considered as functionally oriented. The present study also provides potential insights for the recruitment and training of staff that the front-line personnel have significant impact on Gen Y passengers’ decision-making processes both in functional and emotional value. Recognition of the importance of the different dimensions of value illustrates the opportunity for high speed rail strategists to explore all dimensions of customer value before deciding on an appropriate market approach.

**REFERENCES**


