INTERPRETING RELATIONSHIPS AMONG OKTOBERFEST TOURISTS’ EXPERIENCES AND PERCEIVED VALUE, OVERALL SATISFACTION AND LOYALTY BEHAVIORS FOR BETTER MARKETING STRATEGY DECISIONS

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Introduction

At its core strategic management and marketing is nothing more than “sensing the need for action, deciding upon an action, and executing it …” (Ansoff 1987: 508). In order for tourism and hospitality firms to sense a need for action, some form of information processing and interpretation must take place. This process can be very formal or informal and is defined in this study as an organization’s process of sharing and organizing information into a usable form that provides a basis for desired resource allocations and marketing strategic planning.

Traditional marketing strategies have focused on the 7 Ps and assessed outcomes such as satisfaction and loyalty (Harrington et al. 2017a). While this type of marketing strategic thought process can be applied to the experiential nature of tourism experiences, many researchers and practitioners have questioned the validity of these traditional concepts for tourism and other service experiences (Chandler and Lusch 2015). For instance, more recent concepts of looking at the entire customer journey (Lemon and Verhoef 2016) and its impact, assessing service/experience design (Dasu and Chase 2013; Pine and Gilmore 2011), as well as shifting from goods-dominant logic to memory-dominant logic (Harrington et al. 2019) as more meaningful or impactful approaches to address consumer behavior questions related to service experiences.
Figure 1 provides a framework tying together the customer journey, service experience design, and memory-dominant logic literatures to facilitate the discussion within this chapter. The part contained within the dotted lines of the framework are areas tested in the context of Oktoberfest with results used to tease out implications for tourism management and marketing as well as implications for future research and practical application.

In Figure 1, key aspects of the tourism customer experience are shown starting to the right (before the experience) and leading to the left (during and after the experience). In the box on the far right, the experience service design is an aspect of tourism management that occurs before the actual experience and the service design is a function internal to the firm (although design decisions are likely to be impacted by customer feedback, trends and the competitive environment). Service experience design include aspects such as level of customer control and choice, how these aspects might be sequenced, the management of the actual and perceptual experience duration, and the level of personalization/co-creation of the experience delivery (Dasu and Chase 2013). To enhance the attribution of positive experiences and deflect negative ones, this internal experience design revolves around an organizational-driven process and culture to facilitate emotional responses, trust, and a feeling of control (Harrington et al. 2019; Lemon and Verhoef 2016). Also, within this box in Figure 1, there are customer-driven pre-journey activities that are likely to impact to the actual experience as well as to impact expectations prior to the experience that can lead to satisfaction or dissatisfaction depending on whether expectations are exceeded or not met for the consumer (Ottenbacher et al. 2016). Therefore, Figure 1 represents an integration of earlier frameworks of the customer journey (Lemon and Verhoef 2016), service experience (Dasu and Chase 2013), attribute classification (Lin et al. 2010), the Oktoberfest experience (Harrington et al. 2017b) and memory-dominant
logic (Harrington et al. 2019) to form a basis for empirical tests and discussion used in this chapter in the context of Oktoberfest.

As highlighted above, this chapter focuses primarily on issues associated with the assessment of the quality of attributes as part of the Oktoberfest experience, the level of quality/performance, multiple indicators of success (value, loyalty and satisfaction) and the definition of attributes into four possible types. Past studies have focused primarily on satisfaction levels and/or loyalty intentions as criteria for marketing strategy and resource allocations. In today’s competitive environment and information accessibility, we argue that this type of marketing strategy and its impact on experiential service design is necessary but insufficient. As shown in the boxes to the far left in Figure 1, newer theoretical models indicate outcomes such as perceived wellbeing or increased quality of life are important indicators of successful consumer experiences as well as when experiences become memorable consumers are more likely to become active evangelists in the form of recommendations, sharing of experiences on social media or electronic word-of-mouth (Harrington et al. 2019).

The upcoming sections of this chapter focuses on the central portions of Figure 1 (within the dotted lines) using a modified empirical approach and the context of Oktoberfest to 1) assess the impact of 16 beer tent attributes on attendees’ perceptions of value, overall satisfaction, word-of-mouth and return visits, 2) articulate the implications for marketing strategy decisions and the impact on experiential service design, and 3) discuss implications for 21st century-driven service design decision-making, expanded notions of desired consumer behaviors and methods that provide insights for marketing strategy decisions in travel and tourism.
The case of the Oktoberfest beer tent experience allows us to highlight an enhanced understanding of attribute categories using moderated regression and multiple dependent variables. This chapter’s approach provides an enhanced mathematical structure of Kano’s theory to minimize weaknesses in earlier studies using methods that were either too complex or simplistic, and likely to provide biased results. This case will categorize key Oktoberfest beer tent attributes and how (or if) these are associated with overall satisfaction, visitor loyalty, and perceived value. Based on these findings, a discussion will highlight important similarities and differences with using multiple consumer behavior DVs for classification and decision-making.

Specifically, the use of the Oktoberfest experience as a basis for this chapter will allow for better articulation and understanding of 1) how attributes impact consumer behaviors and experiential service design, 2) how this approach can be useful for researchers and practitioners for marketing strategy insights, and 3) how this approach can be expanded on for reliable 21st Century strategic decision-making approaches.

<Figure 1 Here>

Background

The Oktoberfest tourist experience

Each year Oktoberfest provides a positive impact for the tourism sector in Munich and surrounding areas. The total number of arrivals in the Bavarian capital continues to grow with numbers increasing from 3.74 million in 2000 to 6.59 million in 2014. While the distribution of overnight stays during Oktoberfest is still dominated by travelers from Germany and Europe, it has become more balanced over the years with nearly 50% of all overnight stays in Munich currently taken by foreign travelers.
As usual, the Munich Oktoberfest opens in traditional fashion with a tapping of the first keg by Munich’s mayor. Oktoberfest in Munich covers 85 acres with 16 festival beer tents. The overall seating capacity in the beer tents is about 119,000 visitors. The festival is organized by the City of Munich and employs a total of about 13,000 staff. It features about 175 rides and shows with traditional dishes featuring roast chicken, radishes, Obatzda (Bavarian cheese spread), sausages, grilled fish, roasted ox and Wiesnbrezn (large Bavarian pretzel). About 6 million people visit the Munich Oktoberfest each year and consume over 7 million liters of beer. The largest contingent of travelers are from Munich, Bavaria and other parts of Germany. While other primary nationalities include other Europeans, those from the USA, and elsewhere. The largest age group are generally 30 years of age and older (more than 50%) with close to a 50/50 split of men and women. This diversity makes it a very international tourism event serving a range of age groups and nationalities (Papke 2015).

Given the previously limited access to researchers for Oktoberfest, many questions remain unanswered with regards to primary elements that drive satisfaction, loyalty, perceived value and positive word-of-mouth for beer festival attendees. Given the importance of festivals as tourism attractions, economic drivers and image builders for local communities as well as the growth of interest in artisan beer consumption, a better understanding of these relationships is an important outcome of this chapter.

*Refining attribute models and measurement*

The notion of attribute types, importance and performance having asymmetric effects on customer satisfaction and other behavioral intentions has a long history in the broader consumer behavior literature (Brechan 2006; Gustafsson et al. 2005), in services marketing (Bolton and
Lemon 1999; Lin et al. 2010;) and more recently in hospitality and tourism businesses (Knutson et al. 2006; Mathe-Soulek et al. 2015). The value proposed by the classification of attributes by type is the enhanced ability for practitioners to maximize the effectiveness of resource allocation to attributes that have an impact on the underlying satisfaction-profit chain (Harrington et al. 2017b).

To assess the relationships shown in the central portion of Figure 1, we followed earlier studies using the classification of attributes from Kanos’ attribute-satisfaction model (Kano et al. 1984). While this classification approach has received strong theoretical support, many researchers have criticized it as being too complex and that most early attempts to simplify the classification process are replete with shortcomings (Mikulić and Prebežac 2016).

In this chapter, a test is provided of attribute classification in the context of Oktoberfest using a validated approach of moderated regression (Harrington et al. 2017b; Lin et al. 2010). Oktoberfest, attracting thousands of international and domestic travelers to Munich, Germany each year, has a long history and substantial brand recognition in the festival sector. This sector has become increasingly competitive and represents an important economic segment of tourism (Manthiou et al. 2014). The study sheds light on the classification of attributes with a variety of customer perceptions and behavioral intentions associated with the Oktoberfest experience. These outcomes include overall satisfaction, a composite of customer loyalty, and perceptions of value. The chapter’s contribution builds on earlier research and, by using multiple dependent variables, checks the validity of attribute classification with implications for managing the Oktoberfest and similar tourism experiences.
While numerous studies have been conducted to assess and determine attribute categories and the measurement of the impact of these attribute categories on customer satisfaction and behaviors (Harrington et al. 2017b), Kano’s quality attribute-satisfaction model (Kano et al. 1984) addressed the concept of a non-linear (asymmetric) relationship among attribute types and overall customer satisfaction. In essence, the researchers proposed that not all attributes are equal in a consumer’s mind, therefore, an understanding of the inequities of attribute performance and their impact on customer satisfaction would be the key to managing the consumer’s experience.

Kano’s model proposed five attribute types that have been described using a variety of terms: attractive (excitement/wow factors), one-dimensional (performance/satisfiers), basic (must-be/dis-satisfiers), indifferent, and reverse. Attractive or excitement quality factors are defined as unexpected attributes where consumers will likely be more satisfied if the attribute is provided but will accept the product/service if not present with no dissatisfaction. One-dimensional (performance) quality factors follow a relatively straight relationship between attribute satisfaction-dissatisfaction and overall satisfaction-dissatisfaction. Basic (must-be) quality factors are those that create dissatisfaction when not provided but satisfaction increases at a decreasing rate with quality increases in basic attributes. Indifferent factors have no impact on satisfaction or dissatisfaction when present. The reverse quality factors cause dissatisfaction when present and satisfaction when absent. As Chen (2012) pointed out, since a reverse factor does not represent a real-world consumer need, there is no compelling need to include an assessment of reverse quality factors in real-world business situations. An example in the tourism world might be going through security at the airport; while the time and effort it takes is likely to increase dissatisfaction in the travel experience, the process is required and efforts should be made to minimize duration (perceived or actual) as part of the tourism experience.
Prior to this model, relationships between attributes and overall satisfaction were assumed to be one-dimensional (improvement in any attribute quality would increase customer satisfaction). The realization of non-linear relationships among attributes and customer satisfaction or other outcomes is an important consideration in prioritizing resource allocations by managers (Lin et al. 2010).

While Kano’s model and proposed methods have been partially supported, the original process has been criticized as too complex and difficult to implement. Several researchers have proposed alternative methods to classify attributes using a dummy coding method in regression (i.e. penalty-reward contrast analysis [PRCA]) (Witell and Lofgren 2007) or importance-performance grid (IPA) (Vavra 1997). Lin et al. (2010) and Chen (2012) demonstrated the weaknesses of classification of attributes using dummy coding (PRCA) compared to other regression methods that are capable of more closely modeling linear and non-linear relationships in Kano’s model while being far easier to implement than the original. Mathe-Soulek et al. (2015) used mixed methods to classify the relationship between Quick Service Restaurants’ (QSR) drive-through attributes and overall customer satisfaction. The study attempted to address earlier weaknesses using a combination of qualitative, PRCA and IPA methods. Overall, the findings appeared more valid using this triangulation approach but, as the authors pointed out, interaction effects should be explored in the future as these were one limitation in their study. Mikulić and Prebežac (2016) pointed out that tourism research applying Kano’s model have generally lacked sufficiently rich information for assessment resulting in questionable reliability and validity.

In this chapter, several weaknesses are addressed to more fully understand attribute performance relationships. While these relationships have been considered in other contexts and methods –
restaurants (Mathe-Soulek et al. 2015), hotels (Slevitch and Oh 2010), and other services (Lin et al. 2010), this chapter considers these relationships in the context of a unique festival experience to increase our understanding of classification methods and implications of marketing mix strategies that drive beer festival success. A regression approach that integrates interaction effects of attribute performance and the level of performance was used to more closely model non-linear relationships and address earlier critiques of overly simplistic methods (Harrington, et al. 2017b). Finally, the chapter results moves beyond the sole consideration of overall satisfaction as the dependent variable in assessing attribute categories. This approach uses multiple customer behaviors as dependent variables to assess consistencies or inconsistencies between attribute performance on – overall satisfaction, customer loyalty, and perceptions of value.

**Pre-journey activities**

The notion of the customer journey tied to the entire experience (and shown in Figure 1) includes activities before the purchase decision (Lemon and Verhoef 2016). This process seems particularly relevant when tied to a tourism experience. In the context of Oktoberfest, this pre-journey might include time spent researching the upcoming visit (Goggle search, travel sites, etc.), time spent in preparation for the visit once travel plans have solidified (booking rooms, shopping for the trip, finalizing plans, etc.). While these activities are beyond the traditional classification of attributes, this time spent is likely to impact perceptions of the experience and level of expectations developed prior to the actual visit. When surveyed, Oktoberfest 43% of attendees followed or visited one or more social media sites/programs: 31% the Oktoberfest webpage, 6.5% Facebook, 3% Instagram, 6.9% used the Oktoberfest App, and 3.7% used some
other type of social media prior to attending. On average, attendees spent about 75 minutes researching before attending and somewhere between 1 to 2 hours in visit preparation activities.

**Oktoberfest attributes and dependent variables**

In order to classify attributes of the Oktoberfest experience into four possible types (excitement, basic, performance or indifferent), the Oktoberfest attribute quality and the interacting effect of attribute performance level was assessed on three different dependent variables prior to attribute classification. A description of each dependent variable and the regression model are discussed in the following sections.

**Satisfaction**

While customer satisfaction has long been recognized as an important consideration for commercial enterprise success, its definition may vary with at least nine theories established in the literature. The common denominator of most definitions is that customer satisfaction is the outcome or end-state resulting from a consumption experience (Pizam and Ellis 1999). Kotler (1994) defines customer satisfaction as “the level of a person's felt state resulting from comparing a product's perceived performance or outcome with their own expectations” (p.40). The present study adopted Oliver’s (2010) definition which states that customer satisfaction is the result of a cognitive and affective evaluation, where some comparison standard is compared to the actually perceived performance. In general, the conceptualization of customer satisfaction is not thought to be simply the arithmetic sum of attribute impressions/satisfaction but instead varies by type and importance (e.g., Kano et al. 1984). Therefore, the present study aimed to assess the relationship among key Oktoberfest attributes’ performance and the linear and non-linear relationships with visitor overall satisfaction.
Loyalty

In contrast to customer satisfaction, customer loyalty appears more difficult to define. It is thought to be multi-faceted and includes both an attitudinal and a behavioral dimension toward the provider of the product or service (Kandampully and Suhartanto 2000). Attitudinal loyalty is expressed as the likelihood to recommend and repurchase (or re-visit in the context of a destination) and is normally measured as intentions though self-administered surveys (Tzetzis et al. 2014). Behavioral loyalty is expressed with consumer action such as continued patronage and the act of recommendation. It is measured with a number of different metrics that normally include retention (or defection/churn), usage, lifetime duration, cross buying and share of wallet (Bolton et al. 2004). The integration of attitudinal and behavioral is often termed ‘composite’ loyalty and it is expressed as a behavioral intention which includes revisit intention and intention to recommend (Chen and Tsai 2007).

A significant body of studies (e.g., Homburg and Furst 2005; Kandampully and Suhartanto 2000) indicate that customer satisfaction has a direct, linear impact on customer loyalty, however, there are also many researchers who maintain that this relationship is non-linear (e.g., Bowen and Chen 2001; Baumann et al. 2012). The present study assumes the latter; this conceptualization of customer loyalty underscores the value in using it as an additional dependent variable to explore the impact of attribute performance on customer loyalty behaviors. This relationship appears likely to enhance the understanding of linear or non-linear relationships of attribute performance – and, if these relationships are similar or different compared to overall satisfaction and the resulting attribute categorization.
With regards to the operationalization of the loyalty construct, this study uses a composite measure of customer loyalty that includes intentions to return, recommendation behaviors, and sharing behaviors on social media of the Oktoberfest beer tent experience.

Value

Perceived value is the consumer’s trade-off between the various benefits they receive from a consumer experience and the different costs they incur (Sánchez-Fernández et al. 2009). It has been shown to be a subjective and dynamic construct that varies by 1) consumer, location and context, 2) types of value (functional, social, emotional, etc.), and 3) its temporal nature (prior to purchase, at the point of purchase, during use, etc.) (Sanchez et al. 2006). Several studies (Chen and Tsai 2008; Yuksel 2007) have identified perceived value as the critical construct for forging relationships with customers and it is seen as a predictor for both attitudinal and behavioral loyalty. Therefore, this study assumed that the visitor’s perceived value of the Oktoberfest beer tent experience was likely to be tied to attribute performance, and used it as a dependent variable in order to provide additional means to assess the relationships among attribute performance and perceived value.

In summary, the chapter was designed to further the understanding of relationships among Oktoberfest tent experience attributes and a number of additional dependent variables to assess consistencies or contrasts in attribute categorization based on consumer behavior outcomes. Figure 1 provides an outline of the study’s constructs and relationships; from left to right, the direct effects of Oktoberfest attribute satisfaction was assessed with its relationship with each dependent variable. Additionally, the interaction with performance level was also tested to separate attribute category. This direct and interaction approach provides for an assessment of
attribute category that models Kano’s four constructs of performance (significant direct effects only), excitement (significant interaction and coefficient > 0), basic (significant interaction and coefficient < 0), and indifferent (non-significant) (Lin et al. 2010). As with earlier studies, the reverse category was not included in the analysis as this type is not relevant in a commercial endeavor situation (Chen 2012).

Methods
A survey was carried out in the Armbrustschützenzelt, a beer tent opened in 1895. The survey was presented in both English and German; it consisted of the performance of 16 attributes, overall satisfaction, customer loyalty questions, price/value of the experience, number of times attending Oktoberfest, and demographics. Items included in the survey instrument was based on 1) recommendations by research faculty with expertise in tourism and festival research, 2) a review of the literature, and 3) feedback and desired items suggested by industry representatives. Thus, the Oktoberfest attributes used in this study reflect the physical, social and cultural aspects of the experience as defined by a review of earlier research and a synthesis of experts in Oktoberfest events and tourism in general.

A team of 16 students and two faculty carried out the survey over the course of 21 shifts directly in the tent, from noon until early evening. The sampling strategy employed was plain convenience sampling, commonly used in this type of research (e.g., Sung et al. 2016). The surveys were completed by people sitting at beer tables in all areas of the tent: a large main open area in the middle, different VIP boxes along bordering the main area, and a second floor balcony area overlooking the main area. In total, 1323 usable surveys were completed during the 2015 Oktoberfest from September 20 through October 3, 2015. Of these, 58.3 were male (41.7%
female); 59.7% were from somewhere in Germany, 20.6% from other parts of Europe, and 19.4% were from outside of Europe. Respondents were divided into five age groups with 11.3% aged 16-21, 57.7% aged 22-35, 13.9% aged 36-46, 11.4% aged 47-60, and 5.6% greater than 60 years.

*Analysis*

Following Kano’s model of quality attribute types (Kano et al. 1984), the chapter used a moderated regression approach to sort out relationships among attributes that should be categorized as basic (or must-be) elements, performance (one-dimensional) elements, excitement (attractive) elements and indifferent elements as part of the Oktoberfest tent experience. While dummy coding (PRCA) and importance-performance analysis (IPA) are commonly used in tourism research to group attributes into these main types, the common practice of grouping attribute variables into high and low performance categories has been criticized in earlier research (Mikulić and Prebežac 2011) and does not fit with Kano’s model (Harrington et al. 2017b). Earlier research supported the need to consider moderated regression (Lin et al. 2010), ridge regression (Chen 2012) or other approaches (Mathe-Soulek et al. 2015) to minimize the potential for misclassification of attributes.

Thus, a moderated regression approach was used to enhance the validity of attribute categorization and minimize the flaws of dummy coding methods. Specifically, the moderated approach assesses the moderating effect of perceived attribute quality level, lessens the misclassification of attributes, simplifies data collection process of Kano, minimizes the effects of biased data (the majority of responses being above average in performance) and includes the average (common) attribute performance level, thus, minimizing skewed results due to excluded responses (Lin et al. 2010).
Regression model definitions

Specifics on the regression model used can be found in Lin et al. (2010) and Harrington et al. (2017b). The basics of this moderated regression approach and how used are outlined below:

\[ DV_i = \alpha + \beta_1 X_{ij} + \beta_2 X_{ij} \times Z_{ij}, \]

where \( Z_{ij} = \begin{cases} 
X_{ij} < m & \text{if } X_{ij} < m \\
X_{ij} = m & \text{if } X_{ij} = m \\
X_{ij} > m & \text{if } X_{ij} > m
\end{cases} \)

\( DV_i = \) Because the current study looked at several dependent variables of interest, regression models were run for four dependent variables (using a 5-point Likert-type scale ranging 1 [very low] to 5 [very high]):

- CS\(_i\) represents the overall satisfaction of the \( i \)th customer
- CL\(_i\) represents a composite measure of customer loyalty of the \( i \)th customer
- VR\(_i\) represents the overall perception of value received of the \( i \)th customer

\( \alpha = \) this constant is the average of all reference groups with regard to the dependent variable of interest

\( X_{ij} = \) the performance of the Oktoberfest attribute \( j \) as perceived by the \( i \)th customer. Performance level was based on a five-point scale ranging for 1 (not at all satisfied) to 5 (extremely satisfied).

\( Z_{ij} = \) the moderator variable was created to verify the moderated effect of performance of the \( j \)th attribute from the \( i \)th customer. The symbol \( m \) is the average (or in this case moderately satisfied [\( \geq 3 \) on 5-point scale]). Therefore, if the \( i \)th customer’s performance rating for the \( j \)th attribute was 1 or 2 on the five-point scale, the value was coded as 1. If rating was 3 (of 5), it
was coded as 2 and if a rating of 4 or 5 – coded as 3, resulting in three performance levels.

\[ \beta^{*}_{ij} \] is the impact of the \( j \)th attribute on the dependent variable of interest.

\[ \beta^{*}_{2j} \] = the coefficient representing the interaction effect of attribute performance and perceived performance level.

Once regression models were run, the sign and significance of the regression coefficients were used to classify each attribute as a basic, excitement, performance or indifferent element (Lin et al. 2010). Following the recommendations of Hair et al. (2006) and Lin et al. (2010) to steps were used to avoid collinearity issues.

**Measures**

The measures used included 16 attributes as independent variables, performance level as part of an interaction term, and three dependent variables.

**Attributes**

Table 1 provides a description of the 16 attributes used in the study and the coding used in Tables 2-5. For each attribute performance measure, the survey used a 5-point scale with 1 = not at all satisfied and 5 = extremely satisfied. The far right hand column provides the means and standard deviations for all independent and dependent variables. Staff friendliness, fun group experience and atmosphere had the highest means of the 16 attributes.

<Insert Table 1 about here>

**Performance interaction**

The moderator variable was described in the earlier section on the regression model. Specifically, the attribute performance was coded into three possible levels (1, 2 or 3) and this performance level was multiplied times the attribute performance rating to assess the moderated effect of performance on each dependent variables (i.e., Lin et al. 2010).
Dependent variables

The wording used for the dependent variables of overall satisfaction, composite measure of customer loyalty (intention to return, recommendations, and social media recommendations), and price/value perceptions are also provided in Table 1. Overall satisfaction used a five-point scale ranging from very low (1) to very high (5) overall satisfaction. The composite score for customer loyalty was calculated as a mean of three items; each having a five-point scale from very low to very high. The three items included intention to return, likelihood to recommend visit to friends or family, and likelihood of sharing experience through social media. Finally, a dependent variable representing perceived value was used and asked respondents to indicate their perception of the experience quality relative to overall prices. Here again, this used a five-point scale ranging from very inexpensive to very expensive.

Results

The analysis of Oktoberfest attribute categorization results are divided into tables based on the dependent variable. This separation allows additional understanding of attribute categories and the impact on consumer perceptions.

Overall satisfaction

Table 2 provides results using overall satisfaction as the dependent variable, each attribute satisfaction and the interaction with level of performance as predictor variables. With overall satisfaction as the dependent variable, the 16 attributes were categorized into two categories. 13 were categorized as one-dimensional (performance) (Atmosp, Tradition, PartyEnv, MusicQual, NumPeople, Dirndl, NewPeople, FunGrp, TntAccess, FoodQual, BevQual, Shopping, and Staff) and three as excitement (BavCult, Flirting, and Beer).

<Insert Table 2 about here>
Customer loyalty

Table 3 provides results using a composite score of customer loyalty as the dependent variable with the IV and interaction was stated above. The composite was calculated as the mean of intention to return, recommendations to friends and family, and sharing through social media.

With the composite as the dependent variable, the 16 attributes were categorized into three categories. 10 were categorized as performance (Atmosp, Tradition, PartyEnv, NumPeople, Dirndl, NewPeople, FunGrp, Beer, BevQual, and Staff), five as excitement (BavCult, MusicQual, Flirting, TntAccess and Shopping), and one as basic (FoodQual).

<Insert Table 3 about here>

Perceived value

Table 4 provides attribute categories using perceived value as a dependent variable. This relationship considered if there was a relationship among the satisfaction of attributes and perceptions of price/value. The results in these models resulted in vastly different relationships; Due to non-significant relationships, ten of the attributes could be considered in the indifferent category (Atmosp, Tradition, PartyEnv, MusicQual, NumPeople, Dirndl, NewPeople, Flirting, TntAccess, and FoodQual). Four were categorized as basic (BavCult, FunGrp, BevQual, and Staff), one performance (Beer), and one excitement (Shopping).

<Insert Table 4 about here>

Discussion

The use of multiple dependent variables and the interaction term with attribute performance level provided some interesting insights into the impact of various Oktoberfest attributes on customer satisfaction, loyalty behaviors and perceptions of value. Table 5 provides a summary
of the categorization of each attribute based on individual DVs. The right-hand column provides the mode or most common categorization across all DVs.

Overall, the DV used had an impact how each attribute was categorized. Thus, if researchers or practitioners use the standard DV of overall satisfaction vs. other desired behaviors, the attributes are likely to vary, in many cases, from performance, to excitement, basic or indifferent depending on the consumer behaviors used in the assessment. Assuming a cause and effect relationship between attribute performance and consumer behaviors, this finding has implications for research and practical implications on resource allocations to beer tent attributes starting with the question – what consumer behaviors do we want to impact?

<Insert Table 5 about here>

With overall satisfaction as the dependent variable, 13 of the 16 attributes appear to be one-dimensional in nature. This relationship indicates these 13 attributes are anticipated by Oktoberfest visitors and as performance/quality increases (deceases) so does satisfaction (dissatisfaction) with the overall Oktoberfest tent experience. Additionally, Bavarian culture, flirting, and drinking without being exposed were unanticipated, were perceived as excitement factors, and created higher satisfaction when present as part of the experience.

The composite measure of customer loyalty provides some support to the satisfaction DV findings but also some contrasts. These contrasts appear to be associated with differences in the impact of the interaction term associated with attribute performance level. These relationships appear to support a non-linear and sometimes asymmetrical relationship between attribute satisfaction and loyalty with an impact of critical thresholds in performance level perceptions (Bowen and Chen 2001). In the case of composite customer loyalty as the dependent variable, 10
attributes were categorized as performance; five as excitement (Bavarian culture, music quality, flirting, tent access, and shopping) and one as basic (food quality). Therefore, to drive customer loyalty behavior (return visits, recommendations and social media sharing), the music, shopping and tent access were perceived as excitement elements that increase the likelihood of positive word-of-mouth and returns to Oktoberfest.

The relationship among perceptions of experience quality relative to a price/value connection to the attributes lowered the numbers of performance elements and increased indifferent elements substantially. With perceived value as the dependent variable, 10 attributes were categorized as indifferent, four as basic (Bavarian culture, fun group experience, beverage quality, and staff friendliness), one as performance (drinking without expose), and one as excitement (shopping). Therefore, if using the perception of value to categorize tourism attributes, results and interpretation will be greatly impacted.

**Conclusions**

Using the mode across all dependent variables as an indicator of attribute categorization, ten of the attributes appeared to have clear designations of types. Bavarian culture, flirting opportunities and beer tent shopping were most frequently categorized as excitement factors. These attributes are unanticipated and when present enhance satisfaction, loyalty behaviors and value perceptions.

Clear performance attributes included atmosphere, traditions, the number of people in the tent, seeing attendees in Dirndl or Lederhose, meeting new people, a party environment, drinking without begin exposed, beverage quality, and a fun group experience can be generally described as anticipated and areas were higher quality increases the likelihood of satisfaction, loyalty and perceptions of value. Given the promoted visuals of Oktoberfest, this finding seems to mirror
expectations of prior attendees and first timers. Strategic investments to facilitate these experiences for attendees appear likely to positively impact multiple types of consumer outcomes.

Based on the mode categorization, there were no attributes that could be defined clearly as basic or indifferent. Three attributes had split modal relationships. Music quality, tent access and food quality varied as a performance, excitement, basic or indifferent category based on DV. Therefore, an implication is attendees appear to have a level of expectation in these attribute areas. But, these attributes represent an opportunity to further assess their importance to attendees and if unanticipated level of quality would result in more consistent categorization as performance or excitement factors. Questions regarding how these service areas are managed in the beer tents requires further analysis. For instance, is the inconsistent finding for food quality a result of inconsistent control/quality or a lack of choice? Can the tent access issue be better managed to reduce the perception of wait duration or sequencing of the service process? Can music quality be enhanced to create a stronger emotional response from the attendees? Etc.

Overall, this chapter contributed to a better understanding of attribute categories based on Kano’s model, the use of moderated regression and multiple dependent variables. The original methods of Kano’s model were too complex; the moderated regression more closely follows the mathematical structure of Kano’s theory and addresses shortcomings of dummy coding methods and distorted classification due to skewed samples (e.g., extreme performance levels and overlooking average/common performance ratings using dummy coding exclusively). The use of multiple dependent variables provided a better understanding on how attributes impact consumer perceptions and behaviors – both when consistent and contrasting.
It should be acknowledged that more recent thoughts on tourism outcomes go well below notions or assessment of satisfaction or loyalty. For instance, several tourism research streams have considered the role or impact of tourism experiences on emotional feelings such as higher-order outcomes such as memories, well-being, quality of life, and happiness (Harrington et al., 2019). In a follow-up survey of Oktoberfest attendees, we found that on a 5-point scale (1 = strongly disagree to 5 = strongly agree) the mean was generally within the “agree” range for the Oktoberfest experience positively impacting attendees’ “sense of wellbeing” (3.87/5) and “life satisfaction” (3.86/5). While these results are preliminary and not empirically tested in categorizing attributes here, the business logic or desire to impact these visitor feelings as part of an outcome of a tourist experience has implication for future research and practitioners innovative implementation of tourism experiences.

**Limitations, implications and future research**

While the methods in this chapter address shortcomings of more simplistic methods, the approach is not without criticism. First, other research streams have suggested differing hierarchical models of attribute factors than Kano’s framework (Brechan 2006). Thus, future research could assess other models in the context of hospitality or tourism. Second, this research stream lacks validity tests for the method used in this study as well as other methods to enhance attribute classification power (Chen 2012). While this chapter contributes to our understanding when classifying attributes using moderated regression and multiple dependent variables, additional studies should test these relationships in different contexts, industries and geographic locations as well as how they are impacted by the entire customer journey (e.g. pre-activities through post-experience feelings, memories and behaviors).
The impact of repeat customers on attribute classification could also be considered in future studies as well as considering the shift of attribute categories over time, customer segments and unanticipated vs. anticipated attribute-satisfaction relationships.

Kano’s classification of quality attribute factors provided a framework for practitioners to more thoughtfully allocate limited resources to sustain competitive advantage. But, the original framework was too complex to allow for meaningful articulation of these relations. The approach in this chapter enhanced this ability in terms of both statistical calculation and with regards to the impact on varying consumer perceptions and behaviors. In general, the findings indicate a relationship between the majority of attribute types (12 out 16 attributes) and overall satisfaction and a composite of loyalty behaviors. With that said, it appears that basing attribute categorization and alignment of firm resources on loyalty behaviors rather than overall satisfaction is likely to be beneficial. While research has long supported the empirical relationship between loyalty and substantially higher profits and lower costs per customer (Bowen and Chen 2001; Reichheld and Sasser 1990), managers investing in attributes most closely associated with positive customer loyalty behaviors are likely to accrue benefits in profits and marketing impact (positive-word-of-mouth and more believed recommendations).

**References**


