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## Assessment Of Product And Service Attributes And Consumers' Willingness To Pay In The Vacation Ownership Industry Using The Kano Model And Conjoint Analysis

Amy M. Gregory  
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ASSESSMENT OF PRODUCT AND SERVICE ATTRIBUTES AND CONSUMERS'  
WILLINGNESS TO PAY IN THE VACATION OWNERSHIP INDUSTRY  
USING THE KANO MODEL AND CONJOINT ANALYSIS

by

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A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the College of Education  
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Orlando, Florida

Summer Term  
2011

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## **ABSTRACT**

The ongoing pursuit of understanding how consumers' expectations can be achieved or exceeded has long been an area of interest for academics and practitioners alike. A multitude of measures of satisfaction have been developed, applied, and adopted with the end goal of understanding how satisfied individuals, or groups of individuals, are with a given product, service, or specific attribute of a product. And, while both academic and practical research has identified and focused on explicit attributes relevant to particular products or services, the general consensus appears to support the thinking that higher satisfaction is better. But this may not hold true when one considers that not all attributes are equal in terms of their effect on overall customer satisfaction or that different customer segments may value product attributes differently. From this premise, the current research proposes a model that may be used to classify product and process attributes within the services industry, and augments the traditional method of data analysis in an effort to improve the efficacy of the information gathered.

The theoretical foundation of the study is based on a modified Kano Model, a research model that has been widely applied across a variety of industries and products. Responses from 3,231 consumers were collected in a nationwide survey conducted in the United States. A random sampling method was used with the intention of achieving sufficient heterogeneity among the study participants.

This study provides a comprehensive review of literature related to the Kano Model that has also been summarized in a tabular form (Table 3), providing the readers with a robust synthesis of literature (1984-2010) to include authors, publication dates, sources, titles, research contexts, etc. Further, since the Kano Model was initially developed more than 20 years ago in

1984 with a focus on manufacturing and durable goods, this study introduces a Modified Kano Model that may be better suited for evaluation of attributes related to services. In the Modified Kano Model, the attributes of the original Kano Model (Attractive Quality, One-Dimensional Quality, Must-be Quality, Reverse Quality, and Indifferent Quality) have been modified to better reflect the intangibility and other distinctive characteristics of services. The revised attribute categories have been titled as Desirable Attributes, Positive Attributes, Critical Attributes, Negative Attributes, and Zone of Indifference.

The study also provides an extensive discussion of conjoint analysis techniques, historical evolution, and a review of application of conjoint analysis across various industries; including research within and beyond the hospitality industry. Essentially this study delivers a primer on conjoint methodology. Related to the conjoint analysis components for this research, this study employs Sawtooth Software as the platform for the web-based questionnaire, as well as the data analysis. Sawtooth Software's products are the most widely used conjoint analysis systems in the world providing a variety of solutions from traditional full profile conjoint analysis to more advanced adaptive choice conjoint analysis techniques. This study employs the Choice-Based Conjoint technique; one of the most commonly used techniques in academic research. Choice-based conjoint provides respondents a series of set choices from which they express preferences for specific attribute combinations. Choice-based conjoint analysis is widely used due to its ability to simulate consumer behavior in the marketplace more precisely.

Through the use of the Modified Kano Model and choice-based conjoint analysis, this study assessed the role of process and product attributes in consumers' willingness to pay for and utilize products in the vacation ownership industry. The current study has identified product and process attributes that are preferred by the customer, categorized the attributes according to their

anticipated effect on customer satisfaction, and quantified customer preferences of each in order to establish customer attribute preferences within the vacation ownership industry. In a two-pronged approach, this study explored two distinct aspects of the consumer's vacation ownership experience: the purchase process and the use of the lodging product. Since it has been shown that the Kano Model is effective in categorizing attributes according to the anticipated effect on customer satisfaction in a manufacturing environment, a modified version of this model was extended to a service sector, the vacation ownership industry.

This Modified Kano Model was used to determine consumers' preferences for the vacation ownership product during its use, as well as throughout the purchase process. In addition, the Kano methodology was augmented through the use of Fong's test of statistical significance and Conjoint Analysis in an effort to improve the quality of the information gathered, and advance the efficiency and applicability of the instrument.

This study identified attributes of the vacation ownership product that are positively related to customer satisfaction. Specifically, the following attributes were categorized by the respondents as being positively related to their product satisfaction: 1) a sales executive to guide the prospective purchaser through the sales process, 2) a purchase incentive, 3) resort-like hotel services, i.e., concierge, 4) affiliation with an exchange company, 5) resort amenities, i.e., fitness center, 6) ability to trade for hotel program benefits, and 7) a vacation counselor to assist with vacation planning. In the Modified Kano Model they are described as *Positive Attributes* based on the relationship to product satisfaction.

Perhaps equally as important as understanding the positive effect of attributes is understanding which attributes have no incremental effect on product satisfaction. In this study, the majority of the respondents categorized the availability of a finance package and the presence

of onsite activities as attributes that neither added to their satisfaction or dissatisfaction with the product. These attributes are termed as *Zone of Indifference* in the Modified Kano Model since they neither add to nor detract from overall product satisfaction.

In an effort to quantify consumer preference for particular attributes, this study employed conjoint analysis to test the presence/absence of the study attributes in a series of simulations. Two fixed choice sets and a “none option” were also employed to improve the reliability of the results. The result of the conjoint simulation revealed that willingness to pay for the vacation ownership product varied based on product features, and it also varied across respondents.

Possibly the most imperative outcome of this research is that this study uncovered attribute preferences that have a significant influence on satisfaction or price paid for the vacation ownership product. The findings of the research were consistent with previous literature in that it was found that attributes of the product could be classified using the Modified Kano Model, and that consumers are satisfied with the product purchased. However, this research goes beyond previous studies in that it specifies the anticipated effect on satisfaction and consumer willingness to pay at the attribute level for both the purchase and use of the vacation ownership product. Further, while this research identified that consumers’ basic needs are being met and the industry is delivering on expectations related to attributes that contribute to overall satisfaction, it also uncovered opportunities for product development and pricing strategies that may assist in attracting new customers and expanding the vacation ownership segment of the lodging industry.

In addition to an explicit discussion of the results, this dissertation provides specific practical implications based on the findings. This research could be considered unique as it is a comprehensive view into customer satisfaction and willingness to pay related to both the

purchase and the consumption of a vacation product. As a result, an additional contribution could be the establishment of a benchmark for future studies.



This dissertation is dedicated to my children, who, perhaps unknowingly, sacrificed a lot during the last three years so I could accomplish a dream.

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## **CHAPTER ONE:**

### **INTRODUCTION**

#### Introduction

The purpose of this study is to assess the role of process and product attributes in consumers' willingness to pay and patronage in the vacation ownership industry. The strategy identifies consumer-acknowledged attributes that are preferred by the customer, categorizes the attributes according to their anticipated effect on customer satisfaction, and quantifies customer preferences of each in order to establish customer attribute preferences within the vacation ownership industry. In a two-pronged approach, this study explores two distinct aspects of the consumer's vacation ownership experience: the purchase process and the use of the lodging product.

This chapter begins by providing an overview of the premise of the study, the Kano Model, which has been found to be an effective tool to direct product development and positioning strategies in academic literature and practical application throughout a variety of industries. This is followed by a synopsis of the context of the study, the vacation ownership industry, and the justification of the importance of this study: gaps in existing literature and response to issues raised by industry. Next, the purpose of the study is explained, the research model is presented, the specific research questions are offered, and a description of the methodology employed is provided. The chapter concludes with a discussion of the significance of the proposed study, including its theoretical and practical contributions, as well as its limitations.

## Background

Oliver (1980) formalized the measurement of customer satisfaction through his suggestion that customer satisfaction could be understood by making a comparison between what was expected by the customer and what was received. If what was received exceeded the customer's expectation, the customer would be satisfied. On the contrary, if the expectations were not met, the customer was said to be dissatisfied. And while it may be argued whether satisfaction is transactional (Oliver, 1999; Yi, 1990), or relational (Johnson & Fornell, 1991), many have suggested that satisfying the customer is a requirement for a business' success (Anderson, Fornell & Lehmann, 1994; Matzler, 1998; Oliver, 1999; Yi, 1990).

Researchers have measured customer satisfaction and categorized attributes according to their fulfillment of minimum requirements or additive value (Churchill & Suprenant, 1982). It has been suggested that identifying where consumers place value and making the most of these core competencies, the firm may create a higher level of customer satisfaction (Matzler, 1998). Until this point, research seemed to suggest that higher satisfaction on all attributes was what companies should seek.

In 1984, Kano, Seraku, Takahashi & Tsuji contemplated that not all product attributes are equal in terms of their relationship to customer satisfaction levels. Kano et al. surmised that certain attributes may produce higher satisfaction and that consumers may have differing requirements as to the functional attributes of products. From this premise, Kano et al. challenged the traditional customer satisfaction models through a suggestion that more specific origins of customer satisfaction could be understood by understanding the functional requirements as well as the satisfaction ratings of customers. The results of this type of research

could then be used by companies to increase customer satisfaction, maintain (or gain) a competitive edge, or to differentiate themselves in the marketplace.

Kano's Model has been applied widely within academic research (e.g., Bhattacharyya & Rahman, 2004; Emery & Tian, 2002; Emery & Tolbert, 2003; Fuller & Matzler, 2007; Schvaneveldt, Matzler & Hinterhuber, 1998; Wang, T., & Ji, P., 2010; Yang, 2003 & 2005) and within a variety of contexts such as manufactured consumer products (Miyakawa & Wong, 1989), consumer services including banking, cleaning services, restaurants, and grocery stores (Schvaneveldt, 1991), the retail ski product industry (Matzler & Hinterhuber, 1998), studies in employee satisfaction (Matzler, 2004) and student/professor satisfaction (Emery, 2006), as well as transportation (Silvestro & Johnson, 1990, Shahin, 2004; Shahin, A., & Zairi, M., 2009). Most recently, Yang, Cheng., Sung, and Withiam (2009) proposed a strategic pricing model for the lodging industry via an adaptation of the Kano Model; suggesting that the results of the Kano questionnaire could direct lodging providers toward continuing, outsourcing, or discontinuing certain components of their product offering in an effort to reduce costs for both the provider and the consumer.

Because increasing costs are also a concern for the vacation ownership industry, despite its unparalleled growth rates (Stringam, 2010), this study identifies specific attributes that could be used to develop a positioning strategy for the vacation ownership product that is built upon attribute level customer satisfaction using a Modified Kano Model. Because the original Kano Model was initially developed for, and subsequently adopted by the manufacturing industry, modification of the model to make it more appropriate for services may be more suitable for the hospitality industry. Further, because the results of the Kano Model are derived from frequencies, this study also employs conjoint analysis to improve the statistical reliability of the

results, in order to identify consumer preferences for particular attributes and price points which may assist the industry in addressing increasing costs. It has been suggested that conjoint analysis may provide more accurate insight into consumer preference at the attribute level since it reveals utility ratings for individual attributes that bundled together comprise a multi-dimensional product. And, since conjoint analysis forces consumers exposed to a variety of attribute combinations into a trade off analysis, the utility of each attribute can be calculated by the researcher (Green & Wind, 1975).

### Problem Statement

Research in the vacation ownership industry is limited, despite the fact that the timeshare industry has been touted as the fastest growing segment in the travel industry (Gilligan, 2006; Hayward, 2005; Ragatz, 2007; Scoviak, 2004 & 2003). The strengths of the industry, i.e., physical product and human elements (Stringam, 2010) have been researched for understanding within the academic arena, as well as from a satisfaction perspective (Crotts & Ragatz, 2002; Kauffman & Upchurch, 2007; Lawton, Weaver, & Faulkner, 1998; Sparks, Butcher, & Pan, 2007; Stringam, 2008; Upchurch & Gruber, 2002). However, industry executives rank their concerns for increasing sales and marketing costs within the industry as one of the primary issues that must be addressed in order for the industry to thrive (Stringam, 2010). Although sales volumes are increasing, rising product costs and declining sales efficiencies experienced within the industry are squeezing profit margins. Current industry practices and the present uncertain economic climate offer an opportunity to explore innovations in product development or positioning methods that will not negatively impact prospective purchasers' intentions to buy.

### Purpose of the Study

The purpose of this study is to assess the role of process and product attributes in consumers' willingness to pay and patronage in the vacation ownership industry. The strategy identifies consumer-acknowledged attributes that are preferred by the customer, categorizes the attributes according to their anticipated effect on customer satisfaction, and quantifies customer preferences of each in order to establish customer attribute preferences within the vacation ownership industry. In a two-pronged approach, this study explores two distinct aspects of the consumer's vacation ownership experience: the purchase process and the use of the lodging product. Since it has been shown that the Kano Model is an effective way of categorizing attributes according to the anticipated effect on customer satisfaction in a manufacturing environment, a modified version of this model will be used to determine where consumers find value in the vacation ownership product, a service-based product. In addition, the Kano methodology will be augmented through the use of conjoint analysis in an effort to improve the information gathered, and advance the efficiency of the instrument.

Previous research in the vacation ownership industry has been focused on consumer use of the product, but industry experts recognize that the sales and marketing methods need improvement to address the rising costs (Stringam, 2010). As such, this research study will address both the purchase process and the usage process of the vacation ownership product by investigating consumer stated preferences toward the presence of attributes at the time of purchase as well as during their use of the product.

This study contributes to current research by further categorizing vacation ownership product attributes according to their expected effect on overall product satisfaction. It is expected that this categorization will allow researchers and practitioners to identify the particular

attributes that are important to customer satisfaction and that are related to customer value, uncover opportunities for product positioning, and provide direction for further product development. To address these issues, this study will 1) propose a research instrument that will effectively measure customer expectation of the presence of the product attributes, 2) categorize these attributes according to the expected effect on customer satisfaction, 3) quantify the preferences associated with the presence of the attribute, and 4) using price as a stated attribute, evaluate if differences in willingness to pay exist based on product attributes.

### Theoretical Framework

The theoretical framework of this study is based on previous research that identified product attributes related to customer satisfaction with the vacation ownership product, as well as areas for improvement in the sale of the product, more specifically, the opportunity to improve sales and marketing methods. Previous research has identified that consumers are satisfied with the resort-like amenities of the vacation ownership product, the ability to enjoy a variety of vacation experiences, knowledgeable counselors to assist with the vacation planning process, value for money spent, and the pride of ownership (Crotts & Ragatz, 2002; Kauffman & Upchurch, 2007; Lawton, Weaver & Faulkner, 1998; Sparks, Butcher, & Bradley, 2008; Sparks, Butcher & Pan, 2007; Stringam, 2008; Upchurch & Gruber, 2002).

While previous studies appear to be adept at uncovering the attributes related to customer satisfaction, perhaps they fall short in that they do not address the more significant issues facing the industry today (Stringam, 2010). To this end and through the use of a Modified Kano Model and conjoint analysis, this study will uncover how consumers categorize the presence (or absence) of these attributes and the expected effect on overall satisfaction during the purchase

process and the use of the product. Understanding consumers' expectations of the product attributes and their preferences related to these attributes will provide a platform for product positioning and product development that capitalizes on particular attributes that resonate with consumers. If accomplished, there is also an expected outcome of improved sales and marketing efficiencies if a strategy that focuses on consumer attribute preference is adopted.

### Research Questions

This study will address the following research questions:

1. Which attributes of the vacation ownership product result in customer satisfaction when present, but no dissatisfaction if they are not present?
2. Which attributes of the vacation ownership product are positively related to customer satisfaction?
3. Which attributes of the vacation ownership product are minimum requirements for customers, i.e., without these attributes dissatisfaction decreases, yet their existence does not necessarily improve satisfaction?
4. Which attributes of the vacation ownership product are customers indifferent to, i.e., no impact to satisfaction/dissatisfaction based on presence or absence of these attributes?
5. Which attributes of the vacation ownership product are inversely related to customer satisfaction?
6. Do differences exist in customer willingness to pay for vacation ownership products based on product attributes?

## Methodology

This research examines consumer's requirements and preferences for particular attributes of the vacation ownership product purchase process and usage process through the implementation of a quantitative survey administered to current vacation ownership owners in the United States. The survey instrument is based on the Kano Model questionnaire format, a thorough literature review, and input from industry experts. The research is designed to gather consumer input in order to differentiate the various attributes according to consumer requirements and preferences for that attribute.

Participants in the study are qualified to participate if they own a vacation ownership product and were selected through random sampling of vacation ownership owners associated with one of the largest vacation ownership companies in the United States. For the purpose of this study and to address the research questions related to the purchase process and the usage of the vacation ownership product, it is imperative that participants have purchased the product and are familiar with the sales process and the various aspects of the product usage.

## Significance of the Study

Despite the prominence of the vacation ownership industry, relatively little academic research exists in this area. While vacation ownership owners are generally satisfied with their product (Crotts & Ragatz, 2002; Kauffman & Upchurch, 2007), it appears as if academic research has not differentiated vacation ownership product attributes according to their expected impact on satisfaction levels. This differentiation of attributes may allow for increased satisfaction with the product, product positioning, and product development strategies. In fact,



industry executives report that declining effectiveness of current sales and marketing practices is one of their greatest concerns (Stringam, 2010).

This research applies methodology to the hospitality industry that has been successful in guiding product development and competitive positioning across a variety of industries in an effort to address a gap in academic literature and practical application. In addition, this research expands academic literature within an under-researched category of the hospitality industry and establishes a platform for future research in various lodging categories and segments.

Finally, this research may be the first to explore the vacation ownership purchase process from the consumer's perspective. This research may provide valuable insight for industry practitioners and researchers to understand the expected preferences that consumers attach to particular attributes of the vacation ownership product purchase and usage.

#### Limitations

Even though the research participants were sourced through one of the largest vacation ownership companies in the industry, it is possible that participants' responses could be affected by the characteristics of the particular company and perhaps the more specific experiences of their timeshare vacations with that company. In related fashion, although the survey does not specifically mention attributes, aspects, or characteristics unique to any particular vacation ownership company, survey respondents may provide answers in the survey that relate specifically to the company that extended the invitation for them to participate. As a result, the responses may not be representative of the larger demographic represented by the vacation ownership product.

Due to the intended comprehensive nature of the study, the research will be gathered by asking participants to recall information from previous vacation ownership purchase and usage processes. It is possible then that recall may be impacted by uncontrollable factors.

Attributes utilized in the study were gathered from previous research and industry input. While extensive efforts were made to compile an exhaustive list, it is possible that the attribute list is not comprehensive.

Because of the complexities of the vacation ownership product, the survey targets individuals who own and have used their vacation ownership product in order to ensure an understanding of the product. It is possible that the intentional exclusion of non-owners may influence the results of the research since individuals who chose not to buy the product may have made that decision based upon their dissatisfaction with certain product and/or service attributes.

For the aforementioned reasons, the findings of this study should be generalized with care. Replication of the study to uncover excluded attributes and to validate the findings could address the limitations identified.

In addition, Kano's Model has been criticized since it categorizes attributes but does not quantify the numerical or qualitative performance of the attributes. Further, the model provides no explanation of the drivers of consumer perceptions, why particular attributes are important, and what the behavioral intentions are (Bharadwaj & Menon, 1997).

## **CHAPTER TWO:**

### **LITERATURE REVIEW**

#### Introduction

Chapter two provides the theoretical foundation of the study by addressing the areas that are critical in establishing the underpinnings for the study. The chapter begins with an introduction to customer satisfaction before delving into an overview of the Kano Model, including the framework and methodology. This is followed by an in-depth synthesis of academic literature published on the Kano Model together with its application within and beyond the hospitality industry. Next, a thorough overview of academic literature in the vacation ownership industry is provided in order to establish the context of the research. This is supplemented by general literature on the current state of the vacation ownership industry to shed light on the research opportunity and the gap that exists in current academic literature.

#### Customer Satisfaction

Customer satisfaction has been an issue of research, both in academia and industry, for many years. In fact, it has been suggested that customer satisfaction is a requirement for a business' success (Anderson, Fornell & Lehmann, 1994; Griffin & Vacalores, 2004; Kozak, 2001; Matzler, 1998; McCarther, 2000; Oliver, 1999; Yeung & Ennew, 2000; Yi, 1990). Further, there is general agreement that customer satisfaction is the result of the evaluation of the actual product/service performance in comparison to one's prior expectations (Kotler, 1984; Oliver, 1980). As first formalized, Oliver (1980) suggested that customer satisfaction can be understood through the use of a disconfirmation model within the expectation paradigm.

According to Oliver, satisfaction is measured through a comparison of performance between what is expected and what has been received. If what has been received exceeds expectation (positive confirmation), customers are satisfied. On the contrary, if expectations exceed performance (negative disconfirmation), customers are dissatisfied. When expectations and performance are equal, Oliver suggests there is a point of indifference. Underlying Oliver's thinking is that satisfaction is a result of a transaction, episode or service encounter (Oliver, 1999; Yi, 1990). On the contrary, it has been suggested that satisfaction is cumulative and is comprised of a customer's overall evaluation of products/services as a result of a series of encounters or exchanges (Johnson & Fornell, 1991).

According to Churchill and Suprenant (1982), the importance of the topic and its connections between marketing efforts, consumption, and post purchase process has resulted in the development and measurement of operational guidelines in order to bring more concrete meaning to the concept. Studies propose that services and product attributes may be grouped together based on fulfilling minimum requirements or adding value. Minimum requirements consist of all basic features along with elements and processes that attend to minimal expectations and demands of consumers. On the contrary, features that add value allow the provider to exceed consumer expectations by providing them, yet the absence of these features may not work negatively against the provider (Maddox, 1981).

Matzler (1998) suggested that identifying where satisfied customers place value and exploiting these core competencies of the firm may create a higher level of customer satisfaction and loyalty. Matzler exemplified this thinking in his study relating customer loyalty and market share in the ski equipment industry wherein the relationship between market share over several years was related to loyalty of satisfied customers based on their self ranking of satisfaction.

Matzler concluded that the higher the retention rate, the higher the future market share would be. Later, Matzler and Hinterhuber (1998) concluded that while certain attributes increase satisfaction, there are other attributes that fulfill expectations but do not contribute to increased satisfaction when fulfilled.

Anderson and Sullivan (1993) investigated the antecedents and consequences of customer satisfaction and developed a model that tested hypotheses from satisfaction literature using consumer products and services in Sweden. One particular finding of interest in their study was the relationships of elasticity of repurchase intentions to satisfaction levels. The results of their model showed that higher satisfaction results in greater intentions to repurchase and that the results were additive over time. On the contrary, other studies have revealed potential deficiencies of satisfaction measurement and the possible erroneous belief that satisfaction and loyalty are positively correlated (Jones & Sasser, 1995; Reichheld, 1996).

Mittal, Kumar, and Tsiros (1999) cautioned against ignoring the relationship between attribute level evaluations and overall satisfaction. They pointed out that this relationship is dynamic and it changes over time as shown in their study within the automotive industry. Further, they distinguished between product satisfaction and service satisfaction, noting that these relationships are asymmetrical and do cross over in time when a service subsystem is in place. This is evident during the time of consumption, because service satisfaction has a larger cross over effect than product satisfaction. As time passes the asymmetry will reverse, and product satisfaction has a greater effect than service satisfaction, still allowing them to cross over in time (Mittal, Kumar, & Tsiros, 1999).

According to Heung and Ngai (2008), the customer is the only one that can measure or give value to the establishment. Their study found that customer satisfaction is a key mediator

for perceived value and customer loyalty. Specific to the lodging industry, it has been suggested that individual satisfaction is paramount enough to command substantial presence within personal accounts volunteered by consumers (Maoz, 2004; Small, 2003). In addition, Woodruff (1997) recognized an apparent relationship between satisfaction and value, and suggested that an improved understanding of customer satisfaction can be attained through extensive examination into consumer value. Gallarza & Saura (2006) suggested that quality is a precursor of perceived value and satisfaction is the behavioral consequence of the value expectation. This is consistent with much earlier research conducted by Howard & Sheth (1969), Kotler & Levy (1969) and has played out empirically as a positive effect of value on satisfaction (Cronin & Taylor, 1992; Fornell et al., 1996; Weiner, 1986).

As discussed and in summary, it has been suggested that customer satisfaction is highly recommended for a business' success (Matzler, 1998; Anderson, Fornell & Lehmann, 1994; Oliver, 1999; Yi, 1990). Further, there is general agreement that customer satisfaction is the result of the evaluation of the actual product/service performance in comparison to one's prior expectations (Kotler, 1991; Oliver, 1980). In addition, satisfaction levels may be differentiated depending on whether consumers consider the feature to be fulfilling minimum requirements or adding value. Minimum requirements consist of all basic features along with elements and processes that attend to minimal expectations and demands of customers. Features that add value allow the provider to exceed consumer expectations by providing them, yet the absence of these features may not work negatively against the provider (Matzler, 1998; Matzler & Hinterhuber, 1998; Maddox, 1981). It is from this premise; researchers have attempted to determine how specific product attributes, or attribute types, relate to satisfaction and/or dissatisfaction.

### An Overview of the Kano Model

In a methodical approach to understand the relationship among attributes or categories of attributes and customer satisfaction, Kano, Seraku, Takahashi, & Tsuji (1984) speculated that, in addition to the subjective component related to customer satisfaction of a particular product attribute, researchers and practitioners should also consider the objective component of the quality of performance for the attribute. From the assertion that performance on certain attributes produces higher customer satisfaction, Kano et al. challenged the traditional customer satisfaction models that suggest higher satisfaction on all attributes is better, through a proposition that not all attributes are equal in the customer mind.

According to Kano, et al., (1984) understanding the functional requirements of a product attribute in addition to the satisfaction rating, could reveal the origin of customer satisfaction, as well as the features or attributes that a company should focus on in order to be competitive, increase customer satisfaction, or to differentiate themselves within the marketplace (Kano, et al., 1984). This multi-dimensional measurement provides the basis for Kano's Model which plots satisfaction on the y axis, attributes performance on the x axis, and reveals the predicted effect on satisfaction based on expected attribute quality (Figure 1). Five categories of attribute quality are revealed and will be discussed further in the next section. It is from these categories, that Kano suggests recommendations for product development or product positioning may be formed.

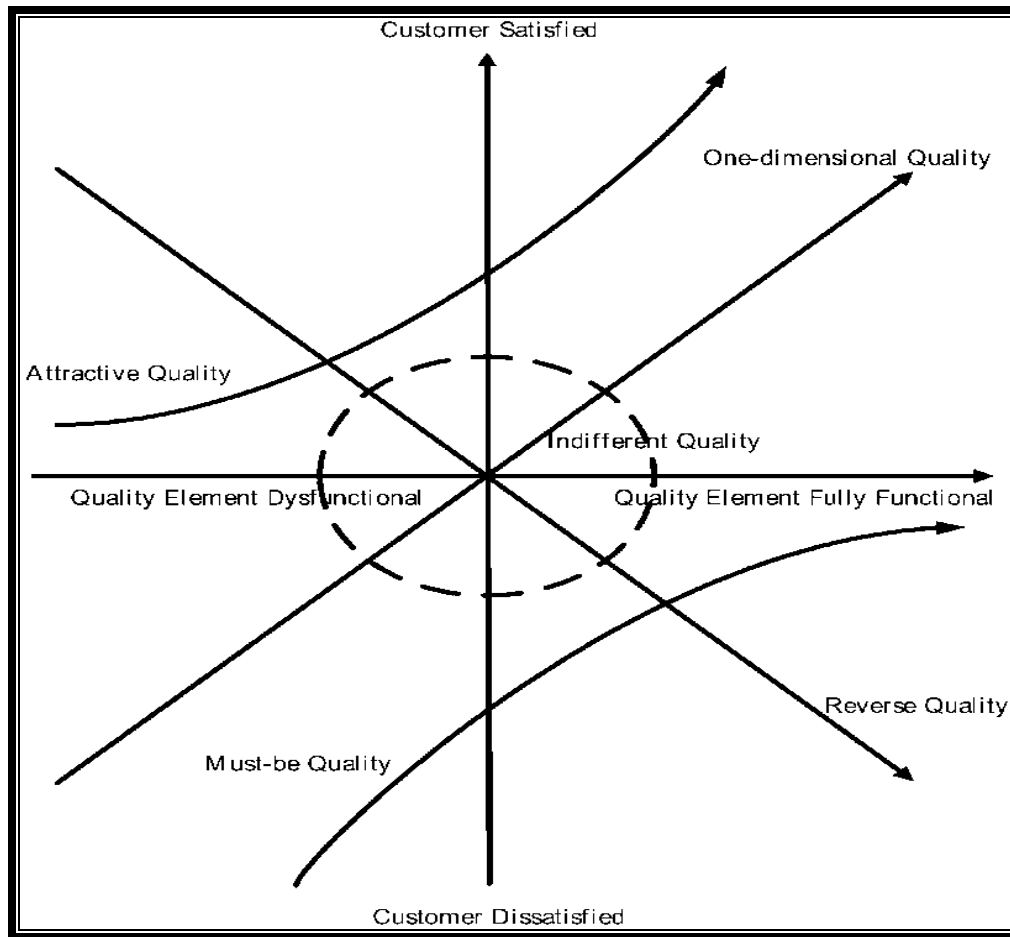


Figure 1: Kano Model

Kano proposed that satisfaction was likely more advanced than simply satisfying essential performance requirements. Rather, it was more probable that consumers had aspirations for and utilized particular aspects that went beyond the basic product attributes. To uncover specific attributes that should be included in research, Kano suggested listening to the “voice of the customer” through direct feedback (existing satisfaction surveys, product complaints, focus groups, etc.), as well as getting input from management regarding positioning strategies, stated product features, competitive offerings, etc. In other words, there may be inherent attributes that are not readily identified that contributed to customers’ perceptions of overall satisfaction. Kano



et al. (1984) proposed that product attributes could be divided into five categories according to the expected effect on satisfaction:

1. Attractive Quality:

Attractive quality results in customer satisfaction if these attributes are present, but no dissatisfaction if they are not present. These attributes are not expected, but are appreciated when provided. Attractive attributes, also referred to as “excitement needs” or “delighters,” have been described as those of which the customer may not have conscious knowledge. These are unexpected attributes that provide a point of differentiation for the provider. Proactively preparing for anticipated requests anticipated requests is considered an Attractive Quality. Here are some examples from the lodging industry, i.e., feather pillows, a roll away bed or extra blankets in advance of the returning customer requesting; these items could be categorized as “delighters.”

2. One-dimensional Quality:

Also referred to as performance needs; these are those attributes that are positively related to customer satisfaction. In other words, the higher the positive performance of these attributes, the greater the level of customer satisfaction. These attributes are listed by customers as keys to their satisfaction. Examples from the lodging industry include promptness of wait staff, on-time airline arrivals/ departures, greater gas mileage per gallon of gasoline; in short it is the ability of a product to support or exceed stated claims.

3. Must-have (must-be) Quality:

Without these attributes dissatisfaction increases, yet their existence does not necessarily improve customer satisfaction. These have been referred to as minimum

requirements or “entry requirements” and are requirements for the provider to compete in the marketplace. These attributes are also described as “basic needs” and refer to the attributes that are expected by the customer. Examples from the lodging industry include presence of restroom facilities within a restaurant, lobby area in a hotel, color TV in a hotel room, working elevator in multistoried hotel.

4. Indifferent Quality:

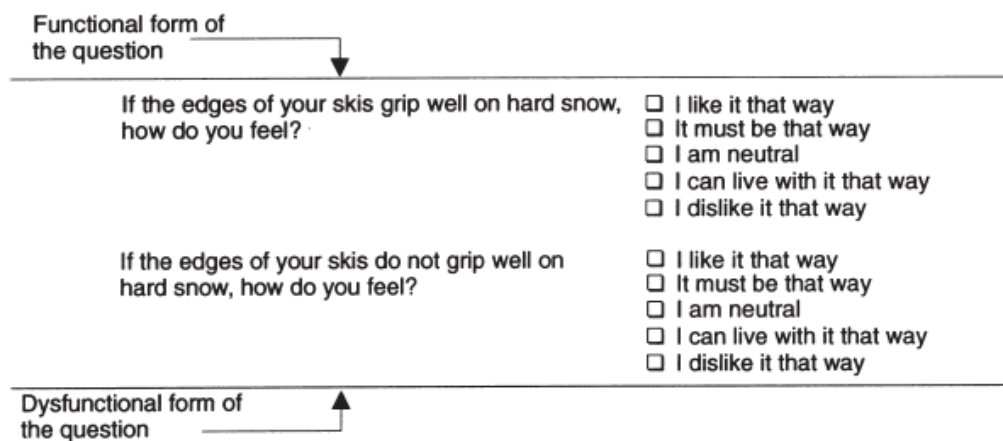
There is no substantial impact to customers’ satisfaction or dissatisfaction based on the presence or absence of these attributes. These attributes have no impact on customer satisfaction. An example from the lodging industry might include soft music in the lobby and common areas.

5. Reverse Quality:

Contrary to must-have (must-be) attributes, reverse attributes cause dissatisfaction when present and satisfaction when absent. These attributes have a negative impact on satisfaction. Examples from the lodging industry include discourteous or non-attentive staff, and long wait times at the front desk.

It is important to note here that Kano’s original model allows for and recognizes questionable attributes; those that did not consistently fall into one of the above five categories. Additionally, Kano’s Model is often referred to as having three attributes: attractive, one-dimensional and must-have, rather than the five listed above. These are also more commonly referred to as delighters, satisfiers and basic needs. The apparent evolution and reduction from five attributes to three is presumably due to the fact that the Kano Model has been applied most often in the area of quality improvement and/or product development, wherein indifferent and reverse attributes would not be the focus (Ting & Chen, 2002).

In order to determine the appropriate category for a particular attribute, Kano suggested the traditional satisfaction question be accompanied by statements referring to specific attribute functional quality. Satisfaction ratings were gathered by way of a seven point Likert scale (1 = not satisfied to 7 = satisfied). However, in order to derive the functional requirements, Kano's unique approach utilized a statement describing the product attribute in a fully functional state, as well as a contrasting statement describing the same attribute in a dysfunctional state. These statements were differentiated only by the fact that one related to the presence of the attribute ("How would you feel if the product had the attribute?") and the other related to the absence of the attribute ("How would you feel if the product did not have the attribute?"). Respondents chose from five categorical responses for attribute functionality: like, must-be, neutral, live with, dislike for both the functional and dysfunctional states. The responses equate to categorical labels provided for the Kano functional/dysfunctional questions ("How would you feel if the product had/did not have the attribute?") presented in the questionnaire (Figure 2).



(Matzler, 1988)

Figure 2: Kano Questionnaire

Kano (1984) suggested that customer responses to functional (having the attribute) and dysfunctional (not having the attribute) statements related to the attribute, could then be sorted into one of the five quality categories. By evaluating the frequency of the responses of two answers to each of the functional and dysfunctional questions jointly, the product features could be classified using the Kano Model (Table 1). Through this categorization of attributes and expected resultant level of satisfaction, research could aid in directing product development efforts and product positioning strategies accordingly. For example, if the answer provided for the functional form of the question (If the edges of your skis grip well on hard snow, how do you feel?) was “I like it that way” and that answer is evaluated with the response on the dysfunctional form of the question (If the edges of your skis do not grip well on hard snow, how do you feel?), such as “I dislike it this way”, the Kano Model would suggest this is a one dimensional attribute. In this case, the presence of this attribute is positively related to satisfaction.

Table 1: Categorizing Responses Using the Kano Model

		<b>Customer Requirements</b>				
		<b>Dysfunctional</b>				
		<b>Like</b>	<b>Must-have</b>	<b>Neutral</b>	<b>Live with</b>	<b>Dislike</b>
<b>Functional</b>	<b>Like</b>	<i>Questionable</i>	<i>Attractive</i>	<i>Attractive</i>	<i>Attractive</i>	<i>One Dimensional</i>
	<b>Must-have</b>	<i>Reverse</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Must-have</i>
	<b>Neutral</b>	<i>Reverse</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Must-have</i>
	<b>Live with</b>	<i>Reverse</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Indifferent</i>	<i>Must-have</i>
	<b>Dislike</b>	<i>Reverse</i>	<i>Reverse</i>	<i>Reverse</i>	<i>Reverse</i>	<i>Questionable</i>

According to Kano, all customer requirements are not created equally and the resolution of each requirement does not produce the same level of satisfaction. It is not only important for providers to understand the various requirements of their customers, but also to quantify the positive or negative impact of satisfying those requirements. As Emery and Tian (2002) summarized, Kano's Model suggests that there are four important objectives to accomplish encompassing the broader requirement of understanding customer needs. First, basic needs must be met. The inability to meet the basic needs of one's customers results in a considerable negative effect on customer satisfaction. Second, because of the linear relationship of one dimensional attributes (satisfiers) and customer satisfaction, the more one dimensional attributes that can be identified and delivered upon, the greater customer satisfaction is likely to be. Third, because "attractive attributes" or "delighters" provide increased satisfaction when they are present, but no dissatisfaction when not present, it is important for providers to understand these elements and seek to achieve them. Attractive elements can become a point of differentiation among competitors, however, as they become more common may fall into the basic need category. Thus, the fourth point, attractive elements may only be temporary in nature according to the degree of customer expectation or competitive differentiation. It is perhaps this last point and the ability of the Kano Model to accommodate these changes in attribute classification over time that led to its wide acceptance in comparison to previous models (Matzler, 2004).

Previous research has demonstrated that Kano's Model can be useful in categorizing attributes according to customer preference. In addition, applying the results of the Kano Model has been helpful in guiding product development and services offerings. Kano's Model has been applied widely within academic research (e.g., Bhattacharyya & Rahman, 2004; Emery & Tian, 2002; Emery & Tolbert, 2003; Liu, 2008; Liu & Wu, 2009; Schvaneveldt, Enhawa & Miyakawa,

1991; Fuller & Matzler, 2007; Schvaneveldt, Matzler & Hinterhuber, 1998; Yang, 2003 & 2005) and within a variety of contexts such as manufactured consumer products (Miyakawa & Wong, 1989), consumer services including banking, cleaning services, restaurants, and grocery stores (Schvaneveldt, 1991), website design, (Von Dran, Zhang & Small, 1999), the retail ski product industry (Matzler & Hinterhuber, 1998), transportation (Silvestro & Johnson, 1990), as well as studies in employee satisfaction (Matzler, 2004) and student/professor satisfaction (Emery, 2006). The next section explains the aforementioned studies in greater detail.

### Application of the Kano Model

Kano's Model has been praised and challenged; yet it has withstood a variety of challenges and continues to be applied more than 25 years after its inception. Following is a chronological review of the Kano Model in academic research.

In the seminal publication published by Kano et al. (1984), it was suggested that categorization of product attributes according to customer expectation of functionality combined with satisfaction ratings on these attributes could provide the required direction for companies' product development efforts and product positioning strategies. Kano's theoretical approach applied in the context of television sets and clocks, established a framework for identifying attributes that are critical to quality, created an instrument for data gathering and analysis, and provided the direction for application dependent upon the providers strategies and/or capabilities. Introduced during an era of market segmentation and specialized product development, the model has been applied within a variety of industries and contexts.

Matzler and Hinterhuber (1998) incorporated the Kano Model with Quality Function Deployment (QFD), a method to transform user demands into design quality and ultimately

specific elements of the manufacturing process (Akao, 1970; Revelle, Moran & Cox, 1998). Matzler and Hinterhuber's application was in the area of product development to demonstrate how projects could be more successful through the use of the two models. In a case study involving the ski industry, Matzler and Hinterhuber emphasized the importance of the "voice of the customer" through administration of Kano's principles, data collection and analysis to develop a step by step approach for product development that ensured specific attributes related to customer satisfaction are incorporated. In a case study approach using the ski industry, Matzler and Hinterhuber verbally gathered the attributes to be included in the product after speaking with purchasers of ski equipment. These attributes were assembled into a survey using the Kano questionnaire design. After categorizing the results and tallying the responses by category, Matzler and Hinterhuber concluded that "edge grip" was a "must be" requirement; "ease of turn" was a "one dimensional requirement" and "service of edges and base" an "attractive requirement." Further, Matzler & Hinterhuber were able to identify a potential market segmentation opportunity with "edge grip" as these scores were spread across multiple categories. Further inspection revealed that the significance of this attribute depended upon the skill of the skier.

Similarly, Tan & Shen (2000) incorporated the Kano Model into the planning stages of Quality Function Deployment (QFD) to improve upon the understanding of the voice of the customer with emphasis on the nature of customer feedback. Tan & Shen formulated an approximate transformation function to adjust the improvement ratio of each customer attribute in order to achieve the preferred customer satisfaction performance. This approach further emphasized two of the greater benefits of Kano's Model: confirmation of choice when trade offs are necessary and product/service differentiation in an increasingly competitive marketplace

(Tan & Pawitra, 2001). Sireli, Kauffmann, & Ozan (2007) had a similar premise in recognition of the potential shortcomings of QFD and incorporated the Kano Model in order to refine the QFD method for an application in design of cockpit weather systems.

As another testament to the Kano Model, Tan & Pawitra (2001) recognized the strengths of the Kano Model against the backdrop of SERVQUAL. Three shortcomings of SERVQUAL were identified in an arena of increased market competition where the need for product innovation, as opposed to process improvement, became critical in retaining and attracting customers. SERVQUAL presumes a linear relationship exists between customer satisfaction and service attribute performance although this may not always be the case. In addition, the expected linear relationship between attribute performance and satisfaction does not necessarily consider the customers' expectations of the particular attribute, its role in differentiation, or the level to which it may simply be taken for granted. Finally, SERVQUAL has been accepted as a continuous improvement tool rather than a tool that facilitates innovation based on customer preferences. The authors commend the Kano methodology for addressing the shortcomings in the assumption of a linear relationship between attribute performance and satisfaction, primary focus from previous research and practices for continuous process improvement (versus innovation), and the potential to address the gaps that exist between anticipated and actual service delivery.

As an extension to previous research, in 2003 Pawitra & Tan incorporated QFD, SERVQUAL and the Kano Model in an effort to understand the effectiveness of tourism marketing in Singapore by the tourism board. The premise of the study, similar to a later study by Baki, Basfirinci & Cilingir (2009), is that SERVQUAL was appropriate but not sufficient to prioritize the areas of improvement. Incorporating the Kano Model, the researchers were able to



identify attributes worthy of further focus through an expected linear relationship of improvement and resultant satisfaction increases. The QFD Model was then applied in order to design action plans to narrow the gaps between customer predictions and expectations regarding actionable attributes that would improve customer satisfaction with Singapore as a tourist destination. This approach is consistent with later studies by Tontini (2007) and Tontini & Silveira (2007) who began referring to this approach as narrowing the improvement gap.

In a different approach, Ting & Chen (2002) scrutinized the premise of the five categories of the Kano Model through the use of natural logarithms to challenge the assertion of the model. Through a study of 43 attributes of hypermarkets (supermarkets) using more than 400 consumer responses, the authors were able to lend support to the claims of the categorical attributes according to what Kano originally claimed.

In an interesting twist on investigating customer satisfaction, Emery & Tian (2002) adopted the Kano Model as a premise for instructor satisfaction with student work. Throughout the course of two years (four semesters), two instructors explained to students that their final grade would be a product of the instructors' satisfaction with their performance on various projects, both in a group setting and individually. Using the Kano Model and the Delighters, Satisfiers and Basic Needs as the premise for course instruction, the students (producers of the project to be graded) had to learn from the instructors (the customers) what attributes of their product were expected and how performance on each of those attributes would impact satisfaction. Analysis of student evaluations, course grades and grade point averages revealed positive correlations between increased understanding of the professor's expectations and satisfaction levels, and course grades, as well as overall individual student grade point averages. A similar study was conducted by Emery in 2006 with 95 faculty members in a state university.

The results of this study also revealed that the Kano methodology was effective in identifying consistent and quantifiable categories of faculty expectations for student performance.

In a comparable approach, Emery & Tolbert (2003) aimed to help 270 supervisors qualify and quantify the expectations of their employees from 30 different business for-profit and not-for-profit organizations from both the manufacturing and services sectors. The core expectations were differentiated using the Kano Model. Regardless of the variations across the businesses and industry sectors, Emery & Tolbert were able to clearly identify basic needs (attendance, attitude, accountability, performance), satisfiers (initiative, team player, time management, continuous learning, goal setting), and delighters (leadership, innovation, problem solving) from the data. In conclusion, Emery & Tolbert (2003) demonstrated that the Kano Model was an appropriate approach to developing expectation, performance, and improvement strategies within the workplace.

Yang (2003) incorporated the Kano category classification methodology into a study on home appliances. Through multiple survey methods and further classification of the identified attributes, Yang identified 15 attributes for home appliance products. Each of the attributes was classified into the five Kano categories revealing variations in expected performance and related satisfaction according to the results received. Yang effectively points out the additional information that the Kano methodology provides exceeds those of traditional satisfaction surveys by revealing the attributes that are differentiated by consumer expectations of satisfactory performance versus those that merely have a rated as satisfactory or unsatisfactory. Traditional satisfaction surveys would have recommended that the provider focus on attributes that are less impactful on customers' overall satisfaction rather than identifying those identified as basic needs, satisfiers and delighters.

In Matzler's 2004 study on employee satisfaction, three important implications were identified. After successful application of the Kano Model within the arena of employee satisfaction, in comparison to its typical application in customer satisfaction, Matzler concluded that the importance of attributes is a function of satisfaction; attributes cannot be classified into one of Kano's categories a priori; the model allows for the dynamic nature of attribute categorization over time.

In a 2004 study, Bhattacharyya & Rahman applied the Kano Model to a study on banking services pointing out that the ease of using the Kano Model to produce results quickly with very little mathematical computation. In particular, the study was conducted in order to determine what attributes of the bank's services were attractive to existing account holders in order to increase traffic flow through the branch. After doing exploratory research using secondary data in the industry and speaking with bank management as well as current account holders, the authors identified five principle dimensions for the study. In all 39 attributes were identified and the survey was administered to 50 individuals who had an existing relationship with the bank. The authors were able to identify and categorize the attributes important to various segments of bank's customers that would help the bank improve satisfaction in areas that would increase business from the existing customer set.

Also in 2004, Kuo adopted the Kano Model to provide further understanding for web community service quality attributes. Kuo was able to effectively categorize service quality attributes according to Kano's categories using the two-question approach addressing functional expectations of web service quality. Kuo added a satisfaction increment (and dissatisfaction decrement) index in order to suggest the movement on customer satisfaction if the related attributes were improved upon. Similar to other authors, Kuo pointed out the improvement that

the Kano Model has in identifying attributes worthy of focus for producers interested in finding the key to customer satisfaction rather than a traditional tally of satisfaction-only scores.

In 2007, Sireli, Kauffman, and Ozan adopted the Kano Model to develop a cockpit weather information system. In accordance with requirements gathering from various sources, the authors gathered information on 30 attributes organized into five dimensions to be included in the survey. Using the Kano methodology, the authors were able to discern discrete categories of attributes that could assist in providing direction for product development among complex products.

It has been suggested that while Kano’s Model effectively categorizes product attributes according to expected satisfaction impacts, Yang (2005) suggested that Kano has not accurately captured the importance of the attributes with the model. The argument is that importance of a particular attribute may drive a different level of satisfaction. As a result, Yang suggests that Kano’s original categories of quality attributes be multiplied to account for high and low importance factors thereby resulting in a more precise categorization of attributes. Kano’s five categories then become twelve as shown below.

Table 2 Attribute Categories in Kano’s Original Model and Yang’s Modified Model

<b>Categories of Attributes</b>		
<i>Kano Model</i>	<i>Yang’s High Importance Categories</i>	<i>Yang’s Low Importance Categories</i>
Attractive	Highly attractive	Less attractive
One-dimensional	High value-added	Low value-added
Must be	Critical	Necessary
Indifferent	Potential	Care-free

Even more recently, Yang, et al. (2009) proposed a strategic pricing model for the lodging industry via an adaptation of the Kano Model and correlation of the categories with frequency of use of particular service items. Operating from the premise that lodging products have evolved to include much more than the core product of a place to sleep for the night, their approach suggested that identification of categories of quality attributes could reveal attributes that consumers are willing to pay for directly, could be outsourced, or should not be offered at all. The authors' suggestion is that consumers would benefit from lower prices and enhanced value and the service provider could improve profit margin because the service provider could determine which service items should be outsourced, included for an incremental fee or dropped entirely. In a case study approach involving a luxury hotel in Taiwan, the authors lend support to a pricing model that can be adapted within the industry to enhance customer value while improving the hotel's profitability through improved cost controls. It is from this premise, that this research moves forward with the Kano Model.

#### Criticism of the Kano Model

Despite the various benefits of the Kano Model, the model is not without critique. Due to the structure of the questionnaire, specifically the need to present each attribute in a functional and dysfunctional fashion, the length of the questionnaire can be cumbersome (Matzler, 2004). Bharadwaj & Menon (1997) pointed out that while the Kano Model classifies attributes, it does not allow for quantification of or qualitative performance of the specific attributes as have others (Kuo, 2004; Sireli, Kauffmann, & Ozan, 2007; Yang, 2003, 2005). Nor does it aid the researcher in understanding behavioral factors, motivation or drivers of perception. Similarly,

Bhattacharyya & Rahman (2004), in their study of a particular bank in India, identified the analytical shortcomings of the results of the Kano Model and suggested that a weighted average approach could be calculated to overcome some of the shortfalls such as the relative importance of particular attributes across the various categories.

In a recent refinement of the original Kano Model, Yang (2005) identified a perceived deficiency in the original Kano Model; the degree of importance of various attributes. Although this “deficiency” may have been identified earlier, Tan & Shen’s (2000) approach for satisfying the potential shortcoming was to derive importance ratings from information gathered within the process. It should be noted that Tan & Shen recognized that not all of Kano’s categories could be manipulated in this fashion. Further, they recognized the potential need for sub-categories within Kano’s original categories that could have been a precursor to future research. Yang, however, approached the issue in a more direct fashion. Yang’s supposition contends that while Kano identified categories of attributes, the lack of an “importance factor” for each category may have led to incorrect results. For example, Kano’s “must be” category could be enhanced by an importance factor that would result in necessary attributes and critical attributes. Similarly, one dimensional attributes could be categorized as high value adds or low value adds. This two category classification continues for each of Kano’s categories except “reverse attributes” which are excluded from Yang’s refined model.

It is interesting that the potential issue of statistical significance of the Kano Model classifications was not raised in literature prior to 2007. Sireli, Kauffmann, & Ozan (2007), in an integrated approach using the Kano Model and QFD, built on the premise that proper categorization of attributes may not achieve statistical significance when the results produce multiple categories with values that are not statistically different. As a result, they incorporated a

statistical significance test introduced by Fong in 1996 to produce more reliable Kano categories for their multiple product design methodology based on an integration of QFD and the Kano Model. Yet, interestingly enough, examination of research using the Kano Model reveals no other use of Fong's model or other statistical significance tests to support the categorization of attributes.

As discussed, the Kano Model has been applied within a variety of contexts and industries. Previous research has demonstrated that Kano's model can be useful in categorizing attributes according to customer preference. In addition, applying the results of the Kano model has been helpful in guiding product development and services offerings. Kano's model has been applied widely within academic research (e.g., Bhattacharyya & Rahman, 2004; Emery & Tian, 2002; Emery & Tolbert, 2003; Schvaneveldt, Enhawa & Miyakawa, 1991; Fuller & Matzler, 2007; Matzler & Hinterhuber, 1998; Yang, 2003 & 2005) and within a variety of contexts such as manufactured consumer products (Miyakawa & Wong, 1989), consumer services including banking, cleaning services, restaurants, and grocery stores (Schvaneveldt, 1991), the retail ski product industry (Matzler & Hinterhuber, 1998), transportation (Silvestro & Johnson, 1990), as well as studies in employee satisfaction (Matzler, 2004) and student/professor satisfaction (Emery, 2006). It seems appropriate then that the methodology also be applied within this study and the vacation ownership industry context.

As previously stated, the Kano Model has been successfully applied within a variety of contexts and industries by assisting researchers with a view into customer preference at the attribute level. Table 3 provides a comprehensive literature resource for published literature using the Kano Model.

Table 3: Literature Resource on the Kano Model

<b>The Kano Model in Publication (1984 - 2010)</b>			
<b>Primary Author</b>	<b>Year</b>	<b>Journal</b>	<b>Context</b>
Kano, N.	1984	The Journal of the Society for Quality Control	Consumer Products
Brandt,	1987	AMA Conference Proceedings	Transportation
Miyakawa, M.	1989	Society for Quality Control Conference Proceedings	Consumer Products
Miyakawa, M.	1989	Journal of Marketing Research	Consumer Products
Silvestro, R.	1990	Quality in Services	Transportation
Schvaneveldt, S.	1991	Total Quality Management	Consumer Services
Fong, D.	1996	Center for Quality Management Journal	Conceptual Paper
Bharadway, S.	1997	Quality Management Journal	Space Technology
Matzler, K.	1998	Technovation	Banking
Von Dran, G.	1999	AMCIS Conference Proceedings	Internet Websites
Tan, K.	2000	Total Quality Management	Information Technology
Tan, K.	2001	Managing Service Quality	Conceptual Paper
Emery, C.	2002	Journal of Education for Business	Education
Ting, S.	2002	Total Quality Management	Consumer Products
Emery, C.	2003	Academy of Organizational Culture, Communications & Conflict	Organizational Behavior
Jane, A.	2003	Quality Management in Healthcare	Healthcare
Orsingher, C.	2003	International Journal of Service Industry Management	Consumer Services
Pawitra, T.	2003	Managing Service Quality	Tourism
Yang, C.	2003	Managing Service Quality	Consumer Products
Bhattacharyya, S.	2004	European Business Review	Banking
Kuo, Y.	2004	Total Quality Management & Business Excellence	Internet Websites
Matzler, K.	2004	Total Quality Management & Business Excellence	Human Resources
Shahin, A.	2004	The International Journal of Quality & Reliability Management	Tourism
Poon, W.	2005	Journal of Hospitality & Tourism Management	Lodging
Yang, C.	2005	Total Quality Management & Business Excellence	Consumer Products
Emery, C.	2006	Academy of Educational Leadership Journal	Education
Fuller, J.	2007	Technovation	Tourism
Ryan, C.	2007	Cornell Hotel & Restaurant Administration Quarterly	Lodging
Sireli, Y.	2007	IEEE Transactions on Engineering Management	Transportation
Tontini, G.	2007	Total Quality Management & Business Excellence	Consumer Products
Tontini, G.	2007	International Journal of Operations & Production Management	Foodservice



This research attempts to provide additional insight into customer preference by looking at combinations of attributes that comprise the more holistic product offering. While the Kano Model provides respondent rating of attribute preference, the ratings are independent of one another in that they address the individual attribute rather than the product offering which is comprised of various attributes. It has been suggested that a product is comprised of a bundle of attributes, and customers evaluate those attributes individually often making trade offs among various attributes (Green & Wind, 1978). Therefore, a more accurate picture of satisfaction and consumer preference may be had if the researcher can understand consumer preference related to each attribute and for the product by observing and quantifying the trade offs among attributes (Garrow, 2007; Green & Wind, 1978; Orme, 2006).

### Conjoint Analysis

Garrow (2007), in a study addressing airline travel, suggests that trade off analyses are an effective way to understand consumer preference for products based on attributes including varying levels of attributes. Kohli, and Mahajan, (1991), proposed that consumers will pay an equivalent value to the expected utility of a given product or service, and propose a more precise way to determine consumer willingness to pay through attribute utilities derived from conjoint analysis.

Initiated in consumer studies in 1971, conjoint measurement is a relatively new method for analyzing consumer preference. Developed from the fields of mathematical psychology and psychometrics, through the initial work of Luce and Tukey (1964), conjoint analysis breaks down overall judgments into psychological components that can be measured in terms of utility. The measurement of utility provides an interval scale allowing for mathematical measurement

and analysis. This measurement allows the researcher to interpret, and perhaps predict, the relative importance of a product's multi-dimensional attributes (Green & Wind, 1975). Prior to this time, the economic theory of utility and related expectancy value class of models (Fishburn, 1967; Rosenberg, 1956) had been used to model consumer preferences among multi-attribute alternatives (Green & Srinivasan, 1978).

Understanding preferences and values that individual consumers and consumer segments place on definitive attributes of products can assist researchers and practitioners alike in various aspects of consumer behavior, product positioning and product development. As it has been observed (Green & Srinivasan, 1978; Green & Wind, 1975) preferences can be obscure and individuals are unique; measuring and analyzing these factors is not without its challenges. One solution was to break products down to the attribute level and have consumers rank or rate their preference of attributes collectively or in terms of a single attribute. In so doing, researchers could apply scale models of regression or factor analysis to the otherwise ambiguous and individual preference measure (Luce & Tukey, 1964). This method became the genesis for what is today known as conjoint analysis. Green and Srinivasan (1978) define conjoint analysis as “any decompositional method that estimates the structure of a consumer's preferences given his/her overall evaluations of a set of alternatives that are pre-specified in terms of levels of different attributes.”

While similar, there are distinct variations between the earlier economic-based theory and the psychologically-based conjoint analysis. According to Wilkie and Pessemier (1973), economic theory has been more concerned with an aggregate approach that builds from separate value assessments of individual components via weighting of the various attributes. Green and Srinivasan (1978) raised the research purpose as another key distinction in the two approaches:

expectancy value theorists seek explanation as their primary objective, while predictive validity is the first interest for users of conjoint analysis.

There are several issues that come into play with this type of analysis: cost, time, confusion and respondent fatigue (Green & Wind, 1975). Alternatively, an orthogonal array, in which the various combinations are selected and the contributions of each are balanced, can be employed so that each factor's weight is retained separately and is not confused with those of the other factors. In conjoint analysis, scenarios including various alternatives of the product attributes to be measured are constructed and respondents are asked to choose or rank, depending upon the approach, their preferences of each scenario. This eliminates the need for the respondent to assess every possible combination of attributes and provides a starting point from which to delve further into the specific attributes that are important to the respondent. This has been established as an acceptable experimental design through the use of conjoint measurement.

Various computer programs then calculate the utility scales of each attribute through the use of algorithms that apply a numerical representation of the utilities of the factors. Individual scores for each respondent are entered and the program searches for the mathematical scale value of each factor in the design. The scale value for each attribute is chosen such that the total utility of the factor (sum of each level of each factor) matches to the individual respondent answers as closely as possible. Further, since all utility scales are measured in a common unit, researchers can better understand the level of importance by comparing utility ratings among the various factors (Green & Wind, 1975).

Methods for conjoint measurement have evolved over the years. Initially, physical, card-based product options of all possible alternatives were employed in the 1970s. Currently, conjoint analysis involves more efficient, computer-based designs utilizing Hierarchical Bayes

estimation and partial profile designs in settings that are more like the consumer decision-making process (Orme, 2006). Moreover, the variety of techniques allows the researcher to choose which method is most appropriately matched to the product as well as the consumer.

Orme (2006) estimated that between 5,000 and 8,000 conjoint analysis projects were conducted over a twelve month period in 2005. This estimate is based on a survey of customers using Sawtooth Software, a conjoint analysis software package. Expanding this estimate beyond a single customer base, reveals more than 10,000 conjoint analyses conducted worldwide on an annual basis.

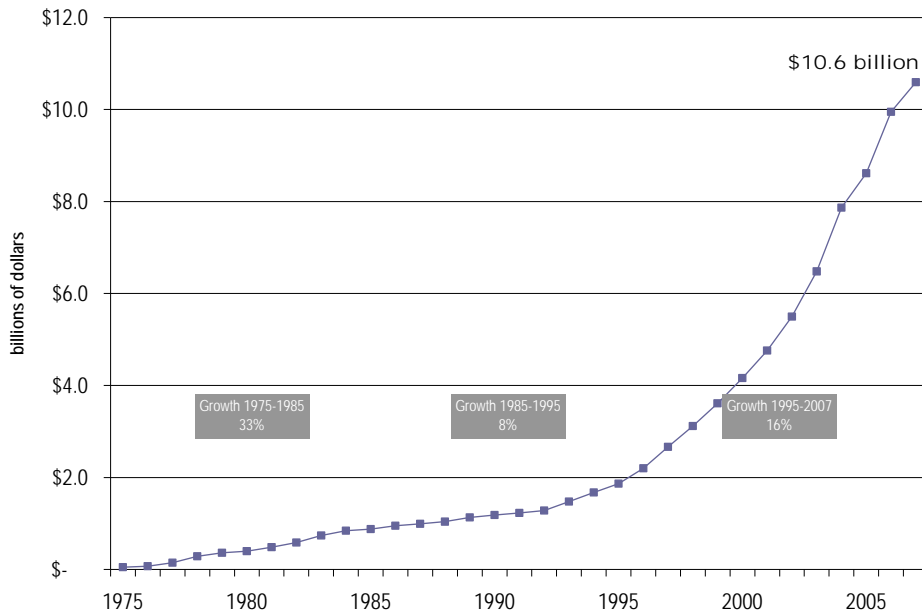
Conjoint analyses have been employed in a variety of industries to address a multitude of business issues. For example, Microsoft utilized conjoint analysis to conduct benefits research, improve job satisfaction and reduce turnover and hold down costs (Slade, Davenport, Roberts & Shah, 2002). In his book, Orme (2006) identifies a variety of industries using and applications for conjoint analysis. Marriott International employed conjoint analysis to identify what attributes business travelers valued most in hotels. Through this analysis, they developed and implemented their Courtyard hotel brand. Yale University conducted a study in cancer treatment wherein conjoint analysis was employed to determine the proper course of treatment based on consumer preference. General Electric has used conjoint analysis to better understand how top executives evaluate financial deals; thereby providing their sales team with tools that improve chances of getting deals approved.

The vacation ownership product is a complex product comprised of various attributes (Upchurch & Gruber, 2002). Based on the applications and findings using conjoint analysis in previous research, it would seem appropriate that conjoint analysis could be effectively utilized to determine consumer preference for vacation ownership products.

## The Vacation Ownership Industry

According to Upchurch & Kaufman (2005), the vacation ownership (also referred to as timeshare) product is defined as a real estate product that provides for a week (or its equivalent) of ownership in “lavish resort accommodations.” The vacation ownership segment of the hospitality industry is a large and rapidly growing segment (Powanga & Powanga, 2008; Ragatz, 2007; Upchurch & Gruber, 2002). In fact, the timeshare segment has been recognized as the fastest growing segment of the travel industry (Gilligan, 2006; Hayward, 2005; Ragatz, 2007; Scoviak, 2004). According to a 2009 economic impact study sponsored by ARDA, the Washington DC based vacation ownership and resort development industry representative, the timeshare industry contributed an estimated \$69 billion of output to the U.S. economy in 2009; including 465,800 full and part time jobs; \$22 billion in salaries, wages, and related income, as well as approximately \$8.4 billion in tax revenues.

Historically, the vacation ownership industry has experienced double-digit compound annual growth rates over the last twenty years (ARDA, 2009). According to ARDA’s 2009 State of the Timeshare Industry annual report ([www.arda.org](http://www.arda.org)), there were 1,548 vacation ownership resorts in the United States representing 7.2 million equivalent weeks of vacations owned by more than 4.7 million individuals. In 2009, U.S. sales totaled \$6.3 billion dollars representing approximately 60% of the worldwide timeshare sales volume.



Source: Ragatz Associates, American Economics Group and AIF, 2009

Figure 3: Vacation Ownership Worldwide Annual Sales Volumes

### History of the Industry

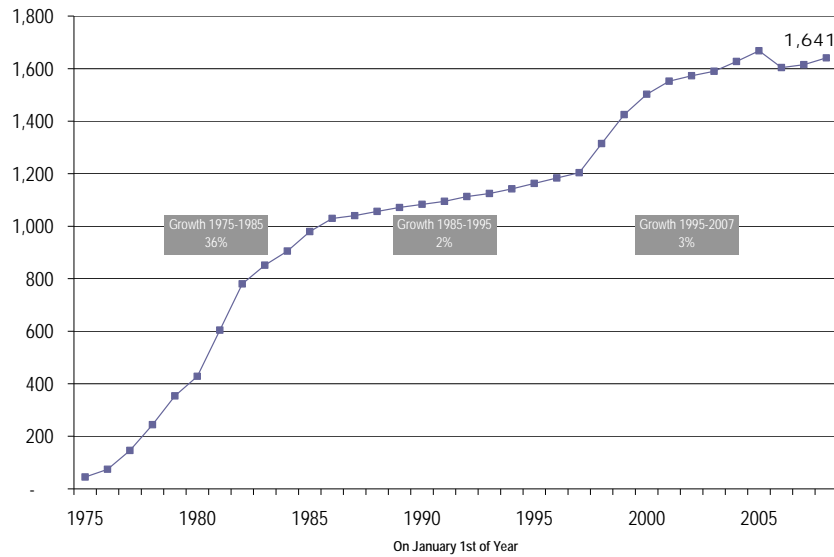
The timeshare industry started in the 1960s with a concept borne by a French resort development company, wherein the developer guaranteed purchasers a ski vacation every year. The premise was based on the value proposition that it was cheaper to buy the hotel rather than rent the room every year. This program, the Societe des Grands Travaux de Marseille, was the first resort timesharing program and was based on a fixed week, fixed unit program. Also in the 1960s, Hapimag (Hotel und Appartementhaus Immobilien Angage), a German company with three resorts in Europe, developed a “right to use” timesharing program. This structure allowed purchasers the flexibility to enjoy more than one location at any time of the year. (AIF, 2010)

During the next decade, resort timesharing reached the United States with leasehold interests in Hawaii. Fueled by the condominium boom, resort timesharing also became popular

in Florida during this time as developers “sold off” condominiums by the week rather than by the unit. This development gave rise to a business opportunity that would provide greater flexibility to both resort timeshare developers and buyers. In order to provide increased value for sellers and buyers of the vacation ownership product, an intermediary that facilitated the exchange of one owner’s week in one destination for another owner’s week in another owner’s destination was necessary. An entrepreneurial business opportunity was created and a single organization answered the call. The first timeshare exchange company, Resort Condominiums International (RCI), was created in 1970.

In the 1980s, resort timesharing was flourishing with more than 2,000 resorts and approximately four million owners worldwide. Shady tactics by opportunistic developers led to increased regulation. The “cleaning up” of the industry paved the way for future growth with the implementation of quality control procedures. Also during this time, Marriott International entered the industry through the acquisition of a small, timeshare resort development company.

In the 1990s, other major hotel brands ventured into timesharing either by acquisition or purpose-built timeshare resort development. Consumer acceptance was on the rise and the industry was prospering as a multi-million dollar industry including approximately 5,400 resort timeshare properties.



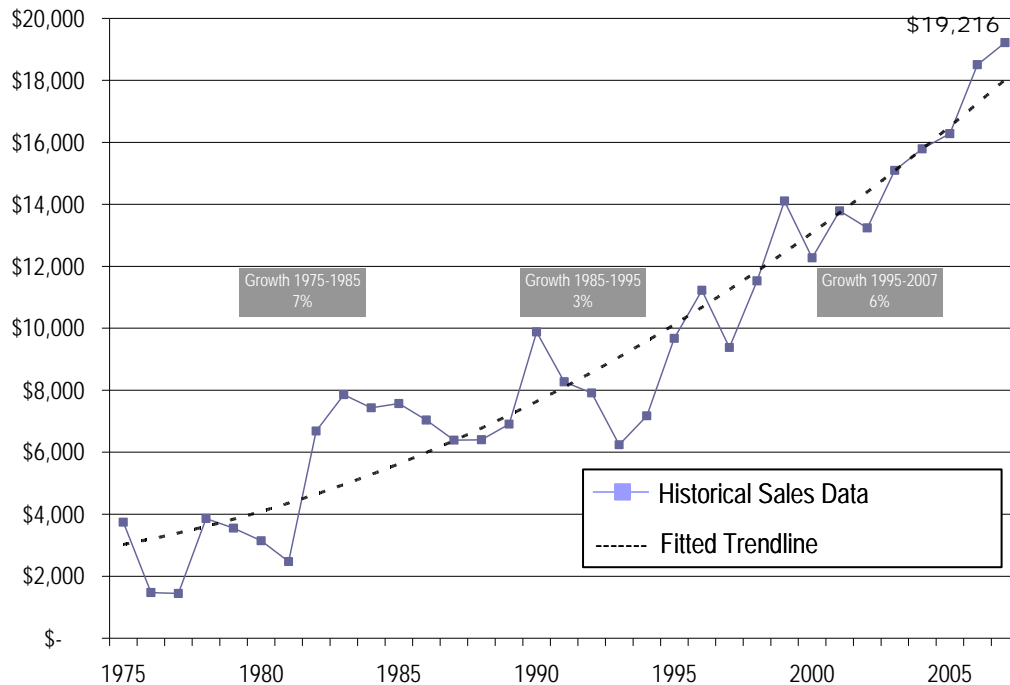
Source: Ragatz Associates, American Economics Group and AIF (2009)

Figure 4: Timeshare Resorts since 1975

### Current State of the Timeshare Industry

Fueled by double-digit growth over the years, the timesharing industry exceeded \$10 billion in revenues for U.S. based timesharing companies in 2007. As with the sales, average timeshare prices have also climbed steadily over the years. While one might expect straight-line growth, many things including geographical location, product offering and quality of timeshare resorts in sales at the time can impact the variable line of average pricing.





Source: Ragatz Associates, American Economics Group and AIF (2009)

Figure 5: Timeshare Average Sales Price since 1975

The timeshare industry has been evolving from single site developments of condominium conversions to purpose-built resorts and vacation exchange systems supported by elaborate points based systems that facilitate trade of a variety of travel related products (Scoviak, 2003). Based on resort portfolios, total numbers of owners or annual sales volumes, four hotel brands are the most prominent within the timeshare industry. The following information was gathered from annual reports of each of the companies.

**Hilton Hotels:**

Hilton entered timeshare through a combined plan of acquisition and resort development. Based on some of the early acquisitions, Hilton established a hybrid points-based program that

allows its owners flexibility to exchange among its system of resorts without the use of an external exchange company.

**Marriott Hotels:**

The first brand to enter timeshare, Marriott primarily has purpose built timeshare units and a development strategy for shared campuses with resort hotels. Marriott claims to be the largest timeshare company in terms of annual sales revenues.

**Starwood Hotels:**

Primarily through the acquisition of Orlando-based Vistana resorts, Starwood has become a significant player in the industry.

**Wyndham Vacation Ownership:**

Through the acquisitions of Orlando-based Fairfield Vacation Ownership and Seattle-based TrendWest in 2006, Wyndham is the brand with the largest resort locations and number of owners.

Table 4: Key Players in the Timeshare Industry

Company	Brands	Resorts	Locations	Market Share*	Owners
Wyndham	Wyndham Vacation Resorts; WorldMark by Wyndham	185	U.S., Caribbean, Mexico, Canada, South Pacific	19%	800,000
Marriott	Marriott Vacation Club	40	U.S., Caribbean, Spain, France, Thailand, Aruba, St Kitts	14%	370,000
Starwood	Starwood Vacation Ownership	28	U.S., Bahamas, Mexico	7%	130,000
Hilton	Hilton Grande Vacations	30	Colorado, Florida, Nevada, New York, Hawaii, Egypt, England	5%	100,000
Bluegreen	Bluegreen Vacation Club	45	U.S., Aruba	4%	186,500

Source: Company-specific annual reports

\*Market share is calculated on annual sales volume.

### **Academic Literature in the Vacation Ownership Industry**

Existing research on vacation ownership is limited. Powanga & Powanga (2008) provide a summary of existing research highlighting the areas that have been studied: challenges facing the industry (Woods, 2001), Sparks' 2007 study on value evolution through ownership term; Sing & Horowitz's 2007 study on ownership associations, and Crofts and Ragatz's 2002 analysis of timeshare owners' satisfaction. While Powanga & Powanga's summary of industry literature is broad, other studies on vacation ownership have been uncovered.

Since Powanga & Powanga's publication, a scant amount of literature has been added including an overview of future issues and opportunities for the industry (Stringam, 2010); a comparison of vacation ownership resort amenities and resort hotel amenities (Stringam, 2008); an economic analysis of vacation ownership (Powanga & Powanga, 2008); and demographic

study on satisfaction related to vacation ownership (Kauffman & Upchurch, 2007). Following is a synthesis of published literature on the subject of timeshare/vacation ownership relevant to this study.

Stringam (2010), interested in researching the future of the vacation ownership industry, conducted a strengths, weaknesses, opportunities and threats analysis of the vacation ownership industry through interviews with key industry executives. Through in-depth, grounded theory interviews with 21 key industry professionals at the executive level involved with small developments (6 or more locations), large independent developers, multi-national global hotel chains involved in the industry, and exchange company executives, Stringam identified the physical product quality and human capital elements as strengths of the industry. The sales and marketing processes, sales costs, in room amenities, and taxation were considered weaknesses of the product. Opportunities for the industry lie in new markets/destinations, product offerings, and market segments. Industry threats exist in the areas of human and capital resources.

Few studies have been published on amenities offered by timeshare companies. Lawton, Weaver, & Faulkner (1998) concluded that the onsite and nearby amenities, children's activities, and entertainment options associated with timeshare resorts in Australia added to the satisfaction level of timeshare owners. In a study on timeshare resorts in the Carolinas, the fourth largest geographic market in terms of concentration of timeshare resorts, Stringam (2008) determined that amenities related to timeshare resorts were comparable with amenities offered in resort lodging properties. According to Stringam (2008), the following were listed as the most common amenities associated with timeshare resorts: swimming pools, exercise rooms, children's activities, and tennis courts for onsite amenities; WIFI internet access, DVD players, and CD players for in-unit amenities.

While amenities were not the focal subject of much of the published literature, some studies provide additional insight into attributes that are important to consumers when considering the timeshare product. Upchurch & Gruber (2002) concluded that use of their timeshare product at their home resort or through exchange for another location, and owner services/reservation counselor quality had an affect on consumer satisfaction. Crotts and Ragatz (2002) identified flexibility of location, financial savings, amenities, and quality of accommodation among the attributes consumers value in the vacation ownership product.

In an effort to address the unique complexities of vacation ownership, Sparks, Butcher, and Pan (2007) note that the timeshare product is comprised of both experiential and ownership components. Their 2007 study was specifically focused to determine value that was attached to the experience and ownership components of the timeshare product. In an unmatched approach based upon the fact that the purchase of vacation ownership is a long term investment and thereby may invoke strong feelings of value, the authors used a qualitative approach to determine which dimensions of value relate specifically to vacation ownership. In this study, the authors considered value through the lens of utility in comparison to alternative products. In their study, seven themes of value derived from the timeshare product were observed. Breaking these themes down by the components or attributes specifically mentioned provides a list of attributes that are valued by timeshare owners and, if satisfied, could affect customer satisfaction with the timeshare product. The seven categories identified in Sparks' 2007 study are: ownership pride, financial, flexibility, gift, luxury, reward, new experience. In addition, the authors also identified six detractors of consumer derived value related to the vacation ownership product: quality of facilities experienced through exchange, proximity of resorts to primary residence; reservations issues related to specific requests, financial (resale value and maintenance costs), inability to

adjust to personal life cycle changes, negative industry image. Sparks, et al. concluded that the results of their study provides value dimensions that vacation ownership companies can spotlight to enhance satisfaction with existing owners while encouraging sales by new owners.

In 2008, Sparks, Butcher, & Bradley expanded on the previous study through the use of confirmatory factor analysis determined there were eight different types of value that consumers could obtain from the vacation ownership product. Further, through simple regression analysis, the authors were able to find support for a relationship between the value factors and customer satisfaction with the product.

Kaufman & Upchurch (2007) studied differences in satisfaction levels of the timeshare product based on gender and marital status. The study by Kaufman & Upchurch is applicable to this study as it identifies particular attributes related to customer satisfaction with the timeshare product. In their study, Kaufman & Upchurch found statistically significant differences in satisfaction between males and females, as well as between individuals who were single and those who were married. In a similar segmentation approach, Upchurch, Rompf & Severt (2005), used an applied psychographic segmentation scheme to classify timeshare owners, and then analyze differences in timeshare satisfaction levels among the various segments. In their case study approach, they determined that there were statistically significant differences in satisfaction levels of timeshare owners when classified according to psychographic segments.

Attention from the academic community has come to the vacation ownership industry primarily due to the unprecedented and continued growth of the segment; as is apparent in the introductory paragraphs of each publication. Although sales volumes are increasing, rising product costs and declining sales efficiencies experienced within the industry are squeezing profit margins creating opportunities for innovations in product offerings, business processes,

and pricing methods that will not negatively impact prospective purchasers' intentions to buy (Stringam, 2010). Considering the current published research, it appears as though there is a need for research providing insight into consumers' purchase behaviors and factors influencing value within the vacation ownership context.

### Summary

This chapter provided the theoretical basis of the study by addressing the areas that are vital in ascertaining the underpinnings for the study. This chapter began with an introduction to customer satisfaction followed by an overview of the Kano Model. That was followed by a synthesis of academic literature published on the Kano Model together with its application within and beyond the hospitality industry. Next, a systematic synopsis of academic literature in the vacation ownership industry was provided to establish the context of the research. This was supplemented by general literature on the present state of the vacation ownership industry to shed light on the research opportunity and the gaps that exist in current academic literature.

The following chapter discusses the methods that will be employed in the study to evaluate which attributes of the vacation ownership product have an effect on consumer satisfaction. It also discusses how the Kano Model and conjoint analysis may be used to provide insight into consumer preferences in the vacation ownership industry.

## **CHAPTER THREE:**

### **METHODOLOGY**

#### Introduction

This chapter discusses the methods that will be used in the study to empirically assess which attributes of the vacation ownership product have an effect on consumer satisfaction with the vacation ownership product, and how the Kano Model and conjoint analysis may provide insight into consumer preferences in the vacation ownership industry. The chapter begins with an overview of the conceptual framework and the research model. This is followed by the specific research questions, the supporting hypotheses, and the literature that was used to prepare the hypotheses. Next, the survey instrument and sampling method are described, including the steps taken to address validity and reliability. Then, the statistical procedures used to address the research questions and test the hypotheses are detailed. Finally, the limitations of the study are addressed and the chapter closes with a summary.

#### Conceptual Model

The conceptual framework of this study adopts a quantitative approach designed to categorize the various attributes of the vacation ownership product according to their anticipated effect on customer satisfaction. As noted previously, the Kano Model has been used in a variety of applications and industries to effectively accomplish this objective (Bhattacharyya & Rahman, 2004; Emery & Tian, 2002; Emery & Tolbert, 2003; Schvaneveldt, Enhawa & Miyakawa, 1991; Fuller & Matzler, 2007; Matzler & Hinterhuber, 1998; Yang, 2003 & 2005).



## Modifying the Kano Model for the Hospitality Industry

Because the Kano Model was initially developed for and subsequently adopted by the manufacturing industry during an era of product development and competitive differentiation, (e.g. Miyakawa & Wong, 1989, Schvaneveldt, 1991, Matzler & Hinterhuber, 1998, Silvestro & Johnson, 1990), modification of the model may make it more appropriate for application to services and the greater hospitality industry. Further, since academic research in satisfaction has focused on the attribute level through analysis of specific attributes that drive overall satisfaction and the relationship to consumers' activities, attitudes, demographic profiles, or company profitability, (e.g. Orsingher & Marzocchi, 2003; Poon & Yong, 2007; Ryan & Huimin, 2007), it seems to follow that an appropriate modification of the Kano Model would be to measure satisfaction and presence (or absence) of a particular attribute instead of the functional/dysfunctional quality of that attribute. In fact, Kano (1984) blatantly referred to his own model attributes as having or lacking a certain functions or features.

Consultation with industry professionals and academics led to what resulted in minor label changes in order to adapt the model to the industry. As such, it is proposed that the original Kano Model be modified to include verbiage that is widespread within the hospitality industry (Figure 6).

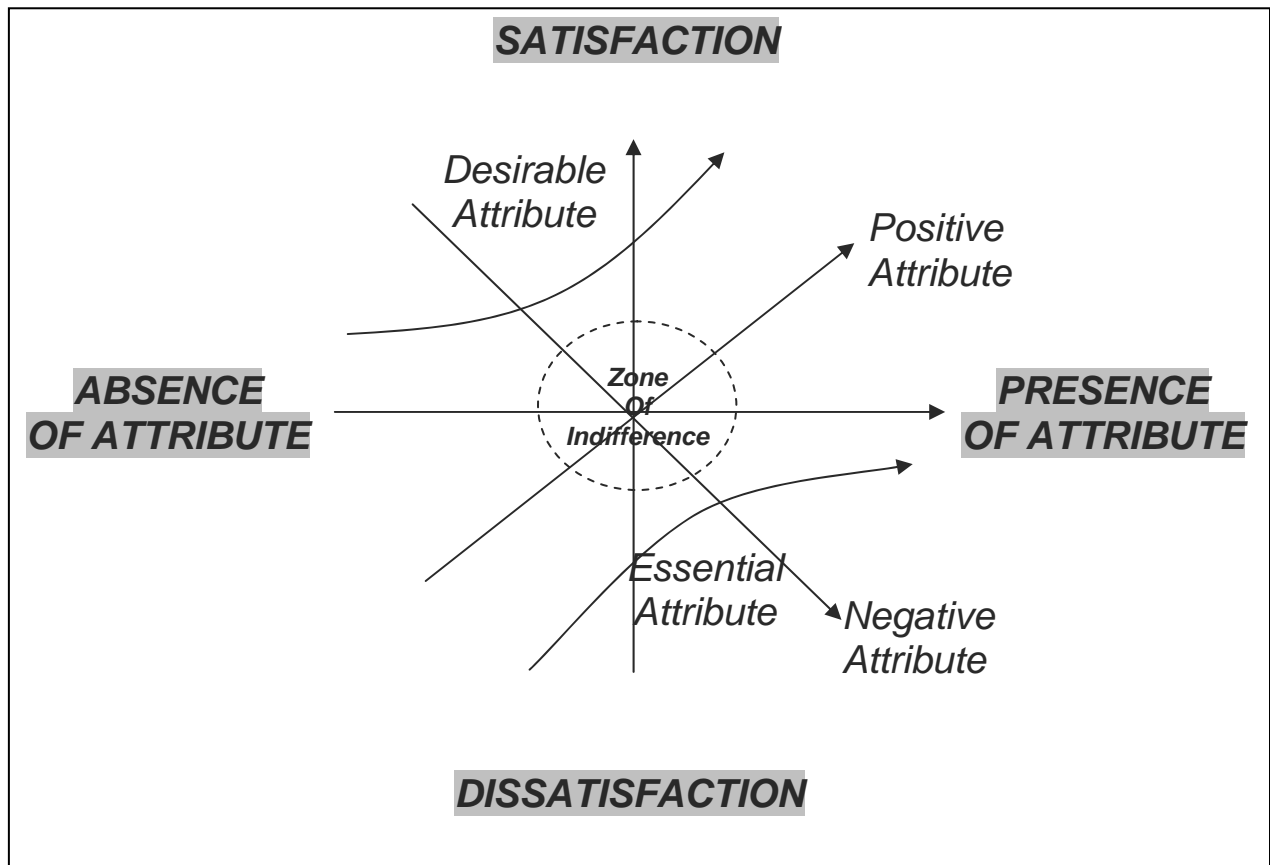


Figure 6: Modified Kano Model

Similarly, to address the description of the attributes as they relate to the expected effect on satisfaction, a modification to Kano's original five categories is suggested:

Table 5: Categories of the Modified Kano Model

	<b>Kano Model</b>	<b>Expected Effect on Satisfaction</b>	<b>Modified Kano Model</b>
1	Attractive Quality	results in customer satisfaction if these attributes are present, but no dissatisfaction if they are not present	Desirable Attribute
2	One Dimensional Quality	positively related to customer satisfaction	Positive Attribute
3	Must be Quality	without these attributes dissatisfaction increases, yet their existence does not necessarily improve satisfaction	Essential Attribute
4	Indifferent Quality	there is no substantial impact to customers' satisfaction or dissatisfaction based on the presence or absence of these attributes	Zone of Indifference
5	Reverse Quality	contrary to must-be (critical) attributes, negative attributes cause dissatisfaction when present and satisfaction when absent	Negative Attribute

#### Applying the Model to the Vacation Ownership Segment of the Hospitality Industry

Existing academic literature on vacation ownership reveals two primary areas of focus each with their related attributes: the purchase process (Powanga & Powanga, 2008; Scavo, 1999; Sparks, 2010), and the usage/experience process (Crotts & Ragatz, 2002; Lawton, Weaver & Faulkner, 1998; Powanga & Powanga, 2008; Sparks, 2010; Upchurch & Gruber, 2002). The dimensions identified in academic literature were examined and validated by industry professionals to ensure that no items had been overlooked. The table below consolidates the various dimensions and specific attributes related to the vacation ownership product.

Table 6: Attributes of the Vacation Ownership Product

<b>Dimension</b>	<b>Explanation</b>	<b>Attribute</b>
<b>Purchase Process</b>		
Knowledgeable Staff	Based on the complexity of the product and the nature of the sale, the industry uses personal selling techniques. (Upchurch & Gruber, 2002)	Sales Executive
High Pressure Sales Tactics	Incentive to make a purchase decision on the day of the sales presentation in order to improve sales efficiencies. (Scavo, 1999)	Purchase Incentive
Financing Availability	Due to the relatively high initial cash outlay, vacation ownership developers offer financing options to consumers to assist in the purchase process (Powanga, 2008)	Finance Package
<b>Usage Process</b>		
Quality Product	Overall resort quality including furnishings, in room amenities and services offered (Crotts & Ragatz, 2002; Upchurch, 2002; Stringam, 2009)	Resort-like Amenities, Resort Hotel Services
Flexibility	Ability to go to different timeshare resorts through an exchange company (Crotts & Ragatz, 2002; Sparks, et. al, 2008, Upchurch & Gruber, 2002) Ability to trade timeshare weeks (or equivalents) for hotel point/stays <a href="http://www.marriottvacationclub.com/learn-about-ownership/where-can-i-go/the-marriott-collection.shtml">http://www.marriottvacationclub.com/learn-about-ownership/where-can-i-go/the-marriott-collection.shtml</a> ; <a href="http://www.starwoodvacationownership.com/benefits/choice.jsp">http://www.starwoodvacationownership.com/benefits/choice.jsp</a> ; <a href="https://www.wyndhamvacationresorts.com/ffr/variety.go">https://www.wyndhamvacationresorts.com/ffr/variety.go</a>	Timeshare Exchange, Hotel Program Benefits
Fun	Variety of things to do at the resort or nearby (Crotts & Ragatz, 2002; Lawton, Weaver, & Faulkner, 1998; Sparks, et. al, 2008; Stringam, 2009)	Resort-like Amenities, Activities
Personalization	The opportunity to speak with someone directly to help with reservations, options, product usage (Sparks, et. al, 2008; Stringam, 2010; Upchurch & Gruber, 2002)	Vacation Counselor

Based on the previous findings in academic literature, all of the above attributes are positively related to customer satisfaction with the vacation ownership product. It is expected that the above attributes will also be categorized accordingly in the Modified Kano Model used in this study. However, because the Modified Kano Model allows for further classification of

the attribute beyond the Likert satisfaction scale, it is anticipated that the further classification of the attributes will be achieved when applying the modified Kano methodology.

### Hypotheses

In the proposed research model, it is expected that the various attributes of the vacation ownership sales and usage processes that have been identified in academic literature will be categorized differently according to the Modified Kano Model. Kano et al. challenged the traditional customer satisfaction models that suggest higher satisfaction on all attributes is better, through a proposition that not all attributes are equal in the consumer mind. Understanding the functional requirements of a product attribute in addition to the satisfaction rating, could reveal the origin of consumer satisfaction, as well as the features or attributes that a company should focus on in order to be competitive, increase customer satisfaction, or to differentiate themselves within the marketplace (Kano, et al., 1984).

As such, Kano observed that certain attributes were positively and linearly related to customer satisfaction but others result in customer satisfaction when present, but no dissatisfaction if they are not present. The former relationship is linear while the latter relationship is depicted in a curvilinear fashion in the Kano Model. Existing literature reveals that owners are generally satisfied with the vacation ownership product (Lawton, Weaver, & Faulkner, 1998; Stringam, 2010; Upchurch & Gruber, 2002). This study delves into both the purchase and use of the vacation ownership product and the hypotheses are constructed accordingly.

Upchurch and Gruber, 2002, credit the complex product with the need for personal selling techniques that also contribute to overall satisfaction with the product. These are

explained as a guided presentation by a knowledgeable individual who explains the various components of the product and maintains an ongoing relationship with the purchaser after the sale. Scavo (1999) explains that the personal selling technique also improves the likelihood of individuals to purchase the product since the specific needs of the individual customer can be focused on by the sales executive. In addition, Scavo (1999) explains that vacation ownership companies also facilitate the purchase of the product by making financing available for the consumer. Because these attributes of the purchase event have been explained as facilitators of the process, one could conclude that they may be positively related to consumers' satisfaction with the product. Based on existing literature in the vacation ownership industry the following relationships are hypothesized:

H1: The presence of positive attributes during the vacation ownership product purchase process is positively related to overall vacation ownership product satisfaction.

H1a: The presence of a *sales executive* during the vacation ownership product purchase process is positively related to overall product satisfaction.

H1b: The presence of a *financing package* during the vacation ownership product purchase process is positively related to overall product satisfaction.

Existing literature presents a positive relationship between the attributes and consumers' overall satisfaction with their use of the vacation ownership product. However, it does not address the expected effect on satisfaction given the presence (or absence) of a particular attribute that the Kano model allows. Nonetheless, existing research provides the premise from which previously studied attributes could be categorized within this study based on the previously identified relationship to consumer satisfaction with the vacation ownership product. Specifically, Crofts and Ragatz (2002), Upchurch & Gruber (2002), and Stringam (2009)

identified that the quality product comprised of overall resort quality, upscale furnishings, in room amenities, and the services offered at the resort were positively related to consumers' overall satisfaction with the vacation ownership product. In addition, Sparks, et. al. (2008) and Upchurch & Gruber (2002) identified that the flexibility associated with the exchange option – the utilization of a third party company to enact exchanges among timeshare owners to use resorts outside of the specific resort that they purchased – was also a point of satisfaction for consumers owning the product. Sparks, et. al, (2008) identified a theme related to fun that owners attributed to their satisfaction with the product. The “fun” components of the product identified by Sparks (2008) included variety of things to do at the resort and nearby. Sparks, et. al (2008), Stringam (2009), and Upchurch & Gruber (2002) all identified that the presence of a vacation counselor to assist with vacation planning was also a point of satisfaction for owners of the vacation ownership product.

Because existing research reveals positive levels of consumer satisfaction as a result of satisfaction ratings with the particular aforementioned product attributes, it would be logical to expect that these attributes would be categorized as positive attributes using the Kano model. As a result of existing literature and the anticipated effect on satisfaction demonstrated in the Kano model, the following hypothesis and sub-hypotheses are presented:

H2: The presence of positive attributes is positively related to overall product satisfaction during consumer use of the vacation ownership product.

H2a: The presence of *resort hotel services* in the vacation ownership resort is positively related to overall product satisfaction.

H2b: The presence of *an exchange company* in the vacation ownership product offering is positively related to overall product satisfaction.

H2c: The presence of *resort-like amenities* at the vacation ownership resort is positively related to overall product satisfaction.

H2d: The presence of *activities* at the vacation ownership resort is positively related to overall product satisfaction.

H2e: The presence of *a vacation counselor to assist with vacation planning* is positively related to overall product satisfaction.

In order to gather detail on the attributes that should be studied, Kano conferred with industry executives in addition to gathering consumer requirements. In similar fashion and to augment and validate the consumer requirements with industry perspectives, a panel of industry executives at the Vice President level or above representing multiple lodging brands and independent developers in the vacation ownership industry were asked to provide input to the attributes identified in literature in order to validate the comprehensiveness of the major product components. In addition, the executives were asked to provide their perspective as to in which category, the sales and usage attributes would fall. As a result, the following categorizations of vacation ownership attributes in the Modified Kano Model will be tested:



Table 7: Industry Perspectives on Attribute Categorization

	<b>Modified Kano Model Category</b>	<b>Attribute</b>
1.	Desirable Attribute	Resort Hotel Services; Exchange Company  <i>(result in customer satisfaction if these attributes are present, but no dissatisfaction if they are not present)</i>
2	Positive Attribute	Resort Amenities; Resort Activities; Trade for hotel program benefits  <i>(Positively related to customer satisfaction)</i>
3	Essential Attribute	Sales Executive; Vacation Ownership Counselor  <i>(Without these attributes dissatisfaction increases, yet their existence does not necessarily improve satisfaction)</i>
4	Zone of Indifference	Financing Availability  <i>(there is no substantial impact to customers' satisfaction or dissatisfaction based on the presence or absence of these attributes)</i>
5	Negative Attribute	High Pressure Sales Tactics (Purchase Incentive)  <i>(contrary to must-be (critical) attributes, negative attributes cause dissatisfaction when present and satisfaction when absent)</i>

As a result of existing satisfaction literature in the vacation ownership industry the “desirable attributes” and “positive attributes” listed above have been addressed with H1 and H2, with the exception of “trade for hotel program benefits.” The websites for each of the vacation ownership companies affiliated with a lodging brand refer to hotel program benefits and membership in the hotel frequency programs, often with elevated recognition status, and ability to access the lodging brands’ hotel rooms worldwide For example, Starwood Vacation Ownership’s website explains that Starwood Vacation Ownership owners receive Gold Preferred status in the Starwood Preferred Guest program, and the flexibility to convert a week of vacation ownership into Starwood Starpoints that can be used to access free nights at more than 890

Starwood hotels worldwide (Starwood Vacation Ownership website, 2011). A featured owner testimonial on this website quotes one owner family stating that they have not paid for vacation accommodations in the last year as a result of this benefit. Similarly, Hilton Grand Vacation Club (Hilton Grand Vacation Club website, 2011) and Marriott Vacation Club International (Marriott Vacation Club website, 2011) tout similar benefits for their timeshare owners on their websites. Information on the websites explains that owners of these lodging companies' vacation ownership product may exchange their timeshare week for hotel frequency program points. These points can then be used for hotel accommodations, air fare, cruises, and car rentals.

Therefore, because existing literature (Crotts & Ragatz, 2002; Upchurch & Gruber, 2002; Sparks, et. al, 2008; and Stringam, 2009) identified components of the use of the vacation ownership product that allowed owners to have different vacation experiences through the use of an exchange company. Since consumers' explanations of the ability to trade the vacation ownership product for hotel program benefits reveals similar benefits, one could expect that this product attribute, the ability to trade for hotel program benefits, would be positively related to satisfaction. As a result, the following hypothesis is proposed:

H3: The presence of a *program to trade vacation ownership weeks for hotel program benefits* is positively related to customer satisfaction.

From the progression of the vacation ownership industry across continents, the industry has been plagued with a negative image of shady sales and marketing tactics. (ARDA, 2005) Some have claimed that the sales and marketing tactics have neither changed nor improved, and that the ongoing negative image is largely due to those practices (Jackson, 2003; Rezak, 2002; Schreier, 2005; Tugend, 2006; Woods, 2001). Common to the negativity are the high pressure

sales tactics that encourage prospective buyers to make a purchase decision on the same day that they attend the sales presentation. It has been suggested that such practices induce pressure with the prospective buyer and may negatively impact the immediate buying experience and add to the overall negative image of the industry (Schreier, 2005; Woods, 2001). Given the negative light within which this attribute is discussed in existing literature, the following hypothesis is presented:

H4: High pressure sales tactics used in sale of vacation ownership products cause dissatisfaction when present and satisfaction when absent.

Finally, to address a gap in existing vacation ownership literature and to answer the research questions regarding what attributes of the vacation ownership product that consumers prefer most, the following hypotheses are proposed. Due to the lack of existing literature or insight from the industry, the hypotheses are presented in null form.

H5: There is no difference in consumer preference for a vacation ownership product based on the presence of certain attributes.

H5a: During the purchase of a vacation ownership product, there is no difference in consumer preference for a vacation ownership product based on the presence of positive attributes.

H5b: During the use of a vacation ownership product, there is no difference in consumer preference based on the presence of positive attributes.

After understanding consumer preference for and the expected impact on satisfaction of various attributes, this study attempts to understand consumer willingness to pay for the vacation ownership product as it relates to the presence or absence of attributes identified in this research. Garrow (2007), in a study addressing airline travel, suggests that trade off analyses are an

effective way to identify consumer willingness to pay for products based on attributes including varying levels of attributes. Kohli, and Mahajan, (1991), reiterating the basis of consumer willingness to pay being grounded in utility theory that suggests that consumers will pay an equivalent value to the expected utility of a given product or service, propose a more precise way to determine consumer willingness to pay through attribute utilities derived from conjoint analysis. Consumer willingness to pay has been measured in a variety of ways from open ended stated values provided by the respondent or categorical choices of pre-established amounts.

The generally agreed upon issue with these approaches is that stated preferences generally yield lower, and perhaps unrealistic amounts (Lyon, 2000). Orme (2006) suggests that a more appropriate measure of willingness to pay is through price as a product attribute. Varying the price within reasonable limits for the consumer and allowing for a “none option,” allows the researcher to determine the utility of the price attribute in conjunction with or related to the various other attributes being examined. To shed light on the relationship of the study attributes and consumer willingness to pay for the vacation ownership product, the following hypothesis is offered. The hypothesis is presented in null form due to the lack of published literature offering direction of the relationship between the attributes specific to the vacation ownership context.

H6: There is no difference in consumer willingness to pay for a vacation ownership product based on the specific attributes.

Initiated in consumer studies in 1971, conjoint measurement is a relatively new method for analyzing consumer preference. Developed from the fields of mathematical psychology and psychometrics, through the initial work of Luce and Tukey (1964), conjoint analysis breaks down overall judgments into psychological components that can be measured in terms of utility. The measurement of utility provides an interval scale allowing for mathematical measurement

and analysis. This measurement allows the researcher to interpret, and perhaps predict, the relative importance of a product's multi-dimensional attributes (Green & Wind, 1975). Prior to this time, the economic theory of utility and related expectancy value class of models (Fishburn, 1967; Rosenberg, 1956) had been used to model consumer preferences among multi-attribute alternatives (Green & Srinivasan, 1978).

Understanding preferences and values that individual consumers and consumer segments place on definitive attributes of products can assist researchers and practitioners alike in various aspects of consumer behavior, product positioning and product development. As it has been observed (Green & Srinivasan, 1978; Green & Wind, 1975) preferences can be obscure and individuals are unique; measuring and analyzing these factors is not without its challenges. One solution was to break products down to the attribute level and have consumers rank or rate their preference of attributes collectively or in terms of a single attribute. In so doing, researchers could apply scale models of regression or factor analysis to the otherwise ambiguous and individual preference measure (Luce & Tukey, 1964). This method became the genesis for what is today known as conjoint analysis. Green and Srinivasan (1978) define conjoint analysis as “any decompositional method that estimates the structure of a consumer's preferences given his/her overall evaluations of a set of alternatives that are pre-specified in terms of levels of different attributes.”

While similar, there are distinct variations between the earlier economic-based theory and the psychologically-based conjoint analysis. According to Wilkie and Pessemier (1973), economic theory has been more concerned with an aggregate approach that builds from separate value assessments of individual components via weighting of the various attributes. Green and Srinivasan (1978) raised the research purpose as another key distinction in the two approaches:

expectancy value theorists seek explanation as their primary objective, while predictive validity is the first interest for users of conjoint analysis.

There are several issues that come into play with this type of analysis: cost, time, confusion and respondent fatigue (Green & Wind, 1975). Alternatively, an orthogonal array, in which the various combinations are selected and the contributions of each are balanced, can be employed so that each factor's weight is retained separately and is not confused with those of the other factors. In conjoint analysis, scenarios including various alternatives of the product attributes to be measured are constructed and respondents are asked to choose or rank, depending upon the approach, their preferences of each scenario. This eliminates the need for the respondent to assess every possible combination of attributes and provides a starting point from which to delve further into the specific attributes that are important to the respondent. This has been established as an acceptable experimental design through the use of conjoint measurement.

Various computer programs then calculate the utility scales of each attribute through the use of algorithms that apply a numerical representation of the utilities of the factors. Individual scores for each respondent are entered and the program searches for the mathematical scale value of each factor in the design. The scale value for each attribute is chosen such that the total utility of the factor (sum of each level of each factor) matches to the individual respondent answers as closely as possible. Further, since all utility scales are measured in a common unit, researchers can better understand the level of importance by comparing utility ratings among the various factors (Green & Wind, 1975).

Methods for conjoint measurement have evolved over the years. Initially, physical, card-based product options of all possible alternatives were employed in the 1970s. Currently, conjoint analysis involves more efficient, computer-based designs utilizing Hierarchical Bayes

estimation and partial profile designs in settings that are more like the consumer decision-making process (Orme, 2006). Moreover, the variety of techniques allows the researcher to choose which method is most appropriately matched to the product as well as the consumer.

Orme (2006) estimated that between 5,000 and 8,000 conjoint analysis projects were conducted over a twelve month period in 2005. This estimate is based on a survey of customers using Sawtooth Software, a conjoint analysis software package. Expanding this estimate beyond a single customer base, reveals more than 10,000 conjoint analyses conducted worldwide on an annual basis.

Conjoint analyses have been employed in a variety of industries to address a multitude of business issues. For example, Microsoft utilized conjoint analysis to conduct benefits research, improve job satisfaction and reduce turnover and hold down costs (Slade, Davenport, Roberts & Shah, 2002). In his book, Orme (2006) identifies a variety of industries using and applications for conjoint analysis. Marriott International employed conjoint analysis to identify what attributes business travelers valued most in hotels. Through this analysis, they developed and implemented their Courtyard hotel brand. Yale University conducted a study in cancer treatment wherein conjoint analysis was employed to determine the proper course of treatment based on consumer preference. General Electric has used conjoint analysis to better understand how top executives evaluate financial deals; thereby providing their sales team with tools that improve chances of getting deals approved.

For the purposes of this research, a choice-based conjoint analysis approach was employed using Sawtooth Software version 7.0. Choice-based conjoint analysis presents the research participant with a finite number of product variations containing the attributes to be tested. Several choices are provided simultaneously and the participants choose the most

preferred combination. The preferences captured in the trade off scenarios are then calculated by way of regression through the use of algorithms that apply a numerical representation of the utilities of the factors in order to identify the utility scales of each attribute. Individual scores for each respondent are entered and the program searches for the mathematical scale value of each factor in the design. The scale value for each attribute is chosen such that the total utility of the factor (sum of each level of each factor) matches to the individual respondent answers as closely as possible. Further, since all utility scales are measured in a common unit, this research may allow for a better understanding of the level of importance of each attribute by comparing utility ratings among the various factors (Green & Wind, 1975).

The following table portrays the specific methodology that will be employed to address each hypothesis.



Table 8: Research Methodology

	<b>Hypotheses</b>	<b>Methodology</b>
<b>H1</b>	The presence of positive attributes during the vacation ownership product purchase process is positively related to overall vacation ownership product satisfaction.	
	<b>H1a:</b> The presence of a sales executive during the vacation ownership product purchase process is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
	<b>H1b:</b> The presence of a <i>financing package</i> during the vacation ownership product purchase process is positively related to overall product satisfaction	frequencies with Fong's (1996) test of significance
<b>H2</b>	The presence of positive attributes during consumer use of the vacation ownership product is positively related to overall product satisfaction.	
	<b>H2a:</b> The presence of resort hotel services in the vacation ownership resort is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
	<b>H2b:</b> The presence of an exchange company in the vacation ownership product offering is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
	<b>H2c:</b> The presence of resort-like amenities at the vacation ownership resort is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
	<b>H2d:</b> The presence of activities at the vacation ownership resort is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
	<b>H2e:</b> The presence of a vacation counselor to assist with vacation planning is positively related to overall product satisfaction.	frequencies with Fong's (1996) test of significance
<b>H3</b>	The presence of a program to trade vacation ownership weeks for hotel program benefits is positively related to customer satisfaction.	frequencies with Fong's (1996) test of significance
<b>H4</b>	Purchase incentives cause dissatisfaction when present and satisfaction when absent.	frequencies with Fong's (1996) test of significance
<b>H5</b>	There is no difference in consumer preference for a vacation ownership product based on the presence of certain attributes	Conjoint Analysis and Chi Square
<b>H6</b>	There is no difference in consumer willingness to pay for a vacation ownership product based on the presence of certain attributes.	Conjoint Analysis and Chi Square

## Research Design

This study employs quantitative research methods via a computer-based survey. The data for the study was gathered through extensive review of existing literature on the vacation ownership product and through input from industry experts to ensure that the essential attributes of the product were captured.

## Sample

For the purpose of this study and to address the research questions related to the purchase process and the usage of the vacation ownership product, it is imperative that participants have purchased the product and are familiar with the various aspects of the product usage. Participants in the study were qualified to participate if they currently own a vacation ownership product and were listed on the purchase contract as the primary purchaser. In order to ensure heterogeneity of the participants, no further qualifications regarding product ownership or purchase were applied. A random sampling of 20,000 vacation ownership owners of one of the largest vacation ownership companies were invited to participate in the survey. The sampling size was selected in order to achieve the minimum threshold of respondents for analysis if only 1% of the sample responded. The survey invitation originated directly from the vacation ownership company and contained a web link for the survey. Approximately 31% (6,266) of the individuals accessed the survey with 3,231 individuals completing the survey; representing a 16% response rate. Only fully completed surveys were utilized in the data analysis. The 3,231 completed surveys (16.1% response rate) provided an adequate sample for statistical analysis.

The response behavior of the potential respondents was reviewed in order to provide insight into further opportunities to improve the survey instrument. Sawtooth Software's SSI

Web application includes a reporting capability that records the point at which an individual abandoned the survey, referred to as the “last question seen.” Table 9 provides the detail for abandonment activity. In summary, of the 3,035 individuals who started the survey, but did not complete, 61% entered the survey yet abandoned the survey after the introductory explanation and initial two questions. An additional 22% abandoned the survey at or immediately after the introductory paragraph for the conjoint analysis. This information was reviewed with the Sawtooth Software and determined that it was consistent with previous behavior for similar types of surveys with which the company had experience. The following table provides the details of the last component of the survey that was viewed by those who entered but did not complete the survey.

Table 9: Last Component Viewed by Those Abandoning Survey

<b>Last Component Viewed Before Abandoning</b>	<b>Count</b>	<b>% of Respondents</b>
Kano Questionnaire Introduction	651	10%
Brand Presence/Absence	965	15%
Sales Executive Presence/Absence	236	3%
Purchase Incentive Presence/Absence	95	1%
Financing Package Presence/Absence	87	1%
Hotel Services Presence/Absence	61	0%
Exchange Company Presence/Absence	46	0%
Hotel Program Benefits Presence/Absence	34	0%
Resort Amenities Presence/Absence	25	0%
Organized Activities Presence/Absence	21	0%
Vacation Counselor Presence/Absence	29	0%
Conjoint Questionnaire Introduction	103	1%
Choice Set 1	180	2%
Choice Set 2	58	0%
Choice Set 3	48	0%
Choice Set 4	39	0%
Fixed Choice Set	47	0%
Choice Set 5	49	0%
Choice Set 6	54	0%
Fixed Choice Set	36	0%
Transition to Product Use Questions	20	0%
Choice Set 1	37	0%
Choice Set 2	18	0%
Choice Set 3	15	0%
Choice Set 4	9	0%
Fixed Choice Set	10	0%
Choice Set 5	8	0%
Choice Set 6	9	0%
Choice Set 7	8	0%
Choice Set 8	6	0%
Fixed Choice Set	2	0%
Demographics	22	0%

## Survey Instrument

To attend to the research questions within this study, the survey instrument is computer-based. The survey instrument is contained in Appendix B. This platform allows for an efficient conjoint analysis approach across a large sample when multiple attributes are involved (Orme, 2009). The Kano-style questionnaire has been criticized due to its length (Matzler, 2004), and since this study intends to build upon the Kano methodology, a computer-based approach is appropriate.

The administration of the web survey followed Dillman's (1999) "Total Design Methodology" principles in order to facilitate the greatest number of responses. A welcome screen introduced the respondents to the survey purpose, provided an estimation of time to complete the survey, and explained how to navigate through the survey. A unique identifier allowed the respondent to enter the survey and return to the last question answered if the survey was not completed in a single sitting. The use of color and graphical elements was minimized in order to eliminate distraction. Respondents were provided with a status bar to track their progress throughout the survey. In addition, two motivational screens to encourage the participants to complete the survey were interspersed in the survey. Questions were formatted for ease of reading within a single pane that minimized the respondents' needs to use the scroll bar to reveal the entire question or response options.

The questionnaire was comprised of two primary sections: the Kano questionnaire and choice-based conjoint questions. The first part of the survey contained specific Kano style questions to gather consumer input on the various attributes of the vacation ownership product purchase and usage as they relate to the presence or absence of the attribute as well as the stated

effect on satisfaction according to the Kano Model. This portion of the survey was constructed to replicate the Kano questionnaire used in previous research.

The second part of the survey was constructed using a choice-based conjoint analysis approach. Choice-based conjoint forces the respondent to choose one of the product options shown on the screen. This approach closely replicates the process consumers go through when determining which product alternative to choose since a variety of options can be considered simultaneously (Orme, 2009). To further conform to replication of the consumer decision process, a “none” alternative was available in the event that the consumer would not choose any of the options available. Further, to improve the validity of the responses, respondents were asked if they would really consider buying the product they chose. The survey was based on an orthogonal design wherein each attribute was presented with each level where the levels were mutually exclusive of one another and unambiguous. This allows for the ability to analyze the effect of each attribute independent of other influences (Orme, 2009). Finally, using the Sawtooth Software design functionality, which generates numerous versions of the conjoint analysis survey in a manner that allows for level balance (each level appears an equal number of times within each attribute), orthogonality (each level appears an equal number of times with every other level of different attributes), and balanced overlap (variation across levels of an attribute within a choice task), the most efficient design was generated to deliver the greatest precision according to the sample size. The precision of the design can be determined through simulated responses and aggregate logit utility estimation resulting in standard error reports. Prior to survey dissemination, the efficiency for the conjoint analysis section of the survey was scrutinized using the Sawtooth Software design efficiency utility and was found to be a highly efficient design.

## Validity and Reliability

Shavelson (1996) explains that validity is the extent to which the survey measures what it was intended to measure and that the results can be generalized beyond the results of the study. In order to improve the validity of the study, the survey instrument was pilot tested with 43 individuals before being launched to the sample population. Twelve individuals working in the industry and familiar with the timeshare product, and 31 timeshare owners on their timeshare vacation pre-tested the survey. The individuals were observed as they completed the survey online in order to identify any wording that was unclear, layout or formatting issues, to ensure the respondents understood what was being asked, and to estimate the time of expected completion by other respondents. Upon completion of the survey, the individuals were asked to share their thoughts on the content and functional aspects of the survey. Based on the feedback gathered in the pilot testing, minor adjustments were made to the survey instructions, completion status information, and content verbiage. The final survey was administered to the sample selected for the study.

To address the external validity of the study, particularly since the sample was randomly selected from the customer base of one of the largest vacation ownership companies, a question was added to the demographic/psychographic data collection portion of the survey. The particular question asked if the respondent owned vacation ownership with a company other than the one that provided the entry into the survey by asking them to report the number of weeks owned with vacation ownership companies other than the one that initiated the survey. Of the 3,231 respondents, the majority (1,874 or 58%) own one or more weeks of timeshare with another company. Ownership with another vacation ownership company improves the

generalizeability of the results across the vacation ownership segment of the hospitality industry, thereby increasing the validity of the results.

To address the reliability of the instrument, a scale analysis in SPSS using Cronbach Alpha was performed. According to Shavelson (1996), a scale's reliability is an indication of its internal consistency; said otherwise, how free it is from random error. Given the relatively short scales that were used in this study, fewer than ten items according to Briggs and Clark (1986), it would be expected that the Cronbach value would be low, so the mean inter-item correlation should be reported. Briggs and Clark (1986) suggest that 0.2 to 0.4 is an optimal range for the mean inter-item correlation. Reliability for the various subscales used in the research met or exceeded the suggested requirements for the mean inter-item correlation. The total scale reliability was 0.853.

### Data Analysis

Data was collected for the study using Sawtooth Software's web survey application (SSI Web version 7.0). Statistical Package for Social Science (SPSS) software version 18.0 was used for analysis of descriptive data, for example, demographics. Analyzing results of the Kano questionnaire is relatively simplistic in that it involves a tally of the responses to the various questions incorporated in the survey. The data collected for the Kano Model portion of the survey was tallied in a fashion consistent with previous studies using SPSS. However, to provide further statistical support to the findings, and to be consistent with previous research, additional computations were performed using a formula introduced by Fong (1996). To quote Fong (1996), "to determine the statistical significance of Kano responses at 90% confidence level, when a and b are the frequencies of the two most frequent observations and N is the total



number of responses, the null hypothesis is defined as  $H_0: a - b = 0$ , and the alternative hypothesis as  $H_1: a - b > 0$ .” Therefore, if the following formula holds,

$$a - b < Z_{\alpha} \sqrt{\frac{(a + b)(2N - a - b)}{2N}}$$

the difference is not statistically significant (fail to reject  $H_0$ ).

Lastly, conjoint analysis, using Sawtooth Software’s Choice Based Conjoint version 7.0, was also employed in order to improve the results of the study and to provide insight into which attributes consumers have a preference for over other attributes, as well as their willingness to pay for the product based on particular attributes.

According to Green & Wind (1975), conjoint analysis improves upon other methods of analyzing consumer preference in that it creates utility rankings at the individual product attribute level that can be regressed upon to determine consumer preference as it relates to a particular attribute or combination of attributes. Conjoint analysis allows for the trade offs that exist when consumers are forced to choose one product over another (Orme, 2006).

In his book, Orme (2006) suggests that conjoint analysis allows for more realistic questions since consumers may be most likely to respond that they would like the highest performance on all product attributes yet give up the least to achieve that. Through a variety of examples, Orme demonstrates how conjoint analysis may reveal more realistic and actionable results for the researcher. For example and according to Orme (2006), if a researcher were to ask if the respondent prefers a consumer credit card product with a high (or low) interest rate and a high (or low) credit limit, it is likely the consumer may choose a low interest rate and a high credit limit. However, if the researcher were to incorporate various specific levels of high credit

limit, i.e., \$5,000, \$7,500, and \$10,000, as well as varying low credit limits, i.e., 7%, 10%, 13%, and present the respondent with various product offerings that incorporated various combinations of the attributes, the researcher could discern the utility related to each attribute by examining choice preferences across product offerings. Conjoint analysis allows the researcher to create these trade-off scenarios with varying levels of the various attributes, credit limits and interest rates in this case, to determine at what point the respondent prefers one attribute to the other, or if no preference is attached to either attribute (Orme, 2006). To further understand consumer preference for the vacation ownership product, conjoint analysis was used in this study. This seems to be an appropriate approach given previous application in existing research within a myriad of contexts, i.e., employee benefits at Microsoft Corporation (Slade, Davenport, Roberts & Shah, 2002), Marriott's lodging product development (Green, Krieger & Wind, 2002), restaurant preferences (Koo, Tao & Yeung, 1999), and theme park activity preferences (Kemperman, Borgers, Oppewal & Timmermans, 2003).

### Summary

This chapter discussed the methods that were used in the study to empirically assess which attributes of the vacation ownership product have an effect on consumer satisfaction with the vacation ownership product, and how the Kano Model and conjoint analysis may provide insight into consumer preferences in the vacation ownership industry. The chapter began with an overview of the conceptual framework and the research model. This was followed by the specific research questions, the supporting hypotheses, and the literature that was used to prepare the hypotheses. Next, the survey instrument and sampling method were described, including the steps taken to address validity and reliability. Then, the statistical procedures used to address

the research questions and test the hypotheses were detailed. Finally, the limitations of the study were addressed. The following chapter details the findings of the research study.

## **CHAPTER FOUR:**

### **FINDINGS**

#### Introduction

This chapter details the outcome of the analysis conducted to address the research questions and evaluate the hypotheses included in this research. First, descriptive statistics for the study participants are provided. Next, the results of the Kano Model and conjoint analysis are provided along with a summary of the major findings according to each of the nine hypotheses and various sub-hypotheses. Lastly, the chapter concludes with a brief summation of the chapter.

#### Respondent Profile

Of the 3,231 completed surveys, respondents in this study were primarily male (62%); 38% of the study respondents were female. The large majority of the respondents were married (82%), with approximately 17% of the respondents being single, and another 1% classifying themselves as “other”. Nearly 62% of the respondents have children present in the home. The mean age of respondents was 59.7, with the largest percentage of respondents falling into the 55 to 64 years of age bracket. The mean household income of the respondents was \$170,630. The respondents in the study are educated with 59% having completed college and another 23% reporting completion of a post graduate degree. The mean time elapsed since the respondent last purchased timeshare is approximately 12 years with one third of the respondents having purchased within the last 10 years. Finally, the majority of respondents (57.9%) own one or more weeks of timeshare with more than one company, and 14% of study respondents report

owning two or more weeks with more than one timeshare company. Table 10 provides the detailed description of the study respondents.

Table 10: Respondent Profile

		Frequency	Percent	Mean	Median
<b>Gender</b>					
	Female	1228	38.00		
	Male	2003	62.00		
<b>Marital Status</b>					
	Married	2638	81.64		
	Single	546	16.90		
	Other	47	1.47		
<b>Presence of Children in Home</b>					
	Yes	1678	61.62		
	No	845	31.03		
<b>Age</b>				59.70	59.00
	18-24	9	0.28		
	25-34	19	0.59		
	35-44	435	13.48		
	45-54	873	27.04		
	55-64	1351	41.85		
	65 and over	541	16.76		
<b>Household Income</b>				\$170,630	\$150,000
	< \$74,999	435	16.76		
	\$75,000 to \$99,999	455	17.53		
	\$100,000 to \$124,999	595	22.93		
	\$125,000 to \$149,000	578	22.27		
		Frequency	Percent	Mean	Median
<b>Household Income (cont.)</b>				\$170,630	\$150,000
	\$150,000 to 174,999	448	17.26		
	\$175,000 to 200,000	335	12.91		
	> \$200,000	359	13.83		
<b>Education</b>					
	High School	559	17.30		
	College	1917	59.34		
	Post Graduate	735	22.74		

	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>Median</b>
<b>Years since last purchase</b>			12.34	11.00
< 1	111	3.44		
2 to 5	455	14.09		
6 to 10	620	19.20		
11 to 15	1761	54.52		
> 15	284	8.79		
<b>Weeks owned with another timeshare company</b>				
None	1356	42.00		
1 to 2	1429	44.20		
> 2	445	13.77		

Further analysis of the study respondents reveals the large majority own timeshare within the most dense timeshare destinations. Of all of the respondents, 27% of them own in the Caribbean, 23% in South Carolina, 15% in Florida, with Colorado, Hawaii, and California rounding out the 90% of destinations owned by the respondents. See Table 11 for more detail.

Table 11: Timeshare Resort Locations Owned

<b>Locations Owned</b>				
	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Caribbean	741	27.21	27.2	27.2
South Carolina	635	23.32	23.3	50.5
Florida	418	15.35	15.4	65.9
Colorado	244	8.96	9.0	74.8
Hawaii	180	6.61	6.6	81.5
California	146	5.36	5.4	86.8
Arizona	90	3.31	3.3	90.1

As the ownership is dispersed geographically, so is the resident state of the respondents. The largest percentage of respondents in this study live in California (16.6%), followed by Florida (7.4%), Illinois (6.3%), New York (6.2%), New Jersey (5.9%), Pennsylvania (5.4%), and

Massachusetts, Virginia, Ohio, and Texas (each at 4.4%). Table 12 provides further detail on the breakdown of resident state by respondents in the study.

Table 12: Resident States of Study Respondents

<b>Resident State</b>					
State	Frequency	Percent	Valid Percent	Cumulative Percent	
CA	535	16.6	16.6	16.6	
FL	238	7.4	7.4	23.9	
IL	204	6.3	6.3	30.3	
NY	201	6.2	6.2	36.5	
NJ	190	5.9	5.9	42.3	
PA	176	5.4	5.4	47.8	
MA	144	4.4	4.4	52.2	
VA	144	4.4	4.4	56.7	
OH	141	4.4	4.4	61.0	
TX	141	4.4	4.4	65.4	
MD	119	3.7	3.7	69.1	
MI	100	3.1	3.1	72.2	
GA	90	2.8	2.8	75.0	
NC	79	2.5	2.5	77.4	
CO	63	1.9	1.9	79.4	
WA	59	1.8	1.8	81.2	
CT	57	1.8	1.8	83.0	
UT	53	1.7	1.7	84.6	
AZ	47	1.5	1.5	86.1	
SC	44	1.4	1.4	87.4	
TN	40	1.2	1.2	88.7	
MN	34	1.1	1.1	89.8	
OR	34	1.1	1.1	90.8	
IN	33	1.0	1.0	91.8	
KY, KS, MO, IA, WI, NH, PR, AL, HI, RI, DE, LA, AR, NV, ID, ME, NE, VT, SD, AK, WV, MS, NM, OK, WY, DC, MT, ND, VI		< 1.0 each	< 1.0 each	100.0	
Total	3231	100.0	100.0		



### Hypotheses Testing

As discussed in the previous chapter, it was anticipated that the different attributes of the vacation ownership sales and usage processes that have been identified in academic literature would be categorized differently according to the Modified Kano Model. Kano et al. challenged the traditional customer satisfaction models that suggest higher satisfaction on all attributes is better, through a proposition that not all attributes are equal in the consumer mind.

The data gathered in this research lends support to Kano's Model. Attributes that had been identified previously in academic literature were categorized differently using the Kano questionnaire and Kano Model. Table 13 provides the expected and resultant classification of the attributes included in this research study. Further detail for each of the hypotheses that were tested using the Kano Model follows.

Table 13: Classification of Study Attributes

Modified Kano Model Category	Hypothesized & Resultant Attribute Classification	
	Hypothesized Classification	Resultant Classification
Desirable Attribute	Resort Hotel Services; Exchange Company  <i>(result in customer satisfaction if these attributes are present, but no dissatisfaction if they are not present)</i>	
Positive Attribute	Resort Amenities; Resort Activities; Trade for hotel program benefits  <i>(Positively related to customer satisfaction)</i>	Sales Executive, Purchase Incentive, Resort Hotel Services, Exchange Company, Resort Amenities, Trade for hotel program benefits, Vacation counselor
Essential Attribute	Sales Executive; Vacation Ownership Counselor  <i>(Without these attributes dissatisfaction increases, yet their existence does not necessarily improve satisfaction)</i>	
Zone of Indifference	Financing Availability  <i>(there is no substantial impact to customers' satisfaction or dissatisfaction based on the presence or absence of these attributes)</i>	Financing Availability, Activities
Negative Attribute	High Pressure Sales Tactics (Purchase Incentive)  <i>(contrary to must-be (critical) attributes, negative attributes cause dissatisfaction when present and satisfaction when absent)</i>	

## **Hypothesis 1**

Hypothesis one stated that the presence of positive attributes during the vacation ownership product purchase process is positively related to overall vacation ownership product satisfaction. More explicitly, the sub-hypotheses addressed the presence of a sales executive (H1a), and the presence of a financing package (H1b).

Review of the results of the Kano questionnaire specific to the presence of a sales executive reveal that respondents classified the presence of a sales executive as a positive attribute. Because the respondents like having a sales executive present and do not like it when the sales executive is not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H1a.

In reviewing the data, when the question was asked to include the presence of a sales-executive, slightly more than 45% of the individuals responded that they “like it that way” - having a sales executive take them through a personalized sales presentation. Approximately 20% of the respondents were neutral; 14% responded that it must be that way or they can live with it that way. Interestingly, less than 5% of the respondents stated that they do not like it when a sales executive takes them through a personalized sales presentation.

Examination of the responses to the complementary question fashioned to eliminate the presence of the sales executive during the sales presentation, reveal that the largest percentage (35%) of respondents do not like it that way. Interestingly, however, 27% of the respondents are neutral; 18% are neutral; and another 18% do not like it that way. A very small 1% of the respondents responded that it must be that way; meaning they would rather not have a sales executive take them through a sales presentation. Table 14 provides the breakdown (count and

percentage) of responses related to the presence and absence of a sales executive during the purchase of a vacation ownership product.

Table 14: Modified Kano Model Response Categorization – Sales Executive

If, during the process of purchasing a vacation ownership product, a SALES EXECUTIVE takes you through a personalized sales presentation, how does that make you feel?	Count	Percent
I like it that way.	1462	45.24%
It must be that way.	464	14.36%
I am neutral.	693	21.44%
I can live with it that way.	463	14.32%
I do not like it that way.	149	4.61%
If, during the process of purchasing a vacation ownership product, a SALES EXECUTIVE <b>does not</b> take you through a personalized sales presentation, how does that make you feel?	Count	Percent
I like it that way.	578	17.88%
It must be that way.	39	1.2%
I am neutral.	862	26.67%
I can live with it that way.	596	18.44%
I do not like it that way.	1156	35.77%

Review of the results of the Kano questionnaire specific to the presence or absence of a financing package reveal that this attribute falls into the zone of indifference based on the survey

responses. Because the majority of respondents indicated that they were neutral both when a financing package was available and when it was not available, the attribute falls into the zone of indifference attribute in the Modified Kano Model. The results of this research fail to support H1b - The presence of a financing package during the vacation ownership product purchase process is positively related to overall product satisfaction.

In reviewing the data, when the question was asked to include the presence of a financing package, 46% of the individuals responded that they “were neutral “- to having a financing package available during the purchase of a vacation ownership product. Approximately 33% of the respondents like it that way; 11% responded that they can live with it that way. However, approximately 6% of respondents say that it must be that way and less than 5% of the respondents stated that they do not like it when a financing package is available during the purchase of a vacation ownership product.

Inspection of the responses to the complementary question created to eliminate the presence of the financing package during the sales presentation, reveal that the largest percentage (50%) of respondents is also neutral. However, 26% of the respondents do not like it that way, and 20% can live with it that way. Less than 4% of respondents like it that way and 1% of the respondents indicated that it must be that way; meaning they would rather not have a financing package available during the purchase of a vacation ownership product. Table 15 provides the breakdown (count and percentage) of responses related to the presence and absence of a financing package during the purchase of a vacation ownership product.

Table 15: Modified Kano Model Response Categorization – Financing Package

If a FINANCING PACKAGE IS AVAILABLE during your vacation ownership purchase process, how does that make you feel?	Count	Percent
I like it that way.	1073	33.2%
It must be that way.	184	5.69%
I am neutral.	1479	45.77%
I can live with it that way.	347	10.73%
I do not like it that way.	148	4.58%
If a FINANCING PACKAGE IS NOT AVAILABLE during your vacation ownership purchase process, how does that make you feel?	Count	Percent
I like it that way.	113	3.49%
It must be that way.	30	0.92%
I am neutral.	1601	49.55%
I can live with it that way.	631	19.52%
I do not like it that way.	856	26.49%

## Hypothesis 2

Hypothesis two stated that the presence of positive attributes during the use of the vacation ownership product is positively related to overall vacation ownership product satisfaction. More explicitly, the sub-hypotheses addressed the following product attributes:

resort hotel services (H2a), an exchange company (H2b), resort-like amenities (H2c), organized activities (H2d), and a vacation counselor to assist with vacation planning (H2e).

Review of the results of the Kano questionnaire specific to the presence of a resort hotel services reveal that respondents classified resort hotel services as a positive attribute. Because the respondents like having hotel services present and do not like it when the hotel services are not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H2a.

In reviewing the data, when the question was asked to include the presence of a hotel services, 71% of the individuals responded that they “like it that way “- having hotel services, such as a concierge, available at the vacation ownership resort. Approximately 14% of the respondents were neutral; 9% responded that it must be that way, and 5% indicated they can live with it that way. Interestingly, less than 1% of the respondents stated that they do not like it when hotel services are available at the vacation ownership property.

Examination of the responses to the complementary question fashioned to eliminate the presence of the hotel services during the use of a vacation ownership product, reveal that the largest percentage (48%) of respondents do not like it that way. Interestingly, however, 21% of the respondents are neutral; 28% can live with it that way. A very small 1% of the respondents responded that they like it that way or it must be that way; meaning they would rather not have hotel services available during the use of a vacation ownership product. Table 16 provides the breakdown (count and percentage) of responses related to the presence and absence of a hotel services during the use of a vacation ownership product.

Table 16: Modified Kano Model Response Categorization – Resort-Like Hotel Services

If the vacation ownership resort OFFERS RESORT-LIKE HOTEL SERVICES, how does that make you feel?	Count	Percent
I like it that way.	2301	71.21%
It must be that way.	301	9.31%
I am neutral.	449	13.89%
I can live with it that way.	149	4.61%
I do not like it that way.	31	0.95%
If the vacation ownership resort <b>DOES NOT OFFER</b> RESORT-LIKE HOTEL SERVICES, how does that make you feel?	Count	Percent
I like it that way.	38	1.17%
It must be that way.	26	0.8%
I am neutral.	691	21.38%
I can live with it that way.	918	28.41%
I do not like it that way.	1558	48.22%

Review of the results of the Kano questionnaire specific to the presence of an exchange company reveals that respondents classified an exchange company as a positive attribute. Because the respondents like having an exchange company present and do not like it when an



exchange company is not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H2b.

In reviewing the data, when the question was asked to include the presence of an exchange company, 45% of the individuals responded that they “like it that way “. Approximately 20% of the respondents were neutral; 14% responded that it must be that way, and 11% indicated they can live with it that way. Interestingly, less than 10% of the respondents stated that they do not like it when an exchange company is available during the use of a vacation ownership product.

Examination of the responses to the complementary question fashioned to eliminate the presence of an exchange company during the use of a vacation ownership product, reveal that the largest percentage (49%) of respondents do not like it that way. Interestingly, however, 24% of the respondents are neutral; 16% can live with it that way. Only 8% of the respondents responded that they like it that way, and less than 2% indicated that it must be that way; meaning they would rather not have an exchange company available during the use of a vacation ownership product. Table 17 provides the breakdown (count and percentage) of responses related to the presence and absence of an exchange company during the use of a vacation ownership product.

Table 17: Modified Kano Model Response Categorization – Exchange Company

If the vacation ownership company OFFERS AN AFFILIATION WITH AN EXTERNAL EXCHANGE COMPANY, how does that make you feel?	Count	Percent
I like it that way.	1464	45.31%
It must be that way.	454	14.05%
I am neutral.	639	19.77%
I can live with it that way.	356	11.01%
I do not like it that way.	318	9.84%
If the vacation ownership company DOES NOT OFFER AN AFFILIATION WITH AN EXTERNAL EXCHANGE COMPANY, how does that make you feel?	Count	Percent
I like it that way.	261	8.07%
It must be that way.	48	1.48%
I am neutral.	801	24.79%
I can live with it that way.	530	16.4%
I do not like it that way.	1591	49.24%

Review of the results of the Kano questionnaire specific to the presence of resort-like amenities reveals that respondents classified resort-like amenities as a positive attribute.

Because the respondents like having resort-like amenities present and do not like it when the

resort-like amenities are not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H2c.

In reviewing the data, when the question was asked to include the presence of resort-like amenities, 70% of the individuals responded that they “like it that way “. Approximately 11% of the respondents were neutral; 17% responded that it must be that way, and 2% indicated they can live with it that way. Interestingly, less than 1% of the respondents stated that they do not like it when resort-like amenities are available during the use of a vacation ownership product.

Inspection of the responses to the complementary question fashioned to eliminate the presence of resort-like amenities during the use of a vacation ownership product, reveal that the largest percentage (65%) of respondents do not like it that way. Interestingly, however, 15% of the respondents are neutral; and 18% can live with it that way. Less than 2% of the respondents responded that they like it that way, or that it must be that way; meaning they would rather not have resort-like amenities available during the use of a vacation ownership product. Table 18 provides the breakdown (count and percentage) of responses related to the presence and absence of resort-like amenities during the use of a vacation ownership product.

Table 18: Modified Kano Model Response Categorization – Resort-like Amenities

If the vacation ownership resort OFFERS RESORT-LIKE HOTEL AMENITITES, how does that make you feel?	Count	Percent
I like it that way.	2246	69.51%
It must be that way.	537	16.62%
I am neutral.	357	11.04%
I can live with it that way.	79	2.44%
I do not like it that way.	12	0.37%
If the vacation ownership resort DOES NOT OFFER RESORT-LIKE HOTEL AMENITITES, how does that make you feel?	Count	Percent
I like it that way.	17	0.52%
It must be that way.	26	0.8%
I am neutral.	493	15.25%
I can live with it that way.	582	18.01%
I do not like it that way.	2113	65.39%

Review of the results of the Kano questionnaire specific to the presence of organized activities reveals that organized activities fell into the zone of indifference. Because the respondents were largely neutral when organized activities are present and when they are not present, the attribute is categorized in the zone of indifference in the Modified Kano Model. The results of this research, therefore, do not support H2d.

In reviewing the data, when the question was asked to include the presence of organized activities, 44% of the individuals responded that they “were neutral “. Approximately 40% of the respondents “liked it that way”; 5% responded that it must be that way, and 10% indicated they can live with it that way. Interestingly, less than 2% of the respondents stated that they do not like it when organized activities are available during the use of a vacation ownership product.

As identified by Sireli, Kauffmann, & Ozan (2007), when frequencies are not more than a few points apart, additional statistical analyses should be performed. Sireli, et. al. (2007) suggest using the following formula, introduced by Fong (1996) where he states “to determine the statistical significance of Kano responses at 90% confidence level, when a and b are the frequencies of the two most frequent observations and N is the total number of responses, the null hypothesis is defined as  $H_0: a - b = 0$ , and the alternative hypothesis as  $H_1: a - b > 0$ .”

Therefore, if the following formula holds,

$$a - b < Z_{\alpha} \sqrt{\frac{(a + b)(2N - a - b)}{2N}}$$

the difference is not statistically significant (fail to reject  $H_0$ ). Using the previous formula, the difference is statistically significant. As a result, this would suggest that the attribute “organized activities” could be categorized according to the Kano Model.

Inspection of the responses to the complementary question fashioned to eliminate the presence of organized activities during the use of a vacation ownership product, reveal that the largest percentage (43%) of respondents is also neutral. Nearly 28% of the respondents can live with it that way; and 26% do not like it that way. Less than 4% of the respondents responded that they like it that way, or that it must be that way; meaning they would rather not have organized activities available during the use of a vacation ownership product. Considering

Kuo's (2004) suggestion for addressing attributes that are categorized according to the greatest effect on satisfaction, organized activities would not be one to focus on at the aggregate level.

Table 19 provides the breakdown (count and percentage) of responses related to the presence and absence of organized activities during the use of a vacation ownership product.

Table 19: Modified Kano Model Response Categorization – Organized Activities

If the vacation ownership resort OFFERS ORGANIZED ACITIVITES, how does that make you feel?	Count	Percent
I like it that way.	1285	39.77%
It must be that way.	155	4.79%
I am neutral.	1410	43.63%
I can live with it that way.	319	9.87%
I do not like it that way.	62	1.91%
If the vacation ownership resort DOES NOT OFFER ORGANIZED ACITIVITES, how does that make you feel?	Count	Percent
I like it that way.	97	3%
It must be that way.	16	0.49%
I am neutral.	1382	42.77%
I can live with it that way.	887	27.45%
I do not like it that way.	849	26.27%

Review of the results of the Kano questionnaire specific to the presence of a vacation counselor to assist with vacation planning reveals that respondents classified the vacation counselor as a positive attribute. Because the respondents like having a vacation counselor present and do not like it when the vacation counselor is not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H2e.

In reviewing the data, when the question was asked to include the presence of a vacation counselor, 53% of the individuals responded that they “like it that way “. Approximately 30% of the respondents were neutral; 7% responded that it must be that way, and 7% indicated they can live with it that way. Interestingly, less than 3% of the respondents stated that they do not like it when a vacation counselor is available during the use of a vacation ownership product.

Inspection of the responses to the complementary question fashioned to eliminate the presence of a vacation counselor during the use of a vacation ownership product, reveal that the largest percentage (40%) of respondents do not like it that way. Interestingly, however, 34% of the respondents are neutral; and 23% can live with it that way. Less than 3% of the respondents responded that they like it that way, or that it must be that way; meaning they would rather not have a vacation counselor available during the use of a vacation ownership product. Given that two categories, “do not like it that way” and “neutral”, are within a few points of each other, Fong’s formula (Fong, 1996) was used to test the statistical significance of the difference. The results were not statistically significant, so this attribute should not be categorized using the Kano Model. Table 20 provides the breakdown (count and percentage) of responses related to the presence and absence of a vacation counselor during the use of a vacation ownership product.

Table 20: Modified Kano Model Response Categorization – Vacation Counselor

If the vacation ownership company OFFERS VACATION COUNSELORS to assist you with vacation planning, how does that make you feel?	Count	Percent
I like it that way.	1715	53.07%
It must be that way.	223	6.9%
I am neutral.	981	30.36%
I can live with it that way.	226	6.99%
I do not like it that way.	86	2.66%
If the vacation ownership company DOES NOT OFFER VACATION COUNSELORS to assist you with vacation planning, how does that make you feel?	Count	Percent
I like it that way.	79	2.44%
It must be that way.	26	0.8%
I am neutral.	1111	34.38%
I can live with it that way.	730	22.59%
I do not like it that way.	1285	39.77%

### Hypothesis 3

Hypothesis three stated that the presence of a program to trade vacation ownership weeks for hotel program benefits is positively related to customer satisfaction. This hypothesis arose from two sources: the discussions held with an expert panel from the industry, and examination



of vacation ownership product offerings through review of the websites, and not previously identified in academic literature, as discussed previously. The websites for each of the vacation ownership companies affiliated with a lodging brand refer to hotel program benefits, membership in the hotel frequency programs, often with elevated recognition status, and ability to access the lodging brands' hotel rooms worldwide.

Review of the results of the Kano questionnaire specific to the presence of a program to trade vacation ownership weeks for hotel program benefits reveals that respondents classified this as a positive attribute. Because the respondents like having such a program present and do not like it when the program is not present, the attribute is categorized as a positive attribute in the Modified Kano Model. The results of this research support H3 stated as “the presence of a *program to trade vacation ownership weeks for hotel program benefits* is positively related to customer satisfaction.”

In reviewing the data, when the question was asked to include the presence of a program to trade vacation ownership weeks for hotel program benefits, 69% of the individuals responded that they “like it that way “. Approximately 10% of the respondents were neutral; 13% responded that it must be that way, and 5% indicated they can live with it that way. Less than 3% of the respondents stated that they do not like it when a program to trade vacation ownership weeks for hotel program benefits is available during the use of a vacation ownership product.

Inspection of the responses to the complementary question fashioned to eliminate the presence of a program to trade vacation ownership weeks for hotel program benefits during the use of a vacation ownership product, reveal that the largest percentage (69%) of respondents do not like it that way. Interestingly, however, 15% of the respondents are neutral; and 14% can live with it that way. Less than 2% of the respondents responded that they like it that way, or

that it must be that way; meaning they would rather not have such a program available during the use of a vacation ownership product. Table 21 provides the breakdown (count and percentage) of responses related to the presence and absence of a program to trade vacation ownership weeks for hotel program benefits during the use of a vacation ownership product.

Table 21: Modified Kano Model Response Categorization – Hotel Program Benefits

If the vacation ownership company OFFERS AN OPTION TO EXCHANGE YOUR TIMESHARE WEEK(POINTS) FOR HOTEL POINTS, how does that make you feel?	Count	Percent
I like it that way.	2236	69.2%
It must be that way.	432	13.37%
I am neutral.	316	9.78%
I can live with it that way.	163	5.04%
I do not like it that way.	84	2.59%
If the vacation ownership company DOES NOT OFFER AN OPTION TO EXCHANGE YOUR TIMESHARE WEEK(POINTS) FOR HOTEL POINTS, how does that make you feel?	Count	Percent
I like it that way.	43	1.33%
It must be that way.	18	0.55%
I am neutral.	473	14.63%
I can live with it that way.	453	14.02%
I do not like it that way.	2244	69.45%

## **Hypothesis 4**

Hypothesis four stated that purchase incentives cause dissatisfaction when present and satisfaction when absent. This hypothesis arose from initial conversations with industry experts and is not widely discussed in academic literature. The industry has been inundated with a harmful image and shady sales and marketing tactics. (ARDA, 2005) Some have suggested that the current day sales and marketing tactics have neither changed nor improved, and that the ongoing negative image is largely due to those practices (Jackson, 2003; Rezak, 2002; Scavo, 1999; Schreier, 2005; Tugend, 2006; Woods, 2001). High pressure sales tactics, also referred to as same day purchase incentives, - encouraging prospective buyers to make a purchase decision on the same day that they attend the sales presentation – are common to the negativity. It has been suggested that such practices induce pressure with the prospective buyer and may negatively impact the immediate buying experience and add to the overall negative image of the industry (Schreier, 2005; Woods, 2001). Hypothesis 4 examines the consumer perspective of the purchase incentive used in vacation ownership sales practices to entice consumers to make a purchase decision on the same day they are introduced to the product.

Review of the results of the Kano questionnaire specific to the presence of a purchase incentive reveals that respondents classified this as a positive attribute. Because the respondents like having such an attribute present and do not like it when the attribute is not present, it is categorized as a positive attribute in the Modified Kano Model. The results of this research do not support H4 stated as “high pressure sales tactics cause dissatisfaction when present and satisfaction when absent.”

In reviewing the data, when the question was asked to include the presence of a same day purchase incentive, 66% of the individuals responded that they “like it that way “.

Approximately 13% of the respondents were neutral; 11% responded that it must be that way, and 5% indicated they can live with it that way. Less than 4% of the respondents stated that they do not like it when a purchase incentive is available during the purchase of a vacation ownership product.

Inspection of the responses to the complementary question fashioned to eliminate the presence of high pressure sales tactics, reveal that the largest percentage (48%) of respondents do not like it that way. Interestingly, however, 28% of the respondents are neutral; and 20% can live with it that way. Less than 3% of the respondents responded that they like it that way, or that it must be that way; meaning they would rather not have such an incentive available during the purchase of a vacation ownership product. Table 22 provides the breakdown (count and percentage) of responses related to the presence and absence of a purchase incentive.

Table 22: Modified Kano Model Response Categorization – Purchase Incentive

If a PURCHASE INCENTIVE IS AVAILABLE during your vacation ownership purchase process, how does that make you feel?	Count	Percent
I like it that way.	2141	66.26%
It must be that way.	369	11.42%
I am neutral.	436	13.49%
I can live with it that way.	176	5.44%
I do not like it that way.	109	3.37%
If a PURCHASE INCENTIVE IS <b>NOT AVAILABLE</b> during your vacation ownership purchase process, how does that make you feel?	Count	Percent
I like it that way.	78	2.41%
It must be that way.	28	0.86%
I am neutral.	910	28.16%
I can live with it that way.	660	20.42%
I do not like it that way.	1555	48.12%

Finally, to address a gap in existing vacation ownership literature and to answer the research questions regarding what attributes of the vacation ownership product that consumers prefer most, the following hypotheses were proposed. Due to the lack of existing literature or insight from the industry, the hypotheses were presented in null form.

## **Hypothesis 5**

Hypothesis five stated that there is no difference in consumer preference for a vacation ownership product based on the presence of positive attributes. To address this hypothesis, choice-based conjoint questions were incorporated into the survey and share of preference and chi square analyses were performed to determine attribute level preferences for the respondents included in the study. A conjoint counting analysis was used to determine the share of preference of each attribute; the percentage of times that a particular level (presence or absence, in the case of this study) was chosen in relation to the number of times that it appeared were performed. In addition a chi square analysis was performed to understand if the differences in the selections are significant. Results of the analysis show that respondents do have preferences for certain attributes and that these preferences are statistically significant. Therefore, this research failed to support H5 – “There is no difference in consumer preference for a vacation ownership product based on the presence of certain attributes.”

Table 23: Share of Preference

<b>Sales Exec</b>			<b>Hotel Services</b>		
Total Respondents	3231		Total Respondents	3231	
Sales Executive Yes	0.37		Hotel Services Yes	0.38	
Sales Executive No	0.29		Hotel Services No	0.28	
Within Att. Chi-Square	136.32		Within Att. Chi-Square	185.32	
D.F.	1		D.F.	1	
Significance	p < .01		Significance	p < .01	
<b>Purchase Incentive</b>			<b>Exchange Company</b>		
Total Respondents	3231		Total Respondents	3231	
Purchase Incentive Yes	0.38		Exchange Company Yes	0.36	
Purchase Incentive No	0.28		Exchange Company No	0.24	
Within Att. Chi-Square	191.91		Within Att. Chi-Square	133.22	
D.F.	1		D.F.	1	
Significance	p < .01		Significance	p < .01	
<b>Financing</b>			<b>Trade for Hotel Program Benefits</b>		
Total Respondents	3231		Total Respondents	3231	
Financing Package Yes	0.37		Hotel Program Yes	0.58	
Financing Package No	0.29		Hotel Program No	0.18	
Within Att. Chi-Square	119.79		Within Att. Chi-Square	3194.91	
D.F.	1		D.F.	1	
Significance	p < .01		Significance	p < .01	
<b>Price</b>			<b>Resort-like Amenities</b>		
Total Respondents	3231		Total Respondents	3231	
20,000	0.49		Resort Amenities Yes	0.47	
22,000	0.39		Resort Amenities No	0.29	
24,000	0.26				
26,000	0.19		Within Att. Chi-Square	1119.78	
			D.F.	1	
Within Att. Chi-Square	1112.25		Significance	p < .01	
D.F.	3				
Significance	p < .01		<b>Organized Activities</b>		
			Total Respondents	3231	
			Activities Yes	0.24	
			Activities No	0.51	
			Within Att. Chi-Square	1114.72	
			D.F.	1	
			Significance	p < .01	
			<b>Vacation Counselor</b>		
			Total Respondents	3231	
			Vacation Counselor Yes	0.54	
			Vacation Counselor No	0.13	
			Within Att. Chi-Square	2132.26	
			D.F.	1	
			Significance	p < .01	

## **Hypothesis 6**

Hypothesis six stated that there is no difference in consumer willingness to pay for a vacation ownership product based on the presence of certain attributes. Table 24 shows the share of respondent choice for the various product concepts with a breakdown for the various price points. Although the majority of respondents (41%, 68%, and 49%, for each of the three concepts presented), chose the lower price point (\$20,000), the data and chi square tests reveal there is a significant difference in willingness to pay (price indicated) based on the variations in attributes and levels within each concept. Therefore, this study fails to support H6 since H6 states “there is no difference in consumer willingness to pay for a vacation ownership product based on the presence of certain attributes.”



Table 24: Conjoint Analysis Share of Preference on Price

	CBC System			
	Share of Preference			
	Total	Concept 1	Concept 2	Concept 3
Total Respondents	3231	2162	908	1696
\$20,000	0.49	0.41	0.68	0.49
\$22,000	0.39	0.37	0.41	0.40
\$24,000	0.27	0.30	0.17	0.27
\$26,000	0.19	0.26	0.08	0.17
Within Att. Chi-Square	1112.26	86.58	620.20	673.25
D.F.	3	3	3	3
Significance	p < .01	p < .01	p < .01	p < .01
Between Group Chi-Square	286.19			
D.F.	6			
Significance	p < .01			

Summary

This chapter provided the analyses to address the research hypotheses based on the data that was collected from a sample of 3,231 survey respondents. The findings related to each of the study attributes were discussed. Table 25 provides a summary of the hypotheses, statistical significance, and the research results. Table 26 provides the calculations related to the statistical significance test used for H1 through H5, where statistical significance for these hypotheses was tested using the Fong’s (1996) formula:

$$a - b < Z_{\alpha} \sqrt{\frac{(a + b)(2N - a - b)}{2N}}$$

The next chapter discusses the findings of this research as it relates to previous studies, and assesses the contributions of the study to academic literature, as well as practical implications within the context of the vacation ownership industry.

Table 25: Summary of Hypothesis Testing

	<b>Hypotheses</b>	<b>Significance</b>	<b>Result</b>
H1	The presence of positive attributes during the vacation ownership product purchase process is positively related to overall vacation ownership product satisfaction.		
H1a	The presence of a sales executive during the vacation ownership product purchase process is positively related to overall product satisfaction.	Significant - <i>See Table 26</i>	Supported
H1b	The presence of a <i>financing package</i> during the vacation ownership product purchase process is positively related to overall product satisfaction	Significant - <i>See Table 26</i>	Not supported
H2	The presence of positive attributes during consumer use of the vacation ownership product is positively related to overall product satisfaction.		
H2a	The presence of resort hotel services in the vacation ownership resort is positively related to overall product satisfaction.	Significant - <i>See Table 26</i>	Supported
H2b	The presence of an exchange company in the vacation ownership product offering is positively related to overall product satisfaction.	Significant - <i>See Table 26</i>	Supported
H2c	The presence of resort-like amenities at the vacation ownership resort is positively related to overall product satisfaction.	Significant - <i>See Table 26</i>	Supported
H2d	The presence of activities at the vacation ownership resort is positively related to overall product satisfaction.	Yes See Table 26	Supported
H2e	The presence of a vacation counselor to assist with vacation planning is positively related to overall product satisfaction.	Yes See Table 26	Not Supported

	<b>Hypotheses</b>	<b>Significance</b>	<b>Result</b>
H3	The presence of a program to trade vacation ownership weeks for hotel program benefits is positively related to customer satisfaction.	Yes See Table 26	Supported
H4	Purchase incentives cause dissatisfaction when present and satisfaction when absent.	Yes See Table 26	Not Supported
H5	There is no difference in consumer preference for a vacation ownership product based on the presence of certain attributes	Yes Chi Square $p > .01$	Failed to Support
H6	There is no difference in consumer willingness to pay for a vacation ownership product based on the presence of certain attributes.	Yes Chi Square $p > .01$	Failed to Support

Table 26: Statistical Significance of Kano Categorizations

<b>Attribute</b>	<b>Two Highest Frequencies</b>		<b>Difference of Two Highest Frequencies</b>	$1.65 \sqrt{\frac{(a+b)(2N-a-b)}{2N}}$
	a	b	(a-b)	
Sales Executive	1462	693	769	62.48
Financing	1479	1073	406	64.77
Hotel Services	2301	449	1852	65.50
Exchange Company	1464	454	1010	60.56
Hotel Amenities	2246	537	1709	65.60
Organized Activities	1285	1410	125	65.33
Vacation Counselors	1715	981	734	65.33
Hotel Program Benefits	2236	432	1804	65.23
Purchase Incentive	2141	436	1705	64.88

## **CHAPTER FIVE:**

### **DISCUSSION AND CONCLUSIONS**

#### Introduction

This chapter provides a discussion of this research study and findings. The chapter begins with a summary of the research premise and objectives. The premise of existing research within the vacation ownership context is provided as perspective, the findings of this study are discussed in relation to existing literature, and the conclusion that can be drawn are provided. Next, the contributions of the study to academic literature, as well as the practical implications are provided. The limitations of the study and suggestions for future research are presented, and the chapter concludes with a brief summary.

#### Synopsis: Background, Rationale, and Purpose

The purpose of this study is to assess the role of process and product attributes in consumers' willingness to pay and patronage in the vacation ownership industry. Through identified consumer-acknowledged attributes that are preferred by the consumer, the study categorized the attributes according to their anticipated effect on consumer satisfaction, and quantified consumer preferences of each in order to establish preferences within the vacation ownership industry. The study explored two distinct aspects of the consumer's vacation ownership experience: the purchase process and the use of the lodging product.

The foundation of the study, the Kano Model, has been found to be an effective tool to direct product development and positioning strategies in academic literature and practical application (e.g., Bhattacharyya & Rahman, 2004; Emery & Tian, 2002; Emery & Tolbert, 2003;

Fuller & Matzler, 2007; Schvaneveldt, Matzler & Hinterhuber, 1998; Yang, 2003 & 2005). In 1984, Kano, Seraku, Takahashi & Tsuji contemplated that not all product attributes are equal in terms of their relationship to consumer satisfaction levels. Kano et al. surmised that certain attributes may produce higher satisfaction and that consumers may have differing requirements as to the functional attributes of products. Kano et al., referring back to earlier research on the positive effects of customer satisfaction, proposed that four primary objectives related to satisfaction should be considered:

- 1) attributes related to basic needs of the customer (critical attributes) must be identified and met,
- 2) attributes with a positive relationship to satisfaction (positive attributes) should be identified and delivered upon in order to increase satisfaction,
- 3) attributes that increase satisfaction when present, but do not deter from satisfaction when absent (attractive attributes), should be understood and could be delivered upon in order to create a point of differentiation for the provider, and
- 4) attributes that provide this point of differentiation may become expected, and therefore, could be temporary in nature.

From this premise, Kano et al. challenged the traditional customer satisfaction models through a suggestion that more specific origins of customer satisfaction could be understood by understanding the functional requirements as well as the satisfaction ratings of consumers. The results of this type of research could then be used by companies to increase customer satisfaction, maintain (or gain) a competitive edge, or to differentiate themselves in the marketplace. A Modified Kano Model, found to be more appropriate for hospitality products and services, was proposed and adopted for the study.

Because increasing costs are a concern for the vacation ownership industry, despite its unparalleled growth rates (Stringam, 2010), applying the Kano Model and methodology may be appropriate given the findings from research applied to various other industry segments. This study also employed conjoint analysis in order to identify consumer preferences for particular attributes and price points which may assist the industry in addressing increasing costs. It has been suggested that conjoint analysis may provide more accurate insight into consumer preference at the attribute level since consumers, exposed to a variety of attribute combinations, are forced into a trade off analysis wherein the utility of each attribute can be calculated by the researcher (Green & Wind, 1975).

Research in the vacation ownership industry is limited, despite the fact that the timeshare industry has been touted as the fastest growing segment in the travel industry (Gilligan, 2006; Hayward, 2005; Ragatz, 2007; Scoviak, 2004 & 2003). The strengths of the industry, i.e., physical product and human elements (Stringam, 2010) have been researched for understanding within the academic arena, as well as from a satisfaction perspective (Cross & Ragatz, 2002; Kauffman & Upchurch, 2007; Lawton, Weaver, & Faulkner, 1998; Sparks, Butcher, & Pan, 2007; Stringam, 2008; Upchurch & Gruber, 2002). However, industry executives rank their concerns for increasing sales and marketing costs within the industry as one of the primary issues that must be addressed in order for the industry to thrive (Stringam, 2010).

The core objective of this study, therefore, was to understand which product attributes effect consumer satisfaction with the vacation ownership product. A Modified Kano Model was used to determine where consumers find value in the vacation ownership product, a service-based product. In addition, the Kano methodology was augmented through the use of conjoint

analysis in an effort to improve the information gathered, and advance the efficiency of the instrument.

Specifically, this study addressed the following research questions:

1. Which attributes of the vacation ownership product result in customer satisfaction when present, but no dissatisfaction if they are not present?
2. Which attributes of the vacation ownership product are positively related to customer satisfaction?
3. Which attributes of the vacation ownership product are minimum requirements for consumers, i.e., without these attributes dissatisfaction decreases, yet their existence does not necessarily improve satisfaction?
4. Which attributes of the vacation ownership product are consumers indifferent to, i.e., no impact to satisfaction/dissatisfaction based on presence or absence of these attributes?
5. Which attributes of the vacation ownership product are inversely related to customer satisfaction?
6. Do differences exist in consumer willingness to pay for vacation ownership products based on product attributes?

The research questions were addressed by a web-based survey completed by 3,231 vacation ownership owners in the United States. The participants were selected through a random sampling process originated by one of the largest vacation ownership companies in the industry. Information provided by the respondents revealed that the majority of the respondents owned more than one week of timeshare with more than one company. The details of the survey instrument, sampling, and nature of the respondents are included in Chapter 3.

## Discussion of Findings

Consistent with previous studies (Cross & Ragatz, 2002, Lawton, Weaver, & Faulkner, 1998; Upchurch & Gruber, 2002), this research suggests that vacation ownership owners are satisfied with the product purchased. This is evident in the consumer categorization of attributes included in this study as “positive attributes – those that are positively related to satisfaction.” Interestingly enough, even the attribute hypothesized to be categorized as a negative attribute (purchase incentive due to its expected effect on dissatisfaction, rather than satisfaction) was perceived favorably by owners of the product included in this research. As such, the findings of this study are consistent with existing research that suggests that consumers of vacation ownership products are generally satisfied with the product (Crotts & Ragatz, 2002; Kauffman & Upchurch, 2007; Lawton, Weaver & Faulkner, 1998; Sparks, Butcher, & Bradley, 2008; Sparks, Butcher & Pan, 2007; Stringam, 2008; Upchurch & Gruber, 2002). In addition, the research also lends support to a conclusion that companies in the vacation ownership industry have identified and delivered upon the attributes (positive attributes) of the product that are related to increased satisfaction.

Following general agreement that customer satisfaction is the result of the evaluation of the actual product/service performance in comparison to one’s prior expectations (Kotler, 1991; Oliver, 1980), and understanding that satisfaction levels may be differentiated depending on whether consumers consider the feature to be fulfilling minimum requirements or adding value, this study also uncovered attribute preferences for vacation ownership owners that may more heavily influence satisfaction or price paid. In addition, the results of the Modified Kano Model and the conjoint analysis were consistent as they related to anticipated effects on customer satisfaction and share of preference. However, it is somewhat suspicious that the categorization



of attributes is clustered in two categories that have been referred to by Kano and others as meeting basic needs and related to increased satisfaction.

While minimum requirements consist of all basic features along with elements and processes that attend to minimal expectations and demands of customers; features that add value allow the provider to exceed consumer expectations by providing them, yet the absence of these features may not work negatively against the provider (Matzler, 1998; Matzler & Hinterhuber, 1998; Maddox, 1981). The attributes included in this study were either classified as being positively related to satisfaction or as having no substantial impact to customers' satisfaction or dissatisfaction. This may suggest that the attributes included in the study and consistent with current literature are basic features that attend to the minimum requirements of the customers.

As Emery and Tian (2002) summarized, Kano's model suggests that there are four important objectives to accomplish encompassing the broader requirement of understanding customer needs. First, basic needs must be met. The inability to meet the basic needs of one's customers results in a considerable negative effect on customer satisfaction. Second, because of the linear relationship of one dimensional attributes (satisfiers) and consumer satisfaction, the more one dimensional attributes that can be identified and delivered upon, the greater consumer satisfaction is likely to be. Third, because "attractive attributes" or "delighters" provide increased satisfaction when they are present, but no dissatisfaction when not present, it is important for providers to understand these elements and seek to achieve them. Attractive elements can become a point of differentiation among competitors, however, as they become more common may fall into the basic need category. Thus, the fourth point, attractive elements may only be temporary in nature according to the degree of customer expectation or competitive differentiation. It is perhaps this last point combined with the results of the categorization of

vacation ownership attributes in this research, that further support the industry professionals' current concerns for industry growth – that current practices within the industry must change (Stringam, 2010) – as it appears as though consumers' basic needs are being met and the industry is delivering on expectations related to positive attributes that contribute to overall satisfaction. However, an opportunity for differentiation and increased satisfaction among consumers may exist if vacation ownership companies can identify those attributes that delight owners when present but do not detract from satisfaction when absent (attractive attributes).

The following section recaps each of the research questions. This recap is followed by conclusions of the study.

#### Research Question 1

Which attributes of the vacation ownership product result in customer satisfaction when present, but no dissatisfaction if they are not present?

Attributes that result in customer satisfaction when present, but no dissatisfaction when they are not present are referred to as “Desirable Attributes” in the Modified Kano Model were used in this study. To achieve this categorization, respondents would have indicated that they like having the presence of the attribute, but can live with, must have, or be neutral if the attribute is not present. It was hypothesized that resort hotel services (i.e., concierge services) and an exchange company affiliation would be categorized as “Desirable Attributes” in this study. In fact, none of the attributes included in the study were categorized as “desirable attributes” by the study participants.

According to Kano, et al., (1984), these attributes are not expected, but are appreciated when provided. Desirable attributes, also referred to as “excitement needs” or “delighters,” have

been described as those of which the consumer may not have conscious knowledge. These are unexpected attributes that provide a point of differentiation for the provider.

There may be valid reasons why none of the study attributes were classified by the respondents as “desirable attributes.” The list of attributes was pulled from existing literature and industry experts; however, Kano et al. (1984) described these attributes as unexpected and ones that the consumer may not have conscious knowledge. In addition, Kano cautions that these types of attributes while creating a point of differentiation may also be replicated and will later come to be expected. This transitions the categorization of “desirable attributes” to a categorization of “positive” or “essential” attributes once the consumer begins to expect them. Scoviak (2003) describes the evolution of the vacation ownership industry and the homogeneity of the product form. Perhaps the products themselves, or upon recall by consumers, is not differentiated uniquely in the consumer’s mind. Finally, Stringam (2010) identified human capital and product development as opportunities for the industry. Perhaps the lack of unique competitive advantages within the industry is at play.

## Research Question 2

Which attributes of the vacation ownership product are positively related to customer satisfaction?

Attributes that are positively related to customer satisfaction are referred to as “Positive Attributes” in the Modified Kano Model used in this study. To achieve this categorization, respondents would have indicated that they like having the presence of the attribute, but dislike it if the attribute is not present. It was hypothesized that resort-like amenities, organized activities, and trade for hotel program benefits would be categorized as “Positive Attributes” in this study.

The greatest amount of attributes included in this study was categorized as positive attributes. In addition to resort-like amenities and trade for hotel program benefits, a personalized sales presentation from a sales executive, a purchase incentive, resort hotel services, affiliation with an exchange company, and a vacation counselor to assist with vacation planning were categorized by the respondents as positive attributes.

Kano refers to these attributes as “performance attributes.” Kano suggests that the higher the positive performance of these attributes, the greater the result in increased overall satisfaction. Vacation ownership companies would do well to focus on measurement of actual satisfaction in these areas to ensure they are performing at or above expectation.

Consistent with previous research (Crotts & Ragatz, 2002; Kaufman, Severt, & Upchurch, 2005; Sparks, et. al., 2007; Stringam, 2008; Upchurch & Gruber, 2002), resort services, the presence of an exchange company, and vacation planning assistance were identified as being positively related to satisfaction with the vacation ownership product. Interestingly, however, much of the same research also identified “activities” as being positively related to satisfaction with the vacation ownership product as well. The results of this study suggest that those included in this research were indifferent to the presence of activities. Perhaps this is due to the age of the participants, the term of ownership, or the age of the children in the household.

### Research Question 3

Which attributes of the vacation ownership product are minimum requirements for consumers, i.e., without these attributes dissatisfaction decreases, yet their existence does not necessarily improve satisfaction?

In order for an attribute to be categorized as a minimum requirement or “essential attribute”, respondents had to indicate that they thought the attribute must be present, or that they were neutral or could live with the presence of the attribute, but that they disliked it if the attribute was not present. Kano refers to these attributes as entry requirements. Since none of the study attributes were categorized as essential attributes, it is possible that the fundamental attribute of providing for a vacation accommodation should have been included in the survey instrument. Interestingly enough, this shortcoming was also identified by Stringam (2009) and by Sparks (2007) in their studies.

#### Research Question 4

Which attributes of the vacation ownership product are consumers indifferent to, i.e., no impact to satisfaction/dissatisfaction based on presence or absence of these attributes?

Attributes that have no impact on customer satisfaction or dissatisfaction fall into a “Zone of Indifference.” in the Modified Kano Model used in this study. To achieve this categorization, respondents would have indicated that they can live with, must have, or be neutral if the attribute is present as well as if it is not present. It was hypothesized that financing availability would be categorized within the “Zone of Indifference” in this study. While financing was categorized by the study participants to be in the “Zone of Indifference”; organized activities fell into this category as well. Following the findings and recommendations of Yang (2009), perhaps these programs could be outsourced in order to decrease costs without any apparent impact to overall product satisfaction.

Interestingly enough, this finding is somewhat contradictory to the findings of Lawton, Weaver & Faulkner (1998), Sparks, Butcher & Pan (2007), Stringam (2008), and Upchurch &

Kaufman (2005). In their various studies, they reported that the presence of activities was a contributor to overall product satisfaction with the vacation ownership product.

#### Research Question 5

Which attributes of the vacation ownership product are inversely related to customer satisfaction?

Attributes that result in customer dissatisfaction when present, but satisfaction when they are absent, are referred to as “Negative Attributes” in the Modified Kano Model used in this study. To achieve this categorization, respondents would have indicated that they must have, are neutral to, can live with, or dislike the presence of the attribute, but can live with, must have, or be neutral if the attribute is not present. It was hypothesized that high pressure sales tactics, in the form of purchase incentives, would be categorized as “Negative Attributes” in this study. In fact, none of the attributes included in the study were categorized as “negative attributes” by the study participants. The expected negative attribute, purchase incentive, was categorized by study participants as a “positive attribute.” Perhaps as Scavo (1999) suggests, the purchase incentive has become an expected component of the product offering.

#### Research Question 6

Do differences exist in consumer willingness to pay for vacation ownership products based on product attributes?

Conjoint analysis was performed in order to analyze this research question. Research participants were shown a variety of product offerings that contained various combinations of attribute levels (available or not available) and corresponding prices. The respondents’ selections in the survey did vary by attribute including the share of preference for price. While

the largest majority of respondents chose the lower price points, not all respondents chose the option with the lowest price point. This suggests that consumer willingness to pay does vary based on product attributes.

There is no known literature to support pricing of vacation ownership products. However, Sparks, et al., (2008) identified themes that were consistent with the value that vacation ownership owners found in the product.

### Contribution to Literature

Previous research in the vacation ownership industry has been focused on consumer use of the product, but industry experts recognize that the sales and marketing methods need improvement to address the rising costs. Fittingly, this research study addressed both the purchase process and the usage process of the vacation ownership product by investigating consumer stated preferences toward the presence of attributes at the time of purchase as well as during their use of the product.

This study contributes to current research by further categorizing vacation ownership product attributes according to their expected effect on overall product satisfaction and identifying an opportunity for further investigation into or identification of attributes that may provide a point of differentiation. This categorization will allow researchers and practitioners to identify the particular attributes that are important to consumer satisfaction and that are related to consumer value, uncover opportunities for product positioning, and provide direction for further product development.

### Managerial Implications

This study identified attributes of the vacation ownership product that are positively related to customer satisfaction with the product. Specifically, the following attributes were categorized by the research study participants as being positively related to their product satisfaction:

- a sales executive to guide the prospective purchaser through the sales process,
- a purchase incentive
- resort-like hotel services, i.e., concierge
- affiliation with an exchange company
- resort amenities, i.e., fitness center
- ability to trade for hotel program benefits
- a vacation counselor to assist with vacation planning

Perhaps equally as important, the majority of the research study participants categorized the availability of a finance package and the presence of onsite activities as attributes that neither added to their satisfaction or dissatisfaction with the product. Vacation ownership companies should consider the costs of these programs considering that the presence of these product attributes does not appear to impact customer satisfaction or dissatisfaction.

Lastly, none of the attributes in the study were classified as those that provide a point of differentiation. Further exploratory research could be done to uncover attributes of the vacation ownership product that are attractive (increase satisfaction when present, but do not negatively impact satisfaction when absent) to consumers. Delivering upon these attributes may increase satisfaction and provide a positioning strategy for the industry going forward as it seeks to attract new customers and retain the satisfaction levels of its current customers.



The following section addresses each of the key findings of the research and discusses specific implications for the vacation ownership industry. The objective of this section is to provide possible explanations or opportunities that should be considered by practitioners in the industry based on the findings in this study.

The results of this study categorized the presence of a sales executive during the purchase process as a positive attribute; meaning that owners of the product like having a sales executive take them through a personalized sales presentation and do not like it when this is not available. Implications for the industry, based on this finding, suggest that the current personalized selling approach works for the majority of customers. However, it is important to note that approximately 20% of the respondents were neutral to the presence (and absence) of a sales executive during the sales presentation; meaning that having a sales executive take them through a personalized sales presentation is not a requirement for their overall product satisfaction. Perhaps this is due to the long-term ownership (greater than 10 years on average for study respondents), the familiarity with the product based on the multiple weeks of ownership with one or more companies, or the average age of the respondents (59.7). It would be beneficial for vacation ownership companies to understand if differences in their customers existed related to the attractiveness of a sales executive providing a personalized sales presentation. If differences do exist and existing customers or prospective buyers could be segmented accordingly without impact to product satisfaction, referral, or repurchase, vacation ownership companies could benefit from alternate sales techniques that do not involve sales executives and the related costs (commissions, benefits, etc.) related to personal selling techniques. However, companies should proceed with caution in order to understand the implications beyond the scope of this research

since this research did not investigate the relationship among attribute categorizations and repurchase or referral intentions.

Similarly, respondents in the study had a strong preference for the presence of a vacation counselor to assist with vacation planning. More than 66% of the respondents prefer the presence of a vacation counselor and the findings indicate that this feature of the product is positively related to product satisfaction, despite the familiarity with the product evident in the lengthy term of product ownership, ownership of multiple weeks with multiple companies, and variety of locations owned. Nonetheless, nearly 30% of the respondents are neutral if a vacation counselor is not provided. Perhaps this is also due to the familiarity of the product and length of ownership. Since maintaining a staff of individuals to assist owners with their vacation planning can be costly, the industry should attempt to understand which owners may not be adversely impacted by the lack of a vacation counselor to assist with planning or those who may be willing to pay for such a benefit. Caution should be taken again to ensure that changes to such a feature, common throughout the industry, does not negatively impact consumer repurchase or referral intentions.

As with the presence of a sales executive and the presence of a vacation counselor, the results of this study indicate that the industry practice of providing purchase incentives is also positively related to customer satisfaction. However, what is of essential interest here is that while the overwhelming majority of respondents like having a purchase incentive (67%), the responses are a bit more segmented when the respondent was asked how they feel if a purchase incentive is not available. One would expect, based on the large percentage of those that like it that way, that the responses related to not having a purchase incentive would be similar. In fact, the results are more varied. While the majority do not like it when a purchase incentive is not

available, 20% can live with it that way and 30% are neutral. This suggests that consumers may be conditioned to the presence of a purchase incentive since it is industry practice to provide incentives for all purchasers, not just first time buyers. Alternatively, the longer term of ownership or multiple week ownership represented in this study, as well as the high average income (\$170,000) may be an influencer in the respondents' answers. However, if nearly 50% of the respondents in this survey do not require a purchase incentive in order to be satisfied with the product, individual companies and perhaps the industry may be able to move off this practice over time, thereby shedding one of the more negative aspects of the product as reported widely in the media and as perceived by consumers in general. It would be important for practitioners to understand which consumers do not require a purchase incentive and to ensure that elimination or restructuring of this component of the sales process does not negatively impact sales efficiencies.

This research confirmed what previous studies have explained or revealed regarding resort-like hotel services, such as a concierge, and resort amenities, i.e., onsite fitness center. Individuals included in this study categorized these attributes as being positively related to their satisfaction with the product. This is not surprising since vacation ownership resort development has strived to construct accommodations and resorts that are purpose built, four and five star accommodations as a result of the improvements in the physical product and service levels based on the industry presence of the primary lodging brands, or in order to gain the necessary approvals and ratings from the timeshare exchange companies.

Related to the previous point, the presence of an option to participate in hotel program benefits through the exchange of the annual timeshare ownership is a popular facet of satisfaction according to this study. This may be influenced by the preponderance of owners

who participated in the study that owned with a company that offered such benefits, or it may be related to the multiple company ownership evident in the respondents included in the study. Given that the ratings on this attribute were among the highest in terms of concentration of responses in the “like it that way” category, practitioners would be well served to understand what is related to this aspect of this particular attribute. More specifically, it may not be enough to offer a program that allows an owner to trade for alternate accommodations or vacations, but the responses to this attribute may be influenced by other factors related to the brand or consumer behavior driven by brand loyalty, familiarity, longevity, etc.

It is interesting to note that the findings of this study suggest that owners of the product are neutral regarding the presence of a financing package and organized activities as it relates to their satisfaction with the product. As noted previously, perhaps this is due to the lengthy term of ownership, multiple weeks owned, relatively high incomes (perhaps not needing financing assistance), or the study terminology in the case of “organized activities.” While the financing package may provide additional income for vacation ownership companies, perhaps the terms could be restructured to be more attractive to purchasers in order to increase their interest and activity related to this product attribute, or it may be eliminated altogether for certain customers in order to either decrease the time related to purchase or complexity of the sales process. Related to organized activities, the presence of children and the ages of those children attached to respondents in this study may be an influencing factor in how respondents related to this particular attribute. Additionally, based on the longer term of ownership, perhaps those included in the study are familiar enough with the locations purchased that they no longer require onsite activities in order to entertain them in their destination. Further, if organized activities are not “refreshed” regularly, owners may grow accustomed to the offerings and may not be repeatedly

enjoying them. Practitioners should consider attendance levels of the various activities and the money and resources spent against them to ensure that owners are finding value in them.

Finally, regarding pricing and the various attributes included with the product purchase and use, respondents in this survey varied according to the price they would be willing to pay for the product. This suggests that there are segments of owners who value various components of the product differently. While a trend is visible related to the presence of attributes and a higher price, 20-25% of the respondents were willing to pay a higher price when not all of the attributes were available within a given product offering. Additional research should be done in this area either as individual companies or collectively as an industry to determine the characteristics of buyers who are willing to pay a higher price based on the presence or absence of certain attributes. Identifying where consumers place value will allow the industry to either target certain consumers with a greater willingness to pay or to adapt a variable pricing structure that considers modified product offerings or segmenting in order to improve the overall profitability of the particular company.

#### Limitations of the Study

Although the company providing the random sampling of respondents is among the largest for number of owners, operating units, and annual sales volumes, it is possible that participants' responses could be affected by the characteristics of the company, and perhaps the experience of the product offered by that company. However, this effect is perhaps minimized due to the representation of respondents who own one or more weeks of vacation ownership with a company other than the one introducing the respondent to the survey.

Due to the intended comprehensive nature of the study, the research was gathered by asking participants to recall information from previous vacation ownership purchase and usage processes. It is possible then that recall may be impacted by uncontrollable factors.

Attributes utilized in the study were gathered from previous research and industry input. While extensive efforts were made to compile an exhaustive list, it is possible that the attribute list is not comprehensive.

Although the majority of participants included in the study own multiple vacation ownership products with more than one company, the average time lapsed since last purchase was more than 10 years ago. This may impact the results of the respondents' willingness to pay for additional product as requested in this study. However, according to Stringam (2010), industry experts state that industry sales and marketing practices have changed little over time.

For the aforementioned reasons, the findings of this study should be generalized with care. Replication of the study to uncover excluded attributes and to validate the findings would address the limitations identified.

In addition, Kano's Model has been criticized since it categorizes attributes but does not quantify the numerical or qualitative performance of the attributes. Further, the model provides no explanation of the drivers of customer perceptions, why particular attributes are important, and what the behavioral intentions are (Bharadwaj & Menon, 1997).

#### Suggestions for Future Research

The primary objectives of this research were to evaluate consumer classification of attributes using the Modified Kano Model and to determine if there were differences in

preferences for certain attributes. The study accomplished those objectives, however, in some cases the findings could be improved upon through additional research.

The attributes used in this study were uncovered from existing literature and augmented by industry experts; and none were categorized by the research participants as “desirable” (resulting in satisfaction if they are present, but no dissatisfaction if they are not present) or “essential” (without these attributes dissatisfaction increases, yet their existence does not necessarily improve satisfaction). This suggests that there may be opportunities to further understand in which existing or additional attributes consumers would find value that may contribute to a greater level of product satisfaction. Perhaps in-depth qualitative research regarding purchase and usage motivations and behaviors could reveal additional attributes that have not yet been considered.

In addition, this research study aimed at categorizing and understanding if differences in consumer preference for attributes existed. This study did not intend to delve further to understand if differences in consumer preference for attributes was driven by the function of the attribute, i.e., utilitarian or hedonic, demographics, product purchased (product form, location, etc.), consumer-intended use of the product, length of ownership, or most recent purchase date. This information, as well as other psychographic information, may provide additional insight into the preferences of vacation ownership owners and prospective purchasers.

### Summary

This chapter presented a succinct review of the study and discussion of the findings. The results were incorporated with existing literature on the topic, included practical implications for the industry, as well as recommendations for further research. This study is the first to examine

both the purchase and usage process attributes of the vacation ownership product, and can provide a platform for further research in this area. Research related to the vacation ownership industry, products, and consumer preferences is limited, yet the industry reports concern for increasing costs and improved sales and marketing techniques as one of the greater opportunities for the ongoing success of the industry. This study provides an incremental step towards a more in-depth understanding of the complex vacation ownership product and related consumer preferences for purchase and use of the product.



**APPENDIX A:**

**RESEARCH INFORMATION AND CONSENT FORM**

## Research Information and Consent Form

████████████████████ is collaborating with academic researchers from the University of Central Florida in an effort to understand the preferences of vacation ownership owners.

If you agree to participate in this research, you will be asked to provide your responses on a short questionnaire. The purpose of this research is to study owner preferences in the vacation ownership sales and usage processes. There are no right or wrong answers – only your opinion. We are simply interested in your thoughts on each question. Please note that you are ineligible to participate in this research if you are less than 18 years old.

Your responses are completely confidential. Information collected from this project will be used solely for research purposes.

Your participation in this research is completely voluntary. You do not have to answer any question or questions that you do not wish to answer. Please be advised that you do not have to participate in this research and you may withdraw from it at any time without consequence.

It will take you approximately 15 minutes to complete this survey. There are no anticipated risks associated with participation. There are no direct benefits or compensation for participation.

If you have questions or comments about this research, please contact:

Amy Gregory at 407-513-6813; [agregory@knights.ucf.edu](mailto:agregory@knights.ucf.edu) or  
Dr. H.G. Parsa at 407-903-8708; [hgparsa@mail.ucf.edu](mailto:hgparsa@mail.ucf.edu) or  
████████████████████; [████████████████████survey@████████████████████.com](mailto:████████████████████survey@████████████████████.com)

If you have any questions about research participants' rights, you may contact IRB Coordinator, Institutional Review Board (IRB), University of Central Florida (UCF), 12201 Research Parkway, Suite 501, Orlando, Florida 32826-3246, Telephone: 407-823-2901.

Sincerely,

[REDACTED]

Senior Vice President

[REDACTED]

Submission of completed questionnaires verifies that you are at least 18 years of age and constitutes your consent to participate in this research.

**APPENDIX B:**

**SURVEY INSTRUMENT**

This survey is being conducted in order to understand the preferences of timeshare owners during the purchase and usage of the timeshare product. The survey will take approximately 15 - 20 minutes to complete.

Thank you for your participation.

Please type (or copy/paste) your password included in the content of the email here to begin the survey:

Next

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The next few windows of the survey are intended to get your feedback on the timeshare sales presentation and product features. You will see TWO STATEMENTS ON EACH WINDOW:

The FIRST STATEMENT asks you to respond when the ITEM in question is PRESENT, and the SECOND STATEMENT asks you to respond when the ITEM in question is NOT PRESENT.

Please choose the response FOR EACH STATEMENT that best suits you by clicking the button next to the response choices.

Next



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Related to the PURCHASE of a vacation ownership product --

If, during the process of purchasing a vacation ownership product, a SALES EXECUTIVE takes you through a personalized sales presentation, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If, during the process of purchasing a vacation ownership product, you take yourself through the vacation ownership purchase process on your own WITHOUT a SALES EXECUTIVE, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the purchase of a vacation ownership product --

If a PURCHASE INCENTIVE IS AVAILABLE during your vacation ownership purchase process, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If a PURCHASE INCENTIVE IS NOT AVAILABLE during your vacation ownership purchase process, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next





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Related to the purchase of a vacation ownership product --

If a FINANCING PACKAGE IS OFFERED BY THE DEVELOPER during your vacation ownership purchase process, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If a FINANCING PACKAGE IS NOT OFFERED BY THE DEVELOPER during your vacation ownership purchase process, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership resort OFFERS RESORT-LIKE HOTEL SERVICES(i.e., concierge), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership resort does NOT OFFER RESORT-LIKE HOTEL SERVICES(i.e., concierge), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership company OFFERS AN AFFILIATION WITH AN EXTERNAL EXCHANGE COMPANY, i.e., II or RCI, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership company does NOT OFFER AN AFFILIATION WITH AN EXTERNAL EXCHANGE COMPANY, i.e., II or RCI, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership company OFFERS AN OPTION TO EXCHANGE YOUR TIMESHARE WEEK(POINTS) FOR HOTEL POINTS, such as Marriott Rewards or Hilton Honors, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership company does NOT OFFER AN OPTION TO EXCHANGE YOUR TIMESHARE WEEK (POINTS) FOR HOTEL POINTS, such as Marriott Rewards or Hilton Honors, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership resort OFFERS RESORT-LIKE HOTEL AMENITITES (i.e., fitness center), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership resort does NOT OFFER RESORT-LIKE HOTEL AMENITITES (i.e., fitness center), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership resort OFFERS ORGANIZED ACITIVITES (i.e., children's programs, movie nights, social mixers), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership resort does NOT OFFER ORGANIZED ACITIVITES (i.e., children's programs, movie nights, social mixers), how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Related to the USE of your vacation ownership product --

If the vacation ownership company OFFERS VACATION COUNSELORS to assist you with vacation planning, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

If the vacation ownership company does NOT OFFER VACATION COUNSELORS to assist you with vacation planning, how does that make you feel?

- I like it that way.
- It must be that way.
- I am neutral.
- I can live with it that way.
- I do not like it that way.

<< Next



Thank you for completing the survey up to this point. You are nearly half way done! The remainder of the survey will take approximately 10 -15 minutes. In this section, you will be presented a series of vacation ownership product offerings. You will be asked to select the product offering that you prefer most.

For the following questions, please assume that you are in the market to purchase another week (or points equivalent) of timeshare. You have done your research and you know this week will cost you approximately \$20,000. Please click "Next" to continue.

<< Next





During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake	Independent Developer, i.e., Westgate, Orange Lake
Sales Presentation	Self-guided purchase where you gather your own information	Self-guided purchase where you gather your own information	Personalized presentation with a Sales Executive
Purchase Incentive	No purchase incentive for buying on the same day	No purchase incentive for buying on the same day	Purchase incentive for buying on the same day
Financing	No financing package offered by the timeshare company	Financing package offered by the timeshare company	Financing package offered by the timeshare company
Price	\$24,000	\$22,000	\$20,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

0%  100%

During the PURCHASE process,  
if these were your only options, which would you choose?  
Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Branded hotel company, i.e., Marriott	Branded hotel company, i.e., Marriott
Sales Presentation	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information	Self-guided purchase where you gather your own information
Purchase Incentive	Purchase incentive for buying on the same day	No purchase incentive for buying on the same day	Purchase incentive for buying on the same day
Financing	No financing package offered by the timeshare company	Financing package offered by the timeshare company	No financing package offered by the timeshare company
Price	\$22,000	\$24,000	\$26,000

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

0%  100%

During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Independent Developer, i.e., Westgate, Orange Lake	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake
Sales Presentation	Self-guided purchase where you gather your own information	Personalized presentation with a Sales Executive	Personalized presentation with a Sales Executive
Purchase Incentive	Purchase incentive for buying on the same day	No purchase incentive for buying on the same day	No purchase incentive for buying on the same day
Financing	No financing package offered by the timeshare company	No financing package offered by the timeshare company	Financing package offered by the timeshare company
Price	\$20,000	\$26,000	\$20,000
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

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During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake	Independent Developer, i.e., Westgate, Orange Lake
Sales Presentation	Personalized presentation with a Sales Executive	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information
Purchase Incentive	No purchase incentive for buying on the same day	No purchase incentive for buying on the same day	Purchase incentive for buying on the same day
Financing	No financing package offered by the timeshare company	Financing package offered by the timeshare company	Financing package offered by the timeshare company
Price	\$26,000 <input type="radio"/>	\$24,000 <input type="radio"/>	\$24,000 <input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



During the PURCHASE process,  
if these were your only options, which would you choose?  
Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake	Branded hotel company, i.e., Marriott
Sales Presentation	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information	Personalized presentation with a Sales Executive
Purchase Incentive	Purchase incentive for buying on the same day	No purchase incentive for buying on the same day	No purchase incentive for buying on the same day
Financing	Financing package offered by the timeshare company	No financing package offered by the timeshare company	No financing package offered by the timeshare company
Price	\$26,000	\$20,000	\$22,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

0%  100%

During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Independent Developer, i.e., Westgate, Orange Lake	Independent Developer, i.e., Westgate, Orange Lake	Branded hotel company, i.e., Marriott
Sales Presentation	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information	Personalized presentation with a Sales Executive
Purchase Incentive	Purchase incentive for buying on the same day	Purchase incentive for buying on the same day	No purchase incentive for buying on the same day
Financing	No financing package offered by the timeshare company	Financing package offered by the timeshare company	No financing package offered by the timeshare company
Price	\$22,000 <input type="radio"/>	\$26,000 <input type="radio"/>	\$22,000 <input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake	Branded hotel company, i.e., Marriott
Sales Presentation	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information	Self-guided purchase where you gather your own information
Purchase Incentive	No purchase incentive for buying on the same day	Purchase incentive for buying on the same day	Purchase incentive for buying on the same day
Financing	Financing package offered by the timeshare company	No financing package offered by the timeshare company	Financing package offered by the timeshare company
Price	\$22,000	\$22,000	\$20,000
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

0%  100%

During the PURCHASE process,  
 if these were your only options, which would you choose?  
 Choose by clicking one of the buttons below:

Company	Branded hotel company, i.e., Marriott	Independent Developer, i.e., Westgate, Orange Lake	Branded hotel company, i.e., Marriott
Sales Presentation	Personalized presentation with a Sales Executive	Self-guided purchase where you gather your own information	Personalized presentation with a Sales Executive
Purchase Incentive	Purchase incentive for buying on the same day	No purchase incentive for buying on the same day	No purchase incentive for buying on the same day
Financing	Financing package offered by the timeshare company	No financing package offered by the timeshare company	No financing package offered by the timeshare company
Price	\$26,000 <input type="radio"/>	\$20,000 <input type="radio"/>	\$22,000 <input type="radio"/>

Given what you know about the market, would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

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Thank you for your participation to this point. The remainder of the survey can be completed in 5 - 10 minutes. This section of the survey deals with your preferences when USING the timeshare product.

For the following questions, please assume that you are in the market to purchase another week (or points equivalent) of timeshare. You have done your research and you know this week will cost you approximately \$20,000. Please click "Next" to continue.

<< Next



If these were your only options, which would you choose?

Services	Concierge	Concierge	Concierge	Front desk assistance, but NO concierge
Amenities	NO resort like amenities on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	Organized activities on property	Organized activities on property	NO organized activities on property	NO organized activities on property
Exchange company	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI	II or RCI affiliation
Hotel Points Exchange	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance
Price	\$20,000	\$26,000	\$24,000	\$22,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property
Activities	NO organized activities on property	NO organized activities on property	Organized activities on property	Organized activities on property
Exchange company	NO affiliation with II or RCI	II or RCI affiliation	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance
Price	\$24,000	\$22,000	\$26,000	\$20,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge	Concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	NO resort like amenities on property	NO resort like amenities on property
Activities	Organized activities on property	Organized activities on property	NO organized activities on property	NO organized activities on property
Exchange company	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI	II or RCI affiliation
Hotel Points Exchange	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance
Price	\$22,000	\$20,000	\$24,000	\$26,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Concierge	Concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	NO resort like amenities on property
Activities	NO organized activities on property	NO organized activities on property	Organized activities on property	Organized activities on property
Exchange company	II or RCI affiliation	NO affiliation with II or RCI	NO affiliation with II or RCI	II or RCI affiliation
Hotel Points Exchange	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance
Price	\$26,000	\$20,000	\$22,000	\$24,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Concierge	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	Organized activities on property	NO organized activities on property	Organized activities on property	NO organized activities on property
Exchange company	II or RCI affiliation	II or RCI affiliation	NO affiliation with II or RCI	NO affiliation with II or RCI
Hotel Points Exchange	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance
Price	\$26,000	\$24,000	\$22,000	\$20,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property
Activities	Organized activities on property	NO organized activities on property	NO organized activities on property	Organized activities on property
Exchange company	II or RCI affiliation	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	NO exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance
Price	\$22,000	\$20,000	\$24,000	\$26,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Concierge	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	NO organized activities on property	NO organized activities on property	NO organized activities on property	Organized activities on property
Exchange company	II or RCI affiliation	II or RCI affiliation	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance
Price	\$20,000	\$24,000	\$26,000	\$22,000

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next





If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Front desk assistance, but NO concierge	Concierge	Concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property
Activities	Organized activities on property	NO organized activities on property	Organized activities on property	Organized activities on property
Exchange company	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI	NO affiliation with II or RCI
Hotel Points Exchange	NO exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance
Price	\$26,000	\$20,000	\$24,000	\$22,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Concierge	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	NO organized activities on property	NO organized activities on property	Organized activities on property	NO organized activities on property
Exchange company	II or RCI affiliation	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	Exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance
Price	\$22,000	\$20,000	\$24,000	\$26,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Concierge	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	Organized activities on property	NO organized activities on property	Organized activities on property	NO organized activities on property
Exchange company	II or RCI affiliation	II or RCI affiliation	NO affiliation with II or RCI	NO affiliation with II or RCI
Hotel Points Exchange	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance
Price	\$26,000	\$24,000	\$22,000	\$20,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Concierge	Concierge	Concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	Organized activities on property	NO organized activities on property	NO organized activities on property	Organized activities on property
Exchange company	NO affiliation with II or RCI	NO affiliation with II or RCI	II or RCI affiliation	II or RCI affiliation
Hotel Points Exchange	NO exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance
Price	\$24,000	\$26,000	\$20,000	\$22,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge	Front desk assistance, but NO concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	NO resort like amenities on property	NO resort like amenities on property
Activities	Organized activities on property	NO organized activities on property	NO organized activities on property	Organized activities on property
Exchange company	II or RCI affiliation	NO affiliation with II or RCI	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	NO exchange for hotel program points	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points
Vacation Planning Assistance	NO vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance	NO vacation counselor assistance
Price	\$26,000	\$24,000	\$20,000	\$22,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Concierge	Front desk assistance, but NO concierge	Concierge
Amenities	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property
Activities	Organized activities on property	NO organized activities on property	Organized activities on property	Organized activities on property
Exchange company	NO affiliation with II or RCI	II or RCI affiliation	II or RCI affiliation	NO affiliation with II or RCI
Hotel Points Exchange	NO exchange for hotel program points	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	Vacation counselor assistance	Vacation counselor assistance
Price	\$26,000	\$20,000	\$24,000	\$22,000
	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next



If these were your only options, which would you choose?

Services	Front desk assistance, but NO concierge	Front desk assistance, but NO concierge	Concierge	Concierge
Amenities	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property	Resort-like amenities, i.e., fitness center, on property	NO resort like amenities on property
Activities	Organized activities on property	NO organized activities on property	Organized activities on property	Organized activities on property
Exchange company	II or RCI affiliation	NO affiliation with II or RCI	NO affiliation with II or RCI	II or RCI affiliation
Hotel Points Exchange	Exchange for hotel program points	Exchange for hotel program points	NO exchange for hotel program points	NO exchange for hotel program points
Vacation Planning Assistance	Vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance	NO vacation counselor assistance
Price	\$24,000	\$26,000	\$24,000	\$20,000
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you really buy the vacation ownership product you chose above?

- Yes
- No

<< Next

0%  100%

The following questions are used for research segmentation purposes only.

Please indicate HOW YOU HAVE USED YOUR VACATION OWNERSHIP PRODUCT in the past by allocating a percentage (out of 100 total) of usage to each of the following options.

For example, if you always occupy your home resort, you would put 100 in the "occupy home resort" option below. You do not need to enter the percentage (%) signs in the boxes below, but your total must equal 100.

<input type="text"/>	External exchange (different company) with exchange company
<input type="text"/>	Exchange for a different location within same company
<input type="text"/>	List for Rent
<input type="text"/>	Occupy home resort
<input type="text"/>	Trade for hotel program points
<input type="text"/>	Other <input type="text"/>
<input type="text"/>	Total

Please indicate how many weeks (or points equivalents) of NON-XXXXX VACATION OWNERSHIP YOU OWN.

0  
 1 - 2  
 More than 2





The following questions are used for research segmentation purposes only.

Please indicate your gender:

Female

Male

Please indicate the highest level of education you have completed by selecting from the check boxes below.

High School

Undergraduate degree, i.e., Bachelors

Graduate degree, i.e., Masters

Post-graduate degree, i.e., Doctorate

<<

Next >>

0%  100%

---

Thank you very much for your participation in this survey. Your input is invaluable and will be used to help guide vacation ownership companies in the development of product offerings for their owners and customers.

If you have any comments on the survey or would like to provide additional information that was not captured in the survey, please use the follow text box.

<< Next



---

Thank you for your participation. The survey is complete.  
You may now close your browser window.

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**APPENDIX C:**

**INSTITUTIONAL REVIEW BOARD APPROVAL**



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### Approval of Exempt Human Research

From: **UCF Institutional Review Board #1  
FWA00000351, IRB00001138**

To: **Amy M. Gregory**

Date: **March 08, 2011**

Dear Researcher:

On 3/8/2011, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
Project Title: ASSESSMENT OF PRODUCT AND PROCESS ATTRIBUTES  
AND CONSUMERS' WILLINGNESS TO PAY IN THE  
VACATION OWNERSHIP INDUSTRY USING THE KANO  
MODEL AND CONJOINT ANALYSIS

Investigator: Amy M. Gregory  
IRB Number: SBE-11-07516

Funding Agency:  
Grant Title:

Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/08/2011 10:12:48 AM EST

IRB Coordinator

## REFERENCES

- Akao, Y. (1970). Development History of Quality Function Deployment. *The Customer Driven Approach to Quality Planning and Deployment*. Minato, Tokyo Japan: Asian Productivity Organization.
- American Resort Development Association (ARDA) (2010). Industry fact sheet.  
[http://www.arda.org/uploadedFiles/ARDA/News\\_and\\_Information/Industry\\_Information/SOI\\_Factsheet%202010.pdf](http://www.arda.org/uploadedFiles/ARDA/News_and_Information/Industry_Information/SOI_Factsheet%202010.pdf)
- Anderson, E., Fornell, C., & Lehmann, D. (1994). Customer satisfaction, market share, and profitability. *Journal of Marketing*, 58(3), 53-66.
- \_\_\_\_\_, & Sullivan, M. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*. 12(2), 125-143.
- ARDA International Foundation (2010). *Timeshare Industry Resource Manual*. Washington, DC: American Resort Development Association.
- ARDA International Foundation (2010). *Vacation timeshare owners report, 2010 Edition*. Washington DC: American Resort Development Association (ARDA) International Foundation.
- ARDA (2005). *The timeshare industry resource manual*. Washington DC: American Resort Development Association (ARDA).

- Baki, B., Basfirinci, C., & Cilingir, Z. (2009). An application of integrating SERVQUAL and Kano's model into QFD for logistics services. *Asia Pacific Journal of Marketing and Logistics*, 21(1), 106-126.
- Bharadwaj, S., & Menon, A. (1997). Discussion in applying Kano methodology to meet customer requirements: NASA's micro gravity science program. *Quality Management Journal*, 4(3), 107-109.
- Bhattacharyya, S., & Rahman, Z. (2004). Capturing the customer's voice, the centerpiece of strategy making: A case study in banking. *European Business Review*, 16(2), 128-138.
- Churchill, G., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19(4, Special Issue on Causal Modeling), 491-504.
- Crotts, J., & Ragatz, R. (2002). Recent US timeshare purchasers: Who are they, what are they buying, and how can they be reached? *International Journal of Hospitality Management*, 21(3), 227-238.
- Dillman, D.A. (1999). *Mail and internet surveys: The tailored design method*. New York, NY: Wiley.
- Emery, C. (2006). An examination of professor expectations based on the Kano model of customer satisfaction. *Academy of Educational Leadership Journal*, 10(1), 11.

\_\_\_\_\_, & Tian, R. (2002). Schoolwork as products, professors as customers: A practical teaching approach in business education. *Journal of Education for Business*, 78(2), 97-102.

\_\_\_\_\_, & Tolbert, S. (2003). Using the Kano model of customer satisfaction to define and communicate supervisor expectations. *Allied Academies International Conference. Academy of Organizational Culture, Communications and Conflict. Proceedings*, 8(1), 7.

Fong, D. (1996). Using the self-stated importance questionnaire to interpret Kano questionnaire results, *Center for Quality Management Journal*, 5(3), 21-23.

Fuller, J., & Matzler, K. (2007). Virtual product experience and customer participation - A chance for customer-centered, really new products. *Technovation*, 27(6), 378-387.

Gallarza, M. & Saura, I. (2006). Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behaviour. *Tourism Management*, 27(3), 437-452.

Gilligan, E. (2006). The time has come: Demand surges for timeshare resort properties. *Commercial Property News* 20(2), 16-19.

Green, P., & Srinivasan, V. (1978). Conjoint analysis in consumer research: Issues and outlook. *Journal of Consumer Research*, 5(2), 103-123.

\_\_\_\_\_ & Wind, Y. (1975). New way to measure consumers' judgments. *Harvard Business Review*, 53, 107-117.



- Griffin, G. & Glifton, J. (2004). The motivational and demographic characteristics of research ecotourists: Operation Wallacea volunteers in south east Sulawesi, Indonesia. *Journal of Ecotourism*, 3, 69-82.
- Hayward, P. (2005). Lodging's 4<sup>th</sup> dimension: Alternative lodging is becoming an ever growing aspect of the industry landscape. *Lodging Magazine*, 31(1), 26-31.
- Hejaili, F., Assad, L., Shaheen, F., Moussa, D., Karkar, A., & AlRukhaimi, M. (2009). Culture-related service expectations: A comparative study using the Kano model. *Quality Management in Health Care*, 18(1), 48-58.
- Heung, V. & Ngai, E. (2008). The mediating effects of perceived value and customer satisfaction on customer loyalty in the Chinese restaurant setting. *Journal of Quality Assurance in Hospitality and Tourism*, 9(2), 85-107.
- Hilton Grand Vacation Club – What is the Hilton Honors Program? (2011). Retrieved March 11, 2011 from <http://www.hiltongrandvacations.com/resort-vacation-ownership.php>
- Howard, J. & Sheth, J. (1969). *The theory of buyer behavior*. John Wiley & Sons, Inc. NY.
- Jackson, J.W. (2003). Brand comfort powering timeshare growth: Sales tactics still irritate potential buyers. Retrieved January 6, 2011, from [http://www.hotelonline.com/News/PR2003\\_4th/Nov03\\_TimeshareGrowth.html](http://www.hotelonline.com/News/PR2003_4th/Nov03_TimeshareGrowth.html)
- Jane, A., & Dominguez, S. (2003). Citizens' role in health services: Satisfaction behavior: Kano's model, part 1. *Quality Management in Health Care*, 12(1), 64-71.

- \_\_\_\_\_, & Dominguez, S. (2003). Citizens' role in health services: Satisfaction behavior: Kano's model, part 2. *Quality Management in Health Care*, 12(1), 72-80.
- Johnson, M., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of Economic Psychology*, 12(2), 267-286.
- Jones, T., and Sasser, W. (1995). Why satisfied customers defect. *Harvard Business Review*, 73(6), 88-99.
- Kano, N., Seraku, N., Takahashi, F. & Tsuji, S. (1984). Attractive quality and must-be quality. *Hinshitsu: The Journal of the Japanese Society for Quality Control*, 14(2), 39-48.
- Kaufman, T., Severt, D., & Upchurch, R. (2005). The relationship between vacation club components and owner satisfaction: The case of the vacation ownership industry. *Tourism Analysis*, 10(4), 405-409.
- \_\_\_\_\_, & Upchurch, R. (2007). Vacation ownership: Gender positioning. *Journal of Leisure and Retail Property Management*, 6(1), 8-14.
- Kotler, P. (1984). *Marketing management: A planning approach*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- \_\_\_\_\_. (1991). *Marketing management: Analysis, planning, implementation, and control*. Englewood Cliffs, NJ. Prentice Hall, Inc.
- \_\_\_\_\_, & Levy, S. (1969) Broadening the concept of marketing. *Journal of Marketing*, 33(1), 10-15.

- Kozac, M. (2001). A critical view of approaches to measure satisfaction with tourist destinations. *Consumer Psychology of Tourism Hospitality and Leisure*, Wallingford, CT: CABI Publishing, 303-320.
- Kuo, Y. (2004). Integrating Kano's model into web-community service quality. *Total Quality Management & Business Excellence*, 15(7), 925-939.
- Lawton, L., Weaver, D., & Faulkner, B. (1998). Customer satisfaction in the Australian timeshare industry. *Journal of Travel Research*, 37(1), 28-36.
- Lee, Y., & Chen, J. (2009). A new service development integrated model. *Service Industries Journal*, 29(12), 1-16.
- \_\_\_\_\_, Sheu, L., & Tsou, Y. (2008). Quality function deployment implementation based on fuzzy Kano model: An application in PLM system. *Computers & Industrial Engineering*, 55(1), 48-63.
- Liu, M. (2008). Using the refined Kano's model to measure university education quality: The case study on the department of food and beverage management in southern Taiwan. *Business Review, Cambridge*, 11(1), 111-117.
- \_\_\_\_\_, & Wu, S. (2009). Service quality of student dorms using a refined Kano 2D model: A case study of a national hospitality college in southern Taiwan. *Journal of Information & Optimization Sciences*, 30(3), 481-488.

- Luce, D. & Tukey, J. (1964). Simultaneous conjoint measurement: A new type of fundamental measurement, *Journal of Mathematical Psychology*, 1(1), 1-27.
- Lyon, D. (2000). *Pricing research in marketing research: State-of-the-art perspectives*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Maddox, R. (1981). Two-factor theory and consumer satisfaction: replication and extension. *Journal of Consumer Research*, 8(1), 97-102.
- Maoz, D. (2004). The conquerors and the settlers: Two groups of young Israeli backpackers in India. *The Global Nomad*. Clevedon, UK: Channel View, 109-122.
- McCarthur, S. (2000). Beyond carrying capacity: Introducing a model to monitor and manage visitor activity in forests. *Forest Tourism and Recreation: Case Studies in Environmental Management*. Wallingford, CT: CABI Publishing, 259-278.
- Marriott Vacation Club – The Marriott Collection. (2011). Retrieved on March 11, 2011 from <http://www.marriottvacationclub.com/learn-about-ownership/where-can-i-go/the-marriott-collection.shtml>
- Matzler, K., Fuchs, M., & Schubert, A. (2004). Employee satisfaction: Does Kano's model apply? *Total Quality Management & Business Excellence*, 15(9-10), 1179-1198.
- \_\_\_\_\_, & Hinterhuber, H. (1998). How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment. *Technovation*, 18(1), 25-38.

- Mean-Shen, L. (2009). A refined and integrated Kano model and the implementation of quality function deployment - research on the library of a vocational and technical school in southern Taiwan. *International Journal of Organizational Innovation (Online)*, 2(1), 252-260.
- Mittal, V., Kumar, P., & Tsiros, M. (1999). Attribute-level performance, satisfaction, and behavioral intentions over time: A consumption-system approach. *Journal of Marketing*, 63(2), 88-101.
- Miyakawa, M., & Wong, C. (1989). Analysis of attractive quality and must-be quality through product expectation factors. Proceedings of 35<sup>th</sup> Technical Conference, Tokyo. *Society for Quality Control*, 101-104.
- \_\_\_\_\_. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- \_\_\_\_\_. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4), 33-44.
- Orme, B. K. (2006). *Getting started with conjoint analysis: Strategies for product design and pricing research*. Madison, WI: Research Publishers LLC.
- Orsingher, C., & Marzocchi, G. L. (2003). Hierarchical representation of satisfactory consumer service experience. *International Journal of Service Industry Management*, 14(2), 200-216.
- Pawitra, T., & Tan, K. (2003). Tourist satisfaction in Singapore--a perspective from Indonesian tourists. *Managing Service Quality*, 13(5), 399-411.

- Poon, W., & Yong, G. (2005). Comparing satisfaction levels of Asian and western travelers using Malaysian hotels. *Journal of Hospitality & Tourism Management*, 12(1), 64-79
- Powanga, A., & Powanga, L. (2008). An economic analysis of a timeshare ownership. *Journal of Retail & Leisure Property*, 7(1), 69-83.
- Ragatz, R. (2007). Timeshare facts and figures, <http://www.rciaffiliates.com/industryoverview/timesharefacts.asp>, accessed 13 March 2009.
- Reichheld, F.F. (1996). *The loyalty effect*. Boston, Massachusetts: Harvard Business School Press.
- Rezak, S. (2002). Consumer research sheds light on all aspects of resort timesharing business. *Hospitality Management* 21, 245-255.
- Ryan, C., & Huimin, G. (2007). Perceptions of Chinese Hotels. *Cornell Hotel & Restaurant Administration Quarterly*, 48(4), 380-391.
- Scavo, J. (1999). Marketing resort timeshares: The rules of the game. *St. John's Law Review*, 73(1), 217-245.
- Schreier, L.A. (2005). *Timeshare vacations for dummies, 1st ed.* Hoboken, NJ:Wiley & Sons Publishing.
- Schvaneveldt, S., Enhawa, T., & Miyakawa, N. (1991). Consumer evaluation perspectives of service quality: Evaluation factors and two-way model of quality. *Total Quality Management*, 2(2), 149-161.

- Scoviak, M. (2003). A little bit of sunshine: Consumers unwillingness to give up their holidays and a greater need for family time continue to support optimism for timeshare and fractional ownership. *Hotels*, 37(2), 32-36.
- \_\_\_\_\_. (2004). Envable positioning: Timeshare continues to churn out good news and good numbers. *Hotels*, 38(2), 32-36.
- Shahin, A., & Zairi, M. (2009). Kano model: A dynamic approach for classifying and prioritizing requirements of airline travelers with three case studies on international airlines. *Total Quality Management & Business Excellence*, 20(9), 1003-1028.
- \_\_\_\_\_. (2004). Integration of FMEA and the Kano model: An exploratory examination. *The International Journal of Quality & Reliability Management*, 21(6/7), 731-746.
- Shavelson, R. (1996). *Statistical reasoning for the behavioral sciences 3<sup>rd</sup> Edition*. Boston, MA: Allyn and Bacon.
- Silvestro, R., & Johnston, R. (1990). The determinants of service quality: hygiene and enhancing factors. *Quality in Services II, Selected Papers*. Warwick Business School, UK.
- Sireli, Y., Kauffmann, P., & Ozan, E. (2007). Integration of Kano's model into QFD for multiple product design. *IEEE Transactions on Engineering Management*, 54(2), 380-390.
- Slade, L., Davenport, T., Roberts, D., & Shah, S. (2002). How Microsoft optimized its investment in people after the dot-com era. *Journal of Organizational Excellence*, 22(1), 43-52.

- Small, J. (2003). Voices of older women tourists. *Tourism Recreation Research*, 28(2), 31-39.
- Sparks, B., Butcher, K., & Bradley, G. (2008). Dimensions and correlates of consumer value: an application to the timeshare industry, *International Journal of Hospitality Management*, 27, 98-108.
- \_\_\_\_\_, Butcher, K., & Pan, G. (2007). Customer derived value: Understanding the meaning in the resort ownership industry. *The Cornell Hotel and Restaurant Administration Quarterly*, 48(1), 28-45.
- Starwood Vacation Ownership Lifetime Benefits. (2011). Retrieved March 11, 2011 from [http://www.starwoodvillas.com/travel/index.html?IM=STRWDPREVIEWS\\_WEB\\_REDIRECT](http://www.starwoodvillas.com/travel/index.html?IM=STRWDPREVIEWS_WEB_REDIRECT).
- Stringam, B. (2010). Timeshare and vacation ownership executives' analysis of the industry and the future. *Journal of Retail & Leisure Property*, 9(1), 37 – 54.
- Tan, K., & Shen, X. (2000). Integrating Kano's model in the planning matrix of quality function deployment. *Total Quality Management*, 11(8), 1141-1151.
- \_\_\_\_\_, & Pawitra, T. (2001). Integrating SERVQUAL and Kano's model into QFD for service excellence development. *Managing Service Quality*, 11(6), 418-430.
- Ting, S. & Chen, C. (2002). The asymmetrical and non-linear effects of store quality attributes on customer satisfaction. *Total Quality Management*, 13(4), 547-569.



- Tontini, G. (2007). Integrating the Kano model and QFD for designing new products. *Total Quality Management & Business Excellence*, 18(6), 599-612.
- \_\_\_\_\_, & Silveira, A. (2007). Identification of satisfaction attributes using competitive analysis of the improvement gap. *International Journal of Operations & Production Management*, 27(5), 482-494.
- Tugend, A. (2006). Time shares are shedding the faint odor of disrepute. *The New York Times*, p. C5.
- Upchurch, R., & Gruber, K., (2002). The evolution of a sleeping giant: Resort timesharing. *The International Journal of Hospitality Management*, 21(3), 211-225.
- \_\_\_\_\_, Rompf, P., & Severt, D. (2005). Segmentation and satisfaction preferences of specific Looking Glass Cohorts profiles: A case study of the timeshare industry. *Journal of Retail & Leisure Property* 5(3), 173-184.
- Von Dran, G., Zhang, P., & Small, R. (1999). Quality Websites: An Application of the Kano Model to Website Design, *AMCIS 1999 Proceedings*. Paper 314. Retrieved from <http://aisel.aisnet.org/amcis1999/314>
- Wang, T., and Ji, P. (2010). Understanding customer needs through quantitative analysis of Kano's model. *The International Journal of Quality & Reliability Management*, 27(2), 173-184.
- Wilkie, W., & Pessemier, E. (1973). Issues in marketing's use of multi-attribute attitude models. *Journal of Marketing Research*, 10, 428-491.

Woodruff, R. (1997). Customer value: the next source for competitive advantage. *Academy of Marketing Science Journal*, 25(2), 139-153.

Woods, R.H. (2001). Important issues for a growing timeshare industry. *Cornell Hotel and Restaurant Administration Quarterly*, 42(1) 71-81.

Yang, C. (2003). Establishment and applications of the integrated model of service quality measurement. *Managing Service Quality*, 13(4), 310-324.

\_\_\_\_\_. (2005). The refined Kano's model and its application. *Total Quality Management & Business Excellence*, 16(10), 1127-1137.

\_\_\_\_\_, Cheng, L., Sung, D., and Withiam, G. (2009). Strategic-pricing policy based on analysis of service attributes. *Cornell Hospitality Quarterly*, 50, 498-509.

Yeung, M. & Ennew, C. (2000). From customer satisfaction to profitability. *Journal of Strategic Marketing*, 8, 397-409.

Yi, Y. (1990). A critical review of consumer satisfaction. *Review of Marketing*, 4, 68-123.