An Assessment of Customer Satisfaction and Market Segmentation at the Timberline Lodge Recreation Complex
Customer Satisfaction and Market Segmentation at the Timberline Lodge Recreation Complex

Michael D. Ferguson
Robert C. Burns Ph.D.
West Virginia University

National Association of Recreation Resource Planners
April 19, 2012
The Timberline Lodge is located in the Mount Hood National Forest of Northwest Oregon.

As part of the New Deal, President Franklin Delano Roosevelt established the Works Progress Administration (WPA) and funded the majority of Timberline’s construction. Construction of the lodge was completed in 15 months—a remarkable achievement. The lodge was primarily built by hand using native materials collected on site and from around the region.

In 1937 FDR arrived at Timberline Lodge and formally dedicated it. FDR utilized a bicycle seat on a post to prop himself up to the podium, making it appear as though he was able to stand, as he had been paralyzed from the waist down from Polio.

The Magic Mile chairlift was the first chairlift in Oregon and the second chairlift in North America, ushering in a golden era of skiing on Mt. Hood.
Timberline Lodge Then...
- The Timberline Lodge ski area encompasses nearly 1,415 acres of skiable terrain, and is the only ski area in the United States which provides lift accessible ski terrain during all twelve months of the year.
- Due to these unique features, skiers and snowboarders from around the world pursue this coveted resource in order to train, recreate, and enjoy this anomaly of a ski resort.
- Estimations ascertain that nearly 10,000 users attempt to summit Mount Hood every year, making it one of the most climbed mountains in the world.
- This popular site and its surrounding recreation opportunities host upwards of one million annual visitors and is managed by a unique blend of private, public and non-profit entities.
- In accordance with a special use permitting lease initiated by the USDA Forest Service, the Timberline hotel and ski area have continued to be managed by RLK and Company, a private sector business, for over half a century.
- The USDA Forest Service Mount Hood National Forest, oversee the historic Timberline Lodge as well as the surrounding environment.
- Additionally, Friends of Timberline, a local non-profit organization, aids the USDA Forest Service and RLK and Company in the restoration and preservation of on-site historic artifacts including artwork and furnishings.
Timberline Lodge Now…
 Purpose of the Study

- This study examined the effectiveness of service quality indicators as predictors of overall satisfaction at the Timberline Lodge Recreation Complex.
- Focus on the satisfaction ratings of service quality and trip experience items between various market segments of visitors.

- The primary purpose of this thesis was to investigate the effectiveness of service quality indicators as predictors of overall satisfaction at the Timberline Lodge Recreation Complex. Moreover, the utilization of market segmentation played a critical role in the analysis of the dissimilarities of TLRC users' satisfaction levels.
Recreation Complex Overview

- Previous studies
  + Stove-pipe
  + Silos

- West Virginia University Market Segmentation
  + Mount St. Helens National Volcanic Monument, WA
  + Diamond Lake, OR

- Market Segmentation technique is highly effective
  - Homogeneous group segmentation provides management the opportunity to better understand their visitors by placing users into different groups based upon similar characteristics (Donnelly, Vaske, DeRuiter, & King, 1996).
- The focal point of this study includes all of the recreation facilities and activity segments which surround the Timberline Lodge.
- For the purpose of this study, this area and the activity segments that encompass it were referred to as the Timberline Lodge Recreation Complex (TLRC).
- The TLRC is an intricate area made up of the Timberline Lodge, Wy’East day lodge, one ski hill, three primary parking areas, one wilderness access point, one main loop road, and a wide array of scenic viewpoints and general recreation areas.
- The entire TLRC complex consumes a total of four square miles within the Mount Hood National Forest and provides an abundance of individual recreation sites and activities.
- In order to ensure a diverse set of responses, the survey area was divided up into three distinct geographical sectors. Note, parking lot #3 was permanently closed on June 1 for construction.
-A systematic sampling schedule was created in order to allow for the collection of data at specific locations, times, and days of the week to ensure that a representative sample of each recreation location was obtained.
-Face to face interviews were employed in order to gather data from recreation users throughout the two primary parking areas at the TLRC between the months of May and August of 2011.
-A total of 972 surveys were conducted, resulting in 805 useable surveys within 43 sampling days
-A succession of 15 satisfaction items and 8 crowding and conflict items were employed
- Due to the multifaceted nature of the TLRC, a wide variety of recreation activities take place simultaneously.
- Based on this notion, TLRC users were presented with a listing of a broad range of activities.
- Recreation users were then asked to indicate which of those activities they partook in on that specific day, and of those, which was their primary activity.
- The respondents were then categorized accordingly based off of their primary activity response, and placed into one of two segmented user groups; snow users or lodge users.
- Snow users were classified as any TLRC users who participated in snow based activities.
- Subsequently, lodge users were categorized as any TLRC users who engaged in activities that revolved around the Timberline Lodge.
- Out of the entire sample, just under three-fourths of respondents (74.7%) reported that their primary activity was snow use, while the remainder of the sample (25.3%) indicated that lodge use was their primary activity.
- It should also be noted that overlapping activity participation was also common.
- More than 81% of lodge users indicated that they had also participated in snow activities, and 31.6% of snow users reported that they had engaged in lodge activities.
Analysis of User Segments
- Snow users were predominately male (76%)
- Lodge users gender distribution relatively even (48% / 51%)
- Snow users younger
- Lodge users older
- Snow users had lower income
- Lodge users had higher income
On average, lodge users’ education levels were slightly higher than snow users.
- Snow users tended to recreate with friends
- Lodge users recreated with family and friends
* Make note that these are different categories
-Snow users recreated in larger groups than snow users
- The majority of snow users were repeat visitors (79%)
- The majority of lodge users were first-time visitors (77%)
-Snow users tended to be newer to the TLRC facility, opposed to lodge users
- Snow users recreated at a much higher frequency than lodge users
- It should be noted that 50% of the lodge user sample recreated for only 1 day per year at the TLRC
-Surprisingly, both user groups tended to recreate on day trips.
- Large proportion of lodge users only stayed for 1 hour on day trips
- Snow users stayed for much longer on day trips
- The majority of lodge users that did stay, stayed for 1-2 nights.
- Of the snow users who stayed overnight, they tended to stay for longer.
Conclusions & Implications
Conclusions

- Snow Users
  - Gender: Primarily male
  - Age: Younger
  - Income: Lower
  - Education: Slightly lower
  - Race: Predominately White
  - Country: U.S.A.
  - Group Composition: Friends
  - # of Adults: Typically 2-4
  - 1st Time vs. Repeat: Repeat
  - Year of 1st visit: Earlier (2001)
  - Days Recreating per year: More (25)
  - # of Nights: More (5.87)
  - # of Hours: More (6.22)

- Lodge Users
  - Gender: Even
  - Age: Older
  - Income: Higher
  - Education: Slightly higher
  - Race: Predominately White
  - Country:More likely to be from another country
  - Group Composition: Family & Friends
  - # of Adults: Predominantly 2
  - 1st Time vs. Repeat: 1st Time
  - Year of 1st visit: Later (1993)
  - Days Recreating per year: Fewer (6)
  - # of Nights: Less (1.71)
  - # of Hours: Higher (2.28)

-A summary comparison of the snow users and lodge users determined that 13 out of the 15 socio-demographic, trip and group characteristic items were significant.

Socio-Demographics: In regards to socio-demographics...

-SNOW: Snow users tended to be younger, white, males from within the United States who possess lower levels of both income and education.

-The findings of this research are congruent with ski literature in which skiers are typically younger, males participating in a male dominated sport.

-Interestingly, the recreation literature on snow users’ notes that this user segment typically possesses higher levels of income and education.

-I believe that the below average income and education levels of TLRC snow users are a direct result of the low mean age that the group possesses.

-Moreover, the literature suggests that adventure sports are more appealing to younger demographics.

-LODGE: Conversely, lodge users were predominantly older visitors with higher levels of income and education.

-They are typically Caucasians, with an even distribution of gender, and have a higher propensity to be visiting from another country.

Trip and Group Characteristics: *In regards to group and trip characteristics....

-SNOW: Snow users generally recreated in larger groups, consisting of primarily friends.

-They are typically repeat visitors who recently began recreating at the TLRC and have a propensity to recreate for longer spans of time.

-It is my opinion that due to the vast number of skiers and snowboarders that comprise the snow user segment, this user segment is drawn in by the 365 days per year of snow that the Timberline Ski area provides.

-Additionally, ski and snowboard training facilities, which target specific demographic groups, are customary at the TLRC, hence the lower age, income, and education levels as well as the elevated number of days recreating per year.

-LODGE: Conversely, lodge users tended to be older, with income levels significantly exceeding those of snow users.
Management Implications

- Target markets defined

- TLRC managers provided the information to properly address independent user segments
  - Visitor profiles
  - Target markets
  - Marketing techniques
  - Activity diversification
    - On site & Off site
  - Future developments
  - And more...
- I hypothesize that lodge users have a propensity to rate satisfaction items higher than their snow user counterparts for a multitude of reasons.
  - First, it is evident that lodge users recreate at the TLRC for the services and facilities provided, thus they rate these items higher.
  - More importantly, it is of this author’s opinion that snow users recreate at the TLRC for the experience, thus they rate all services and facilities items lower.
  - Furthermore, data analysis infers that snow users tend to be repeat users, while lodge users tend to be first time visitors.
  - The recreation literature notates that repeat visitors (i.e. snow users) possess the inclination to rate all satisfaction items lower than first time visitors (i.e. lodge users).
  - Past research has determined that repeat users know what to expect as each additional trip is made. These users may alter their expectations of a recreation facility, service, or experience simply based upon the number of trips which they have experienced in the past.
  - Additionally, the literature notes that repeat visitors with with “vested interests” can bias responses, therefore, providing skewed results that are less reflective of segmented preferences, and more so of a minority interest.
  - This literature coincides with happenstances that I witnessed while interviewing such as certain minority groups abnormally rating satisfaction items in pursuit of a specific agenda with the overall TLRC management.

- Overall, snow users rated perceived levels of crowding and conflict higher than lodge users.
- I opine that snow users may have had a propensity to gauge crowding and conflict variables higher due to a prevalent animosity amongst snow users recreating in the same, or opposing snow related activities.
- The literature supports this opinion, as conflict typically occurs when users engaged in
Management Implications

- First study to view TLRC as a complex
- Agencies searching for methods to measure customer satisfaction.
- Graphic demonstration of the value of market segmentation.
- Multi-faceted activity segmentation can be applied at other similar facilities.
- Timberline Lodge management are provided with the tools to address individual issues and markets.

- Previous studies at the TLRC have looked at the individual ‘silos’ of activities and topics at the Timberline Lodge.
- This research is the first study that has looked at the TLRC as an all encompassing complex.
- The findings within this study offer land management agencies insight into the multitude of benefits provided by customer satisfaction research.
- Moreover, this study provided a graphic demonstration of the value of market segmentation to recreation resource managers.
- The findings of this thesis determine that there is definitive relationship which exists between market segmentation and customer satisfaction as 9 satisfaction items and 4 crowding and conflict items were found to be significant.
- As previously stated, this thesis is a smaller subset of a broad scale, overlaying analysis for the managers of the Mount Hood National Forest.
- The satisfaction, crowding, and conflict items revealed significant findings which can result in specific implications to outdoor recreation managers around the world.
- Due to the evolving nature of the ski industry in general, recreation areas that were once focused on 1 specific activity, are now finding that they must diversify their activities in order to survive.
- This diversification has led to elevated levels of conflict, crowding, and reduced satisfaction levels; expanding upon the need for studies such as this.
- Due to the fact that the TLRC is first and foremost a ski area, this coveted user group should remain the focus of all management objectives.
- Recreation managers must focus specifically on snow users as a whole and establish cost effective ways to provide increased services to this user segment.
- Next, the issue of perceived crowding and conflict between independent user segments within the TLRC is prevalent.
- Focusing on the prevalent differences in crowding, conflict, and satisfaction levels...
Questions?