

Developing Forecasting Modeling Criteria for Snow-School Lesson Volumes

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Abstract

Examines the factors that influence demand for ski and snowboard lessons at Whistler Blackcomb ski resort. Using a combination of key informant interviews and analysis of customer purchase patterns, demand is linked to overall skier visitation as well as market segmentation. A conceptual model based on the concept of negotiation of leisure constraints is developed to aid understanding of consumer behaviour. Linear regression models are developed to show the impact of skiers visitation, geographic origin, and pricing on ski and snowboard lesson demand. Recommendations related to 5 Ps of marketing are presented product, price, promotion, place, and people. Recommendations include simplifying product offerings, creating rate fences for different market segments, and focusing promotional activities on improving the preference for lesson participation. The value of combining qualitative inquiry with data-mining is demonstrated with this paper.

Keywords: Tourism, Forecasting, Market Segmentation, Regression, Ski,

Introduction

This research project seeks to understand the relationship between both exogenous and endogenous variables, and individual visitors' decisions to enroll in snow-school lessons at Whistler Blackcomb. In an increasingly unpredictable world that has seen business levels at Whistler Blackcomb fluctuate dramatically with world economic conditions, a thorough understanding of the factors driving this variability is required. Short and long-term scheduling, hiring, and budgeting decisions are based on estimations of business levels. Recent changes in booking patterns have made these estimations more difficult, with guests often booking much closer to arrival (RCC Associates, 2011).

Purpose: Goals and Objectives

The goal of this research is to determine the factors that influence guests' likelihood of purchasing a snow-school product. Ultimately, this inquiry should point to the components that will enable the subsequent development of a forecasting tool.

The objective of this study is to recommend factors that will help predict future demand for snow-school products.

Research Questions

To begin the investigation, factors were sought through the lens of the traditional 5 P's of the marketing mix: product, place, price, promotion and people (Moore & Pareek, 2006). The following research questions therefore relate directly to market segmentation and the marketing mix.

- What factors influence an individual's decision to purchase a snow-school lesson? Which market segments are more or less likely to purchase a snow-school lesson? These questions relate to the socio-economic factors influencing demand.
- *Product:* What benefits are customers seeking from snow-school products? Are there needs that are not currently met by the Whistler Blackcomb Snow School product mix? What external trends in consumer preferences have an impact on snow school demand?
- *Place?* What channels are customers using to access snow-school products? What is the effectiveness of these channels?
- *Price:* Are prices influencing demand? What is the price elasticity of demand for snow-school lessons? Are there macro-economic factors that might influence the impact of price?
- *Promotion:* Are current promotional strategies effective? Which promotions drive demand?
- *People:* Who influences individual decisions to purchase lesson products? What do these people do to influence decisions? How do they influence decisions?

Literature Review

Ski Participation and Leisure Constraints

To help understand some of the factors affecting participation in lessons, an analysis of the literature on constraints to participation in the sport of skiing was conducted. Much of the literature regarding the sport of skiing in the context of a tourist and leisure activity relates to the constraints to participation (e.g., Alexandris, Kouthouris, Funki, & Chatzigianni, 2008; Gilbert & Hudson, 2000; Williams & Fidgeon, 1999). The conceptual models that have been developed to address the issue of leisure and ski participation constraint were useful in developing a conceptual model for ski lesson purchase decisions.

In a thorough introduction, Gilbert and Hudson (2000) point to the concept of negotiation of leisure constraints. Figure 1 (below) shows the hierarchical negotiation model of leisure constraints originally presented by Crawford *et al.* (1993).

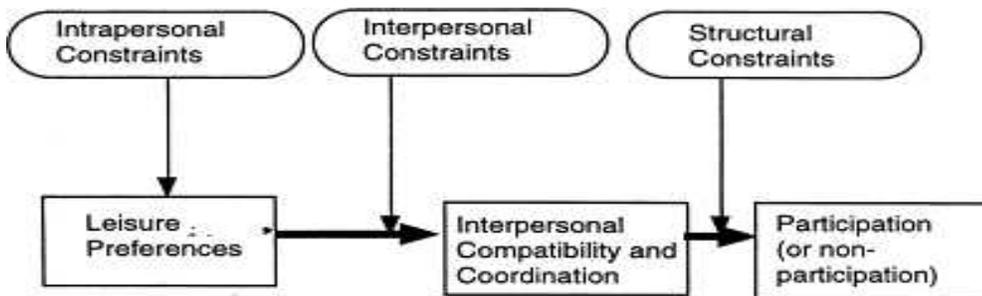


Figure 1: Negotiation of Leisure Constraints

(Gilbert & Hudson, 2000, p. 910)

Godbey, Crawford, and Shen (2010) provided a review of the development and use of this hierarchical leisure constraints theory; they point out that “[t]he hierarchical model posits that leisure constraints exist at three levels: intrapersonal, interpersonal, and structural which must be navigated sequentially for participation to take place or continue/progress” (p. 113). Godbey *et al.* suggested that this hierarchy should be used as a lens for the development of constraints. While there are correlations between constraints at different stages of the hierarchy (p. 114) careful distinction between levels should be made when using quantitative methods such as structural equation modeling (p. 116). Building on the original hierarchical model, Gilbert and Hudson (2000) developed a model of participant constraint for skiing that includes feedback loops. Figure 2 shows the hierarchical model developed specifically for skiing.

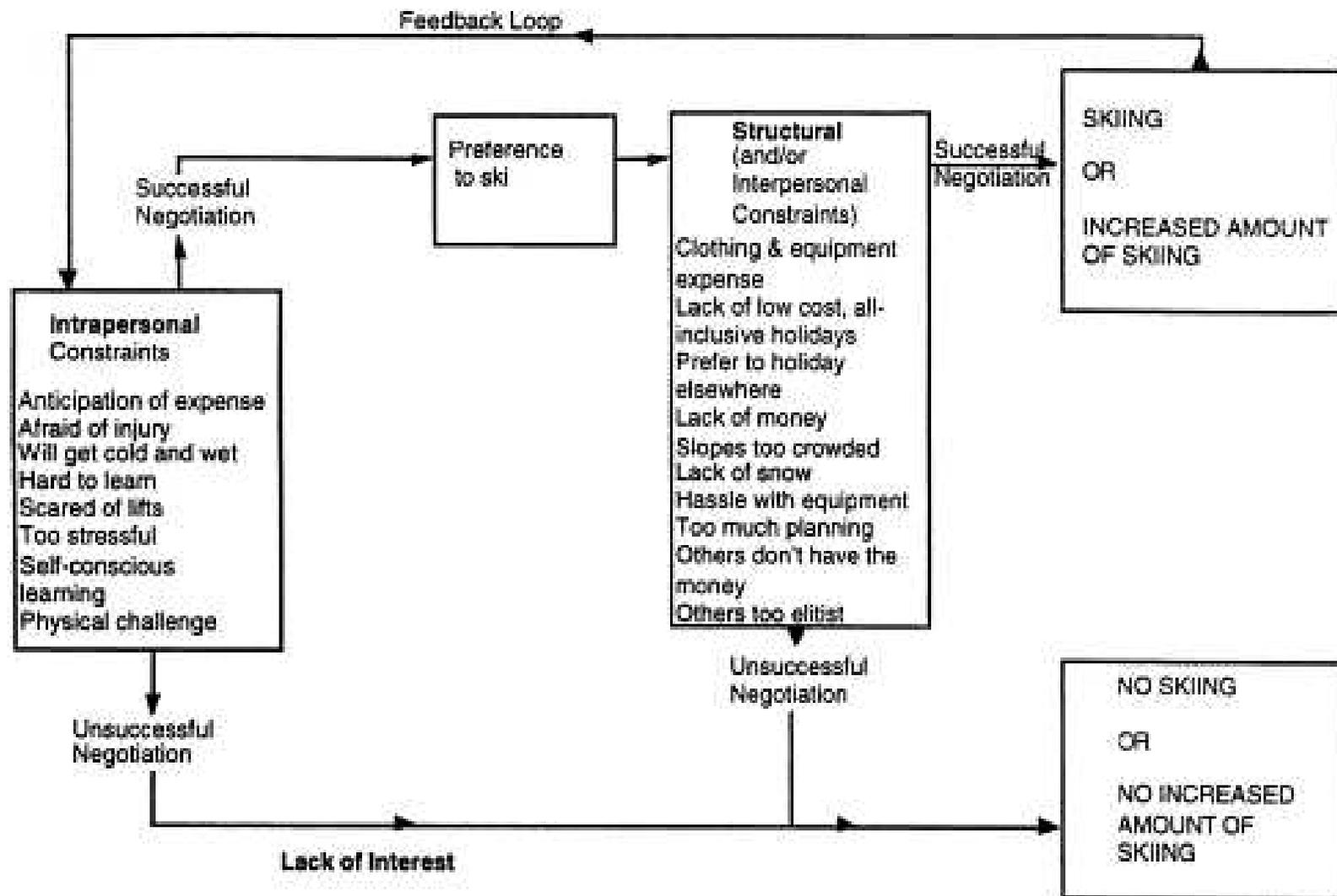


Figure 2: A Model of Leisure Constraints (pertaining to skiing)
 (Gilbert & Hudson, 2000, p. 919)

Intrapersonal constraints presented in Figure 2 could be related to the concept of skilled consumptions, which is linked to the frequency of ski holidays (Richards, 1996). The decision to purchase a snow-school lesson is often linked to this desire to advance skills and build confidence (RRC Associates, 2011, p. 16).

Godbey et al. (2010) help put the concept of participant constraints into a concept that may be more measurable with the following statement: “One way to view leisure behaviour is as a series of exchange considerations (costs vs. rewards) involving the relative “profitability” indices which are constantly being mentally calculated as people consider alternate courses of action (leisure behavior)” (p. 123). Often these factors are not actually related to the specific service consumed in a destination; factors may be socio-demographic, or based on an individual’s prior experience and expectations (Mendes, Valle, Guerreiro & Silva, 2010).

Factors more specific to the attributes of the experience have also been considered. Alexandris *et al.* (2008) cite the original proponents of the hierarchical theory of negotiated constraints, and suggest that the internal, intrapersonal, factors will often be the most important factors in an individual's decision to participate (p. 249). Psychological factors relating to fear have been identified as constraints to initial participation in skiing by others as well (Williams & Fidgeon, 1999) and could be a factor in the decision to participate in a lesson. Constraints regarding the actual skiing experience were identified as having high correlations and were deemed primarily physiological (Alexandris *et al.*, 2008, p. 259). The exploration of the concept of participant constraint leads to the understanding that there are two general sets of factors that influence demand for a recreational activity and its services, internal and external factors.

Tourist Experiences

The concept of the experience as a commodity, as explained by Pine and Gilmore (1998; 1999), means that like any other product, experiences are produced. Snow-school lessons are the perfect example of this notion of experience as commodity. Quan and Wang argue that tourist experiences can be described as supportive experiences or peak experiences (2004). A ski lesson could also be viewed in the same way, as a supportive experience or peak experience. Poulsson and Kale (2004) provide analysis that can help to operationalize the production of experiences and further describe the components that are important within an experience. These components may also be factors that influence the decision to purchase an experience. They propose that experiences require these “sensations and feelings [...] to be apprehended by the customer: personal relevance, novelty, surprise, learning, and engagement” (p. 271).

Marketing services and experiences

Product, place, price, promotion and people (the P's of marketing) are elements of the marketing mix that are commonly used to develop a marketing strategy (Moore & Pareek, 2006). The traditional concept of marketing in terms of economic maximization of utility of which the P's are an integral component was developed in the era of a goods-focused economy (Vargo & Lausch, 2004). The concept of consumers as “thoughtful information processors and rational value maximizers” was behind much of this earlier marketing thought (Day & Montgomery, 1999, p. 4). The P's of marketing may be a useful tool in describing some of the network components responsible for creating utility and then delivering it to consumers, especially when considering goods or even basic services.

Thaler's (1985) examination of mental accounting in consumer behavior may be useful in

understanding how services and experiences hold value for consumers. Perception and image are critical components in tourism marketing as illustrated in Pike (2008). Consumers could therefore calculate the value of an experience based on the degree to which their perceived image of the experience matches their needs and wants. The concept of calculating value is critical to enable a statistical model to forecast demand.

Forecasting Methodologies

The structural (or external) factors introduced earlier, based on the work of Gilbert and Hudson (2000), are either economic or could be described by proxy with econometric analysis. Much of the existing tourism forecasting literature relies upon econometric models. These models utilize a variety of approaches to calculate the impact of explanatory variables on tourism demand. Explanatory variables often used in econometric modeling of tourism demand include: “income levels of the potential tourists, tourism prices in the destination (own price) and in the competing countries (substitute prices), as well as travel costs and marketing expenditures” (Li, Song & Witt, 2006, p. 220). The econometric forecasting methodologies used with these types of exogenous variables are explained in great detail in Song, Witt and Li (2009). Tse (2000) found that macro economic (daily exchange rates) variables did not have a significant influence on daily lesson demand at Whistler Blackcomb.

Discrete choice analysis can be used to “understand customer purchasing behavior at a disaggregated individual decision maker level” (Christ, 2011a, p. 203). Discrete choice modeling of individual behavior is also described as conjoint analysis and has been widely used in the marketing field (Vriens, 1994). Discrete choice models essentially calculate the utility of each option to determine which option will be selected. This type of analysis was used experimentally by Morley (1994) to predict destination choice under different price conditions. The disaggregated evaluation of preferences allows for a thorough analysis of the importance of a variety of factors (Vriens, 1994). These models basically allow a calculation of the relative utility of a variety of choices. The uncertainty of certain components of utility may be explained through an understanding of mental accounting (Thaler, 1985). The first step in the development of a discrete choice model is to perform regression analysis on the available variables (Christ, 2011).

Methodology

Phase 1: Structured Interviews

Sampling

Interviews were conducted with Whistler Blackcomb Employees as well as employees of the major booking agent for Whistler Blackcomb. The interviewing component of this research helped to establish a theory of lesson purchase intention. The second stage of the research offered statistical measures of factors relevant to lesson purchase. The general method of sampling used was purposive sampling (Robson, 2011). As results of the survey started to emerge the survey size and elements of the population necessary to reach saturation became evident. Given that interviewees were all in similar positions and interacting with a similar set of customers, data saturation occurred after a relatively small number of interviews.

Interview Questioning for Qualitative Analysis

To understand which factors influence an individual's decision to purchase a snow-school lesson, interviews were held with individuals who are responsible for interacting with customers as they book their vacations to Whistler or once they have arrived. Elements of the marketing mix that were investigated were product, place, price, promotion and people (Moore & Pareek, 2006).

Interview Response Analysis

After each interview was recorded, the responses to each question were coded. Robson identifies three sets of coding which will enable the development of a “substantive-level *theory*” (2011, p. 149). Given the small sample size, coding was done by hand with responses summarized.

Phase 2: Customer Database Analysis

Whistler Blackcomb uses a customer resource management (CRM) system (called RTPOne) for all point-of-sale sites as well as back office management. A report containing customer information and their purchase behaviour was used for this component of the project. The output of the RTPOne report was processed using spreadsheet software to create the database necessary for statistical analysis. Analysis of this database enabled the testing of some of the factors that were deemed important through the initial qualitative research.

Data set

The data used for this investigation was exported from the Whistler Blackcomb database beginning in late February, 2012. To maintain consistency, the data used for these analysis is for the period from December 1, 2011 to February 25, 2012. This period includes the busy December holiday period as well as busy periods for Chinese New Year and Presidents Week.

The snow school is organized into three basic divisions: private lessons, kids' group lessons, and adult group lessons. For the purpose of this investigation, four basic groups were derived from the whole set. These include: Adult Private Lessons, Kids' Private Lessons, Adult Daily Group Lessons, and Kids' Daily Group Lessons.

Findings

Interview response summary

One of the most consistent comments that interview participants suggested when prompted for additional comments was the need to increase the number of lessons that are pre-booked. Respondents generally suggested that there are two ways to incite guests to book snow school in advance: price and scarcity. However other factors that may offer some value for forecasting were also identified.

Potential factors

Based on the interview responses, there are a number of factors that may be important to forecasting snow-school lesson demand. These factors include price, geographic origin, ability level, familiarity with the resort, and price. Quantitative analysis for geographic origin, familiarity with the resort, and price was conducted in the second phase of this research.

Quantitative Data Analysis and Modeling

Based on the interview responses provided in the previous chapter, a data mining and modeling exercise was conducted. Data was extracted from data managed through RTPOne, the POS and customer resource management tool employed by Whistler Blackcomb. Multi- and single-variate linear regression statistical methods were employed in combination with the *Analysis of Variance (ANOVA)* statistical test. Through exploratory data analysis, a range of variables were tested.

Familiarity with the resort

The piece of data that best represents familiarity with the resort is the type of lift ticket or pass an individual has. There are three basic types of passes that can be used to access lifts at Whistler Blackcomb: Daily Lift Tickets, Edge Card (Discount Card), and Season Passes.

Familiarity with the resort can therefore be understood through an analysis of the types of passes being used at the resort. Since all passes are scanned at the base of the mountain each day, the number of each type of pass used each day is an available dataset.

Table 1 shows that the majority of lesson takers are lift ticket holders as opposed to Season pass or Edge card-holders.

Table 1: Pass type by lesson type

Pass Type	Adult Group	Kids Daily	Private	Grand Total
Edge	5.87%	7.34%	4.75%	6.17%
Lift	84.36%	83.31%	94.36%	86.05%
Season	9.77%	9.35%	0.88%	7.78%
Total:	100.00%	100.00%	100.00%	100.00%

Regression statistics indicate that the overall volume of skiers on the mountain in any given day

had a very strong influence on the number of all types of lessons sold. For each type of pass and type of lesson the *R-Squared* value was 1.00. However the *standard error of the estimate* was lowest for daily lift tickets. Therefore the number of daily lift tickets is the best indicator for lesson business levels.

Geographic Origin

The origin of snow-school customers was extracted from customer address information. Table 2 shows the percentage of participants in 5 different snow-school products by their general geographic origin. Origins were aggregated so that the region has a significant number of participants. Records with no address information make up almost 30% of the data set. The missing data is simply excluded from this analysis.

Table 2: Customer origin by snow school product

Product	Asia	Australia	BC	Canada	Latin America	UK-Europe	USA	Whistler	Total
Adult Group	4.4%	17.2%	23.7%	7.1%	3.7%	10.2%	23.7%	10.0%	100%
Esprit	4.0%	26.9%	6.1%	9.4%	0.5%	23.4%	13.1%	16.8%	100%
Kids Adventure Camp	11.1%	15.8%	18.5%	8.1%	3.4%	6.0%	21.0%	16.2%	100%
Kids Daily	3.9%	8.4%	33.4%	5.6%	2.6%	3.3%	31.5%	11.4%	100%
Private	12.0%	9.2%	9.3%	7.3%	5.9%	8.6%	25.0%	22.8%	100%
All Types	6.0%	13.0%	23.5%	6.8%	3.7%	7.7%	26.1%	13.3%	100%

In addition to Table 2 showing the overall proportion from each origin category, regression analysis was performed comparing the total number of lesson participants from each region with the rate of participation in Kids' and Adults' Private and Daily Group lessons. Summary statistics are shown in Table 3. The *R-Squared* along with the statistical significance from the ANOVA are shown for each geographic origin and lesson type.

Table 3: Effect of origin on rate or lesson participation

Origin	Kids Group Lesson		Adult Group Lesson		Kids Private Lesson		Adult Private Lesson	
	<i>R-Squared</i>	<i>Significance</i>	<i>R-Squared</i>	<i>Significance</i>	<i>R-Squared</i>	<i>Significance</i>	<i>R-Squared</i>	<i>Significance</i>
Asia	0.02	0.16	0.05	0.05	0.25	0.00	0.40	0.00
Australia	0.00	0.58	0.07	0.01	0.01	0.45	0.09	0.01
BC	0.18	0.00	0.01	0.31	0.02	0.25	0.09	0.01
Canada	0.10	0.00	0.01	0.29	0.14	0.00	0.22	0.00
Latin America	0.05	0.04	0.00	0.62	0.22	0.00	0.36	0.00
Other	0.03	0.11	0.02	0.19	0.06	0.03	0.20	0.00
UK-Europe	0.02	0.20	0.01	0.34	0.04	0.06	0.13	0.00
USA	0.17	0.00	0.04	0.08	0.11	0.00	0.25	0.00
Whistler	0.14	0.00	0.00	0.91	0.25	0.00	0.60	0.00

Price

Price impacts the various products and market segments differently. Currently, the pricing strategy employed by Whistler Blackcomb Snow School includes peak-period pricing and discount periods. To help understand how pricing impacts demand, the rate of participation during different pricing periods was evaluated. Pricing was evaluated for private lessons and daily group lessons for kids and adults. To estimate the impact of pricing on lesson sales, regression models were run using the price and lift ticket sales as the independent variables with the number of lessons sold as the dependent variable. This allows the model to represent the actual rate of participation. Because the total number of lessons sold is often highest during periods of higher prices, using only price as an independent variable would create the illusion that increases in price result in an increase in demand.

The most aggressive pricing strategy is the Discover Whistler Days (DWD) promotion that gives a 30% discount on a number of lesson products. Of the lesson products analyzed, only adult daily group lessons are subject to DWD pricing. The adult group lesson pricing model indicates that the model is statistically significant, *coefficients* for both independent variables are significant, and the *R-squared* value is very high at 1.00. The *coefficient* for price is -1.04 for this model, indicating that for every dollar increase in price there will be 1.04 fewer lessons sold. The result is logical, since one would generally assume that an increase in price would result in a decrease in demand. Price is therefore a useable factor in Adult Group lesson demand.

For Kids Daily lessons and Private lessons there was no indication that higher prices reduced demand. This may be due to the small difference between peak and off peak pricing for both of these categories.

Conceptual Model

Conceptual Model Introduction

The concepts introduced in the literature review form the basis of the conceptual model of snow-school lesson sales forecasting. The concepts uncovered during this research project include demographics, market segmentation, personal perceptions, and structural factors that might influence demand. Figure 3 shows the conceptual model that can help determine lesson volumes based on the decisions made by potential customers.

Market Segments and Interpersonal factors

The first lens involves market segmentation. The market segment will determine the probability of a customer choosing to book a lesson. Market segments can be determined by a number of factors, as evidenced by the key informant interviews.

Factors such as geographic origin and familiarity with the resort have been shown to have an impact on snow school lesson demand. Therefore these factors could be used as proxies for the intrapersonal factors that drive demand. Further market segmentation methods may be available, however for use in a forecasting model these two segmentation methods are useful.

Compatibility

The compatibility of lesson products with a guest's desires and situation is the next factor along the conceptual model for lesson participation. At the compatibility stage of the model there are product-related factors as well as interpersonal factors.

Product-related factors include the time that lessons are offered or their duration. Interviewees indicated that the full-day duration of kids' programs may not be what some guests are looking for as well as having only full- and half-day durations for adult group lessons. Interpersonal compatibility relates to the people involved in individual guests' vacations, including the people they travel with and possibly the people that they meet. Skiing is a social sport and a big component of a ski vacation involves spending time with family and friends. Guests who would otherwise book lessons may be persuaded not to because they would like to spend time with family and friends instead. Parents may also desire their children to socialize with others in kids' group lessons. Compatibility can therefore be a constraining factor or a pull factor for lesson participation.

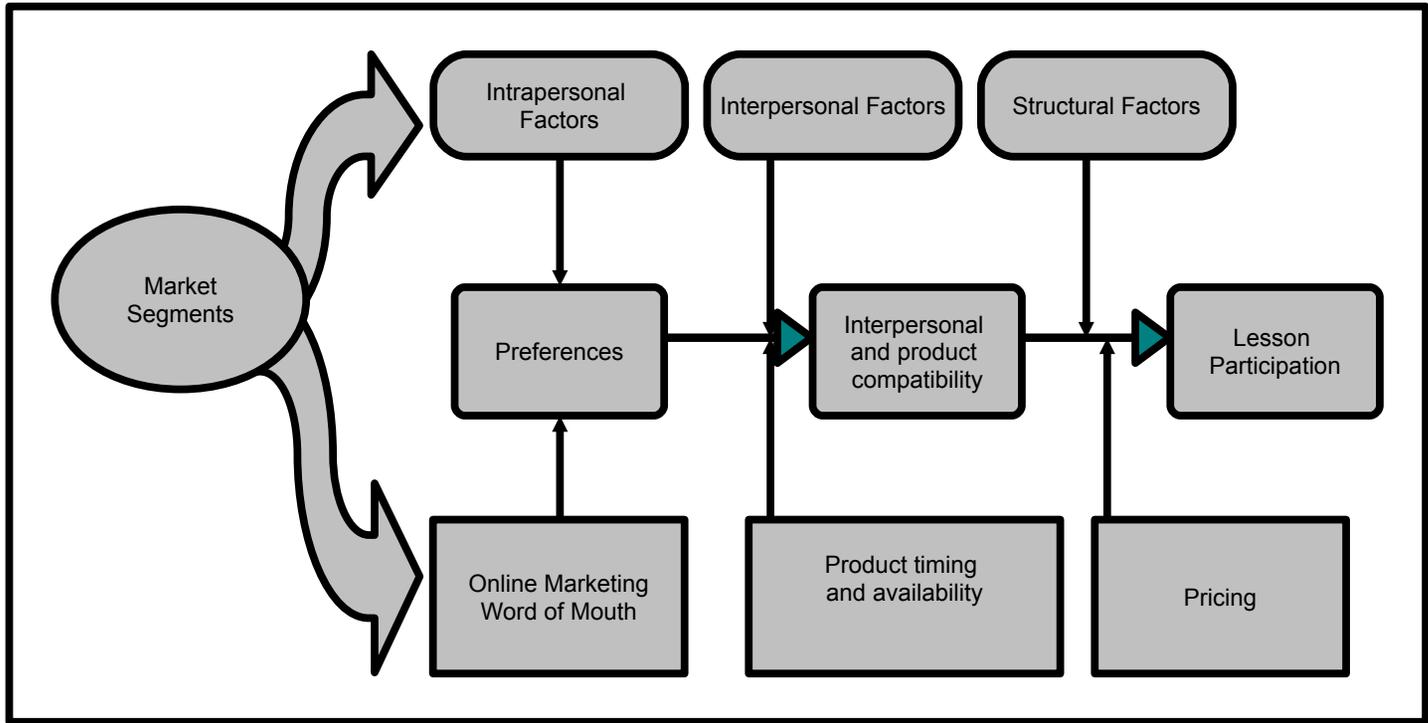


Figure 3: Conceptual Model of Lesson Participation

Structural Constraints

Structural constraints for snow-school lessons are primarily financial. Interviewees often indicated that price is a major stumbling block for potential lesson participants. Price is shown to have a negative impact on the variability of lesson volumes on only adult group lessons. Price is therefore a driving factor for adult group lessons and the amount that price is adjusted throughout the season is having an impact on demand for adult group lessons. The fact that price does not have a negative impact on the variability of the volume of other lesson programs does not mean that price is not a factor. Price may eliminate some potential lesson participants entirely, especially for premium private lessons. For some guests the cost will not be prohibitive and the benefits are well worth the cost. This cost-benefit trade-off creates a feedback loop in the model, where the perceptions of the value of the lesson may be revisited. If the value is not perceived, then the price represents a barrier to participation.

Summary and Recommendations

A number of recommendations emerge as a result of the inquiry into factors that influence demand for snow-school products, table 4 summarizes the recommendations.

The goal of developing forecasting criteria results in a more thorough understanding of the snow-school customer purchase system. Market segmentation, preferences, compatibility, and structural constraints along with the total visitation to the resort could effectively predict snow-school volumes. The problem remains that many potential factors do not have quantitative values. Looking at the pricing side of the value equation must be done with care, increasing preference for booking snow-school lessons can yield better financial results. More work is necessary to further develop an understanding of the market segments that book snow school and how they value certain aspects of their vacation experience. This research has demonstrated that there is significant value in the data collected through the CRM systems at Whistler Blackcomb. Some limitations do exist. For example, customers are not always tracked effectively in the system, creating the need for some assumptions. Even with these limitations, the opportunity exists to identify emerging trends in Whistler Blackcomb's business, for example, the importance of visitors from Asia in the variability of snow-school lesson demand. Combining data mining with qualitative research will enable future trends to be identified earlier and forecast more accurately.

Table 4: Summary of Recommendations

Management component	Important considerations
Factors to use for forecasting	<ul style="list-style-type: none"> • Pre-booked lift tickets • Price – only adult group lessons • Holidays – for kids lessons • Market segments including guest origin
People	<ul style="list-style-type: none"> • Need effective sales and booking agents to help speed up the booking process
Product	<ul style="list-style-type: none"> • Create simplicity in product offerings • Re-brand niche products separately
Price	<ul style="list-style-type: none"> • Adult group lessons are price sensitive • Private lessons not price sensitive • Kids lessons more likely driven by other factors eg. Holidays • Use effective rate fences
Promotion	<ul style="list-style-type: none"> • Look to improve preference for snow-school – online word of mouth • Use price promotions for certain market segments

References

- Achrol, R. S., & Kotler, P. (1999). Marketing in the network economy. *The Journal of Marketing*, 63(, Fundamental Issues and Directions for Marketing), pp. 146-163. Retrieved from jstor
- Alexandris, K. K., Kouthouris, C., Funk, D., & Chatzigianni, E. (2008). Examining the relationships between leisure constraints, involvement and attitudinal loyalty among Greek recreational skiers. *European Sport Management Quarterly*, 8(3), 247-264.
- Bianchi, M. (1998). Consuming novelty: Strategies for producing novelty in consumption. *Journal of Medieval & Early Modern Studies*, 28(1), 3. Retrieved from ebscohost
- Canadian Tourism Commission. (2012). *Tourism snapshot: A focus on the markets that the CTC and its partners are active in.* (No. 2).Canadian Tourism Commission.
- Canadian Tourism Commission. (n.d.). *The Explorer Quotient Worksheets.* (Worksheet).
- Christ, S. (2011a). Discrete customer choice analysis. In S. Christ (Ed.), *Operationalizing Dynamic Pricing Models* (pp. 203-231) Gabler. doi:10.1007/978-3-8349-6184-6_9
- Christ, S. (2011n). Multinomial logit model for low-cost travel choice. In S. Christ (Ed.), *Operationalizing Dynamic Pricing Models* (pp. 253-301) Gabler. doi:10.1007/978-3-8349-6184-6_9
- Cohen, E. (1988). Authenticity and commoditization in tourism. *Annals of Tourism Research*, 15(3), 371-386. doi:10.1016/0160-7383(88)90028-X
- Cohen, E. (1979). A phenomenology of tourist experiences. *Sociology*, 13(2), 179-201. Retrieved from sage

- Day, G. S., & Montgomery, D. B. (1999). Charting new directions for marketing. *The Journal of Marketing*, 63(, Fundamental Issues and Directions for Marketing), pp. 3-13. Retrieved from jstor
- Enz, C. A., Canina, L., & Lomanno, M. (2004). Why discounting doesn't work: The dynamics of rising occupancy and falling revenue among competitors. *Cornell Hospitality Report*, 4(7)
- Gilbert, D., & Hudson, S. (2000). Tourism demand constraints: A skiing participation. *Annals of Tourism Research*, 27(4), 906-925. doi:10.1016/S0160-7383(99)00110-3
- Gilmore, J. H., & Pine, B. J. (2002). Differentiating hospitality operations via experiences. *Cornell Hotel and Restaurant Administration Quarterly*, 43(3), 87-96. doi:10.1177/0010880402433009
- Godbey, G., Crawford, D. W., & Shen, X. S. (2010). Assessing hierarchical leisure constraints theory after two decades. *Journal of Leisure Research*, 42(1), 111-134. Retrieved from proquest
- Guest, G. G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
- Holden, a. (1999). Understanding skiers motivation using Pearces travel career construct. *Annals of Tourism Research*, 26(2), 435-438. doi: 10.1016/S0160-7383(98)00082-6
- Jackson, E., Crawford, D., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences*, 15(1), 1-11.
- Kimes, S. E., & Wirtz, J. (2003). Has revenue management become acceptable? Findings from an international study on the perceived fairness of rate fences. *Journal of Service Research*, 6(2), 125-135. doi:10.1177/1094670503257038
- Li, G., Song, H., & Witt, S. (2006). Forecasting tourism demand using econometric models. In D. Buhalis, & C. Costa (Eds.), *Tourism Management Dynamics : Trends, Management, and Tools* (pp. 219-228). Amsterdam: Elsevier Butterworth-Heinemann.

- McFadden, D. (2001). Economic choices. *The American Economic Review*, 91(3), 351-378. Retrieved from proquest
- Mendes, J. d. C., do Valle, P. O., Guerreiro, M. M., & Silva, J. A. (2010). The tourist experience: Exploring the relationship between tourist satisfaction and destination loyalty. *Tourism (13327461)*, 58(2), 111-126.
- Milman, A. A. (2009). Evaluating the guest experience at theme parks: An empirical investigation of key attributes. *The International Journal of Tourism Research*, 11(4), 373-387.
- Moore, K., & Pareek, N. (2006). *Marketing: The Basics*. London: Routledge. Retrieved from voyager
- Morley, C. L. (1994). Experimental destination choice analysis. *Annals of Tourism Research*, 21(4), 780.
- Pine, I.,B.J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-105.
- Pine, B. J., & Gilmore, J. H. (1999). *Experience Economy : Work is Theatre & Every Business a Stage*. Boston, Massachusetts: Harvard Business School Press. Retrieved from ebscohost
- Poulsson, S. H. G., & Kale, S. H. (2004). The experience economy and commercial experiences. *Marketing Review*, 4(3), 267-277. Retrieved from ebscohost
- Quan, S., & Wang, N. (2004). Towards a structural model of the tourist experience: An illustration from food experiences in tourism. *Tourism Management*, 25(3), 297-305. doi:10.1016/S0261-5177(03)00130-4
- Richards, G. (1996). Skilled consumption and UK ski holidays. *Tourism Management (1982)*, 17(1), 25.

- Ritchie, B., Burns, P., & Palmer, C. (Eds.). (2005). *Tourism Research Methods: Integrating Theory with Practice*. Wallingford, U.K.: CABI Publishing.
- Ritchie, J. R. B., & Crouch, G. I. (2003). *The Competitive Destination: A Sustainable Tourism Perspective*. Cambridge, MA: CABI Publishing.
- RRC Associates. (2011). *Whistler Blackcomb Snow School Report: July 2011*. Boulder, Colorado: RRC Associates.
- Ryan, M., Gerard, K., & Amaya-Amaya, M. (2008). Discrete choice experiments in a nutshell. In M. Ryan, K. Gerard & M. Amaya-Amaya (Eds.), *Using Discrete Choice Experiments to Value Health and Health Care* (pp. 13-46) Springer Netherlands. doi:10.1007/978-1-4020-5753-3_1
- Scott, N., Baggio, R., & Cooper, C. (2008). *Network Analysis and Tourism : From Theory to Practice* . Clevedon England ; Buffalo, NY: Channel View Publications.
- Shaw, C., & Ivens, J. (2002). *Building Great Customer Experiences*. New York, N.Y.: Palgrave Macmillan.
- Shernoff, D. J., Csikszentmihalyi, M., Shneider, B., & Shernoff, E. S. (2003). Student engagement in high school classrooms from the perspective of flow theory. *School Psychology Quarterly*, 18(2), 158-176. doi:10.1521/scpq.18.2.158.21860
- Simpson, M. C., & Ladle, R. J. (2008). *Handbook on Tourism Forecasting Methodologies*. Madrid Brussels: World Tourism Organization ; European Travel Commission.
- Song, H., Witt, S. F., & Li, G. (2009). *Advanced Econometrics of Tourism Demand*. New York: Routledge.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), pp. 199-214.
Retrieved from jstor

- Train, K. E. (1998). Recreation demand models with taste differences over people. *Land Economics*, 74(2), 230-239. Retrieved from [jstor](#)
- Tse, S. (2000). *Determining Optimal Daily Staffing Levels at the Whistler Blackcomb Ski and Snowboard School*. (Unpublished Master of Science (Business Administration)). University of British Columbia.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *The Journal of Marketing*, 68(1), pp. 1-17. Retrieved from [jstor](#)
- Vriens, M. (1994). Solving marketing problems with conjoint analysis. *Journal of Marketing Management*, 10(1-3), 37-55. Retrieved from [ebSCOhost](#)
- Williams, P., & Fidgeon, P. R. (2000). Addressing participation constraint: A case study of potential skiers. *Tourism Management*, 21(4), 379-393. doi: 10.1016/S0261-5177(99)00083-7