OBSERVATIONAL STUDY OF RETAIL WINE VENUES IN SAN LUIS OBISPO IN RELATION TO SHELF SPACE AND THE AMOUNT OF WINE SOLD.

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Chapter 1

INTRODUCTION

All retail wine venues are different when it comes to how they present their wines to consumers. Wine distributors across America will differentiate in terms of which wines they give larger shelf space to, which wines they chose to sell, and the manner in which they communicate to the consumer. Each store has a unique wine display, different prices of wines, types of wines, offers varying promotional strategies, and many other factors that make them stand out to customers. Every time a person gees to the store to purchase wine they not only make decisions based on personal preference and word of mouth, but also on how the wines are displayed. For example, one particular wine may have a larger shelf space and different price compared to the same wine sold at another retail venue. This can influence individual wine sales from one location to another across the thriving wine market. This is a very vital aspect of the wine industry and can depict which wines do better than others. In order for retail wine venues in San Luis Obispo to make important shelf space decision, according to consumer views, it would be useful to learn more about the effect that shelf space ha on wine sales from venue to venue. Considering San Luis Obispo is a relatively diverse city with a large number of wine drinkers, it would be practical to use the results of this study to help stores across California in determining their allocation of wine.

Problem Statement

What are the similarities and differences in shelf space and amount of wines sold at retail wine venues in San Luis Obispo?

Hypothesis

Shelf Space and amount of wine sold at the retail level will fluctuate from one retail wine venue to another.

Objectives

1) To gain valuable data related to the similarities and differences in wine shelf space and amount of wines sold at the retail level.

2) To conduct a statistical observational study of selected retail wine venues in San Luis Obispo over a six-week period.

3) To find averages, percentages, and frequencies of each store through the use of nominal frequencies, ordinal frequencies, interval means, and ratio means.

Significance of the Study

The observational study will compare and contrast ten retail wine venues in San Luis Obispo and pinpoint specific aspects of each wine display. The fact that all retail wine venues have unique wine displays makes it practical to analyze how wines are presented to the customer. Gaining information on the allocation of wine, shelf space, and the amount of wine sold can be useful for businesses in making important decisions in the marketplace. The data

will also help retail wine venues learn more about their competitors, which could lead to improvements in wine displays. All in all, the statistical analysis of the data collected from the observational survey will provide valuable information that will clearly portray the similarities and differences of the retail venues observed.

Chapter 2

LITERATURE REVIEW

A survey was conducted at Cal Poly San Luis Obispo in front of grocery stores in order to compare consumer wine closure preferences between students and local residents. For example, some wine drinkers prefer the classic cork closure while some favor the newer twist off closures. All of these decisions are based, not only on preference and convenience, but also on how it impacts the quality of the wine itself. According to Pyle(2009), He found significant differences in the respondents' knowledge and preference of wine closures between the two control groups. All in all, the study led to valuable data related to consumer wine closure familiarity and helped wine marketers in making important decisions.

An observational study was done in order to see if featuring displays in multiple locations in a store will increase sales. The locations studies were: in aisle (primary), checkout (secondary), and test positioning (outposts). According to Underhill (2010), 64% of customers shopped the aisle, 34% shopped the checkout, and only 5% shopped the outpost displays. The study concluded that money spent at the outpost displays could be better spent on improving displays where customers are more familiar and comfortable shopping.

Twenty-four wine prices were collected from four wine distributors throughout San Luis Obispo: Vons, Beverages & More, Cork N' Bottle, and NapaCabs.com. Miceli (2009) used ANOVA variance tests, which revealed that Vons had the lowest average wine prices. ANOVA variance tests are a collection of statistical models and their procedures, which is helpful in

comparing three or more means in a given study. The data proved the hypothesis that retail grocery stores have lower prices compared to other wine retailers.

Fifty students between the ages of 21-24 years old were surveyed on Cal Poly's Campus and were asked questions based on their wine preferences. According to Lohmann (2008), 66% of the respondents preferred red wine over white wine. This confirmed the hypothesis that red wines tend to be more popular than white wines. The study speculated that expanding white wine marketing could lead to an increase in white wine sales and popularity.

A study was done to explore consumer preferences over colors and shapes of wine label designs through the use of a survey conducted in Spain. De Mello and Pires (2009) collaborated from previous data that label designs give consumers perceptions of quality and wine personality. After the surveys were collected and analyzed, De Mello and Pires (2009) found that shapes were much more effective than colors alone. According to De Mello and Pires (2009), this study was vital for wine marketers because color-shape combinations are one of the most inexpensive changes a winemaker can make and provides opportunity for great improvements in sales.

A survey was conducted in San Luis Obispo consisting of 416 wine drinkers to see if the wine market was segmented by age. Wolf(2005) looked at Generation X, Y, and Baby Boomers in order to distinguish differences in demographics, purchasing attitudes, and purchasing behaviors. After statistically analyzing the data collected from the survey, through the use of percentages, averages, and frequencies, the results suggested that it is important to develop marketing strategies that directed towards the target generation. The study also discovered

that Generation Y consumers preferred inexpensive wines, in the $5.00-$9.00 range. While Generation X consumers cared more about the brand name and quality and will spend more for their wines.

A study was done in order to see if point-of-purchase (POP) displays inhibit a decrease in sales of a featured brand. Areni, Duhan, and Kiecker (1999), used a Test-market at Texas Tech University, where the use of POP displays led to a decrease in sales of the featured wine. Moreover, sales of regularly shelved wines form competitive regions actually increased. The results of a laboratory experiment supported the explanation that the POP displays essentially reorganized the wine into region categories within the stores, making it easier for consumers to compare alternatives by region. This resulted in increased sales of wines from preferred regions and a decrease in sales of wines from displayed regions.

Folwell and Moberg(1993) performed an overview of wine sales in a given market area and then compared the regression results to two merchandising theories: wine space allocation and shelf placement. The study confirmed the existing belief that the optimal shelf location is in the (MS+1) shelf, also referred to as the eye-level location. How wines are faced in the marketplace is another key factor to consider, which means that more facings can increase impulse purchasing of wine. According to study, incorporating shelf space location and number of facings with the pricing of wines are the most statistical significant factors influencing wine sales. In Conclusion, shelf space should be allocated on the margin, which gives those products that provide highest possible profit returns the additional space.

A study was done in Germany to correlate wine expert ratings and consumer perceptions. Through the use of linear mixed models, Schiefer and Fisher (2008) analyzed data from thirty-six wine consumers and found that even though expert wine perceptions were useful, the demand for more consumer based evaluations are high. In conclusion, the data collected can be very useful for wine distributors in marketing their wines appropriately, which would inevitably boost wine sales.

A similar study was done that analyzed the effect of expert opinions on consumer demand for wines. An experimental approach was performed in retail grocery chains in which Hilger (2007) displayed expert opinion information for a group of randomly selected wines. According to this study, although there is no consumer response to expert opinion provision, increases in sales and demand are directly related to highly favorable wine reviews. Furthermore, the results indicate that consumers utilize quality information provided for highly reviewed wines in contrast to solely using the label to learn about the wine's origin.

A survey was conducted in Spain to examine the designation of origin (DO) wine consumer behavior through stated preferences (SP) and revealed preference data (RP). Nadhem and Albisu (2007) used the information from the RP and SP data to look at similarities and differences between what people said on the surveys and what they actually did on the real purchase (RP). The analysis found that there was a relationship between the preference of the DO and wine aging attributes. Purchase frequencies from the study show that consumer segmentation is undertaken. The results also indicate similarities in the consumer choice process when comparing the two data sources, especially from the DO and wine aging

attributes. One the other hand, through the use of likelihood ratio statistic it was not possible to merge the two data sources, SP and RP, because of the differences in consumer price perceptions, which could be explained by the different purchase occasions in each case.

Information Resources Inc, IRI, is a company that collects data from past transactions made at the retail market level. In the case of the wine industry, IRI has valuable information based on the top wine brands in the market for various regions. Specific data related to dollar sales, volume sales, changes year to year, etc. are calculated through IRI's database. According to IRI 2010, Yellow Tail is the top wine brand in the United States, with over $6.2 billion in sales in 2010 alone. Barefoot is third with over $190 million in sales. Kendall Jackson is sixth with over $160 million in sales. Jay Lohr is forty seventh with over $32 million in annual sales for 2010. The average promoted price in 2010 of Yellow Tail was $8.08, $7.35 for Barefoot, $15.86 for Kendall Jackson, and $15.21 for Jay Lohr. All in all, IRI data is very helpful for developing an understanding of a particular industry and learning more about various companies.

Global Market Information Database, GMID, is a global market research company that specializes in industries, countries, and consumer trends. In the case of wine trends in the United States, According to GMID (2009), total sales grew by 2% and consumers tend to go for cheaper priced wines due to the economic circumstances. A growing popularity of sake lead to a 5% increase in sales of rice wines. The average unit price of wine increased by 2%, despite the fact that the highest priced wines struggled. According to GMID (2009), the majority of the wine consumed in the US is domestic, with 85% coming from California. Since 2004, imports have been a source of volume growth of wines since 2004, with more wines coming out each year.

Even though volume sales of imported wines slowed in 2008 and 2009, especially the high priced wines, imported wines from Chile and Argentina remained popular. Malbec, a popular varietal from Argentina, more than doubled its sales in 2008. This particular varietal can be found for under $10, which makes it even more appealing to consumers who are looking for cheaper wines.

Chapter 3

METHODOLOGY

Procedures for Data Collection

In order to acquire the data needed for this study, a list of retail wine venues in the city of San Luis Obispo over a particular time frame must be determined. Trader Joes, Scolaris, World Market, Beverages & More, Albertsons, Vons, Ralphs, Cork & Bottle, Campus Bottle, and Costco were observed once a week over a six week time period. This was exactly sixty observations, which will suffice for an adequate sample size.

A tally sheet was used in surveymonkey.com in order to compare and contrast the retail wine venues based on shelf space and extent of sine sold. The data was recorded online by the observer at the time of the visit to the retail outlet. The tally sheet had questions based on types of wine, number of brands, location of wines relative to price, prices of specific wines per unit, size of wine displays, number of sales, and types of promotions. The information collected from the sixty tally sheets was analyzed through Microsoft Excel in order to find desired market presentation characteristics between all ten retail wine venues.

Procedures for Data Analysis

The data collected from the six week time frame was analyzed in order to differentiate the ten venues. Data organized through Microsoft Excel was analyzed through a computer program called SPSS. This program was used to find averages, percentages, frequencies, and one-way data analysis from each store in relation to wine prices, number of wine brands, and

types of promotions. Means of all the retail outlets observed was calculated through the use of interval means and ratio means. For example, an average was calculated for the number of shelves and aisles observed from all the stores. Also, ratio data was compared to nominal and ordinal frequencies derived from the tally sheets. A nominal frequency is the midpoint between the data sets or the arithmetic mean between high and low cut off frequencies. Wine displays will change over time at all retail venues. For example, prices of specific wines fluctuate on a weekly basis due to several factors that are decided by the individual outlets. Specific questions related to promotions and prices of wines on the tally sheet were used to pin-point changes over the six week period.

<div align="center">Assumptions</div>

This study assumes that all retail wine venues observed are a representative sample of the retail market population on a larger scale. This means that the Trader Joes observed in San Luis Obispo will represent all of the Trader Joes in California. This could be difficult because not all stores are exactly the same at all times. For example, Trader Joes has different shelf space for wine from one store to another. However, the findings of the study could be compared to the same study performed in another city in California. The methodology developed will be meaningful for studies in other parts of the United States.

Chapter 4

Data Analysis

The first significant observation to discuss is the number of aisles each store had for displaying their wines. 43% of the ten stores had three aisles of wines and 12% of the stores had eight aisles for observation. There was a high of fifteen aisles, which was observed at Beverages & More and a low of one aisle, which was observed at Albertsons.

Table 1

Aisles

Number of Aisles	Frequency	Valid Percent
3	26	42.6%
8	7	11.5%
other	28%	45.9%

Almost half, 41% of the retail outlets observed had 5 shelves used for displaying their wines, while 18% of the wine displays had 4 shelves.

Table 2

Shelves

Number of Shelves	Frequency	Valid Percent
4	11	18.0%
5	25	41.0%
3	7	11.5%

other	18	29.5%

Mostly all, 80% of the retail outlets offered a refrigerated section for their wines. Trader Joes and Costco were the only 2 stores that didn't have refrigerator space.

Table 3

Refrigerator Space

Refrigerator space	Frequency	Valid Percent
Yes	50	80%
No	10	10%

Determining the number of wine brands that each store offered was very difficult to derive. In some instances the manager or store owner was able to provide me with such information. But, if that was not the case then I would count the number of brands on each shelf and multiply that by the number of shelves and the number of aisles. This gave me a rough estimation of the number of wine brands. The number of wine brands fluctuated between the stores, with a 12% mean of 300 brands. A low number of 120 brands were observed at Campus Bottle and high of over 2000 brands were observed at Beverages & More. The majority of the stores, 35%, carried approximately 120-320 wine brands. 33% of the stores carried approximately 322-1035 wine brands. Similarly, 33% carried approximately 1050-2000+ wine brands.

Table 4

Brands

Brands by #	Frequency	Valid Percent
Low of 120	1	2%
Mean of 300	7	12%
High of 2000	6	10%

Table 5

Number of Brands	Valid Percent
120-320	34.5%
322-1035	32.7%
1050-2000+	32.8%

Most of the stores, 70%, had sections by varietal and 60% had sections by country.

Table 6

Varietals

Section Type	Valid Percent
By Country	62.1%
By Varietal	69.5%

Each store was different when it came to how they sectioned their wines. For example, Vons had individual sections for imported wines, domestic wines, sparkling wines, local wines, port wines, red wines, and white wines. On the other hand, World Market had sections of wines for California, Italy, France, Germany, New Zealand, Argentina, and South America. Beverages and More not only had every single imported wine from across the world, but also featured wines by varietal type, such as pinot, syrah, chardonnay, merlot, Cabernet, Sauvignon Blanc, and Zinfandel. 16% of the stores featured a section for domestic wines. 33% of the stores had a section for local wines within California. 31% of the stores had a section for Italian and French wines while only 20% of the stores had a section for Spanish wines. Lastly, 28% of the stores had a section for South American wines.

Table 7

Sections

Section	Frequency	Valid Percent
US	10	16.4%
Ca	20	32.8%
Italy	19	31.1%
France	19	31.1%
Spain	12	19.7%
South America	17	27.9%

Yellow Tail, Kendall Jackson, Jay Lohr, and Barefoot were the four prices of wines observed weekly over the six week period. According to IRI data, Yellow Tail, Kendall Jackson, and Barefoot are among the top ten wine brands internationally (IRI). Jay Lohr was selected because it is one of the most popular local wine brands. The prices recorded were the lowest possible price available, whether it was price reduced or was a club price. 90% of the stores carried Yellow Tail and Jay Lohr, while only 80% of the stores carried Kendall Jackson and Barefoot. 26% of the observed wine venues priced their Yellow Tail at $5.99 and 20% of the observations priced their wine at $6.99 a bottle. There was a low at $4.95, which was recorded at Ralphs, and a high of $7.99. Costco offered the best deal by displaying a 1.5 liter bottle for only $8.49. 20% of the prices observed for Kendall Jackson were sold for $12.99 a bottle. There was a high of $17.99 and a low of $9.99, which was recorded at Vons. 24% of the prices observed for Jay Lohr were priced at $12.99 a bottle. There was a low of $9.99, which was observed at Trader Joes and a high of $16.99, which was observed at several stores. 58% of the prices observed for Barefoot were priced at $5.99 a bottle. There was a low of $4.95, which was observed at Ralphs and a high of $6.99.

Table 8

Wine Brand	Frequency	Valid Percent
Yellow Tail	54	88.5%
Kendall Jackson	49	80.3%
Jay Lohr	54	88.5%
Barefoot	51	83.6%

Yellow Tail

Table 9

Price	Frequency	Valid Percent
4.95 Low	5	8.2%
5.99 Average	16	26.2%
7.99 High	9	14.8%

Kendall Jackson

Table 10

Price	Frequency	Valid Percent
$10.79 Low	3	4.9%
$12.99 Average	12	19.7%
$17.99 High	9	14.7%

Jay Lohr

Table 11

Price	Frequency	Valid Percent
$9.99 Low	5	9.3%
$12.99 Average	13	24.1%
$16.99 High	6	11.1%

Barefoot

Table 12

Price	Frequency	Valid Percent
$4.95 Low	3	5.8%
$5.99 Average	30	57.7%
$6.99 High	7	13.5%

Specific Aisles, separated either by country, region, or varietal, were selected each week from each store over the six week period. Prices of wines were collected from each aisle and were broken up into price categories: 0-$4.99, $5-$9.99, $10-$14.99, $15-$19.99, and $20 plus. For example, one week I would record wine prices from the imported aisle, while the following week I would record wine prices from the domestic aisle. This gave me a very broad number of wine prices from all ten stores. A majority, 53% of the observations, averaged 0-7 wine prices between 0-$4.99, while 47% of the observations averaged 7-57 wine prices. 11% of the time there were only four prices between 0-$4.99. 70% of the observations averaged 24-188 wine prices at $5-$9.99, while the remaining 30% averaged only 1-24 wine prices in this price range. A majority, 72% of wine priced between $10-$14.99 averaged 1-50 wine prices, while the minority, 28% of the observations, averaged 50-108 wines prices. 49% of the observations averaged 2-13 wine prices at $15-$19.99, while the remaining 51% averaged anywhere between 13-61 wine prices in this price range. 11% of the time there were only three wine

prices at $15-$14.99. 62% of the observations averaged 0-18 wine prices at $20 and above, while only 38% of the observations averaged 18-65 wine prices.

Table 13

0-$4.99 Range

Range of Wine Prices	Frequency	Valid Percent
0-7	30	52.6%
7-57	27	47.4%
Average (4)	6	10.5%

Table 14

$5-$9.99 Range

Range of Wine Prices	Frequency	Valid Percent
1-24	17	29.8%
24-188	40	69.2%
Average (12)	4	7%

Table 15

$10-$$14.99

Range of Wine Prices	Frequency	Valid Percent
1-50	41	71.9%
50-108	16	28.1%

Average (14)	5	8.8%

Table 16

$15-$19.99

Range of Wine Prices	Frequency	Valid Percent
2-13	27	49.1%
13-61	28	50.9%
Average (3)	6	18.2%

Table 17

Above $20

0-15	34	61.8%
15-65	21	38.2%
Average (10)	5	9.1%

A majority of the stores, 98%, placed their high priced wines on the top of the shelves and the lower priced wines on the bottom of the shelves.

Table 18

Location of High and Low Priced Wines

Location	Valid Percent
Top	98%
Low	98%

The mean number of wine bottles on sales per aisle was 90. There was a low of 5 bottles on sale and a high of 450 bottles of wine on sale per aisle.

Table 19

Brands on Sale per Aisle

Mean	High	Low
90.4	450	5

A majority of the retail wine venues, 60%, displayed their wines at the back-left of the store. 30% of the stores placed their wines at the front of the store, while the remaining 10% were other.

Table 20

Location of Wine Display

Location	Frequency	Valid Percent
Back Left	34	60%
Front	16	30%
Other	10	10%

There are various types of wine promotions that stores chose to utilize, whether it is end aisle displays, tags, neck hangers on bottle, price reductions, circulars, and other. For example, Bev Mo used every form of promotions possible. In contrast, Trader Joes had no price reductions, tags, or neck hangers. Furthermore, 90% of the stores used end aisle displays, 50% used tags, 70% used neck hangers, 80% used price reductions, 70% used circulars, and 70% used something other.

Table 21

Types of Promotions

Type of Promotion	Valid Percent
End Aisle Display	90%
Tags	50%
Neck Hanger on Bottle	70%
Price Reductions	80%

Circulars	70%
Other	70%

The number of non-price promotions includes any displays throughout the store or along the wine aisles that feature various wine brands. Each retail venue will fluctuate week to week in terms of the number of wines they chose to promote and the location of particular wine displays in the store. For example, Scolaris had a large wine display at the entrance of the store with approximately ten wine brands. 31.5% of the observations had between 2-16 non-price promotions. 48.1% of the observations had between 16-29 promotions. The remaining 20.4% had between 29-50 promotions throughout the store. The average number of non-price promotions observed over the six week period was 30.

Table 22

Number of Non-Price Promotions

Number of Observed Promotions	Valid Percent
2-16	31.5%
16-29	48.1%
29-50	20.4%
Average (30)	13%

Types of wine packaging are different from store to store. Types of packaging includes regular 750ml bottles, 1.5 liter bottles, half 375ml bottles, bag-in-box, Small Pouches, and

other. For example, Beverages and More carried every form of packaging and even had other

unique forms of packaging wine such as six packs of small bottles of wine. All of the stores

carried the basic 750ml bottle. 80% of the stores carried 1.5 L bottles. 60% of the stores carried

375ml bottles, 70% of the stores carried bag-in-box wine. 40% of the stores carried small

pouches and 20% had something other than typical packaging.

Table 23

Types of Packaging

Type	Valid Percent
Regular	100%
1.5 Liter	80%
Half Bottle	60%
Small Pouches	40%
Bag-in-Box	70%
Other	20%

Every time I went to a store for observation I would count the number of customers

shopping in and around the wine display. Beverages and More had a high of 23 customers

shopping at a given time over the sex week period. The minority, 16% of the observations, had

only one customer shopping for wine at the time of the observation. Lastly, 25% of the time

there were no customers shopping during the observational study.

Table 24

Customers

Number of customers	Frequency	Valid Percent
0	15	24.6%
1	10	16.4%

The last question on the observational survey sheet was my subjective rating of each store. This was based on a variety of critical aspects of the shelf space that I used to judge each wine display. Some examples include the organization of the wine display, number of wine brands, how up to date the store is on particular wine innovations, prices, customer service, how easy it was for me to find specific wines, etc. For example, Cork N' Bottle and Campus bottle were given lower ratings due to their small selection and high prices. In contrast, Beverages & More and Trader Joes received higher ratings due to their great customer service, vast selection of wine brands, organization, and low prices. The ratings were broken down 1 through 5, with 1 being poor, 2 being not that good, 3 being somewhat good, 4 being very good, and 5 being excellent. 10% of the observations were given a 5, 16% were given a 2, 34% were given a 3, 28% were given a 4, and 12% were given a 5.

Table 25

Overall Ratings

Rating	Valid Percent
Poor	9.8%
Not That Good	16.4%
Somewhat Good	34.4%
Very good	27.9%
Excellent	11.5%

One-way Data Analysis

Multiple comparisons were calculated using one-way analysis, which were used to compare all the stores. If the significance level, or P value, is greater than .10, then there is no difference between the two retail wine venues with respect to the data analyzed. The first comparison was to determine the similarities in overall ratings from store to store.

Trade Joes was no different from Vons and Ralphs, with significance levels at .999 and .901. Beverages & More had no comparisons with any of the stores because all significance levels fell below .10. Vons was similar to Trader Joes and Ralphs with significance levels at .999. World Market was similar to Scolaris, Costco, and Albertsons, with significance levels of 1.0, .775, and .880. Scolaris was compared to World Market, Costco, and Albertsons, with

significance levels of 1.0, .379, and .493. Ralphs was similar to Trader Joes and Vons, with

significance levels of .901 and .999. Costco was similar to World Market, Scolaris, and

Albertsons, with significance levels of .775, .379, and 1.0. Albertsons was similar to World

Market, Scolaris, and Costco, with significance levels of .880, .493, and 1.0. As you can see from

the previously stated data, Albertson, Scolaris, Costco, and World Market are all similar with

respect to their overall ratings. Lastly, Campus Bottle and Cork N' Bottle are both similar, with a

significance level of .999.

Table 26

Trader Joes

Store	Significance Level
Vons	.999
Ralphs	.901

Table 27

Vons

Store	Significance Level
Ralphs	.999
Trader Joes	.999

Table 28

World Market

Store	Significance Level
Scolaris	1.00
Costco	.775
Albertsons	.880

Table 29

Scolaris

Store	Significance Level
World Market	1.00
Costco	.379
Albertsons	.493

Table 30

Costco

Store	Significance Level
World Market	.775
Scolaris	.379

Albertsons	1.00

Table 31

Albertsons

Store	Significance Level
World Market	.880
Scolaris	.493
Costco	1.00

Table 32

Ralphs

Store	Significance Level
Trader Joes	.901
Vons	.999

Table 33

Campus Bottle

Store	Significance Level
Cork N Bottle	.999

Descriptive statistics were calculated through one-way analysis to find means of the number of brands, per aisle, that fell in a particular price range. The average number of total wine brands out of the ten retail wine outlets was 739. The average number of non-price promotions for all stores was 24, which includes various wine displays in the store. The average number of brands between 0-$4.99 was 11. The average number of brands between $5-$9.99 was 53. The average number of brands between $10-$14.99 was 41. The average number of brands between $15-$19.99 was 22. Lastly, the average number of brands that were priced at $20 and above was 24. Therefore, by looking at this cumulative data over the six week period, one could speculate that a majority of wine prices fall between $5-$9.99.

Table 34

Price Ranges

Range	Mean
Total Brands (All Stores)	738.60
$0-$4.99	10.67
$5-$9.99	53.49
$10-$14.99	40.65
$15-$19.99	22.40
$20+	20.07
Non-price Promotions	23.59

The next descriptive analysis was to find the average number of brands from each store. Trader Joes averaged 550 wine brands over the six week period, which did not change. Beverages & More averaged 2000 wine brands, which also did not change. Vons, on the other hand, averaged 1350 wine brands, which fluctuated week to week. World Market averaged 300 wine brands, Scoalris averaged 1036 wine brands, Ralphs averaged 1123 wine brands, Costco averaged 243 wine brands, Albertsons averaged 429 wine brands, Cork N' Bottle averaged 132 wine brands, and Camus bottle had the lowest average with only 121 wine brands.

Table 35

Wine Brands by Store

Store	Mean
Trader Joes	550.83
Beverages & More	**2000.00**
Vons	1350.00
World Market	300.00
Scolaris	1036.43
Ralphs	1123.20
Costco	242.80
Albertsons	429.00
Cork N' Bottle	132.34
Campus Bottle	**120.57**

Multiple comparisons of the ten stores were calculated and analyzed in order find comparisons regarding the number of wine brands. Trader Joes was similar to Albertsons, with a significance level of .140. Beverages & More and Vons neither had any comparisons related to the number of brands they carried. World Market was similar to Costco and Cork N' Bottle, with significance levels of .922 and .973. Scolaris was compared to Ralphs, with a significance level of .523. Costco was similar to World Market and Cork N' Bottle, with significance levels of .922 and 1.00. Cork N' Bottle was no different from World Market, Costco,

and Campus Bottle, with significance levels of .973, 1.00, and .610. Lastly, Campus Bottle was similar to Costco and Cork N' Bottle, with significance levels of .753 and .610.

Table 36

Trader Joes

Store	Significance Level
Albertsons	.140

Table 37

World Market

Store	Significance Level
Costco	.922
Cork N' Bottle	.973

Table 38

Scolaris

Store	Significance Level
Ralphs	.523

Table 39

Costco

Store	Significance Level
World Market	.922
Cork N' Bottle	1.00

Table 40

Cork N' Bottle

Store	Significance Level
World Market	.973
Costco	1.00
Campus Bottle	.610

Table 41

Campus Bottle

Store	Significance Level
Costco	.753
Cork N' Bottle	.610

Chapter 5

Summary

This study was conducted in order to gain valuable information related to the retail wine industry and find similarities and differences in wine shelf space from store to store. All the stores were unique to some degree, but they also shared several aspects of the wine display. For example, some stores were similar in relation to the number of wine brands they offered, structure of the wine displays, prices of wines, types of promotions, types of packaging, number of sections based on varietals or countries, and overall ratings. Averages, frequencies, one-way analyses, multiple comparisons, and descriptive statistics were all calculated through the SPSS computer program in order to compare the observed data.

Some interesting findings from my results are stores average three aisles and five shelves for displaying wines. The majority of the stores, 80%, had refrigerated wine beverages, which implies that the remaining 20% might want to consider investing in refrigerator space. Ralphs had the lowest prices of Barefoot, Yellow Tail, and Kendall Jackson, while Trader Joes had the lowest price for Jay Lohr. The majority, 6 of the 10 stores, placed their wine display at the back left of the store. All ten stores averaged 90 wine brands on sale per aisle, while the average number of brands for all stores was 739. Another interesting finding was that Beverages and More carried the most brands (2000), while receiving the highest overall rating. In contrast, Campus Bottle had the least amount of brands (120), while receiving the worst overall rating. This suggests that having a large selection of wine brands directly impacts the perception that individuals have wine displays.

Conclusions

After completing the study I realized how complex wine shelf space can be and how important it is to make the wine as easily presentable to the customer as possible. For example, Trader Joes has the most organized wine display out of ten stores observed, as they take pride in keeping their wines properly faced in order to insure they are readily visible to the customer. Another key aspect to the wine display is having a large selection of wines that are broken up in to sections. Beverages & More is a great example, as they had the largest selection of wine brands and had their wines adequately organized according to the varietal type or the country of origin. As a consumer, this is very convenient because the wines are organized in a way that they can be easily accessed. Pricing is another key factor in wine sales. Stores like Ralphs, which had the lowest prices for three of the four selected wines, will attract more customers because people pay a lot of attention to low prices. This study was intended to get a better idea of how stores fluctuate week to week and which stores had the most favorable displays, according to the observational information presented.

Recommendations

Wine consumers go to stores and seek the best quality wines at the most affordable prices. These customers notice small aspects of wine displays that catch their attention, such as shelf space organization, low wine prices, large selections, and the overall presentation of the wines. All of these factors impact sales and can be easily altered in order to fulfill the customer's demands. The most appealing retail venue from this study was Beverages & More because they offered the largest variety of wines and greatest number of promotions. The wine

was organized in a way that made it easy for the consumer to find wine varietal and by country of origin. Based on the research, a new retail wine outlet should use Beverages and More as an example for organization.

In order to get a larger sample size of observations, a similar study could be performed in a different part of California. This would lead to more observational data related to wine shelf space and would strengthen the existing findings. After analyzing the data from the observational survey, I gained a better understanding of how each store presents their wines in a way that will maximize sales. In order to construct the optimal wine shelf space, the person in charge of managing the wine displays could use this data to make better marketing decisions.

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