

Project Dissertation Report on Consumer choice criteria for wine attributes

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CERTIFICATE

This is to certify that the Project Report titled “Consumer choice criteria for wine attributes” is a bonafide work carried out by Mr. Preekshit Dhiman of MBA 2017-19 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi – 110042 in partial fulfillment of the required for the award of the degree of Master of Business Administration.

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DECLARATION

I, Preekshit Dhiman, Student of MBA 2017-19 of Delhi School of Management, Delhi Technological University, Bawana Road , Delhi-110042 declare that Major Project Report on “**Consumer Choice criteria for wine attributes**” Submitted in fulfillment of Degree of Masters of Business Administration is the original work conducted by me.

The Information and data given in the report is the authentic to the best of my knowledge. This report is not being submitted to any other university for award of any other Degree, Diploma and Fellowship.

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Date:

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With Regards

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Table of Content

• Executive Summary	5
• Chapter-1	9-11
1.1 Industry Overview.....	6
1.2 Indian Wine Market.....	8
1.3 Key Attributes of a Wine.....	9
1.4 Indian wine market	10
1.5 Grape Production in India.....	11
1.6 Objectives	12
• Chapter-2	13-18
2.1-2.6 Literature review.....	13-18
• Chapter-3	20-22
3.1 Research methodology.....	20
3.2 Type of Data Collection.....	22
• Chapter-4	
4.1 Conjoint Analysis.....	23
4.2 Selection of Attributes	25
4.3 Online Forms	28
4.4 Using SPSS for conjoint analysis.....	30
• Chapter-5	
5.1 Result and Analysis.....	31-32
• Chapter-6	
6.1 Conclusion.....	33
• References	34

Executive Summary

The objective of this project was to know the attributes that customers prefer while making the buying decision for wine. There are a number of factors that matter to customers, like Price, Brand, Country of Origin, Sweetness, Acidity, Body, Bitterness, Smell, and Wine making Techniques, Fruit Characteristic of wine, Tannin, Burning sensation of wine.

Then it was observed which factors out of these were selected by the maximum people of the sample. On the basis of most selected attributes various combinations are made for the purpose of conjoint analysis. The objective of conjoint analysis is to find the utilities of different attributes. Online questionnaire was used to get response from the respondents.

The result will give an idea to the people what are the most important factors Considered in Indian market while buying Wine. Through this, one can get the information regarding how to position wine in Indian market to get the best results. Wine manufacturers or sellers can know the aspects to focus on before entering the Indian market.

Chapter-1

1. Industry Overview

1.1 Introduction

The Indian liquor industry has been overwhelmed by more grounded spirits (especially whiskey) and brew for a considerable length of time. The wine showcase was nearly non-existent in India 10 years prior. In any case, the market saw noteworthy development in incomes in the most recent decade, with a compound yearly development rate of 23.8 percent somewhere in the range of 2011 and 2015 (Research and Markets, 2016). The wine utilization also developed at comparative rates and contacted 31.7 million liters in 2015. The per capita utilization of wine in India is very low at around 10 milliliters for every annum when contrasted with worldwide normal of four liters for each annum. Imported wines establish a quarter of wine utilization in India. The little however under touched Indian wine market showcases a colossal development opportunity as a result of the variables like increasing dispensable livelihoods, developing social acknowledgment of liquor utilization by the two sexual orientations, as additionally expanded globalization and familiarity with the medical advantages of wine. Present day retail chains have begun distributing rack space for various kinds and brands of wines. Moreover, a portion of the states in India like Maharashtra and Karnataka give ideal climatic conditions to the development of best-quality grapes for wine generation. Perceiving these chances, numerous household and global wine makers are making enormous speculations and fortifying their essence in India. The assortment in value focuses, taste, shading, pack size, brands and other advertising factors results in multifaceted nature in wine buy process. This postures noteworthy difficulties to the retailers as far as stocking the ideal item blend. Subsequently, customer inclinations in wine retailing is a vital issue in the story of wine industry in developing markets.

Past research in wine showcasing has set up that there are various variables that influence shoppers' wine choice process. A dominant part of these investigations have been led in nations where the wine industry is at a developed stage. Despite the fact that there is a continuous discussion whether buyers' inclinations and purchasing conduct is predictable crosswise over societies, late investigations have uncovered that Indian clients show distinctive shopping

inspirations and basic leadership styles when contrasted with their western opposites. The Indian wine showcase is still at an early stage. For quite a while, the utilization of mixed beverages was viewed as a social forbidden in the Indian culture, however at this point it is viewed as an image of upward development particularly by the more youthful age. Also, the youthful buyers in their 20s are progressively open to analyze diverse kinds of beverages, and in this way are bound to attempt and receive wine contrasted with the more established customers who are inclined to the customary routine with regards to devouring hard alcohol. India has the biggest size of worldwide youthful populace underneath the age of 30. The youthful customers in their 20s have a place with the millennial buyer fragment. The millennial fragment, conceived somewhere in the range of 1977 and 1999, are the heaviest customers of wine on the planet among all ages and this pattern is being seen in India too. However, a little thought is given about how customers buy wine in India where the market is as yet rising. Past examinations have discovered that the significance of properties in wine buying pattern changes with nation. In this way, it is intriguing to examine the properties of wine that are basic for customers' basic leadership with respect to wine buy in India. Also, it is smart to know the general significance of various traits in the general inclination. This comprehension of shoppers' inclinations would help Indian just as worldwide wine retailers to effectively plan their advertising systems for India and the information picked up can likewise be utilized for other developing markets. To address the above issues and concerns, the present examination has the accompanying targets. In the first place, the examination plans to recognize the properties that are essential for Indian millennial shoppers in their buy choice of wine. Second, the investigation endeavors to quantify the general significance of various traits in the buy choice, and the favored dimensions for the distinctive qualities.

1.2 Worldwide Market

The market is esteemed at USD 287.39 billion in 2016 and is forecasted to reach USD 402 billion by 2023, at a 5.8% CAGR amid the estimate time frame 2018 - 2023. The wine showcase is immense, to a great extent commanded by the European and North American nations. The USA, France, Italy, and Spain are the biggest makers and customers of wine. In the worldwide exchange, the European locale has over half offer of the worldwide wine exchange. As of now, there are around one million small and large wine producers all nations inclusive and the world's

most renowned brands (around 84%) are French. The wine utilization is declining in the conventional markets. Whereas it is developing quickly (x4 since 2000) in the Asian markets. Asia-Pacific records for 16% of estimation of worldwide wine imports.

1.3 Wine Market Competitive Analysis

The challenge in the worldwide wine market is accounted for to be huge, for the most part in developed nations of North America and Europe, with static development throughout the years. Around 43% of the worldwide wine utilization is in the non-wine producing regions. It is a direct result of an immense populace driven interest for wine items in such non-conventional wine utilization nations; every single enormous brewer is developing its business in such areas. The market is divided on account of some local and universal merchants, a few of the players hold significant share. Wine merchants principally contend based on the portfolio, item separation, and valuing and are currently focusing on growing their business in the market by setting up new assembling plants and presenting new items.

Different item dispatches, enhanced, inventive item packaging and crafted wine items, gigantic marketing and promotional exercises, and mergers and acquisitions with smaller dimension players have been solid business techniques for wine advertise development. Organizations are influencing acquisitions so as to enhance their situations with the wholesalers and to pick up passage into the new markets.

1.4 Indian wine market

The utilization of Wine in India is observed to increment with ascent of consciousness of wine as a decent beverage for wellbeing. The wine market of India watched development with a CAGR of over 25% in recent years.

Developing prominence of Vineyards as the travel industry places, higher expendable wages and development in remote vacationers, advancement of wine as valuable to wellbeing and so on are a portion of the purposes behind such development. Worldwide travel and open to different nations where drinking wine is a piece of the way of life are additionally driving the offers of wine in India.

One of the real hindrances in development of wine showcase is the cost of wine which is nearly high than other mixed refreshments and India being a price sensitive nation, individuals, for the most part, don't favor spending on wine. In spite of the quantity of Indian wine creators is on the ascent, the utilization of imported wine is high in India.

Wine is considered as an exceptionally youthful classification in India, however its solid exhibitions and high possibilities are prompting the section of a few new players, while in the meantime existing organizations are growing their item portfolios and nearness in different districts of Indian market. Sula Vineyards is viewed as the market head in the Indian wine advertise pursued by Grover Zampa Vineyards, Fratelli Wines Pvt Ltd, John Distilleries Private Limited and others.

The wines in Indian market are commonly sectioned as Red wine, White wine, Sparkling wine, Rose wine and different wines. Red wines are the most famous and for the most part expended wine having an expansive piece of the overall industry. While white, rose and shimmering wine are rising sections. With expanding variations and new brands these portions are estimated to become higher contrasted with the red wine section and acquire a higher piece of the pie in future, which will diminish the predominance of red wine in the Indian wine showcase.

1.5 Grape Production in India

Maharashtra is the main state in grape cultivation and generation in India. The complete territory undergrape development is 92,000 HA, with 3500-4000 acres area under development of just the wine grapes variety in Maharashtra. The yearly grapes production in Maharashtra is 1,810 thousand MTs. Nasik, Sangli, Solapur, Pune, Ahmednagar, Latur, Osmanabad and Satara are the real grape delivering locale in Maharashtra. Out of complete generation, 65% of the grapes are utilized for eating reason while the rest is utilized for the creation of raisin, grape juice, syrup, jam and wine

Current Status of Wine Production in India

India's extending wine industry is amidst avital progress. Right now there are 93 wineries in India which are associated with real wine production in the country. In 2014, nation's wine

creation hit a record of 17 million liters, with fare deals rising 40% year on year to contact us \$4.4 million in the main 7 months. As per All India Wine Producers Association, the deals likewise ascended by 21% from 95 lakh liters in 2013-2014 to 1.15 crore liters in 2014-2015. In spite of the increasing wine production and deals, the greatest wine consumption regions in India are found just in some cities like Mumbai (37%), Goa (10%), Delhi (25%) and Bangalore (12%). This is the underline reason for India being considered as a rewarding and significantly unexplored goal for mixed beverages by a few between national organizations working in soaked alcoholic beverages markets of Europe and the US.

Key Attributes of a Wine

- Sweetness
- Acidity
- Tannin
- Alcohol
- Body
- Fruit Characteristic

Sweetness

Our human view of sweet begins at the tip of our tongue. Regularly, the absolute early introduction of a wine is its dimension of sweetness.

To taste sweetness, one needs to concentrate on the taste buds on the tip of the tongue. If the taste buds tingling, then it is a marker of sweetness. Many dry wines can have a trace of sweetness to make them all the more full-bodied.

On the off chance, one can discover a wine which has residual sugar, you may appreciate a hint of sweetness in the wine.

Acidity

Acidity in nourishment and drink tastes tart and lively. Taste of acidity is additionally now and then mistaken for alcohol content.

Wines with higher acidity feel lighter-bodied on the grounds that they appear to be "spritzy." If one favors a wine that is increasingly rich and round, then he appreciates marginally fewer acidity.

While checking for acidity, if one rubs the tip of the tongue to the top of the mouth, it feels gravelly, the mouth feels wet like one has bit into an apple

Tannin

Tannin is regularly mistaken for Level of Dryness since tannin dries the mouth out. Tannin in wine is the presence of phenolic substances that add harshness to a wine. Tannin adds bitterness to the wine.

Phenolics are extracted from the skins and seeds of wine grapes and can likewise be added to a wine with the utilization of maturing in wood (oak). So how does tannin taste? Envision putting a utilized dark tea bag on the tongue. A wet tea pack is for all intents and purposes gives the exact pure tannin taste that is severe and has a drying sensation.

Tannin tastes herbaceous and is frequently portrayed as astringent. While these descriptors sound extremely negative, tannin includes balance, intricacy, structure and makes a wine last more. It's additionally one most imperative "bravo" qualities in red wines.

Alcohol

The normal glass of wine contains around 11– 13% liquor. All things considered, wine ranges from as meager as 5.5% liquor by volume (ABV) to as much as around 20% ABV.

We decipher liquor utilizing various taste receptors which is the reason it can taste harsh, sweet, hot, and sleek at the same time. One's genetics qualities really assume a job in how unpleasant or sweet liquor tastes.

In any case, everyone would be able to detect liquor towards the back of their mouths in our throats as a warming sensation. Specialists at tasting wine can guesstimate the dimension inside a very quick time

Body: Light Bodied or Full Bodied

Body is the consequence of numerous elements from wine assortment, where it's from, vintage, liquor level and how it's made. Body is a depiction of the general impression of a wine. You can enhance your ability by focusing on where and when it's present.

1.6 Objectives of the Study

- To find the most preferred attributes of a wine that consumers consider while buying it
- To know the utility of different attributes.
- To know the most preferred mix of attributes that would impact its sales

Chapter-2

2. Literature review

2.1 Consumer preferences for wine attributes in an emerging market by Ritu Mehta and NiveditaBhanja Department of Marketing, Indian Institute of Management Calcutta,-

The developing wine showcase in India introduces a gigantic open door for advertisers to detail a procedure focused at the Indian buyers. The motivation behind this paper is to distinguish the qualities that are critical for youthful wine consumers in their choice of wine, the favored alternative inside the recognized properties and the relative significance buyers put on the recognized characteristics.

Procedure/approach – inside and out meetings were completed to distinguish the properties of essential significance in the wine choice process. Thusly, conjoint examination was directed on the information gathered through an overview of 252 respondents which positioned buy expectation of profiles got from a symmetrical plan.

Discoveries – inside and out meetings uncovered five factors as imperative in the decision of wine, to be specific, value, mark, taste, cause and kind of the wine. The consequences of conjoint investigation demonstrated cost as the most essential factor, trailed by the kind of the wine. Red was the most favored sort. Brand, taste and birthplace follow up in a specific order of significance with twenty to thirty year olds wanting to purchase well-known brands, sweet wines and of Indian root.

The investigation adds to the wine shopper conduct look into by distinguishing the traits that are essential for promoting of wine to the expansive section of Indian millennial customers. The discoveries will assist advertisers with bettering position their wines in the Indian market. The examination will likewise help in the advancement of item, marking and estimating choices.

2.2 How Loyal are Italian Consumers to Wine Attributes? By LEONARDO CASINI, CAM RUNGIE and ARMANDO MARIA CORSI

Lately, Italian wine conveyance channels have confronted significant auxiliary changes. The retail division achieved 35% of offers by volume and 60% by incentive in 2008, and is gauge to increment until the finish of the 'monetary emergency. This change has added to an expansion in general store/hypermarket rack spaces and in the quantity of marks utilized at most purposes of the offer. This has brought about the Italian wine showcase being more divided than it was a couple of years prior. In this specific circumstance, the capacity to comprehend the manner by which buyers settle on their decisions, and especially the capacity to recognize the variables influencing buyers' reliability toward specific items, has turned into a key part of business choices. Faithful buyers are a benefit to a firm. They exhibit that the firm satisfies clients and animates them to purchase the item a second time. In addition, the capacity to coordinate clients' wants just once isn't sufficient, as persisting fulfillment speaks to a key predecessor of client maintenance. The creators contend that a firm should go for making great client maintenance, as in develop and aggressive markets this prompts expanded profitability. One inquiry, be that as it may, stays unanswered. I'm not catching our meaning by loyalty? Rundle-Thiele and Bennet (2001) affirm that a quintessential definition of steadfastness does not exist, but rather what exists is a progression of various measurements that, best case scenario, fit with the setting under examination. As of not long ago, a significant part of the writing liked to focus on the reliability to a brand utilizing what is known as the Brand Performance Measures to assess the faithfulness it gets from buyers. Less consideration has been devoted to the capacity of item properties (other than brands) to produce loyalty, in spite of the fact that it is has been exhibited that traits, for example, value, locale of beginning and assortment of the grapes can influence reliability more than brands.

This system exhibits the significance of the present work, which centers around the investigation of steadfastness towards three properties—value, configuration and quality assignment—for wines sold in the Italian current circulation. The perception of steadfastness levels for these three properties will be made through the supposed polarization record. This record is gotten from the Beta Binomial Distribution (BBD) show—officially connected in writing for the examination of loyalty toward brands and item characteristics (Jarvis et al., 2003, 2006, 2007a, 2007b) and for the situating of a brand as a specialty or a difference in pace (Jarvis and Goodman, 2005). To the

best of our insight, nonetheless, this procedure has never been connected in Italy and, besides, it has never been connected to the investigation of the Italian wine advertise. Consequently, the significance of this work is twofold. To start with, the analysts present another technique, which turned out to be effective for the examination of client dedication to items. Second, this technique speaks to a rich hypothetical system, as well as it is a valuable administrative device for procedure and division.

2.3 The Influence of Wine Attributes on Region of Origin Equity: An Analysis of the Moderating Effect of Consumer's Perceived Expertise

This exploration tends to showcase the collaboration between the components of brands. More explicitly, the creators assess how the locale of source as a segment of a wine mark increases the value of a wine purchaser. Previous research recommends that the area of starting point value is essentially directed by the other wine qualities with which it is joined on the wine name: business mark, dimension of cost, sort of bottler, grape variety. The creators test whether the directing impacts rely upon self-saw buyer expertise. They utilize a discrete decision technique to study 1,162 European wine buyers, about similarly chose from France, Austria, Germany, and the UK. Results demonstrate that the district of birthplace value is to be sure altogether directed by the other wine attributes. They likewise demonstrate these directing impacts are increasingly critical for buyers who see themselves as "progressively master" than for buyers who feel they are "amateurs"

2.4 Comment on "flavor and aroma attributes of riesling wines produced by freeze concentration and microwave vacuum dehydration"

In their article, Clary et al. look at the flavor and smell profiles of "sweet pastry wines delivered utilizing late-collect stop focus, wine created from crisp grapes solidified utilizing refrigeration and wine created from grapes halfway dried utilizing microwave vacuum parchedness." The creators utilize tangible boards, just as strong stage microextraction (SPME) with gas chromatography-mass spectrometry (GC-MS) examination, so as to describe their wines. The creators put forth the accompanying expression in their Results and Discussion segment: "SPME examination identified 28 mixes identified with the fragrance of the wine tests. Be that as it may,

the convergences of these mixes were underneath the fragrance limits defined by Guth, Yorgos and Baumes, Zea et al. and Peinado et al. Best case scenario, the focuses distinguished in the wines were about 20% of the fragrance edge concentration defined in the literature. This proclamation does not bode well. On the off chance that all fragrance mixes were available at concentrations well underneath their individual smell limit concentrations, how might they be "identified with the smell of the wine tests"? Too, there seem, by all accounts, to be just 26 fragrance mixes recorded. Moreover, utilizing the fragrance edge fixations, and the fixations gotten by SPME/GC-MS the centralizations of the accompanying mixes surpass the cited fragrance sift olds given in Clary et al.: ethyl acetic acid derivation (every one of the three medicines); 3-methylbutyl acetic acid derivation (each of the three medicines); and ethyl decanoate (solidified by refrigeration and late reap solidified). Subsequently, utilizing the creators' very own information, their explanation that "SPME examination identified 28 mixes identified with the fragrance of the wine tests. In any case, the groupings of these mixes were underneath the fragrance limits defined by Guth, Yorgos and Baumes, Zea et al. and Peinado et al. Best case scenario, the fixations distinguished in the wines were about 20% of the smell limit fixation defined in the writing" does not show up inside predictable.

2.5 The production and consumer perception of sparkling wines of different carbonation levels

The goal of this investigation was to decide the impact of carbonation level on the tactile and compound properties of conventional shining wine and distinguish the dimension of carbonation that could be seen by shoppers. Shining wine medications (n = 11) were delivered through the expansion of various groupings of dextrose at packaging to make shimmering wines differing in carbonation (CO₂) level. Last wines ran in CO₂ fixation from 0 to 7.5 g CO₂/L (p ≤ .05). A purchaser tangible assessment board (n = 48) assessed the wines utilizing a combined examination test in which a shimmering wine at CO₂ centralizations of 1.2, 2.0, 4.0, 5.8, or 7.5 g CO₂/L was contrasted with the control shining wine (0 g CO₂/L) for mouthfeel traits (carbonation and chomp) and acrid taste. Results demonstrated noteworthy contrasts (p ≤ .001) between the control and shimmering wines containing 2.0, 4.0, 5.8, and 7.5 CO₂/L for the mouthfeel qualities of carbonation and chomp, recommending that a base CO₂ centralization of >1.2 g CO₂/L was required for purchasers to identify mouthfeel contrasts contrasted with the

control. The aftereffects of this examination give shimmering winemakers and makers of other carbonated items with data in regards to the dimension of CO₂ seen by purchasers of shining wines.

Carbonation, characterized as the shivering conferred by the nearness of carbon dioxide, is a vital tactile property in the acknowledgment of numerous drinks. In soda pops, carbonation delivers an engaging mouthfeel that is frequently depicted as 'shivering'. While carbonation is powerful in the acknowledgment of these non-mixed refreshments, it is additionally vital in the personality of shining wine and contributes its trademark bubbling.

In shining wine creation, changes underway stages may impact the tangible profile of the last wine, including its apparent carbonation. The additional time and work escalated customary strategy is known as methodé champenoise. In this technique, when essential aging is finished, refermentation is important as the characteristic grape sugars are totally used amid the principal aging. The second maturation in the methodé champenoise, is otherwise called prise de mousse, and completes in the fixed container, creating the CO₂ that gives the completed wine its bubbling.

Shimmering wine is characterized as a multicomponent hydro-alcoholic arrangement that is supersaturated with CO₂-broke up gas particles and ethanol, both framed amid maturation

Of the 48 customers, 83.4% devoured both table and shining wines a couple of times each month. The board comprised of 46% guys and half females somewhere in the range of 21 and 60+ years old. The most expended shining wine types included Champagne (58.3%), Prosecco (37.5%), blended (for example mimosa, Bellini, and so on.) (33.3%), Blanc de blancs (29.2%), and Blanc de noirs and non-vintage shimmering wine similarly (25%).

Combined correlation testing was led to decide whether shoppers could recognize a control wine (containing 0 g CO₂/L) and a shining wine treatment containing 1.2, 2.0, 4.0, 5.8, or 7.5 CO₂/L. The mouthfeel traits of carbonation ('which wine is progressively carbonated?') and nibble ('which wine has more chomp?') were inspected. For the two characteristics, when the control wine (0 g CO₂/L) was contrasted with itself (dazzle control) or contrasted with the shining wine containing 1.2 g CO₂/L, no huge contrasts in any qualities were found.

Segmenting the Sustainable Wine Consumer

There has been sizable development in reasonably delivered wines, with 40% of California makers taking an interest in the Code of Sustainable Wine Growing Practices program. Research proposes that buyers of economical sustenances have a particular identity, way of life, and conduct attributes and that inclinations for ecological qualities of wine depend on shopper learning. Further, among global buyers, more established female twenty to thirty year olds living in urban zones and following sound ways of life are bound to purchase feasible wines.

Earlier research has built up comprehension of shopper inclinations for feasible items. Be that as it may, while California drives the country in wine generation and utilization, little is thought about which California wine buyers are well on the way to buy supportable wines. The reason for this exploration was to look at the mentalities of wine purchasers with respect to manageable creation rehearses and distinguish the fragment well on the way to pay for maintainable wine. Customer comprehension of economical practices and ability to pay were additionally analyzed. Interest in "supportability" can take different years; this examination will enable wineries to recognize their objective markets.

A review was directed among 206 California wine shoppers. Respondents were solicited to rate the attractive quality from fourteen wine highlights. Delivered economically was an incredibly or entirely attractive trademark for 42% of respondents, who were thusly recognized as reasonable buyers. These customers were bound to be female, hitched, and knowledgeable. The most essential qualities of wine for these customers were varietal, supportable creation, great esteem, delivered with worry for the wellbeing and prosperity of workers, and water rationing techniques. The best wine properties for non-reasonable customers were great esteem, mark, deal evaluated, and premium quality.

Right around 66% of reasonable customers were to some degree comfortable with economical creation rehearses. At the point when requested to portray a wine that is created reasonably, most respondents showed a negligible effect on the earth and water preservation. Notwithstanding, 7% of economical buyers and 20% of non-manageable shoppers showed that they didn't know the importance of produced sustainably. A fourth of purchasers believed that natural and feasible

were the equivalent, and very nearly 1/3 think supportable delivered wines are increasingly costly. Almost 90% of reasonable wine purchasers were eager to pay a premium of over \$5.00 for feasible wine.

This examination demonstrates the significance of manageability to a sizable buyer segment however proposes that shopper instruction identified with maintainability claims is required.

Spanish Wine Consumer Behavior: A Choice Experiment Approach

Generally, wine utilization in Spain is diminishing, while in the meantime, assignment of source (DO) wine utilization is expanding step by step. This examination analyzes Spanish DO wine purchaser conduct by the utilization of a decision explore procedure. A main-effects model, just as an association impacts show, is evaluated dependent on four qualities: designation of origin, value, wine aging, and grape variety. Readiness to pay gauges, contingent upon the value portion, is gotten for changing starting with one property level then onto the next. Buyer division is embraced dependent on buy frequencies. Market recreations are introduced for customer segments+ Empirical outcomes show the significance of the (DO) and the wine maturing qualities on wine choice. The collaboration impacts demonstrate demonstrates the significance of quality connections on customer's decision process. Contrasts, just as likenesses, are recognized among shopper fragments

Chapter-3

3.1 Research Methodology

Research is done to find out the reasons if there is something lacking in the business model, what can be done to improve the outcomes. Research also reduces uncertainty and its results help in decision making. Many times management is unable to identify a business problem which is hindering the growth. Market research helps to identify that problem.

3.1.1 Exploratory Research

Exploratory research is the first step and is conducted to find potential business opportunities. This research gives a basic idea about what changes can be made. It does not give the exact figure, it gather preliminary information that helps in defining the problems and suggest hypotheses. Exploratory research is not conclusive in itself as is qualitative research. The types of exploratory research are Literature review, depth interview, focus group, and case analysis.

In literature review, researcher goes through secondary data, i.e. various research papers, articles and data already present to find the hypotheses. A lot of information is available in library, on internet sources, newspaper, magazines etc. all of them can be used in literature review.

3.1.2 Descriptive Research

On the basis of results of exploratory research, researchers dig deeper to find conclusive results. Quantitative techniques are used to find results or justify the hypothesis. It is a research to describe an existing phenomenon, behavior.

In this particular research, the objective was to know the important attributes of the wine that impact the buying decision. Then calculate the utilities of these attributes. For this purpose, initially secondary research was done by going through certain research papers. After that quantitative research was used to calculate the numeric results. Use of online questionnaire was done to record the results.

Chi square, factor analysis, regression are some examples of quantitative research as they quantify the findings. These tests provide a numeric results. In this case conjoint analysis was used.

3.2 Type of Data collection

The data for this research was collected through primary and secondary sources.

3.2.1 Primary data

In order to collect primary data questionnaire was floated to respondents on the basis of judgmental sampling. Two questionnaire were floated, the first questionnaire was to know the most important attributes while the second questionnaire was floated for ranking the different combinations. Ranking of different combination is the process for conjoint analysis, on the basis of ranking the utilities of different attributes is obtained.

3.2.2 Secondary data

For secondary data collection various study papers and websites were considered. Various research papers were consulted. Consumer preferences for wine attributes in an emerging market and The Influence of Wine Attributes on Region of Origin Equity: An Analysis of the Moderating Effect of Consumer's Perceived Expertise were the main research papers. Articles on website to find the attributes that decide the purchase behavior

3.2.3 Sample Size

$$\text{Sample size} = (ZS/E)^2$$

$$\text{Standard Deviation} = \text{Range}/6$$

$$S = 4/6 = .67$$

$$\text{Tolerable error} = 0.07$$

Confidence interval at 95%

$$\text{Sample Size} = (1.96 * .67 / 0.07)^2$$

352 (approx.)

Chapter-4

4.1 Conjoint Analysis

Conjoint analysis is a survey based measurable strategy utilized in statistical surveying that decides how individuals esteem distinctive characteristics (highlight, work, benefits) that make up an individual item or service.

The target of conjoint analysis is to figure out what blend of a set number of properties is most powerful on respondent's decision or choice making. A controlled arrangement of potential items or services is appeared to review respondents and by dissecting how they make inclinations between these items, the verifiable valuation of the individual components making up the item or services can be resolved. These verifiable valuations (utilities) can be utilized to make business models that gauge piece of the pie, income and even benefit of new structures.

Conjoint analysis began in numerical brain science and was created by marketing educator Paul E. Green at the Wharton School of the University of Pennsylvania. Other conspicuous conjoint analysis pioneers incorporate teacher V. Seenu Srinivasan of Stanford University who built up a direct programming strategy for rank arranged information just as a self-elucidated methodology, Richard Johnson who built up the Adaptive Conjoint Analysis system during the 1980s and Jordan Louviere who designed and created decision based ways to deal with conjoint examination and related strategies, for example, best to worst scaling.

In conjoint Analysis ranking of different combinations is done by the respondents and the combinations are formed by intermingling of attributes. It is advisable to keep the combinations below 24 for accurate results.

Conjoint analysis is a propelled statistical surveying examination strategy that endeavors to see how individuals settle on complex decisions. Consistently, individuals settle on decisions that require exchange offs, so regularly that one might not be aware of it. Straightforward choices, for example, what sort of clothing cleanser should one purchase or which flight should be booked. All of these contain various components that eventually detail a choice.

Intuitively, a few of us might be more value touchy while others are more element centered. This is the center of conjoint analysis, understanding which components shoppers consider to be imperative or minor.

4.2 Selection of Attributes

So the first step was to select the major attributes on the basis of which combinations could be made for conjoint analysis. Through secondary research it was found out that the attributes of wine are price, brand name, Country of origin, Sweetness, Acidity, Body, Bitterness, Smell, Wine making technique, fruit characteristic of wine, Tannin and burning sensation of the wine.

A questionnaire was floated to the respondents containing all the above options to choose from. The respondents were then asked to select all the options which they considered while buying a wine. Out of the 360 respondents, 263 selected price, 165 selected brand, 137 selected fruit characteristics of wine, 97 selected sweetness, 89 selected country of origin, 81 selected wine making technique, 53 selected burning sensation of wine, 51 selected bitterness, while 31 selected tannin. Since majority of respondents from the sample went for price, brand and fruit characteristics hence the combinations are formed around these three attributes. Three price range i.e Rs 800, Rs. 1200, Rs. 1600 were selected, three fruit/flavors were chosen i.e white pear with spices and citrus, pine apple with apple and citrus, and the third one was vanilla with raspberry. The flavors were chosen keeping in mind that the white pear, pineapple, are used for white wine while raspberry is used for red wine. For brand two famous brands in India were chosen i.e Sula and Fratelli-SETTE as one is foreign brand and other is Indian. It covers country of origin also in a way. Hence the total combinations were 18($3*3*2$).

The nine attributes present in the questionnaire were selected by going through a lot of articles and research papers, and for selecting the 18 combinations the brands selected, the flavors and the price range was again selected by consulting various research papers and websites.

Secondary research was the basis for forming the questionnaire and after this primary research would be done using conjoint analysis which is a quantitative method. The tool used for

performing the conjoint analysis is SPSS.

4.3 Questionnaire for the selection of attributes

Survey on wine attributes

Dear Sir/Mam

We are doing a brief survey to gather information on what attributes customers consider while buying a wine. We would be grateful if you could spare a few minutes to fill this questionnaire. thank you for your co-operation.

* Required

Name *

Your answer

Have you ever consumed wine? *

Yes

No

Out of the options given below, which one is your favorite hard drink? *

- Whiskey
- Scotch
- Beer
- Gin
- Rum
- Wine
- Other: _____

How often do you consume wine on an average? *

- Once in a year
- Once in six months
- Once in a quarter
- Once in a month
- Twice in a month

Select the attributes, from the following options, you consider while purchasing a wine *

You can select more than one options. Select all those options which are important in your decision making of which wine you would go for.

- Price
- Brand
- Country of Origin
- Sweetness (sweetness for wines is judged on the basis of their viscosity)
- Acidity(Wine with higher acidity feels lighter bodied while Wine with less acidity is rich and round)
- Body(Light or Full bodied)



- Bitterness(In taste)
- Smell
- Wine making techniques(Oak, Aging, fermentation style)
- Fruit characteristic of the wine
- Tannin(The dryness in the taste of wine you feel on the your tongue)
- Burning sensation of the wine

4.4 Online form for Conjoint Analysis

Rank the combinations

Below are the 18 combinations of wine on the basis of brand, price and flavour/fruit characteristics. Rank these combination from 1 to 18 as per your choice. There are three kind of (flavours/fruit) types, three (price) range and two (brand) types, hence 18 combinations

* Required

SULA REISLING



SETTE-FRATELLI



Raspberry is used for red wine, while apple, pineapple, citrus, pear are used for white wine

Rank the combination given below by selecting the appropriate column as per your choice *

RANK 1 RANK 2 RANK 3 RANK 4 RANK 5 RANK 6 RANK 7

BRAND(SULA REISLING)-
PRICE(800)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(SULA REISLING)-
PRICE(800)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(SULA REISLING)-
PRICE(800)-
FRUIT(RASPBERRY+VANILLA)

BRAND(SULA REISLING)-
PRICE(1200)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(SULA REISLING)-
PRICE(1200)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(SULA REISLING)-
PRICE(1200)-
FRUIT(RASPBERRY+VANILLA)

BRAND(SULA REISLING)-
PRICE(1600)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(SULA REISLING)-
PRICE(1600)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(SULA REISLING)-
PRICE(1600)-
FRUIT(RASPBERRY+VANILLA)

BRAND(FRATELLI-SETTE)-
PRICE(800)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(FRATELLI-SETTE)-
PRICE(800)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(FRATELLI-SETTE)-
PRICE(800)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(FRATELLI-SETTE)-
PRICE(800)-
FRUIT(RASPBERRY+VANILLA)

BRAND(FRATELLI-SETTE)-
PRICE(1200)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(FRATELLI-SETTE)-
PRICE(1200)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(FRATELLI-SETTE)-
PRICE(1200)-
FRUIT(RASPBERRY+VANILLA)

BRAND(FRATELLI-SETTE)-
PRICE(1600)-FRUIT(WHITE
PEAR+CITRUS+SPICES)

BRAND(FRATELLI-SETTE)-
PRICE(1600)-FRUIT(RIPE
PINEAPPLE+CITRUS+APPLE)

BRAND(FRATELLI-SETTE)-
PRICE(1600)-
FRUIT(RASPBERRY+VANILLA)

◀ ▶

4.5 Using SPSS for conjoint analysis

customerresponse.sav [DataSet4] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help

Visible: 19 of 19 Variables

	ID	pref1	pref2	pref3	pref4	pref5	pref6	pref7	pref8	pref9	pref10	pre
1	Customer 1	1	2	3	4	5	6	7	8	9	10	
2	Customer 2	18	17	1	2	3	4	5	6	7	8	
3	Customer 3	12	11	10	9	7	8	3	1	2	18	
4	Customer 4	1	2	3	4	5	6	7	9	8	10	
5	Customer 5	1	2	3	4	5	6	7	8	9	10	
6	Customer 6	1	2	3	4	5	6	7	8	9	10	
7	Customer 7	18	17	16	15	14	13	12	11	10	9	
8	Customer 8	1	2	3	4	5	6	7	8	9	10	
9	Customer 9	1	2	3	4	5	6	7	8	9	10	
10	Customer 10	18	17	16	15	14	13	12	11	10	9	
11	Customer 11	1	2	3	4	5	6	7	8	9	10	
12	Customer 12	2	4	6	3	1	5	7	10	11	8	
13	Customer 13	1	2	3	4	5	6	7	8	9	10	
14	Customer 14	2	1	3	5	4	6	7	8	9	10	
15	Customer 15	1	4	3	2	6	5	7	8	9	11	
16	Customer 16	9	10	11	12	13	14	16	17	18	1	
17	Customer 17	1	2	4	3	6	5	8	7	11	10	
18	Customer 18	1	4	3	9	11	10	6	2	5	12	
19	Customer 19	3	1	2	6	4	5	9	7	8	12	
20	Customer 20	1	2	3	10	11	12	13	14	15	4	
21	Customer 21	1	2	3	4	5	6	7	8	9	10	
22	Customer 22	1	2	3	4	5	7	6	8	9	10	
23	Customer 23	2	18	17	15	16	13	14	10	11	12	

Data View Variable View

File Edit View Data Transform Analyze Direct Marketing Graphs Utilities Add-ons Window Help

Visible: 5 of 5 Variables

	BR	PR	Fruit	STATUS_	CARD_	var	var	var	var	var	var	var	var	var
1	1.00	1.00	1.00	0	1									
2	1.00	1.00	3.00	0	2									
3	1.00	2.00	2.00	0	3									
4	1.00	2.00	1.00	0	4									
5	2.00	2.00	1.00	0	5									
6	1.00	3.00	1.00	0	6									
7	2.00	2.00	3.00	0	7									
8	2.00	3.00	3.00	0	8									
9	2.00	2.00	2.00	0	9									
10	2.00	1.00	3.00	0	10									
11	2.00	3.00	1.00	0	11									
12	2.00	1.00	1.00	0	12									
13	1.00	1.00	2.00	0	13									
14	2.00	3.00	2.00	0	14									
15	1.00	2.00	3.00	0	15									
16	2.00	1.00	2.00	0	16									
17	1.00	3.00	2.00	0	17									
18	1.00	3.00	3.00	0	18									
19														
20														
21														
22														
23														

Data View Variable View

Chapter-5

5.1 Results and Analysis

5.1.1 SPSS Output

Overall Statistics

Utilities

		Utility Estimate	Std. Error
BR	Sula	.190	.470
	Fratelli SETTE	-.190	.470
Fruit	White pear+Citrus	1.070	.665
	Ripe pineapple+Apple+citrus	-.849	.665
	Vanilla+raspberry	-.221	.665
PR	800	-.499	.576
	1200	-.998	1.152
	1600	-1.497	1.727
(Constant)		10.498	1.244

Importance Values

BR	19.522
Fruit	52.208
PR	28.270

Averaged
Importance
Score

5.1.2 Analysis

On the basis of first questionnaire, 263 of the respondents preferred price as the attribute they considered while making a purchase decision for a wine. 165 and 137 respondents told they consider brand and fruit characteristics respectively. These were the attributes selected while forming the combination based on secondary research as well as these responses.

While the questionnaire for ranking the different combinations was filled by 231 respondents. We can see from the output sheet that the utility varies with brand, fruit characteristics and price. The utility is decreasing with increase in price.

The utility goes from (-.499) to (-.998), hence the range of utility is .499 in the price range of rupees 800 to rupees 1200. While the utility decreases from (-.998) to (-1.497), again the range is .499 in the price range 1200 to 1600 i.e the overall utility range is .998. this means with increase in every 800 rupees the utility decreases by 0.998. hence for every 100 rupees increase or decrease in the price range 800 to 1600 the utility will decrease or increase by 0.1247 respectively.

The utility range for fruit characteristics or flavors is 1.291, it is more than price. Hence fruit characteristics play a major role, with change from white pear and citrus to raspberry the utility decreases by 1.291

Chapter-6

6.1 Conclusion

We can see the utility change in case of fruit characteristics from white pear and citrus to pineapple and citrus is less as compared to the shift in case of pineapple and citrus to vanilla and raspberry. This shows people prefer white wine more as compared to vanilla flavored red wine, as raspberry is a component found in red wine while citrus, pineapple, apple, white pear are components of white wine.

The price utility range is less than that of fruit characteristic, it shows that if price is increased by 1034.86 rupees and the vanilla raspberry is converted to white pear and citrus, there would be no effect on the utility.

As per the responses people have favored the indigenous brand Sula over Fratelli SETTE, which is pretty obvious as the sales of Sula is more than Fratelli in India, whereas the case is opposite outside India.

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