Executive Summary

Revenue-Generating Recommendations for Visitor Experience



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Executive Summary

Bodega Vistalba's tourism department is aiming to increase quantity of wine and merchandise sold on site at their winery while minimizing costs. This can be accomplished by (a) increasing the number of guests who come to the winery and (b) by increasing the quantity of purchases per visitor. As the client noted they are having issues at the point of sale, our team focused on the latter by improving the checkout process as well as the journey as visitors move through the winery on the tour. *Exhibit 1* shows our consideration of these objectives and metrics.

Specifically, we have a two part recommendation. First, to optimize efficiency of the checkout process by ensuring two people are at the point of sale when transactions occur. Second, we recommend improving overall visitor experience by improving the tour script and schedule, providing more accessible information, and placing signs in selected locations throughout the winery. These actions will drive an increase in revenue of 14% over the status quo.¹

Two people working at the point of sale after tours decreases process time by 36%

As there was limited existing data for checkout processes, we used a simulation in order to project checkout times. To complete the simulation, we used distributions provided by the Vistalba tour guides as well as our own observations. We found that the overall checkout time would be 36% less with two employees than one employee. *Exhibits 2* and 3 show the simulation and resulting data respectively. Therefore, we recommend the presence of two staff members at the cash register after each tour to minimize checkout time. This improvement comes from the two employees being able to share the tasks of documenting the sale and packaging the wine or merchandise.

Moreover, *Exhibit 4* shows the tour guides only spend 4% of their time checking out visitors, the lowest percentage of time out of all activities performed by tour guides. This demonstrates that the checkout process is not the root cause of the winery's point of sale problem. Thus, a focus on other aspects on the tour will have a more significant effect on the visitor experience.

Improve visitor experience and interaction will create long-term revenue

A study by Cornell University has shown that a simple change of a tour and tasting experience from "Satisfactory" to "Highly Satisfactory" can increase amount spent on wine by 14% (with 93% probability), and increase the likelihood of re-purchasing wine in the future by 2% (with 92% probability). We have identified three key opportunities to improve customer experience at Bodega Vistalba through analysis of customer interactions, space, and transaction data. *Exhibits 5, 6, and 7* show these three analyses.

1

¹ Shapiro, Marin, and Miguel I. Gómez. "Customer Satisfaction and Sales Performance in Wine Tasting Rooms." International Journal of Wine Business Research Intl Jnl of Wine Business Res (2014): 45-60. Print.

Modifying the tourism script will improve visitor interaction and brand equity

Many visitors are touring several other wineries in the region in addition to Vistalba. In order for visitors to make a purchase at Vistalba, they must be able to recall the Vistalba brand distinctively and not other brands at the point of purchase. Therefore, the tour information provided should be as distinctive as possible. By adding brand stories about Vistalba's foundation and its products rather than details about the wine industry in general, Vistalba can increase probability of purchase.

In addition, we have observed that time visitors spend at the winery varies greatly in length. Some tour groups only have around an hour at the winery, while other groups may have up to two hours for their visit. Ergo, we recommend the implementation of a flexible script with options for guides to skip certain segments based on the time visitors have for the visit. These recommendations for the tour path, changing brand stories, and flexible script commentary are consolidated in *Exhibits 8*, *9*, and *10* respectively.

Implementing these two changes has zero financial cost for Vistalba; as the tour guides already know all of the information, they simply need to present it in a different way. Additionally, it is very easy for the tour guides to ask how much time each visitor has, and then adapt their tour to fit that time frame. With better greeting of customers, a good brand story, and flexible timing, Vistalba can increase revenue by as much as 5%. ^{1,3}

Providing easily accessible information will both reduce checkout confusion and increase likelihood of purchase

Our tour guides have noted that 80-85% of visitors only buy the wines that they sampled in the tasting, which is alarming as each visitor only tastes four wines. Visitor purchases are driven directly by knowledge, and customers are limited in their knowledge about wines not tasted.⁵ After analyzing tastings and tours, we contend that by (a) providing additional information at the point of sale and (b) providing a method of information recall from tastings, visitors will be more inclined to purchase wines. We contend that these changes together can increase revenue by up to 6%.¹

First, visitors are spending 15 minutes, on average, in the gift shop before their tour begins, which is generally idle time. Currently, only one local wine magazine is displayed for visitors to read. We see this as an opportunity to educate visitors about Vistalba's unique brand and products. Vistalba should provide printed catalogs that contain descriptions of each wine available for purchase. *Exhibit 11* provides an example of one page from the catalog. Each catalog should cost approximately 830 pesos, and in combination will increase revenue by up to 2%.^{1,4}

Secondly, there is a lack of connection between the tasting and purchasing of wine. Visitors currently do not reach the point of sale until at least five minutes after the final contact with the wines, which cannot be tasted at the point of sale. Due to limited capability of human short-term sensory memory,

² Nedungadi, Prakash. "Recall and consumer consideration sets: Influencing choice without altering brand evaluations." *Journal of consumer research*(1990): 263-276.

³Burns, Will. "Disney Proves That Profitable Marketing Is About Brand Stories." *Forbes*. Forbes Magazine, 9 June 2015. Web. 06 Jan. 2016.

⁴ Based on the best price found: Casebound Wine List Covers. (n.d.). Retrieved January 7, 2016, from http://www.menushoppe.com/casebound-wine-list-cover

this five minute delay will greatly increase visitors' knowledge uncertainty about the wine, therefore reducing likelihood of purchase⁵. In order to close the gap, we recommend the use of a tasting card so that the visitors can take notes on the wines they taste, then keep the cards for later reference. Seen in Exhibit 12, the card allows them to rate the wines on multiple scales based on their preferences. Following from previous client services, these cards, made of cardstock, will cost about three pesos each and will increase revenue by approximately 4%.

We have created prototypes of each of these documents to show our client, and recommend that Vistalba produce four professionally bound versions of our catalog and one tasting card per visitor (about 15,000 pesos per year).

Add signage around the winery to increase brand exposure and reduce uncertainty

One major issue our client framed is that a large percentage of visitors pass by the gift shop after the tour without making purchases. Based on a space analysis, we have identified the area outside of the giftshop as the most effective area to place signs to gain the most attention from customers. We recommend the placement of two signs in that area to reduce churning of customers and improve brand equity.

First, we recommend the strategic placement of a chalkboard outside of the giftshop to direct visitors to the gift shop, display potential deals, and communicate other relevant information. This will decrease ambiguity as to where to join the tour and where to go after, which often results in missed sales.

We also recommend the placement of a Vistalba logo on the wall to the left of the door of El Lounge. Currently, there is no initial exposure to the Vistalba brand. This sign will both provide a sense of direction to the customers and expose customers to the Vistalba brand immediately.

We believe the placement of the chalkboard and the logo will provide a smoother visitor experience and increase traffic into El Lounge by a predicted 10-15%, thus increasing revenue by 3% with 2% coming from the increased traffic and 1% from the mere exposure effect to the Vistalba brand.⁶ A no-cost alternative to this recommendation would be strategically placing empty wine bottles on the scenery right outside the gift shop, as a reminder to where purchases can be made.

These recommendations provide 14 percent return with low financial risk

A break-even and risk analysis is displayed in *Exhibit 13*. We have concluded that the low physical costs of our recommendations ensure that there is also low risk, with all recommendations breaking even within a year. However, opportunity costs must be considered as well. For example, it may take time for the tour guides to learn the changes to the tour script, and during that time the tours could seem unorganized and poorly planned by visitors, impacting sales made after the tour. It is also possible that visitors do not use the wine catalog or tasting cards to their full potential after Vistalba

⁵ Korhonen, Pekka, et al. "Uncertainty in consumer decisions." (2011).

⁶ Zajonc, Robert B. "Attitudinal Effects Of Mere Exposure." Journal of Personality and Social Psychology 9.2, Pt.2 (1968): 1-27. Web.

spends the money necessary to produce them. Finally, if new signs that match the current style are not affordable, the lower cost options may not mesh with the minimalistic architecture, thus changing the overall experience for visitors.

Due to the limited time that we had at Vistalba, we were unable to fully test these changes. In order for Vistalba to increase their sales per customer, *Exhibits 14* and *15* outline a testing plan to implement the preceding recommendations. This involves using a control group and experimental group, with the experimental group using the recommended changes. If needed, past transaction data can be used as a benchmark, with each customer spending an average of 533 pesos on wine in 2015.

The combination of an efficient checkout process and an improved visitor journey will have a significant impact on the revenue of Bodega Vistalba. Specifically, ensuring that there are two people working the checkout station during busy times, improving the tour script, providing more accessible information, and placing strategic signs around the winery will drive an increase in purchases. The aggregate of these changes can be implemented with relative ease at a very low cost and will result in a 14% increase in revenue for Bodega Vistalba's tourism department.

Exhibit 1: Goals and metrics for increasing quantity purchased at POS.

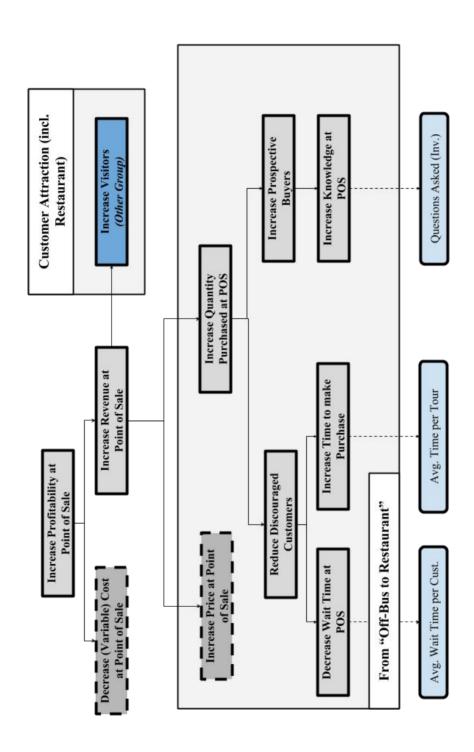


Exhibit 2: Simulation flow for process analysis.

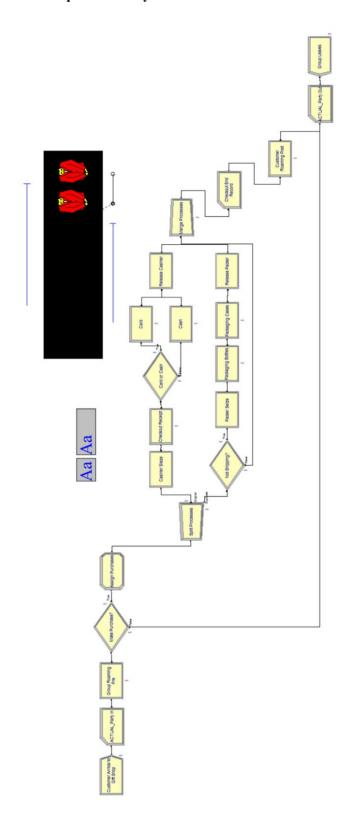


Exhibit 3: A process simulation shows the benefits of having two people checking visitors out.

Staff at POS	Register	Employees	Per Employee
1	17.1%	25.6%	25.6%
2	15.8%	23.3%	11.7%
3	15.9%	23.5%	7.8%

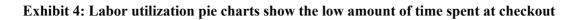
Table 1. Utilization rate of resources for completing purchase-only processes at point of sale.

Staff at POS	Average	Std. Deviation	Maximum Wait
1	2 min, 58 sec	29 sec	14 min, 43 sec
2	1 min, 53 sec	17 sec	6 min, 54 sec
3	1 min, 53 sec	13 sec	7 min, 6 sec

Table 2. Time for checkout processes (purchase only) at Point of Sale, depending on staff

Using the simulation, we were able to analyze 100 replications of a post-tour instance of the gift shop, examining definitive processes only (i.e., temporarily forgoing analysis explaining wines and conversing with visitors). Moreover, two employees can work on the same visitor at once by running the cash register, charging, and packing. These advantages allow for process time per purchase to decrease by about a minute on average. Using the same analysis, there is no significant difference by adding additional employees at the point of sale after the second employee.

The advantage to having a single staff member at the POS is a higher utilization rate per employee. That said, the utilization per employee seems to be rather low in both instances (< 30% at $\alpha < 0.05$) which can likely be attributed to (a) a lack of accounting for conversations with visitors in this model and (b) a highly variable interarrival time dependent on the arrival of tour groups.



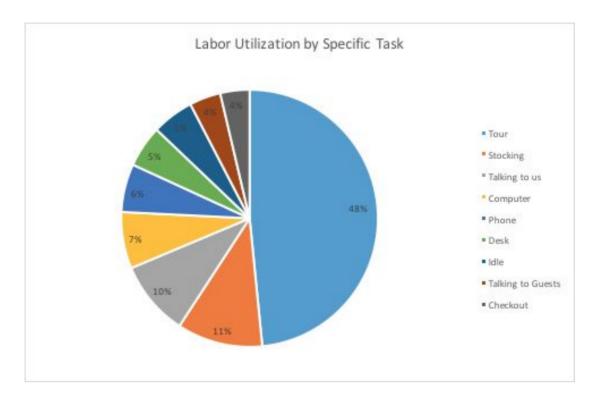


Exhibit 5: Customer interactions

Exhibit 6: Space analysis shows that the area outside of the giftshop is most visited by the customers.	

Exhibit 7: Average amount spent on an overall purchase, a merchandise only purchase, a tasting only purchase, or a wine only purchase (in 2010 pesos)

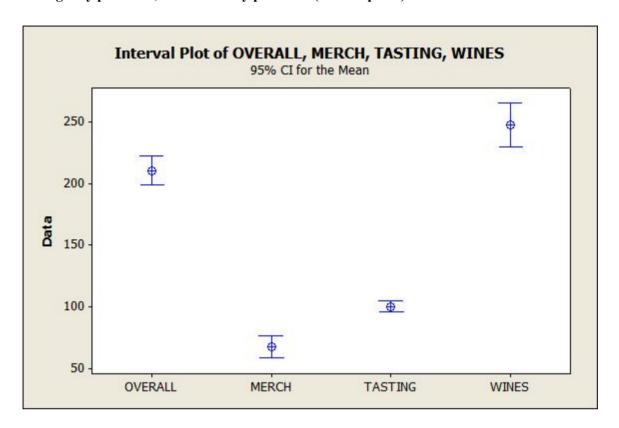


Exhibit 8: New tour	path will impr	ove visitor exp	periences thro	oughout the tour

Exhibit 9: Presentation of brand stories will increase customer attachment to the Vistalba brand

Who are we?

Bodega Vistalba, founded by Carlos Pulenta, has a life story that is the most important reference when it comes to assessing the excellence of its wines.

The descendant of an Italian family, Carlos Pulenta is the oldest son of Don Antonio Pulenta, one of the founders of the Bodega Peñaflor 80 years ago.

Bodega Vistalba was built between 2001 and 2004 in a family-owned land at the heart of Vistalba (Luján de Cuyo). The architecture style is "criollo", or Argentine native style. This blends perfectly into the classic Mendoza terroir. Following the heritage of his ancestors and the traditional winemaking that the first Italian and Spanish immigrants brought to Argentina, this is where Carlos Pulenta developed his personal undertaking of blending wines involving members of his family, advisors, enologists and a highly esteemed group of people who knew his land well. The first wines were produced in the year 2003, and they were first placed on the market in the year 2005. Today, our wines are sold in more than 20 countries.

The winery exercise a strict harvesting and production processes. Grapes are harvested manually and when off the vine their temperature is reduced in a cooling tunnel (approx. 15 degrees Fahrenheit). Stems and berries go through a manual selection process twice. These grapes are gently placed in concrete fermentation tanks, where, after three to four days of cold maceration, fermentation begins. The winery has been designed in such a way that the whole winemaking process is gravity induced without the use of pumps. The concrete fermentation tanks were designed by Carlos Pulenta himself. Inside the tank walls there are water pipes that can circulate cold or hot water. The temperatures of the water are computer controlled. The main advantages of this system are thermal inertia and micro-oxygenation. Two French wooden barrels are used for the best selected grapes destined to Blend A. After being bottled, the wines rest in an underground cellar which constitutes the heart of the winery itself. Wines rest there in French oak casks in a temperature controlled room with a temperature of 58 degrees Fahrenheit and 80% relative humidity; ideal conditions for wine.

In 2009 Alejandro Bulgheroni, connected to the agroindustry sector through several projects since the year 1999, began his participation in Bodega Vistalba, working with Carlos toward a common goal: "producing top-quality wines of world renown, with a marked identity and personality".

Vistalba (Brand of Mastery):

Vistalba is the name of our winery, the flagship wine, and also the name of the region that the winery is in. Bodega Vistalba is the only winery permitted to use the Vistalba appellation in its name because our family is the first one to have established wineries in this region.

The Vistalba brand defines our winery and the wine-making tradition that is behind us. Recognizing the importance of blending in creating a world-class vintage, Carlos built Bodega Vistalba in 2002 following the Bordeaux chateaux model to create sophisticated blends with incredible aging potential. The goal of Carlos is not only to create a wine that not only define our winery, but also the entire Argentinean wine industry.

The distinct Corte blends are the result of the best grapes of each harvest and differ from vintage to vintage. The Vistalba wines share similar terroir—loamy soil with medium to low fertility; cold winters and warm summers with high day temperatures and cool night temperatures—and are vinified using natural yeasts in concrete vats. It is currently one of the most popular brand in Argentina.

Tomero (Brand of Tradition):

Even though not produced on the Vistalba estate, the Tomero brand is as traditional and excellent. We select the best grapes from best regions of Argentina - Malbec and others from Valley De Uco and Torrontes from Salta - to present our visitors with the finest graph varieties argentina has to offer. In fact, Quality of both grapes and winemaking were highlighted in 2006 when the first vintage of Tomero Reserva Malbec was voted best Malbec in the world at the Argentinean 'Wine Olympics'.

The Tomero becomes a part of the vineyard scenario in 1833 and his presence there continues to this day. His job is the distribution of irrigation water in those vineyards or crop fields which, by law, are entitled to use the river water. The Tomero is hired by the landowners, and his job is to open and close the "Tome de Agua" (Water Intake Channel) of each estate. Today, the Tomero is the symbol of an irrigation system developed more than 100 years ago, which has enabled the development of vine-growing regions in Mendoza. Taking on the name of Tomero is both a burden and an honor, we hope that our Tomero brand can not only maintain the tradition of Argentinean wine making, but also spread our wine-tradition tradition to every corners of the world.

Progenie (Brand of Inheritance):

Progenie was a brand created by Carlos for his father's 80th birthday. In Spanish, Progenie means descendant in Spanish, translating into Carlos' determination of continuing the traditional excellence of his father's wine-making estates and providing consumers from both Argentina and all over the world with excellent and innovative wines.

The production process of Progenie deploys one of the traditional methods to elaborate sparkling wines used in the Champagne area in France. It involves a second fermentation of the wine inside the bottle, thus containing the gas produced by the yeast. This second fermentation is induced by adding some grams of sugar and yeast. Progenie is matured on yeast for several months, which is later removed using old shaking tables. The excellence of our methods were verified in 2009 when Progenie I was recognized at the **Argentina Wine Awards**.

Exhibit 10: Flexible tour script incorporates the stories behind all of the brands

Location	Topics to talk about	Notes
Inside El Lounge (3 min)	 Brief introduction to the different brands History of Carlos Pulenta and Bodega Vistalba (As you are walking to vineyard) 	 Tell visitors that here is where they can make purchases after the tour Don't spend too long explaining the story behind brands, just a quick introduction Emphasize that Carlos Pulenta is part of a 12 winery global partnership Carlos Pulenta has dedicated his life from the time he was a child to producing wine
New first stop in vineyard (3 min)	Vistalba brandFarming techniques	 Size and composition of Vistalba and Valle de Uco vineyards Harvest details, placing grapes in different rooms based on different temperatures Talk about the Vistalba name coming from the area
Walking through olive trees (2 min)	Corte V	Create personal interactions with visitors
Fermentation room (3 min)	 General wine fermentation process Difference between concrete and metal tanks 	 Keep relatively brief, one of the less exciting parts of the tour Micro-oxidization of the wine through concrete w/o epoxy Wine making process using only gravity, without pumps
Walking towards the Cellar (3 min)	ArchitectureRestaurant	 Designed to keep the buildings cool during the summer Minimalistic design
Outside barrels (2 min)	Aging process	 Ideal temperature and natural humidity Also mention the cool lights
Downstairs outside Progenie storage room (3 min)	• Progenie	do not elaborate too much on how to make sparkling wine
Tasting Room (35 mins)	 Tomero Show Carlos Pulenta's private wine collection 	 Emphasize cross section of clay soil with respect to importance of the tomero and irrigation Explain why Argentina is a great place to grow grapes
Back in El Lounge (1 min)	• Conclusion	Thank them for coming

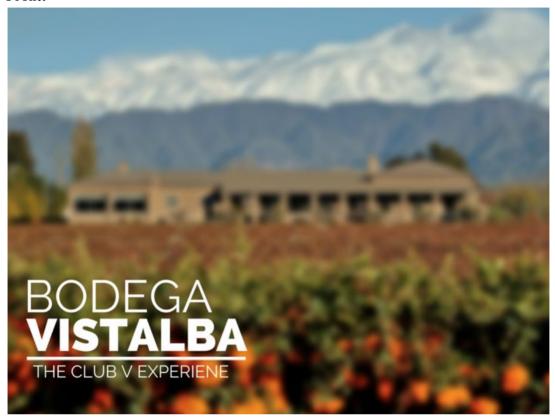
Points to emphasize throughout the tour: high quality, what makes each of their wines special

Plus 5 mins for questions

Exhibit 11: Wine catalog example

Exhibit 12: Tasting Card allows visitors to rate wines on multiple scales

Front:



Back:

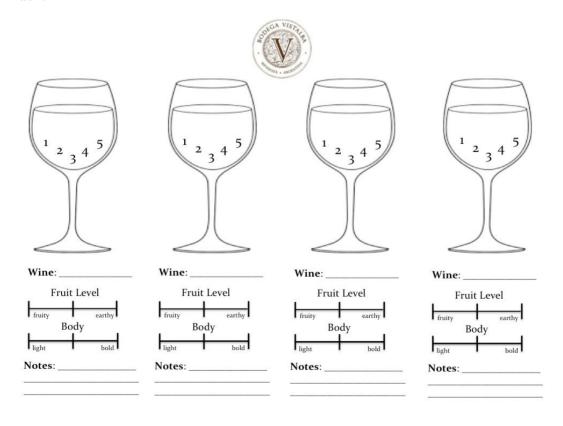
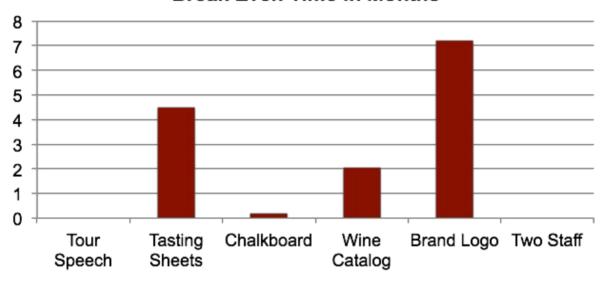


Exhibit 13: Break even analysis

Recommendation	Cost Estimation (in pesos)	Risk	Return	Ranking	Break Even Period (In Months)	
Modifying tourism speech	\$0	Tour guide non-compliance	5%	1	N/A	83,333
Addition of tasting sheets	\$15,000	Non-usage	4%	2	4.50	
Addition of chalk board at entrance	\$350	Failure to draw sufficient attention	2%	3	0.21	
Addition of wine information booklet (Quantity of 6)	\$3,400	Non-usage	2%	4	2.04	
Brand logo at the El Lounge entrance wall	\$6,000	Failure to draw sufficient attention	1%	5	7.20	
Maintaining two employees at checkout counter after tours	\$0	Executional difficulties	0%	6	N/A	
			14% T [1]			
			\$140,000.			
SIGNAGE	3%					
SCRIPT	5%					
KNOWLEDGE	6%					
PROCESS	0%					

[1] Shapiro, Marin, and Miguel I. Gómez. "Customer Satisfaction and Sales Performance in Wine Tasting Rooms." International Journal of Wine Business Research Intl Jnl of Wine Business Res (2014): 45-60. Print.

Break Even Time in Months



Note: Tour speeches and maintaining two staff at checkout do not incur a cost, so there is no break even time recorded. See the section regarding opportunity cost in the executive summary for more information.

Exhibit 14: Testing Plan for Speeches

Testing Plan for Speeches

Two-Group Post-Test Experiment

For one month, perform the following tasks:

- 1. Have one tour guide use the old tour script (control group)
- 2. Have one tour guide use the new tour script (treatment group)
- Gather statistics on the percentage of guests who make a purchase for both the control/treatment group
- We recommend for such an experiment you used two experienced or two inexperienced guides
 - As there are currently two experienced guides and one new guide, we recommend Juliana and Noemie are used to compare

Comparison:

Use the following equation to determine the script that

Raw Success Rate =
$$100 \times \frac{Customers\ who\ make\ a\ purchase}{Customers\ who\ tour\ in\ group}$$

Use the following equation to determine the script that drives the most revenue.

$$Monetary Success Rate = \frac{Total Revenue Driven}{Customers who tour in group}$$

Determine success of each group based on these two metrics. If the treatment group outweighs the control group significantly, proceed with changing the script

Internal Validity Issues:

- · History: Differences in the tour guide style/structure other than script used
- · Maturation: Tour guides changing method of operation over testing period
- Selection: Groups for tour guides will contain customers with different purchase preferences and likelihood

External Validity Issues:

· Hawthorne Effect: Tour guides will know they are participating in a recorded experiment

Exhibit 15: Testing Plan for Catalog

Testing Plan for Catalog

One-Group Pre-Test/Post-Test Experiment

For one month, perform the following tasks:

- 1. Track number of clients that enter the gift shop (from tours or otherwise)
- 2. Track number of clients that make a purchase
- 3. Track quantity/price of purchases made by clients

After the first month, perform the following treatment:

1. Place several catalogs of "Our Wines" on the counter

Continue testing for another month with the treatment, and perform the following tasks:

- 1. Track number of clients that enter the gift shop (from tours or otherwise)
- 2. Track number of clients that make a purchase
- 3. Track quantity/price of purchases made by clients

Comparison:

Use the following equation to determine the success rate with and without the catalog present:

Raw Success Rate =
$$100 \times \frac{Customers\ who\ make\ a\ purchase}{Customers\ who\ enter\ shop}$$

Use the following equation to determine the revenue driven with and without the catalog present:

$$Monetary Success Rate = \frac{Total \ revenue}{Customers \ who \ enter \ shop}$$

Determine success of each group based on these two metrics in the following manner:

	Pre-Test	Post-Test
Raw Success Rate		
Monetary Success Rate		

If the post-test success rates outweigh the pre-test success rates, implement the catalog for use.

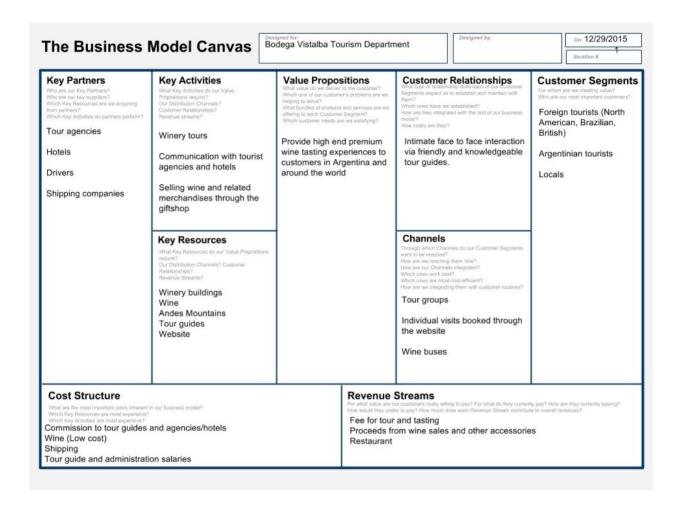
Internal Validity Issues:

- · Selection: Pre-Test and Post-Test groups may have different inclinations
- · Maturity: Market changes over time based on season

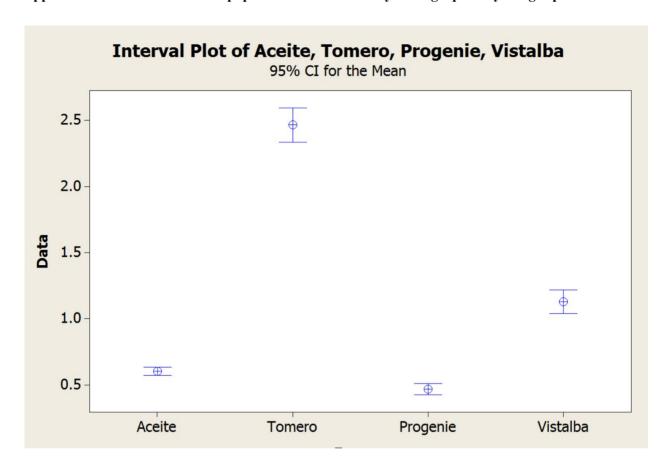
External Validity Issues:

- Population Validity: Population selected may not be representative of general customers
- Multiple-Treatment Interference: If test is done in the same window as the script test

Appendix A: The Business Model Canvas for Bodega Vistalba's tourism department gives context to the recommendations

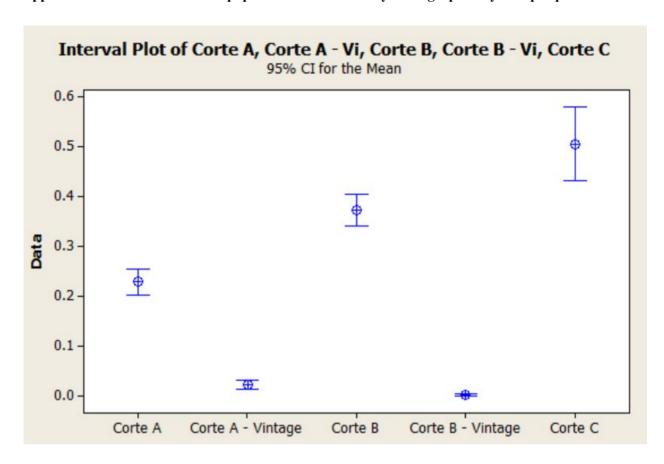


Appendix B: Evaluation of most popular brands of wine by average quantity bought per visitor



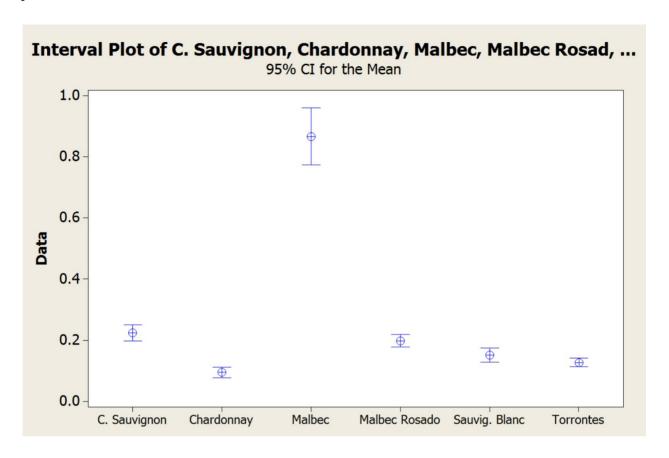
This plot demonstrates the average number of units one visitor purchases of each brand, given that they make a purchase.

Appendix C: Evaluation of most popular blends of wine by average quantity sold per person.



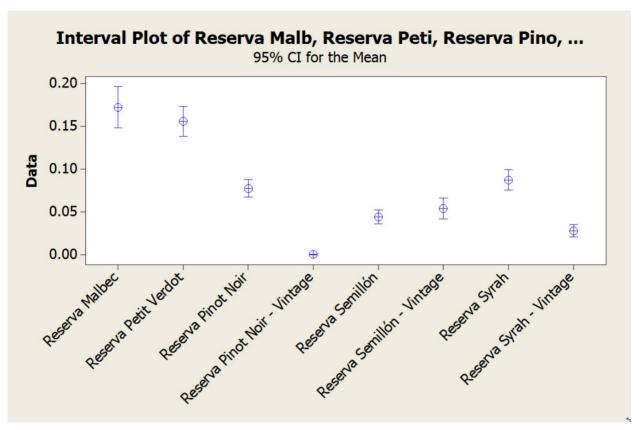
This plot demonstrates the average number of units one visitor purchases of each type of Vistalba wine, given that they make a purchase.

Appendix D: Evaluation of most popular Tomero Clasico wines by average quantity sold per person.



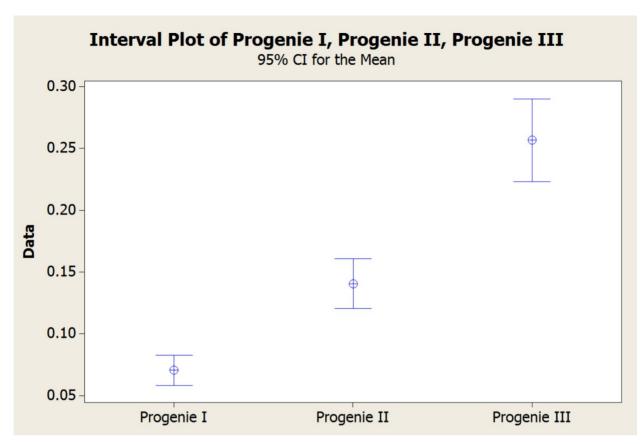
This plot demonstrates the average number of units one visitor purchases of each type of Tomero wines, given that they make a purchase.

Appendix E: Evaluation of most popular reserves by average quantity sold per person.



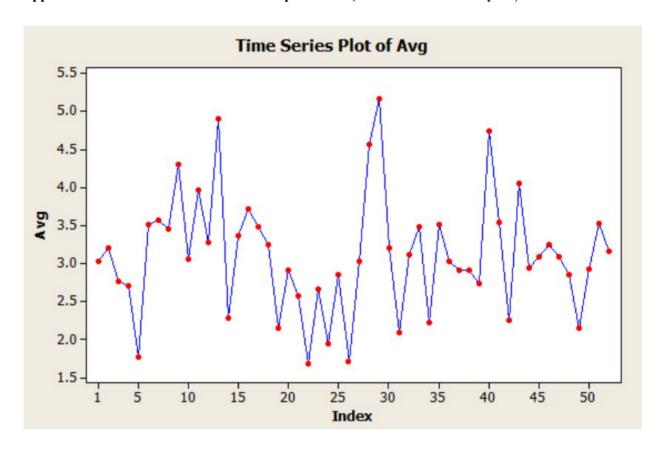
This plot demonstrates the average number of units one visitor purchases of each type of Reserva wines, given that they make a purchase.

Appendix F: Evaluation of most popular Progenie wines by average quantity sold per person.

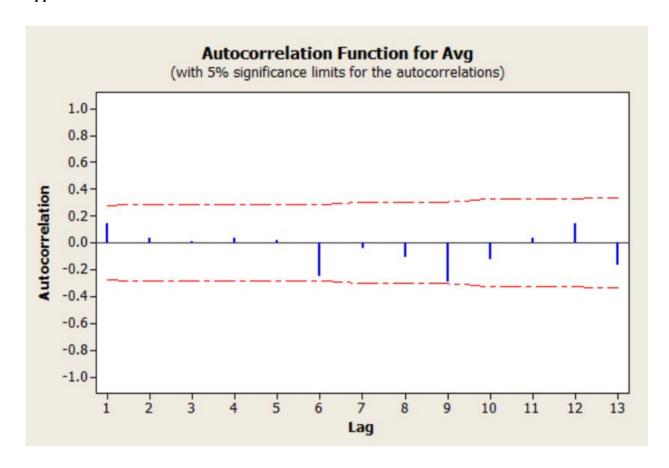


This plot demonstrates the average number of units one visitor purchases of each type of sparkling wine, given that they make a purchase.

Appendix G: Seasonal variation in visitor purchases (off weeks 14-26 each year)



Appendix H: Lack of seasonal variation.



Appendix I: Percentage of sales by day of the week



Appendix J: Percentage of sales by day of the week

