

## LOGOS Café Market Research Analysis

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### LOGOS Café Market Research Analysis

LOGOS café is a small private business located in Newington suburb within NSW state. LOGOS is comprised of 8 employees including the owners of the café, which acquired the ownership of the café in June 2021. LOGOS café faces numerous challenges including a reduced customer base within the local area, higher prices of goods due to the challenging economic situation imposed by the COVID-19 pandemic and higher competition among businesses from newly built shopping centres around the suburb. Therefore, the purpose of this market research analysis is to assist LOGOS café to gain a competitive advantage within the local area by identifying factors responsible for customers' decision to visit LOGOS café more frequently and developing focus groups of customers to better understand the need of the customers. By informing and recommending market-based actions, as supported by the outcome of the market research analysis, LOGOS will be capable to achieve this goal.

### Literature Review

Experience quality in the restaurant sector is the customer's knowledge or observation of restaurant characteristics obtained through the eating process (Jeong and Jang, 2011, p. 1526). Research findings suggest that experience quality plays a significant role in retaining customers and improving customer satisfaction (Kusumawati & Sri Rahayu, 2020; Ting and Thurasamy, 2016; Serving up a Great Restaurant Customer Experience Strategy | Deloitte US, 2017). Hence, a holistic approach to improving experience quality is needed to increase the customer base. A study conducted by Zhang et al. (2018) investigated factors associated with experience quality and how they explain the variation within the perceived value for money (VFM), customer satisfaction (CS) and loyalty (LOYT). By using multiple regression analysis, the study revealed

that service quality and ambience are statistically significant factors that add  $\Delta R^2 = .195$  to the explained variance of the VFM model.

Furthermore, the same factors were statistically significant in the CS model along with the coffee quality factor ( $p < .05$ ). Coffee quality and Service quality were both found to be statistically significant within the LOYT model. Thus, the results of the study suggest that customers' loyalty and willingness to return depend strongly on the quality of the received services, which in turn rely on the level of friendliness and the communication skills of service staff, and food/coffee quality.

Another investigation conducted by Deloitte in the US revealed more detailed results regarding experience quality factors (Serving up a Great Restaurant Customer Experience Strategy | Deloitte US, 2017). The survey conducted on 2,000 diners revealed a set of basic requirements that all restaurants should satisfy, such as quality, value, staff, location and sanitary. These factors were indicated by the diners as minimum requirements that all restaurants should satisfy. Moreover, the study developed a guest-first framework that included factors such as "engage me", "empower me", "hear me", "delight me", and "know me". This framework was developed to identify areas of significant differentiation between restaurants as such areas of focus provide the most opportunities for customer growth. The most important factor as indicated by the customers is "Engage me", which is defined as "the restaurant interacts with me in a friendly, authentic, and hospitable way" (Serving up a Great Restaurant Customer Experience Strategy | Deloitte US, 2017, p. 6). "Empower me" is defined as "the restaurant provides me real-time information to help me make decisions" and "Hear me" is defined as "the restaurant understands my situation and listens to my needs" (Serving up a Great Restaurant Customer Experience Strategy | Deloitte US, 2017, p. 6) displayed second-highest relative importance measure. These measures, however, differed when all factors were separated into a sit-down, carry-out and delivery categories, with "empower me", "delight

me" and "know me" having higher importance for carry-out and delivery categories. Hence, restaurants should consider the tangible as well as the intangible value that it provides to their customers. Customisation and personalisation of the restaurant's services create a distinct competitive advantage, which will assist the restaurant to develop a higher customer base.

### LOGOS Café Analysis

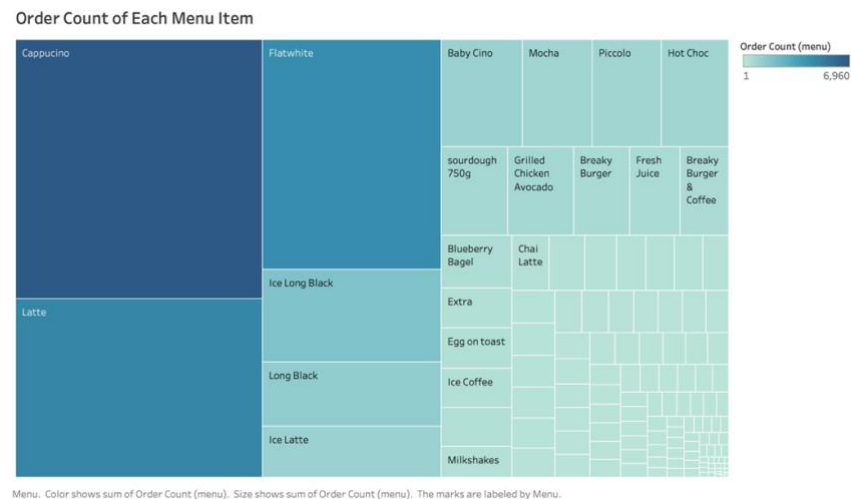
The data collected from the register was used to identify key statistical factors from August 2021 to April 2022. The sales before tax demonstrate a clear trend downwards (Table 1), which highlights the increase in competition in the local area and some possible aftereffects of the COVID-19 pandemic. It should be noted that April months was still in the process of collecting the data, which explains the lowest value of sales.

Table 1:



The treemap below (Table 2) demonstrates a significant number of coffees being sold by the LOGOS café with "Cappucino", "Latte" and "Flat white" being the top 3 items sold to the customers. In fact, all top 10 items sold in the café included hot or cold coffee drinks. Other category items including "Sourdough bread slice", "Grilled Chicken Avo", "Breaky Burger" and "Breaky Burger Coffee Combo" were outside of the top 10 items most sold items.

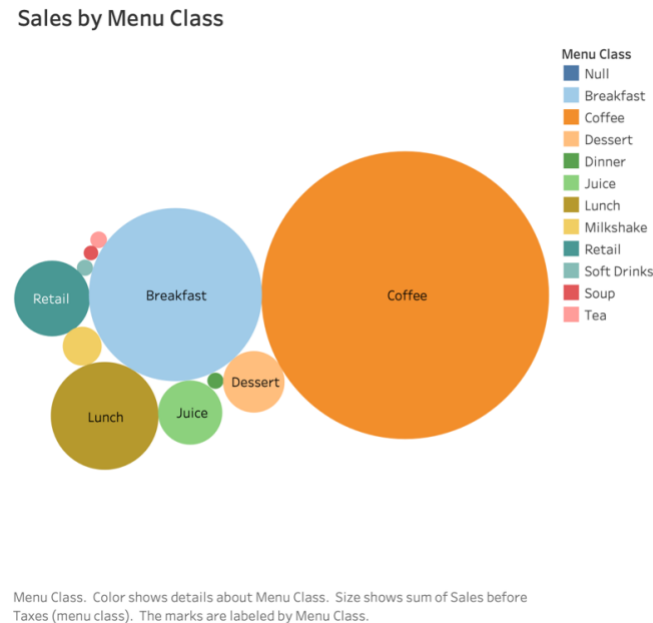
Table 2:



Furthermore, the analysis of the sales by menu class supports significant sales within the "Coffee" class with 108,360 items (Table 3), followed by "Breakfast" with 39,224 items and "Lunch" with 15,212 items. "Retail", "Desert" and "Juice" classes represented a smaller share of sales, although these are significant enough to be mentioned.

Such sales suggest that the primary selling point for LOGOS café is coffee, which includes a range of hot and cold drinks. This is followed by breakfast, such as toast and breaky burger, and lunch items comprising a smaller share of sold items. Hence, the data suggest that morning and mid-day should be the busiest period in the café. It may also suggest that cheaper and quicker-to-make items are sold more often considering that most sold items take less time to make.

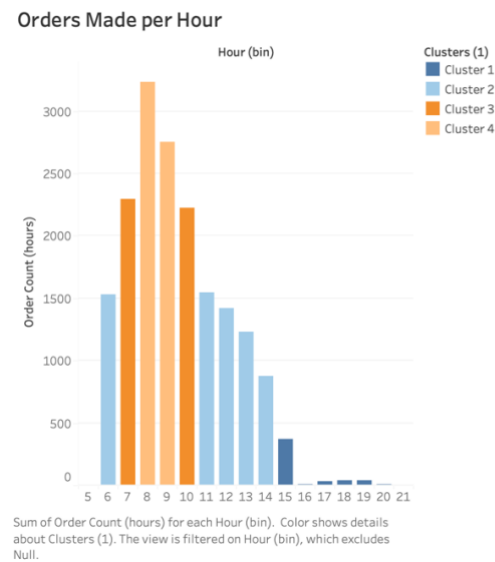
Table 3:



The busiest hours within the LOGOS café includes 8:00 and 9:00, while the least busy hours are from 11:00 to 14:00 (Table 4). Hours from 15:00 to 21:00 are not considered as these are the closing hours.

Moreover, running a clustering analysis for the "orders made per hour" suggest there are 4 distinct clusters of orders made. The first cluster, as previously mentioned, has the least number of orders made due to closing hours being 15:30. However, some sales after 15:00 is also present as an attempt to have the café open at these times was made. The second cluster includes people making 800-1500 orders in the early morning until the afternoon. The third cluster includes people making 2200-2250 orders between 7:00-10:00. The fourth cluster includes people ordering 2750-3250 during 8:00-9:00. These clusters suggest that the greatest number of orders are made within 7:00-10:00. These hours are usually associated with people going to work on weekdays and customers coming to enjoy their breakfast during weekends. Hence, coffee and breakfast menu items are more popular.

Table 4:





## **Method**

### **Participants and Tools**

Forty-seven LOGOS Cafe customers participated in the volunteer survey. All customers were encouraged to complete the survey. Survey Monkey was used as a survey platform, which only allowed to generate 10 questions per survey using a Basic package. Hence, 10 questions were created with the answers being recorded in an Excel sheet. The final data analysis was conducted using Excel and Tableau software platforms.

### **Survey Structure**

The survey included 10 questions relating to demographic, motivational and personal variables. Demographic data included the age range and whether the customer lives in Newington or not. Motivational data included factors responsible for choosing LOGOS cafe, while personal data involved priorities, desires, and numeric feedback on items such as quality of food, customer service and overall view of the cafe. Items such as quality of food, customer service and overall view of the cafe were scored using the Liberty scale, while other questions were scored using bivariate responses (yes and no).

### **Procedure**

The QR codes linked to the survey were printed and distributed within the store. The survey was open to complete over the period of 1 month, from the 27th of May to the 3rd of June. After the end day, the data was recorded, cleaned, and analysed using Excel and Tableau

software platforms. The patterns within descriptive statistics were recorded. Correlational and regression analyses were performed to further analyse the data and develop a possible predictive model.

### Analysis

#### Correlation Matrix

**Figure 1.** *Correlational Analysis of the Independent Variables*

	<i>Age range</i>	<i>CS experience Scale</i>	<i>Average Waiting Time (mins)</i>	<i>LOGOS score</i>	<i>Food Quality Scale</i>
Age range	1				
CS experience Scale	-0.1139346	1			
Average Waiting Time (mins)	0.03312707	-0.3440551	1		
LOGOS score	-0.0174429	0.55634384	-0.1910516	1	
Food Quality Scale	0.16123916	0.21130286	0.19204271	0.07587083	1

The outcome of the correlational analysis of 47 responses is summarised in Figure 1. To avoid multicollinearity of numeric independent variables, "LOGOS score" and "Average Waiting Time" have been removed due to high correlational values with multiple variables. Thus, the final model will include "Age range", "CS Experience Scale" and "Food Quality Scale" numeric variables.

## Linear Regression Analysis

**Figure 2.** *Linear Regression Summary*

<i>Regression Statistics</i>	
Multiple R	0.44778363
R Square	0.20051018
Adjusted R Square	0.124368292
Standard Error	1.099340694
Observations	47

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	12.73026332	3.182565831	2.633375477	0.047420805
Residual	42	50.75909838	1.208549961		
Total	46	63.4893617			

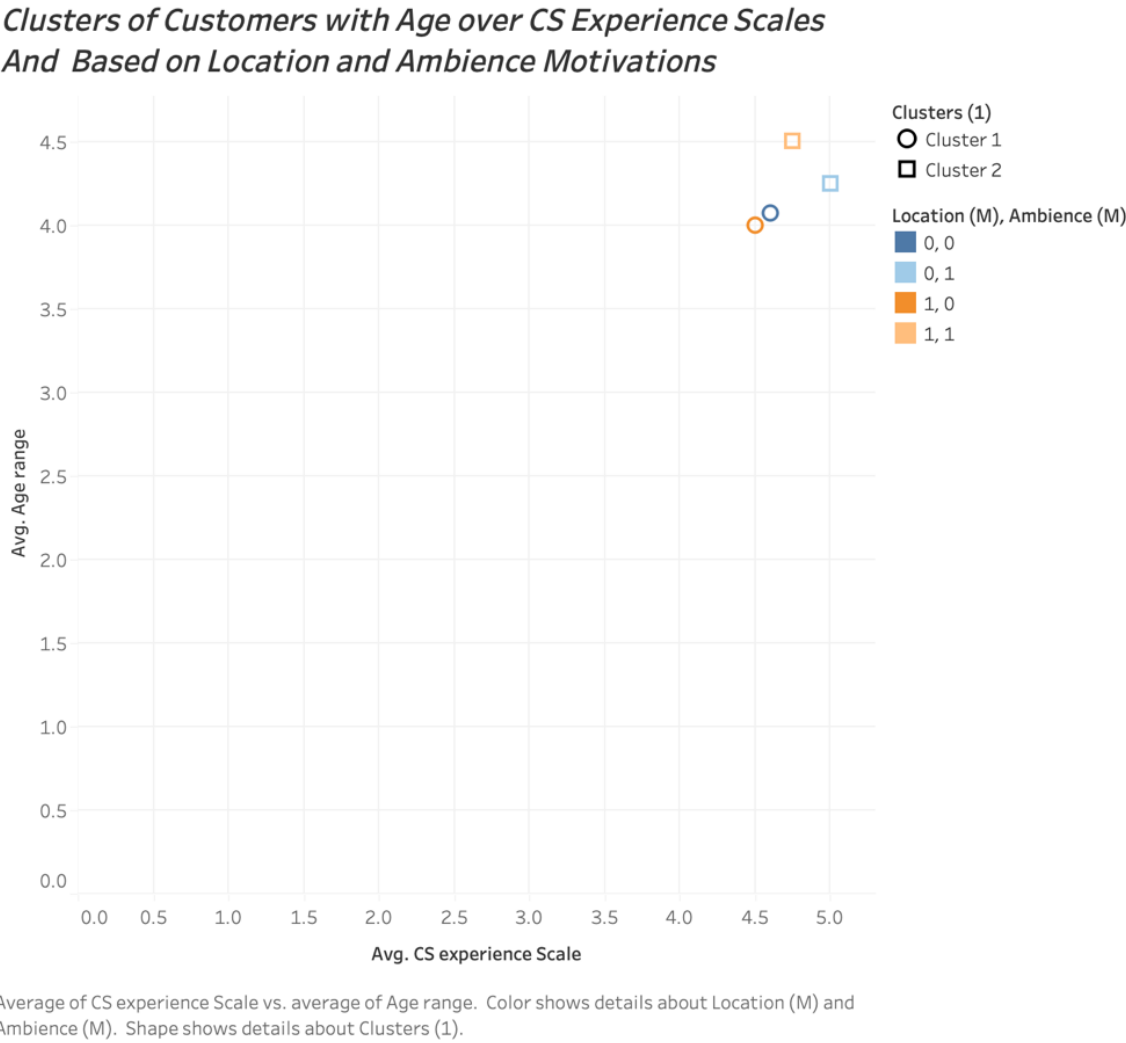
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	3.193689892	1.685382793	1.894934436	0.064998588
Location (M)	0.515355821	0.330357974	1.559992073	0.126266066
Ambience (M)	-0.547980292	0.389378457	-1.407320517	0.166690269
Age range	0.387376352	0.186031818	2.082312354	0.04344306
CS experience Scale	-0.300039801	0.296308675	-1.012592024	0.317053222

The summary of the linear regression is demonstrated in Figure 2. The final model contains 4 variables as previous models failed to meet the significance level. The R-squared is 0.20 meaning that the model explains 20% of the variance within the "visiting during the week" variable. Interestingly, the model suggests that an increase in ambience and customer service experience leads to less customer visiting frequency during the week. This effect could be explained by the lower number of high scores in the lower range of visiting frequency. Hence, a negative coefficient is observed although such an effect is not significant. This is particularly true for the "CS experience" variable since customers that visit the café for the first time score the highest values compared to the customers that visit the café more frequently. Due to a higher count of people coming more often than less frequently and possible effects of other variables lead to a reduction effect.

### **Clustering Analysis**

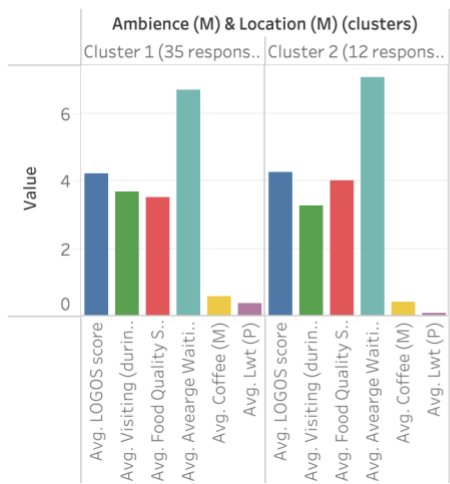
The same variables utilised in the predictive model were used to develop a clustering model to further develop a better understanding of the customer base of the LOGOS café. The outcome of the clustering is demonstrated in Figure 3. The chosen variables produced two relatively distinct groups of customers with the first cluster scoring less on ambience and CS experience while being relatively younger. The second cluster displays older customers with more preference for ambience and higher CS experience scores. These clusters, however, are affected by the small sample size, which may reduce or inflate the differences between the groups. Thus, further analysis should be evaluated with caution.

Figure 3.



Final Analysis

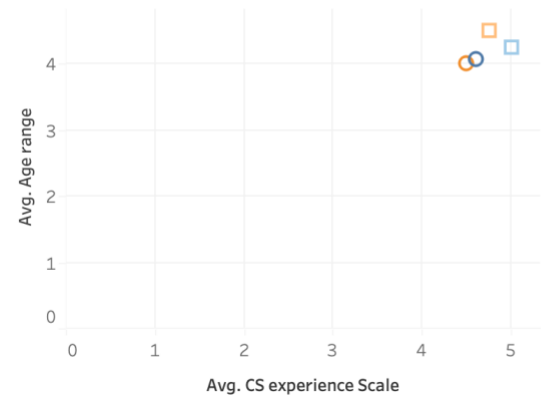
Clustering Effects on Variables



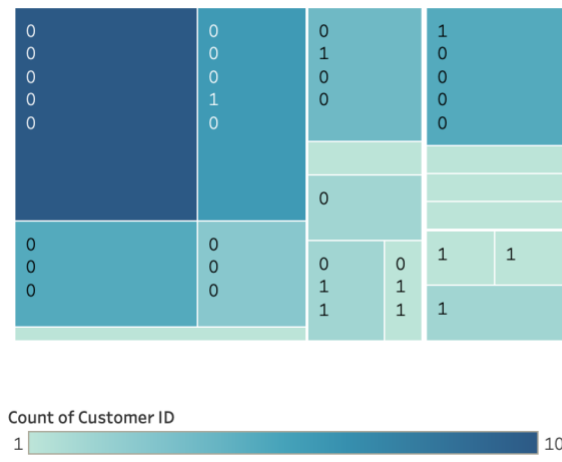
Measure Names

- Avg. LOGOS..
- Avg. Visitin..
- Avg. Food Q..
- Avg. Avearg..
- Avg. Coffee ..
- Avg. Lwt (P)

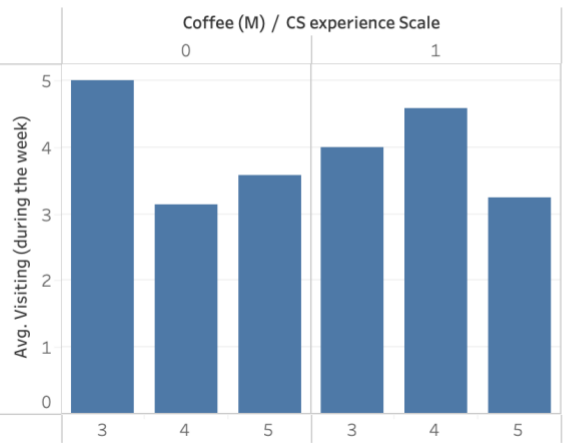
Clusters of Customers with Age over CS Experience Scales And Based on Location and Ambience Motivations



New Desirable Changes by Customers



Average Visiting Frequency Based on Coffee and CS experience Scale



The final application of the clusters is demonstrated above. Using Tableau analytical tools, the analysis will be further discussed in person. However, the main findings can be summarised in the following dot points:

- Cluster 1 is associated with people prioritising coffee as the main driver for frequent visiting of LOGOS café
- Cluster 1 contains more responses compared to cluster 2, with 35 responses (75%)
- The LOGOS score did not affect the frequency of visiting and is consistently high for both clusters
- Older age of the customers and ambience of the store play a significant role in the higher visiting frequency of the customers
- Cluster 2 was comprised of people primarily focused on food quality
- Cluster 2 had lower visiting times compared to cluster 1
- The average visiting frequency increased as the coffee and CS experience scale increased (the “no coffee” and “3 CS experience scale” group does not align with hypothesis due to low number of responses in this group, which affects the average). This is aligned with the literature review findings.

Customers have indicated the following desired changes in LOGOS café:

- 10 customers suggested no changes
- 6 customers desired for better sandwich selection
- 5 customers desired for better selection of cakes and combos

### **Conclusion and Recommendations**

Two distinct groups have been identified based on the results of the survey. Most customers belong to the first cluster (75%), which are motivated in purchasing coffee and thus, waiting less time, visiting frequently, and concerned less about ambience and food quality. The second cluster includes people interested in food as indicated by higher food quality scores, more waiting times, ambience expectations and less frequent visiting. Hence, based on the results of the study, the goal of LOGOS café should focus to improve the food menu section as it only accounts for a quarter of the interest from customers. The food menu is a more profitable area to focus on compared to coffee due to high competition from other local cafes, which forces the price of coffee to be consistently low. Additionally, it would take multiple coffees to be sold to make up a single profit made from an average food item.

One way of improving the food menu is by adding more "quick and easy to make" food items, which would be sold well along with coffees. For example, a recent introduction of mini doughnuts and danishes demonstrates the high demand for such items due to recent high sales of such items. Thus, more of such items targeting a wider range of tastes (from sweet to savour) would prove to be the best option. Such items should perform well in the morning, during the times when the sales of coffees are high.

Another, more important option for LOGOS café, would be the introduction of an improved lunch menu section. Due to high competition from other stores around the café, the sales during the lunch period appear to be low. Establishing a more competitive lunch menu should increase the sales and visiting times of the customers. This can be achieved by focusing on more unique food items. For example, "Red Stone Café" (one of the LOGOS café competitors) have signed a deal with a brand specialising in making quality cheeseburgers, which "Red Stone



Café" can now sell. Therefore, low competition from other restaurants, that are not specialised in selling burgers, may contribute to their relative success around the lunchtime menu. A similar approach should be taken by LOGOS café. Establishing a new segment of food items will attract more customers during lunchtime and reduce competition from other stores, thus leading to higher profit.

The last option for LOGOS café would be to focus on creating more combos and a special dessert menu. People are interested in new food items as indicated by the desire of the customers in the survey. Hence, regularly introducing limited edition cakes and combos may allow further increase the interest and visiting times of customers. The introduction of such food items should be further supported using social media platforms. This will increase the exposure of LOGOS café items to the local community as well as to customers beyond the local community. However, such an approach should be regularly maintained to sustain a reasonable engagement. A starting point could be the introduction of new desserts or combos once a week.

As a result, LOGOS café experiences a high level of competition from nearby stores, which places high pressure on the performance of the café. However, it also demonstrates a high potential as demonstrated by the high number of sold coffees and the high average score on the LOGOS café scale. Therefore, this report should assist in the decision-making of the café management and allow them to realise this potential into action.

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