

## **Chapter 9:**

# **Interpretation of Results and Conclusion**

This chapter concludes the present study by putting forward the results of the analyses undertaken in the previous chapters. This chapter also puts forward some suggestions that can be followed by prospective restaurant owners.

In chapter 7, we dealt with the efficiency of restaurants. 95 restaurants with varying locations were studied. The first thing that can be said is that the method of calculation of efficiency is not an easy task. The CCR and the BCC methods that were employed to fulfil the task involve complex mathematics. Therefore, another simpler method of measuring efficiency given by Muller was used. We found out that the CCR is the best measure among the three as that measure is highly correlated with the other two methods. It means that the results derived from CCR can be fairly used in lieu of the other two methods. Moreover, this method is very commonly used by scholars. However, given its complex nature, the method put forward by Muller can also be employed since most of the managers of restaurants of Guwahati may not possess the necessary skills to perform a CCR or BCC analysis.

When the inefficient restaurants were studied, the results showed that some inputs had to be reduced to such a level that the suggested (by the method) input is negative. However, any restaurant cannot have negative quantity or even zero quantity of some indispensable inputs like cooks or size of the restaurant. Therefore, it should be kept in mind that the results need to be handled with caution. Numbers make analyses precise but it should be backed by logic or common sense before putting it to application.

The first sub-objective was to see if the efficiency of the restaurants was affected by its owner being a male or a female person. It was found that women are 44% more likely than men to be the owner of an efficient restaurant. However, the p-value is 0.45 which means that if we sample the population, only 55% of the times we will get such a result. Therefore, this result is not significant. This also points to the idea that there is no significant relation between the efficiency of a restaurant and the gender of its owner. So, we can infer, with caution, that the gender of a

person plays little to no role in making the enterprise run by him/her efficient. In other words, males and females are similar in terms of managing a restaurant efficiently.

The second sub-objective was to test the empirical evidence of the 'learning curve' theory in the case of restaurants. When the binary LOGIT model is used, it is found that there is no significant relation between the efficiency of a restaurant and the number of years of operation of the restaurant. Therefore, a second method is adopted where the S curve or the logistic curve is attempted to be fit into the observations. It is found that there is a significant relationship between the efficiency of a restaurant and the number of years of operation. More precisely, this relationship was a logistic relationship. The curve that is derived shows that as the number of years of operation of a restaurants increased, it tended to be more efficient. That means it can be said that an old restaurant is more likely to be efficient than a new one. One reason that can be attributed to this phenomenon is that the old restaurants have gained experience over the years and thus, have learnt to manage their resources more efficiently. Thus, the 'learning curve' theory is proved to be true in the present case.

Finally, the last sub-objective is to find out which of the input had significant impact on the efficiency of the restaurants so that proper care can be taken while deciding the input mix by the managers. The censored or TOBIT regression is used for this purpose. The result that came out is waiter, cylinder and electricity have a significant relationship with the efficiency of the restaurants. However, their magnitude is very low. Moreover, the sign of waiter is positive meaning that an increase in the number of waiters will increase the efficiency of the restaurants. The sign of cylinder is also positive which essentially means that a one unit increase in the number of days one cylinder functions will increase the efficiency. Lastly, the sign of electricity is negative, meaning that a one unit increase in the cost of electricity will reduce the level of efficiency. This result is perfectly in sink to what common sense tells us.

The second objective of the study, which was analysed in Chapter 8, is to get an idea about the demand side of restaurants. 400 consumers of Guwahati city were surveyed to derive at the results mentioned in chapter 8.

The primary objective was to understand how the socio-economic conditions of a person affect his/her reason to choose to go to a restaurant. It is found that there is a clear demarcation between the people below and above the age of 30. The most popular reason for people of all age groups was to spend time with friends or family. However, the second most popular reason for people below the age of 30 was to enjoy tasty food while the reason is to enjoy a relaxing environment for the ones above the age of 30. This means that, if the prospective restaurant owners or managers want to attract young consumers, more attention should be given to the variety of cuisines and on the taste while if they target older population, then more attention should be paid to probably a comfortable and hustle-free ambience. The target group of the owners or managers will be determined by multiple factors, which is beyond the scope of the present research.

Males and females roughly show the same need to go to restaurants. The most popular choice for both the categories was to spend time with friends or family. However, the number of such people within each category is different. While 38.93% of the males reveal this choice, among the females, this choice was revealed by 50.68% of them. Moreover, none of the females revealed that they go to the restaurants due to affordable price. Therefore, one policy suggestion from this is that, if the target population is the female population, then probably the owners or managers should put emphasis on cut-edge trendy stuff like themed restaurants so that they can have fun while spending quality time with friends. And since only two transgenders responded, so a reliable generalisation cannot be made.

When the reason for choosing restaurants is studied between workers and workers, it is found that there is not much difference between the two groups in terms of their preference. Both the

groups opted to go to restaurants mostly to spend time with friends or family. The only difference between the two groups is that relatively larger proportion of the workers go to restaurants to avail quick services compared to non-workers. This is logical too, as the workers are probably in a rush to work and go to restaurants during work hours. Therefore, owners and managers can give less attention to interior design and rather focus on fast service if they are targeting office goers or any worker.

Lastly, the reason for choosing restaurants is studied among people with different income. It is found that there is a rough segregation between people earning below Rs. 15000 per month and people earning above Rs. 15000 per month. Spending time with friends or family is unanimously the most popular reason for going to restaurants for people of all income groups. However, the percentage of people who goes to restaurants due to affordable price is the highest in the category of people earning above Rs. 15000 per month. This is perfectly in sync with logic and reality as this category of people have high disposable income. The obvious implication of this result is that owners or managers can raise the prices of their food items if they are operating in some posh locality or they are in the vicinity of such places, as branded shopping malls, clubs or cinema halls, which are frequented by people with high income.

The multinomial LOGIT model is used to see the impact of the socio-economic factors, age, gender, occupation and income, on the reason for opting to go to restaurants.

Since, the concept of restaurant came into being to save precious human time, therefore, the reason to avail quick service was taken to be the base category against which all the other categories are tested.

When the reason to go to restaurant due to affordable price was studied compared to quick service, it is found that the p-values for all the independent variables are much greater than 0.1 (which was the required p-value). Therefore, our confidence to infer from this comparison is seriously limited.

When relaxing environment was compared relative to availing quick service, it is found that only the independent variable, gender, gives significant results. It is found that females are 6.44 times more likely to prefer a relaxing environment over quick service than males.

Again while comparing the reason of spending time with friends or family relative to quick service, it is found that even after an increase in income, an individual will be indifferent between the two reasons. In other words, rise in income will have no effect on the probability of choosing to go to restaurants to spend time with friends over quick service. Also, females are 5.79 times more likely to visit a restaurant in order to spend time with friends or family rather than to avail quick services, compared males.

Lastly, when the reasons to go to a restaurant are tasty food and quick service, it is found that if the income of a person increases, we would expect him/her to be indifferent between choosing to go to restaurants to enjoy tasty food and to avail quick service. Moreover, a female is 3.47 times more likely to visit a restaurant in order to enjoy tasty food rather than to avail quick services, compared to a male person.

The first sub-objective is to study the relationship between the socio-economic conditions of a person and the frequency of visit to restaurants using a linear regression model. It is found that income is the only independent variable that is giving significant results and a positive sign. However, the magnitude of the effect is low meaning that a unit increase (or decrease) in income will have very little increase (or decrease) in the frequency of visit to restaurants.

Again, to study the second sub-objective, linear regression model is used. This sub-objective deals in the relationship between the socio-economic conditions of the people and their amount of expenditure per meal on restaurant food. It is found that only age and income give significant results. It is found that an increase in income by Rs. 100 will increase the expenditure by 6.9 times and an increase in age will reduce the expenditure by 83.53 times.

The last sub-objective is to see how the socio-economic factors affect the preference for home-made food, restaurant food or food ordered home. A multinomial LOGIT model was adopted.

When comparing going to restaurant for food over home-cooked food, it is found that a unit change in the age of a person will change his/her probability of choosing restaurant food over home-cooked meal increases by 0.911 times, which means the probability will fall. Similarly, when home-cooked meal is compared to online home delivery of food, we find that a unit change in age leads to a 0.855 times change in preference of online home delivery food over home-cooked meals. Therefore, we can say with fairly good confidence that aged people will prefer home-cooked food more over food cooked outside.

### **Conclusion:**

This study was an attempt to study some aspects of the supply and demand side of the restaurants of Guwahati. Since, this is a little explored area, therefore, there was unavailability of secondary data on the issue. The available data is generally in an aggregated form where restaurants are either clubbed with hotels or with other trades. But seeing the huge potential for growth in this sector, more data will be available in the future, making research more easy and reliable. Due to limited time and financial resources, very some areas of this sector could be covered, leaving much scope of further research in this arena.