# MATHEMATICAL AND STATISTICAL STUDY OF CUSTOMER'S PSYCHOLOGICAL AND BUSINESS BEHAVIOR 

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#### Abstract

In the present paper, the author tries to know people's Psychological and business behavior of customers while they go for shopping, for this he has conduct a survey by dividing customers into four different groups: female above 30 years, male above 30 years, female below 30 years and male below 30 years. The author thinks that the study will help the businessmen to boom their income because it will help them to maintain good relation with customers and provide them better service. The results also expressed with column chart which help oneself to understand in better way. The study has been conducted in small cities area so the author feels that this study helps to understand customer's psychology in better way and could be a key changer in business in their areas.


Key words: Psychology, Customer behavior, Purchase, Business, Column Chart, Company.
(AMS mathematical subject classification: 00a05, 62XX, 62-07.)

## Introduction

Every business sector wants to take its business on top and a person and If they read customers psychology properly they and made some arrangements according to customers choice, they can improve their business and it has observed that the business groups always keep try for betterment. For this time to time they conduct surveys, they also conduct seminars or workshops to get extracts how they can improve the relations with customers. Plenty of work has also be done in this direction and many companies are also applying the essence. But there is always a possibility to do better and one should always keep progressive as we know "there is always a roof on the top".

## Main Study

The author have studied about their problems, their likings and disliking and try to get their suggestions which can make their purchasing easy
and happy. For this he has made a survey of total 460 people. They are divided into four different groups according to their age. One is "Male above 30 years", second is "Female above 30 years", third is "Male below thirty years" and fourth is "Female below 30 years". Out of total 460 people, there were 100 male above 30 years, 700 female above 30 years, 140 male below 30 years and 30 female below 150 years. The author has prepared a questioner for the convenience of customers which are mentioned below and try to find their views. The questions are as follows:
(i) While going shopping how much time generally you spend at parking
(a) <5 minutes (b) 5-10 minutes (c) > 10 minutes
(ii) How much time do you generally spend at lift
(a) < 5 minutes (b) 5-10 minutes (c) >10 minutes
(iii) How much time do you generally spend at Billing counter
(a) $<5$ minutes (b) 5-10 minutes (c) $>10$ minutes
(iv) While purchasing what do you prefer
(a) Branded Tag (b) Less Price (c) Quality without branded tag (d) Branded tag and Less price
(V) While purchasing what encourage you to purchase more
(a) Salesperson's behavior (b) Attractive Display
(c) More Discount
(vi) Which mode for billing usually do you prefer
(a) Cash (b) Debit/Credit Card (c) PayTm (d) Other
(vii) When do you feel more happy
(a) Purchase for yourself (b) Purchase for your family ( or relatives, friends etc.) (c) Both
(viii) How much generally do you purchase (Whatever you decide at home)
(a) More (b) Less (c) Same
(ix) Do you wait for sessional SALE for purchasing (clothes/ shoes/ jewelry etc.)
(a) Yes (b) No (c) Some Time
(x) Sometimes do you purchase to show your known (without any need)
(a) Yes (b) No (c) Some Time
(xi) Do you generally purchase your clothes without check fitting or wearing (because of hesitation)
(a) Yes (b) No (c) Some Time
(xii) After purchasing (Clothes/shoes/jewelry etc.), when you reach home, how many times do you feel that you commit mistake and you have to change the item. (Among five times)
(a) One (b) Two (c) Three (d) Four (e) Five
(xiii) Which day generally you prefer for purchasing
(a) Monday (b) Tuesday (c) Wednesday
(d)

Thursday (e) Friday (f) Saturday (g) Sunday
In the category of above 30 years female, In first question 20 female chosen (a) 40 female chosen (b) and 10 female has chosen (c) option and 10
female complain about the distance while 20 females times should be less others looked satisfy. In second question 10 female chosen (a) 50 female chosen (b) and 10 female has chosen (c) option and 1 female prefer stairs 35 females were not satisfied with time they want less time at lift and 20 female looked satisfy. In third question 20 female chosen (a) 40 female chosen (b) and 10 female has chosen (c) option and 20 female complain about more time and 10 female asked for increasing billing counters specially on weekend days. In fourth question 10 female went with (a) branded tag, 50 female were agree with (d) option branded tag and less price. In fifth question 40 female like option (a) and (c) Salesperson's behavior and more discount and 30 female went with option (b) and (c) attractive display and more discount. For sixth question, 20 female prefer to pay with cash 50 female prefer with debit/credit card, in card mostly like debit card. In seventh question, 30 female feel happy to purchase for themselves while 40 female feel happy to purchase for their close fellows. For eighth question, 50 female generally purchase more whatever they decide at home and 30 female same thing they purchase what they decide before, going for shop. In ninth question, 30 female wait for sessional SALE while 40 female do not wait of SAIL. In tenth question, 40 female accept that sometimes they purchase to show their friend or knows without any need while 30 female deny for that. For eleventh question, 20 female in this category feel hesitation to check their clothes in changing room where 50 female do not show any hesitation to check their clothes in changing room. For twelfth question, 40 female in this category feel out of five purchasing one time they think to change or exchange and 20 female thinks two times, change the item. In thirteen question, 10 female prefer Monday, 10 female prefer Tuesday, 10 female prefer Wednesday and 40 female prefer Sunday for purchasing.

In the category of above 30 years male, In first question 70 male chosen (a) 20 male chosen (b) and 10 male has chosen (c) option and 10 male complain about the lake of space. In second question 60 male chosen (a) 20 male chosen (b) and 20 male has chosen (c) option and 10 males were not satisfied with time they want less time at lift. In third question 40 male chosen (a) 50 male
chosen (b) and 10 male has chosen (c) option and 10 male complain about more time and they asked for increasing billing counters especially on weekend days. In fourth question 30 male went with (a) branded tag, 10 went with option (b) less price and 60 male were agree with (d) option branded tag and less price. In fifth question 40 male like option (a) and (b) Salesperson's behavior and attractive display and 60 male went with option (b) and (c) attractive display and more discount. For sixth question, 30 male prefer to pay with cash 60 male prefer with debit/credit card, in card mostly like debit card. In seventh question, 20 male feel happy to purchase for themselves while 80 male feel happy to purchase for their close fellows. For eighth question, 80 male generally purchase more whatever they decide at home and 20 male same thing they purchase what they decide before, going for shop. In ninth question, 60 male wait for sessional SALE while 40 male do not wait of SAIL. In tenth question, 50 male accept that sometimes they purchase to show their friend or knows without any need while 40 male deny for that while 10 did not attend the question. For eleventh question, 20 male in this category feel hesitation to check their clothes in changing room where 70 male do not show any hesitation to check their clothes in changing room while 10 did not attend the question. For twelfth question, 70 male in this category feel out of five purchasing one time they think to change or exchange. In thirteen question, 30 male prefer Saturday and 70 male prefer Sunday for purchasing.

In the category of below 30 years female, In first question 70 female chosen (a) 50 female chosen (b) and 10 female has chosen (c) option and 10 females feel times should be less others looked satisfy. In second question 60 female chosen (a) 80 female chosen (b) and 10 female has chosen (c) option and 20 females were not satisfied with time they want less time at lift. In third question 40 female chosen (a) 100 female chosen (b) and 10 female has chosen (c) option and 40 female complain about more time and 10 female asked for increasing billing counters specially on weekend days and they want men should be appointed at billing counter because of their fast servicing. In fourth question 20 female went with (a) branded tag, 130 female were agree with (d) option
branded tag and less price. In fifth question 30 female like option (a) and (b) Salesperson's behavior and more discount and 130 female went with option (c) attractive display and more discount. For sixth question, 50 female prefer to pay with cash 70 female prefer with debit/credit card, in card mostly like debit card. In seventh question, 40 female feel happy to purchase for themselves while 110 female feel happy to purchase for their close fellows. For eighth question, 130 female generally purchase more whatever they decide at home and 20 female same thing they purchase what they decide before, going for shop. In ninth question, 40 female wait for sessional SALE while 90 female do not wait of SAIL. In tenth question, 130 female accept that sometimes they purchase to show their friend or knows without any need while 20 female deny for that. For eleventh question, 70 female in this category feel hesitation to check their clothes in changing room where 80 female do not show any hesitation to check their clothes in changing room. For twelfth question, 40 female in this category feel out of five purchasing one time they think to change or exchange and 30 female think two times, change the item while 50 female think to change for all times. In thirteen question, 10 female prefer Monday and 110 female prefer Sunday for purchasing.

In the category of below 30 years male, In first question 90 male chosen (a) 50 male chosen (b) and 60 male complain about the lake of space. In second question 90 male chosen (a) 30 male chosen (b) and 20 male has chosen (c) option and 30 males were not satisfied with time they want less time at lift. In third question 60 male chosen (a) 50 male chosen (b) and 20 male has chosen (c) option and 20 male complain about more time and they asked for increasing billing counters specially on weekend days. In fourth question 10 male went with (a) branded tag, 130 went with option (d) option branded tag and less price. In fifth question 40 male like option (a) and (b) Salesperson's behavior, 10 male like option (b) attractive display and 60 male went with option (b) and (c) attractive display and more discount. For sixth question, 50 male prefer to pay with cash 70 male prefer with debit/credit card, in card mostly like debit card. In seventh question, 70 male feel happy to purchase for themselves while 50 male feel happy to
purchase for their close fellows. For eighth question, 40 male generally purchase more whatever they decide at home and 80 male same thing they purchase what they decide before, going for shop. In ninth question, 40 male wait for sessional SALE while 90 male do not wait of SAIL. In tenth question, 10 male accept that sometimes they purchase to show their friend or knows without any need while 120 male deny for that while 10 did not attend the question. For eleventh question, 120 male in this category feel hesitation to check their clothes in changing room where 20 male do not show any hesitation to check their clothes in changing room. For twelfth question, 40 male in this category feel out of five purchasing one time they think to change or
exchange, 30 male feel to change two times and 50 feel all times to change or exchange the item they purchased. In thirteen question, 40 male prefer Monday and 30 male prefer Tuesday, 70 male prefer Sunday for purchasing.

Now we will illustrate the above results by the column graph, which will help one to understand in better way the customer's view according their groups and questions.





## Conclusion

The authors feel that their study will help to understand the psychology of purchasing in different age group people. It will very helpful to business sector because they can made the sufficient changes according to preference of customers. This study will also helpful to construct better relations between customers and businessmen. The author also feel that every business sector should study about psychology (or business psychology) which help them to get more success in their respective fields.

## References

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