Impact of Risk Perceptions on Purchase Intention in C2C e-Commerce based on Gender Groups

Karan Rajesh¹, Dr. Jacob Joseph²

¹Student, BBA, Department of Management studies, Christ University.
²Associate Professor, Department of Management Studies, Christ University.

Abstract: With the trend of emerging markets in the current business world, numerous studies have been done on risks and other variables of business to consumer models and various theories and assumptions have been made. But what marketers and researchers have failed to do is focus on the untouched model that is the customer to customer business models. In this regard, this paper has studied the various risks associated with shopping on online customer to customer websites and how these risks affect the customer's purchase intention. For this research we will be focusing on the purchase intention of customers, its correlation with the perceived risks such as perceived risk of net store, perceived risk of delivery and perceived risk of product and their impact, based on Gender groups. According to our study results, there is a moderate relationship between perceived risks and purchase intention, however the relationship is stronger in men when compared to women.

Keywords: Purchase Intention, Perceived Risks, E-Commerce.

I. INTRODUCTION

The world of customer to customer E-commerce is rather interesting. In the traditional model of business to customer markets, the potential customers had to go to the marketplace or to the place of business to get what they were looking for. But then came the customer to customer marketplace model where businesses facilitated an environment to induce transactions between customers. Over here customers could go to other customers to purchase goods they need or hire services they are looking for. A very good example of customer to customer is that section of your daily newspaper and the example of an auction. It facilitates transactions between customers and in both cases, the customer, not a business is the entity selling the products or services to the other customer. That is the main goal of customer to customer, to enable this relationship and helps customers locate things that were earlier not so easy to locate.

But as time passes by, new trends emerge in business and the marketplace also develops along with the flow of time. With the boom of internet and information technology, even businesses are going digitally global and accessing new customers. Such is the example of customer to customer E-commerce websites such as OLX and Quikr which act as a platform for customers to sell their products and services to other customers.

The benefit here is that there is the removal of the intermediary which would make you cough up a few thousands of rupees either way to either buy or sell. Thanks to the internet, intermediary companies are fostering relationships between customer to customer companies. Companies such as Ebay etc have been a huge hit since its inception in the year 1995. They use services of PayPal etc to mitigate the risks related to making payments online.

In customer to customer platforms, virtually anyone can sign up and start buying and selling. There are many benefits in terms of the customer to customer marketplace.

It keeps the monetary variables very low as there are no intermediaries, hence keeping the margins high for the sellers and the prices low for the customers.

Then there is also the convenience factor, in the sense that sellers do not have to sell individually as in a brick and mortar store, they could just list their items and wait for customers to come. Also customers do not have to keep driving and checking out different places, they could just take a look at the lists provided by the sellers.

But this is not without a flipside as well. Since it is a customer to customer market, risks regarding to credit card payments are very high, as many of these websites are not secure.

Also since the sellers are customers themselves, there might not be adherence to quality. Also since the buyers are customers, there are no guarantees that they might pay.
II. LITERATURE REVIEW

Not many studies have been done on the effects of perceived risks on the purchase intention of individuals (especially based on gender groups) while shopping on c2c e-commerce platforms, but given below here are a few studies which have casually submerged into the said topics.

Sohail Younus, Faiza Rasheed and Anas Zia (2015) in their study realised that even in the worst competitive markets, the manufacturing industries that manufactured consumer goods paid attention to the customer’s purchase intention inorder to maintain their reputation in the market and increase their goodwill. Since they understood that loyal customers means more revenues in the future. The study done by these authors focused on the variables which affected customer’s purchase intention and the purpose of their study was to understand the impact of customer knowledge, celebrity endorse and perceived value on the customer’s purchase intention. Over here the purchase intention is the dependent variable and the customer knowledge, celebrity endorsement and perceived value are the independent variables. The study further goes on to explain that there is a statistically significant relationship between the dependent variables with itself and that with of the purchase intention.

Dr. Rajeev K. Shukla (2016) in his study makes us understand how the internet basically gives us a virtual platform to shop products and services. The study tells us how we get access to thousands of types of varities of products and services with the click of a mouse or a touch of the finger in online shopping. Specifically speaking, this study goes in depth inorder to study the gender effect on customer’s perception while shopping online. For this study, around eleven different hypotheses were stated and an attempt was made to find out if there is a significant difference in customer’s perception towards online shopping. The study was done on a non probability judgement convenience sampling of people who used the internet. Findings of the study indicated that there was a gender wise significant difference in the concern towards time taken for product delivery, and also that receiving a recommendation from a friend or a positive review through word of mouth reduced the perceived risks of the customer.

Yue Chen (2015) in his study of the effects of decomposed perceived risk on consumer online shopping behaviour, which was done in china, investigated the roles that risk perceptions plays in a customer’s online purchase intention. Majority of the studies he did, concluded with the fact that risk perceptions were viewed as a high level surrogate construct. However, he did a few other studied too which focused on the influence of different perceived risks on the customer’s purchase intention. He came to the conclusion that the different sources or origins of perceived risks brought about distinct effects to the customer's purchasing behaviour and their purchase intentions. The risks induced due to personal anxiety seemed to have an effect on the consumer’s satisfaction and their repurchase intention. Moreover risks perceived or originated from product performance seemed to have a positive impact on repurchase intentions.

Theodosios Tsiakis (2012) did an analysis of the customer’s perception towards perceived risks of information security online. He states that the customer's trust is the most essential factor influencing web based transactions and it is highly influenced by the customer's perceived information safety.

This perceived risk comes under the broad umbrella term perceived risk of netstore, which is one of the three perceived risks we will be covering in our research, the others being perceived risk of delivery and perceived risk of net store. The customer security in an e-store is an ongoing research issue especially in the current electronic marketing field. The purpose of this paper was to identify and analyse the direction in consumer issues of perceived risk of information security.

Piyanka Sinha and Saumya Singh (2017) in their study “Comparing Risks and Benefits For the Value Enhancement” explained how e-retailing or how we like to call it e-commerce is not specifically new, but the amount of potential in its online marketing in market research is still deeply unexplored and just barely touched. An attempt was made in this study to understand the different dimensions of the human psyche, specifically that of the Indian Online Consumers. As each and every single consumer has their own perception of the growing e-commerce markets, it is very important for retailers to get a grip of the consumers’s perceptions and attitudes inorder to integrate the dimensions of risks and benefits. The research deals with how the consumers purchase intention is jointly determined by their attitude and understanding towards purchasing things online.

P. Jayasubramanian, D. Sivasakthi and Ananthi Priya (2015) concluded that coming to an understanding of the consumer's needs for online selling has become a big challenge for marketers. Specially coming to this understanding and making various improvements in the different factors that affect the consumer’s to shop online will most likely help marketers to gain the strategic advantage over others in the long run. Shopping online especially in customer to customer markets have brought about various possibilities which were earlier not possible but however, this concept has led to the arising of possibilities of fraud and privacy conflicts and other risks which are perceived by the customers.
III. RESEARCH METHODOLOGY

The research relies mainly on primary data and offers thorough and accurate answers to the research questions.

A. Objective of the Study

1) To find the difference in correlation between risk perception and purchase intention based on Gender groups in c2c e-commerce.

2) To understand the impact of perceived risks on purchase intention based on gender groups in c2c e-commerce.

B. Hypothesis

1) $H_0$: There is no difference in correlation between risk perception and purchase intention based on gender groups in c2c e-commerce.

2) $H_1$: There is a difference in correlation between risk perceptions and purchase intention based on gender groups in c2c e-commerce.

3) $H_0$: There is no impact of perceived risks on purchase intention based on gender groups in c2c e-commerce.

4) $H_1$: There is a significant impact of perceived risks on purchase intention between gender groups in c2c e-commerce.

C. Date Collection Methods

The data used in this study is primary data. The data has been sourced from questionnaires distributed virtually to people around Bangalore, including students and employees.

D. Tools used for the Study

The tools used for the study include crosstabs, descriptives, Correlation and regression.

IV. DATA ANALYSIS

Select your Gender:

|        | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------|-----------|---------|---------------|--------------------|
| Valid  |           |         |               |                    |
| male   | 145       | 71.1    | 71.1          | 71.1               |
| female | 59        | 28.9    | 28.9          | 100.0              |
| Total  | 204       | 100.0   | 100.0         |                    |

We surveyed a total of 204 people, dividing the demographics into 71.1% men and 28.9% Women. The graph representing the male population in blue and the women population in green.
The Cronbach’s Alpha value for the questionnaire is between .6 and .7 which means that the internal consistency is around good, making it reliable.

**How likely people think that they would buy from a c2c ecommerce platform**

| Select your Gender | very unlikely | unlikely | neutral | likely | very likely | Total |
|--------------------|---------------|----------|---------|-------|-------------|-------|
| male               | 18            | 27       | 26      | 41    | 33          | 145   |
| female             | 7             | 23       | 12      | 5     | 12          | 59    |
| Total              | 25            | 50       | 38      | 46    | 45          | 204   |

**How likely people think that there will be failure in delivery after payment?**

| Select your Gender | very unlikely | unlikely | neutral | Likely | very likely | Total |
|--------------------|---------------|----------|---------|-------|-------------|-------|
| male               | 27            | 42       | 36      | 29    | 11          | 145   |
| female             | 11            | 10       | 17      | 18    | 3           | 59    |
| Total              | 38            | 52       | 53      | 47    | 14          | 204   |

**How likely people think that their credit card number may be stolen when making a transaction**

| Select your Gender | very unlikely | unlikely | neutral | Likely | very likely | Total |
|--------------------|---------------|----------|---------|-------|-------------|-------|
| male               | 21            | 45       | 34      | 36    | 9           | 145   |
| female             | 9             | 13       | 11      | 16    | 10          | 59    |
| Total              | 30            | 58       | 45      | 52    | 19          | 204   |

**How likely people think that they would choose a poor product/service in regards to a C2C Platform.**

| Select your Gender | very unlikely | unlikely | neutral | Likely | very likely | Total |
|--------------------|---------------|----------|---------|-------|-------------|-------|
| male               | 27            | 45       | 36      | 32    | 5           | 145   |
| female             | 11            | 7        | 17      | 21    | 3           | 59    |
| Total              | 38            | 52       | 53      | 53    | 8           | 204   |
### Correlations

#### Men

|purchaseintention| Pearson Correlation| Purchase intention| perceivedrisk|
|------------------|---------------------|--------------------|--------------|
| Sig. (2-tailed)  | - .342 **           | .001               |              |
| N                | 145                 | 145                |              |

|perceivedrisk| Pearson Correlation| Purchase intention| perceivedrisk|
|--------------|---------------------|--------------------|--------------|
| Sig. (2-tailed)| -.418 ** | 1                |              |
| N            | 145                 | 145                |              |

#### Women

|purchaseintention| Pearson Correlation| Purchase intention| perceivedrisk|
|------------------|---------------------|--------------------|--------------|
| Sig. (2-tailed)  | -.331 **           | .001               |              |
| N                | 145                 | 145                |              |

|perceivedrisk| Pearson Correlation| Purchase intention| perceivedrisk|
|--------------|---------------------|--------------------|--------------|
| Sig. (2-tailed)| -.311 ** | 1            |              |
| N            | 145                 | 145                |              |

### Correlations Men

|purchaseintention| Pearson Correlation| netstore| delivery| product|
|------------------|---------------------|---------|---------|--------|
| Sig. (2-tailed)  | - .342 **           | -.380 **| -.394 **|        |
| N                | 145                 | 145     | 145     |        |

### Correlations Women

|purchaseintention| Pearson Correlation| netstore| delivery| Product|
|------------------|---------------------|---------|---------|--------|
| Sig. (2-tailed)  | - .311 **           | -.252 **| -.303 **|        |
| N                | 145                 | 145     | 145     |        |
A. Regression Men

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|------------------|--------------------------|
| 1     | .418 | .175    | .169             | .60298                  |

. Predictors: (Constant), perceived risks

ANOVA²

| Model | Sum of Squares | df | Mean Square | F | Sig.  |
|-------|----------------|----|-------------|---|-------|
| 1     | 11.026         | 1  | 11.026      | 30.326 | .001*  |
| Residual | 51.993    | 143| .364        |    |       |
| Total  | 63.019         | 144|             |    |       |

a. Dependent Variable: purchase intention
b. Predictors: (Constant), perceived risks

You can see from our value of 0.175 that our independent variables explain 17.5% of the variability of our dependent variable

The table shows that the independent variables statistically significantly predict the dependent variable, $F(1, 143) = 30.326, p < .05$ (i.e., the regression model is a good fit of the data).

Coefficients²

| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|-------|-----------------------------|---------------------------|---|------|
| 1     | (Constant)                  | 3.980                     | .161| 24.730 | .001 |
|       | perceived risk             | -.311                     | -.418 | -5.507 | .001 |

a. Dependent Variable: purchase intention

Equation to predict purchase intention from the three risks is

$$3.980 - (.311 \times \text{perceived risk})$$

B. Regression Women

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|------------------|--------------------------|
| 1     | .261 | .068    | .052             | .53573                   |

a. Predictors: (Constant), perceived risks

You can see from our value of 0.068 that our independent variables explain 6.8% of the variability of our dependent variable

ANOVA²

| Model | Sum of Squares | df | Mean Square | F | Sig.  |
|-------|----------------|----|-------------|---|-------|
| 1     | 1.200          | 1  | 1.200       | 4.181 | .046*  |
| Residual | 16.359    | 57 | .287        |    |       |
| Total  | 17.559         | 58 |             |    |       |

a. Dependent Variable: purchase intention
b. Predictors: (Constant), perceived risks

The table shows that the independent variables statistically significantly predict the dependent variable, $F(1, 57) = 4.181, p < .05$ (i.e., the regression model is a good fit of the data).
Coefficients

| Model            | Unstandardized Coefficients | Standardized Coefficients | 95.0% Confidence Interval for B |
|------------------|-----------------------------|---------------------------|--------------------------------|
|                  | B                           | Std. Error                | Beta                          | t     | Sig. | Lower Bound | Upper Bound |
| (Constant)       | 3.368                       | .253                      |                               | 13.290| .001 | 2.861       | 3.876       |
| perceived risks  | -.169                       | .082                      | -.261                         | -2.045| .046 | -.334       | -.003       |

a. Dependent Variable: purchase intention

The equation to predict purchase intention from the three risks is

\[ 3.368 - (.169 \times \text{perceived risk}) \]

V. FINDINGS OF THE STUDY

A. Correlation

The correlation coefficient between the perceived risks and the purchasing intention of men is -0.418 (P < 0.05), which shows a moderate negative correlation.
The correlation coefficient between the perceived risks and the purchasing intention of women is -0.331 (P < 0.05), which shows a moderate to low negative correlation.
The relationship is strongest between purchase intention and perceived risk of product in men whereas the relationship is weakest between purchase intention and perceived risk of net store.
The relationship is strongest between purchase intention and perceived risk of net store in women whereas the relationship is weakest between purchase intention and perceived risk of delivery.

B. Regression

The statistical Value of P is less than 0.05 and hence we can conclude that the regression analysis is statistically significant in the prediction of purchase intention. Hence we conclude that there is a statistically significant relationship between perceived risks and purchase intention in men.
The statistical Value of P is less than 0.05 and hence we can conclude that the regression analysis is statistically significant in the prediction of purchase intention. Hence we conclude that there is a statistically significant relationship between perceived risks and purchase intention in women.

VI. CONCLUSION

The present study has analyzed gender effect on customers’ perception towards online c2c shopping. The findings of the study have revealed differences in gender-wise significant risk perception towards product delivery in online shopping, Product and the Net store. Male respondents have shown more concern than female respondents towards the three perceived risks which influence their online shopping behavior.
Thus, findings of the study will help online retailers to better understand the psyche of male and female online shoppers and equip themselves to attract consumers towards online format. The marketers could introduce EMI facilities, insured and assured timely delivery to alleviate risk factors.
Actual cost of products including delivery service charges should be explicitly communicated to online shoppers to avoid later on misperception of any hidden charges. The findings of this study would help online retailers to design their offerings by including convenience and security concern of online shoppers. From the study we were able to achieve our objective and find out that there is a relationship between purchase intention and perceived risk while shopping in c2c e-commerce platforms. We were also able to find out the difference in the strength of the relationship between the various perceived risks and purchase intention and we were also able to differentiate the effects between men and women.
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