IMPACT OF RISK AND TRUST ON THE PURCHASE DECISION OF ONLINE SHOPPING CUSTOMERS- A STUDY WITH REFERENCE TO CHENNAI CITY

K R Abarna\textsuperscript{A}, V Vijayalakshmi\textsuperscript{B}, V Andal\textsuperscript{C}

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\begin{tabular}{|l|}
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\textbf{ABSTRACT} \\
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\textbf{Purpose:} The main aim and purpose of this paper is to the intrinsic relationship among risk, trust and purchase decision of online shopping customers and to validate the constructs of risk and trust in the study area of Chennai city. \\
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\textbf{Theoretical Framework:} The whole theory of this research leans upon the consumers' perceptions of risk and trust in online purchases arise from the need for the product and purchase convenience. The technology readiness in online transactions motivates the online shopping consumers to take their purchase decision amid risk and Trust. \\
\hline
\textbf{Design/Methodology/Approach:} The well-structured questionnaire is circulated among 750 respondents, 50 each in all the 15 zones of Chennai city and able to receive usable 511 responses. The data was investigated through statistical tools, correlation analysis, Cronbach alpha method, confirmatory factor analysis and structural equation model (SEM). \\
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\textbf{Findings:} It is found that the purchase decision of online consumers depends upon their optimistic purchase attitude towards online shopping, the risk involved in online shopping and customer trust in online shopping. \\
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\textbf{Research Practical and Social Implications:} This present research revealed a practical research along with social implications namely both state and central governments in India should form strategies to assure security to online shopping and even encourage even the unorganized sector to involve in online shopping. \\
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\textbf{Originality/Value:} The originality of this research is the development and test of three hypotheses pertaining to the relationship among three marketing entities in perceived of consumers, trust of consumers and their purchase decision. The relationship has the empirical proof to emphasize their value. \\
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IMPACTO DO RISCO E CONFIANÇA NA DECISÃO DE COMPRA DE CLIENTES DE COMPRAS ONLINE- UM ESTUDO COM REFERÊNCIA À CIDADE DE CHENNAI

RESUMO

\textbf{Objetivo:} O principal objetivo e propósito deste artigo é a relação intrínseca entre risco, confiança e decisão de compra de clientes de compras online e validar os construtos de risco e confiança na área de estudo da cidade de Chennai.

\textsuperscript{A} Research Scholar, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu, India-600117. E-mail: abarnaravi1991@gmail.com Orcid: https://orcid.org/0000-0002-9206-8795

\textsuperscript{B} Research Supervisor & Guide, Department of Commerce, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu, India-600117. E-mail: vijayalakshmi.vels@gmail.com Orcid: https://orcid.org/0000-0002-0576-2288

\textsuperscript{C} Assistant professor & Research Co-Guide, Corresponding Author, Department of Commerce, Vels Institute of Science, Technology and Advanced Studies (VISTAS), Pallavaram, Chennai, Tamil Nadu, India-600117. E-mail: andalgokul79@gmail.com Orcid: https://orcid.org/0000-0001-6234-8481
Referencial Teórico: Toda a teoria desta pesquisa se apóia na percepção dos consumidores de risco e confiança nas transações online decorrente da necessidade do produto e conveniência de compra. A prontidão da tecnologia nas transações online motiva o consumidor de compras online a tomar sua decisão de compra em meio ao risco e à confiança.

Desenho/Metodologia/Abordagem: O questionário bem estruturado é distribuído entre 750 respondentes, 50 cada em todas as 15 zonas da cidade de Chennai e capaz de receber 511 respostas utilizáveis. Os dados foram investigados por meio de ferramentas estatísticas, análise de correlação, método alfa de Cronbach, análise fatorial confirmatória e modelo de equação estrutural (SEM).

Resultados: Verificou-se que a decisão de compra dos consumidores online depende de sua atitude de compra otimista em relação às compras online, o risco envolvido nas compras online e a confiança do cliente nas compras online.

Implicações práticas e sociais da pesquisa: A presente pesquisa revelou uma pesquisa prática com implicações sociais, ou seja, os governos estaduais e centrais da Índia devem formar estratégias para garantir a segurança das compras online e até mesmo incentivar o setor desorganizado a se envolver em compras online.

Originalidade/Valor: A originalidade desta pesquisa é o desenvolvimento e teste de três hipóteses pertinentes ao relacionamento entre três entidades de marketing na percepção dos consumidores, confiança dos consumidores e sua decisão de compra. A relação tem a prova empírica para enfatizar seu valor.

Palavras-chave: Atitude de Compra, Decisão de Compra, Risco, Confiança do Cliente.

IMPACTO DEL RIESGO Y LA CONFIANZA EN LA DECISIÓN DE COMPRA DE LOS CLIENTES QUE COMPRAN EN LÍNEA: UN ESTUDIO CON REFERENCIA A LA CIUDAD DE CHENNAI

RESUMEN

Propósito: El principal objetivo y propósito de este documento es la relación intrínseca entre el riesgo, la confianza y la decisión de compra de los clientes que compran en línea y validar los constructos de riesgo y confianza en el área de estudio de la ciudad de Chennai.

Marco teórico: Toda la teoría de esta investigación se apoya en las percepciones de los consumidores sobre el riesgo y la confianza en las compras en línea que surgen de la necesidad del producto y la conveniencia de la compra. La preparación tecnológica en las transacciones en línea motiva a los consumidores de compras en línea a tomar su decisión de compra en medio del riesgo y la confianza.

Diseño/Metodología/Enfoque: El cuestionario bien estructurado se distribuye entre 750 encuestados, 50 de cada uno en las 15 zonas de la ciudad de Chennai y puede recibir 511 respuestas utilizables. Los datos fueron investigados a través de herramientas estadísticas, análisis de correlación, método alfa de Cronbach, análisis factorial confirmatorio y modelo de ecuaciones estructurales (SEM).

Hallazgos: Se encuentra que la decisión de compra de los consumidores en línea depende de su actitud de compra optimista hacia las compras en línea, el riesgo involucrado en las compras en línea y la confianza del cliente en las compras en línea.

Implicaciones prácticas y sociales de la investigación: esta investigación actual reveló una investigación práctica junto con las implicaciones sociales, es decir, los gobiernos estatales y centrales de la India deberían formar estrategias para garantizar la seguridad de las compras en línea e incluso alentar incluso al sector no organizado a participar en las compras en línea.

Originalidad/Valor: La originalidad de esta investigación es el desarrollo y prueba de tres hipótesis relacionadas con la relación entre tres entidades de marketing en lo que perciben los consumidores, la confianza de los consumidores y su decisión de compra. La relación tiene la prueba empírica para enfatizar su valor.

Palabras clave: Actitud de Compra, Decisión de Compra, Riesgo, Confianza del Cliente.

INTRODUCTION

The liberalized economic scenario in India motivates retail and domestic consumers to embrace technology, particularly the Internet for their all commercial transactions of purchasing and selling. The reputation of online retail activity is at its peak. (Von Abrams, 2010). However, in India, the transition from traditional offline shopping to online shopping is
less and their attempt to take up online transactions is much slower because of its mixed economy and population comprising rural, semi-urban and urban geographical bases. (Nasco et al., 2008). Considering the usage of online and the internet in western countries and the USA there are limited growth in India particularly in business-to-consumer (B2C) transactions (Rohm et al., 2004). It implies that online shopping and e-commerce in India are in a buoyant state and demand wide-scale research on consumer behaviour towards online shopping and factors hindering the popularity of e-commerce and making customers have the hesitation of venturing online shopping. (Nasco et al., 2008).

(i) The main aim of this research is to test all three hypotheses of the research
(ii) and also to validate the constructs of the attitude of consumers towards online shopping,
(iii) The risk involved in online shopping and customer trust in online shopping respectively.

The study is justified on the existing relationship between risk and trust on the online purchase decision of consumers. The consumers' perceptions of risk and trust in online purchases arise from the need for the product and purchase convenience. The technology readiness in online transactions motivates e-commerce development (Donoso and Crittenden, 2008). As far as the Global Competitive Index on the popularity of online shopping is concerned India ranked 73rd position, the attitude of consumers’ intentions to adopt online purchasing depends on their depth of trust, confidence and convenience. (Taylor and Strutton, 2010). However, the popularity of online shopping in the rural areas of India is still in the budding stage but urban areas like Chennai city standing testimony to the popularity of online shopping on par with western countries. E-commerce adoption in developing is useful for their national development in the form of creating job opportunities, buying capacity and the influence of cultural dimensions (Grandón et al., 2010). Therefore the present study is justified in the current context of determining the role of risk and customer trust in the purchase decision of online consumers.

The present study is leaning upon the main hindrance to consumers' smooth purchase online is their perceptions of risk and trust involved in every online purchase. Online vendors considered that risk and trust factors are important and need to be addressed as a vital component of their marketing strategy. (Urban et al., 2009). These strategies motivate them to improve the levels of their online transactions. Ethnicity and culture are also very important for the continuous usage of online shopping, the consumer-centric focus towards online shopping
and cultural dimensions compel the consumers to think about the risk and trust involved in online shopping. (Greenberg et al., 2008). The new communication technologies create more awareness of the risk and trust involved in online shopping. (Maldifassiand Canessa, 2010). In this background of the study the researcher is able to estimate the influence of risk and trust on purchase decision of online consumers.

LITERATURE REVIEW

Cheung and Lee, (2001) proved that “the attitude of the customers towards the perceived risk identified that trust is an important component in creating confidence among the consumers. The attitude towards trust motivates consumers to venture into online shopping and gives them the confidence to comfortably share their personal information during online purchases”.

McKnight et al., (2002) innovatively observed that “most of the consumer purchase attitude is influenced by the Web vendor advice. The adoption of essential purchases and the widespread popularity of e-commerce are related to each other significantly. The research also found that an understanding of the influence of risk is significant to all successful online consumers. Customer trust attitude is a multidimensional perception of transaction components namely product, quality, price and safe transactions”.

Bourlakis et al., (2008) argued that “consumers are inclined to purchase products online when the transactions are with minimum risk. They perceived that Internet usage for online shopping is risky. Moreover, these perceived ideas of consumers are inversely related to the attitudes towards risk involved in online shopping. The purchase intentions of customers rapidly increased due to the convenience of online shopping.”

Hypothesis 1: The positive Consumer attitude is important for online purchase intention among customers.

McCole et al. (2010) argued that the “online environment experienced by consumers is entirely based on their trust as well as the technology involved in online shopping. Consumers are willing to take on the various tasks involved in information searching and purchasing the products. It is also found that the risk involved in online shopping is consistently creating a negative impact on online shopping”.

Kim et al., (2008) meticulously identified “the three types of risks namely financial risk; product risk and time/convenience risk are always with all online shopping. These risks also create a negative influence on consumers' perception towards online shopping. The author also
estimated the frequency of the influence of perceived risk on frequent online purchasers”. Hence this leads to the hypothesis

_Hypothesis 2: There is a negative relationship between Perceived online risk and consumer attitude towards online purchasing_

Urban et al., (2009) argued that “customer trust depends upon the dimensions of online purchase namely product quality, price, vendor reputation and quick delivery. The reputation of the companies of the product and quick delivery reduces the risk perception of customers and increased the trust in online shopping. Customers always demand the existence of trustworthiness in the domain of online shopping”.

Wu et al. (2010) argued that “consumers always place trust in the company's reputation and smooth online transactions. The timely delivery without delay from the vendors and also safe money transactions were found to influence the customer attitude towards online purchases. It is also found that the vendor's customer relationship positively influences the attitude towards online purchasing”. This leads to the hypothesis

_Hypothesis 3: There is a positive influence of customer trust on the customer attitudes towards online purchasing._

**MATERIAL AND METHODOLOGY**

The convenience sampling method is found suitable to collect the responses from all 15 zones of Chennai city. The researcher visited all fifteen zones in person and met the respondents who made at least 12 online shopping in a year. After getting that information, they were selected to give responses to the questionnaire framed by the researcher as the research instrument. The respondents are requested to express their opinion freely, rationally, and transparently regarding their perception of online shopping. To get the appropriate responses, the researcher developed a research instrument in the form of a questionnaire. The research instrument comprises five parts namely demographic and online purchase details of the customer in part 1 and the other four parts are respectively statements about purchase attitude towards online shopping, Risk involved in online shopping, customer trust in online shopping and purchase decision of online customers.

The 5 statements of consumer attitude towards online shopping were developed from the scales adopted by (Oliver and Beach 1985) with slight modification concerning the Chennai ethnic condition. These 5 statements are Likert's five-point scale with the numerical coding 1-strongly disagrees and 5-disagree. The risk involved in online shopping statements is adopted
from Andrew et.al (2007). It also consists of five statements in Likert's five-point scale like consumer attitude. Customer trust in online shopping statements is adopted from (Cheng and Lee 2001) in Likert’s five-point scale. The purchase decision five statements obtained from () the required scale.

After framing the questionnaire both pre-test and pilot study was conducted. The pretesting is done with 30 respondents through convenience sampling method two each from all the fifteen zones in Chennai city. All these respondents in the pretesting stage are well accessible for frequent online purchases. After identifying that they can understand all the statements and questions in the questionnaire. Similarly, a convenience sampling method is applied for the pilot study also to get the 110 responses from the 15 zones of Chennai city. Cronbach alpha method is applied for the statements of purchase attitude towards online shopping, Risk involved in online shopping, customer trust in online shopping and purchase decision of online customers to check the sufficient reliability.

The well-structured questionnaire is circulated among 750 respondents, 50 each in all the 15 zones of Chennai city and able to receive usable 511 responses. After getting these responses they are systematically entered and numerically coded for further analysis. After their coding, they are analyzed and thoroughly investigated through the statistical tools, correlation analysis, Cronbach alpha method, confirmatory factor analysis and structural equation model (SEM) using SPSS 23 version and AMOS 18 statistical software.

RESULTS AND DISCUSSION

At the point of inception, the reliability test using Cronbach’s alpha is conducted to test the reliability of the statements in Likert’s five-point scale for purchase attitude towards online shopping, the risk involved in online shopping, customer trust in online shopping and purchase decision of online customers. The following table indicated the reliability co-efficient value

<table>
<thead>
<tr>
<th>Factors</th>
<th>Cronbach alpha value</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer attitude</td>
<td>0.796</td>
<td>0.75</td>
</tr>
<tr>
<td>Risk</td>
<td>0.845</td>
<td>0.75</td>
</tr>
<tr>
<td>Customer trust</td>
<td>0.811</td>
<td>0.75</td>
</tr>
<tr>
<td>Purchase decision</td>
<td>0.785</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Source: Prepared by authors (2022)

From the above table, it is ascertained that all the Cronbach alpha values for purchase attitude towards online shopping, Risk involved in online shopping, customer trust in online shopping, and purchase decision of online customers are reliable.
shopping and purchase decision of online customers are greater than the required benchmark values of 0.75, which implies all the statements are well understood by the online shopping consumers so that they can give a fair and rational opinion on the online shopping components purchase attitude, risk, customer trust and purchase decision of online customers.

In the second stage, the 5 variables each under purchase attitude, risk, and customer trust and purchase decision of online customers must be confirmed through confirmatory factor analysis. In this analysis, all these underlying variables of purchase attitude, risk, and customer trust and purchase decision of online customers the variables must fit the required important 6 fit indices to confirm their explanatory power for the factors they represent. The application of confirmatory factor analysis over the factors of purchase attitude, risk, and customer trust and purchase decision of online customers brought the following fit indices in the table.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>Fit indices</th>
<th>Values</th>
<th>Benchmark values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Customer attitude</td>
<td>Chi-square</td>
<td>10.247</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-value</td>
<td>0.392</td>
<td>&gt;.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goodness of fit index (GFI)</td>
<td>0.964</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparative fit index (CFI)</td>
<td>0.963</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normed fit index (NFI)</td>
<td>0.961</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.08</td>
<td>&lt;=0.08</td>
<td></td>
</tr>
<tr>
<td>2. Risk</td>
<td>Chi-square</td>
<td>11.258</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-value</td>
<td>0.512</td>
<td>&gt;.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goodness of fit index (GFI)</td>
<td>0.975</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparative fit index (CFI)</td>
<td>0.972</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normed fit index (NFI)</td>
<td>0.970</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.07</td>
<td>&lt;=0.08</td>
<td></td>
</tr>
<tr>
<td>3. Customer trust</td>
<td>Chi-square</td>
<td>9.995</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-value</td>
<td>0.442</td>
<td>&gt;.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goodness of fit index (GFI)</td>
<td>0.982</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparative fit index (CFI)</td>
<td>0.981</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normed fit index (NFI)</td>
<td>0.979</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.07</td>
<td>&lt;=0.08</td>
<td></td>
</tr>
<tr>
<td>4. Purchase decision</td>
<td>Chi-square</td>
<td>10.873</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-value</td>
<td>0.375</td>
<td>&gt;.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goodness of fit index (GFI)</td>
<td>0.977</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparative fit index (CFI)</td>
<td>0.975</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normed fit index (NFI)</td>
<td>0.972</td>
<td>&gt;.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.08</td>
<td>&lt;=0.08</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by authors (2022)
The above table indicated that all the variables of the four factors purchase attitude, risk, customer trust and purchase decision of online customers perfectly represent the factors with high variance. All 6 fit indices perfectly satisfy the required benchmark values. It also validates the representation of the variables for all four factors considered in this research.

In the third stage, the hypotheses testing is carried out using the linear multiple regression analysis. In testing hypotheses 1, 2, 3 and 4, the four linear multiple regression analyses derived the F-values, beta values and t-values are statistically significant at a 5 percent level.

<table>
<thead>
<tr>
<th>Factors</th>
<th>R-square</th>
<th>F-value</th>
<th>Beta</th>
<th>T-Value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer attitude</td>
<td>0.301</td>
<td>3.478</td>
<td>0.114</td>
<td>3.028</td>
<td>0.000</td>
</tr>
<tr>
<td>Risk</td>
<td>0.314</td>
<td>4.018</td>
<td>-0.112</td>
<td>-3.298</td>
<td>0.000</td>
</tr>
<tr>
<td>Customer trust</td>
<td>0.333</td>
<td>3.981</td>
<td>0.148</td>
<td>3.117</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Prepared by authors (2022)

In all three regression analyses, the R-square values are greater than the required variance .30 and the beta value for risk is negative which indicated that the risk in online shopping negatively influences the purchase decision of online consumers. This implies that all the hypotheses are supported and the relationships proposed are accepted. The consumer attitude towards online shopping positively influences the purchase decision of online consumers and the risk involved in online shopping negatively influences the purchase decision and customer trust positively influences the purchase decision of online consumers.

**CONCLUSION**

The purchase decision of online consumers depends upon their optimistic purchase attitude towards online shopping, the risk involved in online shopping and customer trust in online shopping. Customer trust in the product attribute, company reputation and safe online shopping transactions motivate customers to take their purchase decision in the name of e-commerce.

The optimistic attitude among online consumers can be developed only through their frequency of online purchases and customer relationships maintained by online vendors. The optimistic attitude is further developed by the customer's perception of risk-free online shopping. Customer trust in online shopping is positively related to the frequency of online shopping as well as the risk-free shopping encouraged by the vendors involved in the online
market. Customer belief and trust remove all the hindrances and barriers for the customers and they feel very convenient online shopping.

It is suggested that both state and central governments in India should form strategies to assure security to online shopping and even encourage even the unorganized sector to involve in online shopping. The study suggested that customers expect risk-free transactions and convenience in their online shopping. So vendors have to ensure reasonable price of the product, quality and quick delivery in their successful business ventures over the customers. The study is conducted in the narrow geographical base of Chennai city and samples are limited to these areas alone. It does not cover even rural and semi-urban areas of the state or a country. Online purchase behaviour consists of several companies whereas the present study focuses only on the influence of risk and customer trust on the attitude and purchase decision. As far as future research is concerned, dynamic researchers can focus on the role of CRM quality and price in changing the purchase behaviour of online consumers. Similarly, a separate study can be focused on determining the influence of demographic variables on the antecedents of purchase behaviour of online consumers.

REFERENCES


