



**Gujarat
Technological
University**

Proceedings of GTU – CGS & CME
4th International Conference
on

Governance in E-commerce: Contemporary Issues & Challenges

Ahmedabad, 02-03 September 2016

Editors:

Dr. Ritesh K. Patel

Dr. Krishnaba A. Vaghela

Dr. Viral G. Bhatt

Prof. Bharat C. Dalal



Jointly Organised By:

Centre for Governance Systems (CGS)
& Centre for Marketing Excellence (CME)

A Post-Graduate Research Centres at
Gujarat Technological University
Chandkheda Campus, Ahmedabad (India)

Proceedings of GTU – CGS & CME
4th International Conference
on
**Governance in E-commerce:
Contemporary Issues & Challenges**

Ahmedabad, 02-03 September 2016

Editors:

Dr. Ritesh K. Patel

Dr. Krishnaba A. Vaghela

Dr. Viral G. Bhatt

Prof. Bharat C. Dalal



ESTD-2007

**Gujarat
Technological
University**

Jointly Organised By:

Centre for Governance Systems (CGS)
& Centre for Marketing Excellence (CME)
A Post-Graduate Research Centres at
Gujarat Technological University
Chandkheda Campus, Ahmedabad (India)

“Proceedings of GTU – CGS & CME 4th International Conference on Governance in E-commerce: Contemporary Issues & Challenges”

Published in India in 2016 jointly by:

Centre for Governance Systems (CGS) & Centre for Marketing Excellence (CME): A Post-Graduate Research Centres at Gujarat Technological University, Chandkheda Campus, Ahmedabad (India).

Copyright © Gujarat Technological University (GTU), Ahmedabad (India), Year 2016.

All rights reserved. No part of this publication may be reproduced, transmitted, or stored in a retrieval system, in any form or by any means, without permission in writing form the publisher.

Disclaimer :

The views mentioned in research papers in the proceedings of 4th International Conference on Governance in E-commerce: Contemporary Issues & Challenges, are personal views of respective author(s) and editors of this book directly or indirectly does not have any personal views related to any of the person(s) or organization(s) mentioned in these research papers. Editors have considered the reports of review committee members for selecting the suitable research papers for the publication in the proceedings book. Respective author(s) of the research papers have declared in writing, that this is their original work and any issues related to plagiarism will be their sole responsibility. Editors of the book or the university does not hold any responsibility related to plagiarism and the content mentioned in the research papers are the sole creation of respective author(s).



₹ 600/-

Printed By

Asian Printery

Raipur, Ahmedabad –380001, Gujarat, India.

Ph.: 079-22148826 | Email : asianprintery@yahoo.com

Website : www.asianprintery.com



**Gujarat
Technological
University**

GUJARAT TECHNOLOGICAL UNIVERSITY
Chandkheda Campus, Ahmedabad.
Sabarmati-Koba Highway, Nr. Visat Three Roads,
In campus of Vishwakarma Government Engineering College,
Chandkheda, Ahmedabad – 382424, Gujarat, India.
(O.) +91-079-23267500, (F.) +91-079-23267580,
(E.) info@gtu.ac.in, (W.) <http://www.gtu.ac.in>



Vijay Rupani

Chief Minister, Gujarat State

Dt. 30-08-2016

Message

Technology today means modern and scientific gadgets and equipments being utilized for better life and to keep up in the race of development. Technology has its roots in the aboriginal inventions which have evolved over the years and have covered almost all the fields in contemporary times. Today technology has made way in major sectors as well as day to day life.

I am much pleased to learn that The GTU – Center for Governance System (CGS) & centre for Marketing Excellence (CME) is Organizing 4th International Conference on Governance in E – Commerce: Contemporary issues & Challenges “ on 2nd and 3rd September 2016 at University Campus in Chandkheda. My heartiest best wishes to the organizers and all the participants for a successful event and also to the Conference Proceeding Book being published on the eve of the event.


(Vijay Rupani)

To,
Dr. J. C. Lilani, I/C Registrar,
Gujarat Technological University,
Nr. Vishwakarma Government Engineering College,
Nr. Visat Three Roads,
Visat – Gandhinagar Highway, Chandkheda,
Ahmedabad – 382424.
Email: info@gtu.in
registrar@gtu.ac.in



FOREWORD

Dr. Rajul K. Gajjar,
Vice Chancellor,
Gujarat Technological University.

India is a shopper's paradise now, albeit, online. Armed with smart gadgets and aided by declining broadband subscription and 4G services, consumers have become the driving force of e-Commerce in the country. From buying groceries to furniture, movie tickets, trains tickets to steel, coal and tea, e-Commerce has empowered the consumers. With digital devices and social media, online sellers are getting unprecedented opportunity for growth and have thus become continuously more attractive for investors. B2B e-Commerce has brought in efficiency, convenience, choice, reach and lower transactional cost for buyers. With the launch of Digital India and Make in India, the Government of India has been active in bringing out solutions that will help SMEs. The technology centric framework by the Government will provide cloud based platforms for SMEs. The introduction of GST (Goods and Services Tax) will bring in much awaited relief for the e-Commerce sector¹.

India is already the second-largest Internet market globally in terms of users. "We expect Internet penetration to increase from 32% in 2015 to 59% in 2020, translating to a near-doubling of the Internet user base," says Morgan Stanley. It estimates India will have almost 320 million online shoppers by 2020 compared with 50 million in 2015. At \$13.8 billion, the GMV of the top three ecommerce companies exceeded that of the top 10 offline retailers at \$12.6 billion in 2015.

In line with the above facts and situations prevailing in Indian electronic commerce industry, government policies and frameworks developed for traditional business models, need to be revised to match the online commerce business models. Hence, it was a need of the hour to organize a conference on Governance, Policies and Frameworks of Electronic Commerce Business Models. At GTU, we have taken up an initiative to invite researchers, academicians, industry executives, and policy makers to join us on a common platform to discuss the issues in this emerging industry in Indian markets and overseas. The 4th International Conference on Governance Systems (ICGS-2016) - "Governance in E-commerce: Contemporary issues & Challenges" is jointly organized by Centre for Governance Systems (CGS) & Centre for Marketing Excellence (CME) at Gujarat Technological University, Ahmedabad during 2-3 September, 2016. This volume covers a wide range of issues and strategies relating to the governance in e-commerce and we hope it will prove to be useful to the researchers, academicians, businesses, industries, government and nongovernment organizations. I congratulate the authors who contributed their papers and to the organizing committee members for the efforts they have put together for this conference.

¹CII (April, 2016), " e-Commerce in India A Game Changer for the Economy ", accessed online from: <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-e-commerce-in-india-noexp.pdf>



MESSAGE

Prof. Bharat C. Dalal
Honorary Director,
Centre for Governance Systems,
Gujarat Technological University.

100 BILLION E COMMERCE MARKET in INDIA.by 2020A REALITY

Gujarat Technological University , popularly known GTU has been always forward looking for initiatives in Business & Technology by organizing Innovative Programs and Conferences on Real Time Basis. The International Conference on E-Commerce is a step in this direction . E Commerce is growing tremendously every year at least by Fifty to Sixty percent. In the year 2015, consumers in India purchased Twenty Billion dollars products. It is estimated that 300 million customers are buying Online from three major E-Commerce players, namely, FLIPKART, Snapdeal, Amazon and others. More than 300,000 sellers are selling their products on E Commerce platform. There is a serious competition among all major players. AMAZON with almost same value of over ten billion dollars as of FLIPKART and Snapdeal with seven billion dollars make up almost eighty percent of the market. More than few thousand products are purchased on E-Commerce platform, a revolutionary Distribution Channel with huge potential , real time and to some extent interactive. The consumer is empowered by vital relevant information of the products, price, product specifications and competitors. The present Conference would explore Opportunities, Problems and Governance Issues of safety of money, delivery and frauds of quality. More than hundred Researchers would be presenting their research papers from large number of Universities and Management Institutes from India. Several distinguished. Speakers from E-Commerce companies and Management Thinkers would be addressing the Conference. Hundreds of students from GTU Colleges and Faculty would be benefiting from this Conference proceedings.

26th August, 2016
Ahmedabad

Preface

The e-commerce sector has seen unprecedented growth in the last three years. This was driven by rapid technology adoption led by the increasing use of devices such as smartphones and tablets, and access to the internet through broadband, 4G, etc, which led to an increased online consumer base. Additionally, favoured demographics and a growing internet user base helped aid this growth. In terms of highlights, the growth shown by local players such as Flipkart and Snapdeal and the huge investor interest around these companies displayed the immense potential of the market.

With the entry of e-Commerce behemoths such as Amazon and Alibaba, the competition is expected to further intensify. Both of these international players come with deep pockets and the patience to drive the Indian e-Commerce market. Additionally, their strong domain knowledge and best practices from their international experience give them an additional edge. Additionally, these companies have been part of markets where they have seen the e-Commerce market evolve and are aware of the challenges and strategies to address issues thereof.

Indian companies realise this, and are therefore aiming to continue their focus on expanding sellers and selection on their platforms, innovating on multiple customer touch points, and providing seamless and rapid delivery services in order to compete with the international entities. Competition is expected to continue, with these e-Commerce companies experimenting with different ways to attract customers and increase online traffic.

The Indian government's ambitious Digital India project and the modernisation of India Post will also affect the e-Commerce sector. The Digital India project aims to offer a one-stop shop for government services that will have the mobile phone as the backbone of its delivery mechanism. The programme will give a strong boost to the e-Commerce market as bringing the internet and broadband to remote corners of the country will give rise to an increase in trade and efficient warehousing and will also present a potentially huge market for goods to be sold. For India Post, the government is keen to develop its distribution channel and other e-Commerce related services as a major revenue model going ahead, especially when India Post transacted business worth 280 crore INR in the cash-on-delivery (CoD) segment for firms such as Flipkart, Snapdeal and Amazon. Both these projects will have significant impact on increasing the reach of e-Commerce players to generally non-serviceable areas, thereby boosting growth.

India's overall retail opportunity is substantial, and coupled with a demographic dividend (young population, rising standards of living and upwardly mobile middle class) and rising internet penetration; strong growth in eCommerce is expected. From an investment perspective, the market is a primarily minority stake market, with maximum traction in early-stage deals. Such early stage funding will help companies develop a strong foundation to start from. With such strong market prospects and an equally upbeat investor community, we look forward to many more e-commerce companies from India entering the coveted billion-dollar club.

With this phenomenon growth in the online industry and e-commerce, the issues related to ideal governance have been raised. Recent mergers and acquisitions of Indian companies by foreign players along with tremendous mushrooming of many e-commerce companies in the recent times at an accelerated pace in this industry is also phasing an urgent need for the existence of a regulatory body; which can offer standard guidelines as well as works as a measuring unit and should be able to take corrective actions by the special powers vested within. The recent up gradations in the area of taxation in India by the introduction of GST also supports the need. Since this is a relatively new field and such issues being faced for the first time, the need is quite justified.

GTU – CGS & CME has jointly organised the 4th International conference on Governance in E-commerce: Contemporary Issues & Challenges during 02-03 September, 2016 and has received very warm response from the Institutes, Industries, NGOs, large number of students and researchers across various organizations. Great initiative taken by GTU for this series of conferences, which has been appreciated throughout the nation.

A reading of this book on “Proceedings of GTU – CGS & CME 4th International Conference on Governance in E-commerce: Contemporary Issues & Challenges [ISBN- 978-93-5258-984-5]” is expected to provide not only insightful summary of the work being done in this area, but more importantly, it would help generate new research directions in the same area.

Dr. Ritesh K. Patel

Dr. Krishnaba A. Vaghela

Dr. Viral G. Bhatt

Prof. Bharat C. Dalal

Acknowledgements

“Proceedings of GTU – CGS& CME 4th International Conference on Governance in E-commerce: Contemporary Issues & Challenges [ISBN- 978-93-5258-984-5]” is a select collection of contributions made by scholars and practitioners during Gujarat Technological University (GTU) – Centre for Governance Systems (CGS) & Centre for Marketing Excellence (CME), 4th International Conference on Governance Systems (ICGS-2016) organised during 02 – 03 September, 2016 at GTU Chandkheda campus, Ahmedabad. This title is the culmination of inputs of many people who have guided and executed our efforts in creating this compilation of contemporary research.

We seek to place on record our immense gratitude to our Chief Patron Dr.Rajul K. Gajjar, Hon. Vice Chancellor, GTU along with Patrons of the conference Dr. J. C. Lilani [I/C Registrar, GTU, Ahmedabad], Mr.Kaushal Mehta [CEO MOTIF India, Ahmedabad]. We also like to extend our gratitude to our convenors of the conference Dr. S O Junare [Registrar, Raksha Shakti University, Ahmedabad], Dr. Rajesh Khajuria [Director, SMJV's C K Shah Vijapurwala Institute Management, Vadodara], Dr.P.G.K.Murthy [Director, Parul Institute of Management and Research, Vadodara], Dr.JagdishJoshi [Director, SomLalit Institute Of Management, Ahmedabad] and Dr.Kaushal A. Bhatt [Assistant Professor, PG Research Centre for Global Business Studies, GTU] for their vital inputs since the inception of this conference idea. We also acknowledge the commendable contribution of our advisory committee members Guruji G. Narayana [Board Member, Centre for Business Ethics & CSR, GTU], Dr. Charles Savage [President & Mentor, Knowledge Era Enterprising International, Germany], Dr.SamoBobek [Professor of Business Information Systems, Faculty of Economics and Business, University Of Maribor, Slovenia], Dr.ShaileshThaker [Honorary Director, Center for Business Ethics and CSR, GTU], Dr.BhushanPunani [Director, Blind People Association, Ahmedabad], Prof. Joseph V. Carcello, [Corporate Governance Centre, University of Tennessee Knoxville], Mr. Sanjay B. Dalal [CEO - oGoing Inc., Irvine California, USA], Mr A Khandual [Ex General Manager, IDBI Bank], Shri D. P. Negi, [Director – HasmukhGoswami College of Engineering & Advisor (Strategic Planning), CEPT University and Advisor Gujarat Vidyapith], Dr.AlokChakrawal [Professor, Dept. of Commerce & Business Adm., Saurashtra University & Former Director of Inter Connected Stock Exchange, Mumbai], Dr.JayrajsinhJadeja [Dean – Faculty of Management, M S University, Baroda], and Dr. K. N. Sheth [Director, Adani Institute of Infrastructure Engineering, Ahmedabad]

Our heartfelt thanks are also indebted to the team of PG Research Centre for Governance Systems (CGS), MBA Section and All Assistant Professors, Research Associates and Research Assistants of various PG Research Centres at GTU, for their continuous efforts in marking this publication possible, right from inputs at the conference meetings to their contribution in reviewing the submissions and coordinating with the reviewers and authors. A special thanks is due to the remarkable efforts of Ms.Avani Mehta [Research Assistant, Centre for Governance Systems] along with Ms.Babita Gupta [Admin Assistant, GTU]]for coordinating all the interactions with the delegates of the conference and making all the necessary arrangements for them. We would heartily acknowledge the technical support from Ms. Rina Thakkar [Admin Assistant, GTU] and Mr. Rupendra Chourasiya [Programmer, GTU] for developing a holistic website of the conference <http://cgs.gtu.ac.in>.

This book would not have been possible without the research efforts of all the national and international scholars, academicians, practitioners and participants of the conference. It is their contribution that has resulted in this publication becoming possible. We are, hence indebted to them and place on record

our heartfelt gratitude for their outstanding intellectual contribution. We also thank the organizing committee members of ICGS-2016 for supporting this academic endeavour.

Our thanks are also due to Ms. Chitrani Parmar [Internal Auditor, GTU], Mr. M. N. Parmar [Chief Accounts Office, GTU], Mr. Anil Solanki [Head, Purchase Dept., GTU], Mr. Mohit Suthar [Officer, Purchase Dept., GTU] for their continuous secretarial and administrative support. A special is also due to Dr. Sarika Srivastava [Head, Conference Dept., GTU] and Mr. Bhavik Chauhan [Office, Conference Dept., GTU].

Special thanks are also indebted to the conference paper review committee members without whose support and meticulousness this book would not have been read for timely publication. Finally, our sincere thanks are due to our printer, Asian Printery, Raipur, Ahmedabad for timely publication of this book.

We owe a lot to our families, who have uncomplainingly accorded us the required time and absence from home to accomplish this significant academic task.

Last but not the least; we thank almighty who gave us potency to accomplish this book.

Dr. Ritesh K. Patel
Dr. Krishnaba A. Vaghela
Dr. Viral G. Bhatt
Prof. Bharat C. Dalal

August 26, 2016.

Ahmedabad.

Brief Profile of Editors



Dr. Ritesh K. Patel is currently working as Assistant Professor at Centre for Governance Systems (CGS) a PG Research Centre at Gujarat Technological University (GTU), Chandkheda, Ahmedabad. He has gained his MBA degree in Marketing from Hemchandracharya North Gujarat University, Patan and Ph.D. in the area of Marketing from Department of Management, Sardar Patel University, Anand. He has also cleared 'National Eligibility Test for Lectureship (UGC-NET)' in the subject of Management. He has sound academic experience of 6 years at Post

Graduate Level and 5 years Industry experience at Managerial level. Prior to joining GTU he worked as Academic Associate with Indian Institute of Management Ahmedabad (IIM-A); He has also worked as Assistant Professor at Institute of Law, Nirma University (NU) for a short stint. He started his academic career with Gandhinagar Institute of Technology (GIT), Gandhinagar. Prior to joining academics he worked as Branch Manager at nationalised financial services providers like Indiabulls Securities Ltd., and Angel Broking Ltd. He has presented several research papers in various national and international level conferences. He has published around 25 research papers in various referred journals of national and international repute. Based on his thesis he has published a book 'Brand Management in Retail Banking', with LAP LAMBERT Academic Publishing, Germany, ISBN: 978-3-659-27382-7, www.morebooks.de. He has also published a reference book on Research Methodology, ISBN: 978-93-80866-48-2 with Ahmedabad based publisher. His area of consulting and teaching are Branding, Online Retailing, Quantitative Techniques and Good Governance. He can be contacted on ap_cgs@gtu.edu.in, profriteshkpatel@gmail.com, +91-9687100199.



Dr. Krishnaba A. Vaghela is a Management post graduate; dual specialized in Marketing and finance & is a B.Sc. (IT) in Computers as well as bachelor in Law. She has a Doctoral degree from Saurashtra University, Rajkot. She holds a professional expansion over Academics & Co-ordination in the field of Management for the past six years, along with an Industry Exposure. She has two years of Experience with ceramic industry after post-graduation. For the last four years she is associated with

academics as assistant professor in management discipline. Her expertise includes teaching various subjects viz., Organizational Behaviour, Principle of Management, Sales and Distribution Management, Service Marketing, Business law, International Business, Environment for business, etc. To her credential, she has presented papers at national and international conferences and attended various Faculty Development Programs being organized by Management Institutions and other organizations. She is also heading Research project "Kotler's incubator for Ayurvedic Medicine" as assistant professor in center for Marketing Excellence (CME))at Gujarat Technological University (GTU). She is approachable on ap2_cme@gtu.edu.in, +91-.9687822802

Brief Profile of Editors



Dr. Viral G. Bhatt (Ph.D. MBA, M.Com (Gold Medalist), PGDHMM, B.Com) heads the SAL Institute of Management since the inception as a Director. A highly skilled, talented and qualified Director, with more than 18 years of experience in the Teaching, Administration and Management of college activities. His core areas of expertise are quantitative techniques, research methodology and organizational research. Throughout the career, he has served many renowned institutions like SomLalit, Royale Business School, United world School of Business and Sarvoday Group of Colleges. Other than academic industry, he has been constantly associated

with institutions like SEBI as a Committee member for monitoring the private equity education fund for Gujarat state and BSE and NSE as a member of common pool of arbitrators. He has also been serving many other companies like Kamlesh Engineering, SFL Furniture, S P Valvsetc as a consultant and a mentor. He has taken very keen interest in overall grooming and development of the MBA students by regularly associating renowned personalities from industry and keeping interacting sessions with the students. Actively participating in the industrial interface and handling various activities like student placement, industrial projects and corporate consultancies. Worksop with TATA Consultancy Services and Recent leadership seminars at the Gujarat Technological University shows the efforts made by him for the innovation and development of the academic industry. He has organised and manage the program of Honouring and Awarded of Doctorate Degree to SunitaWillams. He has actively contributed as a Convener in International Conference on Good Governance at GTU in 2013. He firmly believes that industrial interaction, interface is the key for management educations and always ready to provide effective platform for management students. He can be reached on viral.bhatt@sal.edu.in, +91-9925195819.



Prof. Bharat C. Dalal is a leading Management Consultant and his clients include large and small organizations; eg. Larsen & Tourbro, Himson group, DCM, Torrent, Gujarat State Fertilizers, Vadilal Ice cream, Gujarat Tea processors and others. Prof.Dalal was the founder Professor at the Indian Institute of Management, Ahmedabad. Prof.Dalal was the Chairman of Executive Management programs at Nirma University, Ahmadabad for several years and he is credited with the start-up of Diploma in Executive Education programs for working managers. He organized

every year more than 10 Management Development Programs for Executives in industry. He was conferred full Professorship at the young age of 29 years by Indian Institute of Management, Ahmadabad. He has written more than 40 cases in Strategic Marketing and Management in the Indian and American organizations. He is at present giving honorary services as the Hon. Director of Centre for Corporate Governance (CGS), A PG Research Centre at Gujarat Technology University (GTU) since last two years. First International Conference on Good Governance was organized in the year 2013 at GTU and it received great response from the Educational Institutes, Industry and Non Profit organizations. He can be reached on bharatcdalal@gmail.com, +91-9824267773.

INDEX

SR. NO.	Research Paper Title	Author(s)	Page No.
1	TO STUDY PERCEPTION OF CONSUMERS RELATED TO DEVIANCES IN ONLINE VIEWED PRODUCTS & RECEIVED PRODUCTS IN CENTRAL GUJARAT	Deepali k. Wani Umesh Singh	001
2	HPC (HUMAN-PC CONNECTION) ISSUES IN E-COMMERCE.	Ms. Deepika Vaghela	017
3	THE ROLE OF FAMILIARITY AND TRUST IN ACCEPTANCE OF E-COMMERCE SITES	Parinda Doshi	035
4	E-COMMERCE AND INFLATION: AN INSIGHT OVER PROPOSED INCLUSION OF E-COMMERCE FOR CPI CALCULATION	Dr. Abhay Raja	043
5	ETHICAL PRACTICE OF E-RETAILERS AND ITS IMPACT ON ONLINE SHOPPERS OF AHMEDABAD	Kalgi Shah Dr. Mamta Brahmabhatt,	051
6	A STUDY ON INFLUENCE OF PERCEIVED PRIVACY AND SECURITY ON ONLINE PURCHASING WITH REFERENCE TO CONSUMERS OF NAVSARI CITY	Dr. Babaraju k. Bhatt Ms. Apurva a Chauhan	061
7	THE STUDY ON PERCEPTION OF CONSUMERS TOWARDS DEVIANCE IN PRE AND POST ONLINE PURCHASE OF PRODUCT AND ITS EFFECT ON CONSUMER'S PERCEIVED RISK	Dr. Babaraju. K. Bhatt Dr. Seema H. Kadam	071
8	DRAGONFLY EFFECT OF SOCIAL MEDIA MARKETING ON KHADI INDUSTRY IN INDIA: SEARCH FOR A HAPPIER TIME	Ms. Avani Agrawal Ms. Priyanka Nair	083
9	AN APPLICATION OF TECHNOLOGY ACCEPTANCE MODEL IN UNDERSTANDING STUDENTS' BEHAVIOURAL INTENTION FOR USE OF INTERNET BANKING IN SURAT CITY	Dr. J. M. Kapadia Mr. Pratiksinh Vaghela	099
10	ELECTRONIC BANKING PAYMENT SERVICES – A FUTURISTIC PERSPECTIVE	Dr Rajesh P Ganatra Ms. Poonam Arora	111
11	A SURVEY ON AWARENESS AND SATISFACTION LEVEL OF THE CONSUMERS OF ONLINE GIFTING WITH SPECIAL REFERENCE TO AHMEDABAD CITY	Mr. Jignesh Vidani Ms. Khushali. Pathak	121
12	ROLE OF TRUSTMARK IN E-COMMERCE	Dr. Sandeepnath Modi	137

INDEX

13	A COMPARATIVE STUDY OF CUSTOMER PERCEPTION TOWARDS E-BANKING SERVICES PROVIDED BY BANKS IN INDIA.	Shriti Lal	143
14	An Empirical Study of SMEs' Websites for Business Opportunities	Dr Sarvesh Rajnikant Trivedi	153
15	ANALYZING CONSUMERS RISK PERCEPTION IN ACCEPTANCE OF ELECTRONIC PAYMENT; A CASE STUDY OF OMANI CONSUMERS	Dr. Anshuman Sharma	169
		Mr. Zaheer Ahmed Khan	
16	CLOSET CONSUMERS ATTITUDE TOWARDS DIGITAL MARKETING: AN EMPIRICAL STUDY	Dr. Medha Gupta	177
		Mansi Mirchanadani	
17	A STUDY ON PERCEPTION OF FEMALE CONSUMERS RELATED TO DEVIANCES IN ONLINE VIEWED PRODUCTS & RECEIVED PRODUCTS: WITH REFERENCE TO BHAVNAGAR CITY	Ms. Ami Pandya	183
18	DEFAMATION IN INTERNET AGE: LAW & ISSUES IN INDIA	Amit Kashyap	191
		Dr.Tarkesh Molia	
19	CROWDFUNDING: AN INNOVATION IN THE AGE OF DIGITAL MARKETING	Dr. Smriti Pathak	201
		Prof. Paramjeet Kaur	
20	RANKING E-COMMERCE WEBSITES USING FEATURE ARRAY	Vikas Chomal	211
		Dr. Jatinderkumar R. Saini	
21	PERCEPTION OF CONSUMERS RELATED TO DEVIANCES IN ONLINE VIEWED PRODUCTS & RECEIVED PRODUCTS	Foram Shah	227
22	EXAMINING THE ROLE OF SOCIAL MEDIA IN HEALTHCARE PRACTICES: AN INSIGHT INTO NEW AVENUES AND OPPORTUNITIES FOR HEALTHCARE STAKEHOLDERS	Akula Susmita Rao	235
		Dr. Bharati V. Pathak	
		Dr. Ritesh K. Patel	
23	FRAMEWORK OF ONLINE MEDICAL RETAILING IN INDIA: ISSUES & CHALLENGES	Dr. Ritesh K. Patel	248
		Ms. Avani Mehta	
24	EMERGING ISSUES OF CYBER SECURITY IN E-COMMERCE	Rakesh Singh Kunwar	256
		Dr. Priyanka Sharma	
25	A SURVEY ON THE AWARENESS AS WELL AS TO KNOW THE LEVEL OF SATISFACTION OF THE ONLINE SHOPPING AMONG THE PEOPLE OF AHMADABAD CITY.	Ms. Khushali Pathak	261
		Mr. Jignesh Vidani	
26	CASH OR E-CASH ISSUES ON DELIVERY SYSTEM IN JUNAGADH AREA	Vipani Kajal	277

INDEX

27	A STUDY OF CUSTOMER'S PERCEPTION OF SECURITY AND TRUST IN E-PAYMENT SYSTEMS	Kedar Bhatt Dr. Amit Rajdev	287
28	CONSUMER PERCEPTION TOWERD E-COMMERCE - A STUDY OF GUJARAT	Ms. Krutika Raval Mr. Tushar Panchal	297
29	ACTORS AFFECTING POST GRADUATE STUDENTS' (STUDYING MBA) PERCEPTION OF ELECTRONIC PAYMENT: AN EMPIRICAL ANALYSIS	Dr. Pankajray Patel Dr. Ravi Vaidya	307
30	PROPHESYING MOBILE INTERNET ADOPTION INSURAT USING UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY-2 MODEL	Riddhish Joshi	317
31	ENHANCING THE CUSTOMER'S EXPERIENCE IN A DIGITAL WORLD: AN EMPIRICAL STUDY	Dr. Brijesh S	333
32	AN EMPIRICAL STUDY OF SOCIAL MEDIA MARKETING IMPACT ON DIGITAL TRANSFORMATION OF SERVICE FIRMS.	Dr. Kanchan Patil	351
33	A MODEL BUILDING APPROACH TO PREDICT FRAUDULENT BEHAVIOR OF CUSTOMER IN EASY RETURN POLICY IN ONLINE SHOPPING	Dr. Krishnaba Parmar Mr Ashwin Jadeja	365



Proceedings of GTU – CGS & CME
4th International Conference
on

Governance in
E-commerce:
Contemporary Issues
& Challenges

Ahmedabad, 02-03 September 2016



TO STUDY PERCEPTION OF CONSUMERS RELATED TO DEVIANCES IN ONLINE VIEWED PRODUCTS & RECEIVED PRODUCTS IN CENTRAL GUJARAT.

Deepali K. Wani
Assistant Professor, Science and Humanities
Department,
Babaria Institute of Technology, Varnama,
Vadodara – 391 240.
Research Scholar: Rai University, Ahmedabad.
deepaliwani2872@gmail.com

Umesh Singh
Assistant Professor, Science and Humanities
Department,
Babaria Institute of Technology, Varnama,
Vadodara – 391 240.
Research Scholar: Gujarat Technological
University, Ahmedabad.
singhums@yahoo.com

Abstract

Young generation are mostly inclined towards online shopping now a days. Online shopping provides an easy way to buy products by just clicking the button sitting anywhere as per ease. It is becoming popular day by day but one has to be very cautious while dealing online. As customers cannot meet the seller, they doesn't know their address or where about so there are many chances of malpractices to be done from the seller side. This paper discusses on one of such problem of online shopping. It is a survey of perception of consumers towards the problem of what they see on the website and what they actually receive. Many times the products that customer orders online are not received by us. There are also chances of receiving poor quality products which does not match the quality which was shown or as described on the website. There are also possibilities that the received products don't have all the features or characteristics as mentioned on the website. A study on this problem was conducted by filling up questionnaire from the consumers who are engaged in online shopping in central Gujarat. An effort is made to know the grievances and experiences of online customers towards online purchasing.

Keywords: online shopping, malpractices, perception, consumers, received products.

1. INTRODUCTION

Today the world is of internet. E-commerce is becoming more and more popular among the internet users. It is the largest platform for doing business worldwide. E-shopping has become one of the important activities of internet users. But still there is something lacking in online purchasing and that is trust on the online seller and its products. Many people hesitate to buy online due to number of perceived risks. This is due to the expectation of any loss or any negative consequences as a result of online shopping, (G.Pires, 2004). The reason behind such perception is that the consumers interact in a virtual environment through website interface. During physical shopping customers can touch the product, check the performance, and check the quality of product. Also the customers know the seller in case of any discrepancies observed in the products so that they can exchange the product or get it repaired. But this is not possible in online shopping. Customers are not aware about the sellers' whereabouts so there are chances of unfair practises from the seller side. The customers may not receive the same product as it was seen on the website. It can differ in design, performance, quality, colour, aesthetic beauty and various other features. Different types of perceived risk can be financial risk, convenience risk, time risk, product risk, security risk, service risk, social risk, delivery risk, technology innovativeness risk. Product risk consists of following risk such as (Vinaykumar, 2013)

Functional risk : The risk that whether the product will perform as mentioned on the website.

Physical risk : The risk that whether the product is safe for usage or not?

Financial risk : The risk that whether the product worth its cost or not?

Psychological risk : Customer doubts that whether product will cause social embarrassment or not?

Time risk : the customer doubts that whether he has wasted his time in wrong choice and he has to spend more time if the product selected does not perform well.

Social risk : The customer doubts that whether the product purchased will be approved by the social class to which he belongs.

This paper is an effort to study the perception of online shopping customers relating to the deviations in the products that they see and products that they receive in online shopping. A questionnaire is filled up from the customers engaged in online purchasing to know the problems they face during online shopping regarding the products they see and products they receive.

2. LITERATURE REVIEW

The literature study reveals different types of risk perceived by the customers during online shopping. The study also consists of the change in attitude of customers towards online shopping considering the benefits and risks associated with it.

A survey regarding factors affecting online buying behaviour of Indian consumers was conducted (Sinha, Kim, 2012) to understand different factors responsible for online purchasing attitude of Indian customers. There are different types of perceived risks associated with online shopping such as financial risk, product risk, convenience risk, return policy, perceived behaviour control, subjective norms, attitude and technology specific innovativeness and Indian specific factors such as concerns associated with delivery of ordered products, cyber laws, after service, shipping fees. The purpose of this study was to identify different risks as mentioned above responsible for online shopping behaviour of Indian consumers. Specifically the study was conducted to identify that what kind of risks are perceived by male and female while online shopping. Also survey was conducted to find out that which age groups were more prone towards online purchasing. It was observed that from 143 samples 127 were valid and usable for study.

It was concluded that convenience risk was a prominent factor in online shopping. There were different types of risks perceived by male and females. Females were less concerned than males for the perceived risk except convenience risk. Females were more inclined towards user friendly shopping and males were more concerned for innovativeness. They will gauge different risks involved in online shopping. Also it was observed that age group from 40-49 years were more involved in online shopping rather than young generation which was predicted. The implication of this study is merit attention towards consumers. The online retailers should pay attention towards improving their services, payment methods, eliminate risk and increase trust among customers for online shopping. According to a study (Vinaykumar, Mishra, 2012) researcher has paid attention to online shopping skepticism where consumers may fully realize the benefits of using internet for online shopping but are also concerned about the risk of using online shopping. The proposed model of researchers is about intention forming process to adopt internet to shop online. Due to perceived risks of buyers the intention to shop online changes. The intensity of perceived risk decides the positivity and negativity of adopting channel for online shopping. The study suggests that attitude towards risk and benefits of online shopping conflicts among some customers and has a negative impact on their intention of online shopping.

Skeptical or non-enthusiastic customers are less likely to perceive that internet has affected their shopping behaviour as compared to enthusiastic customers. Online shopping experience lessens skepticism among customers. More and more online shopping experience changes the perception of customers towards benefits and risk of online shopping.

As per the study conducted (Vinaykumar,2013) on online consumer behaviour of youth internet shopping is affected by perceived risk. Two kinds of uncertainty are there in internet shopping i.e. product uncertainty and process uncertainty. When the product received does not meet the specification as expected by customers then product uncertainty occurs and when the customer does not have complete confidence in transaction process then process uncertainty occurs. Product intangibility increases perceived risk. As one cannot touch the products, feel them or cannot see the performance of the product, there is increase in the product risk. Mostly apparels, perfumes ,electronic goods have negative ratings in online purchasing due to above mentioned problems.so due the increased perceived risk online shopping is lagging behind in India. There is prosperity in online shopping in India in future because of its high youth population. So it is important for the online retailers to pay attention towards lowering down of the different perceived risk associated with online shopping.

A study was conducted (Bo Dai,et.al.,2014)to study the influence of online shopping experience on the perception of specific types of risk and how this perception affects the intentions of customers regarding online shopping. It was also studied that effect of risk perception on the intention of online shopping is different for different product categories. This study shows that with increased online shopping experience, shoppers perceive reduced product, financial, and privacy risks when shopping online.Despite the growing population of online shoppers, fifty-eight percent of Internet users describe online shopping as a frustrating, confusing, and overwhelming activity (Horrikan, 2008). A major inhibitor of online shopping is the uncertainty (Liang and Huang, 1998), or perceived risk associated with online purchasing (Egeln and Joseph 2012; Eggert 2006; Miyazaki and Fernandez 2001).

The study shows that with increased online shopping experience, shoppers perceive reduced product, financial, and privacy risks when shopping online for non-digital products. It also shows that previous online shopping experience is a strong positive predictor of online shoppers' purchase intention for both apparel and music products, independent of the impact of perceived product and financial risks.

As research conducted by (Deborah J. C. and M. Almousa) on “Risk perception and internet shopping: comparing United States and Saudi Arabian consumers” suggests that psychological risk had the highest mean difference between the U.S. respondents and S.A. respondents and may be also be due to lack of experience in buying products online as is the case with S.A. respondents. As psychological risk deals with mental discomfort that might be experienced from making the wrong product choice, once again, those with experience shopping and purchasing products online may feel less risk as they know that they have options to return products rather quickly and easily as well as more experience in anticipating how online products might meet expectations. Those with no experience with this form of shopping may not understand return processes, how online products will align with their expectations, and as such may perceive more risk.

As per the work of (Samadi M. and A. Yaghoob-Nejadi, 2009) on “Effect of Consumers' Perceived Risk on Purchase Intention in E-Shopping” the study showed that Tehrani consumers rely on strong money-back guarantee, their previous purchasing experience, information from friends or family, and visit/call local retailer to reduce their perceived purchasing risk in the Internet.

If Marketers desire to increase purchasing in online mode, they must attempt three things. First and foremost, marketers and retailers must realize that the Internet is not a neutral channel but one that a priori is seen by consumers as more risky. Since risk lowers the probability of purchase, retailers and marketers must eliminate and reduce the perception of risk and the probability of risk at each and every opportunity. Marketers must know which risk-reduction strategy is important to consumers in the Internet to reduce their concerns more specifically. Providing an information navigation facility based on such risk-reduction strategies as money-back guarantee, desirable purchasing experience, etc., decreases consumers' perceived risk and increases their purchasing in the Internet.

Second, the marketers must provide a good service to consumers to build positive shopping experience in the Internet. The result of previous research revealed that 68 percent of customers leave because of bad service experience. Therefore, marketers are catering to the need of consumers in the Internet by supporting consumers as they build good experiences for product purchasing. Furthermore, the number of male internet shoppers exceeds the female ones far behind. For that reason, more concentration can be paid on what men buy, at the moment. Yet, according to different studies, female shoppers will increase in the near future. So, the internet shops should be conscious in this regard and adjust their offering as the e-shoppers characteristics/demographics and accordingly demands change, by the passage of time.

(Prajapati, Thakor, 2012) worked on "Understanding consumer online shopping attitudes and behaviour: contribution from technology, tradition and trust perspective" recommends, customers who would like to use internet for shopping in future consider transaction security as the most crucial factor. Therefore, online shopping service providers should increase the security measures if they wish to increase the use of online shopping. E.g. many a times on top of the computer screen where the Web site address is displayed, it is written <https://>. The "s" that is displayed after "http" indicates that Web site is secure. Often, this "s" can be seen after one actually moves to the order page on the Web site. Such securities are provided by TRUSTE (www.truste.org), VERISIGN (www.verisign.com), and BBB online (www.bbbonline.org). Also, researcher recommend that online shoppers should obtain one credit card that they use only for online payments to make it easier to detect wrongful credit card usage.

Resources and knowledge required to access internet are other key reasons for shoppers to give less preference to online shopping. The Online shopping service providers should as a result increase internet and television advertisements demonstrating how internet can be used to make safe purchases and the benefits associated with it. However, most of the respondents do not face any problem while online shopping but few respondents yet are facing the problem like connection error, transaction error and server down. Due to such certain issues, for many internet users till date the use of internet is restricted to information search and mail checking.

An analysis was conducted (Upadhyay, Jasvinder kaur) on online shopping behaviour of consumers of Kota city. The objective of the study was to examine the relationship between consumer factors and attitude towards online shopping and analyse the factors that influence online shopping. Factors affecting the attitude are demographics, perceived risk, reputation of retailers, consumer orientations, price and type of access. From the study it was concluded that the factors that are important for online shoppers are clear information about the products and service, time saving, convenience, security and delivery on time. Attractive offers on the websites are not important for the online shoppers. 'Cash on delivery', payment option is more popular among the consumers while next most preferred option is credit card. It was observed that customers were satisfied with their online shopping experience.

In another research conducted (Malhotra, Chauhan, 2015) it was observed that 38% buyers were from age group of 20-30 years, which states that young generation spend more on online shopping than older generation. It was also found that 58% of consumers bought clothing and apparels, 43% bought mobiles in online shopping. 52% were bothered about the problem of security while 51 % were worried about the product quality received online.

In a study conducted among 200 students of graduation and post-graduation courses of Bareilly region, Uttar Pradesh (Kanchan, et.al., 2015) regarding consumer attitude towards online shopping and the factors responsible for the attitude it was observed that customer online purchase is significantly related to gender, age, security, education, technological familiarity, past online purchase frequency, product type, purchase frequency and expensiveness. The purchase decision is also related to services provided by the online seller such as return, refund and delivery services. From the analysis it was found that males are more interested in online shopping while people under age group of 30-45 were more engaged in online shopping. Income and education is positively related to online purchase frequency. Technology familiarity is positively related to online purchase frequency while security of transaction is negatively related.

3. OBJECTIVES

- ♦ To find out that do customers really receive deviated products while shopping online.
- ♦ To find out in what terms the received products are different from the products display on website.
- ♦ To find whether customers put claim for received deviated products.
- ♦ To find the satisfaction level of customers towards online shopping.
- ♦ To find out in which product category customer has fear of highest deviation.
- ♦ To find out whether customer hesitate or fear to buy online.

4. RESEARCH METHODOLOGY

4.1 Problem Statement : To study perception of consumers related to deviances in online viewed products & received products in Central Gujarat.

4.2 Hypothesis :

H1 : Customers have fear while purchasing online.

H2 : Customers fear the most about performance of received products while online shopping.

H3 : Customers fear the most while purchasing electronics products.

H4 : Gender and fear for online shopping are independent of one another.

4.3 Research Design : Exploratory Research

4.4 Sources of Data : Primary Data (Questionnaires), Secondary data (Books, Research Papers).

4.5 Data Collection Method : Survey.

4.6 Data Collection techniques: Questionnaire.

4.7 Sampling Design:

Population: Customers belonging to Central Gujarat region.

Sampling Method: Non probability sampling, Convenience sampling.

Sampling Size: 106 respondents.

4.8 Limitations:

This research paper is completed in limited time. The respondents are limited to 106 from Central Gujarat region. Results may vary according to different regions as well as with more number of respondents. Researchers and respondents both have limited experience. Research is performed during the month of April and May- 2016 so result may vary for other time period.

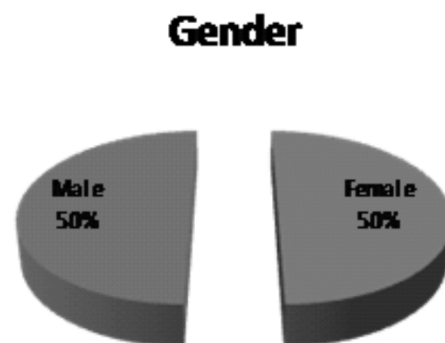
5. ANALYSIS, INTERPRETATION AND HYPOTHESIS TESTING

Q2. Gender of respondents. Figure 1: Count of Gender

Table No. 1 Count of Gender

Row Labels	Q-2
Female	53
Male	53
Grand Total	106

Count of Q2



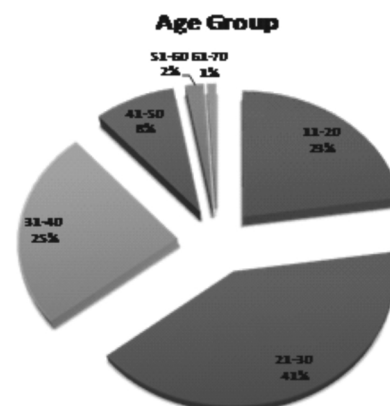
Q3. Age group of respondents

Figure 2: Count of age group

Table No.2: Count of age group

Row Labels	Q-3
11-20	24
21-30	44
31-40	26
41-50	9
51-60	2
61-70	1
Grand Total	106

Count of Q3



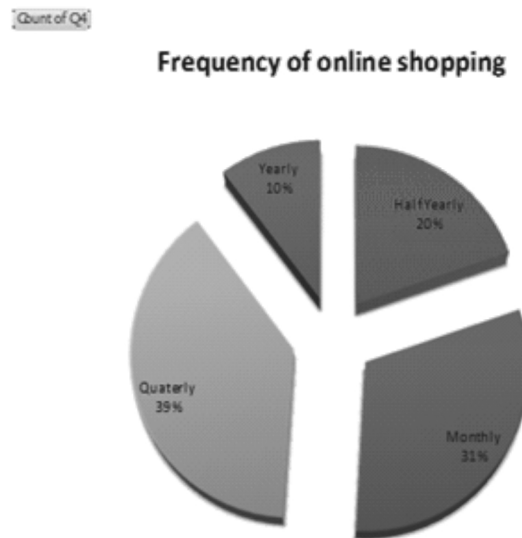
Q4. Frequency of shopping online.

It is observed that around 39% customers shop online on Quarterly basis while 31 % shop on monthly basis.

Table No.3: Frequency of online shopping

Row Labels	Q-4
Half Yearly	21
Monthly	33
Quarterly	41
Yearly	11
Grand Total	106

Figure 3:Frequency of online shopping



Q5. When do you go for online shopping?

It is observed that customers prefer online shopping mostly during sales/schemes/offer period. Almost 64 % customers shop during this period. It shows that sales/schemes/offers is one of the main driving force for online shopping

Table No.4: Online shopping intention

Row Labels	Q-5
On Occasions/festivals	14
Regular shopper	24
Sale/schemes/offers	68
Grand Total	106

Figure 4: Online shopping intention



Q6. Which website you prefer most while online shopping?

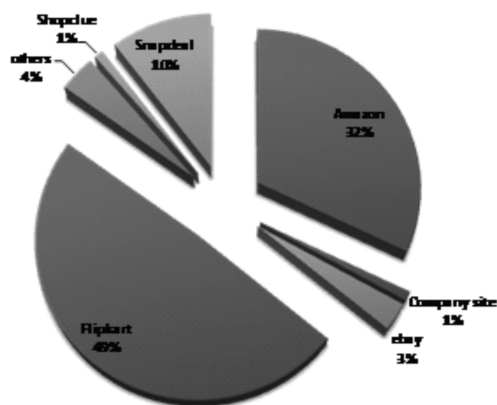
It is observed that customers in central Gujarat region mostly prefer FlipKart (49%) and Amazon (32%) for online shopping.

Table No 5: Preferred online shopping websites Figure 5: Preferred online shopping websites

Row Labels	Q-6
Amazon	34
Company site	1
eBay	3
Flipkart	52
others	4
Shopclue	1
Snapdeal	11
Grand Total	106

Count of Q6

Preferred online shopping websites



Q7. In which of the product category you shop most while online shopping?

It was observed that customers in central Gujarat region mostly go for clothing (29%), Mobiles/smartphones/accessories (22%) and electronics (16%) product categories while shopping online. Least preferable product categories are toys/baby products, sports and fitness and jewellery/accessories/watches.

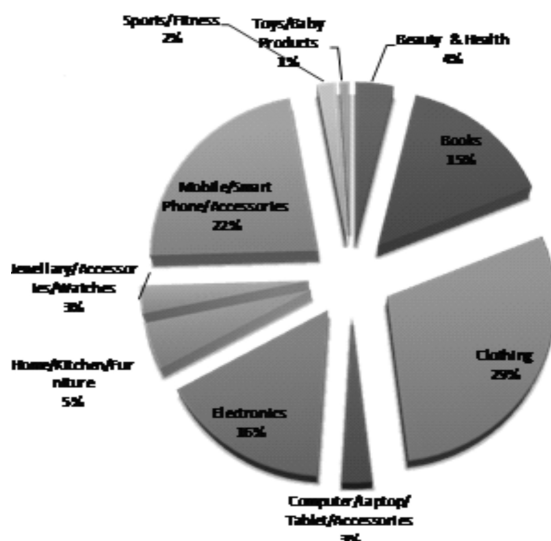
Figure 6: Preference of product category

Table No 6: Preference of product category

Row Labels	Q-7
Beauty & Health	4
Books	16
Clothing	31
Computer/Laptop/Tablet/Accessories	3
Electronics	17
Home/Kitchen/Furniture	5
Jewellery/Accessories/Watches	3
Mobile/Smart Phone/Accessories	24
Sports/Fitness	2
Toys/Baby Products	1
Grand Total	106

Count of Q7

Preference of product category



Q8. Do you have any fear/doubt/hesitation while shopping online products?

It was observed that 53 % were having fear for online shopping. That means almost half of the online shoppers have fear/doubt/hesitation while shopping.

Table No 7: Count of fear while online Shopping

Row Labels	Q-8
No	50
Yes	56
Grand Total	106

Figure 7: Fear while online shopping



Q9. Which fear resist you most to buy online?

It was observed that Customers of central Gujarat mostly fear in after sales commitment (18%), Size (17%), durability (16%) and performance (14%) mostly while online shopping.

Table No 8: Fear Factors

Row Labels	Q-9
After sales commitment	19
Appearance	9
Colour	6
Durability	17
Features	4
On time delivery	5
Performance	15
Price	5
Safety	8
Size	18
Grand Total	106

Figure 8: Fear Factors



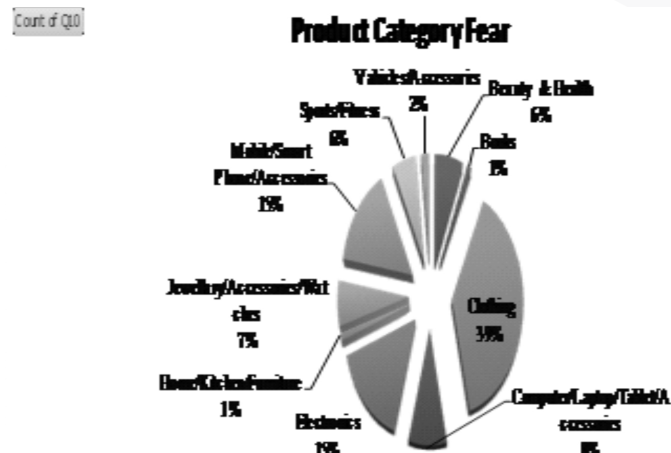
Q10. In which of the following product categories you fear the most of receiving products different from what you have seen on website?

It was observed that Customers mostly fear of receiving deviated products in product categories such as Clothing (39%), Electronics (15%) and mobiles/accessories/smartphones (15%).

Table No 9: Product category fear

Row Labels	Q-10
Beauty & Health	7
Books	1
Clothing	41
Computer/Laptop/Tablet/Accessories	9
Electronics	16
Home/Kitchen/Furniture	1
Jewellery/Accessories/Watches	7
Mobile/Smart Phone/Accessories	16
Sports/Fitness	6
Vehicles/Accessories	2
Grand Total	106

Figure 9: Product category fear



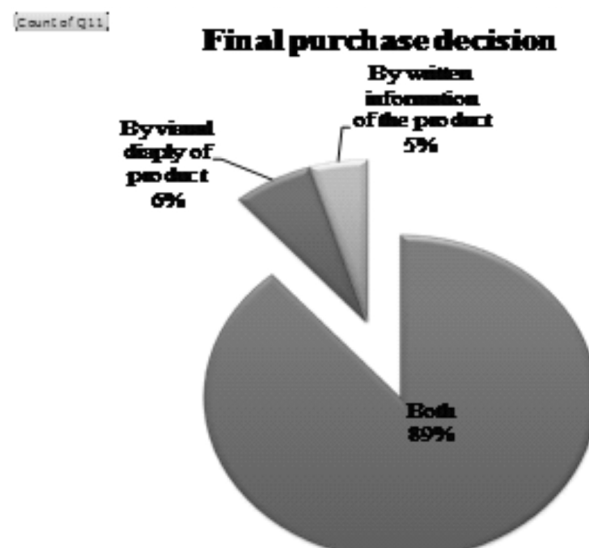
Q11. How do you finalize the products for final purchase while shopping online?

It was observed that customers mostly go through both visual display and written information of the product before finalising the purchase while shopping online. Almost 89% respondents opted for both preference.

Table No 10: Final purchase decision

Row Labels	Q-11
Both	94
By visual display of product	7
By written information of the product	5
Grand Total	106

Figure 10: Final purchase decision



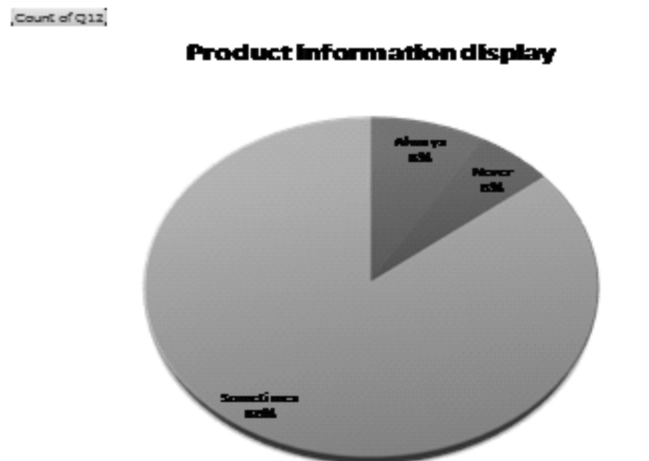
Q12. Do you think product information and display is sufficient to take decision for final purchase while online shopping?

It was observed that only 8% customers responded for always option. It means that the written information and display is not sufficient to provide the product information properly.

Table No 11: Product information/display

Row Labels	Q-12
Always	9
Never	6
Sometimes	91
Grand Total	106

Figure 11: Product information/display



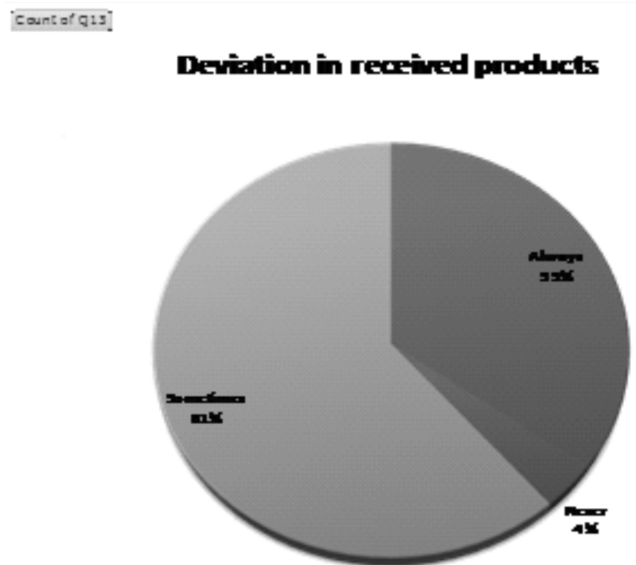
Q13. Do you find received product according to the actual shown product on website while ordering online?

It was observed that 61% respondents received deviated products sometimes during their shopping while 35% received always the actual product. So it was observed that there is high percentage of receiving deviated products during online shopping so care should be taken by the shopkeepers to deliver actual products to the customers as they promise on the website.

Table No 12: Deviation in received products

Row Labels	Q-13
Always	37
Never	4
Sometimes	65
Grand Total	106

Figure12: Deviation in received products



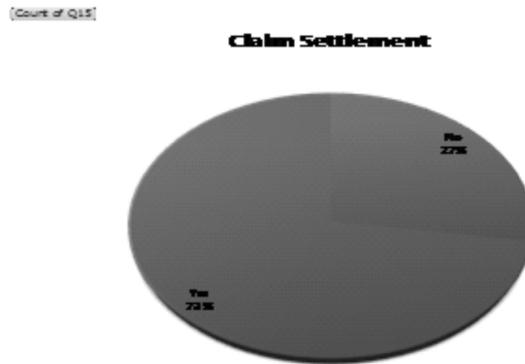
Q15. Do you go for claim settlement if you receive deviated product?

It was observed that 73% customers go for claim settlement if they receive deviated products.

Table No 13: Count of claim settlement

Row Labels	Q-15
No	29
Yes	77
Grand Total	106

Figure 13: Claim settlement



Q16. Is your claim settlement satisfactory?

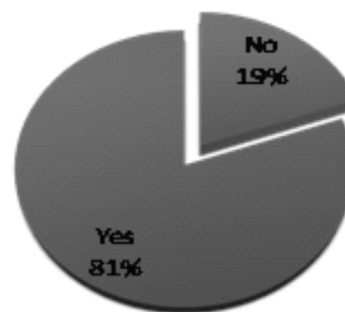
Out of 73 % customers who went for claim settlement, 81% customers received satisfactory claim settlement.

Figure 14: Claim settlement satisfaction status

Table No 14: Claim settlement satisfaction status

Row Labels	Q-16
No	15
Yes	62
Grand Total	77

Claim Settlement Satisfaction Status



Q17. Overall online shopping experience.

Almost 79% customers are observed to be satisfied with online shopping which specifies that customers do go for online shopping despite of several problems they face while shopping online.

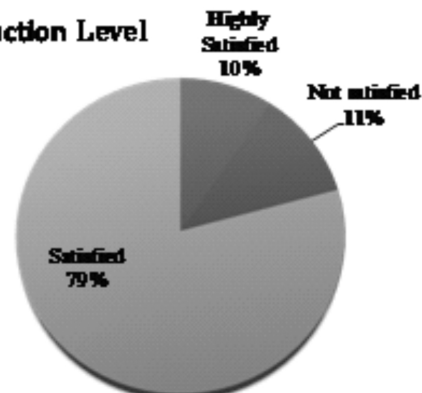
Figure 15: Satisfaction level

Table No 15: Satisfaction level

Row Labels	Q-17
Highly Satisfied	10
Not satisfied	12
Satisfied	84
Grand Total	106

Count of Q17

Satisfaction Level



6. HYPOTHESIS TESTING

H1: Customers have fear while purchasing online.

Table No 16:

H_0	Observed value of Z	Table value of Z at 5% level of significance
$P=51\%=0.51$	0.3707	1.96

Since the observed value of z is less than the table value of z so the null hypothesis (H_1) is in the acceptance region and thus it is accepted. So it can be concluded that customers fear while online shopping.

H2: Customers fear the most about performance of received products while online shopping.

The calculated value of $\chi^2 = 30.41509$. Degrees of freedom is $n-1 = 10-1 = 9$

For 9 degrees of freedom and at 5% level of significance the table value of chi square is 6.919 which is less than the calculated value so the null hypothesis H_2 is rejected. This denotes that there are other factors also which the customers fear the most while shopping online.

H3: Customers fear the most while purchasing electronics products.

The calculated value of $\chi^2 = 121.7358$. Degrees of freedom is $n-1 = 10-1 = 9$

For 9 degrees of freedom and at 5% level of significance the table value of chi square is 16.919 which is less than the calculated value so the null hypothesis H_3 is rejected. This denotes that there are other categories of products also which the customers fear the most while shopping online.

H4: Gender and fear for online shopping are independent of one another

Table No17: Chi square calculations

Particulars	Yes	No	Total
Male	25	28	53
Female	31	22	53
Total	56	50	106

By applying CHI-SQUARE test of independence, the value of $\chi^2 = 0.243043$

Degrees of freedom $= (r-1) * (c-1) = (2-1) * (2-1) = 1$

At degree of freedom-1, at 5% level of significance table value is 3.841, so it is greater than our observed value 0.24304 thus the null hypothesis H_4 is accepted. So it can be concluded that Gender and fear for online shopping are independent of each other.

7. RESEARCH FINDINGS

From the findings it is observed that consumers of Central Gujarat frequently go for online shopping. They choose to shop more during the sales, schemes or offer periods. The most preferred categories of

products while shopping online are clothing, mobiles/smart phones/accessories and electronics items. It is observed from the research that consumers have fear while online shopping. They fear the most about the factors such as after sales commitment, size, durability and performance of the products. They are not sure that they will receive the same products as shown on website. They fear that it may deviate in the above mentioned factors. It is observed from the findings that they mostly receive deviated products and the products are more deviated in the categories such as clothing, electronics and mobiles/smartphones/accessories. Consumers are very careful while deciding the product for purchasing online. They pay proper attention towards the visual display and written information of the product on the website before purchasing the product. They do have complains that the visual and written information of the products is not sufficient to decide for purchasing of product. Consumers mostly go for claim settlement if they receive deviated products. Consumers are satisfied with the claim settlement. Overall majority of consumers in Central Gujarat are satisfied with online shopping. Only 10 % are highly satisfied with online shopping.

8. SUGGESTIONS/RECOMMENDATIONS

From the findings it is suggested that the online sellers should take utmost care in delivering the products. Consumers purchase online to save time, money and to have a comfortable shopping. If they have to go frequently for claim settlements for deviated products it brings a negative impact on the online business. So it is important that online sellers should properly describe their products in the display and proper information should be given regarding the products. They should see that the same product is delivered to the customer as it is shown online on the website.

REFERENCES

1. G. Pires, J. S. "Influences on the perceived risk of purchasing online", *Journal of Consumer Behavior*, 118-131, 2004.
2. Sinha Jayendra, Kim Jiyeon, "Factors affecting Indian consumers 'online buying behavior'", *Innovative Marketing*, Volume 8, Issue 2, 2012
3. Vinay Kumar, Mishra Sumit, "A study of the attitude towards online shopping: A conceptual model regarding intention formation, the role of perceived risks." available at <http://ssrn.com/abstract=2287643>, 2012
4. Vinay Kumar, "A Study on Perceived risk in online consumer behaviour of youth: An Indian perspective" available at <http://ssrn.com/abstract=2351725>, 2013.
5. Malhotra Hemani, Chauhan Manjit kaur, "Consumers' behaviour towards online purchases", *International Journal of English Language, Literature and Humanities*, Volume II, Issue IX, January 2015.
6. Dr. Upadhyay Payal, Jasvinder Kaur, "Analysis of Online Shopping Behavior of Customer in Kota City", *Shivshakti International Journal in Multidisciplinary and Academic Research (SSIJMAR)*, Vol. 2, No. 1, January-February.
7. Kanchan Upasana, Naveen Kumar, Gupta Abhishek, "A study of online purchase behaviour of customers in India", *ICTACT Journal on Management studies*, Volume 1, Issue 3, August 2015.
8. Dai, Bo, S. Forsythe and Wi-Suk Kwon, "The impact of online shopping experience on risk perceptions and online purchase intentions: does product category matter?" *Journal of Electronic Commerce Research*, VOL 15, No: 21-22 2014
9. Horrigan, J. B., "Online Shopping: Convenient But Risky", available at <http://pewresearch.org/pubs/733/onlineshopping> (accessed 15 February, 2009).
10. Liang, T. P. and J. S. Huang, "An Empirical Study on Consumer Acceptance of Products in Electronic Markets: A Transaction Cost Model", *Decision Support Systems*, Vol. 24: 29 -43, 1998.

11. Eggert, A., "Intangibility and Perceived Risk in Online Environments", *Journal of Marketing Management*, Vol. 22, No. 5/6: 553-572, 2006.
12. Miyazaki, A. D. and A. Fernandez, "Consumer Perceptions of Privacy and Security Risks for Online Shopping", *The Journal of Consumer Affairs*, Vol. 35, No. 1: 27-44, 2001.
13. Deborah J. C. and M. Almousa, "Risk perception and internet shopping: comparing United States and Saudi Arabian consumers" *Journal of Management and Marketing Research*, Risk perception and Internet, 10-11
14. Samadi M. and A. Yaghoob-Nejadi, "A Survey of the Effect of Consumers' Perceived Risk on Purchase Intention in E-Shopping" *Business Intelligence Journal*, Vol. 2 No. 2:271-272, August, 2009
15. Prajapati S. and M. Thakor, " Understanding consumer online shopping attitudes and behaviour: contribution from technology, tradition and trust perspective" *International Journal of Asian Research Consortium*, Volume 1, Issue 5: 70-71, October, 2012.

HPC (HUMAN-PC CONNECTION) ISSUES IN E-COMMERCE.

Ms. Deepika M Vaghela
Student
University of Chester, UK
deepikavaghela004@gmail.com

Abstract

A research paper outlines various critical research issues in human-PC connection in the e-commerce environment. It highlights a percentage of the difficulties confronted by clients in perusing Web destinations and leading hunt down data, and proposes a few territories of exploration for advancing simplicity of route and pursuit. Additionally, it talks about the significance of trust in the online environment, depicting a portion of the predecessors and outcomes of trust, and gives rules to coordinating trust into website designing. The issues examined in this article are introduced under three general classifications of human-PC collaboration – Web ease of use, interface outline, and trust and are planned to highlight what we accept are advantageous territories for future examination in e-commerce.

Key words: web usability, interface, trust, e-commerce, navigation, website designing, etc..

1. INTRODUCTION

The internet and World Wide Web have changed our life completely and also changed the way of doing business in global market. Truly use of WWW starts from 1997 and it provides new frontier for business. In spite of some researcher observe as the 'Internet bust', use of internet for e-commerce continues to develop the same number of blocks and mortar businesses incorporates online components into their marketing strategies. Today's environment for e-commerce is completely changed than the earlier days. As the use of internet increased day by day, firm cannot survive in competition of online business by only developing a website, it can't give surety that the customer will come. Online shoppers now become more specious in online acquiring alternatives and more critically, they have become less patient with web sites that are hard to use and understand. The reality is that the Web is to a large extent about "moment delight". User wants to find the information with less effort and the way they want, very quickly. Designers of E-commerce web site forget this important fact, and leads business to losing of valuable customers, and may even loss of economic viability in long term. Unfortunately, number of e-commerce sites continues to commit number of errors in designing like poor navigability, slow upload and download times and confusing contents which is hard to understand (Nielsen, 1999). Main objective of this article is to high light the

Important pitfalls of user interface designing in e-trading websites. Specifically, Author concentrate on an issue that is perhaps the most usually cited problem in Web design – users' powerlessness to navigate Web sites and to search for desired data. Beginning of paper provides information of what problems customer face while searching the product on e-commerce website. Based on these problems, Author tries to provide important recommendation for designing of e-trading websites. The another part of paper concentrate mainly on issues related to buying a product online and gives

guidelines for e-commerce design to help buyers in online shopping.

Another issue that, seemingly, has dependably been vital, however just recently getting more attention is trust in e-commerce. Truly, online environment provides unique set of constraints on buyer-seller relation that does not exist in traditional face to face business. In online business customer cannot meet the sales person, ask a question, observe body language and physically examine the product. Now all this process is done in the “veil” of computer medium. Because of this buying process the question raise in customers mind is trustworthiness of selling party, privacy of buyer’s data, reliability on online transaction and surety of getting product which can satisfy the customer. Till now the issue of trust got less attention in number of e-trade research literature. While many e-trading websites become more conscious on this issue and applied some recommendations from the market for providing trust in buyer- seller relationship, or have applied their own observation and solution to build trust in customer’s mind. It is required to make more research in the area of e-commerce which provides complete guidance on how to build a website that acquires trust in the mind of customers. To explore conceivable responses to this query, we have to examine issues, for example, the predecessors of trust, purchaser and merchant attributes influencing the trust relationship, and how progressing trust can be kept up. The third part of the research talks about the developing significance of trust with regards to Web-based trade and gives various recommendations to guide future research around this area.

The rest of the article is organized as takes after: Section 2 discusses problems related to the route and search aspects of Web ease of use. Section 3 provides an idea of an e-commerce Web site serving as an "acquiring support system", encouraging the steps of the buying process. Future areas of research are likewise presented. Section 4 addresses the issue of trust in e-commerce and its antecedents. It additionally provides a set of guidelines for designing e-commerce Web sites to promote trust from consumers and suggests areas of future research in this area. Section 5 concludes the article with an overview of key issues of Web design to promote ease of use and trust.

1.1.History of E-commerce in India:

The rise of internet organizations in India began in the mid-1990s. The primary Indian internet companies basically included online classifieds, wedding and occupation gateways. The low infiltration of web, absence of mindfulness and absence of improvement and trust in online instalment frameworks were explanations behind Indian web organizations not effectively captivating in e-commerce.

It was just in the mid-2000s, after the website bubble burst that e-business industry in India began to take off. The principal e-business administrations accessible were chiefly offered in the travel business. With the proliferation of low cost carrier airlines, ticket offering began to be made on the web. Indeed, even today travel booking sites hold a larger part share of the Indian e-business sector.

After several years, the online retail industry began coming to fruition and it is quickly developing today as brick and mortar stores are being supplanted by click-only models or brick cum click models of business.

E-commerce space relating to the deals and discount websites started becoming famous after 2009 and onwards, while the concept of online networking for e-commerce is as yet attempting to make a solid footing in the markets despite having one of the largest populaces using Facebook.

The India e-commerce market offer services like B2B, B2C and C2C, but most of the companies mainly dealing with B2C segment.

2. WEB USABILITY

Definition of Web usability was given by number of researchers, according to several standard criteria: the ability to find one's way around the Web, to locate desired information, to know what to do next and, very importantly, to do so with minimal effort. Central to this idea of usability are the important concepts of ease of navigation and search.

The central role of navigate the Web and search for data is certainly of real importance to Web designers, researchers, e-commerce companies selling their items and services, and, of course, to a huge number of users who access the Web every day. The central role of route and search on the Web is not a new concept, however. It has become out of a well-established custom (over a decade) of research and design in the hypermedia field including issues, for example, the relationship between undertaking types and data structure (Gay, Trumbull, and Mazur, 1991; Radha and Murphy, 1992; Wright and Lickorish, 1989, Hardman, 1989), choice of route helps (Hammond and Allinson, 1989; Monk, 1989), evaluation of data seeking strategies (Gray, 1990; Hardman, 1989), orientation and route (Webb and Kramer, 1990; Kim and Hirtle, 1995), and examinations of hypermedia with other types of systems (Beard and Walker, 1990; Gray and Shasha, 1989). Apparently, the Web is very different from most early hypermedia systems, which were uniform in structure and limited in scope. Truth be told, the Web might be regarded as the counter thesis of customary hypermedia systems, with an endless exhibit of site types, content, designs, and purposes. However, in structure and capacity, the Web is fundamentally a hypermedia-based system that can benefit from progressing research in this field (Smith, Newman, and Parks, 1997).

Before starting discussion on specific issues connected to Web navigation and data search, first we distinguish between these two terms. Navigation is nothing but the thing which we commonly referred as a "Browsing". Although some researcher has said that browsing and searching is overlapping with each other (Carmel, Crawford, and Chen, 1992) or related information seeking behaviours (Belkin, Marchetti, and Cool, 1993), Tom (2000) gives idea that the two are different. He described browsing as "...an activity of gathering information related to particular term" in different terms we can say that when user's goal is not clear on what he is searching at that time the process become quite haphazard, serendipitous and unpredictable. Users follow number of paths and may find number of items by using various navigation tools, including hyperlinks and buttons like home, next, back given on the web page. While on other hand, 'search behaviour' is a goal-director which lead user to the particular information what he is searching for. This term is used when the goal of user is quite clear and he knows what he wants to get. In this case the searching process is bounded by various set of navigation options. Some issues related to Web based navigation are described below:

2.1. Issues and challenges related to Web based navigation:

The challenges in browsing and data searching on website is fairly discussed in various literature. There are three types of error occurred during web search: users don't know where they are on web search, not knowing where they can go and don't understand how they can go to other places (Kanerva et al., 1997). Same way in the area of hypermedia search Pitkow & Kehoe (1996) identifies that user face a problem of **disorientation** (i.e. losing the sense of location and direction). Another problem is **cognitive overhead**, challenge of maintaining several tasks or hyperlinks simultaneously (Conklin, 1987). For example, a user might need to keep in mind several potential hyperlinks when

taking after leads in a data search. Concurrently, he might need to mentally note or record data found at each step of the search. These assignments add to his cognitive burden as he browses or searches the Web for data. Kim and Hirtle (1995) describe one outcome of this cognitive overhead as the **digression problem**. In this situation, the user experiences difficulties in planning, managing, and executing digressions from a course of action. High cognitive demands also often lead to *forgetting* or *not noticing* important information (i.e., the “art museum problem”, Foss (1989)).

The challenge for Web designers, therefore, is to facilitate the process of navigation and data search on the Web – specifically, by minimizing occurrences of being “lost in space”, reducing the cognitive demands of data skimming and search, advancing data recognition and recall, and persuading (encouraging) users to explore Web sites. Central to the idea of Web ease of use is the capacity to browse the Web to discover new data or relationships (between different pieces of data), or to perform an objective directed search. Anyway, the relevant questions for designers include: “In what manner can Web design facilitate exploration and search activities? Is there a single best design for advancing skimming and search behaviours?” Some recommendations are discussed in the below sub-sections.

Matching Navigation Aids with the Task:

It is important for every designer to keep in mind that design strategy need to focus on three basic criteria: (1) Task which is going to be performed, (2) How information is available in system, (3) navigation support (Smit et. al., 1997). These topics are of an extreme importance for designing any e-commerce website. Let’s start with Task:

Task type may determine the optimal means of structuring the data in the system. Scientists have examine the relationship between task type and data structure (Mohageg, 1992), said that exploratory tasks are best supported by a network or combination data structure. This can be illustrated, for example, by a standard hyperlinked structure, such as, the one found in the typical Web program. Then again, these studies found that looking errands are best upheld by a various levelled data structure, such as, those utilized by numerous online stores. Second, the task type also gives idea about optimal form of navigation support. For example, it is found that search tasks benefit most by using hierarchical navigation support, while exploration task do best when it is represented graphically (i.e. hyperlink webpages) (Hammond & Allison, 1989). Therefore, from this analysis, one can say that search task is best performed when it is in the form of hierarchy structure using hierarchical navigation support. Exploration task become more effective when it is supported by a network structure and a graphical browser. Given today's usage of the Web, most would concur that standard Web programs actualize the suggestion of a system data structure with a graphical interface, in this manner encouraging investigation undertakings. With respect to search tasks, be that as it may, these studies don't consider the keyword search structure utilized as a part of a large number of today's internet searchers (e.g., Google, Alta Vista, MSN Search). In this way, the accompanying inquiry stays to be examined: For what sorts of errands or pursuit classifications would a catchphrase hunt be more successful than a hierarchical look? Interestingly, all significant web indexes license Web looks both through key words and by utilizing menus.

However these basic things become very important on today’s web linkage, anyhow a more important query is, “what type of browser hyperlink structure is best for exploration?” for answering this question one has to go for research and study. The important issues come after investigation. Kim (1999) has concluded that subjects using a navigation aid based on a spatial metaphor to search the multilevel structure in shopping website has a high perception of use, and buyer find the items more easily than to use a non-spatial navigation aid (i.e. text based search engine). Specifically, spatial route

was prevalent for finding specially appointed things, where objectives were developed suddenly (e.g., discover a birthday present for a companion), versus things in foreordained classes (e.g. books, music). As a result user using spatial route gets more satisfaction. Kim & Yoo (2000) also investigate the effect of different link navigation structure on pleasure and convenience on online shopping. They come to know that combination of 'neighbourhood' link, a 'top' link and 'index' maximise the pleasure of shopping. The reason behind this is this combination minimise the hectic use of back and forward button. It is suggested by Campbell and Maglio that relevant link can be indicated by number of words each link shared with the search topic. Therefore each link indicates both its relevant to search criteria and connection speed. The main aim of this is to provide relevant information to user very easily and most quickly. Results proved that this practice makes improvement in web search navigation. These are some of the examples that designers have to keep in mind when designing a website. Yet more research has to be done in this area of relationship between data structure and navigation aid to provide smooth and easy browsing.

Web Page Revisitation:

Web page Revisitation is another important research issue when dealing with browsing and information search. It is nothing but how a user comes to visit a web page again and again over a period of time. Aim of these studies is to predict a browsing behaviour and recommend a changes in existing browsers to facilitate navigation. Catledge and Pitkow used log files to understand the browsing behaviour of user over a period of three weeks. Tauscher and Greenberg utilise behaviour of 23 users over a period of five to six weeks. Both experiments provide variety of behaviour, including the special techniques used to navigate between pages. Result shows some differences and similarities. Analysis of Pitcow and Catledge shows that visit rate of any webpage by user was about 14 page a day while the analysis result of Tauscher and Greenberg said that this rate is 21 page a day. However both study result is similar in percentage of navigation action started by clicking on hyperlinks, use of back buttons, use of hotlist and use of history. Also, both studies indicate that users revisit the webpage frequently (58% & 61%). Therefore webpage revisitation become more important for usable website design. Analysis of these studies also conclude that user revisit the page either by using BACK button or by clicking to another link. Sadly, technologies designed to revisit the webpage were used very less.

Recently, in 2001 Cockburn and McKenzie updated this research by using Netscape browser. They studied browsing behaviour of 17 subjects over 4 month's periods. Their result provides clear picture of browsing behaviour using contemporary browser. Interesting result comes after this study is average rate of revisit of page is 42 pages per day. This expansion in the quantity of page visits, maybe, reflects both the development of the Web and clients' expanded learning of right now accessible Web locales. With respect to page returns to, the outcomes are significantly more striking than those of the past two studies. This indicates that today's web browsing characterizes a system that is more recurrent (Greenberg, 1993).

Therefore, navigation aids gain more important in browser design. Interestingly, the writers take note of that the mean most extreme number of every subject's bookmarks was 184, with the quantity of bookmark increments vigorously exceeding the quantity of cancellations. Furthermore, around 25% of all bookmarked pages were invalid. This recommends clients might have issues sorting out and dealing with their developing number of bookmarks, and, as the rundown develops, looking and utilizing them turn out to be more troublesome. Hence more research needs to be done to improve the

presentation and organisation of bookmarks to make them easier to use.

Tauscher and Greenberg recommend guidelines based on their study for history lists that provides browsing on web:

- History records ought to attempt to foresee the client's next URL choice. Most likely determinations could be put in the most noticeable area in the rundown (e.g., at the top).
- A history rundown of 6-10 things is a sensible length. Longer records are unrealistic to deliver essentially better results.
- History things ought to have an important representation.
- It ought to be less expensive, as far as physical and subjective movement, for clients to review URLs from a history system than to explore them by means of different techniques (e.g., BACK catch, hypertext joins).
- Allow gathering of URLs into abnormal state Web undertakings, and exchanging between errands.

Cockburn and McKenzie likewise give a few proposals.

- Users might profit by coordinating all the distinctive "revisitation" interfaces (e.g., BACK catch, hot records, and history records) into a solitary interface part.
- Designers ought to consider distinctive executions of the BACK catch that does not prune as of late went to pages from history stack.
- Bookmark accumulations ought to be adaptable to oversee extensive records.
- Bookmark accumulations ought to give apparatuses to help in dealing with the gathering (e.g., recognizing "dead" connections).
- Systems ought to bolster alternate route instruments for exploring a littler arrangement of much of the time went to pages.
- Because clients commonly invest next to no energy in many pages, they ought to be intended to stack rapidly and obviously exhibit connections to the client.

Web Visualization:

Remembering a percentage of the impediments of standard Web programs, especially in wording their powerlessness to give a worldwide perspective of the Web, different specialists as of late have utilized perception systems to re-evaluate and update the Web interface. Ridsen et al. (2000) explain how to use interactive 3D visualization which provides user a global view of large web site. In his study he used computer-generated 3D hyperbolic graphics to create a web site. The hyperbolic graph models Web pages as noted nodes, and hyperlink among those nodes of the chart. The graph is 3 dimensional with globe shaped structure. The edge of current interest and its related edges are clearly showed in the centre of globe, while distant edge appear smaller than the edges which are at centre of globe. This structure gives a feeling of "viewpoint" or space, and passes on a general perspective of the pages inside of the given site. In their usage, guardian nodes were appeared on the left-hand side, and the relatives showed up on the right. As user select any specific edge, it moves to the centre of the hyperbolic space. In short, the user is able to search a Web by navigating a 3D interactive environment. Ridsen et al. thought about a 3D Web program (XML3D) with two more conventional 2D route procedures. Utilizing the Snap.com seek registry as the substance, they initially reconfigured it as XML3D then contrasted it with two 2D renditions, one of these two was Snap.com's unique progressive structure. The other rendition was a 2D collapsible tree program (i.e., a Windows Explorer-like interface). Members performed search and discover tasks utilizing each of the three

programs. The outcomes demonstrated that clients of the 3D program performed a few sorts of tasks (finding existing page classes) quicker than clients of both of the 2D programs. Additionally, there was no decrease in the nature of their reactions. Along these lines, results show that there is some guarantee for picturing Web pages in a 3D group, maybe as a consequence of giving a worldwide perspective of Web destinations in this way lessening clients' intellectual overhead.

2.2.Recommendation for Future Research:

In the previous section, we have examined what we accept are some key issues in planning usable Web locales. The capacity to skim the Web and to scan for particular data is crucial to the idea of convenience in this setting. While various analysts have started to research a percentage of the issues portrayed here, obviously there are numerous more inquiries that at present should be inspected. In this segment, we compress what we accept are some encouraging regions for future study.

1. One of the issues talked about above, search practices, offers ascend to a few potential zones of further study. For instance, given that flow search motors comprise of two fundamental structures – hierarchical and key word – what are the impacts of search motor structure, and related search forms, on searching results? For instance, are key word based searches more viable (e.g., less time, less blunders, more prominent client fulfilment and trust in their prosperity) than hierarchical searches? For what sorts of clients, or for what sorts of undertakings would one say one is structure more viable than the other? What are the psychological procedures connected with utilizing distinctive sorts of search apparatuses? Understanding these configuration suggestions from a psychological point of view may give planners better knowledge into the fit between specific outlines and their utilization.
2. Further work should be done to decide the impacts of navigational guides, utilized as a part of the standard browser connection, on searching adequacy. Kim and Yoo's (2000) take a shot at navigational catch outline for a web shopping centre gave a clearer photo of the sorts and mixes of navigation keys that encouraged searching and data finding in that specific connection. Are there other navigational guides that could be added to e-business destinations that would encourage finding and acquiring items or administrations? For instance, would a virtual representation of a shopping centre encourage finding items? Could there be contrasts in client fulfilment or execution by utilizing diverse positions of navigational apparatuses on a page? Would clients advantage from a few concurrent usages of particular navigational guides? Once more, comprehension the subjective procedure of navigation with such guides would encourage our comprehension of outline.
3. The research on history records likewise gives various intriguing research streets. One suggestion portrayed before was that cutting edge history records ought to have the capacity to foresee the client's next URL, maybe showing it in the most noticeable area in the rundown. How could that system be executed? Would some sort of astute specialist's innovation be the best approach for executing this ability? What impact on "revisitation" conduct would this have? Would it support utilization of the history list versus more normal and less productive navigation techniques (e.g., BACK button)? Identified with this issue is the subject of to what extent the "ideal" history rundown ought to be. Tauscher and Greenberg (1997) propose that 6-10 things are ideal. Would this diminish subjective overhead to make utilization of the history list more effective? Is there such a mind-bending concept as an "ideal" rundown

length? Provided that this is true, what is it? Another inquiry is the way to best speak to history list things. Current browsers utilize ordinarily some blend of key words and a URL. Notwithstanding, are there different documentations that would diminish psychological overhead of handling and utilizing not insignificant records, for example, a unique symbol to mark a particular connection or class of connections? Are there other documentation plots that could be utilized to arrange history things into significant groupings? Cockburn and McKenzie (2001) likewise bring up the issue of how to arrange history records (e.g., by fleeting lumps, in order, title, or visit tally). Could records be composed around particular undertaking sorts (e.g., discovering data on auto repair or on the most proficient method to oversee speculations)? Research could inspect the impacts of various hierarchical plans on clients' searching execution and fulfilment. Cockburn and McKenzie additionally raise the issue of sorting out all "revisitation" interfaces under a solitary interface. For instance, would it bode well to coordinate the regularly use BACK key with the history list? By tapping the BACK key, one may all the while view cursor development on the history list, subsequently having a clearer picture of precisely where BACK is taking you. What impact would an incorporated "revisitation" interface have on client perusing and search execution and fulfilment? At last, the research referred to here raises the issue of BACK button stack pruning (disposing of, or "pruning" a few destinations from the rundown of went by locales). Cockburn and McKenzie get back to for research on various button executions, particularly non-pruned records that demonstrate all destinations went by. Research could look at the impacts of this kind of amendment of the BACK button stack on skimming conduct and its fit with various scanning assignments.

4. A novel way to deal with Web navigation has been the advancement of 3D browsers (e.g., XML3D). Ridsen et al. (2000) assessed the effect of their browser for a particular classification of clients (Web engineers) and for a particular errand (registry administration). It is fascinating to assess the impacts of a 3D browser on the run of the mill skimming conduct of easy going clients. On the other hand, researchers could assess practices identified with searching for particular data on a Web webpage. Would connecting a 3D browser to some kind of 2D representation produce better results than essentially utilizing the 3D browser alone? Provided that this is true, what styles of 2D browser would be best? Will 3D browsers be produced that give a visual follow (i.e., a graphical history) of all locales went to inside of a session, or over various sessions? How might this influence the capacity to return to Web destinations?

These are only few question raised by the review of research issues in Web browsing and search. Author hopes that they may encourage researcher to study on this topics more to provide essentialbenefits in web site designing.

3. DESIGNING FOR WEB COMMERCE

In past section author discussed about some of the very important points of Web Usability. However, these points apply to Web use in general, not only in e- commerce. In this section author point out some of the specific issues on usability of Web in e-commerce and buyer's experience in buying from the web.

3.1.Challenges on purchasing online:

Nielsen (2001) argued that poor website design is the main factor which affects the profitability of

online retailer. He described a study in which user made 496 attempts to perform different tasks on various big and small e-commerce websites, but only 56% become successful. These results are indicate that if the population of e-commerce sites are high, then retailers may lose a large percentage of potential sales because their sites are confusing and difficult to use. Nielsen (1999b) indicates various mistakes that many designers commonly do i.e. slow downloading time, non-standard link colours, long scrolling, bleeding edge technologies, and few others.

To discuss these design problems, he provides various guidelines. For example, for homepage he suggests, start the page with less description which summarise company detail, write a window title with good visibility in search engine and bookmarks, highlight the sites high priority tasks (Nielsen, 2002). Unmistakably, the real accentuation is in encouraging clients' understanding and navigation of e-commerce sites. As we have talked about before, outlines that decrease clients' subjective overhead prompt more noteworthy achievement by and large.

However, in e-commerce context, it is much important to understand the processes which visitors go through in buying items online. This expands on the major idea that destinations ought to be anything but difficult to explore and get it. Nonetheless, e-trade site originators ought to likewise comprehend the purchasing handle and ought to make outlines that make buying less demanding to do. Miles, Howes, and Davies (2000) starts to address these points by suggesting that an e-commerce websites are a type of “decision support system” which supports various stages of buying decision. These stages include: a). searching a product according to buyer's choice through available searching aids, b). manage searching criteria, c). comparison of product. In view of these stages, the author recognizes a system determining plausible measurements of Web-based obtaining support. These measurements include: for supporting item search: i) the sort of webpage analogy utilized (browsable Web structure and/or a search motor); ii) the structure of data on the website (hierarchical or system); for criteria administration: i) the kind of item representation; ii) how item data is given; and for examination bolster: i) the extent of correlation (intrasite or intersite); ii) the kind of examination apparatus utilized. This study can raise various issues that scientists can start to investigate to get the proper guidelines to design a web site and provide suitable process to buyer when purchasing item online.

3.2.Suggestion for Future Research on Designing E-commerce Website:

Here are somerecommendations for future research in the area of Web site designing which helps cust omer to decide the item to purchase or not. They all are grouped under three main buying behaviours discussed above: searching the product, managing search criteria and comparison of product.

1. As we have seen from talks in before segments, client search conduct can be bolstered utilizing an assortment of techniques. For instance, if the expectation is to encourage scanning and data revelation, then the networked data structure might be best. Then again, for the individuals who have an unmistakable thought of what they need, some kind of web index might be a more valuable alternative. One potential examination issue to investigate might be the way best to coordinate investigation and seeking practices. For instance, if a customer scans for vehicles tires, is there an approach to incorporate data (i.e., joins) in the item depiction to related things that the customer may discover valuable (e.g., worldwide situating frameworks)? Likewise, would elective interface outlines empower the mix of search and perusing practices (e.g., 3D program that gives a diagram of the site)? On the other hand, an intriguing region of exploration might be to figure out what sorts of search tools could be utilized to help clients to decide the sorts, styles,

and so forth of items on the site may best fit their needs.

2. As Miles et al. bring up, item representations might be the main implies that clients need to figure out whether items meet their criteria. Things being what they are, what might be the best approaches to present items so clients can settle on the most ideal choices? For instance, ought to items be spoken to utilizing 3D imaging that permits purchasers to view them from all points, both all around, the same number of vehicles producers accomplish for their models? Then again, for a few items, improve? Additionally, what is the effect of representation quality on buying choices? At the point when do shading rendering, estimating, showed item subtle elements, and so forth emphatically impact purchasing conduct inside of the electronic medium? Item data may likewise play a noteworthy part in the buy choice. One issue is to decide the kind of data that would be most valuable to purchasers (e.g., proficient audits, client surveys, and item examination data). By what means would it be advisable for this to data be given on the Web website? For instance, is it best to give item data that is effortlessly open from an online picture by means of a mouse click, or through connections, maybe, to relate Web locales?
3. Many of today's e-business Web destinations don't give satisfactory support to looking at comparable items. The client regularly just needs to note, print out, or recall pertinent data over various Web pages keeping in mind the end goal to look at particular elements. Plainly, bolster for item correlations would advantage clients in these cases. Be that as it may, what kind of support is required? Questions here include: what number item components ought to be thought about? What might be the impact of tweaking correlations so that just particular components managed by clients' search criteria are looked at? What number of items or components can the client think about online before requests on subjective handling turn out to be excessively incredible? Would the capacity to run basic online recreations of various items help leaders (i.e., to think about the item in "activity")? Additionally, Miles et al. bring up a fascinating issue – Does it bode well for a dealer's Web website to have the capacity to contrast its items with those of its rivals? They contend that cross-dealer correlations may really expand purchaser's trust in settling on the right choice and, as time goes on, two connected stores may offer more items by helping clients match items to their prerequisites.

Some of these thoughts identified with acquiring support, obviously, have been executed in current Web destinations. Be that as it may, despite the fact that some of them are currently being utilized, regardless we don't know whether these are the best, best approaches to operationalize obtaining support. With a specific end goal to make this determination, and to gain by a variety of new open doors for supporting client obtaining conduct, further research is required. These are a couple of proposals about where we can begin.

4. TRUST IN E-COMMERCE

The main reason for client to not shop online is mainly the lack of trust or faith (Hoffman, Novak & Peralta, 1999). In other words we can say that trust is the most important thing when purchasing online and it is very necessary for 'online relationship exchange' involving personal and financial information of a buyer which takes place in a virtual environment indicated by uncertainty, lack of control and potential opportunism (Bhattacharjee, 2002). Lack of trust is the main barrier for e-commerce (Keen, 1997). Similarly as stated by Bhattacharjee based on the various e-commerce researches, "less trust on e-commerce web site eventually creates a substantial threat to the successful running of e-commerce business." Henceforth, a key inquiry for e-business accomplishment from a

human-PC collaboration viewpoint is (Rosenbloom, 2000): How can e-trade innovation are built to move purchaser trust?

To answer this question, first it is important to understand the importance of consumer's trust in online environment. Although faith has been noted as an inhibitor or main facilitator of e-commerce, number of aspects containing trust in online shopping and its antecedents and consequences are still not well understood (Bhattacharjee, 2002). A percentage of the related inquiries include: What are the components that constitute both starting and continuous trust in e-trade? What are the forerunners, or elements impacting (starting and progressing) trust in e-trade? What are the configuration qualities that constitute a dependable e-business Web webpage? Does inclination to trust contrast among individuals of various demographics, for example, age gatherings, sexual orientation, and instructive capabilities? What are the instruments for starting, assembling, and managing trust in e-business? How powerful are the current instruments for creating online trust? Whatever degree and how is trust responsible for the achievement or disappointment of an ecommerce Web webpage?

In the accompanying sub-segments, author will audit the idea of customer trust in e-trade, its precursors and results, and systems and configuration issues for trust improvement in e-business. Note that author concentrate just on buyer related trust, that is, trust in business-to-consumer (B2C) and customer to-customer (C2C) e-trade. Taking into account the audit, author offer a few proposals concerning advancement of e-trade Web locales, and highlight some key examination issues concerning trust in e-business.

4.1 Concept of Trust in E-commerce – its Components, Antecedents and Consequences

Trust is a complex, multi-dimensional, connection subordinate build (Gefen, 2000; McKnight, Choudhury, and Kacmar, 2002). As per Friedman, Kahn, and Howe (2000), we trust "when we are powerless against mischief from others yet trust these others would not hurt us despite the fact that they could" (p. 34). With regards to e-trade, shopper trust can be characterized as the readiness of the purchaser (trustor) to be defenseless against the activities of an online party (trustee) by participating in online relationship trades with the party. By giving touchy data to the online party as a feature of the trades, the purchaser, who has constrained capacity to screen or control the conduct of the online party, gets to be helpless against the activities of the gathering. By getting to be powerless, the buyer is going out on a limb in the relationship. Thus, "trust is not going out on a limb essentially, yet rather it is an eagerness to go out on a limb" (Mayer, Davis, and Schoorman, 1995).

Shoppers' nonappearance of trust in the online environment is exhibited by their trepidation of giving without end individual and cash related information as a result of security concerns rising up out of nonattendance of environmental control and control over optional utilization of information (Hoffman et al., 1999). Environmental control alludes to the purchaser's ability to control the exercises of a Web seller and the Web supplier's ability to keep the information from being hacked, though control over auxiliary utilization of information alludes to the ability to control ones close to home information from being utilized for different purposes after the trade has occurred. As demonstrated by Hoffman et al's. (1999) examination, 63% of purchasers decrease to give individual information to Web destinations since they don't trust those gathering the data, 69% of the individuals who decline to give such information do all things considered in light of the fact that the Web locales give no information on how the data will be utilized, and 65% show that it is not worth the peril. Pretty much 95% of Web clients have declined to give individual information to Web destinations at some time when asked

(Hoffman et al., 1999).

The conceptualization of trust in e-business has been progressed by two late endeavours embraced by Bhattacharjee (2002) and McKnight et al. (2002) where measures for the build were created. McKnight et al. conceptualized trust in e-business as containing four perspectives: attitude to trust (i.e., general readiness to trust others), foundation based trust (i.e., impression of the Web environment), trusting convictions (i.e., view of Web merchant qualities), and trusting expectations (i.e., goals to take part in trust-related practices with a Web seller), while Bhattacharjee particularly tended to individual trust in online firms (or 'believing convictions' in McKnight et al.'s term) by building up a seven-thing scale for the develop. In both studies, the idea of trusting convictions is operationalized in light of the measurements proposed by Mayer et al. (1995): capacity (fitness), honesty (unwavering quality and reliability), and altruism (consideration and goodwill) of the trustee (or the online firm or gathering with regards to e-trade). Notwithstanding these two late headways in conceptualizing and operationalizing the trust build in the e-business environment, the idea of progressing or long haul trust in e-trade is still not surely knew or concentrated on.

McAllister (1995) distinguishes between two types of trust: cognition-based trust and affect-based trust. In the context of e-commerce, cognition-based trust refers to reliability and dependability of the trustee, which corresponds to 'integrity' in Mayer et al.'s term. Affect-based trust refers to care and concern for the other party, or 'benevolence' in Mayer et al.'s term. Similarly, these two types of trust were also proposed by Doney and Cannon (1997) but termed credibility (cognition-based) versus benevolence (affect-based) by them. From the literature, it is clear that ability or competence is a necessary but not sufficient condition for trust. To engage in a trusting online relationship, a consumer is likely to first evaluate the competence and integrity of the online firm or party. Hence, cognition-based trust is crucial in establishing an initial relationship with an online party. On the other hand, as indicated by Mayer et al. (1995), the effect of perceived benevolence on trust is likely to increase over time as the relationship develops. Hence, affect-based trust is expected to become more important in subsequent online relationships. Although the literature suggests differences between the types of trust needed to establish an initial versus ongoing relationship, we are not aware of research studies that have empirically investigated, assessed or validated the differences between initial and ongoing trust in online exchange relationships.

Why is trust important? Several researchers have demonstrated its importance in e-commerce. Increased trust in an online store reduces consumers' perception of risk (of carrying out a transaction with the online store) and influences their attitudes toward the online store, which increase their willingness to purchase from the online store (Jarvenpaa, Tractinsky, and Vitale, 2000). Gefen (2000) has also shown a clear relationship between trust and both intention to purchase and intention to inquire about products on the vendor's Web site. Lee, Kim, and Moon (2000) demonstrate a positive relationship between trustworthiness of Web sites and customer loyalty. This relationship is even stronger for high involvement products. Although the importance of online trust has been demonstrated in the literature, and there is no doubt that trust is important for the success of e-commerce, the antecedents of consumer online trust and how they influence overall trust perceptions warrant further study (Bhattacharjee, 2002).

To identify and understand the antecedents of consumer trust in e-commerce, researchers have looked into the trust literature in various disciplines, including marketing, psychology, social psychology, sociology, organizational behavior, and economics. Drawing upon the marketing literature (Doney and Cannon, 1997), Jarvenpaa et al. (2000) assessed how the size and reputation of Internet stores

evoke consumer trust in online exchange relationships. They found a strong relationship between perceived reputation and trust, and a significant but weaker relationship between perceived size of Internet stores and consumer trust. Perceived reputation was found to play an important role in the formation of trust, which has significant implications for the use of reputation systems in e-commerce (to be discussed later). The influence of perceived size on trust, however, was found to differ for different types of stores. They concluded that the degree of ambiguity and uncertainty in a purchase influence the relationship between store size and trust. In other words, the more significant (i.e., expensive) the purchase, the more consumers' trust might be influenced by store size. As noted earlier, McKnight et al. (2002) identified the antecedents and effect of trust in the e-commerce context by drawing on concepts from psychology (i.e., disposition to trust), sociology (institution-based trust), and social psychology (trusting beliefs and trusting intentions). From an economic perspective, information asymmetry affects trust (Ba, Whinston, and Zhang, 1999). In addition to the above factors, other research has identified familiarity (Gefen, 2000), aesthetics (Jarvenpaa et al., 2000), Internet security (Ernst and Young, 2001), and design issues of e-commerce Web sites (Shneiderman, 2000) as antecedents of consumer trust in e-commerce. A more complete understanding of the antecedents of consumer trust in e-commerce is not only necessary but also helpful for devising mechanisms and designs to promote trust.

Consumers' concerns with Internet security and information privacy are two key hurdles faced in e-commerce (Cox, 1999; Ernst and Young, 2001; Swaminathan, Lepkowska-White, and Rao, 1999). To overcome these hurdles, Web site design should help create and establish a climate of trust (Shneiderman, 2000). Trusted third parties play an increasingly important role, and feedback mechanisms have also been introduced. The next section discusses these design issues and mechanisms for establishing trust.

4.2. Discussion and recommendation for future research:

The challenge of establishing consumer trust in e-commerce poses problems and issues that need further research. To date, most of the studies in the MIS literature have examined only initial online trust (e.g., Ba and Pavlou, 2002; Bhattacharjee, 2002; McKnight et al., 2002) or do not differentiate between initial and ongoing trust (e.g., Jarvenpaa et al., 2000). Although establishing initial trust is crucial, online firms also need to focus their attention on establishing long-term relationships with their customers. More research on both initial and ongoing trust is warranted, and a better understanding of how trust can be developed online and then sustained over time is crucial to the survival of e-commerce.

Although the literature has provided us with some basic understanding of the antecedents of trust, the current knowledge base is both sparse and fragmented. A comprehensive knowledge base will need to be developed to better understand these antecedents in the e-commerce context – from both the initial and long-term trust perspectives. Some of the relevant questions include: What are the main factors influencing online trust, and how are these factors related? How do these factors influence the dynamics of trust formation in online relationships and affect consumers' online shopping and purchase behavior? Can these factors be fostered or enhanced in an online environment, and if so, how? Which factors are more effective for initial trust formation and which play a greater role in sustaining consumer trust? For example, do familiarity, personalization, and experience take on a greater role than disposition to trust for repeat customers? Developing a good knowledge base of the antecedents of online trust is crucial as it not only provide us better knowledge and understanding of how trust can be cultivated online, but it may also suggest new ways of establishing consumer trust.

Furthermore, it may provide new research ideas and guidance on future research in this area.

Trust is defined by Shneiderman (2000) as “the positive expectation a person has for another person or organization based on past performance and truthful guarantees (p. 58).” In the absence of prior online exchanges, how does a consumer determine the past performance of an Internet store, and whether its guarantee is likely to be truthful? In other words, how could initial trust be established? Reputation systems play a key role in this respect and, hence, deserve more research attention. Future research should address the limitations of reputation systems and the role they play in long-term trust building efforts. In addition to reputation systems, the literature has provided other guidelines concerning the development of online trust (refer to Section 4). Examples of questions that need further research include: To what degree and in what ways does each of these guidelines foster consumer trust? Which of these guidelines are more effective for fostering initial versus sustained trust? Do people with high versus low disposition of trust respond differently to personalization and other trust building treatments (e.g., third party assurance seal)? What is the role of intermediaries (e.g., trusted third party certifications, escrow services) in development of online trust, and how does it compare to endogenous solutions (e.g., privacy policies)? Which characteristic(s) of a trusted third party assurance seal promote the greatest amount of consumer trust – security, privacy, professional? Is third-party certification an effective method to promote online trust? How can it be made more effective (e.g., changing presentation, look, placement, etc.)? How does it compare to other methods such as reputation systems?

With regard to reputation systems, Kollock (1999) and Resnick et al. (2000) have raised many issues concerning their implementation. Despite some limitations (Resnick et al., 2000), reputation systems have evolved to take on an increasingly important role in online consumers’ purchase decisions. Some basic questions concerning reputation systems remain to be studied, and their findings will help improve the continually evolving designs of reputation systems. These questions include: What is the most effective method of deploying the reputation management concept? How effective are reputation systems under different conditions and scenarios, such as types of products traded, and B2C versus C2C e-commerce? How can we balance the trade-off between accountability and anonymity of reviewers, since credibility of reviews increases with identity and accountability? How can reputation systems be designed more effectively? In order to improve the effectiveness of reputation systems, more attention should also be devoted to evaluate the presentation format and validity of reviewers’ feedback. Examples of relevant questions include: How can the feedback in reputation systems be aggregated and presented more effectively? What methods can be used to assess and maintain the reliability and validity of reputation systems? How can we effectively assess the trustworthiness of reviewers within a reputation system, and perhaps create a reliable “network of trust” among participants in the online community? What key attributes and mechanisms contribute toward the success of reputation systems by encouraging trustworthy behavior and deterring dishonest participation? Does the provision of incentives and rewards (given for high quality feedback) change the dynamics of postings and interactions within a reputation system, and if so, how does that in turn affect consumers’ patterns of purchase behavior? Answers to these questions can help improve the effectiveness and validity of reputation systems.

Empirical studies are needed to understand the above issues and relationships, to assess the effectiveness of the suggested guidelines, and to integrate the guidelines that have been shown to be effective into e-commerce development methodologies. With a better understanding of these factors and relationships, we might be able to introduce more powerful and effective mechanisms to establish a stronger online climate of consumer trust. For instance, from a software development standpoint,

research on intelligent agents shows promise for developing a social experience that establishes a climate of trust (Cassell and Bickmore, 2000). More work is also needed to examine and understand the dynamics of trust formation in establishing a network of trust (i.e., relationships of trust among parties of an online community or participants of a reputation system, as in the case of Epinions.com) in order to assess the validity of such a trust-building mechanism.

Many questions relating to trust in e-commerce remain to be answered and are awaiting further research. We have identified a few key questions above and argue that a professionally designed Web site that integrates trust building mechanisms – such as informed consent, giving assurances, providing guarantees of privacy and security and backing them up with financial compensation, and using (or linking to) references from current and past users – is crucial for success. Web designers and developers need to understand how to foster conditions and devise methods that facilitate the development of trust among participants of e-commerce. We provide some basic guidelines in this article, which we hope will serve as a starting point for those designers and developers and for future research in this area.

5. CONCLUSION

Human-PC Connection in e-commerce is an important research area. With the popularity of the WWW and the constant emergence of new technologies designed for the Web, the amount of research that requires attention is phenomenal. A good understanding of Web-based interaction is crucial for designing usable and effective Web sites, especially in the e-commerce context.

In this article, we examine issues and challenges in the design of Web sites; provide suggestions for improvement, and recommendations for future research. First, we examine Web design for browsing versus information search and assess their relationship and fit with task type. We found that exploratory tasks are best supported by a network or combination information structure while searching tasks are best supported by a hierarchical information structure. Similarly, spatial navigational structure is particularly suited for ad hoc browsing. Our suggestions for future research in this area include assessing the relationship between information structures and navigational aids, and their impact on searching/browsing behaviours and outcomes. Studies on Web revisitation were also reviewed and recommendations concerning design and management of bookmark (or hotlist), and history list are presented. Next, 3D versus 2D Web visualization is compared and future research directions are discussed. Building upon our understanding of the issues involved in Web navigation, we examine these issues in the e-commerce context, or more specifically, in the context of three buying behaviours: product search, search criteria, and product comparison.

With the advancement of Web-based technology, e-commerce is now a reality. However, the lack of trust or the difficulty of cultivating trust in an online environment poses a major hurdle to the future of e-commerce. Research on trust is needed to understand its antecedents and to devise ways to foster trust online. Thirteen guidelines are provided in this article to integrate trust-building strategies into e-commerce sites. Future research is needed to assess the effectiveness of these strategies and to propose other forms of trust building mechanisms.

Although the issues covered in this article are not in any way complete, author tries to highlight some of the trends and important issues for future research in e-commerce. This article has covered two key concepts related to ecommerce – Web navigation and development of trust online. In order to succeed in e-commerce, online vendors need to begin with a user-friendly and trustworthy Web site so that

users feel comfortable and confident interacting with it. The process of navigation and search on the Web site should require minimal effort, and the Web site should be designed in such a way that it facilitates product search within a short amount of time and provide users with a good sense of control over the interaction. Having a user-friendly Web site, by itself, is not adequate. It also needs to cultivate a climate of trust and confidence among its users. For example, a privacy policy and tight security controls should be in place, information on all aspects of the customer relationship should be clearly stated on the Web site, informed consent should be used to maintain the highest level of consumers' privacy, third party certifications may be used, and having a reputation system in place would be very useful. These two components, Web usability (or ease of navigation) and establishing a climate of trust, are crucial and necessary (not but sufficient) factors for e-commerce success.

REFERENCES

1. Ba, S. and Pavlou, P.A., "Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior," *MIS Quarterly*, Vol. 26, No. 3, September 2002 forthcoming.
2. Ba, S., A.B. Whinston, and H. Zhang, "Building Trust in the Electronic Market through an Economic Incentive Mechanism," *Proceedings of the Twentieth International Conference on Information Systems*, Vol. 20:208-213, Charlotte, North Carolina, December 1999.
3. Bhattacharjee, A., "Individual Trust in Online Firms: Scale Development and Initial Test," *Journal of Management Information Systems*, Vol. 19, No. 1:211-241, Summer 2002.
4. Campbell, C. and P.P. Maglio, "Facilitating Navigation in Information Spaces: Road -Signs on the World Wide Web," *International Journal of Human-Computer Studies*, Vol. 50, No. 4:309-327, April 1999.
5. Carmel, E., S. Crawford, and H. Chen, "Browsing in Hypertext: A Cognitive Study," *IEEE Transactions on Systems, Man, and Cybernetics*, Vol. 22, No. 5:865-883, Sep-Oct 1992.
6. Conklin, J., "Hypertext: An Introduction and Survey," *IEEE Computer*, Vol. 20, No. 9:17-41, September 1987.
7. Cox, B., "Security, Privacy Remain Top Consumer Concerns," *InternetNews.com* [On-line],
8. http://www.internetnews.com/ec-news/article.php/4_95031, April 9, 1999.
9. Doney, P.M. and J.P. Cannon, "An Examination of the Nature of Trust in Buyer -Seller Relationships," *Journal of Marketing*, Vol. 61, No. 2:35-51, April 1997.
10. Edwards, D.W. and L. Hardman, "Lost in Hyperspace: Cognitive Mapping and Navigation in a Hypertext Environment," *Hypertext: Theory into Practice*, Ray McAleese (ed.), Oxford: Intellect Books, pp. 105-125, 1989.
11. Ernst & Young, *E-Security and Privacy: The Role of Web Seals on the Internet*,
12. [http://www.ey.com/global/vault.nsf/international/eSecurityandPrivacy/\\$file/eSecurity&Privacylowreslocked.pdf](http://www.ey.com/global/vault.nsf/international/eSecurityandPrivacy/$file/eSecurity&Privacylowreslocked.pdf), 2001.
13. Foss, C.L., "Detecting Users Lost: Empirical Studies on Browsing Hypertext," Technical Report No. 972, INRIA, 1989.
14. Friedman, B., P.H. Kahn, and D.C. Howe, "Trust Online," *Communications of the ACM*, Vol. 43, No. 12:34-40, December 2000.
15. Gay, G., D. Trumbull, and J. Mazur, "Designing and Testing Navigational Strategies and Guidance Tools for a Hypermedia Program," *Journal of Educational Computing Research*, Vol. 7, No. 2:189-202, 1991.
16. Greenberg, S., *The Computer User as Toolsmith: The Use, Reuse, and Organization of Computer-based Tools*, Cambridge University Press, Cambridge, MA, 1993.
17. Greenspan, R., "Trust is in the Details," *CyberAtlas*, http://cyberatlas.internet.com/markets/retailing/article/0,,6061_1369641,00.html, June 21, 2002.
18. Hammond, N. and L. Allinson, "Extending Hypertext for Learning: An Investigation of Access and Guidance Tools," *People and Computers V*, Alistair G. Sutcliffe and Linda Macauley (eds.), Cambridge University Press, Cambridge, UK, pp. 293-304, 1989.

19. Hardman, L., "Evaluating the Usability of the Glasgow Online Hypertext," *Hypermedia*, Vol. 1, No. 1: 34-63, 1989.
20. Hoffman, D.L., T.P. Novak, and M. Peralta, "Building Consumer Trust Online," *Communications of the ACM*, Vol.42, No. 4:80-85, April 1999.
21. Jarvenpaa, S.L., N. Tractinsky, and M. Vitale, "Consumer Trust in an Internet Store," *Information Technology and Management*, Vol. 1, No. 1-2:45-71, 2000.
22. Kanerva, A., K. Keeker, K. Ridsen, E. Schuh, and M. Czerwinski, "Web Usability Research at Microsoft Corporation," *Human Factors for World Wide Web Development*, J. Ratner, E. Grosse, and C. Forsythe (eds.), Lawrence Erlbaum, New York, NY, 1997.
23. Kim, J. and B. Yoo, "Toward the Optimal Link Structure of the Cyber Shopping Mall," *International Journal of Human-Computer Studies*, Vol. 52, No. 3:531-551, 2000.
24. Kollock, P., "The Production of Trust in Online Markets," *Advances in Group Processes*, Edward J. Lawler, Shane R. Thye, Michael W. Macy, and Henry A. Walker (eds.), Vol. 16, JAI Press, Greenwich, CT, pp. 99-123, 1999.
25. Lee, J., J. Kim, and J.Y. Moon, "What Makes Internet Users Visit Cyber Stores Again? Key Design Factors for Customer Loyalty," *Proceedings of the Computer-Human Interaction Conference on Human Factors in Computing Systems*, The Hague, Netherlands, pp. 305-312, April 2000.
26. Mayer, R.C., J.H. Davis, and F.D. Schoorman, "An Integrative Model of Organizational Trust," *Academy of Management Review*, Vol. 20, No. 3:709-734, 1995.
27. Monk, A.F., "The Personal Browser: A Tool for Directed Navigation in Hypertext Systems," *Interacting with Computers*, Vol. 1, No. 2:190-196, 1989.
28. Nielsen, J., "Navigation Through Hypertext," *Communications of the ACM*, Vol. 22: No. 3:296-310, 1990.
29. Nielsen, J., "Trust or Bust: Communicating Trustworthiness in Web Design," *Jacob Nielsen's Alertbox*, <http://www.useit.com/alertbox/990307.html>, March 7, 1999a.
30. Nielsen, J., "Who Commits the 'Top Ten Mistakes' of Web Design?" *Jacob Nielsen's Alertbox*, <http://www.useit.com/alertbox/990516.html>, May 16, 1999b.
31. Radha, R. and C. Murphy, "Searching Versus Browsing in Hypertext," *Hypermedia*, Vol. 4, No. 1:1-31, 1992.
32. Resnick, P., R. Zeckhauser, E. Friedman, and K. Kuwabara, "Reputation Systems," *Communications of the ACM*, Vol. 43, No. 12:45-48, December 2000.
33. Ridsen, K., M. Czerwinski, T. Munzner, and D. Cook, "An Initial Examination of Ease of Use for 2D and 3D Information Visualizations of Web Content," *International Journal of Human-Computer Studies*, Vol. 53, No.5:695-714, 2000.
34. Swaminathan, V., E. Lepkowska-White, and B.P. Rao, "Browser or Buyers in Cyberspace? An Investigation of Factors Influencing Electronic Exchange," *Journal of Computer-Mediated Communication*, Vol. 5, No. 2, <http://www.ascusc.org/jcmc/vol5/issue2/swaminathan.htm>, December 1999.
35. Tauscher, L. and S. Greenberg, "How People Revisit Web Pages: Empirical Findings and Implications for the Design of History Systems," *International Journal of Human-Computer Studies*, Vol. 47, No. 1: 97-137, 1997.
36. Toms, E., "Understanding and Facilitating the Browsing of Electronic Text," *International Journal of Human-Computer Studies*, Vol. 52, No. 3:423-452, 2000.
37. Utting, K., and N. Yankelovich, "Context and Orientation in Hypermedia Networks," *ACM Transactions on Information Systems*, Vol. 7, No. 1:58-84, 1989.

THE ROLE OF FAMILIARITY AND TRUST IN ACCEPTANCE OF E-COMMERCE SITES

Parinda V. Doshi

Assistant Professor

Department of Commerce and Business Management,

M.S. University of Baroda

E-mail: parinda_doshi@yahoo.com

Abstract

World is becoming small with the technical development. The technical development had begun a new era of E-business. People now use internet to buy thing like clothes, shoes, grocery, electric gadgets, books, automobile etc. with a click of a button. This E-business is coined as E-commerce, which is a process where buying and selling of the product takes place with the help of internet. The buyers while buying product from the E-commerce sites rely on the pictures, descriptions and opinions of others, about the products on such sites. Trust on the site and the familiarity of the procedure of inquire and purchase plays a major role in the purchase of the product from different E-commerce sites. The study examines this intriguing idea in the context of the E-commerce involved in inquiring about and purchasing things on the Internet. Data is collected from students who are potential users of the different E-commerce sites. After collection, the data is analysis to know the role of familiarity and trust in acceptance of E-commerce sites. Result of the study show that both familiarity with an Internet vendor and its processes and trust in the vendor influenced the respondents' intentions to inquire about the products, and their intentions to purchase them.

Key Words: E-commerce, Trust, Familiarity, Internet, Motivation

1. INTRODUCTION

Economic and technical development has change the life of the people living in the urban area. People in the cities are busier with their daily routine as specially when both husband and wife are working. Shopping things from the stores is a difficult task to be managed with a dual responsibility. Thus need for facility which can help them to do shopping from their homes was develop among a group of people and this is how the E-commerce business develops in the urban areas. E-commerce has not only fulfilled this requirement of the people but also has been successful in delivering good quality product at a very reasonable price. With the development of e-market, we now find many E-commerce sites dealing in variety of products which satisfy diverse needs of the customers. With the passage of time and innovation in technology purchasing from E-commerce site became more economical and convenient for increasing number of people, which resulted into the continuous increase in the number of customers of E-commerce sites.

While shopping from E-commerce site, customer views the image of the product and if find interesting go for the information mention in the site. Familiarity with the procedure for inquiry makes it easy for the user to take a decision for purchase of the product from the E-commerce site. Other than inquiry, trust on the site for the quality products and services is another important factor

for the E-commerce business to be successful (Gefen, 2000). The present study is conducted to know the impact of trust and familiarity of E-commerce site on the inquiry and purchase of product by the students in Vadodara city. The study also examines the most popular E-commerce site among the selected students in Vadodara city.

The paper is organized in six sections; first section is of introduction followed by the second section of concepts development and literature review. Third section discusses the objectives and the research hypotheses. Fourth section gives the details of research method used, fifth section presents analysis and results of the study followed by a conclusion discussion and implications in the last sixth section.

2. CONCEPT DEVELOPMENT AND LITERATURE REVIEW

Internet promises to revolutionize the shopping and information-gathering choices available to consumers. In order to realize the enormous potential of E-commerce it is important for e-vendors to make consumers feel comfortable for transacting over the new medium (Wang et al., 1998; Gefen and Straub, 2002). Lack of trust in web vendors, technical and institutional environments surrounding the web can also discourage consumers from adoption of E-commerce (Bhattacharjee, 2002). Thus, it is necessary for web vendors to act in such a way that will help in overcoming the consumer perceptions of uncertainty and risk towards the usage of web site. Understanding the nature and antecedents of trust is, therefore, a major

issue for both internet researchers and practitioners (Jarvenpaa and Tractinsky, 1999; Stewart, 1999). Trust was treated as a unitary concept in early research (Rotter, 1971) but now it has been taken as a multidimensional concept by many researchers (Mayer et al., 1995; Rousseau et al., 1998). Concept of E-commerce, trust and familiarity are discussed in detail in the sub sections of the study.

2.1. E-commerce

E-commerce is a setting in which business transactions are conducted through open networks using internet infrastructure. These markets are characterized by high connectivity (Dutta and Segev, 1999), a focus on transactions (Balakrishnan, Kumara, and Sundaresan, 1999), the importance of information goods and networks (Shapiro and Varian, 1999), and high reach and richness of information (Evans and Wurster, 1999). Reach for the study is understood as a quick and cheap reach by E-commerce sites to the number of people and the richness as a depth and detail of information that can be accumulated, offered, and exchanged between market participants. Virtual markets have unprecedented reach because of lack of geographical boundaries (Amit and Zott, 2001).

2.2. Trust

Psychologists have defined trust as a tendency to trust others (Rotter 1971) for social psychologists it is cognition about the trustee (Rempel et al. 1985) and for sociologists it is a characteristic of the institutional environment. Trust is important for the web based vendor as it helps to overcome consumer perceptions of uncertainty and risk. It is because of the trust in the vendor that consumers do not hesitate in sharing their personal information and making purchases from them. The perception of the trust is questioned when people are interacting with an unfamiliar vendor. Thus, in E-commerce the consumer trusts the E-commerce sites for giving their personal information and purchasing products from E-commerce sites. Kee and Knox (1970) defined five trust-related constructs which are dispositional factors, situational factors, perceptions of the other, subjective trust, and behavioral trust. Mayer et al. (1995) define trust-related behaviors as actions that demonstrate dependence on a web vendor and that make one vulnerable to the vendor, or increase one's risk. They examine the

propensity to trust, trust (willingness to be vulnerable to another), and perceptions of trustworthiness (cognitions) of the web vendors. The commonly discussed trust-related behaviors in electronic commerce include sharing personal information, making a purchase, or acting on information provided by a web site (McKnight et al., 2002).

2.3. Familiarity

Familiarity with E-commerce is based upon the previous interactions, experiences, and learning of what, why, where and when to do the things. Familiarities towards the different procedures of E-commerce website help in reduction of uncertainty and simplification of relationships with the web vendors. Familiarity, thus deals with the current actions of the users of the sites while trust deals with the future action of users of E-commerce sites. Familiarity and trust are complementary to each other as one helps in reduction of uncertainty by establishing a structure the other reduces uncertainty by letting people hold 'relatively reliable expectations' about other people's favourable future actions (Gulati, 1995; Luhmann, 1979). Thus familiarity helps in creating the favourable background for the users to trust the E-commerce sites.

In the case of E-commerce site users' trust is more important for buying things than inquiring about the product. The reason that familiarity can build trust is because familiarity not only provides a framework for future expectations, but also lets people create concrete ideas of what to expect based on previous interactions (Blau, 1964). Thus, familiarity with the E-commerce site helps in building the trust on the E-commerce site. Familiarity not only helps in creating a trust with the favourable experience, but can also ruin trust of the user with the unfavourable experience (Hosmer, 1995; Kumar et al., 1995; Kumar, 1996; Luhmann, 1979; Zucker, 1986). The more familiar people are with the E-commerce site, the more their favourable expectations are likely to have been confirmed, and, accordingly, the more they should be inclined to trust the vendor (Gefen, 2000).

3. OBJECTIVES AND THE RESEARCH HYPOTHESES

Prime object of the study is to analyse the impact of trust and familiarity of E-commerce site on inquire and purchase of the product. The prime object is further bifurcated into the sub objectives:

- To know the E-commerce site generally being used by the college students.
- To examine the influence of trust on inquire about the product on E-commerce site.
- To analyse the effect of trust on intention to purchase the product from E-commerce site.
- To study the impact of familiarity on inquiries about the product on E-commerce site.
- To evaluate the significance of familiarity on intention to purchase the product from E-commerce site.
- To investigate the role of familiarity in increasing the trust for E-commerce site.

Objectives of the study lead to the following hypothesis:

H₁: Trust in an E-commerce vendor will increase people's intentions to inquire about products on that vendor's website.

H₂: Trust in an E-commerce vendor will increase people's intentions to purchase products on that vendor's website.

H₃: Familiarity with an E-commerce vendor and its procedures will increase people's willingness to inquire about products on that vendor's website.

H₄: Familiarity with an E-commerce vendor and its procedures will increase people's willingness to purchase products on that vendor's website.

H₅: Familiarity with an E-commerce vendor and its procedures will increase trust in the vendor.

4. RESEARCH METHODOLOGY

The present study is descriptive and exploratory in nature; it focuses on the college students who are user of E-commerce sites, data collection is done from Feb 2016 to April 2016. Population of the study consist of students studying or were associated with Commerce faculty of M.S. University of Vadodara and now perusing some professional courses. From the population 92 samples were drawn using snowball sampling technique. Questioner for the study comprises of six parts. The first part is the demographic profile of the respondent which consists '3' questions inquiring about the degree they are perusing for, gender and age of the students. Second part consist of '4' items relating to familiarity of E-commerce. Third part is of trust which has '1' item. Forth part is design to know the use the E-commerce site which consist of '4' items. Fifth and sixth part of the questioner is for intention of purchase and intention for inquiry, each consisting of '4' items. Data collection is done through the close ended questioner using Likert type scale from '1' strongly disagree to '5' strongly agree.

The objectives of the study have been examined and analysed using suitable statistical tools. To analyse the impact of trust and familiarity of E-commerce site on inquire and purchase of the product; and the role of familiarity on the trust for E-commerce site is measure using correlation and t-test. The result of the analyses is given below.

5. EMPIRICAL RESULTS

The questioner was circulated among the college students of M.S. University of Baroda. The students were divided into three categories which are: student under bachelor course, students of master course and student were or are associated with the faculty and now perusing professional courses. The detail of the students is given in Table no: 1

Table 1: Detail of the Students			
Category		Respondent	Percent
Student	Bachelor	42	46
	Masters	41	45
	Professional Course	9	10
	Total	92	100
Gender	Male	42	46
	Female	50	54
	Total	92	100
Age	16-20	28	30
	21-25	49	53
	26-30	14	15
	30 and above	1	1
	Total	92	100

The detail demonstrates that out of total 92 students, 42 students were perusing bachelor degree which came to 46 percent of the total sample. Student perusing Master degree came to 45 percent and the students of professional courses were 10 percent of the total sample. When these students were further bifurcated according to their gender it was found that 46 percent of the respondents were male and the remaining 54 percent were the female respondent. The gender ratio shows that E-commerce sites were almost equally used by the male and female students of the faculty. Students were further classified according to the age group. The categories of the age classification were 16-20, 21-25, 26-30 and above 30 years. The data reveals that 30 percent of the students belong to the first category of 16-20 years. 53 percent of the students fall in the second category of 21 to 25 years. Third category 26-30 years had 15 percent of the students and the last forth category had 1 student who was above 30 years.

5.1. Popular E-commerce Sites among the Students.

Students were given the choice to tick the sites they have used till date. The responses of the students for the usage of sites are given in Table no: 2

Table 2: E-commerce Sites used by the Students		
E-commerce Sites	Responses	Percent
Amazon	54	28
Flipkart	46	24
Myntra	30	16
Snapdeal	28	15
Jabong	15	8
Ebay	7	4
Shopclues	7	4
Yebhai	3	2
Other	2	1
Total	192	100

As the students were given option to tick more than one site the total response for the usage of site came to 192, which mean many student use more than one E-commerce site for the inquire or purchase of the product. The most popular site among the college students was Amazon with 28 percent of response followed by the Flipkart with 24 percent of the response. These two sites had nearly 50 percent of the total responses and seem to be favourite among the college students. Another two popular sites were Myntra and Snapdeal with the response of 16 and 15 percent. Remaining sites Jabong, Ebay, Shopclues, Yebhai and other were used by 8, 4, 4, 2 and 1 percent of students for inquiry and shopping of the products.

5.2. Trust and Inquiry

Positive correlation of 0.53 was establish between the trust and inquiry of the product. The positive correlation helps to interpret that people will inquiry more on the trusted E-commerce sites. T- test of unequal variance was run at 5 percent significant level between the two variables and the resultant p value of the test was 8.88E-54, the p value is smaller than 0.05 which helps to prove that trust in an E-commerce vendor will increase people's intentions to inquire about the products on that vendor's website.

5.3. Trust and Purchase of Product

Relationship between the trust and purchase was measure through correlation. The positive correlation of 0.30 was found among the variable which means that trust positively affect the purchase behaviour of respondent. T-test of unequal variance was conducted at 5 percent significant level between the variables and the p value of the test was 0.01 which is smaller than 0.05 which help to prove that trust in an E-commerce vendor will increase people's intentions to purchase products on from the vendor's website.

5.4. Familiarity and Inquiry

Familiarity and inquiry also had a positive relationship with the positive correlation of 0.37, which mean that when people are more familiar with the E-commerce site they will inquire more for the things on that site. P value of the T-test of unequal variance at 5 percent significant level among the variables was 4.44E-25 which is smaller than 0.05 and help to prove the positive role of familiarity with procedures will lead to increase in the willingness of people's to inquire about products on that vendor's website.

5.5. Familiarity and Purchase of Product

Positive correlation of 0.37 was found between familiarity and purchase of product. The positive correction explain the positive relationship among the variable and interpreted as when people are more familiar with the E-commerce site they will purchase more from that particular site. P value of the T-test of unequal variance at 5 percent significant level among the variables was 2.81E-64 which is much smaller than 0.05 and help to prove the significance of familiarity with an E-commerce vendor and its procedures for increase in the willingness of people's to purchase products on that vendor's website.

5.6. Familiarity and Trust

Relationship between the familiarity and trust was found positive, with a positive correlation of 0.32 among the variable. When T-test of unequal variance was conducted among the variable at 5 percent significant level, the p value of the test was 7.75E-66 which is smaller than 0.05. Thus the test shows the positive role of familiarity in increasing trust on the E-commerce vendor.

6. FINDINGS AND CONCLUSION

Young generation accept the change easily and are more prone for the usage of new technology. This was the main reason to take the college students for analysing the role of familiarity and trust on the usage of E-commerce sites. The study will help the E-commerce site to know the role of trust and familiarity in the adoption of the E-commerce site for inquire and purchase of product especially among the college students. The conclusion of the analysis is listed below:

- Male and Female student equally use the E-commerce site of inquire and purchase the products.
- Amazon and Flipkartis the most popular site among college students.
- Trust has a positive influence on inquire about the product on E-commerce sites.
- Trust has a positive effect on the intention to purchase of product from E-commerce sites.
- Familiarity has a positive impact on inquiries about the products on E-commerce sites.
- Purchase of product from E-commerce site is significant affected by the familiarity towards the procedure of the sites.

- Familiarity with the sites plays a positive role in increasing the trust for E-commerce sites.

REFERENCES

1. Amit, R & Zott, C. (2001). Value Creation in E-Business. *Strategic Management Journal*, 22, pp. 493-520.
2. Balakrishnan, A., Kumara, S. R. T & Sundaresan, S. (1999). Manufacturing in the digital age: exploiting information technologies for product realization. *Information Systems Frontier*, 1, pp. 25-50.
3. Bhattacharjee, A. (2002). Individual Trust in Online Firms: Scale Development and Initial Test. *Journal of Management Information Systems*, 19(1), pp. 211-241.
4. Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.
5. Dutta, S. & Segev, A. (1999). Business transformation on the Internet. *European Management Journal*, 17, pp. 466-476.
6. Evans, P.B. & Wurster, T.S. (1999). *Blown to Bits: How the New Economics of Information Transforms Strategy*. Harvard Business School Press: Boston, MA.
7. Gefen, D. (2000). E-commerce: The Role of Familiarity and Trust. *Omega*, 28(6), pp. 725-737.
8. Gefen, D., & Straub, D. W. (2003). Managing User Trust in B2C E-Services. *E-service Journal*, 2(2), pp. 7-24.
9. Gulati, R. (1995). Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. *Academy of Management Journal*, 38(1), pp. 85-112.
10. Hosmer, L.T. (1995). Trust the Connecting Link Between Organizational Theory and Philosophical Ethics. *Academy of Management Review*, 20(2), pp. 379-403.
11. Jarvenpaa, S. L., Tractinsky, N., & Saarinen, L. (1999). Consumer Trust in an Internet Store: A Cross Cultural Validation. *Journal of Computer Mediated Communication*, 5(2), pp. 1-33.
12. Kee, H. W., & Knox, R. E. (1970). Conceptual and Methodological Considerations in the Study of Trust And Suspicion. *Journal of Conflict Resolution*, 14(3), pp. 357-366.
13. Kumar, N. (1996). The power of trust in manufacturer-retailer relationships. *Harvard Business Review*, 74(6), pp. 92-106.
14. Kumar, N., Scheer, L. K. & Steenkamp J. B. E. (1995). The Effects of Supplier Fairness on Vulnerable Resellers. *Journal of Marketing Research*, 17, pp. 54-65.
15. Luhmann, N. (1979) *Trust and power*. Chichester, UK: Wiley
16. Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20(3), pp. 709-734.
17. McKnight, D. H., Chervany, N. L. (2002). What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology. *International Journal of Electronic Commerce*, 6(2), pp. 35-59.
18. Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in Close Relationships. *Journal of Personality and Social Psychology*, 49(1), pp. 95-112
19. Rotter, J. B. (1971). Generalized Expectancies for Interpersonal Trust. *American Psychologist*, 26(5), pp. 443-452.
20. Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so Different After All: A Cross-Discipline View of Trust. *Academy of Management Review*, 23(3), pp. 393-404.
21. Shapiro, C. & Varian, H.R. (1999). *Information Rules: A Strategic Guide to the Network Economy*. Harvard Business School Press: Boston, MA.
22. Stewart, K. J. (1999, January). Transference as a Means of Building Trust in World Wide Web Sites. P. De and J. I. DeGross, eds. *Proc. 20th Internat. Conf. Inform. Systems*, December, Charlotte, NC, pp. 459-464.
23. Zucker, L. G. (1986). Production of trust: institutional sources of economic structure. *Research in Organizational Behavior*, 8, pp. 53-111.

E-COMMERCE AND INFLATION: AN INSIGHT OVER PROPOSED INCLUSION OF E-COMMERCE FOR CPI CALCULATION

Dr. Abhay Raja
Associate Professor (Finance),
Shanti Business School, Ahmedabad
drabhayraja@gmail.com

Abstract

Global financial system has witnessed tough ride in recent past. The chances for more turbulence cannot be undermined. Economies world over are marching ahead to take up this challenge. India, after achieving highest GDP growth rate with revised methodology is striving to take growth further.

The bigger challenge for India's pro-development government is to achieve the right balance between development (GDP) and inflation. Ministry of Statistics, Government of India has recently altered the way it calculates GDP and inflation (CPI). Following recent announcements, the ministry is planning to include e-commerce transactions to capture in the calculations of CPI. The phenomenon is seen with a lot of pros and cons.

E-commerce on one hand is the market which is expected to grow at a CAGR of 32 percent in next five years to mark the value of \$69 billion in 2020 (as projected by Goldman Sachs). On the other hand, the share of e-commerce transactions in total market is extremely meager. Another challenge is data for e-commerce market is still not well structured to be ready for capturing in CPI.

In this view, the principal aim of this write-up is to provide an insight to the expected inclusion of e-commerce transactions on CPI. It is expected that India will have 220 billion of users of smart phones with internet connectivity. This write up ponders upon following concerns:

1. What is reach and expected growth of e-commerce in India?
2. Apprehension that e-commerce does not have reach in rural areas.
3. An insight into the current methodology of calculating CPI in India.
4. What will be the likely impact of e-commerce inclusion on CPI?
5. Flip side of expected development of e-commerce in India.

Key Words: Consumer Price Index (CPI), E-commerce

1. PREAMBLE

"Development" is the word buzzing around the world of business and politics in India. The pro-development government in power with substantial majority escalated the expectation of 'we the people' to sky mounting. Prerequisite for nourishment of development tree is a proper statistical parameter for its assessment. Gross Domestic Product (GDP) is accepted world over as a proxy to measure development. Indian methodology for calculation of GDP is revised a year ago which has attracted a lot of debate. With revised methodology, Indian GDP has marked the highest growth rate in the world.

The challenge for any government is to achieve the right balance between development (GDP) and inflation. The government of India has revised the base year for calculation of inflation statistics to make it more in line with international practices. In the efforts for making GDP and inflation data represent more precise picture of the economy, the recent planning is to include e-commerce in the calculation of Consumer Price Index (CPI). Capturing the price movements from online space will make CPI calculation better as the market of e-commerce is expanding. The official of statistical ministry opined that, "We are not getting price data for this set of the universe due to the way this data is collected at present. It is a refinement, not a drastic change". With growing business on e-commerce platform, its weight is expected to increase in CPI calculation in coming years.

In this context, this write up is aimed at addressing following concerns and hence considered as conceptual research paper by the author:

1. What is reach and expected growth of e-commerce in India?
2. Apprehension that e-commerce does not have reach in rural areas.
3. An insight into current methodology of calculating CPI in India.
4. What will be the likely impact of e-commerce inclusion on CPI?
5. Flip side of expected development of e-commerce in India.

2. E-COMMERCE IN INDIA – INFANT TO ADOLESCENCE

India has embarked upon highest yearly growth rate with third largest number of internet users globally. Majority uses smart phones and has e-commerce application installed. It is expected that smart phone users in India with connected mobile internet would reach to 220 million in next ten years. Recently, Vodafone and Airtel have launched their 4G services and few other companies are on the verge of completion of all processes to launch 4G. This will further add fuel to the engine of growth of e-commerce. The inference made by Gawady (2005) is a validation to the proposition of expected quantum leap of e-commerce business in India. He cited that, "The impact of e-commerce on developing countries could be even stronger than that on developed countries because the scope for reducing inefficiencies and increasing productivity is much larger in the developing countries."

Table – 1 India's E-commerce and E-tail growth

Year	E-commerce	E-tail
2009	3.8	0.4
2010	5.3	0.6
2011	7	1
2012	9.5	1.5
2013	12.6	2.3
2014	16.4	3.5
2015	21.3	6

Source: IAMAI, CRISIL, Gartner, PWC analysis and industry experts (derived from PWC report, 2015)

On valuation front, Indian e-commerce companies are marching well ahead. Six Indian e-commerce companies as of Q1-2015 have marked to achieve billion dollar valuations. These companies are Flipkart,

Snapdeal, InMobi, Quikr, OlaCabs and Paytm. Other companies are also putting their best to develop their segment of e-commerce. These all combined efforts backed by strong competition in the e-commerce industry are expected to march well ahead in coming decade. The challenge would however be of the expected stiff competition by unorganized sector.

India's online retailing market is already one of the largest in the world. The growth achieved and expected is substantial enough to attract the attention of policy makers. With the view point of number of users, Avinash Bajaj, co-founder and director of Matrix Partners India, one of India's most established e-commerce venture capital firms, expects India's online consumer base to increase by approximately 1400 percent from 20 million shoppers to reach to 300 million shoppers in next 10 years.

On the business front, the report by Avendus Capital (leading investment bank specialized in media and technology) titled "India goes digital" cited that Indian e-commerce market was of \$6.3 billion in 2011 which was expected mark the value of \$24 billion in 2015. Goldman Sachs expected that Indian online retailing market will expand to \$69 billion in 2020 from current \$23 billion (in 2016) with CAGR of 32 percent. This statistics are evident to demonstrate growth of e-commerce market in India. Statistical ministry's logic can be well supported with the expected growth data for e-commerce.

3. E-COMMERCE AND GLOBAL ECONOMY

Global economy has witnessed roller coaster ride since the beginning of twenty first century. Economies were recovering from dot-com burst and US led sub-prime crisis attacked. Many economists opined that the global financial system in present state is on the crossroads of vulnerability. A statement made by Ramachandra Bhagavatula, chief U.S. economist at NatWest Global Markets in New York in 1990s is apt in current global economic context also. He said, "What has been definitive is not Internet technology but this enormous imbalance in the global economy". This clearly means that Indian policy makers have to take effect of global economic activities while accounting for Indian e-commerce market.

4. REACH OF E-COMMERCE – URBAN TO RURAL

The strong apprehension that e-commerce will be witnessing more growth in urban areas only is also worth putting insight into. According to report of Telecom Regulatory and Development Authority (TRAI), in one year between December 2013 and December 2014 number of internet subscribers has increased by 12 percent to reach to 267.39 millions. The report further added that nearly 35 percent subscribers are from rural India. Many of the villages are now well connected with internet facilities and distribution network by well known e-commerce websites such as flipkart, amazone, snapdeal etc.

Table – 2 Geographical distribution of internet users in India (million)

Year	Urban	Rural
June 2012	99	38
June 2013	130	60
June 2014	165	92
June 2015	216	138

Source: IAMAI-IMRB (derived from PWC report, 2015)

These statistics are pertinent enough to validate the strong participation of rural India in the development of e-commerce. It is worth mention that recent advertisement campaigns by mobile service providers also focus on their reach to rural and far away areas. With increasing connectivity reach and logistics support, rural areas will also have a large share in e-commerce in coming time.

5. CONSUMER PRICE INDEX (CPI)

Since the economic downturn of 2008, inflation figure in India has been quite volatile. It has reached in double digits as well as deflationary situation was also witnessed by Indian economy. Central Statistics Office, last year revised the base year for calculation of Consumer Price Index to follow the internationally accepted practice of using shorter reference period.

Reserve Bank of India used CPI as a key tool to take a decision on monetary policy to control money supply in the market. Inclusion of e-commerce will not make substantial impact looking at the share of it in total trade at present times, but in coming time it would become key differentiator for CPI calculations.

6. E-COMMERCE AND CPI – THE INSIGHT

The debate in this write up is around proposed inclusion of e-commerce data in CPI calculations. Robin Lowe (2001), in his write up on E-commerce and consumer behavior in seventh meeting for international working group on price indices mentioned that, “Although there may be some exceptions, e-commerce generally is not likely to account for a large enough share of purchases for it to be necessary to cover it in price surveys; unless a seismic shift in households’ perception of the value of internet shopping occurs.”

The following statistics are derived from the report of Central Statistics Office, Government of India. It enlists all India weights as per the new series of CPI. According to recent trends, out of total twenty one sub-groups of CPI calculation, three are most likely to be significantly impacted by the growth of e-commerce. Study cites that the most popular vertical in e-commerce is online apparel. Apparel, computers and consumer electronics account for 42 percent of total retail e-commerce sales in India. These three sub-groups and their relative weights in CPI calculations are as follows:

**Table 3 – New Series of CPI – All India Weights
(Sectors having more e-commerce shoppers)**

Sub-groups	Rural	Urban	Combined (Rural + Urban)
Transport and communication	5.83%	9.84%	7.75%
Household requisites	4.48%	3.92%	4.30%
Clothing, bedding and footwear	5.36%	3.91%	4.73%

Source: Report by Central Statistics Office

The table needs further insightful reading. Total weights of three sectors work out at 16.78 percent. The data for current share of e-commerce in these sectors is not available; rather the mechanism for such calculation is still not developed. It is expected that with growth of e-commerce, there can be a need to

increase weights of these sectors due to increased share of organized market. One may put up an argument that with increased span of e-commerce, consumption of these commodities and services will not increase. This argument can be better dealt with the explanation mentioned in next paragraph.

The important point to ponder on these data is to understand the purchase pattern of Indian consumers. A large number of Indian consumers use these commodities and services from unorganized sectors. For calculation of CPI, at present we do not have well established set up to account for unorganized sector. With increase in e-commerce, the share of unorganized sector for these commodities and services will decline. The major advantage of e-commerce is transparency in data. Inclusion of e-commerce in CPI calculation will enable inclusion of comparatively larger dataset as all online transactions can be easily tracked and accounted for. This becomes the solid base to argue that inclusion of e-commerce may necessitate ministry to increase weight of these sectors.

It would be very apt to cite study of Yi and Choi (2005) which found that an annual increase by 1 percentage point in the share of people using the internet decreases the annual inflation rate in the range of 0.04-0.1 percentage point. Considering these statistics, it would be evident to infer that proposed inclusion of e-commerce in CPI is expected to be vital for the policy makers as the growth of e-commerce is expected to be substantial in coming years.

7. GROWTH OF E-COMMERCE IN RETAIL MARKET

E-commerce is likely to make large impact on retail market. The reasons ensuing the propositions are:

1. Changing family structure necessitate shopping retail goods online.
2. Increasing spread and usage of smart phones makes e-shopping convenient.
3. E-commerce enables more options for products accessible to buyers.
4. E-commerce platforms provide heavy discount and schemes.
5. Evolution of many e-commerce platforms making market more competitive.

According to a study, India's retail market is estimated to grow at CAGR of 10 percent. The total traded value in Indian retail market was \$470 billion in 2011 which has grown to \$675 billion in 2016. With expected increase of business on e-commerce platform, the share of e-commerce in retail sector is also likely to increase. Simultaneously, digital India initiative by government will also fuel e-commerce participation in retail business to enhance its feet. Alongside all expectations for e-commerce market of India to flourish in next few years, there are few flip sides to the fact as well.

8. E-COMMERCE IN INDIA – FLIP SIDE

Kyunghye Kim (2011) in his report on reflecting trends in e-commerce in the CPI stated that, "Since Internet shopping malls have made extreme efforts to satisfy consumer expectations and expanded the variety of not only goods but also services, e-commerce will continue as a dominant purchasing tool for both producers and consumers in the future." His claim for expectations of e-commerce trades to expand can be accepted in Indian context also. However, policy makers should also keep in mind a few apprehensions. The following factors can be instrumental as flip side of the expected expansion of e-commerce business in India:

- **Unorganized retail sector:** Indian retail sector with its expected CAGR of 10 percent surely promises to increase its share on e-commerce front. But, it is worth citing that strong hold of unorganized retail sector can be major constraint for e-tailing to develop. The statistics to support and validate this statement are quite substantial. Report says that e-tailing accounts for only 0.3 percent of total retail sales in India. It has 8.7 percent share in Indian organized retail.

Few other statistics make the suspicion more widespread. People prefer to go online to buy books, mobile phones and fashion goods. Online sales of these three segments account for minimum in terms of their contribution in overall sales figures. Only 7 percent books are sold online, 2 percent mobile handsets are bought online and merely 1 percent of fashion goods are preferred to be bought online.

- **Trustworthiness:** Recent advertisement campaign by amazon targets communication with respect to matter of trust. India is young country but it is doubted that how many of them has purchasing power. Those who enjoys purchasing power are old and do not have trust on online shopping. The share of online jewellery selling is just 0.2 percent of its overall sales. This is sufficient enough to claim doubt on trustworthiness of online shopping. People, if provided with proper option would like to buy goods physically than online.
- **Financial Viability:** E-commerce is preferred by customers as it offers wide discounts and provides attractive offers. On the other hand, the fact worth pondering is e-commerce companies are making huge losses. Companies bear huge losses for three segments that account for larger share in Indian e-commerce business; books, mobile handsets and apparels. For book selling of every hundred rupees, companies make loss of Rs.24. In case of mobile handset and apparel the loss amounts are Rs.13 and Rs.8 respectively. This means companies that are attracting customers by heavy discounts and offers, no more will be in a position to offer such discounts. It is a matter of question that how many Indian customers would prefer online shopping vis-à-vis physical shopping if discounts are not offered through e-commerce platforms.
The expected argument that use of internet for trade flatten the distribution cycle and hence the overall cost comes down which enables e-commerce traders to offer products at discount, is also not valid in long-term. The study by Brynjolfsson and Hitt (1996) mentioned that the adoption of the internet did not result in higher profitability. This means that e-commerce firms need to find better sources to keep offering such discounts and making the trade financially more viable.
- **Share of Travel in E-commerce:** The share of Travel business in e-commerce is substantial. US analyst of the travel industry, Philip Wolf (2001) described it as the oasis in the e-economy desert. Report of leading business media, Business Standard says that out of total e-commerce business in India, travel business accounts for nearly 71 percent. Travel is where the real money in India's e-commerce is. Online travel business has grown by 32 percent CAGR between 2009 and 2013. Travel business includes, online ticket booking and taxi services like ola, meru cabs, taxi for sure etc. Majority of such transactions for travel already factored in under CPI calculations. Hence, inclusion of e-commerce transactions will not add impact CPI in substantial manner. However, with increasing span of e-commerce for travel, the share of unorganized travel business is likely to come down, which can be appropriate reason to expect inclusion of e-commerce in CPI calculations.

9. CONCLUSIONS

E-commerce in India has no more remained a baby to nurture and care. With increased use of smart phones with internet connectivity the scope of e-commerce in India is expanding its horizons. Though the current share of e-commerce in Indian market is meager, it is expected to significantly enhance its reach in coming decade. However, there are two major obstacles for the growth of e-commerce in India: *One*, large spread of unorganized market and *Two*, loss making situation for the e-commerce companies in India.

The ministry of statistics, government of India is contemplating to consider e-commerce data for calculation of CPI is a welcome move with a few apprehensions. CPI numbers is a base for Reserve Bank to decide its key policy rates, so inclusion of e-commerce will be the imperative as the market of e-commerce is expected to escalate its share in coming decade. There are a few flip sides of expected growth of e-commerce in India and simultaneously the data pertaining to e-commerce transactions are not well structured.

However, in coming times, if these apprehensions are well dealt, inclusion of e-commerce transactions in CPI calculations can become appreciable move by the ministry of statistics, government of India.

REFERENCES

1. Brynjolfsson, E. and L. Hitt (1996). *Paradox Lost? Firm-level Evidence on the Returns to Information Systems Spending*. Management Science 42(4): 541-558.
2. Gawady, Z.M. El. (2005). *The Impact of E-commerce on Developed and developing Countries Case Study: Egypt and United State*. Paper presented at the international conference of globalization, Technology and Sustainable Development, United Arab Emirates University, World Association for sustainable Development, Al Ain, UAE, 21-32.
3. Kim, Kyunghye (2011). *Reflecting trends in e-commerce in the CPI*. Int. Statistical Inst.: Proc. 58th World Statistical Congress, 2011, Dublin (Session CPS008).
4. Lowe R. (2001). *E-commerce and consumer behavior*. International working group on price indices – seventh meeting. Statistics Canada.
5. Wolf, P. (2001). An Open Letter To Travel Industry Professionals By Philip Wolf - President and CEO PhoCusWright Inc.
 - a. <http://www.hospitalitynet.org/news/4009188.html>
6. Yi, M.H., Choi, C. *The effect of the internet on inflation: Panel data evidence*. Journal of Policy Modeling, Vol. 27, 2005, pp. 885-889.

Sources of Information

1. 5 things you didn't know about India's e-commerce industry
http://www.business-standard.com/article/companies/5-things-you-didn-t-know-about-india-s-e-commerce-industry-114111201035_1.html
2. Consumer Price Index Numbers - Separately for Rural and Urban Areas and also Combined (Rural plus Urban)
http://mospi.nic.in/Mospi_New/upload/brochure_n_cpi18_feb11.pdf
3. Economists Examine Impact Of E-Commerce on Inflation
<http://www.wsj.com/articles/SB936650027257686920>

4. E-Commerce Gets Its Own Consumer Price Index
<http://www.fastcompany.com/3057944/ecommerce-gets-its-own-consumer-price-index>
5. E-commerce in India
https://en.wikipedia.org/wiki/E-commerce_in_India
6. eCommerce in India – Accelerating growth
<http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf>
7. Government considering including e-commerce in CPI calculation
<http://money.livemint.com/news/market/economy/market-pulse/government-considering-including-e-commerce-in-cpi-calculation-438181.aspx#sthash.TajO6UF1.dpuf>
8. Indian govt is tracking online shopping on Flipkart, Amazon, Snapdeal. No, nothing is illegal here
<http://www.businessinsider.in/Indian-govt-is-tracking-online-shopping-on-Flipkart-Amazon-Snapdeal-No-nothing-is-illegal-here/articleshow/51453401.cms>
9. India's online retail market could double in size
<https://www.internetretailer.com/2013/01/11/indias-online-retail-market-could-double-size>
10. Online retail to catch up with physical stores in 5 years: report
<http://www.livemint.com/Industry/NvVOIGkwPtEFixqgqpl0FM/Online-retail-to-catch-up-with-physical-stores-in-five-years.html>
11. Statistics Ministry planning to include ecommerce in calculation of CPI
<http://economictimes.indiatimes.com/industry/services/retail/statistics-ministry-planning-to-include-ecommerce-in-calculation-of-cpi/articleshow/51448886.cms>
12. The economic impact of e-commerce
<http://www.supplychainquarterly.com/columns/scq201102monetarymatters/>
13. What is India's CPI?
<http://www.onemint.com/2013/02/25/what-is-indias-cpi/>

ETHICAL PRACTICE OF E-RETAILERS AND ITS IMPACT ON ONLINE SHOPPERS OF AHMEDABAD

Kalgi Shah,
Assistant Professor,
National Institute of Cooperative
Management, NICM-SJPI
kalgi.mba@gmail.com

Dr. MamtaBrahmbhatt,
Associate Professor,
B.K. School of Business Management
Gujarat University
mamtabrahmbhatt23@gmail.com

Abstract

In the era of online shopping, consumers experience some ethical issues like privacy and transaction security, of online shopping activities. That is the reason why ethical consideration needs to be involved in marketing decision of E-retailers. Although ethics is always considered as hot topic for researchers, very few studies are found in the direction of ethical practice of E-retailers. The purpose of this study is to identify the relationship between customer's perception regarding ethical practice of E-retailers and customer's trust and loyalty for E-retailers. The data collected from online shoppers of Ahmedabad city via structured questionnaire derived from the literature review. The result favours significant relationship between E-retailer's ethics and consumers' trust, satisfaction, and loyalty.

Key Words: Ethics, E-retailers, Customer Satisfaction & Loyalty.

1. INTRODUCTION

The internet is considered as the supreme invention of the 20th century. It becomes life line for our everyday lives as well as business world. With the increase of availability of internet facilities, the various usage of internet is emerged. One of those trends is online shopping or E-shopping. There is remarkable increase in observed in the number of web-based retailers that provide certain advantages' such as more information, easier services and increased control for consumers (Liu and Goodhue 2008, Tsai et al. 2006). Despite of some problems, there has been an increase in online shopping expenditures of people (Wolfinbarger and Gilly 2003) and consumers have begun to adapt to into online retailing (hereafter e-retailing) practices (Lohse et al. 2000). These trends indicate that electronic retailing has become an important alternative to conventional shopping channels (Pavlou and Gefen 2004).

The increase in the number of e-retailers offers many alternatives for customers shopping online. Therefore, the competition intensifies and retaining customers becomes more important for e-retailers (Reichheld and Scheffer 2000). It is not an easy task for e-retailers to gain new customers and retain their ones as, just as it is easy for traditional retailers (Tsai et al. 2006).

Despite of having major expectation of consumers regarding ethics(Kimery and McCord 2006), ethics of e-retailing has not been focused in literature. Few authors have tried to conceptualize online shopping

ethics, but there are very few studies on evaluation of ethical practice of online retailers (Roman 2007, Miyazaki and Fernandez 2001).

The main purpose of this study is to identify whether ethical practice of e-retailers has any relationship with customer satisfaction and loyalty.

2. LITERATURE REVIEW

According to Aristotle, ethics is a phenomenon that evaluates whether the behaviours of individuals are right or wrong (Garki 1999). Ethics seeks an answer to the question “what is good” (Pires and Stanton 2002); but apparently there is not a global answer to this question (Fisher et al. 1999).

Marketing ethics can be defined as ethical judgments applicable to decisions (Gaski 1999). Over a period of time, ethical problems are increased (Vitell and Ho 1997) and that resulted into increasing awareness of consumers as well. So, many studies were carried out about the ethics of marketing and ethical decision making (Hunt and Vitell 1993, Ferrell, Gresham and Fraedrich 1989, Hunt and Vitell 1986, Ferrell and Gresham 1985).

Ethics of E-retailers includes trustworthy, fair and honest behaviours towards customers and safeguarding the interests of their customers (Roman 2007). Due to friendly environment, it is really easy to damage relationship between customer and the firm (Fisher et al. 1999). Ethical behavior of firms plays an important role in gaining customer satisfaction (Abela and Murphy 2008).

There are various studies in the field of E-retailing and customer satisfaction, but ethics of e-retailers is yet to be explored. Vitell et al. (1993) developed marketing norms ethics scale in order to assess ethical situations faced by marketers in their decision-making. The scale had five dimensions: price and distribution norms, information and contract norms, product and promotion norms, obligation and disclosure norms, and general honesty and integrity. There was a modification in these factors by Singhapakdi et al. (1996).

Bush et al. (2000) assessed the perceptions of the ethical issues concerning marketing on the Internet. Their study revealed three most often mentioned ethical concerns were illegal activities (e.g., fraud, hacking), privacy, and honesty/truthfulness of the information on the Internet. The study of Miyazaki and Fernandez (2001) revealed three concerns related to ethical issue for online shopping. They were Privacy, System Security, and Online Retail Fraud.

2.1 Ethics and Trust

Ethical behavior and trust are inseparable concepts hence to build trust, ethics are required (Rao and Singhapakdi 1997). Security and Privacy are the major concerns of ethics for e-retailers (Selnes 1998, Pollach 2005).

H1: E-retailing ethical practice leads to customer trust.

2.2 Ethics and Satisfaction

Ethical factors of a website have a direct impact on customer satisfaction (Roman 2007). According to research ethical practice like timely delivery, security of transaction etc have positive influence on customer satisfaction (Roman 2007, Wolfenbarger and Gilly 2003, Yoo and Donthu 2001).

H2: E-retailing ethical practice leads to customer Satisfaction.

2.3 Ethics and Loyalty

Various studies indicates that a customer prefers to shop from secure service providers, perceived ethical factors in the websites of online shopping firms encourage customers to continue shopping from those firms (Chiou 2004, Miyazaki and Fernandez 2000). This indicates that there is a relationship between E-retailers' ethical practice and loyalty intension. It is not only ethics but trust and satisfaction of customer that gives loyal customers to the firm.

H3: Customer Loyalty is a result of E-retailing ethics, Trust and Satisfaction.

3. RESEARCH METHODOLOGY

3.1 Objectives of the study

This study has major 4 objectives

1. To identify factors affecting e-retailer's ethics
2. To check the relationship between Trust and E-retailer's ethics
3. To find out the relationship between Satisfaction and E-retailer's ethics
4. To check the impact of e-retailer's ethics, Trust and customer satisfaction on customer Loyalty

3.2 Data Collection and sampling

A structured questionnaire was developed online and sent to the respondents. Consumers who have shopped online during last 3 months were the sample unit of the study. Participants were requested to answer the

questions regarding a recent website they had shopped from if they shopped online during the last 3 months. They were also requested to transfer the URL of the questionnaire to potential participants that they thought to be appropriate to meet the criterion. The questionnaire reached 187 consumers via snowball sampling method and data gathered through the answers of these consumers was analyzed. Descriptive statistics of the participants are shown on Table 1.

Table 1. Descriptive statistics of the respondents

Demographic Variable	Frequency	Percentage
Sex		
Female	69	36.9
Male	118	63.1
Age		
Below 15	19	10.16
15-25 Years	87	46.52
25-35 years	46	24.60
35-45 years	25	13.37
Above 45 Years	10	5.35
Monthly Family Income		
Less than 25000	25	13.37
25,001 - 50,000	68	36.36
50,001 - 75,000	43	22.99
75,001 – 1,00,000	31	16.58
More than 1,00,000	20	10.70
Frequency of Purchase		
More than once a week		
Once a week	12	6.42
Once in two weeks	17	9.09
Once in a month	30	16.04
Much rarely	37	19.79
	91	48.66
Frequently Shopped Goods (Multiple Choice)		
Books	27	
Movies, Music & Video Games	47	
Electronic Items	92	
Home Appliances	69	
Toys & Baby Products	26	
Sports, Fitness & Outdoors	81	
Beauty, Health & Gourmet	71	
Clothing & Accessories	117	
Online Recharge/Payment Services	73	

3.3 Measures and Scaling

A structured questionnaire of 37 questions on ethical perceptions of customers towards e-retailers, perceived trust, customer satisfaction and customer loyalty were asked on 7 point likert scale of agreement.

Factor analysis was used to analyse the structural validity of the scales used in the study. The results of validity and reliability analyses are shown in Table 2.

As stated in Table 2, KMO value is greater than 0.5, and Bartlett's Test of Sphericity is less than 0.05. Factor analysis is an appropriate test to conduct.

Cronbach's Alpha of the scales are between 0.782 and 0.879 and all of them are above 0.7, which is a

commonly accepted figure in practice (Hair et al. 2005) and it may be stated that scales are considerably reliable.

Table 2. Exploratory factor analysis (EFA) results

Variables	1 Security	2 Privacy	3 Accuracy	4 Reliability
The security policy is easy to understand.	.582			
The site displays the terms and conditions of the online transaction before the purchase have taken place.	.691			
The site appears to offer secure payment methods.	.738			
This site has adequate security features.	.860			
The site clearly explains how user information is used.		.814		
Only the personal information necessary for the transaction to be completed needs to be provided.		.682		
Information regarding the privacy policy is clearly presented.		.581		
The site exaggerates the benefits and characteristics of its offerings.			.786	
This site takes advantage of less experienced consumers to make them purchase.			.835	
This site attempts to persuade you to buy things that you do not need.			.907	
The price shown on the site is the actual amount billed.				.625
I get what I ordered from this site.				.874
The firm promises to do something by a certain time, and accomplishes it.				.724
Eigen values	3.377	2.799	2.396	1.170
% of Variance	17.775	14.731	12.612	11.419
Cumulative %	17.775	32.506	45.118	56.536
Cronbach Alfa	.836	.879	.782	.873
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.861			
Bartlett's test of sphericity	000			

4. HYPOTHESIS TESING

To test the hypothesis regression analysis is done.

Table 3. Regression analysis results for e-retailer Ethics, Trust, Satisfaction and Loyalty

Model	Dependent Variable	Independent Variable	Standard Beta	t	R ²	F
1	Trust	E-retailing ethics	0.769	16.709	0.67	258.344
2	Satisfaction	E-retailing ethics	0.674	12.932	0.45	167.246
3	Loyalty	E-retailing ethics	0.132	2.715	0.902	280.190
		Trust	0.095	1.719		
		Satisfaction	0.729	14.429		

In model 1, a significant relationship between e-retailing ethics and trust ($\beta = 0.769$) is observed. Apart from that there is 67% of the variance of trust ($R^2=0.67$). As a result of analysis there is no evidence to reject H1.

Model 2 shows significant relationship between e-retailing ethics and satisfaction ($\beta = 0.674$). And there is 45% of variance of the satisfaction ($R^2=0.45$). Again there is no evidence to reject H2.

When all 3 variables are gathered into regression model 3, impact of satisfaction on loyalty is found higher ($\beta = 0.729$). E-retailing ethics and Trust have comparatively less impact on loyalty.

Table 4. Hypothesis Testing Results

No.	Hypothesis	Decision
1	E-retailing ethical practice leads to customer trust	Do not Reject
2	E-retailing ethical practice leads to customer Satisfaction	Do not Reject
3	Customer Loyalty is a result of E-retailing ethics, Trust and Satisfaction	Do not Reject

5. CONCLUSION and IMPLICATION

E-retailing has many advantages like mass market, less expenses, variety of the products, smaller supply chain. But one should not forget the importance of ethics. Currently, market of E-retailing is getting bigger. So to sustain in the competition, E-retailer must develop trust and satisfaction among customers.

Since heavy discount policy is adopted by majority of the E-retailers, loyalty of the customer becomes an issue. However, good ethical practice will help E-retailers to generate more CLVs.

This research attempted to find impact of E-retailer's ethical practice and its impact on customers. The results strongly favour that in era of E-commerce, where there is no one to one interaction between sellers and buyers, ethics play an important role to get customer loyalty.

As a result of EFA, four major factors namely Security, Privacy, Accuracy and Reliability are considered as a base of ethical practice by E-retailers. So it is advisable to the E-retailers to focus on these factors in order to practice ethically.

REFERENCES

1. Abela, A.V. & Murphy, P.E. (2008) Marketing with Integrity: Ethics and the Service -Dominant Logic for Marketing. *Journal of the Academy of Marketing Science*, 36, 39-53.
2. Abromaitytė-Sereikienė, L. (2005) The Levels of Marketing Ethics. *Ekonomika*, 71, 7-23.
3. Anderson, R.E. & Srinivasan, S.S. (2003) E-Satisfaction and E-Loyalty: A Contingency Framework. *Psychology and Marketing*, 20, 123-138.
4. Baron, R.M. & Kenny, D.A. (1986) The Moderator - Mediator Distinction in Social Psychology Research: Conceptual, Strategic and Statistical Considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
5. Bush, V.S., Venable, B.T. & Bush, A.J. (2000) Ethics and Marketing on the Internet: Practitioners' Perceptions of Societal, Industry and Company Concerns. *Journal of Business Ethics*, 23, 237-248.
7. Chiou, J. & Droge, C. (2006) Service Quality, Trust, Specific Asset Investment, and Expertise: Direct and Indirect Effects in a Satisfaction-Loyalty Framework. *Journal of the Academy of Marketing Science*, 34, 613-627.
8. Chiou, J. (2004) The Antecedents of Consumers' Loyalty toward Internet Service Providers. *Information & Management*, 41, 685-695.
9. COM (2011) 681 Final (2011), Communication from the Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions, A Renewed EU Strategy 2011-2014 for Corporate Social Responsibility.
10. Devaraj, S., Fan, M. & Kohli, R. (2002) Antecedents of B2C Channel Satisfaction and Preference: Validating E-Commerce Metrics. *Information System Research*, 13, 316-334.
11. Fisher, J., Taylor, D. & Fullerton, S. (1999) Attitudes toward Consumer and Business Ethics among Canadian and New Zealand Business Students: An Assessment of 28 Scenarios. *Teaching Business Ethics*, 3, 155-177.
12. Freestone, O. & Mitchell, V.W. (2004) Generation Y Attitudes towards E -Ethics and Internet Related Misbehaviours. *Journal Business Ethics*, 54, 121-128.
13. Gaski, J.F. (1999) Does Marketing Ethics Really Have Anything To Say? A Critical Inventory of the Literature. *Journal Business Ethics*, 18, 315-334.
14. Hair, F.J., Black, C.W., Babin, J.B., Anderson, E.R. & Tatham, L.R. (2005) Multivariate Data Analysis , Pearson Prentice Hall, Sixth Edition, New Jersey.
15. Harris, L.C. & Goode, M.M.H. (2004) The Four Levels of Loyalty and the Pivotal Role of Trust: A Study of Online Service Dynamics. *Journal of Retailing*, 80, 139-158.
16. Hosmer, L.T. (1995) Trust: The Connecting Link between Organizational Theory and Philosophical Ethics. *Academy of Management Review* 20, 379-403.
17. Hunt, S. & Vitell, S. (1986) A General Theory of Marketing Ethics. *Journal of Macromarketing*, 1, 5-16.
18. Internet World Stats. (2012). Internet Users in the World 2015 [Data File]. Available at <http://www.internetworldstats.com/stats.htm> (accessed March, 2016)

19. Jones, P., Wynn, M., Comfort, D. & Hillier, D. (2007) Corporate Social Responsibility and UK Retailers. *Issues in Social and Environmental Accounting*, 1, 2, 243-257.
20. Kelly, E.P. & Rowland, H.C. (2000) Ethical and Online Privacy Issues in Electronic Commerce. *Business Horizons*, 43, 3-12.
21. Kimery, K.M. & Mccord, M. (2006) Signals of Trustworthiness in E-Commerce: Consumer Understanding of Third-Party Assurance Seals. *Journal of Electronic Commerce in Organizations*, 4, 52-74.
22. Lightner, N.J., Yenisey, M.M., Ozok, A.A. & Salvendy, G. (2002) Shopping Behaviour and Preferences in E-Commerce of Turkish and American University Students: Implications from Cross-Cultural Design. *Behaviour and Information Technology*, 21, 373-38.
23. Liu, B.Q. & Goodhue, D.L. (2008) An Exploration of The Hygiene and Motivator Aspects of Webqual Constructs In Predicting Website Reuse. Proceedings of The 41st Hawaii International Conference On System Sciences.
24. Lohse, G.L., Bellman, S. & Johnson, E.J. (2000) Consumer Buying Behaviour on the Internet: Findings from Panel Data. *Journal of Interactive Marketing*, 14, 15- 29.
25. Miyazaki, A.D. & Fernandez, A. (2001) Consumer Perceptions of Privacy and Security Risk for Online Shopping. *Journal of Consumer Affairs*, 35, 27-44.
26. Miyazaki, A.D. & Fernandez, A. (2000) Internet Privacy and Security: An Examination of Online Retailer Disclosures. *Journal of Public Policy & Marketing*, 19, 54-61.
27. Morgan, R.M. & Hunt, S.D. (1994) The Commitment-Trust Theory of Relationship Marketing? *Journal of Marketing*, 58, 20-38.
28. Murphy, P.E., Laczniak, G.R. & Wood, G. (2007) An Ethical Basis for Relationship Marketing: A Virtue Ethics Perspective. *European Journal of Marketing*, 41, 37-57.
29. Parasuraman, A., Zeithaml, V.A. & Malhotra, A. (2005) E-S-Qual A Multiple-Item Scale For Assessing Electronic Service Quality. *Journal of Service Research*, 7, 213-233.
30. Pavlou, P.A. & Gefen, D. (2004) Building Effective Online Marketplaces with Institution Based Trust. *Information System Research*, 15, 37-59.
31. Pires, G.D. & Stanton, J. (2002) Ethnic Marketing Ethics. *Journal of Business Ethics*, 36, 111-118.
32. Pollach, I. (2005) A Typology of Communicative Strategies In Online Privacy Policies: Ethics, Power and Informed Consent. *Journal of Business Ethics*, 62, 221-235.
33. Rao, C.P. & Singhapakdi, A. (1997) Marketing Ethics: A Comparison between Services and Other Marketing Professionals. *Journal of Service Marketing*, 11, 409-426.
34. Ribbink, D., Van Riel, A.C.R., Liljander, V. & Streukens, S. (2004) Comfort Your Online Customer: Quality, Trust and Loyalty on the Internet. *Managing Service Quality*, 14, 446-456.
35. Roman, S. (2007) The Ethics of Online Retailing: A Scale Development and Validation from the Consumers' Perspective. *Journal of Business Ethics*, 72, 131-148.
36. Rust, R., Kannan, P.K. & Peng, N. (2002) The Customer Economics of Internet Privacy. *Journal of the Academy of Marketing Science*, 30, 455-64.
37. Schlosser, A.E., White, T.B. & Lloyd, S.M. (2006) Converting Web Site Visitors into Buyers: How Web Site Investment Increases Consumer Trusting Beliefs and Online Purchase Intentions. *Journal of Marketing*, 70, 133-148.
38. Selnes, F. (1998) Antecedents and Consequences of Trust and Satisfaction in Buyer-Seller Relationships. *European Journal of Marketing*, 38, 305-322.
39. Sharma, S. (1996) Applied Multivariate Techniques, John Wiley and Sons Inc., New York .
40. Singhapakdi, A., S. J. Vitell, K. C. Rallapalli and K. L. Kraft: 1996, 'The Perceived Role of
41. Ethics and Social Responsibility: A Scale Development, *Journal of Business Ethics* 15, 1131-1140.
42. Szymanski, D. & Henard, D.H. (2001) Customer Satisfaction: A Meta-Analysis of Empirical Evidence. *Journal of the Academy of Marketing Science*, 29, 16-35.
43. Szymanski, D. & Hise, R.T. (2000) E-Satisfaction: An Initial Examination. *Journal of Retailing*, 76, 309-322.

44. Tsai, H. & Huang, H. (2007) Determinants of E-Repurchase Intentions: An Integrative Model of Quadruple Retention Drivers. *Information and Management*, 44, 231-239.
45. Tsai, H., Huang, H., Jaw, Y. & Chen, W. (2006) Why On -Line Customers Remain With A Particular E -Retailer: An Integrative Model And Empirical Evidence. *Psychology and Marketing*, 23, 447-464.
47. Turkish Statistical Institute (2011) Household ICT Usage Survey 2011 [Data File] available at <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=8572> (accessed March, 2016)
48. Vitell, S.J. & Ho, F.N. (1997) Ethical Decision Making In Marketing: A Synthesis and Evaluation of Scales Measuring The Various Components Of Decision Making In Ethical Situations. *Journal of Business Ethics*, 16, 699-717.
49. Vitell, S.J., Nwachukwu, S.L. & Barnes, J.H. (1993) The Effects of Culture on Ethical Decision-Making: An Application of Hofstede's Typology. *Journal of Business Ethics*, 12, 753-60.
50. Wolfenbarger, M. & Gilly, M.C. (2003) Etailq: Dimensionalizing, Measuring and Predicting Etail Quality. *Journal of Retailing*, 79, 183-198.
51. Yang, Z. & Peterson, R.T. (2004) Customer Perceived Value, Satisfaction, And Loyalty: The Role Of Switching Costs. *Psychology and Marketing*, 21, 799-822.
52. Yen, R. & Gwinner, K.P. (2003) Internet Retail Customer Loyalty: The Mediating Role of Relational Benefits. *International Journal of Service Industries Management*, 14, 483-500.
53. Yoo, B. & Donthu, N. (2001) Developing A Scale To Measure The Perceived Quality Of An Internet Shopping Site (Sitequal). *Quarterly Journal of Electronic Commerce*, 2, 31-47.
54. Zeithaml, V., Berry, L. & Parasuraman, A. (1996) The Behavioural Consequences of Service Quality. *Journal of Marketing*, 60, 31-46.

