

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJR
CM



A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.

as well as in Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)]

Registered & Listed at: Index Copernicus Publishers Panel, Poland

Circulated all over the world & Google has verified that scholars of more than 1388 Cities in 138 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

www.ijrcm.org.in

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	PRICE EFFECT IN DHAKA STOCK EXCHANGE OF CROSS-LISTING IN CHITTAGONG STOCK EXCHANGE MD. RAFIQU L MATIN & DR. JAWAD R ZAHID	1
2.	STUDY OF SHOPPER'S ATTITUDE TOWARDS PRIVATE LABELS IN DUBAI DR. TANMAY PANDA & K. TEJA PRIYANKA YADAV	8
3.	FACTORS INFLUENCING INDIVIDUAL INTRANET USAGE: A LITERATURE REVIEW MOHAMAD NOORMAN MASREK, DANG MERDUWATI HASHIM & MOHD SHARIF MOHD SAAD	15
4.	THE BRANDING OF A COUNTRY AND THE NIGERIAN BRAND PROJECT DR. ANTHONY .A. IJEWERE & E.C. GBANDI	21
5.	THE RELATIONSHIP BETWEEN THE INTERNAL AUDIT FUNCTION AND CORPORATE GOVERNANCE: EVIDENCE FROM JORDAN DR.YUSUF ALI KHALAF AL-HROOT	27
6.	PROPOSED FRAMEWORK FOR IMPROVING THE PAYMENT SYSTEM IN GHANA USING MOBILE MONEY MENSAH KWABENA PATRICK, DAVID SANKA LAAR & ALIRAH MICHAEL ADALIWEI	33
7.	A COMPARATIVE STUDY ON PUBLIC SECTOR BANKS (VS) PRIVATE SECTOR BANKS (A CASE STUDY ON STATE BANK OF INDIA, CANARA BANK VS CITY BANK, ICICI BANK) V. SRI HARI, DR. B. G SATYA PRASAD, VIKAS JAIN & DR. D. L. SREENIVAS.	40
8.	DATA MINING APPLICATION IN TRANSPORT SECTOR WITH SPECIAL REFERENCE TO THE ROAD ACCIDENTS IN KERALA DR. JOHN T. ABRAHAM & SWAPNA K. CHERIAN	48
9.	RURAL MARKETS-A NEW FORCE FOR MODERN INDIA RICHARD REMEDIOS	51
10.	ASSESSMENT OF TRAINING NEEDS AND EVALUATION OF TRAINING EFFECTIVENESS IN EMPLOYEES OF SELECT ITes COMPANIES AT BANGALORE DR. ANITHA H. S. & SOWMYA K. R.	54
11.	JOB HOPPING AND EMPLOYEE TURNOVER IN THE TELECOM INDUSTRY IN THE STATE OF TAMIL NADU L.R.K. KRISHNAN & DR. SETHURAMASUBBIAH	59
12.	GROWTH AND RESPONSE OF AGRICULTURE TO TECHNOLOGY AND INVESTMENT IN INDIA (A STUDY OF POST GLOBALIZATION PERIOD) SONALI JAIN, H.S. YADAV & TANIMA DUTTA	80
13.	DAY OF THE WEEK EFFECT IN INTERNATIONAL MARKET: A CASE STUDY OF AMERICAN STOCK MARKET DR. BAL KRISHAN & DR. REKHA GUPTA	86
14.	STOCHASTIC BEHAVIOR OF A TWO UNIT SYSTEM WITH PARTIAL FAILURE AND FAULT DETECTION VIKAS SHARMA, J P SINGH JOOREL, ANKUSH BHARTI & RAKESH CHIB	90
15.	SURVEY OF NEWRENO AND SACK TCP TECHNIQUES PERFORMANCE IN PRESENCE OF ERRORS FOR HIGH SPEED NETWORK MARGAM K.SUTHAR & ROHIT B. PATEL	98
16.	A STUDY OF INDIAN BANKS WITH REFERENCE TO SERVICE QUALITY ATTRIBUTES AND CUSTOMER SATISFACTION DR. ASHWIN G. MODI & KUNDAN M PATEL	103
17.	PREDICTING CONSUMER BUYING BEHAVIOR USING A DATA MINING TECHNIQUE ARATHI CHITLA	108
18.	PERFORMANCE ANALYSIS OF VALUE STOCKS & EVIDENCE OF VALUE PREMIUM: A STUDY ON INDIAN EQUITY MARKET RUBEENA BAJWA & DR. RAMESH CHANDER DALAL	113
19.	STAR RATING FOR INDIAN BANKS WITH RESPECT TO CUSTOMER SERVICE DR. M. S. JOHN XAVIER	119
20.	ROUTING OF VLSI CIRCUITS USING ANT COLONY OPTIMISATION A.R.RAMAKRISHNAN & V. RAJKUMAR	123
21.	A STUDY ON INVESTORS' CONSCIOUSNESS AND INVESTMENT HABITS TOWARD MUTUAL FUNDS: - AN EXPLORATORY STUDY OF MEHSANA DISTRICT ATUL PATEL, H. D. PAWAR & JAYSHRI DATTA	127
22.	THE JIGSAW CAPTCHA BALJIT SINGH SAINI	134
23.	STUDY OF THE AWARENESS ABOUT THE SERVICES OFFERED BY THE DEPOSITORY PARTICIPANTS IN RAJASTHAN DR. DHIRAJ JAIN & PREKSHA MEHTA	137
24.	ATTACHMENT BETWEEN STOCK INDICES FII, NSE AND BSE P. KRISHNAVENI	142
25.	UTILIZATION OF E-BANKING SERVICES BY THE CUSTOMERS OF ICICI BANK LIMITED M. S. ANANTHI & DR. L. P. RAMALINGAM	146
26.	A SYSTEM FOR EMBEDDING FIVE TYPES OF EMOTIONS IN SPEECH: USING TIME DOMAIN PITCH SYNCHRONIZATION OVERLAP AND ADD (TPSOLA) MAMTA SHARMA & MADHU BALA	153
27.	PERFORMANCE OF INDIAN SCHEDULED COMMERCIAL BANKS IN PRE AND POST GLOBAL CRISIS PRABINA KUMAR PADHI & MADHUSMITA MISHRA	159
28.	FOOD PROCESSING INDUSTRY: INDIA NEED FOR DOMINATING GLOBAL MARKETS ALI LAGZI & R.THIMMARAYAPPA	162
29.	ROLE OF BALANCED SCORECARD AS A COMMUNICATION TOOL ANSHU	167
30.	PERFORMANCE APPRAISAL OF INDIAN BANKING SECTOR: A COMPARATIVE STUDY OF SELECTED PRIVATE AND FOREIGN BANKS SAHILA CHAUDHRY	171
	REQUEST FOR FEEDBACK	181

CHIEF PATRON

PROF. K. K. AGGARWAL

Chancellor, Lingaya's University, Delhi
Founder Vice-Chancellor, GuruGobindSinghIndraprasthaUniversity, Delhi
Ex. Pro Vice-Chancellor, GuruJambheshwarUniversity, Hisar

PATRON

SH. RAM BHAJAN AGGARWAL

Ex.State Minister for Home & Tourism, Government of Haryana
Vice-President, Dadri Education Society, Charkhi Dadri
President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

CO-ORDINATOR

MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

ADVISORS

DR. PRIYA RANJAN TRIVEDI

Chancellor, The Global Open University, Nagaland

PROF. M. S. SENAM RAJU

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

PROF. S. L. MAHANDRU

Principal (Retd.), MaharajaAgrasenCollege, Jagadhri

EDITOR

PROF. R. K. SHARMA

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

CO-EDITOR

MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI

Faculty, YanbuIndustrialCollege, Kingdom of Saudi Arabia

PROF. PARVEEN KUMAR

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

PROF. H. R. SHARMA

Director, Chhatrapati Shivaji Institute of Technology, Durg, C.G.

PROF. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), GuruGobindSinghI. P. University, Delhi

PROF. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

DR. ASHWANI KUSH

Head, Computer Science, UniversityCollege, KurukshetraUniversity, Kurukshetra

DR. BHARAT BHUSHAN

Head, Department of Computer Science & Applications, GuruNanakKhalsaCollege, Yamunanagar

DR. VIJAYPAL SINGH DHAKA

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

DR. SAMBHAVNA

Faculty, I.I.T.M., Delhi

DR. MOHINDER CHAND

Associate Professor, KurukshetraUniversity, Kurukshetra

DR. MOHENDER KUMAR GUPTA

Associate Professor, P.J.L.N.GovernmentCollege, Faridabad

DR. SAMBHAV GARG

Faculty, M. M. Institute of Management, MaharishiMarkandeshwarUniversity, Mullana

DR. SHIVAKUMAR DEENE

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

DR. BHAVET

Faculty, M. M. Institute of Management, MaharishiMarkandeshwarUniversity, Mullana

ASSOCIATE EDITORS**PROF. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida

PROF. NAWAB ALI KHAN

Department of Commerce, AligarhMuslimUniversity, Aligarh, U.P.

DR. ASHOK KUMAR

Head, Department of Electronics, D. A. V. College (Lahore), AmbalaCity

ASHISH CHOPRA

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

SAKET BHARDWAJ

Lecturer, HaryanaEngineeringCollege, Jagadhri

TECHNICAL ADVISORS**AMITA**

Faculty, Government M. S., Mohali

MOHITA

Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadholi, Yamunanagar

FINANCIAL ADVISORS**DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS**JITENDER S. CHAHAL**

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

CHANDER BHUSHAN SHARMA

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT**SURENDER KUMAR POONIA**

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email addresses: infoijrcm@gmail.com or info@ijrcm.org.in.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR
IJRCM

Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '_____ ' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:

Designation:

Affiliation with full address, contact numbers & Pin Code:

Residential address with Pin Code:

Mobile Number (s):

Landline Number (s):

E-mail Address:

Alternate E-mail Address:

NOTES:

- a) The whole manuscript is required to be in **ONE MS WORD FILE** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
- b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is required to be below **500 KB**.
- e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name, designation, affiliation (s), address, mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
6. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.
7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed **5000 WORDS**.

10. **FIGURES & TABLES:** These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.
11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:
 - All works cited in the text (including sources for tables and figures) should be listed alphabetically.
 - Use **(ed.)** for one editor, and **(ed.s)** for multiple editors.
 - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
 - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
 - The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
 - For titles in a language other than English, provide an English translation in parentheses.
 - The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITE

Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

STUDY OF THE AWARENESS ABOUT THE SERVICES OFFERED BY THE DEPOSITORY PARTICIPANTS IN RAJASTHAN

DR. DHIRAJ JAIN
ASST. PROFESSOR
PACIFIC INSTITUTE OF MANAGEMENT
UDAIPUR

PREKSHA MEHTA
MBA STUDENT
PACIFIC INSTITUTE OF MANAGEMENT
UDAIPUR

ABSTRACT

The research study was based on the micro economic approach of estimating the awareness level of services offered by the depository participants to the respondents i.e. demat account holders in the state of Rajasthan. The study done on a demat account holders all over the Rajasthan state. The data was collected by distributing a structured questionnaire to 100 demat account holders. The awareness level about services offered by depository participants to the investors was moderate. The opinion regarding the account opening and maintenance charges was reasonable. The level of awareness about closing and termination of demat account was also moderate. Most of the investors were equity holders & there was no significant relationship between demographic factors and level of awareness.

KEYWORDS

Awareness, Depository, Investment, Investors, Services.

INTRODUCTION

Before 1996, the account settlement period of stock exchanges was 14 days which has been shortened to 7 days. The National Securities Clearing Corporation Ltd. (NSCCL) is a wholly owned subsidiary of NSE providing a settlement guarantee and Bank Of India Shareholding Ltd. is the clearing house of the BSE which is owned jointly by the Bank Of India and BSE. In the case of corporate securities the issuer used to maintain the register and the issuer or the transfer agent used to physically receive the security from a transferee accompanied by a transfer deed signed by the transferor. Majority of the transactions settled in the security market were based on physical movement leading to a wide variety of bottlenecks like increase in transaction cost, bad delivery, tearing, mutilation of certificate, fraud and theft, time and postal delays etc and to remove all these bottlenecks, The Depositories Act 1996, was introduced for dematerialization of securities, electronic transfer of securities, and electronic book entry in depositories.

As the depository network expanded the NSDL and CDSL had been granted a certificate of commencement of business by SEBI. Depository is an institution which holds securities with it, in which trading is done among shares, debentures, mutual funds, derivatives, future & options and commodities. The intermediaries are depository participants and every depository participants need to be registered under any depository in India before they begin their operation in the market. Thus, in India there are two depositories functioning for over a decade (NSDL & CDSL). Therefore there is a need to identify the level of awareness about the services offered by the depositories in India.

REVIEW OF LITERATURE

Dellarocas C, (2000) Contributed to the development of a rigorous discipline for designing trust management mechanisms in online communities. He identifies several properties of online interaction are challenging the accumulated wisdom of our communities on how to produce trust and require the development of new mechanisms and systems. **Sultan Sing (2011)** studied the factors affecting the decision making of the investors in depository system. Most of the investors are aware of the view that shorter settlement period, safety of securities with the depositories, attitude of the staff available with the DPs, timely services provided by the DPs to the investors, reduction in transaction cost, repatriation of sales proceeds of shares/debentures by NRIs were some of the factors that affect the decision making of the investors in the depository system. Earlier studies covered the depository system and environment, which mainly pertained to depository legislation, which was a viable alternative of depository, implications of depositories ordinance, internal audit of depository participants, an overview of the Depositories Act 1996, responsibilities of auditing profession, role of depository in stock and capital market, SEBI guidelines in the depository system, services provided by different depositories or accessibility of depositories to retail investors. But it was very important to study the financial performance of depositories themselves and hence the author conducted the study. **Aggarwal and Dixit (1996)** expressed their views about the legal framework for depository system in India. They also explained the benefits of the paperless trading, responsibilities of depository or participants and eligibility criteria, etc. **Ravi Shah (2002)** highlighted that NSDL and CDSL have changed the face of the Indian capital market. The move from an account period settlement in paper form only to a T+3 settlement in pure electronic form has been achieved in a record span of few years, whereas it took somewhere between 10-20 years in most of the developed countries. **Hurkat and Ved (1999)** discussed the role of depository system in many advanced countries in the stock and capital markets the world over. They also analyzed the services offered by NSDL, dematerialization, re-materialization, trading and fee or charges, comparison of a bank and a depository for the benefits of the depository.

STATEMENT OF PROBLEM

The number of investor accounts in the country's stock market is inching towards the 2 crore mark, with the opening of more than 10 lakh new accounts since the beginning of 2010. At the end of October, the total number of investor accounts, as maintained with the country's two depositories NSDL and CDSL, stood at little over 1.97 crore, up from about 1.86 crore as on December 31, 2010. However, the rate of increase in the number of accounts seems to have slowed down drastically from the recent years. While the number of total accounts has increased by about 11 lakh so far in 2011, the increase was of about 20 lakh accounts during 2010 with both NSDL and CDSL accounting for addition of 10 lakh accounts each. The number of investor accounts had swelled even faster in previous years, especially between 2006-2009, on the back of growing investor interest in the stock market as markets were rallying smartly with a number of high-profile IPOs. A sluggish trend prevailing in the market for many months now and absence of any major IPOs seems to have adversely affected the interest of new investors in the market. The total number of investors could be, however, somewhat lower as some of the people or entities could have more than one accounts. As per the latest data available, the total number of investor accounts in demat or electronic format, which have been made mandatory to trade in the capital markets, maintained with NSDL (National Securities Depository Ltd) currently stands at about 1.20 crore. On the other hand, Central Depository Services (India) Ltd (CDSL) currently maintains about 77.7 lakh demat investor accounts. These exclude the invalid accounts that have been closed or frozen due to unavailability of investor identification details like PAN (Permanent Account Number). Lakhs of investor accounts have been frozen or closed in the recent years.

after PAN was made mandatory for these accounts in 2006. At the end of 2010-2011, NSDL had a total of 1.13 crore investor accounts, while CDSL had 73.4 lakh accounts.

Hence, with the increase in the number of investors account and compulsion of SEBI to trade securities in demat mode, an attempt has been made to study about the "Awareness level of services offered by Depository Participants among Retail Investors" at a micro level. For this purpose, instead of carrying out nationwide research emphasis has been given on a particular state. For this purpose, 5 investors' intensive state has been identified and among those states, Rajasthan state has been selected randomly.

OBJECTIVE OF THE STUDY

- To study the awareness level of retail investors about the nomination services and other services offered by the depository participants in respect of their age, qualification, income etc.
- To study the awareness level of retail investors about the closing and termination of demat accounts.
- To examine the investors opinion regarding charges on various services offered by the depository participants.
- To examine which security the investor finds most appealing.

HYPOTHESIS FRAMED FOR THE STUDY

H₀₁: There is no significant association between educational qualification and the level of awareness about services offered by the depository participants.

H₀₂: There is no significant association between annual income and the level of awareness about the services offered by the depository participants.

METHODOLOGY

- The study is exploratory study with the objective of analyzing the investors awareness about the services offered by the depository participants to the demat account holders. The study has been conducted with the help of the opinion collected from the investors existing in the Rajasthan state. Here, collecting the opinion from all the investors is not possible. Hence, it has been decided to select a representing sample from the investors. For this purpose the sample of hundred investors was selected randomly by adopting the lottery method.
- A well structured questionnaire was prepared and the responses were invited on the investors' awareness and their opinion.
- A pilot study was conducted before administering the questionnaire to the respondents. The purpose was to find out if any modifications were required in the questionnaire or not. A sample of ten respondents was selected for pre-testing. After pre-testing it was found that there is no need for modification, so the questionnaire was used to collect data. Chi-square test and Analysis of Variance (ANOVA) were used to test the hypothesis formulated for the present study. Chi square test was used to find out whether there is any association between socio-economic attributes and awareness level of investors. ANOVA was used to compare the mean score of opinion on charges among investors of different educational qualifications, annual income, age and range of investment in securities.

LIMITATION OF THE STUDY

The study is confined to Rajasthan state only. This is because other states will definitely involve high cost and time.

ANALYSIS AND INTERPRETATION OF DATA

TABLE 1: DEMOGRAPHIC FACTORS

S. No.	Status	No. of respondents	percentage
1. Educational Qualification			
1	Non-Graduate	2	2.0
2	Graduate	53	53.0
3	Post-Graduate	40	40.0
4	Others	5	5.0
	Total	100	100.0
2. Annual Income			
1	Less Than Rs. 1,50,000	9	9.0
2	Rs. 1,50,000 - Rs. 2,50,000	14	14.0
3	Rs. 2,50,000 - Rs. 4,50,000	26	26.0
4	More Than Rs. 4,50,000	51	51.0
	Total	100	100.0
3. Age Group			
1	Less Than 30 Years	45	45.0
2	30-40 Years	30	30.0
3	40-50 Years	17	17.0
4	50-60 Years	7	7.0
5	More Than 60 Years	1	1.0
	Total	100	100.0
4. Gender			
1	Male	88	88.0
2	Female	12	12.0
	Total	100	100.0
5. Range of investment			
1	Less Than Rs. 10,000	4	4.0
2	Rs. 10,000 - Rs. 30,000	11	11.0
3	Rs. 30,000 - Rs. 50,000	19	19.0
4	Rs. 50,000 - Rs. 70,000	12	12.0
5	Rs. 70,000 - Rs. 1,00,000	8	8.0
6	More Than Rs. 1,00,000	46	46.0
	Total	100	100.0

Sources: Primary Data

The respondents were asked about their present educational qualification, annual income age, gender and range of investment with the objective of finding its relation with their awareness. The above table shows that of the 100 respondents most of the respondent were graduates and post graduates and having an

annual income of more than Rs.4, 50,000 and were of less than 30 years of age & invested more than Rs. 1, 00,000 per year. Most of the respondents were male (88%). These all were the crucial to determine the risk taken by the investors.

INVESTORS CHOICE OF INVESTMENT

The investors were given options to choose the type of investment or security in which they invest. The choice of investments was Equity, Debentures, Government Security, Initial Public Offerings, and Mutual Fund.

TABLE 2: INVESTORS' CHOICE OF INVESTMENT

Sr. No.	Choice of investment	Number Of Respondents	Percentage
1	Equity	64	32.65
2	Debentures	23	11.74
3	Government Security	24	12.24
4	Initial Public Offerings	36	18.37
5	Mutual Fund	49	25
	TOTAL	196	100

Sources: Primary Data

The investors were given multiple options to choose. The above table shows that of 100 respondents, 32.65% invest in equity, only 11.74% in debentures, 12.24% in government securities 18.37% in initial public offerings, and 25% of the respondents also invest in mutual funds.

EDUCATIONAL QUALIFICATION AND AWARENESS ABOUT SERVICES OFFERED BY DEPOSITORY PARTICIPANTS

In order to find out the association between the educational qualification of the respondents and their awareness about services provided by depository participants, and the chi-square test is applied.

Null Hypothesis: The association between the educational qualification of the respondents and their level of awareness about services offered by depository participants is not significant.

TABLE 3: EDUCATIONAL QUALIFICATION AND AWARENESS ABOUT SERVICES OFFERED BY DEPOSITORY PARTICIPANTS

Level of Awareness	Educational Qualifications				Total
	Non-Graduate	Graduate	Post-Graduate	Others	
Low	0(.2)	6(5.3)	4(4)	0(.5)	10(10)
Moderate	2(1.3)	36(33.4)	23(25.2)	2(3.2)	63(63.0)
High	0(.4)	9(11.7)	11(8.8)	2(1.1)	22(22.0)
Very High	0(.1)	2(2.7)	2(2)	1(.3)	5(5.0)
TOTAL	2	53	40	5	100

Sources: Primary Data (Figures in the brackets represent the expected frequency)

CHI-SQUARE TESTS			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Chi-Square	6.886	9	.649

As the calculated chi-square value (6.886) is less than the table value (16.919) at 5% level of significance for 9 degree of freedom, the null hypothesis is accepted and it could be concluded that the association between the educational qualification and the level of awareness about the services offered by the depository participants is not significant. Awareness level is moderate among all the group of investors, whether they are highly qualified or have low qualification.

ANNUAL INCOME AND AWARENESS ABOUT SERVICES OFFERED BY DEPOSITORY PARTICIPANTS

In order to find out the association between the annual income of the respondents and their awareness level about services provided by the depository participants, the Chi-square test is applied.

Null Hypothesis: The association between the annual income of the respondents and their level of awareness about services offered by depository participants is not significant.

TABLE 4: ANNUAL INCOME AND AWARENESS ABOUT SERVICES OFFERED BY DEPOSITORY PARTICIPANTS

Level Of Awareness	Annual Income				Total
	Less Than Rs. 1,50,000	Rs. 1,50,000 – Rs. 2,50,000	Rs. 2,50,000 – Rs. 4,50,000	More Than Rs. 4,50,000	
Low	2(.9)	2(1.4)	1(2.6)	5(5.1)	10
Moderate	7(5.7)	8(8.8)	22(16.4)	26(32.1)	63
High	0(2.0)	3(3.1)	3(5.7)	16(11.2)	22
Very High	0(.5)	1(.7)	0(1.3)	4(2.6)	5(5.0)
TOTAL	9	14	26	51	100

Sources: Primary Data (Figures in the brackets represent the expected frequency)

CHI-SQUARE TESTS			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Chi-Square	14.089	9	.119

As the calculated chi-square value (14.089) is less than the table value (16.919) at 5% level of significance for 9 degree of freedom, the null hypothesis is accepted and it could be concluded that the association between the annual income and their level of awareness about the services offered by the depository participants is not significant. Awareness level is moderate among all the group of investors, whether they have high income or have low income.

AGE GROUP AND LEVEL OF AWARENESS ABOUT SERVICES OFFERED BY DEPOSITORY PARTICIPANTS

In order to find out the association between the age group of the respondents and their awareness level about services provided by the depository participants, the Chi-square test is applied.

Null Hypothesis: The association between the age group of the respondents and their level of awareness about services offered by depository participants is not significant.

TABLE 5: AGE GROUP AND AWARENESS ABOUT SERVICES PROVIDED BY DEPOSITORY PARTICIPANTS

Level of Awareness	Age Group					Total
	Less Than 30 Years	30-40 Years	40-50 Years	50-60 Years	More Than 60 Years	
Low	2(4.5)	3(3.0)	4(1.7)	1(.7)	0(.1)	10
Moderate	32(28.4)	14(18.9)	10(10.7)	6(4.4)	1(.6)	63
High	9(9.9)	10(6.6)	3(3.7)	0(1.5)	0(.2)	22
Very High	2(2.3)	3(1.5)	0(.9)	0(.4)	0(.1)	5
TOTAL	45	30	17	7	1	100

Sources: Primary Data (Figures in the brackets represent the expected frequency)

CHI-SQUARE TESTS			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Chi-Square	13.825	12	.312

As the calculated chi-square value (13.825) is less than the table value (21.026) at 5% level of significance for 12 degree of freedom, the null hypothesis is accepted and it could be concluded that the association between the age group and their level of awareness about the services offered by the depository participants is not significant. Awareness level is moderate among all the age groups.

RANGE OF INVESTMENT IN SECURITY AND LEVEL OF AWARENES ABOUT SERVICES PROVIDED BY THE DEPOSITORY PARTICIPANTS

In order to find out the association between the age group of the respondents and their awareness level about services provided by the depository participants, the Chi-square test is applied.

Null Hypothesis: The association between the range of investment of the respondents and their level of awareness about services offered by depository participants is not significant.

TABLE 6: RANGE OF INVESTMENT AND AWARENESS ABOUT SERVICES PROVIDED BY DEPOSITORY PARTICIPANTS

Level of Awareness	Range Of Investment in Securities						Total
	Less Than Rs. 10,000	Rs. 10,000 - Rs. 30,000	Rs. 30,000 - Rs. 50,000	Rs. 50,000 - Rs. 70,000	Rs. 70,000 - Rs. 1,00,000	More Than Rs. 1,00,000	
Low	0(.4)	2(1.1)	4(1.9)	1(1.2)	1(.8)	2(4.6)	10
Moderate	4(2.5)	9(6.9)	12(12.0)	9(7.6)	7(5.0)	22(29.0)	63
High	0(.9)	0(2.4)	3(4.2)	2(2.6)	0(1.8)	17(10.1)	22
Very High	0(.2)	0(.6)	0(1.0)	0(.6)	0(.4)	5(2.3)	5
TOTAL	4	11	19	12	8	46	100

Sources: Primary Data (Figures in the brackets represent the expected frequency)

CHI-SQUARE TESTS			
	Value	Degree of freedom	Asymp. Sig. (2-sided)
Chi-Square	25.311	15	.046

As the calculated chi-square value (25.311) is more than the table value (24.996) at 5% level of significance for 15 degree of freedom, the null hypothesis is rejected and it could be concluded that the association between the range of investment and their level of awareness about the services offered by the depository participants is significant. The respondents having low awareness have lower range of investment and the respondents having high awareness have the higher range of investment.

Comparison of Mean Score of Opinion on Charges among Investors of Different Educational Qualification

Null Hypothesis: There is no significant difference between mean score of opinion on charges among investors of different educational qualification.

TABLE 7: EDUCATIONAL QUALIFICATION AND OPINION SCORE ON CHARGES

Educational Qualifications	Mean	Std. Deviation	Number of respondents
Non-Graduate	1.50	.707	2
Graduate	.53	.799	53
Post-Graduate	.63	.807	40
Others	.00	.000	5
Total	.56	.795	100

Sources: Primary Data

ANNOVA TABLE

	Sum of Squares	Degree of freedom	Mean Square	F	Sig.
Between Groups	3.557	3	1.186	1.927	.130
Within Groups	59.083	96	.615		
TOTAL	62.640	99			

Sources: Primary Data

ANOVA was applied to test whether respondents with different qualification vary in their mean scores on opinion regarding charges. The ANOVA results shows that the significant value (.130) is greater than the level of significant value i.e. 5% (.05), therefore the difference in the investors' educational qualification is insignificant to the score of opinion on charges. Hence null hypothesis is accepted.

Comparison of Mean Score of Opinion on Charges Among Investors of Different Annual Income

Null Hypothesis: There is no significant difference between mean score of opinion on charges among investors of different annual income.

TABLE 8: ANNUAL INCOME AND OPINION SCORE ON CHARGES

Annual Income	Mean	Std. Deviation	Number of respondents
Less Than Rs. 1,50,000	.33	.707	9
Rs. 1,50,000 - Rs. 2,50,000	1.07	.730	14
Rs. 2,50,000 - Rs. 4,50,000	.50	.707	26
More Than Rs. 4,50,000	.49	.834	51
TOTAL	.56	.795	100

Sources: Primary Data

ANNOVA TABLE

	Sum of Squares	Degree of freedom	Mean Square	F	Sig.
Between Groups	4.466	3	1.489	2.457	.068
Within Groups	58.174	96	.606		
TOTAL	62.640	99			

Sources: Primary Data

ANOVA was applied to test whether respondents with different annual income vary in their mean scores on opinion regarding charges. The ANOVA results shows that the significant value (.068) is greater than the level of significant value i.e. 5% (.05), therefore the difference in investors' annual income is insignificant to the mean score of opinion on charges. Hence null hypothesis is accepted.

Comparison of Mean Score of Opinion on Charges among Investors of Different Range Of Investment

Null Hypothesis: There is no significant difference between mean score of opinion on charges among investors of different range of investment.

TABLE 9: RANGE OF INVESTMENT AND OPINION SCORE ON CHARGES

Range Of Investment in Securities	Mean	Std. Deviation	Number of respondents
Less Than Rs. 10,000	.50	.577	4
Rs. 10,000 - Rs. 30,000	1.00	.894	11
Rs. 30,000 - Rs. 50,000	.79	.855	19
Rs. 50,000 - Rs. 70,000	.33	.651	12
Rs. 70,000 - Rs. 1,00,000	.63	.744	8
More Than Rs. 1,00,000	.41	.777	46
TOTAL	.56	.795	100

Sources: Primary Data

ANOVA TABLE

	Sum of Squares	Degree of freedom	Mean Square	F	Sig.
Between Groups	4.788	5	.958	1.556	.180
Within Groups	57.852	94	.615		
TOTAL	62.640	99			

Sources: Primary Data

ANOVA was applied to test whether respondents with different range of investment vary in their mean scores on opinion regarding charges. The ANOVA results shows that the significant value (.180) is greater than the level of significant value i.e. 5% (.05), therefore the difference in the investors' range of investment is insignificant to the score of opinion on charges. Hence null hypothesis is accepted.

CONCLUSION

The findings from the chi-square test shows that the investors' level of awareness about services offered by depository participants and about closing and termination of demat account is moderate though they vary in their educational qualification, age group & annual income.

However, the finding from ANOVA reveals that the account opening charges and maintenance charges are reasonable. This research made an attempt to find out the level of awareness about the services offered by the depository participants in the Rajasthan state. The conclusion drawn from the analyzed data show that the awareness level among investors is not up to the mark and they are not aware about the various services offered by the depository participants. The results of this study will be a sort of feedback for the investors, brokers and regulatory bodies as to what extent have the investors' education programme reached. It is therefore, a matter of paramount importance that the investors are empowered through education on the functioning of the market, obligation of the intermediaries like depository participants the operational intricacies and the risks and pitfalls involved in security trading.

SUGGESTIONS

1. Investors' awareness programmes should be organised to make the investors aware about the services offered by the depository participants.
2. As most of the investors are only aware about the NSDL, They must be made aware about both the depositories NSDL and CDSL.
3. Day to day trends in stock markets, industries and economy can be provided to the investors that would make them more cautious while trading in securities.
4. Investors must be made aware about the usage of internet based services to know about their transaction details.
5. Other than nomination, facilities provided by the depository participants like transposition-cum-demat facility, transmission facility, client-level-pay-in facility and dematerialization must be made known to the investors.
6. Investors must be made aware about the circumstances under which a depository participant can terminate their demat account.
7. Better infrastructure facilities with more computer terminals for easier and convenient transaction can be provided by the depository participants.

REFERENCES

1. Aggarwal, V. K. and Dixit, S. K. (1996), "The Depositories Legislation: A Critical Evaluation," *Chartered Secretary*, April, pp. 367-376.
2. Bakos, Y. (1997). Reducing Buyer Search Costs: Implications for Electronic Marketplaces. *Management Science*, Volume 43, 12, December 1997.
3. Bakos, Y. (1998). Towards Friction-Free Markets: The Emerging Role of Electronic Marketplaces on the Internet. *Communications of the ACM*, Volume 41, 8 August, 1998 pp. 35-42.
4. C. R. Kothari, (2008) "Research Methodology- methods and techniques" New age international publishers.
5. Dellarocas, C. (2000). The Design of Reliable Trust Management Systems for Online Trading Communities. Working Paper, available from <http://ccs.mit.edu/dell/trustmgt.pdf>
6. Hurkat, Manoj and Ved, Umesh (1999), "Depository-An Inevitable Institution", *Chartered Secretary*, September, pp. 991- 993.
7. International Journal of Scientific and Research Publications, Volume 2, Issue 2, February 2012 1 ISSN 2250-3153
8. Prof. Sultan Sing and Sakshi Goyal (July 2011), "Analysis Factor Affecting the decision making of the investors in Depository system", *Journal of Banking, Financial Services and Insurance Research*, Vol. 1, pp. 13-38
9. Ravi, Shah (2002), "Understanding Dematerialization", *The Management Accountant*, pp. 434.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mails i.e. **infoijrcm@gmail.com** or **info@ijrcm.org.in** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

