INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) 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., Open J-Gage, India Ilink of the same is duly available at Inflibret of University Grants Commission (U.G.C.).

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world. Circulated all over the world & Google has verified that scholars of more than 1866 Cities in 152 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

http://ijrcm.org.in/

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page N		
1.	FACTORS INFLUENCING KNOWLEDGE SHARING BEHAVIOUR: DEVELOPING A THEORETICAL FRAMEWORK SOOFI ANWAR & DR. K. DURGA PRASAD	1		
2 .	THE IMPACT OF DIRECT AND INDIRECT FACTORS INFLUENCING BRAND EQUITY FOR ONLINE COMPANIES SEYED ALIAKBAR AHMADI, MOHAMMADREZA DARAEI & EHSAN POUSTIAN			
3.	INTEGRATION OF TECHNOLOGY IN TEACHING SENIOR HIGH SCHOOL SOCIAL STUDIES: THE COMPUTER ASSISTED INSTRUCTION EFFECT ON STUDENTS' PERFORMANCE PAUL DELA AHIATROGAH, BRANDFORD BERVELL & AUGUSTINE YAKUBU			
4.	PAOL DELA ANIATROGAN, BRANDFORD BERVELL & AUGUSTINE TAROBU USING THE ANALYTIC HIERARCHY PROCESS TO ENHANCE PARTICIPATORY DECISION-MAKING IN MULTI-STAKEHOLDER INFRASTRUCTURE PROJECTS: A PIPELINE PROJECT CASE STUDY VICTOR. A. AKUJURU & BANKOLE. O. AWUZIE			
5.	PRACTICAL IMPLEMENTATION OF THE MODEL FOR 'ORGANIZING, MEASURING, ANALYZING STUDENTS' KNOWLEDGE AND PERFORMANCE' ROY MATHEW			
5.	DETERMINANTS OF SMALLHOLDERS' PARTICIPATION IN LOCAL BASED SEED PRODUCTION SYSTEM: THE CASE OF ONION SEED IN EAST SHOA ZONE OF THE OROMIYA NATIONAL REGIONAL STATE, ETHIOPIA FREAW DEMISE & DAWIT ALEMU			
7.	COINTEGRATION OF KARACHI STOCK MARKET WITH OTHER ASIAN STOCK MARKETS FEHMIDA AKRAM, AISHA AKRAM, SHANZA ARSHAD & MAZHAR IQBAL	43		
3 .	SURVEY ON FACTORS INFLUENCING THE PERFORMANCE OF PLM SYSTEM IN AUTO INDUSTRY M. S. GOPINATHA, DR. VISHNUKANTH S. CHATPALLI & DR. K.S. SRIDHAR	47		
).	A STUDY ON QUALITY WORK LIFE WITH REFERENCE TO ENGINEERING COLLEGES AT BANGALORE			
0.	SUNIL RASHINKAR, SRI HARI.V, DR.SREENIVAS.D.L, LAKSHMI NARAYANA.K & SHAZIA KAUSAR POWER & AREA EFFICIENT ROUTER IN 2-D MESH NETWORK-ON-CHIP USING LOW POWER METHODOLOGY – GATE LEVEL POWER OPTIMIZATION SUDHIR N. SHELKE & PRAMOD B. PATIL			
1.	THE STATISTICAL ANALYSIS OF STRUCTURE OF MANUFACTURING SECTOR – WITH SPECIAL REFERENCE TO BANGALORE INDUSTRIAL REGION A. T. SRINIVASA & DR. MUNIVENKATAPPA	68		
2 .	A STUDY ON CONSUMER PERCEPTION OF TATA LPT 3118 12 TYRE VEHICLE OVER 10 TYRE VEHICLES WITH REFERENCE TO THOOTHUKUDI S. JEBASEELI NOVALEENA & DR. A. RANGAWSAMY	75		
3.				
4.				
5.	PERFORMANCE OF PROFITABILITY MANAGEMENT IN AMARA RAJA BATTERIES LIMITED", TIRUPATI - AN EVALUATION K.KALYANI & DR. P. MOHAN REDDY	89		
6.				
7.	RELATIONSHIP OF FINANCIAL REPORTING QUALITY WITH SALES VOLATILITY AND BOOK TO MARKET VALUE MOHAMMAD REZA RAZDAR & DR. B. H. SURESH	97		
8.				
9.	TALENT ACQUISITION AND RETENTION: A STUDY IN INDIAN SMALL AND MEDIUM ENTERPRISES DR. SNIGDHARANI MISHRA & JASMINE T. JHA	10		
0.	MONITORING SYSTEM FOR TERRORISTS AND DANGEROUS PRISONERS DR. PRAMOD BUBNA			
1.	TRENDS OF FOREIGN DIRECT INVESTMENT IN INDIA DR. KARAMVIR SINGH SHEOKAND, PRIYANKA & RAJESH BHARDWAJ	11		
2 .	CONCURRENCY CONTROL IN DBMS WITH TIMESTAMPS GEETIKA			
3.				
4.	AN ANALYSIS OF CHILD'S INFLUENCE IN CHOOSING THE SNACKS ITEMS WITH SPECIAL REFERENCES TO SIVAKASI AREA IN TAMILNADU T. DHANALAKSHMI	12		
5.	MEASURING SERVICE QUALITY OF RAILWAY PLATFORMS IN INDIA: A CASE-STUDY OF EAST-COAST RAILWAYS DR. SRINIBASH DASH, SRI SISIR RANJAN DASH & SRI SUBRAT KUMAR PRADHAN	12		
6.	A COMPARATIVE STUDY OF FINANCIAL STATEMENT OF DISTRICT CO-OPERATIVE DAIRIES OF NORTH GUJARAT PATEL RAJESHKUMAR G., PRAJAPATI RASIKBHAI I. & PATEL NITINKUMAR P.			
7.	WORLD WIDE MIDDLE WARE TECHNOLOGIES M.DHANAMALAR & B.AYSHWARYA	13		
8.	CRITICAL FACTORS FOR SUCCESSFUL SC COLLABORATION: AN INTERPRETIVE STRUCTURAL MODELING APPROACH			
9.	KAUSTUBH JOSHI & ANIKET JADHAV AN EMPIRICAL INVESTIGATION OF INVENTORY MANAGEMENT PRACTICES OF MYSORE PAPER MILLS LIMITED BHADRAVATHI – A CASE STUDY			
0.	BASAVARAJAPPA M T A STUDY ON PERFORMANCE OF MOBILE BAKING SERVICES AND MODELS IN INDIA M.GANGU NAIDU	15		
	REQUEST FOR FEEDBACK	161		

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

<u>CHIEF PATRON</u>

PROF. K. K. AGGARWAL

Chancellor, Lingaya's University, Delhi Founder Vice-Chancellor, Guru Gobind Singh Indraprastha University, Delhi Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar



LATE SH. RAM BHAJAN AGGARWAL Former State Minister for Home & Tourism, Government of Haryana Former Vice-President, Dadri Education Society, Charkhi Dadri Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

CO-ORDINATOR

DR. SAMBHAV GARG Faculty, M. M. Institute of Management, MaharishiMarkandeshwarUniversity, Mullana

<u>ADVISORS</u>

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

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI Faculty, YanbulndustrialCollege, Kingdom of Saudi Arabia PROF. PARVEEN KUMAR Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P. PROF. H. R. SHARMA Director, Chhatarpati 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), Guru Gobind Singh I. 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, Guru Nanak Khalsa College, 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. ASHISH CHOPRA Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

TECHNICAL ADVISOR

AMITA Faculty, Government M. S., Mohali

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





SURENDER KUMAR POONIA

DATED:

v

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 address: <u>infoircm@gmail.com</u>.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. COVERING LETTER FOR SUBMISSION:

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 '_______ virgent control of the 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:

2

- 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.
- 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 <u>BRITISH ENGLISH</u> prepared on a standard A4 size <u>PORTRAIT SETTING PAPER</u>. 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, KurukshetraUniversity, Kurukshetra.

ONLINE RESOURCES

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

WEBSITES

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

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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

http://ijrcm.org.in/

MONITORING SYSTEM FOR TERRORISTS AND DANGEROUS PRISONERS

DR. PRAMOD BUBNA ASST. REGISTRAR DEPARTMENT OF MANAGEMENT BIRLA INSTITUTE OF TECHNOLOGY JAIPUR

ABSTRACT

To day security, safety and monitoring of terrorist and prisoners in jails and in the way of court is very big problem for police and administration across the world. Using Radio Frequency Identification (RFID) technology minimises this problem. RFID is a technology that enables the electronic and wireless labeling and identification of object, human as well as animals. RFID, which means it doesn't provide much value on its own, but it enables organizations to develop applications that create value. The first disturbing fact is that RFID is not a new technology. It was first used over sixty years ago by Britain to identify aircraft in World War II and was part of the refinement of radar. It was during the 1960s that RFID was first considered as a solution for the commercial world. The first commercial applications involving RFID followed during the 70s and 80s. These commercial applications were concerned with identifying some asset inside a single location. They were based on proprietary infrastructures. The Internet is another enabling technology, and just as the Internet enables companies to communicate, collaborate, educate, sell, entertain and distribute products, RFID enables organizations to do develop secure tracing , watching and monitoring prisoners in jails and many different things This paper focus on the ways RFID is being used by organizations today to create value and at some of the ways it might be applied in the future.

KEYWORDS

Monitoring, Safety, Searching, Security, Tracing.

INTRODUCTION

FID is evolving as a major technology enabler for identifying and tracking goods and assets around the world. It can help hospitals locate expensive equipment more quickly to improve patient care, pharmaceutical companies to reduce counterfeiting, and logistics providers to improve the management of moveable assets. It also promises to enable new efficiencies in the supply chain by tracking goods from the point of manufacture through to the retail point of sale (POS). RFID is the reading of physical tags on single products, cases, pallets, or re-usable containers that emit radio signals to be picked up by reader devices. These devices and software must be supported by a sophisticated software architecture that enables the collection and distribution of location-based information in near real time. The complete RFID picture combines the technology of the tags and readers with access to global standardized databases, ensuring real time access to up-to-date information about relevant products at any point in the supply chain

ELEMENTS OF THE SYSTEM

INFORMATION TECHNOLOGY

The information technology is revolutionizing the way, in which we live and work. It is changing all aspects of our life and lifestyle. The digital revolution has given mankind the ability to treat information with mathematical precisions, to transmit it at very high accuracy and to manipulate it at will. These capabilities are bringing into being a whole world within and around the physical worlds. The amount of calculation of computerized information and its length is no limit now. Computer and fast communication are becoming integral parts of our lives. So computer system with communication technology is the main element of this proposed system.

RFID Tags can be either passive, active or battery assisted passive. An active tag has an on-board battery that periodically transmits its ID signal. A battery assisted passive (BAP) has a small battery on board that is activated when in the presence of a RFID reader. A passive tag is cheaper and smaller because it has no battery. Instead, the tag uses the radio energy transmitted by the reader as its energy source. The interrogator must be close for RF field to be strong enough to transfer sufficient power to the tag. Since tags have individual serial numbers, the RFID system design can discriminate several tags that might be within the range of the RFID reader and read them simultaneously. Tags may either be read-only, having a factory-assigned serial number that is used as a key into a database, or may be read/write, where the system user can write object-specific data into the tag. Field programmable tags may be write-once, read-multiple; the user may write "blank" tags with an electronic product code. Logistics and transportation are major areas of implementation for RFID technology. Yard management, shipping and freight and distribution centers use RFID tracking technology. In the railroad industry, RFID tags mounted on locomotives and rolling stock identify the owner, identification number and type of equipment and its characteristics. This can be used with a database to identify the lading, origin, destination, etc. of the commodities being carried.In commercial aviation, RFID technology is being incorporated to support maintenance on commercial aircraft. RFID tags are used to identify baggage and cargo at several airports and airlines. Some countries are using RFID technology for vehicle registration and enforcement. RFID can help detect and retrieve stolen cars.

ANTENNA

RFID READER ANTENNA

The RFID reader antenna transmits a wave that has both electrical and magnetic properties and is known as an electromagnetic wave.

There are 3 different types of RFID antennas:

Linear Polarization (dipole antennas) - the electromagnetic wave propagates entirely in one plane (Vertical or Horizontal) in the direction of the signal propagation. This is the best wave propagation when the tag orientation is known and fixed. The **RFID** antenna and RFID tag should be matched in polarization to obtain the best read rates.

Circular Polarization the electromagnetic wave propagates in two planes creating a circular effect (like a corkscrew) making one complete revolution in a single wavelength timeframe. Since the **RFID antenna** continuously emits a wavelength the rotational field will eventually cover any tag that is in its path. This is best to use when tag orientation is unknown, but **you lose at least 3dB when compared to a linear polarized antenna**. Circular polarization can be right or left handed hence the **RHCP** and **LHCP** options for circular polarized antenna.

Monostatic Circular or Bistatic Circular (2 Right Hand, 2 Left Hand or Right Hand + Left Hand)

- Monostatic is the most common RFID antenna and uses a single common port to transmit and receive signals
- Bistatic uses 2 RFID antennas in the same physical housing and uses one port to transmit and the other port to receive

FREQUENCY BANDS

Frequency	Range	Application
100-500 KHZ	Short range, law reading speed	Animal, Human identification
10-15 MHZ	Medium range, average reading speed	Access control, Smart cards
850-950 MHZ	Long range, very high reading speed	Rail, Road, Car Monitoring, Toll Collection

VOLUME NO. 2 (2012), ISSUE NO. 12 (DECEMBER)

Some standards that have been made regarding RFID technology include:

• ISO/IEC 18092 Information technology—Telecommunications and information exchange between systems—Near Field Communication—Interface and Protocol (NFCIP-1)

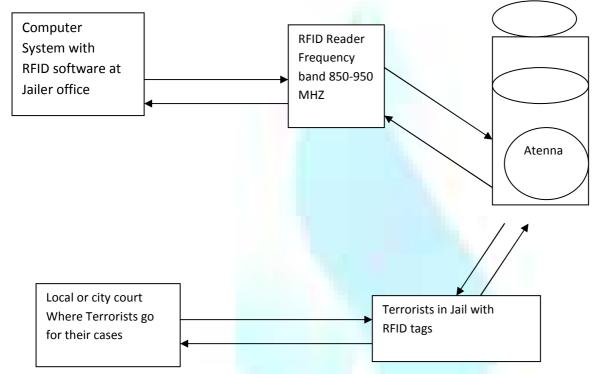
- ISO 18185: This is the industry standard for electronic seals or "e-seals" for tracking cargo containers using the 433 MHz and 2.4 GHz frequencies.
- ISO/IEC 21481 Information technology—Telecommunications and information exchange between systems—Near Field Communication Interface and Protocol -2 (NFCIP-2)

• ASTM D7434, Standard Test Method for Determining the Performance of Passive Radio Frequency Identification (RFID) Transponders on Palletized or Unitized Loads

• ASTM D7435, Standard Test Method for Determining the Performance of Passive Radio Frequency Identification (RFID) Transponders on Loaded Containers

ASTM D7580 Standard Test Method for Rotary Stretch Wrapper Method for Determining the Readability of Passive RFID Transponders on Homogenous Palletized or Unitized Loads

NETWORK DIAGRAM OF THE PRISONERS WITH RFID MONITORING AND TRACING SYSTEM



As a unique identifier for Terrorists being attached to, RFID (SP-K300RW) tags can communicate with reader at 2.45GHz microwave frequency band, there are 4 types of different memory to choose.

SP-K301 96 Bytes RW Tag SP-K302 1K Bytes RW Tag SP-K303 4K Bytes RW Tag SP-K304 16K Bytes RW Tag

PERFORMANCE OF RFID

Long range automatic identification, reader can write data into tags and update data, Conveniently, anti collision capacity, simultaneously identification up to 200 high speed, Multi channel identification capacity. Ultra low RF transmission power consumption, , healthier and safer Unique power saving mode long work life from 6 to 8 years

Time division multi address technology on HDLC and synchronized, communication, tolerance of interfering sources at the scene, Solid state encapsulation tolerance of high strength dropping and vibration, preventive of disassembling

ENVIRONMENT CHARACTERISTICS

This tag can work from -40 to +80 degree ,it has Anti electromagnetism about

10V/m 0.1~1000MHz AM electromagnetic waves, its life of work around 7 to 8 years

its Frequency is 2.4 - 2.4835 GHz, Receiving sensibility is -80dBm--90Bm, Wakeup time is about Less than 3uS, Communication data rate is 1000kbit/s tag type is read/write, its size is 86mm*54mm*5mm, its weight is 30g

AS A RESULT OF THE POTENTIAL BENEFITS OF THIS SYSTEM

While the technology has received more than its fair share of media coverage recently, many are still unfamiliar with RFID and the benefits it can offer. In the face of this need for clear, comprehensive information about RFID and its benefits, this paper defines the opportunities offered by the technology for all organizations involved in the movement, of mankind either sales boy or terrorist or prisoners. It is equally relevant for organizations wishing to track or locate existing goods, assets, or equipment.

CONCLUSION

If Central Government and State Government installed this system in central jails such as Jodhpur central jail, Thira central jail, Mumbai central jail, central jail in Assam or north-east region, Kashmir with north region than security forces can easily monitor the terrorist and dangerous prisoners in jail and in the way of court. In future using 3G and 4G communication technology with integration of RFID technology we may make the system more effective and realizable.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

REFERENCES

- 1. Alexis Leon, mathews leon, Fundamentals of Information Technology, Vikash Publication, New Delhi Page 1-3
- 2. Bill Glover, Himanshu Bhatt ,RFID essentials , O'Reilly Media, Inc., 2006 ISBN 0-596-00944-5, pages 88-89
- 3. Daniel M. Dobkin, The RF in RFID: Passive UHF RFID In Practice, Newnes 2008 ISBN 978-0-7506-8209-1, chapter 8
- 4. Hacking Exposed Linux: Linux Security Secrets & Solutions (third ed.). McGraw-Hill Osborne Media. 2008. p. 298. ISBN 978-0-07-226257-5. http://books.google.com/?id=f5Vz08spzw8C&printsec=frontcover.
- 5. Introduction to RFID, disc 4397-section 12977
- 6. John R. Vacca Computer and information security handbook, Morgan Kaufmann, 2009 ISBN 0-12-374354-0, page 208
- 7. Martein Meints (2007), D3.7 A Structured Collection on Information and Literature on Technological and Usability Aspects of Radio Frequency Identification (RFID), FIDIS deliverable 3(7), June 2007.
- 8. Paolo Magrassi (2001). "A World Of Smart Objects: The Role Of Auto Identification Technologies". http://www.gartner.com. Retrieved 2007-06-24.
- 9. Pete Harrison (2009-07-28). "EU considers overhauling rules for lost air luggage". Reuters. http://www.reuters.com/article/rbssIndustryMaterials UtilitiesNe ws/idUSLS636313 20090728. Retrieved 2009-09-09.
- 10. RFID : An introduction simon holloway
- 11. RFID handbook
- 12. Sen, Dipankar; Sen, Prosenjit; Das, Anand M. (2009), RFID For Energy and Utility Industries, PennWell, ISBN 978-1-59370-105-5, pp. 1-48
- 13. The RFID technology and its current application: Elisabeth ILIE-ZUDOR Zsolt kemeny, Peter Egri, Laszio Monostori
- 14. www.computerworld.com
- 15. www.rfidjournal.com
- 16. www.rfidusa.com
- 17. www.uh.edugartner



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-mail **infoijrcm@gmail.com** 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 cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Fournals

OF RESE

ATIONAL JOURNAL COMMERCE & MA





INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

Ш