

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I  
J  
R  
C  
M



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-Gate, India [link of the same is duly available at Inlibnet 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 3770 Cities in 175 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 No.
1.	<b>CHALLENGES OF INTERNAL AUDITING IN THE PUBLIC SECTOR ORGANISATIONS AND THEIR EFFECT ON INTERNAL AUDITORS JOB SATISFACTION: A CASE STUDY OF PUBLIC INSTITUTIONS IN CHINGOLA DISTRICT, ZAMBIA</b> <i>DR. B. NGWENYA &amp; R. KAKUNDA</i>	1
2.	<b>FACTORS INFLUENCING THE EFFECTIVENESS OF INNOVATIVE RETAIL BANKING PRODUCTS AND SERVICES IN INDIA</b> <i>LALITHA.B.S. &amp; DR. C.S.RAMANARAYANAN</i>	4
3.	<b>EFFECTS OF PACKAGES THROUGH SIDCUL IN ENTREPRENEURIAL DEVELOPMENT OF UTTARAKHAND</b> <i>AMIT DUMKA, DR. VINAY DEVLAL &amp; DR. P. K. GARG</i>	10
4.	<b>CHANDLERS OVERCOMING CHALLENGES (COC)</b> <i>K.DURGADEVI</i>	16
5.	<b>A CONCEPTUAL FRAMEWORK FOR CUSTOMER EXPERIENCE CREATION PROCESS AND ITS IMPACT ON CONSUMER BEHAVIOUR</b> <i>HARLEEN SAHNI, DR. BILAL MUSTAFA KHAN &amp; DR. KISHOR BARAD</i>	20
6.	<b>A STUDY ON MOST INFLUENTIAL FACTORS OF CONSUMER'S BUYING PATTERN TOWARDS MEN'S WEAR WITH SPECIAL REFERENCE TO ERODE CITY</b> <i>BISWARANJAN GHOSH, A.J. MURALIDHARAN, NCUTE COORDINATOR &amp; M. SARAVANAN</i>	26
7.	<b>WOMEN ENTREPRENEURIAL DEVELOPMENT AND MSME's</b> <i>T. PONSINDHU &amp; DR. S.NIRMALA</i>	32
8.	<b>IMPACT OF FDI IN INDIAN RETAIL SECTOR: A SWOT ANALYSIS</b> <i>DR. J. S. YADAV &amp; SANTPAL</i>	36
9.	<b>PRIVATIZATION AND LIBERALIZATION IN HIGHER EDUCATION SYSTEM IN INDIA: NEED IMPROVEMENT IN CURRENT SCENARIO</b> <i>DR. SANGITA MAHESHWARI &amp; DR. APARNA BANIK</i>	41
10.	<b>A STUDY ON THE GROWTH OF MEDICAL TOURISM IN INDIA</b> <i>S. KALIST RAJA CROSS</i>	44
11.	<b>ELECTRONIC COLLABORATING FRAMEWORK FOR DIGITAL SAARC CAMPAIGN</b> <i>KAPIL GOYAL</i>	47
12.	<b>E-COMMERCE IN INDIA: CURRENT DEVELOPMENT</b> <i>BISWAJIT SAHA</i>	49
13.	<b>KING MAKERS OF BUSINESS</b> <i>DR. JEYASREE RAMANATHAN</i>	54
14.	<b>HIGH FREQUENCY TRADING: A NEW CHALLENGE FOR THE MARKET REGULATORS</b> <i>ABHAY KUMAR</i>	56
15.	<b>FINANCING OF INDIA'S GROWTH ENGINE: MICRO, SMALL AND MEDIUM ENTERPRISE</b> <i>BHAMINI GARG</i>	59
16.	<b>A STUDY OF UNORGANISED SECTOR IN INDIA: UNORGANISED RETAIL PRESPECTIVE</b> <i>KANWALJEET</i>	63
17.	<b>DATAMINING METHODOLOGIES AND ITS APPLIED APPLICATIONS</b> <i>M.DHANAMALAR</i>	66
18.	<b>A STUDY ON WORKERS PARTICIPATION IN MANAGERIAL DECISION MAKING WITH REFERENCE TO PEARL GLOBAL INDUSTRIES LIMITED, CHENNAI</b> <i>G. V. SOBHA</i>	69
19.	<b>THE EFFECTS OF ELECTRONIC PAYMENT CHANNELS ON GROWTH OF DEPOSIT BASE OF NIGERIAN DEPOSIT MONEY BANKS</b> <i>AHMADU ABUBAKAR</i>	77
20.	<b>ROLE OF FOREIGN DIRECT INVESTMENT DETERMINANT ON INDIAN ECONOMY</b> <i>Y. SATGURU ROSHAN</i>	82
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	88

## CHIEF PATRON

**PROF. K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur  
(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)  
Chancellor, K. R. Mangalam University, Gurgaon  
Chancellor, Lingaya's University, Faridabad  
Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi  
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## FOUNDER PATRON

**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, Shree Ram Institute of Business & Management, Urjani

## 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.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA**

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

## EDITORIAL ADVISORY BOARD

**DR. RAJESH MODI**

Faculty, Yanbul Industrial College, 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), 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, University College, Kurukshetra University, 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, Kurukshetra University, Kurukshetra

**DR. MOHENDER KUMAR GUPTA**

Associate Professor, P.J.L.N. Government College, Faridabad

**DR. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

**DR. SHIVAKUMAR DEENE**

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

**DR. BHAVET**

Faculty, Shree Ram Institute of Business & Management, Urjani

***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, Aligarh Muslim University, 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

***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 areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; 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; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour 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; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript anytime** in ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## 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.

**WEBSITES**

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

**M.DHANAMALAR**  
**ASST. PROFESSOR**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**KRISTU JAYANTI COLLEGE**  
**BANGALORE**

### ABSTRACT

Data mining is the process of analyzing data from different perspectives and summarizing it into useful information. Data mining software is one of a number of analytical tools for analyzing data. It allows users to analyze data from many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases.

### KEYWORDS

Data mining, KDD, Prediction, Descriptive.

### I. INTRODUCTION

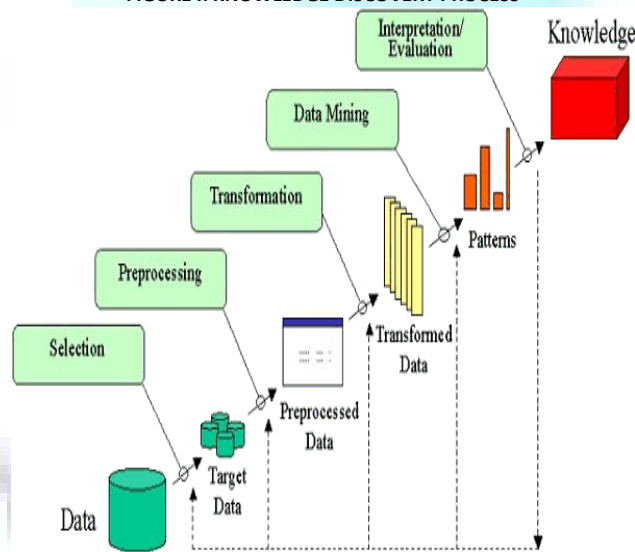
Data Mining is the method of extracting information from huge data sets through the use of Algorithms and techniques drawn from the field of Statistics, Pattern Recognition, Machine Learning and Data Base. The evolution of Information Technology has created large amount of databases. The training in databases and information technology has given growth to an approach to store and function this precious data for additional decision making. Knowledge discovery in databases is the method of discovering suitable knowledge from a collection of data. This largely used data mining technique is a method that includes data preparation and selection, data cleansing, incorporating previous knowledge on data sets and interpreting perfect solutions from the detected results.

### II. PROCESS

The terms knowledge discovery and data mining are different KDD refers to the overall process of discovering useful knowledge from data. The objective of the KDD process is to extract knowledge from data in the context of large databases. Data mining refers to the application of algorithms for removing patterns from data without the additional steps of the KDD process. The whole process of finding and interpreting patterns from data involves the continual application of the following steps:

1. Learning the application domain, the appropriate prior knowledge, the aims of the application
2. Making a target data set: Selecting a data set, or focusing on a subset of variables, or data samples, on which finding is to be performed.

**FIGURE I: KNOWLEDGE DISCOVERY PROCESS**



1. Data cleaning and pre-processing: Elimination of noise or outliers, collecting required information to model or account for noise. Strategies for handling missing data fields. Accounting for time sequence information and known deviations.
2. Data reduction and transformation: Finding useful features to represent the data depending on the goal of the task. By means of dimensionality reduction or transformation methods to reduce the effective number of variables under consideration or to find invariant representations for the data.
3. Selecting the functions of data mining. Deciding whether the goal of the KDD process is classification, regression, clustering, etc.
4. Choosing the mining algorithm): Selecting method to be used for searching for patterns in the data. Deciding which models and parameters may be appropriate. Matching a particular data mining method with the overall criteria of the KDD process.
5. Data mining: Searching for patterns of interest in a exact representational form or a set of such representations as classification rules or trees, regression, clustering, and so forth.
6. Pattern evolution and knowledge presentation.
7. Practice of discovered knowledge.

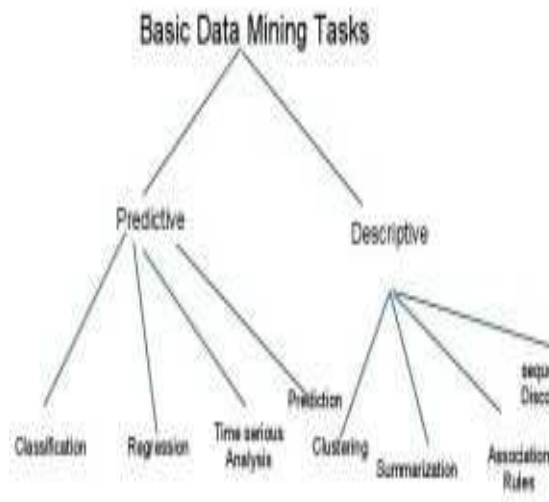
### DATA MINING APPLICATIONS

- **Marketing:** Customer profiling, retention, identification of potential customer, market segmentation.
- **Fraud detection:** Identify credit card fraud and intrusion detection.
- **Scientific data analysis:** Identify the research decision making data.
- **Telecommunication Industry:** Most developing industries providing several services such as fax, pager, cellular phone, Internet messenger, images, e-mail, web data transmission etc. Due to the development of new computer and communication technologies, the telecommunication industry is quickly growing.

- *Retail Industry:* It accumulates large amount data from on sales, customer purchasing history, goods transportation, consumption and services. It is normal that the quantity of data collected will continue to expand rapidly because of increasing ease, availability and popularity of web. It aids in identifying customer buying patterns and trends. That clues to improved quality of customer service and good customer retention and fulfillment.
- *Text and web mining:* used to hunt text or information on web or specified raw data.
- *Biological Data Analysis:* Now a days we see that there is massive development in field of biology such as genomics, proteomics, functional Genomics and biomedical research. Biological data mining is very significant part of Bioinformatics.
- Any other applications that contain large amount of data.

### III. DATA MINING TECHNIQUES

FIGURE II: DATA MINING TECHNIQUES



#### **Predictive Data mining**

Predictive analytics is an part of data mining that deals with extracting information from data and using it to forecast trends and behaviour patterns. Often the strange event of interest is in the future, but predictive analytics can be realistic to any type of unknown whether it be in the past, present or future. The goal of a predictive data mining model is to predict the future outcomes based on passed records with known answers.

#### **Descriptive Data mining**

Descriptive data mining emphasis on finding patterns describing the data that can be interpreted by humans, and creates new, nontrivial information based on the available data set. The aim of a descriptive data mining model is consequently to discover patterns in the data and to appreciate the relationships between attributes represented by the data

#### **Classification**

Classification is a data mining function that allocates items in a collection to target categories or classes. The aim of classification is to correctly predict the target class for each case in the data. A classification task arises with a data set in which the class assignments are known. For example, a classification model that forecasts credit risk could be developed based on observed data for many loan applicants over a period of time. Classifications are discrete and do not imply order. Continuous, floating-point values would direct a numerical, rather than a categorical, target. A predictive model with a numerical target customs a regression algorithm, not a classification algorithm. The simplest type of classification problem is binary classification. In binary classification, the target attribute has only two possible values: for example, high credit rating or low credit rating. Multiclass targets have more than two values: for example, low, medium, high, or unknown credit rating. In the model build (training) process, a classification algorithm finds relationships between the values of the predictors and the values of the target. Different classification algorithms use unlike techniques for finding relationships. These relationships are shortened in a model, which can then be applied to a diverse data set in which the class assignments are strange.

Classification models are tested by relating the predicted values to known target values in a set of test data. The past data for a classification project is typically separated into two data sets: one for building the model; the other for testing the model.

#### **Regression**

Regression is a data mining (machine learning) technique used to fit an equation to a dataset. Regression is a data mining function that guesses a number. Age, weight, distance, temperature, income, or sales could all be predicted using regression techniques. For example, a regression model could be used to predict children's height, given their age, weight, and other factors. Regression models are tested by computing various statistics that measure the difference between the predicted values and the expected values. The simplest form of regression, linear regression, uses the formula of a straight line ( $y = mx + b$ ) and determines the appropriate values for  $m$  and  $b$  to predict the value of  $y$  based upon a given value of  $x$ . Advanced techniques, such as multiple regression, allow the use of more than one input variable and allow for the fitting of more complex models, such as a quadratic equation.

#### **Time series analysis**

Time series analysis includes methods for analysing time series data in order to abstract meaningful statistics and other characteristics of the data. Time series forecasting is the use of a model to compute future values based on formerly observed values. The purpose of time-series data mining is to try to eradicate all meaningful knowledge from the shape of data. Even if humans have a natural capacity to perform these tasks, it relics a multifarious problem for computers.

#### **Prediction**

Predicting the identity of one thing based purely on the description of another, related thing

- Not necessarily future events, just unknowns
- Based on the relationship between a thing that you can know and a thing you need to predict
- Most prediction techniques are based on Mathematical models
  - Simple statistical models such as regression
  - Non-linear statistics such as power series
  - Neural networks, RBFs, etc.
- All based on fitting a curve through the data, that is, finding a relationship from the predictors to the predicted



**Clustering**

Clustering is a procedure of partitioning a set of data (or objects) into a set of meaningful sub-classes, called clusters. Help users realize the natural grouping or structure in a data set. Used either as a stand-alone tool to get vision into data distribution or as a pre-processing step for other algorithms. A subset of objects such that the distance between any two objects in the cluster is less than the distance between any object in the cluster and any object not located inside it. A connected region of a multidimensional space containing a relatively high density of objects.

**Summarization**

Data Summarization encapsulates evolutionary data included both primitive and derived data, in order to create a derived evolutionary data that is overall in nature. Data summarization offers the capacity to give data consumers simplify view of disparate bulks of data. Data summarization in very large multi-dimensional datasets as in the case of data warehouses is a very challenging work.

**Association rule**

Association rule is a popular and well researched method for discovering interesting relations between variables in large databases. It is intended to identify strong rules discovered in databases. Assumed a set of transactions, find rules that will predict the happening of an item based on the occurrences of other items in the transaction.

Given a set of transactions T, the goal of association rule mining is to find all rules having

– support  $\geq$  minsup threshold

– confidence  $\geq$  minconf threshold

Two-step approach:

1. Frequent Itemset Generation

– Generate all itemsets whose support  $\geq$  minsup

2. Rule Generation

– Generate high confidence rules from each frequent itemset, where each rule is a binary partitioning of a frequent itemset

**Sequence discover**

Frequent Sequence Mining is used to discover a set of patterns shared among objects which have between them a specific order. For instance, a retail shop may possess a transaction database which specifies which products were acquired by each customer over time. The sequence mining task is to discover a set of attributes, shared across time among a large number of objects in a given database. For example, consider the sales database of a bookstore, where the objects represent customers and the attributes represent authors or books. Let's say that the database records the books bought by each customer over a period of time. The discovered patterns are the sequences of books most frequently bought by the customers.

**IV CONCLUSION**

In this report an in-depth study of the varied data mining techniques was made. It also discusses two data mining techniques predictive model and descriptive model. It is important to understand both cultures and expectation and objectives of the categories to successful implementation of above techniques.

**REFERENCES**

1. A Survey on data mining techniques, Ranshul Chaudhary<sup>1</sup>, Prabhdeep Singh<sup>2</sup>, Rajiv Mahajan<sup>3</sup>
2. "Data mining articles", <http://www.data-miningarticles.com/info/data-mining-introduction>
3. Frequent Sequences MOHAMMED J. ZAKI zaki@cs.rpi.edu Computer Science Department, Rensselaer Polytechnic Institute, Troy NY.
4. <http://www.philippe-fourmier-viger.com/spmf/SPADE.pdf>
5. SPADE: An Efficient Algorithm for Mining
6. Survey of classification techniques in data mining in Proceedings of the International Multi Conference of Engineers and Computer Scientists 2009 Vol I IMECS 2009, March 18 - 20, 2009, Hong Kong-classification

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Computer Application & 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](mailto: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](mailto: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**

## **DISCLAIMER**

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, nor its publishers/Editors/Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal is exclusively of the author (s) concerned.

## 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*

