

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 4600 Cities in 180 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.	CUSTOMER SATISFACTION IN THE COMMERCIAL BANKS WITH SPECIAL REFERENCE TO NEPAL <i>KESHAV RAJ BHATTA & DR. B. P. SINGHAL</i>	1
2.	COMPUTER VIRTUALIZATION: STRATEGIC ADVANTAGE TO BUSINESS <i>SOMANING TURWALE</i>	5
3.	ROLE OF MANAGEMENT INFORMATION SYSTEM FOR DECISION MAKING PROCESS IN THE ORGANIZATION <i>DR. SAMPADA GULAVANI</i>	7
4.	GAP OF LEADERSHIP SKILLS AMONGST MALE AND FEMALE STUDENTS <i>DR. D M KUMTHEKAR & DR. PAUL D MADHALE</i>	10
5.	CASE STUDY ON MINING BIG DATA <i>M.DHANAMALAR & B.AYSHWARYA</i>	12
6.	SECURE DATA TRANSMISSION IN MOBILE AD-HOC NETWORK USING RSDSV PROTOCOL <i>A. P. PANDE & A. U. PATIL</i>	14
7.	ENHANCEMENT OF TEMPORAL DATA CLUSTERING WITH CLIPPED GAUSSIAN DISTRIBUTION <i>SARALA.R</i>	18
8.	A COMPARATIVE STUDY ON IDENTIFYING USAGE OF MOBILE BANKING SERVICES IN SELECTED PUBLIC AND PRIVATE SECTOR BANKS <i>DR. S.T. BHOSALE</i>	23
9.	A REVIEW ON THE ROLE OF DATA MINING IN BANK <i>VARSHA MOHITE</i>	30
10.	AN EVALUATION OF WEB SERVICES USED BY CUSTOMERS OF SELECTED BUSINESS SECTORS IN ISLAMPUR CITY <i>MANE HIMMATRAO MAHADEO</i>	32
11.	A PERFORMANCE EVALUATION OF SOFTWARE INSTALLED IN RAJARAMBAPU MILK DAIRY, ISLAMPUR <i>D. R. PATIL</i>	36
12.	IMPACT OF 'MAKE IN INDIA' ON FOREIGN DIRECT INVESTMENT <i>SHRADDHA PRASAD KULKARNI</i>	40
13.	PATIENT'S SATISFACTION TOWARDS SERVICE QUALITY: A COMPARATIVE ANALYSIS OF GOVERNMENT AND MISSION HOSPITAL, MIRAJ <i>M. M. SAMUDRE</i>	43
14.	EFFECTIVE USE OF JOB SHARING IN WORK-LIFE BALANCE <i>M. M. PATIL</i>	46
15.	AN REVIEW OF INTERNET BANKING IN INDIA <i>R. T. THORAT</i>	48
16.	FINDING INVISIBLE AND NON-MEASURABLE IMPEDENCE VALUES INSIDE THE OBJECT <i>A. R. RASAL</i>	50
17.	A ROLE OF DATA MINING TECHNIQUES IN SHARE MARKET INVESTMENT <i>H. SANKAPAL</i>	54
18.	WICHA: CHAT AND FILE TRANSFER APPLICATION <i>PRADNYAWANT MALAGE</i>	58
19.	DIGITAL PRINTING IN INDIA: SWOT ANALYSIS <i>S.V. CHAVAN</i>	60
20.	A STUDY ON THE IMPORTANCE OF CORPORATE SOCIAL RESPONSIBILITY IN INDIAN COMPANIES <i>AMRUTHA SANTHOSH, LEKSHMY P.R. & NAYANA N NAIR</i>	62
	REQUEST FOR FEEDBACK & DISCLAIMER	65

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

FORMER CO-ORDINATOR

DR. S. GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

ADVISORS

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, Yanbu 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. SHIVAKUMAR DEENE

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

DR. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, 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

FORMER 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 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/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, **please specify**)

DEAR SIR/MADAM

Please find my submission of manuscript entitled ' _____ ' for possible publication in one of 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 co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to their inclusion of names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR :

Designation :

Institution/College/University with full address & Pin Code :

Residential address with Pin Code :

Mobile Number (s) with country ISD code :

Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) :

Landline Number (s) with country ISD code :

E-mail Address :

Alternate E-mail Address :

Nationality :

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. **pdf. version is liable to be rejected without any consideration.**
 - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**
New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/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 expected to be below **1000 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 within twenty four hours** and in case of non-receipt of acknowledgement 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 a separate mail to the journal.
 - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be **bold typed, centered and fully capitalised**.
 3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
 4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
 5. **ABSTRACT:** Abstract should be in **fully italicized text**, ranging between **150 to 300 words**. The abstract must be informative and explain the background, aims, methods, results & conclusion in a **SINGLE PARA**. **Abbreviations must be mentioned in full.**
 6. **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 stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations.
 7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php, however, mentioning JEL Code is not mandatory.
 8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. **It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
 9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
 10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
 11. **MAIN TEXT:**

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:**INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably range from 2000 to 5000 WORDS.**

12. **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.*
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, horizontally centered with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word should be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section: Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **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. **Also check to make sure that everything that you are including in the reference section is duly cited in the paper.** 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 parenthesis.
 - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders after the references.

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, 19–23

UNPUBLISHED DISSERTATIONS

- 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 Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

ROLE OF MANAGEMENT INFORMATION SYSTEM FOR DECISION MAKING PROCESS IN THE ORGANIZATION

DR. SAMPADA GULAVANI
ASSOCIATE PROFESSOR
BHARATI VIDYAPEETH INSTITUTE OF MANAGEMENT
KOLHAPUR

ABSTRACT

Today's business environment is volatile, dynamic, turbulent and necessitates the demand for accurate, relevant, complete, timely and economical information needed to drive the decision-making process in order to accentuate organizational abilities to manage opportunities and threats. Information system is a professional and academic discipline concerned with the strategic, managerial and operational activities involved in the gathering, processing, storing, distributing and use of information and its associated technologies in society and organizations. Management Information System(MIS) is called as information system which is useful for decision making in an organization. The main emphasis of MIS is to analyze operational activities in the organization. MIS considers three primary resources i.e. people, technology and information and its purpose is to meet the general information need of all the managers in the organization. MIS ensures that an appropriate data is collected from the various sources, processed and send further to all the needy destinations. MIS provides information which is useful to manage organizations and institutions efficiently and effectively. MIS is commonly used to refer to the group of information management methods to support human decision making like decision support systems, expert systems and executive information systems. MIS provides accurate and timely information necessary to facilitate the decision-making process and enable the organizations planning, control and operational functions to be carried out effectively.

KEYWORDS

information system, MIS, MSS, DSS, ICT, decision making.

1. INTRODUCTION

Today due to increased organizational size, expanded operational scope, competitive influence and overall environmental vagaries, information needs of modern organizations have become quite enormous and challenging. Every organization needs to pay great attention to how information is gathered, stored, disseminated and utilized. Information system is organized combination of people, hardware, software, communication networks, data resources, policies and procedures that stores, retrieves, transforms and disseminates information in an organization. The purpose of information system is to improve the effectiveness and efficiency of the organization. MIS is a type of information system combine hardware, software and network products in an integrated solution and provides data to the managers in a format suitable for analysis, monitoring, decision-making and reporting. MIS is one of the major computer based information systems where Information and Communication Technology plays an important role in MIS. The system collects data, stores it in a database and makes it available to users over a secure network. It supports planning, control and operation functions of an organization by furnishing uniform information in the proper time frame to assist the decision makers. This system contains information about people, documents, technology, places and things within the organization and institution or the environment surrounding around it. This paper presents objectives of MIS, role of information and communication technology in MIS, MIS and decision making process and importance of MIS in the organization. [1][4]

2. OBJECTIVES OF MANAGEMENT INFORMATION SYSTEM

MIS is a system to convert data from internal and external sources into information and communicate that information in an appropriate form, to managers at all levels in all functions to enable them to make timely and effective decisions for planning, directing and controlling the activities for which they are responsible (Bee and Bee, 1999). MIS is concerned with the process of collecting, processing, storing and transmitting relevant information to support the management operations in any organizations. To take effective and rational decisions, timely and reliable information is essential and is procured through logical method of information collecting, processing and disseminating to decision makers. In today's world of ever increasing complexities of carrying out business, in order to survive and grow, every organization must have a properly planned, analyzed, designed and maintained MIS. MIS assist decision makers by providing the required information at various stages of decision making and help the organization to achieve its goals and objectives. Well-constructed and well-organized MIS can provide management with the knowledge it needs to reduce operating costs and increase profits. MIS can help management to increase efficiency by quickly providing critical information about procedures and operations. [2] [13]

In view of this, the followings objectives of MIS are set.

- To provide an overview of the information requirements of organizations.
- To analyze the role of management and its dependency on information.
- To discuss the role of information in the decision making process.
- To identify the need for information in day-to-day operations of an organization.
- To support the organization's strategic goals and decisions.
- To produce scheduled and demand reports.
- To serve as a strategic weapon to gain competitive advantages.

3. ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN MIS

In the last decade, there are significant advances in computer hardware and software, human-computer interfaces, communications and scientific tools and techniques. Information networks play a major role in controlling and directing the flow of huge amount of information among organizations. The power of technology has transformed the role of information in a business organization. M.I.S. is basically concerned with processing data into information. Data collection involves the use of Information Technology (IT) comprising computers and telecommunications networks (EMail, Voice Mail, Internet, telephone, etc.). ICT plays an important role for storage, retrieval and transmission of message and become an essential component in the process of decision making in the organization to assist managers at all levels. MIS with ICT aimed at assisting managers and operating personnel, to produce timely, accurate information, well presented and up-to-date information required for efficient and effective process. Different systems are designed with the support of ICT like expert system, decision support system, executive decision support, information systems, enterprise resource planning etc. MIS combines raw data with information in expert system, ask the query and obtain result in the required format [4][5].

4. MIS AND DECISION MAKING PROCESS

In today's competitive world, managers have to assimilate large amount of data, convert that data into information, form conclusions and make decisions leading to the achievement of business objectives. MIS provide accurate and timely information necessary to facilitate the decision-making process and enable the organizations planning, control and operational functions to be carried out effectively. MIS is defined as a computer based Information System based on the database of the organization evolved for the purpose of providing information to the people in the organization (Bresfelean, 2009). MIS processes data into

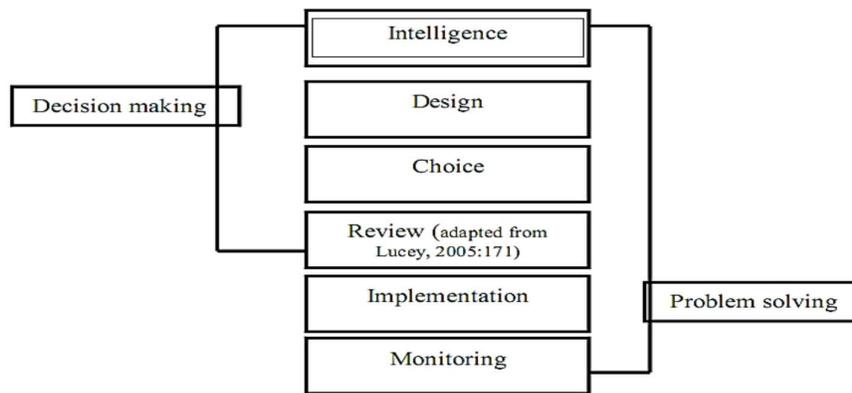
information, which is then communicated to various departments for appropriate decision making. MIS is basically concerned with the process of collecting, processing, storing and transmitting relevant information to support decision making in any organizations. It is also relevant for nonprogrammer decisions as it provides support by supplying information for the search, analysis, evaluation, choice and implementation process of decision making [8]10].

MIS is useful in the area of decision making as it can monitor by itself disturbances in a system, determine a course of action and take action to get the system in control. MIS is a system to convert data from internal and external sources into information and to communicate that information in an appropriate form to managers at all levels, in all functions to enable them make timely and effective decisions for planning, directing and controlling the activities for which they are responsible. The information in MIS describes the firm or one of its major systems in terms of what has happened in the past, what is happening now and what is likely to happen in the future. The information is made available in form of periodic reports, special reports and output of mathematical simulations. The effectiveness of any organization is dependent on the quality of decisions that informs its operation. The success of decision-making is highly dependent on available information and partly on the functions that are the components of the process. For effective decisions to evolve in any organization, therefore receiving information from and supplying information to people within the system are a necessity [13].

Simon (1984), a leading authority in management decision-making considers that decision making comprises four principal phases:

- Intelligence- Searching the environment for conditions calling for decision making.
- Design- Inventing, developing and analyzing possible courses of actions. This involves processes to understand the problem, to generate solutions and testing of solutions for feasibility.
- Choice- Selecting an alternative or course of action from those variables.
- Review- Assessing past choices.

FIG. 1: PROCESS OF DECISION MAKING

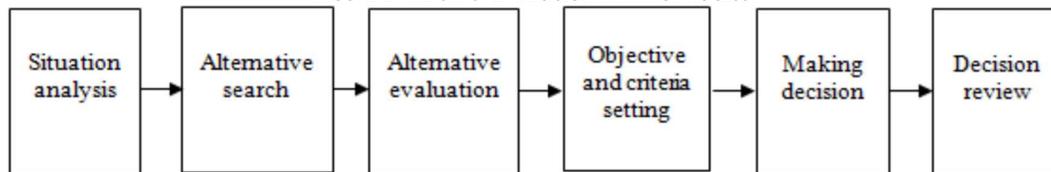


Simon has further classified decisions into two broad categories according to the extent that the process of decision-making can be pre-planned:

- **Programmed Decision:** These decisions are made using standard rules, procedures or quantitative methods. To make a programmed decision, the decision maker uses a performance program, a standard sequence of behavior that organizational members follow routinely whenever they encounter a particular type of problem or opportunity. For example, inventory control decisions, machine loading decisions, scheduling, etc. are routine and repetitive decisions and the organization typically develops specific ways and guidelines to handle them.
- **Non-programmed Decisions:** These type of decisions deal with unusual or exceptional situations. They are decisions made in response to novel problems and opportunities. This type of decision is associated with high degree of uncertainty, cannot be delegated to low levels, may involve things, but always involves people. The decisions like merger, acquisitions, launching of new product, personnel appointments etc. are non-programmed decisions.

MIS include interaction with other decision support systems, information inquiries, cross referencing of external information and potential data mining techniques. A typical MIS consist of six-step decision making process.

FIGURE 2: THE SIX-STEP DECISION MAKING PROCESS



Source: Simon, 1997

i) **INFORMATION ACCESS:** Managers need rapid access to information to make decisions about strategic, financial, marketing and operational issues. MIS simplifies and speeds up information retrieval by storing data in a central location that is accessible via a network and provides decisions that are quicker and more accurate.

ii) **DATA COLLECTION:** When decision is to be taken in groups and individuals , MIS assist for collaborative decisions. MIS enable all members in a project team to access the same essential data, even if they are working in different locations.

iii) **INTERPRETATION:** MIS help decision-makers to understand the implications of their decisions. The systems display raw data in a form of reports that enables decision-makers to quickly identify patterns and trends. Decision-makers can also use MIS to understand the potential effect of change.

iv) **PRESENTATION:** The reporting tools within MIS enable decision-makers to tailor reports to the information needs of other parties. If a decision requires approval by a senior executive, the decision-maker can create a brief executive summary for review. If managers want to share the detailed findings of a report with colleagues, they can create full reports and provide different levels of supplementary data.

At operational levels, decisions are structured with known decision rules and objectives. Sometimes the decisions at such level are the semi-structured type. Table shows decision types taken at different levels of management.

TABLE NO. 1: TYPES OF DECISION AT DIFFERENT LEVELS OF MANAGEMENT

Management Level	Decision Type	Information System Support
Strategic Management	Unstructured	Executive information system
Tactical/Middle Management	Semi-structured	Expert systems, decision support systems
Operational/Lower Management	Structured	Transaction processing, automatic decision-making or accounting models

Source: Renolds, 2003, pp 65

5. IMPORTANCE OF MIS IN THE ORGANIZATION

From the above, it is clear that MIS plays a vital role in the management, administration and operation of an organization. It simplifies and speeds up information retrieval by storing data in a central location that is accessible via a network. The information in MIS describes in terms of what has happened in the past, what is happening now and what is likely to happen in the future. The information is made available in the form of periodic reports, special reports and output of mathematical simulations. All managers use the information output as they make decisions to solve the firm's problems [4].

1. MIS satisfies the diverse needs through variety of systems such as query system, analysis system, modeling system and decision support system.
2. MIS helps in strategic planning, management control, operational control and transaction processing. The MIS helps to the clerical personal in the transaction processing and answers the queries on the data pertaining to the transaction, the status of a particular record and reference on a variety of documents.
3. MIS helps the junior management personnel by providing the operational data for planning, scheduling and control and helps them further in decision-making.
4. MIS helps the middle management in short term planning, target setting and controlling the business functions.
5. MIS helps the top level management in goal setting, strategic planning and evolving the business plans and their implementation.
6. MIS plays the role of information generation, communication, problem identification and helps in the process of decision-making.
7. MIS revolutionized decision-making process through automated systems, through such systems, managers no longer rely on 24-hour service from workers, instead, machines are to be programmed to do things, such as routine decisions, in place of humans.

6. CONCLUSION

MIS is a critical component of the institution's overall risk management strategy and supports management's ability to perform reviews. MIS should be used to recognize, monitor, measure, limit and manage risks. In the age of liberalization and globalization, where information is doubling up every two or three years, a manager has to process a large voluminous data and has to take quick decision. Today organizations cannot grow without properly planned, designed, implemented and maintained MIS. MIS provides accurate and timely information necessary to facilitate the decision-making process and enable the organizations planning, control and operational functions to be carried out effectively. The use of ICT enables organization to have better operate in a global competitive environment and make effective decision making and improve the quality of decision making that is crucial factor for organization. Information resources have become of high demand in today's organizations and MIS is the only option for the satisfaction of such demands. To facilitate better flow of information, adequate MIS is the need of the hour.

REFERENCES

1. Asefeh Asemi (2011), "The Role of Management Information System and Decision Support System for Manager's Decision Making Process ", International Journal of Business and Management, Vol.6, No.7.
2. Davis, G.B., & Olson, M.H. (1985). Management Information Systems, conceptual foundation, structure and development, 2nd. New York, McGraw-Hill. Gordon, J.R. (1993).
3. Kumar, P. K. (2006): Information Systems Decision-Making, Indian MBA. Retrieved October 2, 2010 from <http://www..indianmba.com/Faculty column/FC307/fc307.html>.
4. Mihane Berisha Nimani (2010), "The Role of Information Systems in Management Decision Making- A Therotical Approach ", Information Management.
5. O'Brien, J. A. Management Information Systems: Managing Information Technology in the Internetworked Enterprise, Boston: Irwin McGraw-Hill 1999.
6. Wadhwa, Raj K. (2006), Management Information System – A Modern Perspective, Kanishka Publishers and Distributors, New Delhi, pp-28.
7. G.Satyanarayana reddy, Rallabandi Srinivasu, Srikanth Reddy Rikkula, Vuda Sreenivasa Rao(2009), "Management Information System to Help Managers for Providing Decision Making in an Organization", International Journal of Reviews in Computing, ISSN: 2076-3328.
8. Gabriel, Justin Mgbечи Odinioha, OBARA, Lawyer Chukwuma(2013), " Management Information Systems And Corporate Decision– Making: A Literature Review", The International of Management, Vol.2, Issue 3.
9. Bresfelean V.P., Ghisoiu N., Lacurezeanu R., Sitar&Taut D.&A., Towards the Development of Decision Support in Academic Environments, Proceedings of ITI 2009, Cavtat, Croatia, 2009, p. 343&348.
10. Şükrü Ada, Mohsen Ghaffarzadeh(2015), "Decision making based on management information system and decision support system", International Journal of Economics, Commerce and Management, Vol. III, Issue 4, ISSN 2348 0386.
11. Raymond, McLeod, Jr. (1990), Raymond, Information Systems, New York, Macmillan Publishing Company.
12. O'Brien, J. A. Management Information Systems: Managing Information Technology in the Internetworked Enterprise, Boston: Irwin McGraw-Hill 1999.

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 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

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, neither 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 are 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

