

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & 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 3412 Cities in 173 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.	MARKET REACTIONS TOWARDS CAPITAL EXPENDITURE ANNOUNCEMENTS <i>DR. SHANTANU MEHTA & RAJALAKSHMI VEL</i>	1
2.	IMPACT OF INFORMATION TECHNOLOGY ON MSMEs IN INDORE REGION <i>PARUL SHARDA & DR. M. D. PANGA</i>	5
3.	COMPLIANCE OF CORPORATE GOVERNANCE AND ITS IMPACT ON FIRM PERFORMANCE: AN EMPIRICAL ANALYSIS WITH DUMMY VARIABLES <i>DR. PALLAVI KAPOORIA, DR. R. C. SHARMA & DR. DEEPAK KAUL</i>	9
4.	CAUSE RELATED MARKETING AND ITS IMPACT ON BRAND PREFERENCES & BRAND ATTACHMENT AMONG CUSTOMERS AT BHAVNAGAR CITY WITH SPECIAL REFERENCE TO P&G FMCG PRODUCTS <i>BHAVIK P PARMAR</i>	13
5.	(SACCOS) AFFAIRS IN ETHIOPIA: A CASE STUDY IN MEKELLE CITY, TIGRAY <i>KIDANU NERIE AREGAWI, DR. TEFATSIONSAHLUDESTA & HIWET KEBEDE AREGAWI</i>	15
6.	AN APPROACH TOWARDS EFFICIENT PREFERRED DATA RETRIEVAL BY PRESORTING <i>SUNITA DWIVEDI & DR. ANIL RAJPUT</i>	25
7.	PERCEIVED USEFULNESS, USER ACCEPTANCE OF E-BANKING AND SUCCESSFUL TRANSITION TO CASHLESS POLICY IN NIGERIA <i>CLEMENT IKENNA OKEKE</i>	30
8.	SENSITIVITY OF INTERNAL AND EXTERNAL CHANGE JUSTICE AS A PREDICTOR IN PRIVATE SECTOR <i>UROOS FATIMA RIZVI & FASAHAH HUSAIN QAZI</i>	39
9.	PRODUCTIVITY IMPROVEMENT THROUGH PREVENTIVE MAINTENANCE: THE CASE OF ATSC TEXTILE MANUFACTURING FIRM <i>AMARE MATEBU KASSA</i>	46
10.	A STUDY OF FACTORS RELATED TO SUCCESS & FAILURE OF ENTREPRENEURS IN SMALL SCALE INDUSTRIES WITH IMPORTANCE ON THEIR LEVEL OF EDUCATION AND TRAINING <i>DEEPAK KUMAR</i>	51
11.	MAJOR USES AND PREFERRED PAYMENT SYSTEMS IN NIGERIA: APPLICATION OF WORD OF MOUTH COMMUNICATION IN PROMOTING CASHLESS POLICY OF CBN <i>CLEMENT IKENNA OKEKE</i>	53
12.	CHALLENGES FACED BY BANKING INDUSTRY IN UAE: REENGINEERING THE OPERATIONAL EFFICIENCIES <i>DR. BEENISH SHAMEEM</i>	60
13.	FACE DETECTION IN NIGHT VISION IMAGES: AN APPLICATION OF BPDFHE METHODOLOGY <i>ANURAG RAY & ASHIS PRADHAN</i>	62
14.	UNITED ARAB EMIRATES: THE INTEGRATION OF BUSINESS TECHNOLOGY AND CORPORATE COMPETITIVENESS <i>DR. BEENISH SHAMEEM</i>	66
15.	A STUDY OF RECRUITMENT PRACTICES FROM TRADITIONAL TO e-RECRUITMENT: A PARADIGM SHIFT <i>ABDUL GHANI FAIYYAZ</i>	68
	REQUEST FOR FEEDBACK & DISCLAIMER	72

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

AMITA

Faculty, Government M. S., Mohali

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. M. N. SHARMA

Chairman, M.B.A., Haryana College of Technology & Management, Kaithal

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

CO-EDITOR

DR. BHAVET

Faculty, Shree Ram Institute of Business & Management, Urjani

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

PROF. SANJIV MITTAL

University School of Management Studies, Guru Gobind Singh I. P. University, Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

DR. SAMBHAVNA

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

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

ASSOCIATE EDITORS

PROF. NAWAB ALI KHAN

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

PROF. ABHAY BANSAL

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

PROF. A. SURYANARAYANA

Department of Business Management, Osmania University, Hyderabad

DR. SAMBHAV GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

PROF. V. SELVAM

SSL, VIT University, Vellore

DR. PARDEEP AHLAWAT

Associate Professor, Institute of Management Studies & Research, Maharshi Dayanand University, Rohtak

DR. S. TABASSUM SULTANA

Associate Professor, Department of Business Management, Matrusri Institute of P.G. Studies, Hyderabad

SURJEET SINGH

Asst. Professor, Department of Computer Science, G. M. N. (P.G.) College, Ambala Cantt.

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/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>

IMPACT OF INFORMATION TECHNOLOGY ON MSMEs IN INDORE REGION

PARUL SHARDA
RESEARCH SCHOLAR
MEDI-CAPS INSTITUTE OF TECHNO-MANAGEMENT
INDORE

DR. M. D. PANGA
DIRECTOR
MEDI-CAPS INSTITUTE OF TECHNO-MANAGEMENT
INDORE

ABSTRACT

The Micro, Small and Medium scale enterprises (MSMEs) today playing a pivotal role in the economic and social development of Indian economy, contributing through industrial outputs, employment, exports, investment, innovations etc. Though MSME sector in India is highly heterogeneous in terms of the size of the enterprises, variety of products, and services, and levels of technology with a total of 30 million MSME units. MSMEs contribution towards GDP was 17% in year 2011, and raised to 22% in year 2012. In today's era of Indian globalization MSMEs are facing new challenges and some are struggling hard to survive due to lack of modernization, non-availability of suitable technology, inability to identify new markets etc, these shortcomings can be worked out through technology improvement and skill enhancement with the help of Information technology (IT) infrastructure. Through this paper I have attempted to investigate the relationship between MSMEs competitiveness and Information Technology in Indore region.

KEYWORDS

ICT (Information and communication technology), Micro, Small and medium enterprises.

INTRODUCTION

M SMEs have been globally considered as an engine of economic growth and as key instruments for promoting equitable development. The major advantage of the sector is its employment potential at low capital cost. The labor intensity of the MSME sector is much higher than that of large enterprises. In recent years, the MSME sector has consistently registered higher growth rate compared with the overall industrial sector. With its agility and dynamism, the sector has shown admirable innovativeness and adaptability to survive the recent economic downturn and recession.

MSME- Development Institute, Indore is a field level agency of Ministry of Micro, Small & Medium Enterprises (MSME) to take care of the needs of the MSME Sector in the state of M.P. in the area of Techno-economic and managerial consultancy service. MSME, headed by the Development Commissioner, under the ministry of Micro, Small & Medium Enterprises (MSME). Government of India, is an apex body as well as the nodal agency for formulating, co-coordinating and monitoring the policies and programmes meant for promoting and development of Micro, Small & Medium Enterprises (MSME) throughout the country.

MSME DI, started in 1958 (Formerly known as SISI), is one of the field level agencies of MSME and is the only one of its kind in M.P. Apart from offering various consultancy service, this institute also offers various technical and management training programmes for the benefit of prospective/ existing entrepreneurs. To assist the sector, having Field Testing Station at Bhopal and Branch MSME DIs at Gwalior & Rewa under the administrative control of MSME DI, Indore.

SERVICES OFFER BY MSME DI

MSME-DI offers a wide variety of consultancy services as well as training programmes for the promotion and development of Micro, Small & Medium industries. The major services in brief are listed below:

PROJECT ASSISTANCE

Identification of product Preparation of project Report and pre-feasibility report Appraisal and evaluation of projects for banks and other agencies. Selection of plant and machinery and raw materials Technology and process Know-how Quality improvement and standards Drawings and plant lay-out Common facility, workshop facility-job work undertaken Capacity assessment Assistance for hire purchase of machinery from NSIC.

MODERNIZATION AND TECHNOLOGY UP GRADATION

Technology Up gradation studies/In plant studies.

Production-cum-process development Diversification of project

SENET (SMALL SCALE INDUSTRIES AND RESOURCE CENTER NETWORK)

SENET is an intranet project launched by the Office of the Development Commissioner (**MSME**) in April 1997 and is a small enterprise information resource center network. (Small enterprise means small-scale industries and small-scale services and business activities)

SENET Objectives are: To Create - an electronic intranet for small enterprises - databases for small enterprise To Provide - technical know-how and package assistance to small information servers - Training inputs - Limited financial assistance to information providers To Promote - a network alliance among the information services providers (to small enterprise), including both the public and private sector.

TRC (TECHNOLOGY RESOURCE CENTER)

TRC is a 'TECHNOLOGY RECOURSE CENTER' which is made functional from October, 2001. It is major drive to create a friendly and conducive environment for entrepreneurs. Entrepreneurs can assess the latest available technology and industry related information on the spot. Though it is started in a humble way, it is expected to hit in a big way in future by equipping itself to provide technology-related using the latest IT tools.

UPTECH (INTEGRATED TECHNOLOGY)**UP GRADATION AND MANAGEMENT PROGRAMME**

UPTECH is launched by Development Commissioner (MSME-DI), Government of India. The objective of the project is to implement an integrated Technology Up gradation and Management programme addressed to the smaller skills based enterprises. The programme is organized around clusters of enterprises and is designed to provide for the promotion cost that are inherent in transfer of technology from its producer to the end user.

MSME DI -SDTI (MICRO, SMALL & MEDIUM ENTERPRISES (MSME -DI) - SELECTIVE DISSEMINATION OF TECHNOLOGY INFORMATION)

Micro, Small & Medium Enterprises (MSME- DI) has been launched by the office of DC in collaboration with Technology bureau of small Enterprises (TBSE), is a joint venture of small industries Development bank of India (SIDBI) and Asia Pacific Center for transfer of technology (APCTT). The objective of the project is to build up a database on the technologies that are available indigenously with technology institution and with industry, and also to build up a parallel database of

the technology requirements of Micro, Small & Medium Enterprises (MSME -DI). The project provides an excellent opportunity to both the small enterprises as well as those institutions and units that have technologies for offer /sale.

The sector not only plays a critical role in providing employment opportunities at comparatively lower capital cost than large industries but also helps in industrialization of rural and backward areas, reducing regional imbalances and assuring more equitable distribution of national income and wealth. MSMEs complement large industries as a ancillary units and contribute enormously to the socioeconomic development of the country.

DEFINITION OF MSME

Enterprises are broadly classified in two categories:

- i) Manufacturing and,
- ii) Those engaged in providing/ rendering of services

Both categories of enterprises are then classified into Micro, Small and Medium scale enterprises based on their investments on plants and machineries (for manufacturing enterprises) or on equipments (in case of enterprises providing or rendering services).The present ceiling on investments to be classified as micro, small or medium enterprises is as under:

TABLE-1: CLASSIFICATION OF MSMES BASED ON THE MSMED ACT 2006

Classification	INVESTMENT CEILING FOR PLANT, MACHINERY OR EQUIPMENTS	
	Manufacturing enterprises	Service Enterprises
Micro	Up to USD 62500	Up to USD 25000
Small	Between USD 60000 to USD 1.25 million	Between USD 25000 and USD 0.5 million
Medium	Between USD 1.25 million & USD 2.5 million	Between USD 0.5 million and USD 1.25 million

Information technology initiatives that do not capture business requirements may not achieve the estimated benefits and may face unexpected problems. Managers in MSMEs must understand and evaluate IT's potential impact to obtain numerous benefits. Thus by aligning IT with their business environments, they can avoid failure. IT infrastructure provides opportunities to increase revenue, reduce costs, and improve customer responses through e-businesses. IT infrastructure can develop new products and services that have a high degree of knowledge component therein with addition of skill enhancement may lead to significant improvement in productivity and competitiveness.

Basic IT infrastructure such as Internet, websites, free to use application software (Open Office) can make them more competitive. Internet provided numerous and inexpensive opportunities for MSMEs to compete with large companies. Internet enable them to communicate with their customers and suppliers both at national & international level, they also can perform timely update or renew their brochures for products and services via websites and communicating through e-mails. Numerous MSMEs have adopted IT infrastructure for conducting business.

LITERATURE REVIEW

Annual reports of Ministry of MSME, Government of India have been reviewed for growth statistics, support system and incentives for MSMEs in India. The body of knowledge related to the research area has been explored through research papers, books and relevant web sites. The domains covered during the review of literature include information technology adoption, Productivity Analysis, and micro, small and medium scale enterprises.

Mali Paul, Morrison and McKee, (1978). has described 12 causes responsible for decline of productivity of organizations in general. He includes Rapid Technological changes and High Costs of manufacturing in the list of 12 causes. Technology Factor has been seen as predominant determinant with maximum contribution in Productivity Enhancement. The contribution of Capital, Labor and Technology is found to be 14%, 27% and 59% respectively in productivity enhancements.

Kelmer and Wanghman D. W. (1995) has concluded Regarding the technological needs of MSMEs, technology process is important, but the ability to utilize and capitalize on the advantage of technology through invention and innovation subsequently achieving through synergy is considered more important in running and survival of unit. It has been observed that the synergy plays very vital role in mobilizing the useful resources. Also the need of developing technical entrepreneurship has been strongly realized.

Patricia R. Todd, Rajshekhar (Raj) G. Javalgi, (2007) "Internationalization of SMEs in India: Fostering entrepreneurship by leveraging information technology" in International Journal of Emerging Markets,, concluded that "Advancements in information technology and improvements in communication infrastructure have resulted in opportunities for SMEs to participate in global markets in both developing and developed countries. Since, governmental reforms in 1991, SMEs in India have been faced with new competitive intensity. Improvements in resource utilization make it possible to sell a variety of products and services from anywhere in the world, around the clock. This paper calls attention to ways in which Indian can become competitive.

Vimlesh kumar soni, Vijay.p.Wani, (2010), "Productivity Growth in MSEs through Technology Incubation" in a journal concluded that "Having technical background of education and exposure to entrepreneurship programmes both support in productivity growth of the enterprise. Those who do not possess technical qualification may keep them updated with latest technology related knowledge through regular interaction with incubator organization. The technological and entrepreneurial competence such developed will facilitate in better performance of enterprise.

Prof. (Dr.) S. K. Baral, (2013), "An empirical study on changing face of MSME towards emerging economies in India". With its agility and dynamism, the sector has shown admirable innovativeness and adaptability to survive the recent economic downturn and recession. A growing recognition has been felt throughout the world such that SMEs have a vital role to play in the present context given their greater resource-use efficiency, capacity for employment generation, technological innovations for economic growth of any country across the globe.

OBJECTIVE OF THE STUDY

To find the impact of Information and communication Technology (ICT) on MSME in Indore region, also to find out the factors responsible for it. With the help of reviewed literature we can come up with the Internal factors (enterprises sector, size and age) and three External factors (information requirements, competition intensity & Government incentive schemes) that can affect the adoption of information technology by MSMEs as follows:-

EXTERNAL FACTORS

INFORMATION REQUIREMENT

Information Requirements is concerned with requirements derive from promoting products and services to customers and communicating with business partners and hence facilitating the information to them. Internet can immediately and simultaneously provide information to employees, customers, and suppliers. To summarize, information exchange requirements (with customers & suppliers) motivate enterprises to provide IT based services, setting up in-house Automated Query center to provide answers to queries and requirements of the customers, developing dynamic web sites to provide product and service information, updating product brochures, information regarding design changes, feedback from customers etc.

COMPETITION INTENSITY

The stepping up of competitors to adopt new technology and the intense industry competition will influence the attitudes of managers towards accepting the new technology. In this highly competitive market, competitors or business partners may place pressure on firms to adopt new technologies. In order to compete more effectively, MSMEs managers require advanced information exchange methods for acquiring and sustaining competitive advantage. Thus it can be concluded that Information Technology Adoption allows MSMEs to improve their competitiveness.

GOVERNMENT INCENTIVES SCHEMES

Pressure may come from Government business partners and associates for adopting the Information Technology .During the earlier days of IT ,it was recognized that MSMEs rarely realize the importance and requirements of advanced IT technology, therefore, some of their needs to use the innovated IT technology are not effectively translated into demand. A decade after, it was found that creating user friendly environment and awareness of adopting advanced IT could be enhanced by government support such as provision for incentives and rebates in taxes along with aggressive support from business partners and associates.

INTERNAL FACTORS: ENTERPRISE SECTOR, SIZE AND AGE

Researchers have demonstrated that a positive relationship exists between IT adoption and firm size. Some researchers have demonstrated that firm size positively influences firm commitment IT infrastructure & E- commerce. Furthermore, other researchers identified significant links between business size and level of IT adoption. Few asserted that size represents ability to assume risk, with bigger size facilitating the adoption and diffusion of new technology. Finally specific sector or to cluster in which enterprise is operating is also under some influential factor and it was found that negative relationship exists between enterprise sector and Information Technology Adoption. Besides, the age of an enterprise may lead to conservative ideas and thinking owing to the existence of mature and accepted work types in the longer established organizations.

BASED ON THE ABOVE INFERENCES STUDY PROPOSES THE FOLLOWING SIX HYPOTHESES:

- H-1 A positive relationship exists between information requirements and IT Adoption.
 H-2 A positive relationship exists between intense competition and I T Adoption.
 H-3 A positive relationship exists between Government incentives scheme and I T Adoption.
 H-4 A positive relationship exists between enterprise size and Information Technology Adoption.
 H-5 A negative relationship exists between enterprise age and Information Technology Adoption.

Also from above inferences the conceptual model is developed, shown in Table below:

TABLE 2

Enterprise Sector		Information Requirement
Enterprise Size	Information Technology Adoption	Competition Intensity
Enterprise Age		Government Incentives Schemes

RESEARCH METHODOLOGY AND DATA COLLECTION

Since IT infrastructure may require a considerable part of the budget of MSMEs, it is reasonable to expect that MSMEs that do not perform well may decide not to put too many resources into their IT development. This study focuses on the MSMEs which do have the financial ability to cover the cost of a IT infrastructure. This study selects outstanding Indore MSME companies with after- tax surpluses and continuing sale revenue growth for the past three years as samples. We attempt to explore the determinants of Information Technology Adoption for the MSMEs financial performance and used regression coefficient test as a tool for testing hypothesis.

DATA COLLECTION

Apart from the information collected from MSME-DI Indore, This study collects data from two sources: personal inquiry and a mail questionnaire survey. Firm sector, age and size were obtained from personal inquiry. The adoption of Information Technology, information requirements, intensity of competition, and incentives and supports, are obtained from the self-report questionnaire. We examined Internet sources and personal meeting to identify the names of MSMEs firms which shown considerable growth in financial performance. 50 MSMEs were identified and Questionnaires were mailed to them.

HYPOTHESIS TESTING**TESTING OF HYPOTHESIS H1 (INFORMATION REQUIREMENT)**

Hypothesis H-1 was stated as "A positive relationship exists between information requirements and Information Technology Adoption". The regression coefficient (re) was positive and significant ($rc=1.08$, $p<0.01$). Therefore, we can conclude that there is a statistically significant relationship between the dependent variable "Information Technology Adoption" and the independent variable "information requirement". That is, firms with information requirements are more likely to have Information Technology. Additionally, the independent variable of "information requirement" was comprised of three items, information with customers, partners (suppliers). This study placed three items of the information requirement into the regression to identify the influence of these three items on Information Technology Adoption. The regression model calculation revealed that only the information requirement with customers exhibits a positive relationship with Information Technology Adoption ($rc=1.44$, $p<0.01$). The information requirements with partners (suppliers) did not exhibit any statistically significant relationship with Information Technology Adoption.

TESTING OF HYPOTHESIS H2 (INTENSITY OF COMPETITION)

All of the regression coefficients of the four regression models are positive and significant ($p<0.05$) for Hypothesis H2, "A positive relationship exists between competitive intensity and Information Technology Adoption.". Therefore, we can conclude that there is a statistically significant relationship between the dependent variable "Information Technology Adoption" and the independent variable "of competition". That is, in a higher competitive environment, firms were more likely to develop comprehensive websites.

TESTING OF HYPOTHESIS H3 (SUPPORT AND INCENTIVES)

The regression coefficient is positive and significant ($rc=0.68$, $p<0.01$) for Hypothesis H3, "A positive relationship exists between 'support and incentives' and Information Technology Adoption, therefore, we can conclude that there is a statistically significant relationship between the dependent variable "Information Technology Adoption" and the independent variable "support and incentives". That is, firms with "government incentives schemes " are more likely to conduct Information Technology calculation also reveal that government support and incentives were significantly and positively related to Information Technology Adoption ($rc=1.07$, $p<0.01$), while support and incentives from business partners were not.

TESTING OF HYPOTHESIS H4 (FIRM SIZE)

All of the regression coefficients of the four regression model are positive and significant ($p<0.05$) for Hypothesis H4, "A positive relationship exists between enterprise size and Information Technology Adoption," Therefore, we can conclude that there is a statistically significant relationship between the dependent variable "Information Technology Adoption "and the independent variable "firm size". That is, the larger sized firms are more likely to have comprehensive websites than the smaller ones.

TESTING OF HYPOTHESIS H5 (FIRM AGE)

All of the regression coefficients of the four regression models are negative and significant ($p<0.01$) for Hypothesis H5, "A negative relationship exists between enterprise age and Information Technology Adoption.". Therefore, we can conclude that there is a statistically significant relationship between the dependent variable "Information Technology Adoption" and the independent variable "firm age". That is, the longer established firms are more likely to have comprehensive websites than younger ones.

CONCLUSION AND DISCUSSION

This study used a sample of Indore MSMEs to investigate the factors influencing the Adoption of their Information Technology Adoption. According to empirical surveys, information requirement, intensity of competition, and support and incentives, size and age influence the Information Technology Adoption. This study proves that there is a relationship between environmental factors and the adoption of ICT. Information Technology Adoption increases with increasing information requirements. Highly competitive environments drive enterprises to adopt the IT to acquire first mover advantages, or to avoid being driven out of markets. MSMEs in highly competitive industries have no choice but to follow their competitors in adopting information technology. Government Support and incentives from the external environment also lead enterprises to pursue Information Technology Adoption. Since the 1990s, to improve national competitiveness, countries like Singapore, Korea, Japan, Germany, and Canada have endeavored to develop their digital economies. Government of India can opt for development of e-MSMEs project. The e-MSMEs project encompasses several sub-projects: Knowledge Management Plan, e-Learning Project, e-Business Operation Plan, Broadband to MSMEs, and e-Market. All of these projects are important in helping MSMEs develop their IT strategy. The effectiveness of partnerships between government and MSMEs is empirically demonstrated in this study.

SCOPE FOR FURTHER RESEARCH

As far as scope of ICT on MSMEs in Indore is concerned, it cannot be wrapped in words or figures as the growth of IT sector w.r.t MSMEs will be going to make a mile stone in INDORE. New hopes came with IT park, also the big companies like TCS, INFOSYS have shown a great interest in Indore market which will surely going to help MSMEs to grow with more faster rate. Research can then be done as to what percentage the skilled labor with skilled management had contributed to the growth of MSMEs.

REFERENCES

1. Annual Reports 2010-2011, Ministry of Small Scale Industries, Government of India. "Final Results: Third All India Census of Small Scale Industries 2001-2002", August 2004 Edition, Ministry of Small Scale Industries, Government of India.
2. Dr. Subrata das (2012), International Journal of Engineering and research, Impact of technological factors on small business.
3. Entrepreneurship by leveraging information technology", International Journal of Emerging Markets, Vol. 2 Iss: 2, pp.166 - 180.
4. "Guidelines for Rehabilitation of Sick Small Scale Industrial Units", Reserve Bank of India Document, January 2002.
5. Gupta Anita (2006), "Indian Experience on Promoting Business And Technology Incubation For Improved Competitiveness Of Small And Medium-Sized Industries Through Technological Developments",
6. Jessica Wade (2013) Small Enterprise Finance Centre, IFMR. Journal of Radix International Educational and Research Consortium.
7. Patricia R. Todd, Rajshekhar (Raj) G. Javalgi, (2007) "Internationalization of SMEs in India: Fostering
8. Raymond, L. (2010). Determinants of web site implementation in small businesses. Internet Research: Electronic Networking Applications and Policy, 11(5), 411-422.

WEBSITE

9. www.msmeindore.nic.in

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, IT & 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, 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

