INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT



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

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

The American Economic Association's electronic bibliography, EconLit, U.S.A.

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 5555 Cities in 190 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.	MACRO ECONOMIC ANALYSIS OF DEMONETIZATION AND ITS ECONOMIC IMPLICATION PIYUSH KUMAR & DR. DHANI SHANKER CHAUBEY	1				
2 .	WOMEN ENTREPRENEURSHIP: PROBLEM AND PROSPECTS: A STUDY OF CHITTOOR DISTRICT <i>DR. A. B. SANTHI</i>					
3.	THE ROLE OF MANAGERIAL SKILLS IN SUCCESS OF AN ORGANIZATION DR. CHAMPA DEVI MAURYA & MAJ. DR. ASHOK KUMAR SHARMA					
4.	FACTORS AFFECTING CUSTOMER SATISFACTION: AN EMPIRICAL STUDY ON RETAIL STORES OF SHOPPING MALL, BHOPAL DR. ANKUR SAXENA	15				
5.	MUTUAL FUNDS: A RIGHT SOURCE FOR SMALL INVESTORS G. ASHOK REDDY & DR. S. RAGHUNATHA REDDY	18				
6.	AN ANALYTICAL STUDY OF FACTORS AFFECTING EMPLOYEES' PERFORMANCE IN SARVA HARYANA GRAMIN BANK NEHA DANGI & DR. MAHABIR NARWAL	20				
7.	ESTIMATING INDIA'S AGGREGATE IMPORT DEMAND FUNCTION DR. AMAL SARKAR	26				
8.	A STUDY OF FACILITY MANAGEMENT SERVICES AND ITS AUDIT IN INDIA DR. RAJENDRA SINGH, VINOD GUPTA & DR. NINA JAIN	31				
9.	IMPACT OF TAXATION ON FOREIGN DIRECT INVESTMENT JASLEEN KAUR	38				
10 .	AN INTRODUCTION TO GOODS AND SERVICES TAX 2017 DR. PRERNA	41				
11.	BRAND PERSONALITY AND BRAND LOYALTY RAMYA JAIN	43				
12 .	MOVING FROM EMPLOYEE SATISFACTION TO EMPLOYEE ENGAGEMENT SILKY MADAN	46				
13 .	CONSUMERS BUYING BEHAVIOUR AT SUPERMARKET IN TIRUVARUR DISTRICT <i>DR. V. MURUGAN</i>	51				
14.	NON- FINANCIAL REPORTING: CORPORATE SOCIAL RESPONSIBILITY, EXECUTIVES AND MATERIALITY PRAKHAR WADHWA	54				
15.	IMPACT OF FDI ON ENVIRONMENTAL QUALITY IN INDIA JASLEEN KAUR	57				
16 .	CORPORATE SOCIAL RESPONSIBILITY IN INDIA AARUSHI JAIN & GURJOT KAUR	60				
17.	SARIMA MODEL OF MALARIA IN NIGERIA: A CASE STUDY OF MALARIA CASES OF A TEACHING HOSPITAL IN NIGERIA ADEKANMBI, D.B	63				
18 .	UNDERSTANDING THE CONCEPT OF ENTREPRENEURIAL EDUCATION: CHALLENGES AND IMPLICATIONS AFIFA IBRAHIM	70				
19 .	MIGRATION TO CITIES REVS UP PROFITABILITY IN HOUSING SECTOR MANEESHA GAUR	73				
20 .	GOODS AND SERVICE TAX (GST): A BRIEF INTRODUCTION SAPNA	75				
	REQUEST FOR FEEDBACK & DISCLAIMER	80				

<u>CHIEF PATRON</u>

Prof. (Dr.) 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

ADVISOR

Prof. S. L. MAHANDRU Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR

Dr. R. K. SHARMA

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

<u>CO-EDITOR</u>

Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

EDITORIAL ADVISORY BOARD

Dr. CHRISTIAN EHIOBUCHE

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, USA

Dr. JOSÉ G. VARGAS-HERNÁNDEZ

Research Professor, University Center for Economic & Managerial Sciences, University of Guadalajara, Gua-

dalajara, Mexico

Dr. M. N. SHARMA

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

Dr. TEGUH WIDODO

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Indonesia

Dr. M. S. SENAM RAJU

Professor, School of Management Studies, I.G.N.O.U., New Delhi

Dr. KAUP MOHAMED

Dean & Managing Director, London American City College/ICBEST, United Arab Emirates

Dr. ANIL K. SAINI

Professor, Guru Gobind Singh Indraprastha University, Delhi

Dr. ARAMIDE OLUFEMI KUNLE

Dean, Department of General Studies, The Polytechnic, Ibadan, Nigeria

Dr. SYED TABASSUM SULTANA

Principal, Matrusri Institute of Post Graduate Studies, Hyderabad

Dr. MIKE AMUHAYA IRAVO

Principal, Jomo Kenyatta University of Agriculture & Tech., Westlands Campus, Nairobi-Kenya Dr. NEPOMUCENO TIU

Chief Librarian & Professor, Lyceum of the Philippines University, Laguna, Philippines

Dr. ANA ŠTAMBUK

Head of Department of Statistics, Faculty of Economics, University of Rijeka, Rijeka, Croatia

Dr. FERIT ÖLÇER

Professor & Head of Division of Management & Organization, Department of Business Administration, Faculty of Economics & Business Administration Sciences, Mustafa Kemal University, Turkey

Dr. SANJIV MITTAL

Professor & Dean, University School of Management Studies, GGS Indraprastha University, Delhi

Dr. SHIB SHANKAR ROY

Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh

Dr. NAWAB ALI KHAN

Professor & Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P.

Dr. SRINIVAS MADISHETTI

Professor, School of Business, Mzumbe University, Tanzania

Dr. ABHAY BANSAL

Head, Department of Information Technology, Amity School of Engg. & Tech., Amity University, Noida

Dr. KEVIN LOW LOCK TENG

Associate Professor, Deputy Dean, Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia

Dr. OKAN VELI ŞAFAKLI

Associate Professor, European University of Lefke, Lefke, Cyprus

Dr. V. SELVAM

Associate Professor, SSL, VIT University, Vellore

Dr. BORIS MILOVIC

Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia

Dr. N. SUNDARAM

Associate Professor, VIT University, Vellore

Dr. IQBAL THONSE HAWALDAR

Associate Professor, College of Business Administration, Kingdom University, Bahrain

Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

Dr. ALEXANDER MOSESOV

Associate Professor, Kazakh-British Technical University (KBTU), Almaty, Kazakhstan

RODRECK CHIRAU

Associate Professor, Botho University, Francistown, Botswana

Dr. PARDEEP AHLAWAT

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

Dr. DEEPANJANA VARSHNEY

Associate Professor, Department of Business Administration, King Abdulaziz University, Saudi Arabia

Dr. BIEMBA MALITI

Associate Professor, School of Business, The Copperbelt University, Main Campus, Zambia

Dr. KIARASH JAHANPOUR

Research Adviser, Farabi Institute of Higher Education, Mehrshahr, Karaj, Alborz Province, Iran

Dr. SAMBHAVNA

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

YU-BING WANG

Faculty, department of Marketing, Feng Chia University, Taichung, Taiwan

Dr. MELAKE TEWOLDE TECLEGHIORGIS

Faculty, College of Business & Economics, Department of Economics, Asmara, Eritrea

Dr. SHIVAKUMAR DEENE

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

Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

Dr. JASVEEN KAUR

Head of the Department/Chairperson, University Business School, Guru Nanak Dev University, Amritsar

SURAJ GAUDEL

BBA Program Coordinator, LA GRANDEE International College, Simalchaur - 8, Pokhara, Nepal

Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

FORMER TECHNICAL ADVISOR

AMITA

FINANCIAL ADVISORS

DICKEN 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 the 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 <u>M.S. Word format</u> after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. <u>infoijrcm@gmail.com</u> 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 titled '_____' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is 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 inclusion of their 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/Post*	:
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	:

* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation etc. <u>The qualification of</u> <u>author is not acceptable for the purpose</u>.

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. <u>**pdf.**</u> <u>**version**</u> 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 the 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) Only the **Abstract 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 acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its 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 on 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 typed in **bold letters**, 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 Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating 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 etc.
- 7. **JEL CODE**: Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
- 8. **MANUSCRIPT**: Manuscript must be in <u>BRITISH ENGLISH</u> prepared on a standard A4 size <u>PORTRAIT SETTING PAPER</u>. 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
REVIEW OF LITERATURE
NEED/IMPORTANCE OF THE STUDY
STATEMENT OF THE PROBLEM
OBJECTIVES
OBJECTIVES
HYPOTHESIS (ES)
RESEARCH METHODOLOGY
RESULTS & DISCUSSION
FINDINGS
RECOMMENDATIONS/SUGGESTIONS
CONCLUSIONS
LIMITATIONS
SCOPE FOR FURTHER RESEARCH
REFERENCES
APPENDIX/ANNEXURE

The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

- 12. **FIGURES & TABLES**: These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **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, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may 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 e.g. 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 may follow Harvard Style of Referencing. Also check to ensure 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 italic printing. 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 before 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

A STUDY OF FACILITY MANAGEMENT SERVICES AND ITS AUDIT IN INDIA

DR. RAJENDRA SINGH READER IMS DEVI AHILYA VISHWAVIDALAYA INDORE

VINOD GUPTA RESEARCH SCHOLAR, DEVI AHILYA VISHWAVIDALAYA, INDORE; & DIRECTOR TOTAL FACILITY MANAGEMENT PVT. LTD. INDORE

DR. NINA JAIN HEAD – HR & ADMIN AISECT LTD. BHOPAL

ABSTRACT

This study helps to find out that there is a strong correlation between facility management audit and FM Services namely Administration services, Security services, Housekeeping services, Engineering/Technical services, Utility services, Landscape maintenance services, AMC/Warranty services, Health, Environment and safety services, Other FM services. The difference between R square and adjusted R Square also gives us a clue regarding the possibility of generalizing the computed model from the used sample to the entire target population. The present variance analysis also reveals a high prediction consistency of the computed model relative to the residuals. This study also clearly infers that as Beta coefficient is negative for Housekeeping /Custodial services, Landscape maintenance services, Health, Environment and safety services and Other FM services no statistical significance can be interpreted from the predictor. On the other hand, Beta coefficient is positive for FM Admin services, Security services, Engineering/ Technical services, Utility services and AMC/Warranty services therefore for every 1-unit increase in the predictor variable, the dependent variable will increase by the unstandardized beta coefficient value.

KEYWORDS

facility management services, facility management audit.

INTRODUCTION

Tracility Management: The European standard for facilities management defines it as "the integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities." According to International Facility Management Association "Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology". Facility Management, for any property or place or building, comprises of services and management of Security, House Keeping, Engineering / Technical, Utility, AMC / Warranty, Landscape, Administrative & Help Desk, Vendors, Environment & Safety & other related services.

A facility management audit is a process of data collection & analyse it, related to all facility management deliverable for any place or property. The purpose or aim of the facility management audit is to conduct a comprehensive study that meets the needs of the entire facility management effort in a coordinated manner. This eliminates the need for redundant collection efforts.

Facility a Management Audits process & practice requires resources that include manpower, time, energy and skill. To do a comprehensive and accurate facility management audit will add to cost & needs structured timeframe to carry audits on regular intervals. In turn, audit is economical because it is a necessary step in the effective and efficient facility management of any property. A facility management audit is a comprehensive review of property assets. Facility Management Audit provides an understanding of how the various services are delivered & its performance.

Facility management audits should be a routine part of the facilities management administration. For the existing property, to initiate a facility management audit for the first time, ideal time is when the property undergoes any major renovation or construction activities. For new property, ideal time is just before the habitation of the property or handover. A facility management audit auditing program should be established for all properties, either new or old. Once facility management audit initiated, it must be performed on a regular basis because conditions are constantly changing.

However, in India, Audits are often triggered by the information needs of top management and legislative or regulatory bodies. By integrating the findings and data of facility management audits over the time, management can ascertain appreciated product life cycles, efficiency of services, the impact of various maintenance strategies and the future demands for the infrastructure of any property. This information can be used to increase the efficiency and cost-effectiveness of current facility management and in the future.

LITERATURE REVIEW

The Facility Management, in the opinion of **Brackertz and Kenley**, is increasingly recognized as an element of the value chain of a business through which an organization provides and maintains the quality of the work environment for its human resources and materials and ensures managers to achieve the objectives of the core business. At this point, it is imperative to clarify what is meant by this term, through a series of definitions that specify the objectives, the scope and the basic elements of FM.

Becker (1990): The Facility Management is responsible for coordinating all efforts related to planning, design and management of buildings and their systems, their equipment and their furniture, in order to improve the organization's ability to compete successfully in an environment rapid changing.

Martha J. Whitaker, (1995), claims that to improve, facility managers must first understand how their group is doing – are they meeting the expectations of management and their customers? States that facility manager who do not know the answer to this question will have a difficult time documenting their contributions and improving their services. Argues that a facility management audit which follows an orderly, objective process to compare an organization's FM resources to internal expectations and external benchmarks can help. Claims that the FM audit will give teams

An understanding of every part of their operations enabling facilities managers to develop a holistic view of facilities and strategies for continuous improvement. **Bernard (1996):** Defines the facilities as "the premises and services necessary to accommodate and facilitate the core business." Considering this, the plant management has to encompass the three cost centers that include local, support services and information technology.

VOLUME NO. 8 (2017), ISSUE NO. 06 (JUNE)

Harvey H. Kaiser, Dennis M. Kirkwood, (1997): designed to identify the tasks of a facilities organization seeking to improve effectiveness and efficiency. The growth of these organizations in size, variety of services, and extent of operations has made it increasingly important to audit management methods and performance on a regular basis. It provides a documented, step-by-step method of conducting a large-scale audit of a facilities management organization. Second, the process can be started in Phase III, and be used as a preliminary phase of a detailed audit, providing direction by identifying areas that merit the most intensive investigation. Either way, the audit process defines checklists of facilities maintenance management performance and provides measures of effectiveness, setting up a baseline for future comparisons.

Alexander (1999): The purpose of discipline is to cover all aspects related to space, environmental control, health and safety and support services.

Curcio (2003): The Facility Management is the "Integrated Management of the plurality of services and processes (addressed to the buildings, spaces, people), which are not included in the core business, but which are necessary for the functioning of the organization."

Pala e Pristerà (2004): the process of design, implementation and control through which it is a possible to identify, find and deliver the facilities, in order to provide and maintain a predetermined level of service that can meet business demands in terms of cost and quality.

Maisarah Ali, Wan Mohamad Nasbi Bin Wan Mohamad, (2009) assessed the existing facilities maintenance management practices and processes in public hospitals, in accordance with the concession agreement (CA), in order to identify the current performance status. A case study is conducted in one district hospital in Malaysia to assess five key elements: leadership; policies, plans and procedures; training and orientation; monitoring and supervision; and service performance. This research has introduced a set of key ingredients and effectiveness measures for successful facilities maintenance management. It also explores opportunities for improving facilities maintenance management in public hospitals.

NEED/ IMPORTANCE OF THE STUDY

The Facility Management is related to service sector. In any service sector, it is highly important that all service deliverables shall be audited to know the performance & quality of the services delivered to the client. So, it is needed that a study shall be carried out to know the current practices of audit for various facility management services.

STATEMENT OF THE PROBLEM

Facility Management services encompasses long list of services depending on the type of business or industry. It has been an issue for every client that the expenditure done for such services is meeting to the desired goals or not. Is the FM service cost is adding to overall business growth or not? What are the gaps, how to fill the gaps, do we have optimized the manpower & material? Does current services meet the compliances. Audit helps to get answers to such queries.

OBJECTIVE

To analyze the Facility Management Services & its Audits, in India.

HYPOTHESIS

H₀1: No significant Facility Management services & its audit practices exist in India.

RESEARCH METHODOLOGY

RESEARCH DESIGN

This study is descriptive type and cross sectional in nature. Secondary data is used to identify the variables of interest related to Facility Management audit processes and practices.

POPULATION, SAMPLE UNIT, SAMPLE SIZE

Out of total population of Facility Management Professionals, 406 responses collected from all over India to find out the Facility management audit processes and practices in India.

SAMPLING TECHNIQUE & DATA TYPE

Non-probability sampling using Convenient and Purposive sampling is used to collect primary data from the respondents.

DATA COLLECTION TOOLS

Structured questionnaire is prepared on the basis of Literature review for the collection of primary data. It contains mainly closed objective type questions. 1. The respondents were Facility managers, Facility Management companies and clients who have to choose one value at the expense of other in a forced choice method.

We have used Linkert's five point scale method ranging for preparation of our questionnaire as Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5).

2 Telephonic and face to face interview is also used to collect data from the respondents.

DATA ANALYSIS TOOL

- The collected data is coded and tabulated in the MS-Excel sheet. 1.
- 2. We have used SPSS software for further analysis of data.
- Reliability of the data collected will be assessed by applying the Cronbach Alpha method. 3.
- Regression analysis technique is used to establish a relation between dependent and independent variables. 4.

RESULT & DISCUSSION

In Table-1, Cronbach Alpha reliability test is clearly presented. This study includes 10 Facility management audit and service variables. To test the reliability of all 10 variables, Cronbach Alpha reliability test is conducted using SPSS software. It is found that the variables qualify at 0.907 Cronbach Alpha Reliability test.

TABLE 1							
Case P	Case Processing Summary						
			%				
	Valid	406	100.0				
Cases	Excluded ^a	0	.0				
	Total	406	100.0				
Reliability Statistics							
Cronk	bach's Alpha	N of	Items				
.907		10					

ronbach's Alpha	N of Items
907	10

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.851	.724	.717	.41030	

VOLUME NO. 8 (2017), ISSUE NO. 06 (JUNE)

The value of the correlation coefficient R (0.851) certifies a strong linear correlation between the Facility management audit (Dependent variable) and Facility administration services, Security services, Housekeeping/Custodial services, Engineering/Technical services, Utility services, AMC /Warranty services, Landscape Maintenance services, Health, Environment & Safety services, Other FM SERVICES (Independent variable). Highly important is the coefficient of determination value (R Square = 0.724) which indicates the proportion of the independent outcome variable variance which is determined by the variation of the dependent variable. Thus, 85.1% of the variability in Facility Management Audit is influenced by the variability of the Facility administration services, Security services, House-keeping/Custodial services, Engineering/Technical services, AMC /Warranty services, Landscape Maintenance services, Health, Environment & Safety services, Other FM SERVICES. The adjusted R-Square value (0.717) gives us a clue regarding the possibility of generalizing the computed model from the used sample to the entire target population. This value should be as close as possible to the initial R-Square value (0.724 – 0.717= 0.007) is interpreted as the additional variance (0.7%) induced within the variance of the outcome variable by the sample model relative to a population model. This low percentage states that the obtained model is valid for generalization and will bring unbiased outcome. **AMOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174.136	9	17.414	103.438	.000
	Residual	66.497	395	.168		
	Total	240.633	405			

The ANOVA-table explains the variance of the outcome variable through the influence of the computed model and residuals.

A high F-value shows the prediction consistency of the computed model relative to the residual influence. Its value is calculated as a proportion between the Regression Mean Square and Residual Mean Square (240.633). F value is significant as computed value of F=103.438 is more than table value =6.63 at degree of freedom V1=1 v2=404, 5% level of significance. The statistical significance of 103.438 shows the probability that the computed F-value is not arrived due to fluctuation in random sampling. The present variance analysis reveals a high prediction consistency of the computed model relative to the residuals, but the small F-value indicates the lack of variance in the used variables (observed and predicted outcome variables) due to the reduces number of observations. **COEFFICIENTS**^a

	odel	Unstandardized Coefficients		Standardized Coefficients		Sig.
IVI	bdel	B Std. Error E		Beta	L	
	FACILITY MANAGEMENT AUDIT					
	FM ADMIN SERVICES	.386	.040	.385	9.723	.000
	SECURITY SERVICES	.083	.033	.086	2.465	.014
1	HOUSEKEEPING SERVICES	108	.044	099	-2.429	.016
	ENGG/TECHNICAL SERVICES	.327	.043	.324	7.686	.000
	UTILITY SERVICES	.293	.047	.287	6.198	.000
	AMC/WARRANTY SERVICES	.087	.042	.086	2.075	.041
	LANDSCAPE MAINT.SERVICES	014	.036	014	401	.689
	HES SERVICES	.015	.039	.016	.374	.708
	OTHER FM SERVICES	004	.045	004	079	.937

After the evaluation of the *F*-value and R², it is important to evaluate the regression beta coefficients: unstandardized and standardized. The beta coefficients can be negative or positive, and have a t-value and significance of that *t*-value associated with each. Think of the regression beta coefficient as the slope of a line: the *t*-value and significance assesses the extent to which the magnitude of the slope is significantly different from the line laying on the X-axis. If the beta coefficient is not statistically significant (i.e., the *t*-value is not significant), no statistical significance can be interpreted from that predictor. So from Housekeeping /Custodial services, Landscape maintenance services, Health, Environment and safety services and Other FM services no statistical significance can be interpreted from the predictor. Hence, the Hypothesis is accepted for above variables.

If the beta coefficient is significant, examine the sign of the beta. If the regression beta coefficient is positive, the interpretation is that for every 1-unit increase in the predictor variable, the dependent variable will increase by the unstandardized beta coefficient value. Therefore, Beta coefficient for FM Admin services (0.386) and its computed t value is (9.723), Security services (0.083) and its computed t value is (2.465), Engineering/ Technical services (0.327) and its computed t value is (7.686), Utility services (0.293) and its computed t value is (6.198), AMC/Warranty services (0.087) and its computed t value is (2.075), The table value of t is 2.064 and statistically significant hence for each unit increase in independent variable the dependent variable will also increase by one unit. (For example, if the beta coefficient is 0.386 and statistically significant, then for each unit increase in the predictor variable, the outcome variable will increase by.0.386 units. Hence Hypothesis is rejected for above variables.

FINDINGS

The study reveals that in India, at present, FM services namely FM Admin, Engineering / Technical & Utility are audited and FM Services namely Housekeeping /Custodial services, Landscape maintenance services, Health, Environment and safety services and Other FM services are not audited.

RECOMMENDATIONS / SUGGESTIONS

Based on the study, it is recommended to have Facility Management audit mandatory for all services for any built environment. Audit should be internal & external both. Audit report should be maintained properly so that it can be used as database for further audits. FM audit reports should be referred while preparing the budget for facility management services.

CONCLUSION

This study helps us to found out that there is a strong correlation between facility management audit and FM Services namely Administration services, Security services, Housekeeping services, Engineering/Technical services, Utility services, Landscape maintenance services, AMC/Warranty services, Health, Environment and safety services, Other FM services. The difference between R square and adjusted R Square also gives us a clue regarding the possibility of generalizing the computed model from the used sample to the entire target population.

The present variance analysis also reveals a high prediction consistency of the computed model relative to the residuals.

This study also clearly infers that as Beta coefficient is negative for Housekeeping /Custodial services, Landscape maintenance services, Health, Environment and safety services and Other FM services no statistical significance can be interpreted from the predictor.

On the other hand, Beta coefficient is positive for FM Admin services, Security services, Engineering/Technical services, Utility services and AMC/Warranty services therefore for every 1-unit increase in the predictor variable, the dependent variable will increase by the unstandardized beta coefficient value.

LIMITATIONS

Facility management services / modules applicable are totally dependent on the type of business / industry. So basic or say common facility management services/ modules are taken into consideration for the study purpose.

SCOPE FOR FURTHER RESEARCH

Specific to type of business or industry can be taken for study. Specific facility management service /module may be taken for study in reference to audit of the services.

REFERENCES

- 1. Adegoke, Bolanle Felicia Adegoke, Oluseyi Joshua, (2013) "The use of facilities management in tertiary institutions in Osun State, Nigeria," Journal of Facilities Management, Vol. 11 Issue 2, p183-192. 10p.
- 2. Belser Chuck (2011), "Building for needs, not thoughts", Industrial Engineer: IE., April, Vol. 43 Issue 4, p30-34. 5p.
- 3. Booty, Frank (2010), Facilities Management. Amsterdam: Elsevier. p. 295.

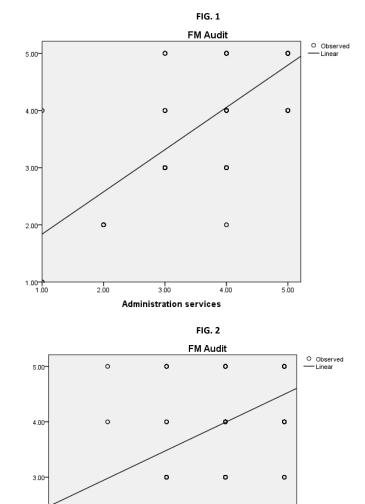
2.00

1.00 | 1.00 0

2.00

- 4. Brian Atkins; Adrian Brooks (2009 (3rd ed.)). Total Facilities Management. Chichester UK: Wiley Blackwell. p. 119 to 130.
- 5. David Cotts; Kathy Roper; Richard Payant (2010), The Facility Management Handbook Organizing the Department. New York: AMACOM. p. Chapter 2.
- 6. Drion, Bernard Melissen, Frans Wood, Roy (2012) "Facilities management: lost, or regained? ", Facilities., Vol. 30 Issue 5/6, p254-261. 8p.
- 7. Hui, Eddie C.M.Zhang, Pei-hua Zheng, Xian, (2013), "Facilities management service and customer satisfaction in shopping mall sector", Facilities, Vol. 31 Issue 5/6, p194-207. 14p.
- 8. Maisarah Ali, Wan Mohamad Nasbi Bin Wan Mohamad, (2009) "Audit assessment of the facilities maintenance management in a public hospital in Malaysia", Journal of Facilities Management, Vol. 7 Iss: 2, pp.142 158
- 9. Penny, Janelle¹Buildings. (2013)"5 Disaster Recovery Myths", February, Vol. 107 Issue 2, p26-29. 4p.
- 10. Priess, Udo¹ (2013), "Integrated Facility Management- Added Value by Innovation." International Journal of Management & Innovation, Vol. 5 Issue 1, p80-88. 9p.
- 11. Renna, Paolo¹(2012), "Influence of maintenance policies on multi-stage manufacturing systems in dynamic conditions", International Journal of Production Research. January, Vol. 50 Issue 2, p345-357. 13p.
- 12. Rogers, Jeffrey W. (2013), "Can facility manager's impact the expected budgetary outcomes of robust asset management programs?," Facilities., Vol. 31 Issue 1/2, p56-67. 12p.

APPENDIX / ANNEXURE



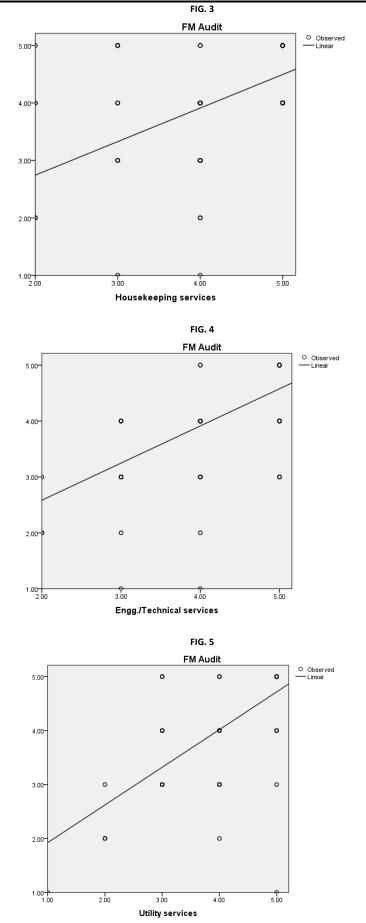
3.00

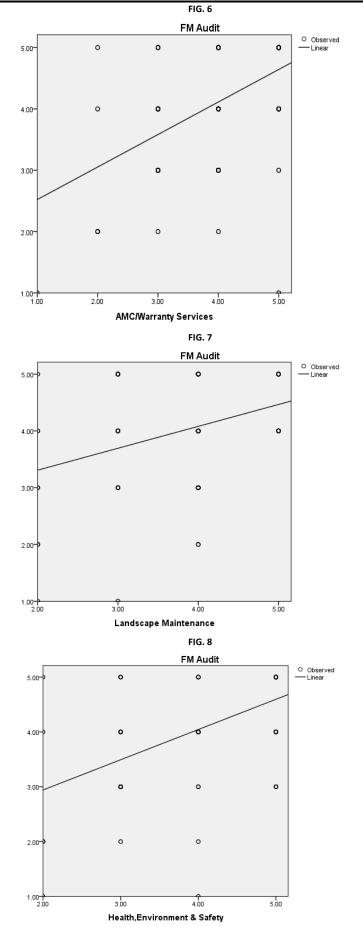
Security services

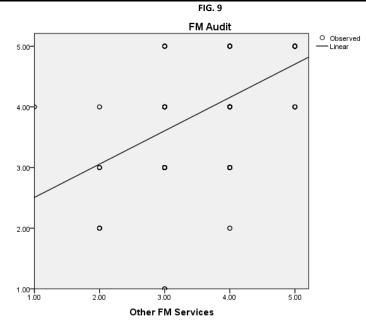
0

4.00

5.00







REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce & 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 <u>infoijrcm@gmail.com</u> 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 to 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 cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Fournals

