

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJR
CM



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,

Open J-Gate, India [link of the same is duly available at Infibnet 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 5220 Cities in 187 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.	BUSINESS CORRESPONDENT MODEL AND ITS CONTRIBUTION IN PROMOTING FINANCIAL INCLUSION IN INDIA <i>H. N. SHYLAJA, DR. H. N. SHIVAPRASAD & GAVISIDDANAGOUDA</i>	1
2.	A STUDY ON PERFORMANCE OF INDIAN MUTUAL FUND SCHEMES INVESTING IN OVERSEAS SECURITIES AND INVESTOR AWARENESS OF SUCH SCHEMES <i>DR. SMITA SHUKLA</i>	7
3.	FINANCIAL INCLUSION - OPPORTUNITIES AND CHALLENGES <i>T R BISHNOI & SOFIA DEVI</i>	15
4.	MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES ON CONSUMPTION OF POWER SAVING DEVICES <i>DR. ASHOK SHRIPADRAO KURTKOTI</i>	21
5.	STUDY TO UNDERSTAND LINKAGE BETWEEN STORE IMAGE AND STORE LOYALTY FOR APPAREL RETAILERS IN INDIA <i>DR. ARADHANA GANDHI</i>	27
6.	“MAKE IN INDIA” IN THE DEFENCE SECTOR: ROLE OF FDI <i>SHAILESH BHOITE & DR. ASHA NAGENDRA</i>	33
7.	CUSTOMERS’ PERCEPTION TOWARDS SELECT NON-GEAR VEHICLES IN NORTH GOA: A COMPARATIVE STUDY <i>DR. GAJANAN MADIWAL</i>	40
8.	MAKE IN INDIA – OPPORTUNITY FOR MANUFACTURING INDUSTRY IN NAVAL SHIPBUILDING <i>CDR. ALOK BHAGWAT & DR. PRADNYA CHITRAO</i>	43
9.	APPROACHES AND VIEWS TOWARDS CORPORATE SOCIAL RESPONSIBILITY: A CONCEPTUAL STUDY <i>DR. DHANANJAY AWASARIKAR</i>	47
10.	MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES <i>DEEPA NATHWANI</i>	51
11.	BUILDING AN AYURVEDA THERAPY DATA WAREHOUSE FOR CANCER TREATMENT <i>DEEPA NYAYADHISH, DR. PRAMOD DEO & DR. GAJANAN PURANIK</i>	55
12.	INVESTMENT AVENUES AND FACTORS AFFECTING INVESTORS DECISION IN INDIA <i>ARUNA R. SHET</i>	59
13.	LUCKNOW CYCLE TRACKS: A PROJECT THAT WENT LIKE A BOMB OR SIMPLY BOMBED? <i>ABHA R DIXIT</i>	62
14.	DETERMINANTS OF TAX COMPLIANCE BEHAVIOR: AMONG CATEGORY “A” AND “B” TAXPAYERS IN HOSANNA TOWN <i>DEREJE LEMMA LALISHO</i>	67
15.	THE EFFECT OF FACEBOOK ADVERTISING ON NIGERIAN STUDENTS’ PURCHASING BEHAVIOUR <i>QARIBU YAHAYA NASIDI</i>	73
16.	INFRASTRUCTURE AND TALENT MANAGEMENT IN TECHNOPARK, TRIVANDRUM <i>R. JOLLY ROSALIND SILVA</i>	77
17.	INVENTORY MANAGEMENT AT POINTS OF SALE: EXPLORING AND ANALYZING THE TRENDS IN INDIAN PAINT INDUSTRY <i>RAHUL GANDHI BURRA & DR. BHARAT MEGHE</i>	79
18.	POTENTIAL OF JAMMU AND KASHMIR TOURISM: SPECIAL REFERENCE TO MUGHAL ROAD AREA <i>JAHANGIR AHMAD MALIK</i>	82
19.	GENERAL ASSESSMENT OF MGNREGA IN HIMACHAL PRADESH: A STUDY OF MANDI DISTRICT <i>KHEM RAJ</i>	86
20.	A COMPREHENSIVE SURVEY ON THE EXPORT OF BOVINE MEAT IN INDIA <i>C. SAI SRUJAN & A.L.P MRIDULA</i>	90
	REQUEST FOR FEEDBACK & DISCLAIMER	94

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 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 **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 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. **The qualification of author is not acceptable for the purpose.**

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 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 **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 be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

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>

MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES ON CONSUMPTION OF POWER SAVING DEVICES

DR. ASHOK SHRIPADRAO KURTKOTI
PROFESSOR
MIT SCHOOL OF BUSINESS
PUNE

ABSTRACT

Over the last few years there was awareness created by the Indian government in using Light Emitting Diode (LED) lamps and solar cookers and heaters. Majority of consumers were aware that there are definite advantages of using power saving electrical products. However, these consumers are reluctant to use LED lamps and solar heaters and cookers due to higher prices. Indian government had given a boost to consumption of LED lamps by distributing these LED lamps very nominal prices. The major advantage of these electrical products is that they save power and power shortage will be curtailed. The major challenge for power saving manufacturers' is in reducing the prices down and making them available at present prices of conventional electrical products. Make in India campaign can boost the foreign direct investment and also create employment to Indian work force. The cost of power savings electrical products can substantially come down due to economics of scale and there are big opportunities in boosting the consumption of power saving devices. There will also opportunity for power saving devices manufacturers' in boosting exports. In order to understand whether consumers will shift to electrical products after make in India takes off in full swing, a market survey was carried out in Pune city. The survey results indicate that majority consumers are willing to shift to power savings electrical if they are available at even about 10% higher prices than other present non power saving products subject to conditions that these products are tested for quality.

KEYWORDS

make in India, light emitting diodes (LED) lamps, solar cookers and heaters.

INTRODUCTION

In 2014, was launched by the Mr. Narendra Modi, Prime Minister of India. There are challenges and opportunities for foreign players in setting up manufacturing units in India. If the Indian government and state government allow a free and competitive environment, foreign players will be attracted to start their operations due to availability of lower cost manpower and economics of scale. The renewable power saving devices will make life of consumers comfortable. "Make in India" campaign can boost foreign direct investment and also create employment to the Indian work force. The cost of these renewable energy products will substantially come down due economics of scale and boost in consumption. It will also boost exports. In order to understand whether consumers will shift to power saving products after "Make in India" takes off in full swing, a market survey was carried out in Pune city and the results are highlighted.

LITERATURE REVIEW

1. Indian Prime Minister, Mr. Narendra Modi attempted to Make India a manufacturing power by declaring "Make in India campaign open to foreign investors. However, there are challenges such as 1. India lacks funds in building factories. Banks are unable to give loan due to non-performing assets going up and banks have failed to recover. 2. With automation used by many new ventures, there will requirement of a few skilled work forces and this will lead to strong labor unrest. 3. You cannot forget the unions. They will resolve to strikes. 4. Report from Ernst & Young said in 2012, India lags far behind other nations in imparting skills training to its workers 5. The research and development spending is very less (Madhavan H, Times Feb 2016)
2. We need to admit that India, from technology point of view is lagging the western world as far as manufacturing is concerned. Experts say that we are still a decade behind advanced countries when it comes to usage of technology and modern manufacturing techniques. Usage of low cost technology often poses problems in terms of product quality, reliability, consistency and performance (Raj, A 2016 www.makeinindia.com)
3. Renewable sources like wind, solar photovoltaic, solar thermal and bio-energy sources like municipal solid and liquid waste, industrial waste, bagasse and tapioca (bio-methanation) and small hydro plants have potential to develop in future. The clean energy technology action plan for Maharashtra, prepared by Pune-based World Institute of Sustainable Energy (Wise), has estimated that Maharashtra State has a potential to generate 57,000 MW to 2, 13,000 MW of renewable energy. Wise recommended that Maharashtra make optimum use of its land and water resources to achieve low carbon and sustainable energy for future development.³

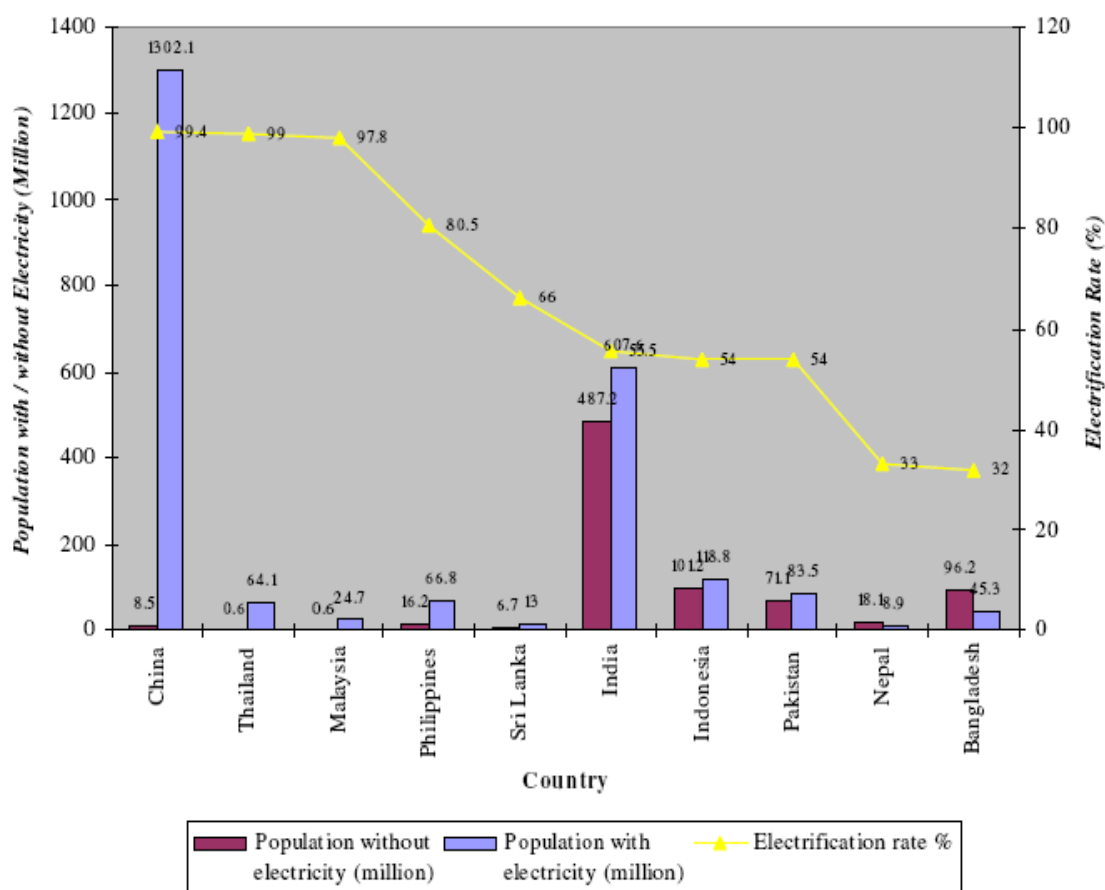
CHALLENGES FACED IN PROMOTING POWER SAVING DEVICES WITH REGARD TO FOREIGN PLAYERS IN MAKE IN INDIA ARE AS FOLLOWS

1. **Ease of doing business:** A number of permissions are required for starting a new business; this causes unnecessary delay. It also requires permission from central, state and local authorities. Due to corruption at different stages, files do not move and finally projects are either delayed or become economically unviable due to the delay. With the present Government, there is strong focus on reducing the tumbling blocks and want to overcome red tape. With the new systems with emphasis on online transactions the top level corruption has reduced. However, the lower level corruption is a major concern and the present government wants to reduce this aspect by going digital. The Indian government is already working with all states and is getting favorable response.
2. **Land acquisition bill:** Due to opposition from other parties, the central government had to postpone the land bill. There will be a loss in interest in FDI if land is not available for setting up manufacturing units.
3. **GST Bill: It is passed** but implantation problems GST need to be resolved as quickly as possible. According to industrialist Adi Godrej, GST will boost the Gross Domestic Product (GDP) by about one percent and goods and services will become cheaper. Overall it is a win-win situation for all players and it will pick up the demand subject to implementing it as quickly as possible. The targeted date of April 2017 must be met for smooth implementation of GST.
4. **Higher interest rates:** Rate cut of 125 basis points was announced by the RBI in the past one year. However, consumer demand has not picked up as banks did not pass on this rate cut fully. Even if banks pass on this cut the present bank rates are much higher than the developed economy. The new RBI Governor D. Urjit Patel has to review this matter and ensure that bank lending rates are reduced.
5. **New concept:** LED lamps and solar panels is a relatively new concept. Any use of products and services with a new concept takes a lot of time in consumer acceptance. The prices of these are very high compared to present bulbs and other products. The consumer's do not foresee long run benefits and reluctant to shift to renewable energy products. All the stakeholders like power saving devices companies and the state/central government need to be spent in educating consumers about their uses and benefits.
6. **Patience and perseverance:** The consumers are unable to see immediate benefits by using power saving devices as the benefits are not immediate but it can lead to a better environment.⁹
7. **Rural demand in India:** About 65 to 70 percent consumers live in rural area where they do not have access to electricity.

Based on the data from World Energy Outlook, International Energy Agency, 487.2 million people in India have no access to electricity The population with access to electricity in India as in 2007 was estimated to be 55.5% which compared to the other countries such as China (99.4%), Thailand (64.1%), Philippines (66.8%) and Pakistan (83.5%), was much lower.

The following Fig. 1 shows extent of electrification and population with or without electricity.

FIG. 1: EXTENT OF ELECTRIFICATION AND POPULATION WITH OR WITHOUT ELECTRICITY



Opportunities in promoting power saving products with regard to foreign players in Make in India are as follows:

1. India is an attractive market among the developing economies.
2. With the 7th pay commission passed there will be higher disposable income with the central employees. The special promotion programmes to central employees can be arranged by the producers so that these consumers will shift to LED lamps and solar panels.
3. India has the advantage of demographic dividend. It is expected that by 2030 India will have about 65 percent population below 25 to 30 years. This will boost the economy as the domestic consumption will go up.
4. The domestic market is large. India being next to China in terms of population. With a population about 125 crores, it is a very large market.
5. Higher productivity and low wages
6. India has high productivity and low wage structure
7. Frequent supply interruptions and poor power quality has driven many industries to develop captive generation plant having combined capacity of about 25,000 MW

Table 1 shows electricity consumption by consumer category

TABLE 1: ELECTRICITY CONSUMPTION BY CONSUMER CATEGORY

Consumer Category	Consumption (Gigawatt-hours)	Percentage
Domestic	89,736	25
Commercial	28,201	8
Industrial	124,573	35
Traction	9,210	3
Agriculture	87,089	24
Others	22,128	6
Total	360,937	100

There is good opportunity to tap these consumers who are put in to hardship due to non-availability of uninterrupted power supply.

8. Power saving devices like, solar photovoltaic, solar thermal and LED lights has a huge future potential. The action plan for Maharashtra, prepared by Pune-based World Institute of Sustainable Energy (Wise), has estimated that Maharashtra State has a potential to generate 57,000 MW to 2, 13,000 MW of renewable energy. Wise has recommended that Maharashtra make optimum use of its land and water resources to achieve low carbon and sustainable energy for future development.³

GOVERNMENT EFFORTS IN CREATING AWARENESS ON POWER SAVING DEVICES

1. Government had distributed about 1 Crore LED Lamps at nominal prices. LED Lamps are energy efficient and save about 80 percent power. the electricity distributes company consumers will have win-win situation as these LED Lamps last about 5 times long run and can withstand better voltage fluctuations.
2. There Indian government has been active in promoting solar projects.

STATEMENT OF THE PROBLEM

1. Make in India is a good initiative but success of the campaign will depend on how quickly the Indian government and states government resolve issues like ease of doing business, making land available by passing land acquisition bill as early as possible and lowering of interest rates. Will the Indian government act fast?
2. The solar energy and LED lighting are expensive and consumers are reluctant to shift. Can to these products be made affordable to common consumers after Make in India campaign?

RESEARCH GAPS

Ongoing through we find that there is hardly any literature available on this topic. With this research paper, the research gaps can be understood.

MANAGERIAL IMPLICATIONS

1. If there is a delay in executing, Make in India campaign then foreigners will be compelled to move to other attractive South Asian countries like Taiwan or Malaysia. Having made initial investments in these countries it will be very difficult to make further investments in India
2. The manufacturing companies who will participate in Make India campaign should be able produce in very large quantities to ensure that consumer make First Energy savings Products
3. In order to the consumers to go for repeat purchase the manufacturing companies who will participate in Make India campaign they should ensure that these products are quality products at affordable prices.
4. To boost exports international quality standard to be maintained.

OBJECTIVES

1. To study challenges and opportunities in manufacturing and marketing energy efficient power saving devices by foreign players in India.
2. To examine the "Make in India" campaign and its impact on consumption of energy efficient power saving devices in India.
3. To get suggestions from consumers to increase awareness on energy efficient power saving products.

RESEARCH METHODOLOGY

Research Design: Descriptive type.

Scope of the study: Respondents in Pune city.

Duration of the study: January – August, 2016.

Type of Universe: Approximately 50 Lacs.

Sample Design: A purposive sampling design.

Sample Size: 270 domestic respondents and 30 industrial consumers.

Research Instrument: Questionnaire.

Method of Data Collection: Both primary and secondary data collected.

LIMITATIONS IN IMPLEMENTING MAKE IN INDIA CAMPAIGN

3. Poor efforts by the government, social activists in creating awareness and customer education.
4. Distribution companies are inefficient and are unable to provide uninterrupted 24by 7 powers.
5. No special incentives are given by the government for using power saving products.
6. There is a delay in implementing land acquisition bill, due to no political opposition.

Demographic Profile (for domestic consumers)

Family Size 2 to 5 members. Gender 135 male and 135 female consumers Ages 18 to 70 years.

MARKET SURVEY RESULTS

A. Table 2 shows the consumers' response to use power saving products

TABLE 2: CONSUMERS' RESPONSE TO USE POWER SAVING PRODUCTS

Count of Gender	Column Labels		%	%
Row Labels	Female	Male	Female	Male
Cannot Say	10	15	7.5	11.1
No	75	80	55.5	60
Yes	50	40	37	28.9
Grand Total	135	135	135	135

Referring to Table 2 key findings are –

1. Majority of respondents are not using power saving products.
2. The female consumer's response usage of power saving devices are higher than male consumer's response.

B. The respondents comments of domestic consumers on the following statements is shown in Table 3:

TABLE 3: STATEMENTS TO GET CONSUMERS' RESPONSE TO THE IMPACT OF MAKE IN INDIA ON CONSUMPTION

Statements to get consumers response to the impact of Make in India on consumption	Response		
	Yes	No	Cannot Say
Make in India will boost			
1. Use of energy efficient LED if costs are reduced and quality is better	240	20	10
2. Use of solar heater and solar cookers if costs are reduced and quality is better	235	35	0
3. Use of products and brands of companies which are star rated	195	55	20
4. Shifting to new premises only if they are provided with energy efficient lighting system.	200	25	45

Referring to Table 3S, key findings are

1. Use of LED lamps, solar products, will go up after Make in India due to affordability and subject to maintaining quality.
2. Use of solar heater and solar cookers will go up, if costs are reduced and quality is better
3. Use of products and brands of companies which are star rated will go up
4. When respondents were asked about shifting to new premises only if they are provided with energy efficient lighting system after Make India, they stated that they are willing do so

C. The following Table 4 shows electricity utility companies' efforts in promoting power saving devices 'for domestic consumers':

TABLE 4: ELECTRICITY UTILITY COMPANIES' EFFORTS IN PROMOTING POWER SAVING DEVICES FOR DOMESTIC CONSUMERS'

Electricity utility companies' efforts in promoting power saving devices	Count	Percentage
a. Adequate	44	16.3
b. Inadequate	226	83.7
Total	270	100

Findings

1. Majority (83.7%) think that electricity utility companies' efforts in promoting power saving devices are inadequate.
2. A small number of customers (16.3%) think that electricity utility companies' efforts in promoting power saving devices are adequate.

The following Table 5 shows electricity utility companies' efforts in promoting power saving devices 'for industrial consumers':

TABLE 5: POWER UTILITY COMPANY EFFORTS IN PROMOTING POWER SAVING DEVICES FOR INDUSTRIAL CONSUMERS'

Option	Number	Percentage
a. Adequate	0	0
b. Inadequate	30	100
Total	30	100

Data analysis and its interpretation

1. 100% customers think that efforts of MSEDCIL in promoting power saving devices are not adequate enough,
2. Customers are certain that are efforts electricity distribution companies in promoting power saving devices are inadequate as evident from customers' response.

D. The following table 6 shows electricity distribution companies, NGOS and the Government efforts in consumer education on proper usage of electricity and reducing wastage for domestic consumers':

TABLE 6: ELECTRICITY DISTRIBUTION COMPANIES, NGOS AND GOVERNMENT EFFORTS IN CONSUMER EDUCATION ON PROPER USE OF ELECTRICITY AND REDUCING WASTE 'FOR DOMESTIC CONSUMERS'

Electricity distribution companies, NGOs and government efforts in consumer education on proper usage of electricity and reducing wastage	Count	Percentage (%)
a. Adequate	36	13.3
b. Inadequate	234	86.7
Total	270	100

Findings

1. A small percentage (13.3%) of customers think that the efforts of electricity distribution companies, NGOs and the government in consumer education on proper use of electricity and reducing wastage are adequate.
2. A major percentage (86.7%) of customers think that electricity distribution companies, NGOs and the government efforts in consumer education on proper usage of electricity and reducing wastage are inadequate.

The following table 7 shows electricity distribution companies, NGOS and the Government efforts in consumer education on proper usage of electricity and reducing wastage (for industrial consumers)

TABLE 7: POWER DISTRIBUTION COMPANY'S EFFORTS ON INDUSTRIAL CONSUMER EDUCATION ON PROPER USAGE OF ELECTRICITY AND REDUCING WASTAGE

Option	Number	Percentage
A. Adequate	0	0
B. Inadequate	30	100
Total	30	100

Data analysis and its interpretation

1. No respondent thinks that efforts of power distribution company in consumer education on proper usage of electricity and reducing wastage are adequate enough,
2. 100% customers think that efforts of power distribution company in educating consumers on proper usage of electricity and reducing wastage are not adequate enough,

The following table 8 shows consumers' response to monitoring of the efforts of power utilities at impacting the environment (for domestic consumers)

TABLE 8: CONSUMERS' RESPONSE TO MONITORING OF THE EFFORTS OF POWER UTILITIES AT IMPACTING THE ENVIRONMENT (FOR DOMESTIC CONSUMERS)

Response	Number	Percentage (%)
Yes.	142	53
No.	10	03
Can't say	118	44
Total	270	100

Findings

1. Majority (53%) of the customers are of the opinion that efforts of power utilities at impacting the environment need to be monitored.
2. 44% respondents "cannot say" in this matter.
3. Surprisingly, 3 % of the customers are of the opinion that efforts of power utilities at impacting the environment should not be monitored.

The customer responses to monitoring of the efforts of power utilities at impacting the environment (for industrial consumers) is shown in table 9

TABLE 9: MONITORING OF THE EFFORTS OF POWER UTILITIES AT IMPACTING THE ENVIRONMENT (FOR INDUSTRIAL CONSUMERS)

Response	Number	Percentage
a. Yes	28	93.4
b. No	0	0
c. Can't say	2	6.6
Total	30	100

Data analysis and its interpretation-

1. 93.4% customers feel that efforts of power utilities impacting environment to be monitored.
2. No customer feels that efforts of power utilities impacting environment should not be monitored,
3. 6.6 % of customers can't say anything in this matter

Domestic consumers' willingness to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers is shown in table 10:

TABLE 10: DOMESTIC CONSUMERS 'WILLINGNESS TO PAY 5% TO 10% HIGHER PRICES FOR ENERGY EFFICIENT LED LAMPS, SOLAR HEATERS AND SOLAR COOKERS

	Consumers' willingness to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.	Response
1.	Consumers' willingness to pay 5% to 10% higher prices for energy efficient LED Lamps, solar heaters and solar cookers.	191Nos.
2.	Not willing to pay higher price.	79 Nos.
Total		270 Nos.

Findings

- 191 domestic respondents are willing to pay 5% higher to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.
- 79 domestic customers are not willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.

Specific comments from domestic consumers who are not willing to pay higher prices are

- The present LED and solar systems are not reliable and quality of products is not known.
- We expect utility companies to offer incentives for using these products.

Specific comments from industrial customers who are not willing to pay 5% higher power tariff even if power distribution Company offers value for money are-

- It is the duty of power utilities company to provide power saving devices. Why pay more?
- No one can guarantee about services of power Utilities Company.
- The power utilities company must improve their operations first and improvements should be visibly seen by consumers first.
- Domestic consumers should not be charged more but the power utilities company can charge more to government offices.
- The present power tariff is quite high. The power utilities company should not pass on their inefficiencies to consumer and must reduce distribution losses.

HYPOTHESIS TESTING

To test consumers are willing to pay 5% to 10% higher prices for energy efficient LED Lamps, solar heaters and solar cookers. (After "Make in India" campaign takes off and subject to conditions that these products are at available at affordable prices and tested for quality.) 'Z' test was used for testing the difference between two means, after verification of normality of assumption.

NULL HYPOTHESIS

H₀: Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.

ALTERNATE HYPOTHESIS

H₁: Consumers' are not willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers

Sample size n= 270 Nos.

Table value of 'Z' for one tail test at 5% level of significance is 1.64.

If calculated value of 'Z' > 1.64, accept the hypothesis and accept H₁, otherwise reject H₀.

Hypothesis testing details are (domestic consumers) is shown in the following Table 10:

TABLE 10: HYPOTHESIS TESTING (DOMESTIC CONSUMERS)

Criterion	Importance			Satisfaction			'Z'Value
	Mean	S.D	C.V	Mean	S.D	C.V.	
Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.	4.76	0.67	14.24	3.23	1.22	37.82	18.06

Where S.D. is Standard Deviation and C.V. is Coefficient of Variance.

It can be observed that

'Z' value for this criterion is more than the table value. We, therefore, accept null hypothesis and reject alternate hypothesis.

Hypothesis testing details for industrial consumers are shown in the following table 11

Sample size n= 30 numbers

TABLE 11: HYPOTHESIS TESTING FOR INDUSTRIAL CONSUMERS

Criterion	Importance			Satisfaction			'Z'Value
	Mean	S.D.	C.V.	Mean	S.D.	C.V.	
Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers	3.73	0.52	13.95	2.73	0.78	28.71	17.52

It can be observed that 'Z' value for this criterion is more than the table value. We, therefore, accept null hypothesis and reject alternate hypothesis. Hence, it can be concluded that in general, after the "Make in India" campaign takes off, consumers "are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers subject to conditions that these products are at available at affordable prices and tested for quality

LIMITATION OF THE STUDY

Consumers were reluctant to express frank opinion on this topic.

SCOPE FOR FURTHER STUDY

A detailed study on this research topic can be carried out in India to ensure comfortable living of Indian populations with the reduction in carbon footprints

CONCLUSION

With Make In India will give big boost to consumption of power saving devices. It will be a shot in the arm for all companies as the survey results indicate that majority consumers are willing to shift to green products even 5 to 10% higher prices than other non-power saving products subject to conditions that these products are at available at affordable prices and tested for quality. Apart from generating employment, it will also boost exports. Collective efforts are required by government, social activists and consumers in creating awareness and extensive usage of green marketing products to conserve energy, protection of nature. The biggest challenge is how the prices can be made affordable for mass usage by consumers. If the renewable energy products are made affordable like mobile phones, then one can ensure that sustainable growth can be achieved and can also reduce carbon foot prints.

REFERENCES

- Bana, S. (2009, Aug. 09) Powering India, *Business India*, p 84- 90
- Business India (2009, Feb 08), Six Million Indians do not have electricity, p. 144
- Chen, T.B., & Chai, L.T. (2010). Attitude towards environment and green products: Consumers perspective. *Management Science and Engineering*, 4 (2), 27-39.

4. Damle, M. (2010, May 19) State's renewable energy potential is 2.13 lakh MW. World Institute of Sustainable Energy Report Identifies the Policy And Framework, *The Times of India, Pune*, p 4
5. Dunlap, R.E., & Van Liere, K.D. (1978). The New Environmental Paradigm: A proposed measuring instrument and preliminary results. *The Journal of Environmental Education*, 9, 10-19
6. <https://www.ledluxor.com/top-10-benefits-of-led-lighting> retrieved on 02-09-16
7. Laroche M., Bergeron J., & Babaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-520
8. Polonsky, M., & Kilbourne, W.E. (2005). Environmental attitudes and their relation to the dominant social paradigm among university students in New Zealand and Australia. *Australasian Marketing Journal*, 13 (2), 37-48.
9. Roberts, J. A., & Bacon, D. R. (1997). Ecologically conscious consumer buying. *Journal of Business Research*, 40, 79-89
10. Weigel, R.H., & Weigel, J. (1978). Environmental concern: The development of a measure. *Environmental and Behaviour*, 10, 3-15.
11. www.csenet.org/ijbm International Journal of Business management, Vol. 6, No. 6, June 2011 ADB Evaluation Study (2007, Aug.) *Energy Sector in India - Building on Success for More results* Retrieved Oct 06, 2008, from <http://www.adb.org/documents/Reports/SADE.com>
12. www.makeinindia.com

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 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 co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals

