# **INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & 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., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world. Circulated all over the world & Google has verified that scholars of more than 6575 Cities in 197 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/

ii

# **CONTENTS**

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.		
1.	WOMEN ENTREPRENEURSHIP DEVELOPMENT IN KASHMIR – PROBLEMS AND REMEDIES			
	NISSAR AHMAD PAUL & Dr. PARVAIZ AHMAD SHAH			
2.	AN ANNOTATED BIBLIOGRAPHY ON QUALITY MANAGEMENT: A COMPREHENSIVE LITERATURE REVISIT	4		
	K C PRASHANTHA & VEENA M			
3.	ANALYSIS OF OPERATIONAL PERFORMANCE OF STATE BANK OF INDIA: A STUDY	7		
	Dr. JYOTIRMOY KOLEY			
4.	SUSTAINABLE DEVELOPMENT: SOLAR ENERGY Dr. SHEETAL VARSHNEY	11		
5.	CHALLENGES AND AVENUES FOR START-UPs IN INDIA SHASHIKALA.S.R & Dr. M. AMULYA	13		
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	17		

## <u>FOUNDER PATRON</u>

## Late Sh. RAM BHAJAN AGGARWAL

Former State Minister for Home & Tourism, Government of Haryana Former Vice-President, Dadri Education Society, Charkhi Dadri Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

## CO-ORDINATOR.

**Dr. BHAVET** Former Faculty, Shree Ram Institute of Engineering & Technology, Urjani

## ADVISOR

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

## <u>EDITOR</u>

Dr. PARVEEN KUMAR

Professor, Department of Computer Science, NIMS University, Jaipur

## CO-EDITOR

Dr. A. SASI KUMAR

Professor, Vels Institute of Science, Technology & Advanced Studies (Deemed to be University), Pallavaram

EDITORIAL ADVISORY BOARD

## **Dr. CHRISTIAN EHIOBUCHE**

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

## Dr. SIKANDER KUMAR

Vice Chancellor, Himachal Pradesh University, Shimla, Himachal Pradesh

## Dr. JOSÉ G. VARGAS-HERNÁNDEZ

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

Mexico

## Dr. RAJENDER GUPTA

Convener, Board of Studies in Economics, University of Jammu, Jammu

## Dr. D. S. CHAUBEY

Professor & Dean (Research & Studies), Uttaranchal University, Dehradun

## Dr. TEGUH WIDODO

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

## Dr. S. P. TIWARI

Head, Department of Economics & Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad

## Dr. BOYINA RUPINI

Director, School of ITS, Indira Gandhi National Open University, New Delhi

## Dr. KAUP MOHAMED

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

## Dr. MIKE AMUHAYA IRAVO

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

## Dr. M. S. SENAM RAJU

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

## Dr. NEPOMUCENO TIU

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

## Dr. A SAJEEVAN RAO

Professor & Director, Accurate Institute of Advanced Management, Greater Noida

## Dr. H. R. SHARMA

Director, Chhatarpati Shivaji Institute of Technology, Durg, C.G.

Dr. CLIFFORD OBIYO OFURUM

Professor of Accounting & Finance, Faculty of Management Sciences, University of Port Harcourt, Nigeria

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

iv

**Dr. SHIB SHANKAR ROY** Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh Dr. MANOHAR LAL Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi Dr. SRINIVAS MADISHETTI Professor, School of Business, Mzumbe University, Tanzania Dr. VIRENDRA KUMAR SHRIVASTAVA Director, Asia Pacific Institute of Information Technology, Panipat **Dr. VIJAYPAL SINGH DHAKA** Professor & Head, Department of Computer & Communication Engineering, Manipal University, Jaipur Dr. NAWAB ALI KHAN Professor & Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P. **Dr. EGWAKHE A. JOHNSON** Professor & Director, Babcock Centre for Executive Development, Babcock University, Nigeria **Dr. ASHWANI KUSH** Head, Computer Science, University College, Kurukshetra University, Kurukshetra **Dr. ABHAY BANSAL** Head, Department of Information Technology, Amity School of Engg. & Tech., Amity University, Noida **Dr. BHARAT BHUSHAN** Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar **MUDENDA COLLINS** Head, Operations & Supply Chain, School of Business, The Copperbelt University, Zambia Dr. JAYASHREE SHANTARAM PATIL (DAKE) Faculty in Economics, KPB Hinduja College of Commerce, Mumbai **Dr. MURAT DARCIN** Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey **Dr. YOUNOS VAKIL ALROAIA** Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran **P. SARVAHARANA** Asst. Registrar, Indian Institute of Technology (IIT), Madras SHASHI KHURANA Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala **Dr. SEOW TA WEEA** Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia Dr. OKAN VELI ŞAFAKLI Professor & Dean, European University of Lefke, Lefke, Cyprus **Dr. MOHINDER CHAND** Associate Professor, Kurukshetra University, Kurukshetra **Dr. BORIS MILOVIC** Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia 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 Dr. MOHAMMAD TALHA Associate Professor, Department of Accounting & MIS, College of Industrial Management, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia Dr. ASHOK KUMAR CHAUHAN Reader, Department of Economics, Kurukshetra University, Kurukshetra Dr. RAJESH MODI Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia WILLIAM NKOMO

Asst. Head of the Department, Faculty of Computing, Botho University, Francistown, Botswana

**INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT** 

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories
http://ijrcm.org.in/

## YU-BING WANG

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

## Dr. SHIVAKUMAR DEENE

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

### Dr. TITUS AMODU UMORU

Professor, Kwara State University, Kwara State, Nigeria

Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

## Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

#### Dr. ASHISH CHOPRA

Faculty, Department of Computer Applications, National Institute of Technology, Kurukshetra

## SURAJ GAUDEL

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

## Dr. SAMBHAVNA

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

## Dr. LALIT KUMAR

Course Director, Faculty of Financial Management, Haryana Institute of Public Administration, Gurugram

FORMER TECHNICAL ADVISOR

ΑΜΙΤΑ

## 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

v

DATED: \_\_\_\_

## 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:

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	
s 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>.

vii

### 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.
- JEL CODE: Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php. However, mentioning 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 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.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories <u>http://ijrcm.org.in/</u>

viii

- 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

### WOMEN ENTREPRENEURSHIP DEVELOPMENT IN KASHMIR – PROBLEMS AND REMEDIES

## NISSAR AHMAD PAUL Ph.D. RESEARCH SCHOLAR DEPARTMENT OF COMMERCE UNIVERSITY OF KASHMIR SRINAGAR

## Dr. PARVAIZ AHMAD SHAH Sr. ASSISTANT PROFESSOR DEPARTMENT OF COMMERCE UNIVERSITY OF KASHMIR SRINAGAR

#### ABSTRACT

The emergence of globalisation has led to the dramatic expansion of small and self-employment sector as an important part of economic development. It has opened new doors for the establishment of women entrepreneurship. Women have been coming forward to start their activities in trade, manufacturing and services sectors. In Jammu and Kashmir, the emergence of women entrepreneurship is comparatively of recent origin. It was under the self-employment scheme started by the government after 70's that women entrepreneurship in the state started blooming. Promotion of women entrepreneurship was considered to be an effect means to tackle the problem of unemployment among women. However, the dream could not realise fully because of certain critical issues. The present paper attempts to analyse and highlight various problems which the growth of women entrepreneurship in Kashmir is confronted with There are four big obstacles in the growth of women entrepreneurship in Jammu and Kashmir. These are dependence, dominance, discrimination and denial of rights of women, the solution of these problems needs a clear thinking and effective action at various fronts. The paper also suggests various ways for the promotion of the women entrepreneurship in Kashmir.

#### **KEYWORDS**

Kashmir, entrepreneurship development, women entrepreneurship.

JEL CODES

J16, L26.

#### INTRODUCTION

Isolalisation has increased the importance of entrepreneurship as an integral part of economic development throughout the world. Women entrepreneurship is a significant subscriber to this economic development. A nation cannot achieve the goal of her socio- economic transformation without the development of women. The participation and contribution of women in the upliftmen of a country cannot be ignored, today we see that business, trade and entrepreneurship have no longer remained the sole domain of men. In fact there has been a phenomenal increase in the member of the self-employed. Women with the advent of globalisation not only create jobs for themselves and others but also provide the society with solution to different management organisation and business problem.

#### SCENARIO IN KASHMIR

Despite various hardships, women in Kashmir have started to accept the entrepreneurship as a respectable profession. This has changed the mind set of men. The Kashmiri women, who tell recent past, remained confined in their homes or working in offices and banks, have now achieved new heights in business by establishing their own ventures. The Kashmiri women entrepreneurs have not only achieved financial success but have also helped to put Kashmir on industrial map. They have made their presence felt on the business scale in the state. From establishing food – processing units, cultivating flowers for foreign markets, setting up of printing press, setting up of educational institution in private sector, establishment of retail trade centres, restaurant laundries, beauty parlours in services and manufacturing centres, these women have given their male counter-part a run for their money. As per the data available the annual turnover of some women entrepreneurs ranges between Rs.5 to 10 million. Some even cater to the requirements of international market. The government on its part is also trying best to encourage women entrepreneurs in Kashmir. The data of last 3 years shows that at least 66 women in district Srinagar only are operating registered and functional small scale industrial units, while 56 others are in the provisional stages of registration. For the rest of the state, the member of women entrepreneurs could be gauged from the loan taken from different financial institutions. The other factors which guide and motivate women entrepreneurs in Kashmir include personnel attitude, preference, income level, education level, personnel interests etc. however, the fact of the matter is that the women in Kashmir have lower rate of participation in entrepreneurial activities than men.

#### **REVIEW OF LITERATURE**

The potential of women entrepreneurs has not been realised in an optional order, even though they are an important source of economic growth and prosperity, many studies have shown that entrepreneurial activities make women more independent and allows them effectively balance their roles of wives and mothers (Lincoln, 2012; Woldie & Asersua, 2004). Developing women's entrepreneurial capacity would go a long way in harnessing their capability to identify and Capitalise on entrepreneurial opportunities within their environment and empower them economically and socially (Shane, 2003)

The women's contribution is said to exist across various Economic sphere, extending to the wider process of social transformation in transition environments (Walter et al., 2006).

A UNIDO report of 2001 stresses the wider social impact of women entrepreneurial activity not only to the women themselves but to the wider operating environment. Around one- third of all business in the formal sector is owned by women and they represent the majority of businesses in the informal sector (Adermi et al., 2008; Bardasi et al., 2007).

The women entrepreneurs face several challenges in their business operation as shown by various studies from time to time (Kantor, 1999; Mattis, 2004; Nichter & Goldmark, 2009).

The emphasis of research has been on women generally lacking the requisite human and external resources for starting and developing their own businesses ranging from financial constraints, government policies, in fractures and technology factors, lack of assets, lack of information, competition, tax burden, low level

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

2

of education, work experience, motivation socio culture actors and family responsibility, networking and access to training (carter, 2000; Chen et al., 2002; DTI, 2005; Mordi et al., 2010; rutashobya & Nchimbi, 1999; Verhuel and Thurik, 2006; Woldie & Adersua, 2004)

The disadvantaged status of women in the society is the result of complex relationship of differential factors stated above operating in the business environment. The women in business around the world share the need for freedom as motivation for starting business in Europe and Asia (Berley & Westhead, 1994; McElwee & AL- Riyami, 2003; Moore & Buttner, 1997).

#### **OBJECTIVES OF THE STUDY**

The study has been undertaken to achieve the following objectives:

- 1. To examine the current scenario of women entrepreneurs in Kashmir.
- 2. To Study various problems and challenges faced by women entrepreneurship In Kashmir.
- 3. To suggest various measures for the improvement of women entrepreneurship in Kashmir.

#### SCOPE AND LIMITATIONS OF THE STUDY

Owing to the vast scope of the subject, the study has been confined to Kashmir division only. Poor response by the subjects of enquiry and financial constraints also served as the impediments in the extension of the volume of study.

#### **RESEARCH METHODOLOGY**

To achieve the stated objectives, both the primary and secondary data have been used. Primary data comprises personnel interviews and discussion with the subjects. Journals, magazines, research publications, Government reports and seminars and conferences volumes constitute the secondary data of the study.

#### DISCUSSIONS

#### PROBLEMS

The main problems faced by the women entrepreneurs in Kashmir are as follows:

Lack of risk bearing power: Women have poor risk bearing power. They grow dependent. The decision of their family especially their parents dominate them. Shortage of finance: Women entrepreneurship also suffers due to inadequate financial resources. The procedure for obtaining bank loan is complicated. Women entrepreneurs even face problems in getting requisite working capital for day to day financing of their business.

Marketing problems: Women entrepreneurs often depend upon the middlemen for marketing their products. These middlemen exploit the women entrepreneurs; they also find it difficult to study the market trend. They also lack energy to invest and win the confidence of the customers and to popularise their products. Stiff competition: Women entrepreneurs have often to face stiff competition from organised industries and male entrepreneurs having vast experience in global market.

limited managerial ability: Women entrepreneurs usually are not experts in each and every function of the enterprise.

lack of entrepreneurial attitude: Women entrepreneurs have no entrepreneurial bent of mind. The basic characteristic of an entrepreneur such as innovation, risk bearing etc. are absent in women entrepreneurs.

Family responsibilities: An important duty of a women is to look after her children and other family members. A very little time and energy is left for her business. She has to make a balance between domestic activities and business activities.

Social attitude: There is a complete discrimination against women in Kashmir. They do not get equal treatment in a male dominated society. The male ego puts barriers in their progress

lack of awareness: Majority of the women in Kashmir are not aware about technological developments, marketing knowledge etc.

Lack of training: A large member of women has no proper and sufficient technical and professional training to set – up a new venture.

Legal formalities: Women entrepreneurs find it extremely difficult in complying with various legal formalities in obtaining licences etc.

Travelling: Women entrepreneurs cannot travel from one place to another freely as men do, women have some peculiar problems like staying out in nights at distant places etc.

**Conflicting situation in Kashmir:** The prevailing conflicting situation due to political instability and. about 25 years old turmoil has acted an as another major obstacle in the development of women entrepreneurship in Kashmir.

#### REMEDIES

The following measures may be adopted to remove the impediments in the growth of women entrepreneurship in Kashmir:

Creation of special financial cells: The commercial banks and other financial institutions engaged in providing finance to industrial establishment in Kashmir must create special cells for providing hassle free finance to women entrepreneurs.

**Concessional rate of interest:** The financial institutions should provide finance to women entrepreneurs at special concessional rates of interest. Also the repayment procedure should be made easy.

Proper supply of raw-materials: Women entrepreneurs should be ensured of proper supply of scare raw- material on priority basis.

Changing the social attitude: It is essential to change the negative social attitude towards women. The parents need to be made aware of the potentiality of the girls and their role in family and society.

Providing training facilities: In order to increase the skill and expertise needed to start and run the enterprise, training facilities should be provided to women entrepreneurs to attract more and more women entrepreneurs. Additional facilities like shipment, transport facilities etc. should be provided.

Setting of marketing co-operatives: Women entrepreneurs should be encouraged and assisted in setting up marketing co-operatives. These co-operatives will help in getting the inputs at reasonable rates to enable the women entrepreneurs to sell their products at profitable prices. This way the middle men can be avoided which in turn will enable these entrepreneurs to draw the benefits of their ventures.

#### CONCLUSION

Women entrepreneurship is gaining momentum in Kashmir. Kashmir women have the potential to set up and manage business enterprise their own successfully. But they need guidance, encouragement and support. Government and NGO's should serve the women entrepreneurs on priority basis. Women in Kashmir should join the main stream of the state economy and contribute to state's economic development with the help of their family members, NGO's and he government

#### REFERENCES

- 1. Arora, R and Sood S.k [2003]: "Fundamentals of Entrepreneurship and small Business", Kalyani Publications, New Delhi- 110002.
- 2. Arora, Renu: Fundamentals of Entrepreneurship and Small Business, Kalyani Publishers.
- 3. Butt. K.A [2005]: Strategizing Industrial Development in Jammu and Kashmir, New Century Publication Pvt. Limited, New Delhi.
- 4. Byrd, W.A. [1987]: "Entrepreneurship, capital and ownership", Washington D.C. The world Bank. Mimeo.
- 5. Coulter, M [2008]; Entrepreneurship in Action, 2e, PHI Learning Pvt. Ltd, New Delhi.
- 6. Desai, Vasant: Dynamics of Entrepreneurial Development and Management. Himalavan Publishing House, Mumbai,
- 7. Hisrich, R.D & Peters. P.M., [2007]: Entrepreneurship, 6th Edition, Tata Megraw-Hill Publishing Co. Ltd, New Delhi
- 8. Kuratko, D.F., Hodgetts, R. M [2007]: "Entrepreneurship.7th e., Thomson, South Western, Australian.
- 9. Morris, M. [2008]: Entrepreneurship and Innovation in Corporations, South Western.

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

http://ijrcm.org.in/

- 10. Nanda, H. [2009]: Fundamentals of Entrepreneurship PHI Learning Private limited, New Delhi-110001.
- 11. Peter, Kilby: Entrepreneurship and Economic Development, The Free Press, New York, 1971.
- 12. Petrin, T. [1992]: "Partnership and Institution Building as Factors in Rural Development"; paper presented at the sixth session of the FAO/ECA working party on women and the Agricultural family in Rural Development Innsbruck, Austrian, 13-16 October
- 13. Prasanna Chandra: Project Preparation Appraisal, Implementation, Tata McGraw hill, New- Delhi.
- 14. Saini. J.S and Gurjar: Entrepreneurship and Education, Challenges and Strategies, Rawat Publications, Jaipur.
- 15. Siner A David: Entrepreneurial Megabuks; John Wiley and Sons, New York.
- 16. Tandon B.C.: Environment and Entrepreneur; Chugh Publications, Allahabad.

## AN ANNOTATED BIBLIOGRAPHY ON QUALITY MANAGEMENT: A COMPREHENSIVE LITERATURE REVISIT

## K C PRASHANTHA ASST. PROFESSOR VSK UNIVERSITY BALLARI

## VEENA M ASST. PROFESSOR VSK UNIVERSITY BALLARI

#### ABSTRACT

Quality Management has been taking many shades with an unprecedented rate since a century by covering all kinds of business communities in it. Despite of this, we have not arrived at a common and standard definition of quality. The lack of unanimity is due to the complex nature in the concept of quality. It is also apparent that there is no general agreement on what Quality philosophy firms should imitate by revisiting the literature review on Quality definitions. By and large, every quality guru in their definitions included the terms related to customer satisfaction in order to casually justify the completeness of the definition. But their works and contributions in various forms revealed that they had ostensible focus over customer satisfaction or open system approach. They never tried to determine customer expectations and transfer to product characteristics to performance characteristics. Instead, most of the models, principles formulated by the gurus are confined to conformance to specifications or in other words closed system approach. The works of Shewhart and Garvin lead to the identification of quality dimensions, but these may cause social loss or related losses to customers or producers immediately or in near future. Therefore, there is a need for including ethical elements in the definition of quality. Organizations in pursuit of making profit pull some expectations and push some expectations into the minds of the customer and satisfy them tactically, which is also against the ethical quality definition. The definition of quality acts as the preliminary vision statement for any researcher or practitioner. Therefore, the paper tries to explore qualitative definition by revisiting the expounds of quality personnel.

#### **KEYWORDS**

quality management, quality dimensions, total quality management.

#### JEL CODES

M10, M20, M30, M40, M50.

#### INTRODUCTION

e know that Quality Management has been taking many shades with an unprecedented rate since a century by covering all kinds of business communities in it. Despite of this, we have not arrived at a common and standard definition of quality (Reeves and Bender, 1994). The lack of unanimity is due to the complex nature in the concept of quality. It is also apparent that there is no general agreement on what Quality philosophy firms should imitate by revisiting the literature review on Quality definitions. Therefore, the perspectives of all the following Quality Gurus: Shewhart, Deming, Feigenbaum, Juran, Crosby, Taguchi, Ishikawa, Shingo, etc. are examined as they have embarked milestones in the rare road of Quality Management in twentieth century. Their definitions by and large fall into the two following categories.

- 1. Open System Approach: Quality is equated to customer expectations.
- 2. Closed System Approach: Quality is equated to conforming specifications.
- The definition in category one, urges to produce a product to satisfy the customer and category two, urges to conform the dimensions set in the design.

#### OBJECTIVES

- 1. To identify the gap in the present literature and practical world of Quality Management
- 2. To present Comprehensive Views on Existing literature on Quality Management
- 3. To derive the sustainable definition of Quality in Quality management
- 4. To Identify the constructs of Total Quality Management

#### METHODOLOGY

For the purpose of achieving the stated objectives, papers published in various national and international journals, books, research reports, articles have collected and analysed.

#### ANALYTICS ON DEFINITIONS OF QUALITY GURUS

"The object of industry is to set up economic ways of satisfying human wants and in so doing to reduce everything possible to routines requiring a minimum amount of human effort. Through the use of the scientific method, extended to take account of modern statistical concepts, it has been found possible to set up limits within which the results of routine efforts must lie if they are to be economical. Deviations in the results of a routine process outside such limits indicate that the routine has broken down and will no longer be economical until the cause of trouble is removed." (Shewhart, 1931)

The preceding statement of Walter A Shewhart, the father of Statistical Quality Control and always the grandfather of Total Quality Management theorized the importance of adapting Management Processes and Statistical Tools in order to streamline the production environment of the firm. Shewhart's principle was to bring a process into a state of statistical control and allow the distinction between assignable and chance cause variations. By keeping the process in control, it is be possible to predict future output and to economically manage processes. (Shewhart, 1939)

As Shewhart did not try to overtly define the term Quality, but we can make out it by deriving his statements and works in the field of quality management. His book 'Economic Control of Quality of Manufactured Product' and identified subjective and objective characteristics of quality opined that his view of Quality is by and large objective to open system approach and subjective to closed system approach of quality. Even other works like PDSA Cycle and other postulates in various occasions hold similar attitude. Shewhart's essential points are (Shewhart, 1931, 1939)

- Aid a manager in making scientific, efficient, economical decisions by SPC.
- Create profitable situations for both businesses and consumers, promoting the utilization of his own creation
- Focussed on

• Statistical control of variability in production system.

- Responsibility of employees in production system (only confined to supervisors and above).
- Ostensibly over needs and expectations of customers.

The fallacy identified in the definition of Shewhart is that he had somewhere deliberately neglected to address the objective issues of quality that is perceived quality rather he focussed on controlling the variations of production process which may be due to situational demands of world war.

Edward Deming, the father of Total Quality Management and the prophet for success in Japanese revival of post-war defined Quality as 'A predictable degree of uniformity and dependability at low cost and suited for market' (Deming, 1986). His view of quality is apparently in line with the open system approach. Deming's essential arguments are

- Quality must be equated to customer satisfaction.
- Virtually quality cannot be defined by single characteristic or agent.
- As quality is equated to customer satisfaction that is needs and expectations, therefore, obviously there is a requirement of addressing different degrees of quality.

Focussed on

- Both behavioural and statistical method of controlling variability in quality of production system.
- Management and Employee responsibility.
- Superficially over needs and expectations of customers.

Edward Deming at the early times balanced the focus over system and human components of organization for quality and revealed the nature of quality that it is relative but failed to visualize and demonstrate that restiveness of quality.

Philip Crosby, in his contributions like Absolutes of quality management, fourteen steps for quality improvement, Quality vaccine, zero defects, etc. unlike other quality gurus his programs are primarily behavioural and less of statistical techniques to change corporate culture and attitudes in it. In the initial stage Crosby defined quality as "Conformance to requirements" as necessary step for management to follow and match the intended needs and expectations of the customer. He strengthened his definition by adding "Without deviation" to the former to theorize "Zero defects". Zero defects approach set an ideal target, which was not easy for organizations to immediately turn towards it. But it paved the way for adapting comprehensive method for defining, producing and delivering a product that tries to eliminate any possibilities of defects.

Crosby further theorized Quality as "Free" which advocated against the perspective that investment in quality is an expensive venture that would burden the organization. Crosby argues that investment in quality will enhance the quality of products, which will attract and satisfy the customers at marketplace, satisfied customers will repeat the purchasing and will communicate their prolific product experience with other potential customers, expansion of this phenomenon will increase market share and profit of organizations. Crosby's view of quality falls under open system approach. His other relevant arguments are

- Quality is not just conforming to specifications, it is a narrow approach but instead the broader is confirming to requirements, if we are to manage quality at high degree. (Crsoby, 1979).
- We must understand and translate the requirements into measurable product or service characteristics, because the customer deserves to receive exactly what we have promoted to produce. (Crosby, 1979).
- Meet the specifications strictly (Zero defects). Zero defects are an attitude of defect prevention. It refers to do the job right first time.

The doubt raised is that whether the products which conform to the requirements are of equal quality? And assertion is about lack of clear synthesis on requirements to be met. Therefore, Crosby's definitions too, partially failed to anatomise quality shades in detail.

Armand V Feigenbaum, the pioneer of quality movement in Europe and Latin America of 50's and the pragmatic innovator of Total Quality Control have defined quality in different views. As per his recent view Quality is 'what the user or customer says' (1983). His definition falls directly into the wagon of open system approach. Feigenbaum's essential points are

- Quality must be equated to customer satisfaction.
- Quality has many faces; it must be comprehensively defined.
- Quality is relative.

Focussed on

- Behavioural method of controlling total variations of quality in production system.
- Management responsibility over initiating the control of variations in firm.
- Perceived quality at customers.

Feigenbaum, in his first half of the journey in quality movement he emphasized to strengthen the system and human components of firm only. But the latter journey, not only shared his focus equitably on understanding customer needs and expectations but he kept these at the centre of the firm. But somewhere his notions of translating customer expectations into product characteristics seem to be weaker. Feigenbaum's definition of quality though fall under open system approach, it failed to reveal its restiveness.

Kaoru Ishikawa a professor and innovator of quality management from Japan defined quality as it is the proof of satisfying the ever changing expectations of the customer and he advocates the idea that customer satisfaction is the end game for all the efforts to deliver a quality product or service (Ishikawa, 1985). His definition can be apparently considered under open system approach of quality. His essential points are

- Quality should fall line with the dynamics of quality.
- Quality must be comprehensively defined by integrating all parts of a firm.
- Price is also an integral part of quality.

Focussed on

- Controlling company wide variations using technical methods.
- Management and Employee responsibility.
- Rhetorically over the perception of customer needs and expectations.

Ishikawa championed in adapting the principles of quality control and assurance in strengthening the system of the organization. However, he has paucity in designing the manufacturing procedures conducive to customer satisfaction.

Joseph Juran the father of quality and mentor to Japanese industrial practitioners defined quality as 'Fitness for use' in a very simple and easily understandable way. It emphasizes relationship between customer satisfaction and conformance of product characteristics to product specifications. The terms 'use' and 'fitness' represent product characteristics to specifications and absence of non-conformity (Juran, Gryna, 1988). Juran's definition apparently falls under open system approach. His essential points are

- Quality is equated to product features that satisfy the usage needs of the customer.
- Quality is also embedded in 'free from deficiencies'.
- Emphasis over internal and external customers in delivering quality.
- Focussed on
- Controlling total variations of all the processes of firm.
- Management responsibility more than employee responsibility.
- Candid over customer expectations.

Juran attempts to define by product-focused and customer-focused approach simultaneously, urging that a practical definition of quality may not possible. On the other hand, one gets the impression that Juran would like to define quality in terms of customer satisfaction. To do so, however, he must deal with the relationship

between customer satisfaction, for which he suggests no comprehensive measurement strategies and the conformance of service attributes/product specifications, which can be accomplished fairly well in the workplace. Because he is not satisfied with efforts to integrate customer satisfaction with product characteristics, he first attempts to define quality in two different and possibly inconsistent ways. When that appears not to work, he defines quality ambiguously as fitness for use.

Genichi Taguchi, a well-known pioneer of modern quality control and low-cost quality engineering, defined quality as 'Ideal value of key product characteristics which avoids financial loss of product to society' (Taguchi and Wu, 1979). It estimates the loss to society from failure of the product in terms of loss to society, loss to customers and loss to producers. His definition of quality falls under open system approach as it emphasizes product characteristic to performance characteristics of the product to customers. His essential points are

• Quality is equated to total loss to society created by the product.

• Product and process design can have an important impact on product's quality and cost.

Focussed on

- Design of experiments to reduce variations.
- Target value to estimate quality loss.
- Robust designs of the system and considering customer expectations at the design stage.

Taguchi's definition encapsulates conformance to specifications and tries to exceed conformance to requirements but it exhibits superficial emphasis in uncovering the strides of product-focussed approach and customer focussed approach.

David Garvin a well known professor from Harvard Business School has introduced five different views of quality to understand the very nature of quality. To do this, the multifaceted interests of product and process stakeholders are used (Garvin, 1984). They are

- Transcendental view- Cannot be defined but felt.
- Product-base view- Defined over product ingredients or attributes.
- User-based view- Defined over user satisfaction.
- Manufacturing-based view- Defined over fulfilling the design specifications.
- Value-based view- defined over usage and selling price.

Montgomery (2000) had given statistical definition of quality, 'Quality is inversely proportional to quality. It opines that quality products can be manufactured by reducing the variations at higher degree.

#### ANALYTIC NOTE

By and large, every quality guru in their definitions included the terms related to customer satisfaction in order to casually justify the completeness of the definition. But their works and contributions in various forms revealed that they had ostensible focus over customer satisfaction or open system approach. They never tried to determine customer expectations and transfer to product characteristics to performance characteristics. Instead, most of the models, principles formulated by the gurus are confined to conformance to specifications or in other words closed system approach. The following table provides the details of works and contributions of quality guru in relation to their target or impact made by them in the firms that is strengthening system of manufacturing or system of understanding and transferring customer expectations.

#### TABLE 1: SHOWING THE WORKS OF VARIOUS QUALITY GURUS AND THEIR TARGETS

Quality Guru	Works in the Field of Quality Management	Target or Emphasis on	
Shewhart	SPC Control Charts, PDSA cycle, etc.		
Deming	14 points, Triangle, 7 Deadly Diseases, etc.		
Crosby 6 C's, 4 Absolutes, Zero Defects, Vaccine, etc		Draduct Draduction and Management	
Feigenbaum TQC, Three Steps to Quality, etc.		Product, Production and Management	
Ishikawa Cause and Effect Diagram, Quality Cir			
Juran Cost of Quality, Trilogy, etc.			
Taguchi	Design of Experiments, Loss function, etc.		

#### TO ARRIVE AT COMPREHENSIVE DEFINITION OF QUALITY

The works of Shewhart and Garvin lead to the identification of quality dimensions, but these may cause social loss or related losses to customers or producers immediately or in near future. Therefore, there is a need for including ethical elements in the definition of quality.

Organizations in pursuit of making profit, pull some expectations and push some expectations into the minds of the customer and satisfy them tactically, which is also against the ethical quality definition.

The ethical definition of quality may be given as 'Conforming to Win-Win requirements for customers, firms, society and environment at large'. This can be achieved by the following steps.

- Understanding needs and expectations of customers,
- Segregate them into compatible and incompatible expectations.
- Design product and performance characteristics.
- Conform to specifications of design.

#### CONCLUSION

The definition of quality acts as the preliminary vision statement for any researcher or practitioner. Therefore, qualitative definition of quality must pave quality support in developing qualitative organization for its quality survival in this qualitative corporate competition.

#### REFERENCES

- 1. Crosby, P. B. (1979). "Quality is free" New York: McGraw-Hill
- 2. Dale H Besterfield, Carol Besterfield and Glen Besterfield, "Total Quality Management", Pearson Publications, 3<sup>rd</sup> edition
- 3. Howard S Gitlow, Alan J Oppenheim, Rosa Oppenheim, David M Levine, "Quality Management", 3<sup>rd</sup> edition New, McGraw-Hill publication
- 4. Jeorge., G., S(1992) Three experts on quality management: Philip b. Crosby w. Edwards Deming Joseph m. Juran Tqlo publication no. 92-02.
- 5. Joseph M Juran and A Blanton Godfrey, "Juran's Quality Handbook", Mc Graw Hill Publication
- 6. Juran, J.M., & Gryna, F. M. (Eds.). (1988). "The quality control handbook" (4th ed.). New York: McGraw-Hill.
- 7. N Logothetis, "Managing for Total Quality from Deming to Taguchi and SPC", Prentice hall of India Pvt. Ltd.

## ANALYSIS OF OPERATIONAL PERFORMANCE OF STATE BANK OF INDIA: A STUDY

## Dr. JYOTIRMOY KOLEY ASST. PROFESSOR P.G. DEPARTMENT OF COMMERCE HOOGHLY MOHSIN COLLEGE HOOGHLY

#### ABSTRACT

The better operational and working performance of commercial banks is crucial for the overall best performance of the banking sector as a whole. It has a large prospective effect on the growth of the economy. The State Bank of India (SBI) is the leading public sector bank in India. It has a great contribution to the development of the Indian financial system as well as the nation's economy. The present study has attempted to evaluate the operational and working performance of SBI based on some important parameters such as total deposits, demand deposits, term deposits, total credits, total investments, credit deposit ratio, investment deposit ratio, advances to priority sectors, the share of priority sectors' advances to total advances, etc over for ten years from 2009-10 to 2018-19.

#### **KEYWORDS**

State Bank of India, Indian financial system, economic growth, operational and working performance.

**JEL CODES** G20, G21.

#### INTRODUCTION

The Indian banking sector is one of the important pillars of the Indian financial system. If the banking sector performs well then automatically the Indian financial system will reflect better performance. It will lead to the economic development of the nation. So, the banking sector plays a pivotal role in the development of the Indian economy. The operational performance of the bank is very crucial for the betterment of the overall performance of the bank. The State Bank of India (SBI) is the largest public sector bank in India. Its operational performance reflects the operational efficiency of the public sector banks to a large extend. The operational performance could be measured by some important parameters like Total deposits, demand deposits, term deposits, total credits, total investments, credit deposit ratio, investment deposit ratio, advances to priority sectors, the share of priority sectors' advances to total advances, etc. The present study has attempted to evaluate the operational and working performance of SBI over for ten years from 2009-10 to 2018-19.

#### LITERATURE REVIEW

Several studies have been conducted by the various academicians and researchers on different aspects of the financial performance of commercial banks in India. Some of them are discussed below:

Paul (2015) analyzed the working and operation of commercial banks in India from 2003-14 to 2012-13 with the help of some selected indicators like deposits, credits, investment, credit deposit ratio, investment deposit ratio. He found that the scheduled commercial banks of India had been significantly performing satisfactorily and contributing to the national growth of the country.

Hundal and Singh (2016) examined the financial performance of public and private sector banks and determined the compound growth of various performance indicators like operating expenses, investment, investment deposit ratio, credit deposit ratio, non-performing assets, etc. of public and private sector banks in India. The study confirmed that the economy with a well-developed banking system grew up faster than those with a weaker one. They also observed that the private sector banks had been working to earn maximum profit, whereas the socio-economic development, growth responsibility, and social welfare is on the shoulder of public sector banks.

Srinivasan and Britto (2017) attempted to evaluate the financial performance of some selected Indian commercial banks with the help of some financial ratios relating to liquidity, solvency, efficiency, profitability for the period of 2012-13 to 2016-17. They also examined the impact of liquidity, solvency, and efficiency on the profitability of commercial banks in India. The study revealed that the financial performance of the private sector banks was relatively better than public sector banks throughout the study period. They also found that the liquidity ratio and solvency ratio, turnover ratio, and solvency ratio had a positive and significant impact on the profitability of the selected public sector and private sector banks.

Kanagavalli and Saroja Devi (2018) analyzed the performance of SBI based on the liquidity, profitability, turnover and market-based ratios throughout for 013-14 to 2017-18. The study showed that the SBI had maintained the required standards in all respects of liquidity, turnover and profitability.

Nayana and Veena (2018) attempted to analyze the profitability performance of SBI during the period from 2003-04 to 2015-16 based on some variables like deposits, borrowings, investment, advances, return on assets, return on equity, dividend payout ratio, net NPA to net advances ratio and net profit. They found that there was a declining profitability of the banking sector due to unsecured loans and advances.

#### **OBJECTIVES OF THE STUDY**

The objectives of the study are as follows:

- 1. To evaluate the operational performance of SBI based on some selected parameters for a period of ten years from 2009-10 to 2018-19.
- 2. To determine the compound growth rate of the selected operational performance parameters.
- 3. To analyze the relationship between the selected operational performance parameters.

#### **RESEARCH METHODOLOGY**

The present study is analytical in nature based on secondary data. The data have been collected from the various issues of RBI bulletin, annual reports of SBI of various years, various related research articles and web-based resources. The study period is ten years starting from 2009-10 to 2018-19. In order to analyze the secondary data various statistical tools (descriptive statistics, F-test) been used to draw the logical conclusion. F-test in two-sample for variances has been done in this study with the help of MS Excel.

Hypothesis: Four sets of hypotheses have been formulated for the purpose of achievement of the research objectives. These are as follows:

 $H_{o1}$ : There is no significant difference in performance between term deposits and demand deposits of SBI

Ho2: There is no significant difference in performance between credit deposit ratio and investment deposit ratio of SBI

Ho3: There is no significant difference in performance between credit deposit ratio and priority sectors' advances to total advances ratio of SBI

Hoa: There is no significant difference in performance between investment deposit ratio and priority sectors' advances to total advances ratio of SBI

#### ANALYSIS AND DISCUSSION

1. Total Deposits of SBI: The total deposits of SBI are the main source of credit mobilization. It consists of demand deposits and time deposits. Any bank needs to maintain an adequate level of deposits in the bank.

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

TABLE	TABLE 1: TOTAL DEPOSITS (DEMAND DEPOSITS AND TERM DEPOSITS) OF SBI FROM 2009-10 TO 2018-19					
Year	Total Deposits	Growth Rate	Demand Deposits	Growth Rate	Term Deposits	Growth Rate
2009-10	11164645645	100	4762179009	100	6402466636	100
2010-11	12555624844	112.458785	5637899451	118.3890702	6917725393	108.0478164
2011-12	14146894011	112.6737553	5755887275	102.0927621	8391006736	121.2971932
2012-13	16274026119	115.0360362	6631253978	115.2081975	9642772141	114.9179407
2013-14	18388523565	112.9930813	7417936016	111.863247	10970587549	113.7700589
2014-15	20529607888	111.6435902	8095557912	109.1349116	12434049976	113.3398728
2015-16	22538575644	109.7857093	9155885402	113.0976457	13382690242	107.6293747
2016-17	25998106619	115.3493771	11362444181	124.0998951	14635662438	109.3626332
2017-18	27221782821	104.7067897	12101736929	106.5064588	15120045892	103.3096107
2018-19	29405410611	108.0216193	13099677038	108.2462552	16305733573	107.8418259

(Source: Compiled from annual reports of SBI of various years)

**Interpretation:** The above table-1 shows the total deposits, demand deposits, and term deposits of SBI with their annual growth rate from 2009-10 to 2018-19. In all the cases, the growth rate has been considerably increased with the zigzag trend over the period. Total deposits have been reduced from 112.458% in 2010-11 to 108.0216% in 2018-19, in between, there is an up and downtrend. Likewise, demand deposits have been reduced from 118.389% in 2010-11 to 108.246% in 2018-19 with a zigzag trend. The term deposits have been reduced from 108.047% in 2010-11 to 107.841% in 2018-19 with a zigzag trend.

2. Total Credit Distributed and Investment made by SBI: Not only accepting deposits but also the creation of credit from such deposits is a primary function of any commercial bank. The investment made by any bank is the way of deploying deposited funds. The investment could be made in government and approved securities.

#### TABLE 2: TOTAL CREDIT DISTRIBUTED AND INVESTMENT MADE BY SBI FROM 2009-10 TO 2018-19

Year	Total Credits	Growth Rate	Total Investments	Growth Rate
2009-10	6895016421	100	4127492607	100
2010-11	10064015513	145.9607186	4190664491	101.5305148
2011-12	11636702054	115.6268295	4609491377	109.9942834
2012-13	13926080333	119.6737724	5193931904	112.6790676
2013-14	15782766860	113.3324416	5794012621	111.553496
2014-15	16922113341	107.2189274	6956917526	120.0708038
2015-16	18702608928	110.5217094	8073745830	116.0534935
2016-17	18968868201	101.4236478	10272808690	127.2372069
2017-18	19601185351	103.3334469	11837942419	115.2356943
2018-19	22268536672	113.6081123	11192477662	94.547492
			A	

(Source: Compiled from annual reports of SBI of various years)

**Interpretation:** The above table-2 shows the total credit and total investments of SBI with their annual growth rate from 2009-10 to 2018-19. The growth rate has been considerably increased with the zigzag trend over the years for total credits. Whereas, the growth rate for total investment has been reduced in the final year of 2018-19. Total credits have been reduced from 145.960% in 2010-11 to 113.608% in 2018-19, in between, there were ups and downs trend. The total investments have been reduced from 101.530% in 2010-11 to 94.547% in 2018-19 with a zigzag trend.

3. Credit Deposit Ratio and Investment Deposit Ratio of SBI: The credit deposit ratio is the indicator of credit creation by the bank from its deposits. The investment deposit ratio indicates the investment made by any bank out of its total deposits collected.

TABLE 3: CREDIT DEPOSIT RATIO AND INVESTMENT DEPOSIT RATIO OF SBI FROM 2009-10 TO 2018-19

Year	Credit Deposit Ratio	Investment Deposit Ratio	
2009-10	61.75759303	36.96931133	
2010-11	80.15543343	33.37678963	
2011-12	82.25623268	32.58306292	
2012-13	85.57243445	31.91546988	
2013-14	85.82944033	31.50885171	
2014-15	82.42784486	33.88724015	
2015-16	82.98043862	35.82189912	
2016-17	72.96249869	39.51368013	
2017-18	72.00551661	43.48702103	
2018-19	75.7293852	38.06264708	

(Source: Compiled from annual reports of SBI of various years)

Interpretation: The above table-3 shows the credit deposit ratio and investment deposit ratio of SBI from 2009-10 to 2018-19. Both the ratios have been considerably increased with the zigzag trend over the years. The credit deposit ratio has been hiked from 61.757% in 209-10 to 75.729% in 2018-19. The investment deposit ratio has been increased from 36.969% in 2009-10 to 38.062% in 2018-19.

4. Advances made to Priority Sector and Share of Priority Sectors' Advances of SBI: In very brief, the priority sector means the agriculture and rural sector of the nation. The RBI has prescribed policy measures for priority sector lending from all the banks working in India.

#### TABLE 4: ADVANCES MADE TO PRIORITY SECTOR AND SHARE OF PRIORITY SECTORS' ADVANCES OF SBI FROM 2009-10 TO 2018-19

Year Advances to Priority Sectors Share of Priority Sectors' Advances to Total Advances

ieai	Auvalices to Fhority Sectors	Share of Fhority Sectors Advances to Total Advances
2009-10	2509051965	32.7613
2010-11	3188732953	35.8286
2011-12	3457800673	33.8706
2012-13	3759627900	30.9182
2013-14	4067488239	29.9905
2014-15	4257143330	29.3987
2015-16	4750380097	29.8139
2016-17	4710768362	29.4679
2017-18	4483589560	27.248
2018-19	5207297760	27.4341

(Source: Compiled from annual reports of SBI of various years)

9

Interpretation: The above table-4 shows the total advances given to the priority sectors and the share of priority sectors' advances to total advances by SBI over the year from 2009-10 to 2018-19. Total advances given to the priority sectors in 2009-10 were Rs. 2509051965 and it has been increased to Rs. 5207297760 in 2018-19. The share of priority sectors' advances to total advances has been reduced from 32.761% in 2009-10 to 27.434% in 2018-19. Testing of Hypothesis

## Hypothesis-1

An F-Test two-sample for variances has been conducted to find out whether the time deposits are significantly different from the demand deposits of SBI.  $H_{o1}$ : There is no significant difference in performance between time deposits and demand deposits of SBI

#### TABLE 5: F-TEST TWO-SAMPLE FOR VARIANCES OF TIME DEPOSIT AND DEMAND DEPOSIT

	Time Deposit	Demand Deposit
Mean	11420.276	8402.046
Variance	12307005.4	8575239.503
Observations	10	10
df	9	9
F	1.435179203	
P(F<=f) one-tail	0.299535759	
F Critical one-tail	3.178893105	

(Source: Compiled by the researcher)

**Interpretation:** The above table-5 shows the F-Test two-sample for variances of time deposits and demand deposits. From the above, it has been observed that the calculated value of F is 1.4352 and the critical value of F is 3.1789. Here, calculate value of F is lower than the critical value of F. It leads to accept the null hypothesis and reject the alternative hypothesis. So, it can be concluded that there is no significant difference in performance between time deposits and demand deposits of SBI.

### Hypothesis-2

An F-Test two-sample for variances has been conducted to find out whether the credit deposit ratio is significantly different from the investment deposit ratio of SBI.

Ho2: There is no significant difference in performance between credit deposit ratio and investment deposit ratio of SBI

#### TABLE 6: F-TEST TWO-SAMPLE FOR VARIANCES OF CREDIT DEPOSIT RATIO AND INVESTMENT DEPOSIT RATIO

Credit Deposit Ratio	Investment Deposit Ratio
78.169	35.713
57.30432111	14.73697889
10	10
9	9
3.888471412	
0.027796848	
3.178893105	
	78.169 57.30432111 10 9 3.888471412 0.027796848

(Source: Compiled by the researcher)

**Interpretation:** The above table-6 shows the F-Test two-sample for variances of credit deposit ratio and investment deposit ratio. From the above, it has been observed that the calculated value of F is 3.8885 and the critical value of F is 3.1789. Here, calculate value of F is higher than the critical value of F. It leads to reject the null hypothesis and accept the alternative hypothesis. So, it can be concluded that there is a significant difference in performance between credit deposit ratio and investment deposit ratio of SBI.

#### Hypothesis-3

An F-Test two-sample for variances has been conducted to find out whether the credit deposit ratio is significantly different from the priority sectors' advances to total advances ratio of SBI.

Hos: There is no significant difference in performance between credit deposit ratio and priority sectors' advances to total advances ratio of SBI

#### TABLE 7: F-TEST TWO-SAMPLE FOR VARIANCES OF CREDIT DEPOSIT RATIO AND PRIORITY SECTORS' ADVANCES TO TOTAL ADVANCES RATIO

	Credit Deposit Ratio	Priority Sectors' Advances to Total Advances Ratio
Mean	78.169	30.67318
Variance	57.30432111	7.525226722
Observations	10	10
df	9	9
F	7.614962742	
P(F<=f) one-tail	0.002893467	
F Critical one-tail	3.178893105	

#### (Source: Compiled by the researcher)

**Interpretation:** The above table-7 shows F-Test two-sample for variances of credit deposit ratio and priority sectors' advances to total advances ratio. From the above, it has been observed that the calculated value of F is 7.6149 and the critical value of F is 3.1789. Here, calculate value of F is higher than the critical value of F. It leads to reject the null hypothesis and accept the alternative hypothesis. So, it can be concluded that there is a significant difference in performance between credit deposit ratio and priority sectors' advances to total advances ratio of SBI.

#### Hypothesis-4

An F-Test two-sample for variances has been conducted to find out whether the investment deposit ratio is significantly different from the priority sectors' advances to total advances ratio of SBI.

Hoa: There is no significant difference in performance between investment deposit ratio and priority sectors' advances to total advances ratio of SBI

#### TABLE 8: F-TEST TWO-SAMPLE FOR VARIANCES OF INVESTMENT DEPOSIT RATIO AND PRIORITY SECTORS' ADVANCES TO TOTAL ADVANCES RATIO

	Investment Deposit Ratio	Priority Sectors' Advances to Total Advances Ratio
Mean	35.713	30.67318
Variance	14.73697889	7.525226722
Observations	10	10
Df	9	9
F	1.958343507	
P(F<=f) one-tail	0.165563575	
F Critical one-tail	3.178893105	

(Source: Compiled by the researcher)

Interpretation: The above table-8 shows F-Test two-sample for variances of investment deposit ratio and priority sectors' advances to total advances ratio. From the above, it has been observed that the calculated value of F is 1.9583 and the critical value of F is 3.1789. Here, calculate value of F is lower than the critical value of F. It leads to accept the null hypothesis and reject the alternative hypothesis. So, it can be concluded that there is no significant difference in performance between investment deposit ratio and priority sectors' advances to the total advances ratio of SBI.

#### FINDINGS

The findings of the study are mentioned below:

- 1. There is significant growth in the total deposits including demand deposits and term deposits of SBI.
- 2. There is no significant difference in performance between time deposits and demand deposits of SBI.
- 3. Credit deposit ratio has an increasing trend from 2009-10 to 2018-19 with a slight zigzag trend over the years.
- 4. There is a significant difference in performance between credit deposit ratio and investment deposit ratio of SBI.
- 5. There is a significant difference in performance between credit deposit ratio and priority sectors' advances to total advances ratio of SBI.
- 6. The advances to priority sectors have an increasing trend over the period.
- 7. There is no significant difference in performance between investment deposit ratio and priority sectors' advances to the total advances ratio of SBI.

#### CONCLUSION

The economic development of a nation depends on its banking sector to a large extend. The largest public sector of India is SBI which shows the importance of its performance towards development. The study reveals that there is no significant difference in the performance of demand deposits and term deposits. The current market position of SBI is well again. Finally, to conclude the study, it may be said that the overall operational and working performance of SBI is quite satisfactory over the period with slight ups and downs. SBI is continuing its contribution towards the financial and economic growth of India.

#### REFERENCES

- 1. Annual Reports of SBI 2009-10, https://sbi.co.in/documents/17826/35696/1275994607852\_12\_BALANCESHEET\_SBI\_GROUP.pdf Accessed on 12/5/2020 at 7:11 AM
- 2. Annual Reports of SBI 2010-11, https://sbi.co.in/documents/17826/35696/1307544010161\_13\_2.pdf Accessed on 12/5/2020 at 7:13 AM
- 3. Annual Reports of SBI 2011-12, https://sbi.co.in/documents/17826/35696/1339769825519\_SBI\_GROUP\_FINANCIALS\_AR12.pdf Accessed on 27/3/2020 at 11:01 PM
- 4. Annual Reports of SBI 2012-13, https://sbi.co.in/documents/17826/35696/1373614553213\_SBI\_UNABRIDGED\_ANNUAL\_REPORT\_2012\_13\_ENGLISH.pdf Accessed on 12/5/2020 at 7:09 AM
- 5. Annual Reports of SBI 2013-14, https://www.sbi.co.in/AR\_13-14/ Accessed on 12/5/2020 at 7:03 AM
- 6. Annual Reports of SBI 2014-15, https://www.sbi.co.in/AR1415/ Accessed on 5/2/2020 at 5:44 PM
- 7. Annual Reports of SBI 2015-16, https://bank.sbi/AR1516/ Accessed on 5/2/2020 at 5:43 PM
- 8. Annual Reports of SBI 2016-17, https://sbi.co.in/AR1617/ Accessed on 5/2/2020 at 5:42 PM
- 9. Annual Reports of SBI 2017-18, https://bank.sbi/AR1718/ Accessed on 5/2/2020 at 5:41 PM
- 10. Annual Reports of SBI 2018-19, https://sbi.co.in/corporate/AR1819/ Accessed on 5/2/2020 at 5:40 PM
- 11. Hundal, A.K. and Singh, M. (2016). Performance Evaluation of Public and Private Sector Banks in India: A Comparative Study. Indian Journal of Research, 5(4), 237-242.
- 12. Kanagavalli, G. and Saroja Devi, R. (2018). Financial Performance of the State Bank of India. Universal Review, 7(XI), 393-405.
- 13. Nayana, N. and Veena, K.P. (2018). A Study on Financial Performance of State Bank of India. International Journal of Current Research, 10(04).
- 14. Paul. P. (2015). A Study on Operational Performance of Indian Commercial Banks. International Journal of Computational Engineering & Management, 18(4), 23-27.
- 15. Srinivasan, P. and Britto, J. (2017). Analysis of Financial Performance of Selected Commercial Banks in India. Theoretical Economics Letters, 7, 2134-2151.

11

## SUSTAINABLE DEVELOPMENT: SOLAR ENERGY

## Dr. SHEETAL VARSHNEY ASST. PROFESSOR SURESH MEHTA SCIENCE & COMMERCE COLLEGE UMARGAM

#### ABSTRACT

The 750- megawatt ultra-mega solar power plant being built in Madhya Pradesh has been christened the Rewa Ultra Mega Solar Power Project. It is touted to reduce the country's emission drastically, by an amount equivalent to 15lakh tone of carbon dioxide annually. India's demand for energy can be filled by such large scale projects and can achieve the goal no. 7 in the action of sustainable development i.e affordable and clean energy. Renewable energy solution is becoming cheaper, more reliable and more efficient every day. Our current reliance on fossil fuels is unsustainable and harmful to the planet, so need to change the way we produce and consume energy. In this paper will examine solar energy impact on the Indian economy and towards sustainable development goal 7.

#### **KEYWORDS**

solar energy, sustainable development.

JEL CODES

Q40, Q42, O13.

#### INTRODUCTION

To the sustainable goal that was made by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and environment for that is, they recognize that action in one area will affect outcomes in others and that development must balance social, economic and environmental sustainability.

Through the pledge to Leave No One Behind, countries have committed to fast-track progress for those furthest behind first. That is why the SDGs are designed to bring the world to several life-changing 'zeros', including zero poverty, hunger, AIDS and discrimination against women and girls.

Everyone is needed to reach these ambitious targets. The creativity, know-how, technology and financial resources from all of society is necessary to achieve the SDGs in every context.

The 750- megawatt Rewa solar Power Plant in Madhya Pradesh was dedicated to the nation by Prime Minister Narendra Modi on Friday (July 10, 2020). The solar plant was set up by the Rewa Ultra Mega Solar Limited, a joint venture between Madhya Pradesh Urja Vikas Nigam Limited and the Centre's Solar Energy Corporation of India (SECI). The project has also received Rs 138 crore financial assistance from the central government. The plant consists of three solar power generating units that are located on a 500-hectare plot of land inside a 1,500-hectare solar park. the solar plant is quite large in terms of scale and is expected to reduce the country's emission drastically, by an amount equivalent to 15 lakh tonne of carbon dioxide annually. The largest Plant in Asia will friendly for the environment and also for the achievement of SDG. The new mission of AAtmanirbhar Bharat may also complete through this project and will open many opportunities for aspirants. on the other hand, will enable to reduce the fiscal deficit.

#### **RESEARCH METHODOLOGY**

The Paper made of secondary data represents from government News, Private News, Journal and published e-research reports, international agencies.

#### **OBJECTIVE OF THE STUDY**

India's economy is increasing at the fastest rate in the world, now making it the globe's third-largest oil consumer. The trend of oil-importing from other countries, impacts on Indian economy like the current deficit, Fiscal deficit, Exchange rate, Inflation and environment pollution. To overcome all situation, need to switch from oil to solar energy and make self-reliance.

#### **IMPACT OF SOLAR ENERGY**

Continuously increasing the energy demand, needs to change the resources that we have ample because of the geographical position of India, have to focus on Solar energy.

The many more initiative was taken by Prime Minister Modiji to attain the SDG7 by 2030. Inauragating of Rewa solar panel moving towards sustainability in the following manner.

Generating employment: The central government has cited job creation as part of its rationale for the Solar Mission. Solar PV is recognized as creating more jobs per unit of energy produced than any other energy source; thus it potentially represents a much-needed solution to unemployment in the face of India's burgeoning population and labour force. As India moves toward its 2022 target, the Indian government must not only have a thorough understanding of the employment opportunities created by the solar industry but also factor in this job creation potential while designing and implementing clean energy policies at the state and national levels.

**Use of wasteland**: Government is encouraging the use of wasteland for the installation of solar power plants. Such land will support to generate solar energy. Government is monitoring the scheme in close coordination with States and other stakeholders to complete the projects in time for which various fiscal and promotional incentives announced by the government.

Self-reliance: Aatmanirbhar Bharat in the energy sector will not be dependent to import from other countries. By 2030 India will self-reliance to generate energy for the Indian public, however, need to focus to prepare infrastructure of India for implementation of solar energy products. Surely Atal Innovation Mission will help to generate innovation in India for making India Aatmanirbhar.

**Fiscal deficit**: Prices of petrol and diesel are deregulated in India. However, kerosene remains a highly regulated commodity and the government of India determines its price at subsidized rates. The difference between the selling price of fuel and its cost to companies is called "under-recoveries." The Indian government rebates this price differential to the oil marketing companies, like Indian Oil, Bharat Petroleum, Hindustan Petroleum, and IBP. These under-recoveries add substantially to the government's total expenditures and lead to increases in the fiscal deficit. To reduce fiscal deficit, switch to solar electrified products so dependency of oil imports from import basket can be minimized.

Exchange rate: The value of the rupee depends on the demand for rupees in the market. Since most payments for oil imports are made in US dollars, whenever oil prices rise, the demand for US dollars' increases. This leads to the relative weakening of the rupee. A high deficit would compel the government to sell rupees and buy dollars to pay its bills. This may reduce if we get self-reliance for solar energy so that we can supply energy for industry and electrified products.

**Inflation**: By 2030, expected Solar power per unit cost fall to Rs.1.90, a joint study by TERI and US-based think tank Climate Policy Initiative (CPI) has revealed. Switch to electrified vehicles reduce the transportation cost will impact on consumer final basket goods and finally, inflation would be in controlled. Without the hindrance of nature and compromise high living standard, change to our attitude towards what we have can be defined sustainability.

**Clean Environment**: With a significant amount of the world's top 20 polluted cities in the world located in India, air pollution emerges as the most important subset of this conversation. Air pollution is the fifth leading risk factor for mortality worldwide. Each year, more people die from air pollution-related disease than from road traffic injuries or malaria. Globally around 4.2million people die due to exposure to poor quality air. So, it is important to gradually attain a paradigm shift towards Energy security. India already has emerged as a global leader in e-3 wheeler space with attractive plans and phase 2 also have an attraction for e-2wheeler, e-cars. All are gradually electrified supported by market demand and consumer awareness, the charging and swapping infrastructure must have to grow. We can achieve a clean environment by using electric products.

#### CONCLUSION

The cost of land and labour is cheaper than the rest of the world so it can be utilized in proper channel, however, Niti Aayog has taken many initiatives to maximize output and steps towards achieving the sustainable development goal by 2030.SDG7-clean environment can be achieved through solar energy which also seeks to environmental degradation. The appreciation of our natural resource constraints is also in our best interest. Truly rational and "effective governance requires a nation to consider and protect the environment and natural resources on which its current and future development depend. Any other approach is self-defeating. The connections between the environment and development thus provide a powerful rationale for environmental protection.

#### REFERENCES

- 1. "Energy crisis- Wikipedia" accessed on 17/8/2020 https://en.wikipedia.org/wiki/Energy\_crisis
- 2. "India becomes a lowest-cost producer of solar power" accessed on 18/8/2020https://energy.economictimes.indiatimes.com/news/renewable/solarpower-cost.
- "PM Modi inaugurates Asia's largest solar power project Rewa Solar in Madhya Pradesh; see top 10 facts" accessed on 18/8/2020 https://www.financialexpress.com/infrastructure/rewa-solar-power-project-asia-largest-solar-power-plant-pm-modi-inauguration-madhya-pradesh/2019361/
- 4. "Solar power plants on wasteland" accessed on 18/8/2020 https://www.business-standard.com/articsle/government-press-release/solar-power-plants-onwaste-land-

## CHALLENGES AND AVENUES FOR START-UPs IN INDIA

## SHASHIKALA.S.R RESEARCH SCHOLAR, BIMS UNIVERSITY OF MYSORE, MYSURU; & ASST. PROFESSOR TTL COLLEGE OF BUSINESS MANAGEMENT SARASWATHIPURAM, MYSURU

## Dr. M. AMULYA ASST. PROFESSOR BIMS UNIVERSITY OF MYSORE MANASAGANGOTHRI, MYSURU

#### ABSTRACT

India is a developing Asian country. It is a most populous and 7th largest country by area. Large population implies a large prospective market in India and puts more pressure for employment in the country. In the present decade, India is undertaking an essential shift towards start-up welcoming policies and a business friendly environment. India in the competitive environment forced to create innovative systems. Due to globalization and advancement in technology competition is increasing day by day that's why self- employment consciousness among people is increasing at fast pace. Starting a venture is a well planned and disciplined exercise with due consideration of both internal and external factors that may impact the sustainability of the venture. The idea behind the venture, market size, revenue and profit targets are some of the important factors that need to be clearly defined before embarking on the journey. Time, team work and tenacity are important elements which determine entrepreneurial success. Infrastructure, government regulations and availability of finance at various stages of growth could be some of the challenges for startups. The paper discusses few challenges and avenues an Indian startup has to face. The study is based on the Secondary Sources of Data.

#### **KEYWORDS**

entrepreneur, employment, internal and external factors, start-up.

JEL CODE 014

#### INTRODUCTION

Trepreneurship is the process undertaken by an individual to augment his business interest. It is an exercise involving innovation and creativity that will go towards establishing his/her enterprise.

The scope of Entrepreneurship in country like India is tremendous. Especially since there is wide spread concern that the acceleration in the GDP growth in the past reforms period has not been accompanied by a commensurate expansion in employment. The rising unemployment rate in India has resulted on growing frustration among the youth. The best solution to solve a problem of unemployment, is to have as many job creators as possible, so we need entrepreneurs. An entrepreneur is one "who assumes the risk and management of business".

#### **MEANING OF STARTUP**

A startup venture could be defined as a new business that is in the initial stages of operation, beginning to grow and is typically financed by an individual or small group of individuals. It is a young entrepreneurial, scalable business model built on technology and innovation wherein the founders develop a product or service for which they foresee demand through disruption of existing or by creating entirely new markets. Startups are nothing but an idea that manifests into a commercial undertaking.

#### Grant Thornton (2016) define startup business as an organization which is

- a) Incorporated for three years or less
- b) At a funding stage of Series B or less (B Series means second round of funding)
- c) An entrepreneurial venture/a partnership or a temporary business organization
- d) Engages in development, production or distribution of new products/services or processes
- e) Revenue of up to INR 25 cr.
- f) Not formed through splitting or restructuring
- g) Employing 50 people or less
- Department of Industrial Policy and Promotion (DIPP) define a startup as an entity incorporated or registered in India with following parameters:
- Established not prior to seven years, (for Biotechnology Startups not prior to ten years)
- With annual turnover not exceeding INR 25Cr in any preceding financial year, and
- Working towards innovation, development or improvement of products or processes or services,
- It is a scalable business model with a high potential of employment generation or wealth creation

It is to be noted that such entity is not formed by splitting up, or reconstruction, of a business already in existence. Also, an entity shall cease to be a startup if its turnover for the previous financial years has exceeded INR 25cr or it has completed 7 years (biotechnology startups 10 years) from the date of incorporation/ registration ('Startup India', 2017)

#### THE STARTUP SCENARIO IN INDIA

It is to be noted that every year more than 800 technology startups are being set up in India. By 2020, it is estimated that around 11,500 tech-startups are going to be established with employment potential of around 250,000 technical people (NASSCOM, 2015). It is admirable to note that India is amongst the top five countries in the world in terms of startups with 10,000+ led by US with 83,000+ comprising 43% tech-based firms with 9% managed by women entrepreneurs. The number of incubators also has crossed 100 in 2014-15 to give boost to the startup saga (Grant Thornton, 2015). Sector wise, the distribution of Indian businesses is:

ABLE 1: BREAK-UP OF INDIAN STARTUP BUSINESSE		
Technology Based	Non-Technology Based	
E-Commerce - 33%	Engineering- 17%	
B2B - 24%	Construction-13%	
Internet - 12%	Agri- products- 11%	
Mobile apps - 10%	Textile - 8%	
SaaS - 8%	Printing & packaging – 8%	
Other – 13%	Transport & logistics- 6%	
	Outsourcing & support -5%	
	Others-32%	

Source: Startups India- An Overview, Grant Thornton, 2015

#### **OBJECTIVES OF THE STUDY**

- 1. To assess the various opportunities for upcoming Entrepreneurs in developing new businesses under the Start Up scheme.
- 2. To assess the various challenges faced by Start Ups.
- 3. To recognise the various reasons for the failure of few Start Ups.

#### **RESEARCH METHODOLOGY**

The present study is based on secondary data. The data has been extracted from various sources like research articles, publications from Ministry of Commerce, Government of India, various bulletins of RBI and authenticated websites.

#### LITERATURE REVIEW

The start-up process covers a period of time that is hard to specify. The onset and the end of the process are not well defined and are delineated differently in the descriptive literature. The process of creating a new venture is consistently characterized as a complex event in which varied planning and preparation activities are necessary and in which decisions need to be taken (Hisrich and Peters 1998; Szyperski and Nathusius 1999).

The lifecycle of the startup companies includes three main stages, which are bootstrapping stage, seed stage, and creation stage. There are four categories of challenges faced by startup companies, namely financial challenges, human resource management, support mechanisms and environmental elements. (AidinSalamzadeh and Hiroko KawamoritaKesim January 2015).

Sharma, (2013), made a study on women entrepreneurs in India. She concluded that women entrepreneurs face many problems like social barriers, legal aspects, lack of education, family support etc. She also explained the various factors like pull and push factors affecting entrepreneurship. According to her women have the probable and firmness in setting up the enterprise and fighting against the all odds.

Foreign exchange regulations are to be in tune with investor needs, so that the best do not register outside India. Global investors demand a benign tax certainty regime so that they remained invested for the long term (Dr. Shailja Badra, Vivek Sharma February 2016)

The most important challenges faced by new entrepreneurs include developing the vision and business idea, raising capital for startup, assembling a business team, finding the right business location, finding good employees, finding good customers, dealing with competition, unforeseen business challenges and expenses, keeping up with industrial changes and trends, lack of support, negative mindset, lack of marketing facilities, lack of infrastructural facilities etc. so it is necessary to overcome these challenges in order to conduct an efficient business. (R.S. Kanchana, J.V. Divya and A. Ansalna Beegom 2014)

#### **ISSUES AND CHALLENGES OF STARTUPS**

A successful start-up cannot start a business just with passion and an idea. A high level of leadership skills with clear understanding of market, excellent communication skills, maturity to see things in right perspective along with the ability to take calculated risks are required on the part of the entrepreneur(Aggarwal,2017). Lack of awareness, multiple clearances, unorganised market, poor infrastructure in Tier 2 /3 cities, lack of mentoring, stringent exit policies, corruption/red tape, technological risk, regulatory obstacles and lack of reforms keeping pace with the fast evolving market changes are some of the challenges as per Rashmi Guptey, Principal (Legal) of Lightbox India Advisors Private Limited.

Some of the major issues and challenges are as follows:

#### Financial Resources

Availability of finance is critical for the startups and is always a problem to get sufficient amounts (Mittal, 2014; Truong, 2016). A number of finance options ranging from family members, friends, loans, grants, angel funding, venture capitalists, crowd funding etc are available. The requirement starts increasing as the business progresses. Scaling of business requires timely infusion of capital. Proper cash management is critical for the success of the startups (Skok, 2016; Pandita, 2017). A recent report paints a gloomy picture with 85% of new company's reportedly underfunded indicating potential failure (Iwasiuk, 2016).

#### Revenue Generation

Several startups fail due to poor revenue generation as the business grows. As the operations increase, expenses grow with reduced revenues forcing startups to concentrate on the funding aspect, thus, diluting the focus on the fundamentals of business. Hence, revenue generation is critical, warranting efficient management of burn rate which in common parlance is the rate at which startups spend money in the initial stages. The challenge is not to generate enough capital but also to expand and sustain the growth.

#### Team Members

To find and hire the right kind of talent for the business with skills to match growing customer expectations are one of the biggest challenges (Truong,2016). Apart from founder(s), startups normally start with a team consisting of trusted members with complementary skill sets. Usually, each member is specialized in a specific area of operations. Assembling a good team is the first major requirement, failure to have one sometimes could break the startup (Skok, 2016). According to a survey, 23 percent startups failed because members did not work as a team. Chirag Garg, CEO, HyperDell, feels that bringing in affordable talent at the right time is a challenge. As per Nitin Sharma, Principal & Founding member, Lightbox India Advisors Private Limited "Hiring and retaining high quality talent, especially in the areas of product and technology remains a key challenge" (Choudhary,2015)

#### • Supporting Infrastructure

There are a number of support mechanisms that play a significant role in the lifecycle of startups which include incubators, science and technology parks, business development centers etc. Lack of access to such support mechanisms increases the risk of failure.

#### • Creating Awareness in Markets

Startups fail due to lack of attention to limitations in the markets. The environment for a startup is usually more difficult than for an established firm due to uniqueness of the product. The situation is more difficult for a new product as the startup has to build everything from scratch.

#### Exceed Customer Expectations

The next most important challenge is gauging the market need for the product, existing trends, etc. Innovation plays an important role, since, that the startup has to fine-tune the product offerings to suit the market demands (Skok, 2016). Also, the entrepreneur should have thorough domain knowledge to counter competition with appropriate strategies. Due to new technologies that are emerging, the challenge to provide over and above an earlier innovation is pertinent. Namrata Garg, Director, SendKardo feels that the biggest challenge is the need to constantly reinvent and come up with a service to be able to match up customer expectations and exceed them.

#### • Tenacity of Founders

Founders of startups have to be tough when the going gets tough. The journey of starting a venture is fraught with delays, setbacks and problems without adequate solutions. The entrepreneur needs to be persistent, persuasive, and should never give up till he/she achieves desired results. History is replete with startups who gave up the fight when things went wrong. Sometimes the product could be ahead of its time or may require complimentary technology /products for the use by the customers. For example, Apple had to delay introduction of iTunes till the regulations favored the launch. It is also relevant to quote Steve Jobs who by commenting "A lot of times, people don't know what they want until you show it to them" reiterates the fact those products from startups mostly fall in the "new and untried" category where the success rate is minimal.

#### • Regulations

Starting a business requires a number of permissions from government agencies. Although there is a perceptible change, it is still a challenge to register a company. Regulations pertaining to labor laws, intellectual property rights, dispute resolution etc. are rigorous in India which takes about 30 days to comply compared to just 9 days in OECD countries. Also, as per World Bank report, "World Bank Ease of Doing Business", India ranks 142 out of 189 economies (Mittal,2014).

#### Growth Decelerators

Some of the agencies which are part of the startup ecosystem themselves can sometimes become hurdles in the growing stages. As per Sneh Bhavsar, co-founder and CEO, OoWomaniya one of the major issues is the influence of incubators, institutes and similar organisations which try to control, manage and be the daddies of the start-ups in the name of helping, mentoring etc (Choudhury, 2015). This needs proper coordination among the organizations for mutual benefit.

#### Lack of Mentorship

Milan Hoogan, Vice President -Sales and Marketing at Erfolg Life Sciences feels that lack of proper guidance and mentorship is one of the biggest problems that exist in the Indian startup ecosystem (Choudhury, 2015). Most of startups have brilliant ideas and/or products, but have little or no industry, business and market experience to get the products to the market. It is a proven example that a brilliant idea works only if executed promptly (Mittal, 2014). Lack of adequate mentor-ing/guidance is the biggest challenge which could bring a potentially good idea to an end.

#### Lack of a Good Branding Strategy

Absence of an effective branding strategy is another issue that prevents startups from flourishing at a faster pace. Hemant Arora, Business Head-Branded Content, Times Network opines that branding demands paramount attention as it gives an identity and occupies a space in the consumer minds(Choudhury, 2015).

#### Replicating Silicon Valley

Koushik Shee, Founder and CEO, Effia, feels that Indian startups get influenced by Silicon Valley models which may not succeed in Indian scenario. Lot of tweaking and modifications could be required when transplanted into Indian markets keeping in mind Indian infrastructure in terms of roads, internet, electricity and telecom penetration (Choudhury, 2015).

#### **REASONS FOR FAILURE**

As regards major reasons for failure of startups, a survey based on analysis of 101 firms showed that 42% failed as the product had no market, 29% firms ran out of cash, 23% did not have the right team, 18% closed due to pricing issues, 17% firms had poor product, 14% failed due to poor marketing and 8% had no investor interest(Griffith, 2014).

#### AVENUES FOR STARTUPS

In spite of challenges and problems that startups are facing, Indian markets provide a plethora of opportunities to find solutions tailored to solve them. Below is a list of few of the opportunities that are discussed for consideration by startups.

#### INDIA'S LARGE POPULATION

The population of India is a huge asset for the country. By 2020, it is expected that the working age population would surpass the non-working population. This unique demographic advantage will offer a great opportunity to any startup. Various infrastructure issues and the bottom- of- the- pyramid market would provide huge opportunities for the startups.

#### > CHANGE OF MIND SET OF WORKING CLASS

Traditional career paths will be giving way to Indian startup space. Challenging assignments, good compensation packages would attract talented people to startups. Also, it is seen that several high profile executives are quitting their jobs to start or work for startups. To reinforce the trend being seen, a survey conducted by Economic Times also confirmed that the number of students joining startups and e-commerce companies has grown considerably in the recent years (Anand, 2016)

#### HUGE INVESTMENTS IN STARTUPS

Huge investment in Indian startups from foreign and Indian investors is taking place. In 2015, more than 300 deals were done by 300+ angels and venture capital/ private equity players with around \$6.5-billion (Rs 42,300Cr) investments making India the most sought after destination for investments. Some of the active players are New York-based Tiger Global Management, Russian company- DST Global, Japanese telecom giant Softbank, Sequoia Capital and Accel Partners. More and more are going to join the bandwagon as this is the tipping point in Indian commerce for making good returns by backing potential unicorns.

#### > INVESTMENTS BY BIG BUSINESS HOUSES

Big business houses are already investing in startups as they cannot use their infrastructure to concentrate on small outfits like startups which require different skill-sets. Industrialists like Ratan Tata (Ola, Bluestone etc), Azim Premji (DataStax, Myntra etc.) and many more are investing in startups giving desired traction and respectability to the segment.

#### > EXAMPLES OF OPPORTUNITIES FOR STARTUPS

Startups in Indian scenario have a tremendous scope in catering to local and niche markets that could be viable and sustainable with early potential of revenue generation. With small area of operations and right product /service the success rate could be high with possible chance for expansion. The bottom-of-the pyramid space is a potential market for offerings ranging from food, clothing, water and hygienic items. The selection of items would be based on the entrepreneurs' expertise and the area of operation.

List of Current Startups and Area of Operations	
Area of Operation	Startup Firm Name
Online food delivery	FRESHMENU,SWIGGY
Online fish, meat delivery	FRESHTOHOME
Big data analytics for trade	PEELWORKS
Online pharmacy	MYRA
Platform to get local businesses online	NOWFLOATS
Logistics management software	FAREYE
Lifestyle tracking platform	HEALTHIFYME
Payments solutions for credit/debit cards	PINELABS
AI-driven solutions for retailers-	STAQU
Packaged ready-to-cook idli /dosa batter	IDFOODS
Peer-to-peer lending	FAIRCENT
Courses 47 Charles to Market TOL 2017	

TABLE 2: IS A LIST OF CURRENT OFFERINGS BY STARTUPS

Source: 17 Start-ups to Watch, TOI, 2017

#### http://ijrcm.org.in/

## CONCLUSIONS

The current economic scenario in India is on expansion mode. The Indian government is increasingly showing greater enthusiasm to increase the GDP rate of growth from grass root levels with introduction of liberal policies and initiatives for entrepreneurs of the Indian start-ups. With government going full hog on developing entrepreneurs, it could arrest brain drain and provide an environment to improve availability of local talent for hiring by startup firms. Small contributions from a number of entrepreneurs would have cascading effect on the economy and employment generation which would complement medium and large industries efforts catapulting India into a fast growing economy. The startup arena has lot of challenges ranging from finance to human resources and from launch to sustaining the growth with tenacity. Being a country with large population, the plethora of opportunities available are many for startups offering products and services ranging from food, retail, and hygiene to solar and IT applications for day to day problems which could be delivered at affordable prices. It is not out of place to mention that some of these startups would become unicorns and may become world renowned businesses by expanding into other developing and underdeveloped countries.

#### REFERENCES

- 1. Anand, Paramjit, "Opportunities for Startups in India", Acreaty Management Consultant (P) Ltd, The Entrepreneur, Feb, 2016 www.theentrepreneur.com/article/270330.
- Derek, Iwasiuk, "Key Challenges, Opportunities for Tech Startups in Emerging Markets," Moneycontrol.com, 2016, http://ventureburn.com/2016/08/keychallenges-opportunities-tech-startups-emerging-markets/. Accessed on 22.02.18
- 3. Dr. K. V. Ramana "Make in India Illusion or Possible Reality Project?" International Journal of Academic Research, April-June, 2015
- 4. http://fortune.com/2014/09/25/why-startups-fail-according-to-their-founders/ Accessed on 20.02.18
- India filings Report, "Challenges faced by Startups in India", 2016, https://www.indiafilings.com/learn/challenges-faced-startups-india/.Accessedon 19.02.18
   K. Kalaivani "A Study on the Impact of Make in India on HRM Practices An overview". Indian Journal of applied research, Volume 5 Issue 4 April 2015.
- 7. Ministry of Urban Development (2014). Draft Concept Note on Smart City Scheme. <a href="http://smartcities.gov.in/">http://smartcities.gov.in/</a>) Accessed on 17 June 2015.
- 8. Mittal Ashish, "Indian Startups: Challenges and Opportunities", Economic Times, 24.11.14, https://economictimes.indiatimes.com/small-biz/startups/indianstartups-challenges-and-opportunities/articleshow/45272. Accessed on 21.02.18

## 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**

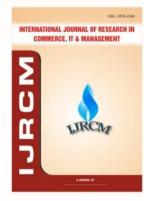
In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived 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 cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Fournals

OF RESEARC

TERNATIONAL JOURNAL COMMERCE & MAN





INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/