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, dian Citation Index (ICI), J-Gage, India [link of the same is duly available at Infilbnet of University Grants Commission (U.G.C.)]

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.	AN ANALYTICAL OVERVIEW OF E-COMMERCE IN INDIA Dr. M. L. DHAKA & ABHILASHA KADYAN	1
2.	AN ANALYSIS OF TRENDS IN VENTURE CAPITAL FUNDS IN INDIA AND THE IMPACT OF COVID 19 B. N. LALITHCHANDRA & Dr. M. SRIRAMULU	4
3.	A COMPARATIVE STUDY OF MOBILE BANKING TRANSACTION OF NATIONALIZED BANKS AND FIVE LEADING PRIVATE SECTOR BANKS OF INDIA MITHUN DAS	10
4.	THE EFFECT OF THE INTERNET OF THINGS ON CUSTOMER ENGAGEMENT: AN EMPIRICAL STUDY OF INSURANCE COMPANIES IN INDIADr. MANISH BADLANI, Dr. RITIKA MOOLCHANDANI & SHYAM BIHARI DUBEY	15
5.	PROBLEMS IN E-BANKING USERS IN ADDIS ABABA, ETHIOPIA MOHAMMED NEGASH	21
	REQUEST FOR FEEDBACK & DISCLAIMER	26

iii

FOUNDER PATRON

Late Sh. RAM BHAJAN AGGARWAL

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

CO-ORDINATOR

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 DARÇIN** 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
<u>http://ijrcm.org.in/</u>

v

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

AMITA

FINANCIAL ADVISORS

DICKEN GOYAL Advocate & Tax Adviser, Panchkula NEENA Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS

JITENDER S. CHAHAL Advocate, Punjab & Haryana High Court, Chandigarh U.T. CHANDER BHUSHAN SHARMA Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT

SURENDER KUMAR POONIA

DATED:

vi

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 Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) Landline Number (s) with country ISD code E-mail Address Alternate E-mail Address Nationality

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

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. <u>**pdf.**</u> <u>**version**</u> is liable to be rejected without any consideration.
- b) The sender is required to mention the following in the SUBJECT COLUMN of the mail:

New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

- c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is expected to be below 1000 KB.
- e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
- g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
- 2. **MANUSCRIPT TITLE**: The title of the paper should be typed in **bold letters**, centered and **fully capitalised**.
- 3. **AUTHOR NAME (S) & AFFILIATIONS**: Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.
- 4. ACKNOWLEDGMENTS: Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
- 5. **ABSTRACT**: Abstract should be in **fully Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA**. *Abbreviations must be mentioned in full*.
- 6. **KEYWORDS**: Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
- 7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
- 8. **MANUSCRIPT**: Manuscript must be in <u>BRITISH ENGLISH</u> prepared on a standard A4 size <u>PORTRAIT SETTING PAPER</u>. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.
- 9. HEADINGS: All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
- 10. **SUB-HEADINGS**: All the sub-headings must be bold-faced, aligned left and fully capitalised.
- 11. MAIN TEXT:

THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION REVIEW OF LITERATURE 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 http://ijrcm.org.in/

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

4

AN ANALYSIS OF TRENDS IN VENTURE CAPITAL FUNDS IN INDIA AND THE IMPACT OF COVID 19

B. N. LALITHCHANDRA ASST. PROFESSOR SREE VIDYANIKETHAN INSTITUTE OF MANAGEMENT SREE SAINATH NAGAR

Dr. M. SRIRAMULU ASST. PROFESSOR GOVERNMENT DEGREE COLLEGE NAIDUPETA

ABSTRACT

It is a proved fact that entrepreneurship facilitates the creation of innovative enterprises, which in turn influences the improvement in competitiveness of the economy, particularly in India, where Start Ups are playing an important role in the development of innovative entrepreneurship. Venture Capital plays a significant role by providing risk capital and handholds the development of enterprises, thereby bridges the gap where traditional sources of funds cannot participate actively in funding new ventures, brings in smart advice, hand-on management support and other skills that help the entrepreneurial vision to be converted to marketable products. It was these inputs that made India to open its doors to private venture capital and the Venture Capital has made a significant contribution to development of entrepreneurship as well as improving competitiveness. The present paper primarily deals with the role of venture capital in the development of entrepreneurship in general and Start Ups in particular. Exclusively relying on secondary sources of data collected from international and national level reports prepared by reputed corporate institutes, research papers and reports of the Ministry of MSMEs, Government of India, this paper makes a modest attempt to analyze the role of Venture Capital in India. The analysis in this paper is focused on different aspects of venture capital investments in India. Special mention was made to the role of venture capital towards the contribution of capital and broad types of venture capital as an introduction to the present analysis. In the light of this introduction, a critical analysis is presented on introduction of venture capital in India, financing the investments to entrepreneurs, trends in venture capital investments in India during 2010-17, and to the recent trends influenced by COVID 19 with reference to the deals and their values, sector-wise venture capital attracted in India. A comparative analysis is provided highlighting the impact of COVID 19 for the period of January 2019 to June 2020. An attempt is also made to analyze the significance of the role of venture capital in generation of income and employment, as a financial mechanism for achieving the sustainable development and economic growth in India, the paper focuses the need for modifying the venture capital funds to play an active role for the industrial development in India, particularly for start-up enterprises.

KEYWORDS

COVID 19, venture capital investments, start ups, deals and investments.

JEL CODES G10, G11, G19.

INTRODUCTION

uring the post-financial crisis period, a new financing eco-system for new ventures has emerged particularly in recent years which have exerted significant implications both for investors and entrepreneurs. A variety of discussions took place and debates were made on the role of alternative funding channels. As a complementary effort there was a heavy pressure from seed and later stage Companies for alternative source of financing have arrived at a conclusion that the traditional closed-end venture capital funds be made as an unique investment process. However, investors have to be cautious for identifying successful investments and the identification must depend on skills and capabilities of the investors. A special focus was laid on financing entrepreneurial companies, especially start-ups and early stage ventures as start-up scene around the world was exploding and disrupting the existing business models. It was observed that investing in entrepreneurial ventures was characterized by very high degree of uncertainty and venture capitalists can create value despite high degree of uncertainty. Much attention was laid on understanding the venture capitalists own incentives and constraints which were found linked to the fund-raising cycle and the way in which the venture capital funds were structured. Being influenced by these experiences, entrepreneurial finance was explored by the following three perspectives:

- 1) The founder's perspective
- 2) The venture capitalists perspective, and
- 3) The investors backing the venture capital.

As a result of these explorations of perspectives, venture capital has emerged as an important source of funding, which had a significant effect on reshaping the start up ecosystem. Then onwards, the corporate entities have used a common approach to identify the funding options based upon the positioning of the company in its life cycle and decomposition of capital market industry into different segments, which were suitable for their maturity stage of development, size, typical investment needs, and availability of information on corporate ownership and governance models.

Attempts were made to identify the potential funding gaps, which was to be filled through appropriate funding strategies aimed at funding the most suitable type of financial investor. It was also identical that each financial system would be affected by a certain amount of allocative efficiency resulting in a gap, referred as the "primary funding gap" between the demand for financial resources for start-up companies and the supply of early stage equity capital, particularly for young and newly created small and medium sized enterprises. Consequent to this development thinking, the domain of venture capital was identified as the only source of external financing after the choices available for internal financing referred as "insider seed money". Consequently, venture capital has emerged as one of the major alternatives over the last two decades in the form of "information venture capital market"- such as "Business angels" and "Business Angel Organization".

OBJECTIVES

A critical examination of the performance of venture capital is the primary aim of the present paper, particularly in case of start ups in India. Besides this primary objective, the present paper aims at the following supplementary objectives also:

- 1. To assess the contribution of venture capital and financing the start ups in India
- 2. To analyse the trends in private equity /venture capital during the 3 stages of investment covering the period of 11 years i.e. 2010 to 2020.
- 3. To present the recent trends in venture capital in India with reference to pre and post –COVID -19 periods (before 2019 and during 2019 and 2020.)
- 4. To examine the reasons for slow growth of venture capital funds in India, and
- 5. To explain the implications of COVID-19 for venture capital funds in India.

http://ijrcm.org.in/

5

RESEARCH METHODOLOGY

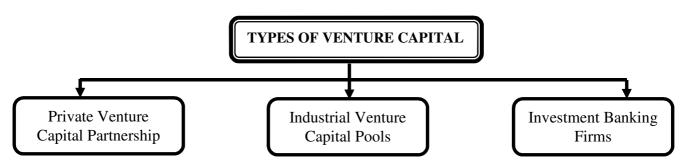
The present analytical study is exclusively based on secondary data sources, focusing on a critical analysis of role of venture capital in financing start ups in India. An attempt is made to examine the recent trends in the performance of venture capital in India. Attention was paid on to present the role of venture capital investments in top sectors and specifically to present the impact of COVID-19 on venture capital investments. To satisfy the objectives mentioned above, relevant secondary data was collected for 11 years i.e. from 2010 to 2020, covering three important kinds of investments, appropriate for three stages of firms/companies in India. Relevant data and insights were gathered from International and National research reports as well as the research papers published in peer reviewed reputed journals like Bain and Company, Venture Intelligence, KPMG, EY, PREQIN PRO etc.

DISCUSSION AND RESULTS

VENTURE CAPITAL AND CONTRIBUTION TO CAPITAL

Venture capital is a form of financing used by start-up and young companies at different stages of growth. Funds flowing into a company in the form of an investment rather than a loan, controlled by an individual or small group known as 'venture capitalists'. Venture capitalists provide large sums of money, advice and prestige by their presence. By obtaining the venture capital backing means that the business would be in the venture capitalist eyes with potential and rapid and profitable growth. Generally, venture capitalists define their investments by the business life cycle-seed financing, start-up financing, second stage financing, bridge financing and leverage buyout. If classified by life-cycle of a business, some venture capitalists prefer to invest in start-up companies, featured by high risk and potential for return, same deal with second-stage financing for expansion purposes and same venture capitalists concentrate solely on supplying funds for management-led buyouts.

The following three are the broad types of Venture Capital:



The first type of venture capital is a largest source of risk capital, aims at business which has the capability to generate a 30% return in investment each year. The capitalist like to participate in the planning and management of the business for which funds were invested.

The second type of venture capital focuses on high tech firms or companies that use state of the art technology in a unique manner, which are expected to achieve a high rate of success.

The third type of venture capital provides risk-capital for expansion and early stage financing. In general, venture capital fills the void between sources of funds for innovation-chiefly corporations, government bodies and the entrepreneurs) and traditional lower-cost sources of capital available to ongoing concerns and expects to earn a consistently superior return on investments in inherently risky business ventures.

VENTURES CAPITAL IN INDIA

In India, SEBI has laid down the activities which constitute eligible business activities qualifying for the concessions available to a recognized. Venture Capital Fund. SEBI (VC funds) Regulation -1996 defined venture capital fund as "a fund established in the form of or trust a company having a dedicated pool of capital which raises money through loan, donations, issue of securities or units as the case may be and makes or proposes to make investment in accordance with these regulations." In India, the venture capital funds are playing an important role in supplying management and marketing expertise to unlisted, new and small private business especially in technology-oriented and knowledge-intensive business or industries which might have long development cycles and which usually do not have access to conventional sources of capital. In India the activities of venture capital funds include the provision of:

- 1) Seed capital for industrial start-ups.
- 2) Additional capital to new business at various stages of their growth.
- 3) Equity financing or leverage buy-out financing to management groups for taking over other companies.
- 4) Bridge Finance
- 5) Capital to mature enterprises for expansion, diversification and restructuring.

VENTURE CAPITAL IN INDIA

Though in India, a large sophisticated financial system is in operation, in additional to formal institutions, informal financial institutions are playing a dominant role as sources of capital. Venture capital industry in India was introduced through the budget speech for the year 1988. In collaboration with ICICI, the UTI set up a venture capital fund of Rs.20 Crore for fostering industrial development during the year 1988-89. The UTI has launched Venture Capital Unit Scheme (VECAUS-I) to raise resources and with Rs.100 Crore, the second venture capital unit was set up for financing Greenfield ventures.

In 1985, the Risks Capital Funding (RCF) was sponsored by IFCI to provide positive encouragement to new entrepreneurs. It has provided risk capital and technology finance under is roof to innovative entrepreneurs and technocrats for their ventures.

The first private sector venture capital fund was set up by ANZ Grindlays Bank in India with an initial capital of Rs 10cr. In Banking Industry, the subsidiaries of SBI and Canara Bank have started the provision of venture capital funds for the development of industries such as watches, seamless metal, cement and ceramics. In addition to the regulatory mechanism of SEBI, the government regulations and policy are very congenial for the development of venture capital industry. by

sanctioning tax breaks and concessions to the venture capital funds and tax exemptions under section 10(23FB) of IT Act. However, such privileges are not allowed to shareholders of a venture capital company.

FINANCING THE INVESTMENTS TO ENTREPRENEURS

Generally, the venture capital provides funds for long-term under the following three modes of financing:

- 1) Equity
- 2) Conditional Loan and
- 3) Convertible Loans

Under the above three modes, the venture capitalists provide finance for investment to entrepreneurial ventures, particularly related to the sectors like biotechnology, medical services, communications, electronic components, and software companies. To maintain a balance between risk and profitability, venture capital firms finance the following stages of investment requirement.

STAGES OF INVESTMENT FINANCING

- 1) Seed capital and Research and
 - **Development Projects**
- 2) Start-ups
- 3) Second Round Finance

- Development Capital
 Expansion Finance
 Replacement Capital
 Turn Arounds
- 5) Buyouts

Early stage financing stage need seed capital and the financial risk increases progressively as the research phase moves into the development phase. Venture capital is provided to undertake these risks and make investments in R&D projects which promise higher returns in future. Venture Capital is necessary for startups with inadequate finance to commercialize new technology and resultant products. Second round finance meets the financial needs for a company at the stage when the product was launched in the market and has not earned. Adequate profits to attract new investors.

Later stage financing includes development capital to purchase of new equipment plant, expansion of market and launching of product into new regions and loan. Expansion finance focuses on low risk ventures. Buy oust refers to the management control by creating a separate business by separating it from their existing owners. These buyouts include management buyout (MBOs) and management buy ins (MBI). Replacement capital is another aspect of financing is to provide funds for the purchase of existing shares of owners. "Turn arounds" is a form of venture capital financing which involves medium to high risks and buying the control of a sick company.

The venture capitalists evaluate technology and study potential markets besides considering the capability of the promoter to implement the project related to early stage investments. They examine new markets and track record of the business in the later stage investments.

TRENDS OF VENTURE CAPITAL FINANCING IN INDIA

An attempt is made to analyze the trends in Venture Capital Investments made in India during the period 2010 to 2017, based on secondary sources of information. The trends are presented in Table 1:

Year	Value of Deals (US \$ million)	Volume of Deals (No. of Deals)
2010	8430	372
2011	9641	446
2012	7546	416
2013	9116	392
2014	11683	470
2015	19635	767
2016	16203	588
2017	26458	595

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p.13

The data presented in Table. 1. reveals that during the period 2010 to 2017, there was a significant increase in the flow of Venture Capital investments as well as in the no. of deals. The value of deals which was US \$ 8430 in 2010 has remarkably increased to US \$ 26458, with a simultaneous increase in no. of deals from 372 to 595. The year 2017 was treated as the best year in terms of the value of PE/VC investments, as the overall underlying trends of deals becoming larger and more complex.

However, it was observed that the impressive growth in absolute terms was due to the large deals by Softbank from its gigantic US\$ 100 billion Vision Investment Fund. In 2017, Softbank made investments worth of US\$ 5 billion in the Indian market and most of these investments have flown from Vision Fund, particularly for e-commerce Company, Flipkart and also US \$ 1.4 billion investments in Paytm and the US \$ 1.1 billion investments in Ola Cabs along with Tencent.

A BIRD'S EYE-VIEW OF OTHER DEALS

An analysis is also made to present the other deals and their volume particularly covering start up deals, buyout deals, credit deals, growth deals and PIPE deals and their respective values of deals during the period 2014-2017 in India. Table. 2 presents these details.

s.	Investments in	2014		2015		2016		2017	
No		No. of Deals	Value (US\$b)						
1	Start up Deals	253	1.7	454	4.8	300	2.1	372	3.5
2	Buyout Deals	11	1.3	23	3.0	29	3.9	25	3.2
3	Credit Deals	24	0.6	35	1.1	65	2.9	57	2.5
4	Growth Deals	121	6.6	213	8.5	160	5.7	159	13.5
5	PIPE Deals	61	1.6	42	2.3	34	1.6	42	3.8

TABLE 2: OTHER DEALS AND THEIR RESPECTIVE VALUES IN INDIA DURING 2014-2017

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p.16-18

The following observations can be made from the data presented in Table 2:

1) The start-ups deals have recorded highest growth in 2015, with a drop to 300 deals with a value of US \$ 2.1in 2016 from 454 deals with US \$ 4.8 billion. Ecommerce was the sector which has received the largest amount start-up funding at US \$819 million.

2) Though the no. of buyout deals was 11 in 2014, picked up momentum from2015 onwards, registering the highest number of 29 in 2016, with a drop to 25 deals. In terms of value of deals also the buyouts registered the highest value of US \$ 3.9 billion in 2016, thought it was only US \$ 1.3 billion in 2014.

3) Credit deals, which emerged as a new mode of funding in 2016, proved as a viable means of financing for the real estate sector, as can be seen from the data that with 65 deals and representing the value of US \$ 2.9 billion in 2016, which has increased from deal value of US\$ 0.6 billion in 2014.

4) Growth capital account for more than 50.0 per cent share of the total value invested and the year 2017 was proved as the best year for growth deals which has touched the peak no. of deals with value of US \$ 13.5 billion.

VOLUME NO. 10 (2020), ISSUE NO. 08 (AUGUST)

7

5) For PIPE investments also 2017 was proved as the best year as they have registered highest no. of deals (42) which received investment of US \$ 3.8 billion, though an investment of US \$ 1.6 billion was invested across 61 deals.

SECTOR-WISE VENTURE CAPITAL INVESTMENTS IN INDIA

A similar view can be seen with regard to the sectoral distribution of venture capital investments in India during the year 2017, which was considered as the best year compared to the year 2016. The important sectors like financial services, real estate, e-commerce, technology, retail and consumer products, and health care recorded the highest ever investments by Venture Capitalists in India. Except for technology, which recorded a decline of 10%, all the other sectors mentioned above grew by over 50% in terms of value. Apart from these, sectors such as logistics, power and utilities and food and agriculture also witnessed good investment activity in 2017. The sector-wise amounts of venture capital attracted are presented in Table.3.

S. No.	Sectors Attracted investments	No. of Deals and Value of Deals (US \$ b)				
		Deal Value	% contribution to overall value	No. of Deals	% contribution to overall Deal volume	
1	Financial Services	7.2	27	112	19	
2	Real Estate	5.0	18	53	9	
3	E-Commerce	4.7	17	60	10	
4	Technology	1.8	7	121	20	
5	Power and Utilities	1.3	5	NA	NA	
6	Health care	1.0	4	37	6	
7	Retail and Consumer	0.8	3	37	6	
8	Others	4.7	18	128	22	

TABLE 3: GROWTH OF INVESTMENTS ACROSS SELECTED SECTORS IN INDIA DURING 2017

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p. 18

Among the different major sectors that have attracted venture capital, as presented in Table. 3, reveals that Financial Services with US \$ 7.2 billion across 112 deals has attracted the highest percentage of contribution to overall value of the deals. This was followed by Real Estate sector contributing 18 % of the overall value estimated as US \$ 5.0 billion across 53 deals. E-commerce was the next succeeding sector which has attracted US \$ 4.7 billion across 17 deals during the year 2017. Other sectors also proved more effective in attracting the venture capital to the tune of 18% of the overall value, accounting for US \$ 4.7 billion across 37 deals. The sectors like technology, health care and retail and consumer have attracted investments ranging from US \$1.8 billion to US \$ 0.8 billion during 2017 in India.

SECTOR WISE DEAL SIZE-RECENT TRENDS

Table 4:

The experts have observed that the Indian VC industry has passed through three distinct phases in the last decade. The first phase refers to the period from 2012 to 2015, which was called as "Growth Stage". The second phase refers to the period of two years, i.e. 2016 and 2017, called as "Maturing and Moderation" period. The third phase refers to the years 2018 and 2019, called as "Renewed Optimism" period buoyed by marquee exits for investors like Flipkart, MakeMyTrip and Oyo, and a strong start-up activity in new sectors such as Fintech and SaaS along with market depth in e-commerce.

An attempt is made to present the average deal size by sectors during the third phase of passage of Venture Capital funds in India. The details are presented in

TABLE 4: THE AVERAGE VC DEAL SIZE BY SECTORS DURING THE 3 RD PHASE IN INDIA	
TABLE 4. THE AVENAGE VE DEALSIZE DI SECTORS DORING THE 5 THASE IN INDIA	

Sectors	Average De	No. of Deals		
Sectors	2018	2019	2018	2019
1. Consumer Tech	11.6	16.9	188	216
2. Fintech	14.3	26.7	71	609
3. Software/SaaS	11.9	12.1	50	88
4. B2B Commerce and Tech	13.2	16.8	38	82

Source: Bain and Company (2020) India Venture Capital Report-2020: Perspectives on the Funding and Start-Up Ecosystem, p.10.

It is evident from the Table.4 that 83.3 per cent of the venture capital investments was concentrated in four sectors like Fintech, Consumer Tech, B2B Commerce and Tech and Software/SaaS. The sector- Fintech was the largest sector accounting for approximately 36.8 per cent of the total investments with 609 deals during the year 2019 followed by Consumer Tech and B2B Commerce and Tech.

GROWTH IN START-UP ECOSYSTEM

It is well known that India has the best start-up ecosystem. A number of initiatives and policy changes like Startup India, Atal Innovation Mission, Digital India and assistance through SIDBI have created a congenial environment for Start-Ups and Venture Capital growth in our country. The estimations revealed that the no. of start-ups have grown at the rate of 17.0 per cent each year from 2015 onwards. The estimated trends in the rapid growth of Start-Up ecosystem in India is presented in Table 5:

Year	No. of Cumulative Start-Ups	No. of Funded Start-Ups			
2015	51	3.6			
2016	61	4.6			
2017	68	5.4			
2018	75	6.0			
2019	79	6.4			

Source: Bain and Company (2020) India Venture Capital Report- 2020: Perspectives on the Funding and Start-Up Ecosystem, p.22.

The data presented in Table. 5 shows that the no. of cumulative start-ups has increased from 51 to 79 (100K), indicating a percentage increase of 54.9 per cent in 2019 over 2015. Similarly, the no. of funded start-ups has also grown from 3.6 to 6.4 (100K) indicating 77.8 per cent of increase in 2019 over 2015.

IMPLICATIONS OF COVID 19 FOR VC FUNDS

The effect of COVID 19 has also touched the trends in Venture Capital funds. Venture Capital investments in the present financial year are found dropping in terms of no. of deals and value of investments. A comparative picture for the first half of 2019 and 2020 is presented to estimate the impact of COVID 19 on investments by venture capital funds. Table 6 presents the impact of COVID 19.

VOLUME NO. 10 (2020), ISSUE NO. 08 (AUGUST)

S. No	Top sectors	First Half of 2019	Second Half of 2019	First Half of 2020*
1	Fintech	600	928	547
2	Healthcare	414	471	370
3	Education	108	146	244
4	Food	287	391	243
5	E-commerce	1257	1764	202
6	Artificial Intelligence	134	127	112
7	Consumer Brands	138	104	73
Top 7	Sectors	2938	3931	1791

Note: *Till June, 6, 2020

Source: Report of the Venture Intelligence -2020 and howindialives.com, 23rd June, 2020

The top sectors presented in Table. 6 reveals that the sector drivers have changed with a negligible changes brought about by the COVID 19. E- commerce is the largest looser as this sector has attracted \$1257 million and \$1764 million during the first and second half of 2019, could attract only \$ 202 million in the first half of 2020, losing more than a billion dollars (\$1055 million). This was followed by health care sector by losing \$136 million in the first half of 2020, compared to first half of 2019. The sectors like food (\$ -44 million), artificial intelligence (\$-22 million) and consumer brands (\$ -65 million) were also the losers during the first half of 2020, compared to first half of 2019. The venture capital investments have witnessed a decrease to the extent of 39.0 per cent in firsts half of 2020, as compared to first half of 2019 and a decline of 54.4 per cent compared to second half of 2019.

IMPACT OF COVID 19 ON VENTURE CAPITAL

The first case of corona virus was registered on January, 30th in India and the efforts of the Government to overdrive to contain virus were started during the second half of March, 2020. Though there were more investments in Start-Ups during the months of January and February, 2020, after these two months the Start-Ups have experienced the situation of lack of funds and many companies have announced layoffs. April and May, 2020 have proved more brutal for start-ups and the no. of deals have decreased to an average of 50 a month during January and April, to 20 in May and only one- fourth of the investments were made in May, 2020, as compared to May 2019, though there was a slight increase in the month of June, 2020. The details of the drop in venture capital investments in Indian start-ups are presented in Table 7:

TABLE 7: IMPACT OF COVID ON VENTORE CAPITAL 2019 AND 2020							
	Venture Capital Investments in Indian Start-Ups (in \$ Million)		Percentage Increase (+)/ Decrease () in 2020 over 2019				
Months	2019 2020						
January	1169	709	39.3				
February	281	791	+181.5				
March	786	392	50.1				
April	574	443	22.8				
Мау	788	202	74.4				
June	640	240	62.5				
For all the months	4238	2777	34.5				

TABLE 7: IMPACT OF COVID ON VENTURE CAPITAL :2019 AND 2020

Source: Report of the Venture Intelligence -2020 and www.howindialives.com, 23rd June, 2020

The estimations of drop in venture capital investments, as presented in Table.7, reveals that there was a decline of venture capital investments to the tune of \$ 1461 million (34.5 per cent) in the first half of 2020 compared to the first half of 2019. Except for the month of February, for all the 5 months, there was a decline in venture capital investments in Indian Start-Ups and highest decline was registered for the months of May and June.

CONCLUSION

In spite of the availability of vast pool of scientific and technical research abilities, India is still recognized as a low cost developer and service provider. Though India has skilled manpower, advantage of English-speaking human resources and cheap labor, its leadership is on a slipping edge as other countries such as Philippines, China and Vietnam, which are trying to grab the position of India. In recent years, the business activities and operations of the industries are getting more and more technology-oriented. Being attracted by the congenial business environment available in India, many foreign companies are getting located around Delhi, Mumbai, Bangalore, Hyderabad, Visakhapatnam, Tirupati and Sathyavedu, which are offering a good no. of employment opportunities to young, skilled and talented people. It is to be admitted here that there would be a phenomenal increase in start-up industries, which provide employment opportunities, if there would be proper, adequate and effective supply of venture capital funds. This can happen only when the right environment is created to understand the global forces and the operational features of life cycle of borrowing companies and it is sure that we can create a right replica of Silicon Valley in India, a phenomenon for the world to watch. No doubt, the COVID 19 crisis has brought up significant changes in the no. of deals and volume of venture capital investments as well as in start-up investment patterns, there is a shift in their focus from tech-centric start-ups in India like EdTech, FinTech and Cyber Security have been promoting their user demand, forming the important sources of attracting the investors. In addition, the efforts of the Government of India to extend \$ 130K for the development of an encrypted video conferencing solution encourage the development of start-ups in India during the post-COVID 19 crisis. Let us hope that the shifts in focus areas as well as the supporting efforts of the Government to unlock the effect of the present health crisis

REFERENCES

- 1. Alex Graham (2019), 'State of venture capital industry in 2019, Finance, p.14, www.toptal.com.
- 2. Apoorv Ranjan Sharma (2020), 'What COVID -19 crises means for India's Startup funding ecosystem in 2020', Financial Express, 1st June, 2020.
- 3. Arpan Sheth, Sriwatsan Krishnan and Samyukktha, Y (2020), India Venture Capital Report-2020: Perspectives on the Financing and Start Up Ecosystem, Bain and Company, Benguluru, pp.20-22.
- 4. M.Sriram (2019), What is Venture Capital and Growth of Venture Capital in India. Livemint, 9th January, 2019, pp.1-2.
- 5. Ernst and Young (2020), 'Report on The IVA-EY Monthly PE/VC Round Up'. February, 2020, pp.9-11.
- 6. KPMG Private Enterprise (2020), Venture Capital Pulse Reports', Asia, Pitch Book. 21st April, 2020, pp.5-6.
- Lukas Whitmore and Ewa Skornas (2020), 'Private Equity and Venture Capital Firms shared their Out-look for 2020'. S& P. Global Market Intelligence, 12th March, 2020, pp.1-3.
- 8. Mouliswara Srivastava (2020), 'VC Funding in Indian Start-Ups fell by 22% in Q'1,2020', The Economic Times, 16th May, 2020, p.6.
- M Haritha, Ravi V, Maruthi Reddy (2012), 'Role of Venture Capital in Indian Economy' IOSR Journal of Business and Management, Vol.4, Issue.2, pp.46-70.
 Professor Scott R. Baker (2016), 'Entrepreneurial Finance and Venture Capital', Northern University, Spring, pp.1-6, www.s-barker@kellogg.northwest-
- ern.edu. 11. Rajat Bhangerial (2018), 'Does Venture Capital Help You to Become a Better Entrepreneur' Linkedin, 4th June, 2018, pp.1-3.
- SEBI (2018), 'Committee Report on 'The Objectives and Vision for Venture Capital in India'. pp.1-6'. www.India.gov.in.

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/

8

- 13. Sriram, M (2019), 'What 2019 hold for Venture Capital Deals in India?', Livemint, 2nd December, 2019, pp.1-3.
- 14. Stefano Bonini and Vincenzo Capizzi (2019), 'The Role of Venture Capital in the Entrepreneurial Finance Ecosystem: Future Threats and Opportunities', Volume 21, Venture Capital, Issue 2 & 3, pp.137-175
- 15. Arun (2019), 'PE investments surge to all-time high of \$ 37 B in 2019', Venture Capital Intelligence Blog, 28th December, 2019, pp. 1-3.
- 16. Vikas Singh (2017), 'Top 7 Trends in Venture Capital Market in India', Blog Post, AO Smart letter, 22nd November, 2017, pp.1-3
- 17. www.bain.com
- 18. www.howindialives.com

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

ABOUT THE JOURNAL

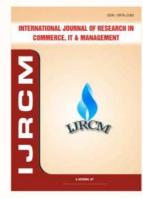
In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Fournals

IL OF RESEARC

TIONAL JOURNAL





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>