

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I  
J  
R  
C  
M



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

*Indexed & Listed at:*

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

Open J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)].

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 3412 Cities in 173 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<b>ATTITUDE OF M. Ed. STUDENTS TOWARDS e-LEARNING</b> <i>DR. SARABJEET KAUR</i>	1
2.	<b>THE CONSEQUENCES OF TAX ASSESSMENT ON TAX COLLECTION OF CATEGORY 'C' TAXPAYERS IN ETHIOPIA: A CASE STUDY IN MEKELLE CITY, TIGRAY</b> <i>NUGUSS MURUTS GEZAHEGN, DR. TEFATSION SAHLU DESTA &amp; YRGALEM GEBRESELISSIE ADANE</i>	4
3.	<b>A COMPARATIVE STUDY OF JOB SATISFACTION LEVELS OF EMPLOYEES IN TWO INDUSTRIES: AN EMPIRICAL REVIEW</b> <i>DR. S. M. MURALI KRISHNA, DR. P ATHMA KARAN REDDY &amp; DR. Y RAJENDRA PRASAD</i>	13
4.	<b>LIQUIDITY PERFORMANCE: A CASE STUDY OF NAGARJUNA FERTILIZERS COMPANY LIMITED</b> <i>S. SHOBHA &amp; DR. P. MOHAN REDDY</i>	19
5.	<b>RANKING OF PAYMENT SYSTEMS ON THE BASIS OF PERCEIVED USEFULNESS (PU) AMONG USERS IN NIGERIA</b> <i>CLEMENT IKENNA OKEKE</i>	24
6.	<b>A STUDY ON CUSTOMERS' ATTITUDE IN LIFE INSURANCE TOWARDS LIFE INSURANCE CORPORATION OF INDIA, TIRUCHIRAPPALLI</b> <i>HARIHARAN, K &amp; DR. K. KUMAR</i>	29
7.	<b>CREATIVITY AND INNOVATION: IMPORTANT DRIVERS OF ENTREPRENEURSHIP</b> <i>S. BALASUBRAMANYAM</i>	35
8.	<b>RETAIL MERCHANDISING AND BRAND BUILDING: A CASE STUDY OF BASMATI BRANDS</b> <i>G SRI LAKSHMI &amp; PITTA ISAAC NEWTON</i>	40
9.	<b>DATA MINING OF THE ASSOCIATION RULES BASED ON THE CLOUD COMPUTING</b> <i>A. THIRUGNANASAMBANDHA MURTHY</i>	48
10.	<b>SKEW DETECTION AND CORRECTION OF INDIAN SCRIPT DOCUMENTS</b> <i>VIKRAM SHARMA</i>	51
11.	<b>CONSUMER BEHAVIOR TOWARDS GOLD PURCHASE</b> <i>DEEPTHI SANKAR</i>	55
12.	<b>MERGERS AND ACQUISITIONS IN BANKING SECTOR</b> <i>DR. R. RADHIKA DEVI</i>	58
13.	<b>DISSATISFACTION OF EMPLOYEES DUE TO MOTIVATION AND LEADERSHIP: A CASE STUDY</b> <i>AJIT SINGH NEGI</i>	66
14.	<b>CONTRIBUTION OF WOMEN IN THE COMMON PROPERTY RESOURCE BASED ACTIVITIES IN TAWANG DISTRICT OF ARUNACHAL PRADESH, INDIA</b> <i>GEPI JINI</i>	69
15.	<b>CUSTOMER SATISFACTION ON MOBILE-PHONE MONEY TRANSFER SERVICES' USAGE IN DODOMA URBAN, TANZANIA</b> <i>NGILANGWA, ESTON &amp; V VENKATAKRISHNAN</i>	73
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	80

## CHIEF PATRON

**PROF. K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur  
(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)  
Chancellor, K. R. Mangalam University, Gurgaon  
Chancellor, Lingaya's University, Faridabad  
Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi  
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## FOUNDER PATRON

**LATE SH. RAM BHAJAN AGGARWAL**

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

## CO-ORDINATOR

**DR. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

## ADVISORS

**DR. PRIYA RANJAN TRIVEDI**

Chancellor, The Global Open University, Nagaland

**PROF. M. S. SENAM RAJU**

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

**PROF. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA**

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

## EDITORIAL ADVISORY BOARD

**DR. RAJESH MODI**

Faculty, Yanbul Industrial College, Kingdom of Saudi Arabia

**PROF. PARVEEN KUMAR**

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

**PROF. H. R. SHARMA**

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

**PROF. MANOHAR LAL**

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

**PROF. ANIL K. SAINI**

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

**PROF. R. K. CHOUDHARY**

Director, Asia Pacific Institute of Information Technology, Panipat

**DR. ASHWANI KUSH**

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

**DR. BHARAT BHUSHAN**

Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar

**DR. VIJAYPAL SINGH DHAKA**

Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur

**DR. SAMBHAVNA**

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

**DR. MOHINDER CHAND**

Associate Professor, Kurukshetra University, Kurukshetra

**DR. MOHENDER KUMAR GUPTA**

Associate Professor, P.J.L.N. Government College, Faridabad

**DR. SAMBHAV GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

**DR. SHIVAKUMAR DEENE**

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

**DR. BHAVET**

Faculty, Shree Ram Institute of Business & Management, Urjani

***ASSOCIATE EDITORS***

**PROF. ABHAY BANSAL**

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

**PROF. NAWAB ALI KHAN**

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

**ASHISH CHOPRA**

Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

***TECHNICAL ADVISOR***

**AMITA**

Faculty, Government M. S., Mohali

***FINANCIAL ADVISORS***

**DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

***LEGAL ADVISORS***

**JITENDER S. CHAHAL**

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

***SUPERINTENDENT***

**SURENDER KUMAR POONIA**

## CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript anytime** in ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## GUIDELINES FOR SUBMISSION OF MANUSCRIPT

### 1. **COVERING LETTER FOR SUBMISSION:**

DATED: \_\_\_\_\_

**THE EDITOR**  
IJRCM

**Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF**

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

**DEAR SIR/MADAM**

Please find my submission of manuscript entitled '\_\_\_\_\_ ' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

#### **NAME OF CORRESPONDING AUTHOR:**

Designation:  
Affiliation with full address, contact numbers & Pin Code:  
Residential address with Pin Code:  
Mobile Number (s):  
Landline Number (s):  
E-mail Address:  
Alternate E-mail Address:

#### **NOTES:**

- a) The whole manuscript is required to be in **ONE MS WORD FILE** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
- b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:  
**New Manuscript for Review in the area of** (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is required to be below **500 KB**.
- e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name, designation, affiliation (s), address, mobile/landline numbers, and email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
6. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.
7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
9. **MAIN TEXT:** The main text should follow the following sequence:

**INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESES****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****SCOPE FOR FURTHER RESEARCH****ACKNOWLEDGMENTS****REFERENCES****APPENDIX/ANNEXURE**

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed **5000 WORDS**.

10. **FIGURES & TABLES:** These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure. Sources of data should be mentioned below the table/figure.** It should be ensured that the tables/figures are referred to from the main text.
11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:
  - All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use **(ed.)** for one editor, and **(ed.s)** for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parentheses.
  - The location of endnotes within the text should be indicated by superscript numbers.

**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:****BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19-22 June.

**UNPUBLISHED DISSERTATIONS AND THESES**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

**ONLINE RESOURCES**

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

**WEBSITES**

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

**CREATIVITY AND INNOVATION: IMPORTANT DRIVERS OF ENTREPRENEURSHIP**

**S. BALASUBRAMANYAM**  
**ENTREPRENEUR & PAST PRESIDENT**  
**PEENYA INDUSTRIES ASSOCIATION**  
**BANGALORE**

**ABSTRACT**

*The purpose of this paper is to bring into the light the entrepreneurial practices and its mechanisms, study the role played by creativity and innovation in this process and over and above determining the techniques and methods to encourage creativity and innovation. According to the Schumpeter (1934), the entrepreneur is the prime mover in economic development, and his function is to "innovate", or "carry out new combinations". Further, he opines that an entrepreneur needs to be "creative, and should be able to take risk". While Peter Drucker states that, an entrepreneur is "someone who maximizes his business opportunities". These two statements clearly stress on the fact that business prospects are at the core of entrepreneurship. The entrepreneur must be creative and innovative to recognize the actual entrepreneurial possibilities and duly employ them to his advantage. In this context, Innovation starts with creativity and that is why they are treated as two sides of the same coin. For conversion of a business idea into a lucrative marketable concept, it is important to maintain balance between creativity and innovation.*

**KEYWORDS**

Creativity, Entrepreneurship, Entrepreneur, Entrepreneurial Process, Innovation, Small Enterprises.

**INTRODUCTION**

*"Capital isn't so important in business. Experience isn't so important. You can get both these things. What is important is ideas. If you have ideas, you have the main asset you need, and there isn't any limit to what you can do with your business and your life".*

**Harvey Firestone**

*"Creative thinking is not a talent, it can be learnt. It empowers people by adding strength to their natural abilities which improves teamwork, productivity and where appropriate profits".*

**Edward de Bono**

There is no scarcity of definitions of entrepreneurship and entrepreneur. After reviewing countless definitions of entrepreneurship, we can say that those terms, which explicate entrepreneurship, are ambition, perseverance, intuition, creativity, responsibility, commitment, but above all: passion. An entrepreneur can emerge because of any of the following: his own wish, knowledge acquired in product/service, opportunities offered by others, circumstances forced upon him, and support extended by the governments and so on. Nevertheless, an entrepreneur is a person who invariably looks for new business prospects, analyze, and develop ideas, and starts working on how to make them sustainable profitable concepts. Such conceptualized business ideas can produce the preferred end results provided the entrepreneur firmly believes in it. Throughout the journey from ideation to translation of a business idea into a reality, entrepreneur has to be creative and innovative and be ready to make sacrifices and accept the risks and uncertainty that the work involves. Creativity is the development of ideas about products, practices, services, or procedures that are novel and potentially useful to the organization and Innovation is the implementation of a new or significantly improved product, service, or process that creates value for business, government, or society. Thus, creativity and innovation play an unambiguous role in the course of identifying problems, methods of solving them and use of opportunities that firms face every day. The entrepreneur who continuously creates new ideas and innovates will be able to meet the challenges of changes and needs of modern society.

**ENTREPRENEURIAL PRACTICE AND TRAITS OF ENTREPRENEUR**

Small enterprises and entrepreneurs play a role of immense importance in the socio-economic growth of any nation because of their inbuilt strengths not only to create new jobs but also in creating and maintaining the welfare of the society. Nationally and globally, the small enterprises account for a remarkable 90% of all industries. Unquestionably, it is the driving force behind a large number of innovations, contributing a significant share to the respective national economy through employment creation, investments and exports. Encouraging entrepreneurship is seen as a means of releasing currently unused chances that are inherent in individuals, rejected technologies and combinations of resources.

**LITERATURE REVIEW**

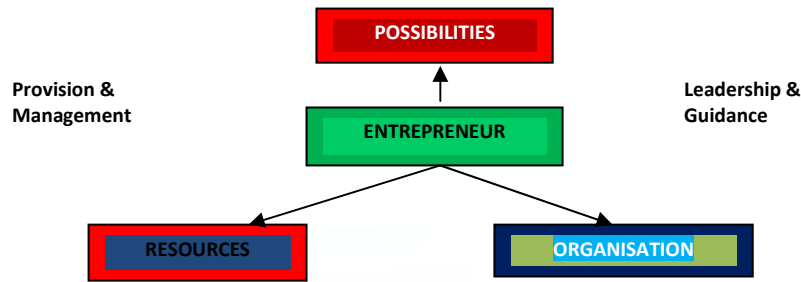
Entrepreneurship is all about the identification of an opportunity, creation of new organization, and pursuing new ventures (Carton et al. 1998). There are many studies done on entrepreneurship like external skills required in entrepreneurs. For example, Schumpeter (1934) has stated that an entrepreneur needs to be innovative, creative, and should be able to take risk. Wickham (2006) has also supported his views. Pajarinen et al. (2006) have said that entrepreneurs with higher academic background are more innovative and will use modern techniques and models to do business. Barringer and Bluedorn (1999) have described entrepreneurs as individuals who can explore the environment, discover the opportunities, and exploit them after proper evaluation.

From the above narrative of Entrepreneurship, it can be inferred that an entrepreneur should possess qualities such as higher academic qualification, creativity, innovativeness, risk-taking ability, responsibility, skill to discover opportunities, etc. Expertise to recognize the market potential is the focal point in entrepreneurship. The job of entrepreneur is not only to look into people's needs but also investigate whether there are areas in which these needs have not been met or have been met in a manner that is not acceptable to consumers<sup>6</sup>. Entrepreneur should recognize his opportunity in this. An individual or an entrepreneurial team can participate in implementation of perceived business opportunity.

Various researches show that an entrepreneurial team contributes to the growth and development of business and an individual entrepreneur contributes only to the creation of means of livelihood. Therefore, entrepreneurs who plan to develop a large and profitable business must constitute a team of managers who will help them do that.

Entrepreneurship is a combination of the following terms: new, innovative, creative, flexible, dynamic and prone to take risks. Entrepreneur, in addition to the resources, possibilities and organization, is a constituent of the entrepreneurial process. Figure below shows the importance of entrepreneur in the entrepreneurial process.

FIG. 1: COMPONENTS OF ENTREPRENEURIAL PROCESS



From the figure above it can be observed that entrepreneur is the core of the process. His expertise lies in linking the other three components of this process and such link results in the creation of value. Therefore, entrepreneur connects possibilities (through their identification in the market and the methods by which they can be used) with the resources (through their provision and the most efficient use) and organization (by directing activities towards the goal of the organization).

The extent to which an entrepreneur will be successful in managing the entrepreneurial process depends on the ability of entrepreneur to meet the exact needs of such entrepreneurial process. His competency is reflected through characteristics, such as self-confidence, independence, acceptance of risk, creativity, innovation and vision, which are relatively recognized with each entrepreneur.

Creativity and innovation occupy a special place among the traits of an entrepreneur. The entrepreneurial process begins by identifying and evaluating entrepreneurial opportunity, as well as by development of ideas in order to take advantage of the perceived business opportunity. Perceiving new business opportunities is often the result of knowledge and expertise of entrepreneur, emerging by the combination of education and experience, and the experience results from various business events. Creating and generating new ideas makes a creative process and the result of this process is invention. Thus, the invention is the design of a new idea, the creation of a new possibility for new or improved product or process. Creativity is a fundamental qualification for innovation, i.e. innovation is the change of creative ideas in a specific product/service/process.

Template below shows a relationship between invention, innovation and entrepreneurship. Through application of creativity and innovation, it is possible to solve problems and use possibilities which companies face. Therefore, creativity and innovation have a key role in the entrepreneurial process. Competitive advantage can be derived through the process of innovating and creating new products/services/processes or improving existing ones. The ability of entrepreneur is reflected in the fact that he uses changes creatively to change obstacles and constraints into advantages. It also shows the relationship of entrepreneur and his creativity and innovation, on one hand, and his expertise and knowledge of business, on the other hand.

FIG. 2

		Expertise and Knowledge of Business	
		Small	Large
Creativity and innovation	Large	Inventor	Entrepreneur
	Small	Promoter	Manager Administrator

By looking at the above template, it can be inferred that an individual who wants to become an entrepreneur must possess, in addition to a high level of proficiency and understanding of business, high creativity and innovation.

**CREATIVITY AS A TRAIT OF ENTREPRENEUR**

Creativity is the ability to create something new and valuable by the art of imagination, which also dominates among the above characteristics of entrepreneur. In the definition of entrepreneurship, the emphasis is on creativity, which includes the following:

- Creation of new business ventures and organizations;
- Creation of new combinations of goods and services, production methods, markets;
- Creative identification of new and existing opportunities;
- Creativity in using new and existing opportunities.

Creativity is usually defined as a continuous search for new and represents a forerunner to innovation<sup>16</sup>. This trait of entrepreneur is related to the insight of problems and finding suitable solutions. An individual is creative when looking at things in a new dimension. Creativity can also be defined as the ability to connect previously unconnected thoughts or ideas in a whole.

Therefore, only a creative entrepreneur can identify new business opportunities and chances, and he has skill to use them properly. In the words of Niccole Machiavelli "Entrepreneurs are simply those who understands that there is a little difference between obstacle and opportunity and are able to turn both their advantage"

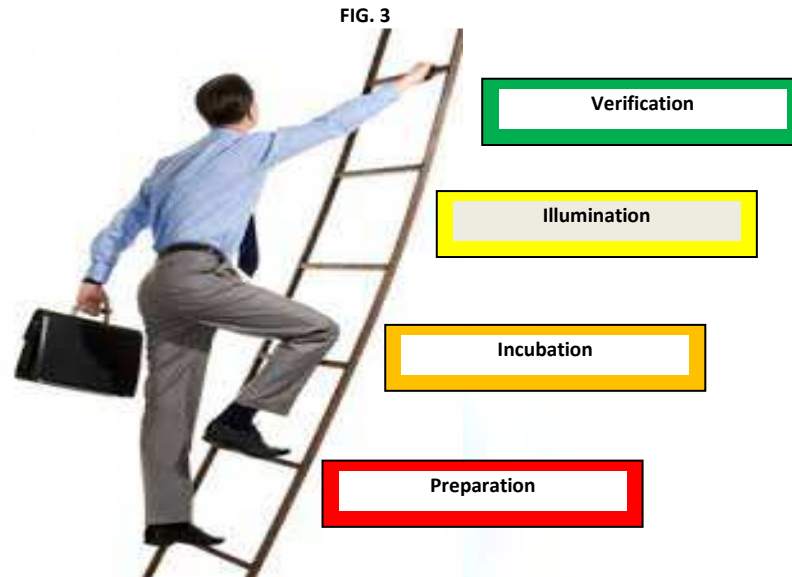
More than ever before, it is increasingly accentuated that creativity depends on knowledge, intellectual abilities, personal characteristics and motivations. These four causes are also the qualities of a successful, creative entrepreneur. According to Guilford<sup>19</sup>, creative people think divergently, i.e. aspire to create more ideas and look for more ways to solve a problem.

A successful entrepreneur must constantly look for changes, play a little, know how to accept the risks and constantly introspect 'What if? In this way, entrepreneurs develop skills, acquire knowledge, and stimulate motivation, what is the key to entrepreneurial success.



**STAGES IN THE CREATIVE PROCESS**

Four stages of Creativity, according to Graham Wallas, are preparation, incubation, illumination and verification as illustrated in Fig. below.

**PREPARATION**

The first phase of creativity is preparation. It implies preparation in two senses. The primary sense involves the necessity to develop, over time, the basic skills and expertise that one must have to function creatively within the specific domain<sup>22</sup>. For example, if machine design is your forte, and you want to design new kinds of machines, you must first know a great deal about the medium itself and the principles behind the functioning of machine components and parts.

The next, the situation-specific kind, involves a period of concentrated mental activity. Suppose there is a problem to be solved, collect information that bears on this problem and on how identical problems have been solved in the past, and actively think, feel or see your way to a solution. In simple words, half the problem is solved if it is clearly-defined. Problem solving creatively requires a clear insight of the problem but, for better focus, entrepreneur needs to know what he wants, which is the ultimate goal. Experience, knowledge and information that entrepreneur has are very important for a satisfactory understanding of the problem, for only thus he can identify the right opportunity and create idea(s).

**INCUBATION**

Incubation is the next stage, and it involves taking time out from the problem. The presumption is that while your conscious mind takes a rest from active work on the problem, your subconscious still works behind the scenes to find a solution. And again and again, that does seem to happen. Pieces of the conundrum that you might not have consciously thought about during active preparation sometimes come together during this period. It is as though the intense work in the preparation phase has activated all your mental faculties, including subconscious ones, and the search for a creative breakthrough continues in some unconscious brain process.

**ILLUMINATION**

Illumination, once it follows incubation, typically arrives as a flash of insight — the famous Aha! Or Eureka, Experience! What comes might not be the absolute answer. Rather, it might be part of the answer, or maybe just a clue regarding where to find the answer.

**VERIFICATION**

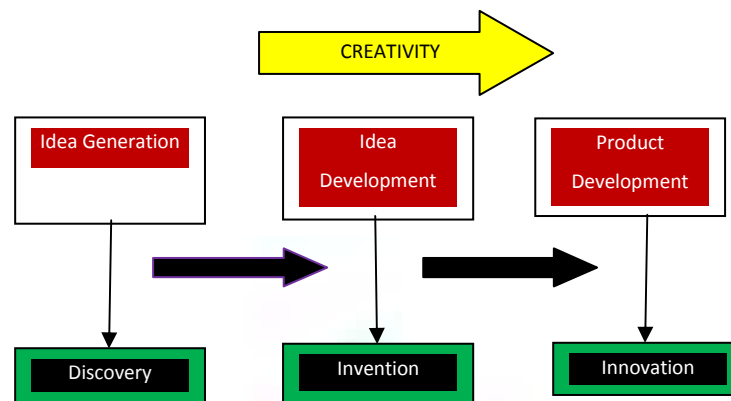
Verification, the last step of the process, involves either intellectually fleshing out the illumination in detail, or testing its practicality. In some situations you might create a model, a sketch, a “breadboard” circuit, or in the case of a work of art, the work itself. Some of the time this verification process is trivially simple; at other times it involves a great deal of work. This phase is most critical, because it is very important to test the viability of the solution itself. If the conclusion is that the solution is unfeasible, it is better revert to the preparation stage.

**INNOVATION AS A TRAIT OF ENTREPRENEUR**

A very important task of entrepreneur is to create value in the market. Value is created through the production of new products/services/processes or improving existing ones, which is achieved through the process of innovation and learning. Therefore, it can be said that innovation is a very important factor of vitality and competitiveness of companies and thus a very important characteristic of entrepreneur<sup>22</sup>. Therefore, innovation is a different way of performing some production, service, entrepreneurial activity that has not previously been seen in the market, whether a completely new product/service/process is being produced or an existing one is being improved. Or else, Peter Drucker defines innovation as 'a specific tool of entrepreneurs, the means by which they use changes as favourable opportunities for some other business or service activity, so entrepreneurs must create something new, something different, they must change or transform value'.

Creativity and innovation are the same is a myth even though they are frequently used as synonyms. Creativity refers to the process of idea generation. Innovation refers to the whole end-to-end process<sup>24</sup>. Therefore, it is necessary to distinguish between the process of creativity and the innovation process. In fact, both are connected with each other. The process of innovation is built and based on the creative process. Specifically, the idea is created within the creative processes. New idea that has not yet been realized, that is, turned into a new product/service/process is an invention. In the process of innovation, a new idea is turned into a market product/service/process. Figure below shows the process of creation and development of a product.

FIG. 4: RELATIONSHIP BETWEEN INVENTION, INNOVATION AND ENTREPRENEURSHIP



According to Drucker, changes are the basis of all innovation. Therefore, the point is to find new products/services/processes, i.e. create an innovation so as to be 'a mighty weapon' in the armoury of entrepreneur while dealing with changes. Through innovations, entrepreneur is trying to use changes and turn them into advantages that can be a source of high profits. However, high profits are generated only in the beginning and for a short period. After some time, income decreases due to the appearance of imitators of innovation. For these reasons, an entrepreneur must permanently, constantly, continuously search for new ideas which he will successfully turn into innovations, and which will bring him monetary rewards.

### TOOLS AND TECHNIQUES FOR DEVELOPMENT OF CREATIVITY AND INNOVATION

Creativity and innovation help to recognise the value of an entrepreneur. Schumpeter believes that entrepreneur is altogether a person of different mould. Therefore, entrepreneur is an individual who is exceptionally talented, competent to introduce novelty, prepare creative ideas, initiate and use changes. There was a time when it was believed that entrepreneurs were born, so an individual who had a good 'sixth sense' could carry out such work. However, the situation has changed today. Today's entrepreneurs grow into professionals who rely more on their knowledge, earned by education, and intellectual abilities they possess. There are three types of skills that prospective entrepreneurs must master before they enter the business project: technical, human and conceptual<sup>25</sup>. Entrepreneurship can be learned like any other profession, if these skills are mastered. Therefore, entrepreneurs are not born, but created.

Creativity is an indispensable quality of any successful entrepreneur. With creativity the entrepreneur has different understanding of a situation due to varied form of ideas being generated. Creativity can be unlocked and creative innovative ideas generated using any of the techniques. The tools and techniques described in this paper have been derived from many other books, Internet sites, and from my own experiences. They are as follows:

### BRAINSTORMING & TYPES OF BRAINSTORMING

Linus Pauling<sup>26</sup> once indicated that the only way to have a creative idea is to find as many answers as possible and to weed out what is inappropriate. We call it "brainstorming"! Brainstorming is a conference technique of attacking problems or creating original ideas by intense discussion and spontaneous idea exchange within a group. Unless it is well structured and expedited, a group action session will end up being a meaningless exercise. The four rules to be followed when using brainstorming are: a). No criticism is allowed by anyone in the group, b). "Freewheeling" is encouraged, c). Quantity of ideas is desired, and d). Combinations and improvements of ideas are encouraged, Over and above, Brainstorming sessions should be fun with no one dominating or inhibiting the discussion.

### VALUE BRAINSTORMING

This is a form of brainstorming where the process is the same – but the content is different. Instead of brainstorming issues, problems, or potential solutions, the group brainstorms a list of things they value. Examples might be honesty, trustworthiness, recognition, etc.

### ROLE STORMING

Role Storming is an evolution of Brainstorming, where you take on another identity to view problems and solutions from a different angle. People may be less embarrassed and more willing to provide unusual or 'off the wall' ideas if they are presented by an anonymous person.

### REVERSE BRAINSTORMING

This is a group method for obtaining new ideas while focusing on the negatives; and, criticism is allowed as against the brainstorming approach. The technique is based on finding fault by asking the question "in how many ways can this idea fail". With the fact that it focuses on the negative aspects of a product or service, the group's morale must be maintained in the right direction. This approach can be effectively used before other creative techniques to stimulate innovative thinking. This method produces some meaningful results as it is easier for an individual to be critical about an idea than to come up with a new idea.

### BRAIN WRITING

It is a silent, written generation of ideas by a group of people. The participants write their ideas on a special card, which circulates within the group (usually six members). Each group member generates and writes down three ideas during a five-minute period. The card then is passed on to the next person, who writes down three new ideas and so on, until each form has passed all participants. Examples of this include, Brain writing pool, Brain writing 6-3-5, etc.

### CREATIVE ORIENTATION

A method which includes: bionics as a skill that is based on the application of knowledge on living systems for solving social problems; searching for solutions according to self-learning principles, starting from the existing product where possible changes in such product are examined; searching of examination area starting from observation of the current situation from another angle.

### SYSTEMATIC STRUCTURING

It is a method which includes: morphological box, specifying the list of attributes, showing problem fields, sequential morphology, decision tree, process analysis. These methods try to encourage intellectual and rational thinking of people.

### CREATIVE CONFRONTATION

A method which includes: classic synectics conference, visual synectics, analysis by stimulating words, BBB method, Force-Fit game, Tilmag method, method of integration of adjacent fields, semantic intuition, forced connection, and catalogue technique.

**SYSTEMATIC SPECIFICATION OF PROBLEM**

This method includes progressive abstraction, epistemological analysis, K-J method, N-M method, hypothesis matrix, relevance tree.

**GORDON METHOD**

The Gordon method involves developing new ideas when the individuals are clueless of the problem. This implies that group members do not know the exact nature of the problem. The entrepreneur begins by mentioning a general concept associated with the problem. The group thereafter responds by expressing a number of ideas. This can then lead to a concept being developed, followed by related concept through guidance by the entrepreneur. At last the actual problem is revealed, enabling the group to make suggestion for the implementation or refinement of the final solution.

**CHEKLIST METHOD**

In this method, a new idea is developed through a list of related issues or suggestions. The entrepreneur uses a list of questions or statements to guide the direction of developing entirely new ideas or focusing on specific idea areas.

**FORCED RELATIONSHIPS**

The steps followed in the process are: a). Isolate the elements of the problem, b). Find the relationships between these elements, c). Record the relationship in an orderly form, d). Analyze the relationships to find ideas, and lastly, Develop new ideas from these patterns.

**PARAMETER ANALYSIS**

Parameter analysis involves parameter identification and creative synthesis. Parameter identification analyzes variables in the situation to determine their relative importance. The relationship between parameters that describe the underlying issues is examined and a solution developed (creative synthesis.)

**CONCLUSION**

An individual who pilots and navigates the entrepreneurial ship is called an entrepreneur. He is oriented towards the future that has a vision and develops ideas, tries to foresee events and changes and use them in an adequate manner. He is able to recognize the opportunity that others have not noticed or have not given importance to. Entrepreneurs more or less differ among themselves, but successful entrepreneurs are branded by dedication, involvement, motivated team, transparency with stakeholders, hard work, strict monitoring of set procedures, determination and flexibility. Every entrepreneur must relentlessly innovate if he wants to survive in extremely competitive world today. Entrepreneur sees the possibility of innovation in changes and, therefore, it is said that entrepreneur is bound to stay alive with changes. Therefore, in order to take benefit of changes, entrepreneur must be creative and innovative. Creativity is the improvement of ideas about products, practices, services, or procedures that are novel and potentially useful to the organization. Innovation is the execution of new ideas at the individual, group, or organizational level with the sole objective of putting the idea into use. Individuals who do not have expressed these two characteristics of entrepreneur can improve them by techniques for development of creativity and innovation

**REFERENCES****BOOKS**

1. Coulter, M.K. *Entrepreneurship in Action*, Prentice Hall, London, 2001, pp. 3-4
2. Drucker, P. F. (1985). *Innovation and Entrepreneurship*. Harper & Row, New York.
3. Graham Wallas. *The Art of Thought*. New York: Harcourt Brace, 1926.
4. Guilford, J.P. (1950). Creativity. *American Psychologist*, 5, 444-454.
5. Robert Weisberg, *CREATIVITY: Beyond the Myth of Genius*, New York: W. H. Freeman and Company, 1993.
6. Schumpeter, JA (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
7. Timmons, J.A. *Opportunity Recognition: The Search for Higher potential Ventures*, at: Bygrave, W.D. (ed.) *The Portable MBA in Entrepreneurship*, John Wiley, 1994, pp. 33.
8. Wickham, P (2006). *Strategic entrepreneurship*. London: Financial Times Prentice-Hall.

**JOURNALS AND ARTICLES**

9. Gilsing, V.A., A. Elco van Burg, G. L. Romme, *Policy principles for the creation success of corporate and academic spin-offs*, *Technovation*, 1st ed., vol.30, 2010, pp.12.
10. Pajarinen, M, Rouvinen, P, Ylä-Anttila, P (2006). *Uusryttä jien kasvuhakuisuus*, KTM julkaisu 29/2006. Helsinki: Ministry of Employment and the Economy.
11. Paunović, B. *Preduzetništvo i upravljanje malim preduzećem*, Centar za izdavačku delatnost Beograd, 2012, pp. 56.
12. Rudregowda, S., *Facilitating & Sustaining Start-ups*, *Industrial Spectrum*, October 2012, Vol. 2. Issue 9, PP No. 44.

**CONFERENCE PAPERS**

13. Carton, RB, Hofer, CW, Meeks, MD (1998). *The entrepreneur and entrepreneurship: operational definitions of their role in society*. Singapore: Paper presented at the annual International Council for Small Business Conference.
14. Jasmina Lukić, *Creativity and innovation as the driving power of entrepreneurship*, *Electronic International Interdisciplinary Conference 2012* September, 3. - 7. 2012

**WEBSITES**

15. Priya Dhamija Gupta, Samapti Guha and Shiva Subramanian Krishnaswami, *Firm growth and its determinants*, <http://www.innovation-entrepreneurship.com/content/2/1/15> Accessed on 10.02.2014
16. Wikipedia. *What is Creativity?* [www.creativityatwork.com](http://www.creativityatwork.com)
17. William Y. Jiang, Ph.D. Power Point Presentation on "Managing Creativity and Innovation" Email: [William.jiang@jsu.edu](mailto:William.jiang@jsu.edu)
18. *Leading Thoughts*. <http://www.leadershipnow.com> Accessed on 02/04/2014
19. *NiccoleMachiavelli*. <http://www.brainyquote.com> Accessed on 09.01.2014

## **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](mailto: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](mailto:infoijrcm@gmail.com).

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

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-  
**Co-ordinator**

## **DISCLAIMER**

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

## ABOUT THE JOURNAL

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

### *Our Other Journals*

