

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

Indian Citation Index (ICI), J-Gate, India [link of the same is duly available at Inflibnet 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 6408 Cities in 196 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.	A NEW ERA OF ECONOMIC GLOBALIZATION: AN OPINION ON OPPORTUNITIES, AND RISK AND CHALLENGES OF ONE BELT ONE ROAD <i>WANG ZHENGBING, ENEREL OCHIRKHUYAG, MYAGMARSUREN UKHNAA &amp; SURAJ GAUDEL</i>	1
2.	A STUDY ON BENEFITS AND CHALLENGES OF DIGITALISATION OF INDIAN ECONOMY <i>Dr. GADDAM JIMMY CORTON &amp; NAGASUDHA K</i>	10
3.	EMPLOYEE ATTITUDE TOWARDS ORGANIZATIONAL CHANGES IN AUTOMOBILE INDUSTRIES WITH REFERENCE TO PEENYA INDUSTRIAL AREA, BENGALURU <i>GANGADHARAPPA K</i>	13
4.	A STUDY ON IMPACT OF KNOWLEDGE MANAGEMENT ON EMPLOYEE'S PERFORMANCE WITH SPECIAL REFERENCE TO IT SECTORS ERNAKULAM <i>DEVIKA R</i>	17
5.	GROWTH OF E-COMMERCE AND ITS IMPACT ON INDIAN ECONOMY <i>RITU YADAV</i>	21
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	<b>24</b>

**FOUNDER PATRON****Late Sh. RAM BHAJAN AGGARWAL**

Former State Minister for Home &amp; 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 &amp; Technology, Urjani

**ADVISOR****Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

**EDITOR****Dr. NAWAB ALI KHAN**

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

**CO-EDITOR****Dr. G. BRINDHA**

Professor &amp; Head, Dr.M.G.R. Educational &amp; Research Institute (Deemed to be University), Chennai

**EDITORIAL ADVISORY BOARD****Dr. TEGUH WIDODO**

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

**Dr. M. S. SENAM RAJU**

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

**Dr. JOSÉ G. VARGAS-HERNÁNDEZ**

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

**Dr. CHRISTIAN EHIOBUCHÉ**

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. BOYINA RUPINI**

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

**Dr. MIKE AMUHAYA IRAVO**

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

**Dr. SANJIV MITTAL**

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

**Dr. D. S. CHAUBEY**

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

**Dr. A SAJEEVAN RAO**

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

**Dr. NEPOMUCENO TIU**

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

**Dr. RAJENDER GUPTA**

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

**Dr. KAUP MOHAMED**

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

**Dr. DHANANJOY RAKSHIT**

Dean, Faculty Council of PG Studies in Commerce and Professor & Head, Department of Commerce, Sidho-Kanho-Birsha University, Purulia

**Dr. SHIB SHANKAR ROY**

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

**Dr. S. P. TIWARI**

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

**Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

**Dr. ABHAY BANSAL**

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

**Dr. ARAMIDE OLUFEMI KUNLE**

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

**Dr. ANIL CHANDHOK**

Professor, University School of Business, Chandigarh University, Gharuan

**RODRECK CHIRAU**

Associate Professor, Botho University, Francistown, Botswana

**Dr. OKAN VELI ŞAFAKLI**

Professor & Dean, European University of Lefke, Lefke, Cyprus

**PARVEEN KHURANA**

Associate Professor, Mukand Lal National College, Yamuna Nagar

**Dr. KEVIN LOW LOCK TENG**

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

**Dr. BORIS MILOVIC**

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

**SHASHI KHURANA**

Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala

**Dr. IQBAL THONSE HAWALDAR**

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

**Dr. DEEPANJANA VARSHNEY**

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

**Dr. MOHENDER KUMAR GUPTA**

Associate Professor, Government College, Hodal

**Dr. BIEMBA MALITI**

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

**Dr. ALEXANDER MOSESOV**

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

**Dr. VIVEK CHAWLA**

Associate Professor, Kurukshetra University, Kurukshetra

**Dr. FERIT ÖLÇER**

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

**Dr. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**Dr. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**YU-BING WANG**

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

**Dr. SAMBHAVNA**

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

**Dr. KIARASH JAHANPOUR**

Dean of Technology Management Faculty, Farabi Institute of Higher Education, Karaj, Alborz, I.R. Iran

**Dr. TITUS AMODU UMORU**

Professor, Kwara State University, Kwara State, Nigeria

**Dr. SHIVAKUMAR DEENE**

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

**Dr. BHAVET**

Former Faculty, Shree Ram Institute of Engineering & Technology, Urjani

**Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

**Dr. VIKAS CHOUDHARY**

Faculty, N.I.T. (University), Kurukshetra

**SURAJ GAUDEL**

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

**Dr. DILIP KUMAR JHA**

Faculty, Department of Economics, Guru Ghasidas Vishwavidyalaya, Bilaspur

***FORMER TECHNICAL ADVISOR***

**AMITA**

***FINANCIAL ADVISORS***

**DICKEN GOYAL**

Advocate & Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

***LEGAL ADVISORS***

**JITENDER S. CHAHAL**

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

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

***SUPERINTENDENT***

**SURENDER KUMAR POONIA**

## **CALL FOR MANUSCRIPTS**

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

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** **anytime** in **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/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)**

**DEAR SIR/MADAM**

Please find my submission of manuscript titled ' \_\_\_\_\_ ' for likely publication in one of your journals.

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

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to inclusion of their names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

**NAME OF CORRESPONDING AUTHOR** :  
 Designation/Post\* :  
 Institution/College/University with full address & Pin Code :  
 Residential address with Pin Code :  
 Mobile Number (s) with country ISD code :  
 Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) :  
 Landline Number (s) with country ISD code :  
 E-mail Address :  
 Alternate E-mail Address :  
 Nationality :

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

**NOTES:**

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. ***pdf. version is liable to be rejected without any consideration.***
  - b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**  
**New Manuscript for Review in the area of** (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
  - c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
  - d) The total size of the file containing the manuscript is expected to be below **1000 KB**.
  - e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
  - f) **The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
  - g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters, centered and fully capitalised**.
  3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address should be given underneath the title.
  4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
  5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **SINGLE PARA. Abbreviations must be mentioned in full.**
  6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
  7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at [www.aea-web.org/econlit/jelCodes.php](http://www.aea-web.org/econlit/jelCodes.php). However, mentioning of JEL Code is not mandatory.
  8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
  9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
  10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
  11. **MAIN TEXT:**

***THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:*****INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **titles must be above the table/figure. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use (ed.) for one editor, and (ed.s) for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parenthesis.
  - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

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

**BOOKS**

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

**CONTRIBUTIONS TO BOOKS**

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

**JOURNAL AND OTHER ARTICLES**

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

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

**UNPUBLISHED DISSERTATIONS**

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

**ONLINE RESOURCES**

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

**WEBSITES**

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



**A NEW ERA OF ECONOMIC GLOBALIZATION: AN OPINION ON OPPORTUNITIES, AND RISK AND CHALLENGES OF ONE BELT ONE ROAD**

**WANG ZHENGBING  
PROFESSOR  
COLLEGE OF ECONOMICS AND MANAGEMENT  
NORTHWEST A&F UNIVERSITY  
YANGLING, SHAANXI PROVINCE (712100), P.R. CHINA**

**ENEREL OCHIRKHUYAG  
STUDENT  
COLLEGE OF ECONOMICS AND MANAGEMENT  
NORTHWEST A&F UNIVERSITY  
YANGLING, SHAANXI PROVINCE (712100), P.R. CHINA**

**MYAGMARSUREN UKHNAA  
HEAD  
ACADEMIC AFFAIRS DEPARTMENT  
THE NATIONAL UNIVERSITY OF COMMERCE & BUSINESS  
210648 PEACE AVENUE, 14/3 SUKHBAATAR DISTRICT, ULAANBAATAR, MONGOLIA**

**SURAJ GAUDEL  
PROGRAM COORDINATOR (B.B.A)  
LA GRANDEE INTERNATIONAL COLLEGE  
SIMALCHAUR-8, POKHARA, NEPAL**

**ABSTRACT**

*The study focuses on historical initiatives of China, that is, One Belt One Road. This study is descriptive and tries to explain complete opportunities, and risks and Challenges of Belt and Road Initiatives in brief on the ground of past literature. Even though scholars view Belt & Road Initiatives as U.S. Marshall plan, correct implementation will create a win-win situation to both partners and non-partners nations along the Belt and Road region. Every country must know that significant investment always entails geopolitical issues, financial risk, debt risk, and funding risk, whether the investor is the United States of America, China, Japan, India, or the European Union. Host nations must think about their current economic and political status; size and need of projects, criteria of involvement, possible interest rate, and cost fluctuation and expected benefit of projects before accepting a loan from any nation for big projects. China should develop independent financial auditing system, increase the bankable loan, and follow the participatory approach in the decision-making process. China must increase the number of investing partners rather than moving alone if they want to gain their historical status of Pax Sinica. The effective mechanism should be developed to address issues related to the safe working environment, pollution prevention and reduction, ecological protection and biodiversity conservation, demolition and relocation, and protection of indigenous people and cultural heritage along the Belt and Road route. If host nations do not analyze financial deals and debt structure before choosing any megastructure, then they have to exchange their sovereignty with a key player of One Belt One Road.*

**KEYWORDS**

Pax Sinica, U.S. marshall plan, one belt one road, geopolitical, politico-military.

**JEL CODES**

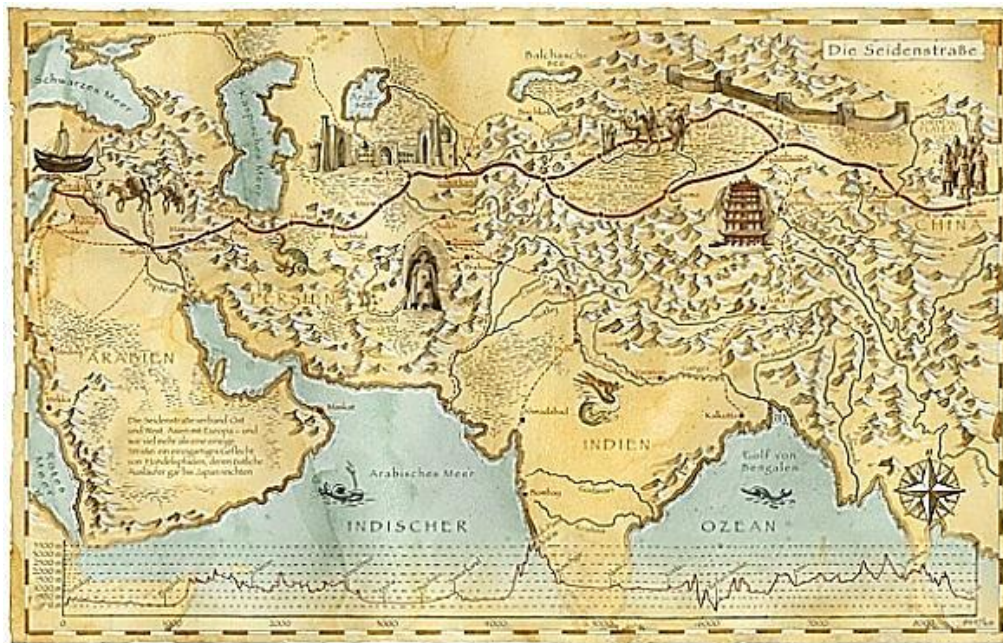
A13, B15, B27, F10, F15.

**1. INTRODUCTION**

The world's economy has been changing rapidly since a few decades before. Change in global politics such as the collapse of communism, revolution in transportation, communication and information technology and increasing need of people have brought the concept of globalization. After the globalization, markets, labour and information of one nation cross its national boundaries. People of different nations start functioning jointly in governance, economic interests, and common currencies. These cross border movement of product, services, and people has forced different nations to participate in different trade agreement such as Trans-Pacific Partnership (TPP), The North American Free Trade Agreement (NAFTA), Eurasian Economic Union (EEA), United States-Mexico-Canada Agreement (USMCA) and the like. The China lead concept of Belt Road Initiative (BRI) is also the result of globalization. There was rapid growth in China's economy from 1980 to 2000 due to huge investment, production, and cross-border production network. China was not only become the biggest recipient of Foreign Direct Investment (FDI) in the year 2002 but also they became the world's biggest exporter in the year 2009. Now China's concern behind One Belt One Road (OBOR) is to maintain their sluggish economic growth, which has been worsening continuously after the worldwide financial crises of the year 2008. China's Silk Road Strategy is also known as One Belt One Road (OBOR) Initiative. It revives and broadens the popular ancient trading route that existed between 130 BC and 1453 BC, that is, Silk Road that links China with an estimated 68 member nations. Silk Road begins from China, moves towards Central Asia, the Middle East, and finally touches the Mediterranean in Europe. This expansion of the Silk Road expected to influence 65 per cent of the world population, 33 per cent of the world GDP, and 25 per cent of worldwide cross-border trade. Boosting cross border trade and economic growth, developing and promoting closer economic integration among member economies through China's investment in necessary infrastructure are major aspects of this initiative. One Belt One Road (*Yi Dai Yi Lu*) strategy is the combined form of two ideas, that is, *Silk Road Economic Belt and 21<sup>st</sup> Century Maritime Silk Road*, which emerged in the mind of China's president Xi Jinping in the year 2013. Silk Road was officially opened during the Han Dynasty (206 BC-220 AD) and was in peaked during the leadership of Roman followed by Byzantine Empires and then by Tang dynasty. Even though European explorer Marco Polo travelled on these routes in between 1254 and 1324 CE, the German geographer and cartographer (Ferdinand von Richthofen) first used the term Silk Road. He, first, pronounced this route as *Seidenstraße* (in the German language).

Businessman in ancient and middle ages have used this land and sea route to trade in East, West and South Asia, and Europe and North Africa. An ancient network of Silk Road can be analysed through the map of Ferdinand von Richthofen as under:

FIGURE 1: FERDINAND VON RICHTHOFFEN'S MAP OF THE SILK ROAD IN 1877



Source: <http://www.silkroutes.net/orient/mapssilkroustrade.htm>

The initial objective of the Belt and Road Initiative (BRI) is to connect China with 70 other countries in Oceania, Asia, Europe, and Africa. Now Silk Road is the network of intricate routes, which have new economic corridors. Although there is no official BRI map, their proposed framework for territorial reach can be depicted as under:

FIGURE 2: CHINA'S CURRENT TERRITORIAL REACH OF ONE BELT ONE ROAD

### China's One Belt, One Road



Source: <https://www.topchinatravel.com/silk-road/one-belt-one-road.htm>

Even though it is suspicious outside China, Chinese Government view OBOR as a foundation for financial integration, trade cooperation mechanism, a mechanism for cooperation in science and technology, and door for cultural and academic exchanges. Even though it is suspicious, China has five primary goals behind OBOR initiative and are policy coordination, facilities connectivity, free trade, financial integration, and people to people bond. Though it is not clear that when and how funding will be utilized, China has promised to invest nearly about US\$ 4 trillion in OBOR member countries. Projects which are ambitious in size and scope can create more risk and more challenges from a practical point of view. Unable to predict fund required for current and future OBOR projects and insection of political, cultural, and social factors make the project more complex, challenging and risky. Many OBOR member countries lack the experience and expertise required to handle such big projects, that may result in waste, poor quality constructions and encourage corruption. In fact, OBOR does not only create economic boon but also it has risks and challenges related to funding, administration and corruption, employment and environment, politics and economics. Hence this article focuses on risks, challenges, and impacts of OBOR based on collective views of experts and scholars worldwide.

China wants to achieve its four objectives through OBOR and are i) Asserting Geopolitical Influence, ii) Gaining Geo-economic Power, iii) Increasing Access to Raw Materials, and iv) Accessing Innovative Technology. During the 1980s and 90s, China was the biggest recipient of the Asian Development Bank and World Bank loan, but now China's loan to developing nation is more significant than the World Bank (Manuel, 2017). China is doing the same thing through OBOR what the US did in the past seven decades for "liberal international order"; thus, the initiative is not evil at all. OBOR is very much maintaining "liberal international order" as compared to U.S. and European human rights and environmental violation when they ventured to Latin America, India, and Africa in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. In reality, Belt and Road Initiative is a big game, and if China continuously push its geo-economics movement and BRI becomes the most important legacy of China influencing world economy, then it is fully considerable and positive. Many Western countries and rival are criticizing this move, as they do not have the US \$ 1 trillion to invest in developing nation. On the ground of mutual benefit, China wants to utilize its large capital accumulation outside the nation, to secure its food, energy and resources supplies, to export surplus products and services, to internationalize Yuan along with increment in soft power (Benli, 2019).

In practice, China's ambitions are purely positive, as every big nation has the same aspirations. As the US cannot guarantee the global economic system, China can create new rules of world trade and new forms of cooperation through OBOR. OBOR will fill the gap that existed in the globalization process left by Trump's America first policy (Huang, 2017). Currently, nearly around 80 State-Owned Enterprises (SOEs) have been carrying out 3,166 projects under OBOR (Shanshan, 2019). Shanshan (2017) also mentioned that until date, China had invested USD 80 billion in OBOR nations and China's trade with these nations exceeds USD 6 trillion. China has created 360,000 local jobs through OBOR investment. In truth, Belt and Road Initiatives is a pragmatic thought of China to settle its both internal and external policies.

## 2. LITERATURE REVIEW

It cannot be rejected the fact that BRI has now become a research platform for scholar and hot meeting agenda for the world's political leaders from the US to Somalia and Ethiopia. China's reconstruction and expansion of ancient Silk Road as per their need have a direct impact on the global economy as it encompasses a massive part of the world under an umbrella. It enhances people-to-people connection through cultural, political, and economic interactions (Uberoi, 2016). Even though scholars think it as a part of the Chinese "Go West" policy, it has a tremendous impact on the global economy (Aris, 2016; Huang, 2016; and Mishra, 2016). China, a country with the largest economy, leads OBOR due to which Chinese authority has an influencing role in Belt and Road Initiatives (Du & Zhang, 2017). China has also developed the concept of Digital Silk Road through which they are going to connect the world digitally, and the Cyberspace Administration of China leads this concept. Belt and Road Initiatives do not have a boundary and it possesses both opportunities, and risk and challenges as it has to face and work in a different culture, nation, various political and economic situation, and geography. As BRI is a continuous process, they are still unknown about how much fund will be invested in which nation and for what project. Different scholars, politicians, and experts have different views on Belt and Road Initiatives. Literature shows an equal quantity of criticism and acceptance of Belt and Road Initiatives. Nature of OBOR, disputed area of OBOR strategy, and random selection and prioritization of projects are significant areas of debate for international scholars (Gabuev, 2017). In fact, OBOR is full of criticism, risk, and challenges. As per Du (2016), OBOR is a Chinese version of globalization whereas Trans-Pacific Partnership (TPP) is U.S. version for the same purpose. Both TPP and OBOR are competing with each other to promote and rebalance Asia (Tian, 2016). Chinese planner and their supporter considered OBOR as a game that changes the economy of the entire region (Hali, Shukui, & Iqbal, 2015). OBOR is an instrument to enhance China's open economy (Haiquan, 2017) through which China promotes its economic growth to control its own and partner countries political situation (Chung, 2017). Belt and Road Initiatives reflect the political, economic, and strategical existence of China in the world (Yu, 2017). OBOR reflects China's importance in international affairs and redesigning of regional dynamics (Wang, Ruet, & Richer, 2017). The network of trade routes, political cooperation, and cultural exchange in Belt and Road Initiatives will reshape the political situation in Central Asia and Asia Pacific region (Zimmerman, 2015). Mutual learning and mutual benefit, cooperation and peace, openness and inclusiveness are major aspects of OBOR (Shapiro, 2017). China plans to achieve strategic, political, and economic objectives by using OBOR strategy for regional cooperation and integration (Yuqing, 2016). OBOR is targeted towards business boosting and equitable distribution of wealth across 60 plus countries with 4 billion populations (Haung, 2016). Das (2017) has criticized OBOR as a tool for selling overproduction capacity to neighbouring countries along the geographical region. Jian (2017) explained OBOR as the backbone for future trade arrangement. Haiquan (2017) suggested China that they have to pay more attention to the interest of U.S. and Russia, the supply of public security goods, and pivot of Pakistan rather than focusing only on own economic growth. Besides positive, negative, & competitive views of the scholar, some scholars' also unveiled risk and challenges related to OBOR. Economic assessment of OBOR shows some uncertainties regarding the implementation of OBOR projects (Chen, 2017). Complex natural features, different socioeconomic condition, common ecological issues, and mismatched resources are some major challenges of OBOR (Yang et al., 2016). One Belt One Road not only provides economic, cultural, political, and strategic opportunities but also it presents many uncertainties, risk and challenges (Swaine, 2015). Hence, this article will focus on opportunities, risk and challenges, and criticism related to OBOR in brief.

## 3. OBJECTIVES & METHODOLOGY

### OBJECTIVES

1. The major objective of this study is to analyse the overall position of OBOR from its beginning phase to till date. Other specific objectives of this study are as under:
2. To understand risks, challenges, and opportunities for OBOR.
3. To extract the views and opinion of different scholars and politicians on OBOR.
4. To recommend probable solutions to correct weakness and to overcome threats identified during the study.

### METHODOLOGY

A conceptual framework for this study was developed through an extensive literature review. The study is descriptive in nature and highly based on fact and opinion provided by various scholars, politician, and experts. The research highly focuses on opportunities, risk and challenges, and criticism related to One Belt One Road Initiatives. Data provided in this study are extracted from various published articles, newsletters, and reports. Thus, the foundation of this study is an existing literature review, and this synthesization of past literature will result in the advancement of knowledge that can be used by future scholars.

## 4. OPPORTUNITIES OF OBOR

OBOR has both positive and negative impact on origin and host nations. Opportunities of OBOR can be viewed as under:

### 4.1. WORK AS GREASE AND WHEELS FOR GLOBAL TRADE

Investment on various infrastructures such as roads, ports, railroads, electricity and energy, and commerce and financial ties between China and other member nations along the Silk Road Economic Belt and the 21st Century Maritime Silk Road will create a vast network of regional connectivity which results in trade facilitation. This will not only support China to make investments overseas and to export its surplus capacity but also it opens several embryonic trade opportunities for host nations and other nations along the belt and road route. During the last two decades, the export of BRI countries nearly double and China has the lion's share on it. Some nations like Nepal, Afghanistan, Tajikistan, and Laos are unable to integrate their domestic economy to the world economy due to the presence of weak policy, inadequate infrastructure, and other various gaps. Thus, Belt Road Initiatives (BRI) will be supportive of them to fulfil these gaps and to link their economy to the world economy. Networks of transportation routes under Silk Road Economic Belt and 21 Century Maritime Silk Road will increase export and import capacity and also cut transit time which leads to increment in investment, increment in cross-border trade, and growth in BRI economics. OBOR reduces the goods shipping time from East Asia to Europe, and we must know that one day delay in shipment caused a 1 per cent reduction in trade.

### 4.2. SUITABLE SOLUTION FOR CAPITAL SHORTAGE FOR DEVELOPING NATION

Developing and underdeveloped nations with the weak economic situation, along the OBOR region, can take advantage of the soft loan provided by OBOR financing institutions. Many contractors and financing institutions in China have been involving in infrastructure development and investments in various countries in Africa, Asia, and Europe. Many nations along the OBOR have a problem with the fiscal budget deficit. On the one hand, these nations require long-term investment where the short-term return is extremely low, and on the other hand, they are suffering from limited resources in their capital market for the infrastructure project. Various funding agencies and contractors under China led BRI can address these funding problems in developing nation. For instances, Djibouti-Ethiopia Railway Line (753 km, US\$ 4,000 millions), Ethiopia and Djibouti; Mombasa-Nairobi Railway (480 km, US\$ 3,804 million), Kenya; Khartoum-Port Sudan Railway (762 km, US\$, 1,154 million), Sudan; Abuja-Kaduna Railway (187 km, US\$ 850 million), Nigeria; Benguela Railway (1,344 km, US\$ 1,830 million), Angola; Addis Ababa Light Rail (32 km, US\$ 475 million), Ethiopia are examples of infrastructure projects completed in Africa by Chinese Contractor under Belt and Road Initiative till date. Addis Ababa-Djibouti Railway cuts the journey time between Addis Ababa and Djibouti to 12 hours from 3 days (British Broadcasting Corporation, 2016). Mombasa-Nairobi Railway has reduced the travelled distance between Mombasa and Nairobi to 4.5 hours which previously took 9 hours by bus and 12 hours on the previous railway line. As per Kenyan President Uhuru Kenyatta, this railway line will be able to reshape the story of Kenya for the next 100 years (British Broadcasting Corporation, 2017). It is claimed that this railway line has created jobs for 46,000 locals and trained 1,600 railway professionals, which resulted in additional GDP growth by 1.5 per cent (British Broadcasting Corporation, 2017). Abuja-Kaduna Railway in Nigeria has played a vital role to connect northwestern economic activity

centres of the country with the business centres of Nigeria (Saliu, 2019). China has already supported Sudan to become independent on their oil industry and currently imparting agricultural assistance to develop the cotton industry with future plans including development of roads, ports, railways, a nuclear power station, solar power farms and more dams for electricity generation and irrigation (Xinhua News Agency, 2018). Likewise, First freight train services that connect China and Europe was launched in January 2017 (Webb, 2017), which was first initiated in March 2011 (Josephs, 2017). This train route has connected 42 European destinations with 48 Chinese cities, and on 26th August 2018, freight train X8044 was reached to Wuhan, China from Hamburg, Germany and it was the successful completion of the 10,000th trip of a freight train (Xinhua News Agency, 2018). This train route has made it easier to deliver goods and services between China and Europe. The same route was extended towards Vietnam in March 2018 (Bo, 2018). Correspondingly, special economic zone, that is, China-Belarus Industrial Park (91.5 km<sup>2</sup>), is now become the big industrial estate with 36 international companies (Xinhua News Agency, 2018) and as per the claim of some Chinese media this park will create 6,000 jobs and provide habitat for 10,000 residents by 2020 (China Daily, 2017). Jakarta-Bandung High-Speed Rail (140 km.) project which was delayed due to land clearing issue (The Jakarta Post, 2018) will shorten the journey time between Bandung and Jakarta to forty minutes which previously took more than three hours (Xinhua News Agency, 2018). This project has employed more than 2,000 locals. As per the agreement between Chinese pharmaceutical company Holley Group and Thai industrial estate developer Amata Group in the year 2005, Thai-Chinese Rayong Industrial Zone was constructed, and now several companies are running there, and the number of industries will be reached to 500 by 2021 (Sriring & Staporncharchai, 2016). Currently, more than 3,000 local peoples are working in this industrial zone (China Xinhua News Agency News Network Corporation, 2015). Another high-speed railway track is also under construction in Thailand and this railway line will link Bangkok with Nakhon Ratch and will be further extended to Nong Khai to connect with Laos (Chankaew, Lefevre, & Macfie, 2017). China Gezhouba Group Corporation (CGGC) is going to construct two hydroelectric dams along the Santa Cruz River in southern Argentina, and it is expected that this project will provide 5,000 direct and 15,000 indirect jobs for Argentina. These two hydroelectric dams will generate an additional 4.95 billion kWh of energy and are enough to replace their previous dependency on fossil fuels (Xinhua News Agency, 2019). China has been investing more than 60 per cent of its BRI's overseas direct investment in ASEAN (Association of Southeast Asian Nations) member states (The Economist Intelligence Unit, 2017). China has also established the Lancang-Mekong Cooperation Fund in 2015 to fulfil the funding gap required for infrastructural development in the Mekong region (Pantucci & Lain, 2016; Aoyama, 2016; and Zhu and Zhu, 2016). As per Black (2017), infrastructural sector of Southeast Asia will require US\$ 15 trillion by 2030, and these nations can take advantage of BRI fund to catalyse their economic growth. China is building 1,600-megawatt India Godda Coal-fired Power Plant (Godda-2x800 MW) in India. It is the first joint project of GE Power and Chinese Engineering, Procurement, and Construction (EPC) in India. This project will provide power supply to four million households bordering Bangladesh. Likewise, China is also constructing a lignite power plant (330 MW) at Thar Coal Block II Sindh, Pakistan.

#### 4.3. COMPLETE THE GLOBALIZATION PROCESS

It seems that China has been intensifying its goal of globalization through one-way investment process, but in fact, huge investment in infrastructure projects in many developing nations in Africa, Middle East, and Asia will open new trade opportunities, reduce transportation cost, provide low-cost labour force and support them in their globalization process as well. Successful completion and implementation of BRI will bring many countries closer to each other and provide benefit not only from an economic point of view but also from the social, cultural, and political point of view. Hence, this BRI can be seen positively as the final stage of the globalization process.

#### 4.4. BRIDGE FOR INFRASTRUCTURE INVESTMENT GAP

Many developing nations in Asia and Africa along the OBOR route have high urbanization rate. Young people are migrating from rural areas to urban areas for better livelihood. These countries are in the need for massive infrastructure development for a very long period as they are at top 10-20 per cent in the world urbanization rate. These countries are unable to manage such a significant amount of capital to invest in roads, rails, schools, hospitals, utilities, housing and the like. In accordance with McKinsey report, the world spent nearly US\$ 2 trillion on different infrastructure projects, and as per World Bank, the developing nation will need an additional US\$ 1 to 1.5 trillion each year to fulfil their infrastructural development need. Therefore, there is no doubt to say that BRI has been working as a bridge for infrastructural investment gap.

#### 4.5. POSITIVE SPILLOVER EFFECT ON GLOBAL WELFARE AND POVERTY

Size and scope of BRI are tremendous, and it encompasses two-thirds of the world population and one-third of the global economy. Poverty ratio in some countries on the BRI route is still high, and many people are surviving under the poverty line. For instance, 25 per cent population in Kenya, 21 per cent in Laos, and 23 per cent in Uzbekistan and Djibouti are still under the poverty line, and they earn less than US\$ 1.9 per day (Ruta, 2018). Thus, successful completion of BRI projects will not only improve infrastructure, finance, transportation, and banking but also it has a substantial positive spillover effect on both global welfare as well as poverty of these nations.

#### 4.6. DOMESTIC BENEFIT

Over the next decade, China's FDI into Belt and Road Initiatives can exceed USD 1 trillion, which is bigger than the combined annual gross GDP of Vietnam, Thailand, and Malaysia (Laubier et al., 2018). This increment in FDI in the rising markets supports China to utilize its elevated foreign exchange reserve and assists in balancing slow internal growth. OBOR projects are highly focused on unexpected global markets through which China can broaden its global economic power. For instance, the textile sector of Ethiopia, Suez Channel Zone of Egypt, and fast-growing markets of Southeast Asia are the target market of OBOR. Another long-term benefit of OBOR to China is that it allows access to natural resources in the different nation that would fuel its inland economic growth. OBOR is a way for China to learn new innovative technology; for instance, Western companies can supply Chinese industries with expertise and R&D. For illustration, OBOR projects in the Western end of Silk Road are slow, as it has to follow EU laws for quality assurance. Chinese companies involving in OBOR projects have been using their material and labour rather than purchasing them in the host nation. This helps the Chinese government to create a market for their overproduction capacity as well as create employment opportunities for their nationals. Currently, China's almost all export and import activities for its far territory depend on Malacca Strait and eastern seaboard. Hence, constructing a new route through Central Asia and Pakistan eases its export and import activities, increases productivity, and economic growth. OBOR is a fertile platform for China's ideal State Owned Enterprises (SOE) to work and invest their reserve currency in a foreign land. Beijing has been using its huge foreign exchange reserve of US \$ 3 trillion in projects with returns above 5% or 6%, which is a better option than investing in U.S. bonds (Gautrin, 2018). This sort of massive investment will be helpful in the internationalization of Renminbi. BRI will bring prosperity not only in central cities such as Chongqing, Chengdu, and Xian but also in peripheral provinces such as Xinjiang, Yunnan, and Guangxi. Even though trade is the main motive, China can use Maritime Silk Road to intensify its naval power to have gains that are more political. Although the human right situation in Xinjiang Uyghur Autonomous Region (XUAR) is serious, more than 50,000 companies established in the year 2017 because of Belt and Road Initiatives.

### 5. RISK AND CHALLENGES

Big investments that cross national boundaries where investors have to work in a different culture, political scenario, and socio-economic conditions have to confront a high level of risk and challenges. China's Belt and Road Initiatives have been facing different types of risk and challenges from its initial phase and are as under:

#### 5.1. ENVIRONMENTAL AND SOCIAL RISK

Potential risks of BRI has ranged from environmental risks to geopolitical and economic risks (Huang, 2016; Cheng, 2016; Aoyama, 2016; and Blanchard & Flint, 2017). A burning question on BRI investment is whether it will undermine or contribute the worldwide effort to tackle climate change and achieve sustainable development (Chao, 2018). In order to tackle climate change and achieve sustainable development, Chinese investments should be green and low carbon intensive, but it is challenging for a Chinese investor to maintain this environment-friendly situation as most of their past projects are brown and high carbon intensive. One of many risks for China led OBOR financing institutions is related to transparent management of social and environmental issues on their overseas investment. Many developing nations along the OBOR route has a different economic and political situation which can generate uncertainties and risk to OBOR. Unable to handle these sorts of uncertainties and risks lead to conflict with local communities and causes direct losses on overseas investment. Most construction sites of OBOR have abundant natural resources and fragile and sensitive ecological environment. Construction of roads and other big projects in these areas may generate physical environmental risk. China itself is a high-level carbon producing country, and many of their overseas investment has drawn the attention of international

communities as they are concentrated in carbon-intensive industries (Liu, 2018). Currently Southeast Asian countries have been receiving 23 per cent of the total Chinese-funded coal-fired power projects under the BRI but these renewable energy sources are only beneficial for short term, and in the long run it will cost more money to the host nation as it increases the level of carbon emission and create negative impact on health and environment (Altenburg and Rodrik, 2017). Many dams constructed in the Mekong region have a positive impact on the environment due to low carbon emission, but in the long-run, it will emit more methane and also harm local communities and ecosystem (Räsänen, Varis, Scherer, & Kumm, 2018). In addition, these dams alter water level, sediment distribution, and fish population (Piman and Shrestha, 2017). Quality of constructed projects also impacts health and environment of people. In July of 2018 thousands of Lao and Cambodian people displaced including 34 dead due to the collapse of Xe Pian-Xe Nam dam in Laos. Likewise, 85 villages in central Bago region of Myanmar flooded due to the breach of the dam in August 2018. Massive investment in gas pipeline projects for fossil fuel will result in high greenhouse gas emissions (Ascensao et al., 2018). As per the International Energy Agency (2017), the use of excessive fossil fuel will double CO<sub>2</sub> emission in Southeast Asia by 2040. Many countries along the OBOR route have signed the Paris Climate Agreement and the United Nations Framework Convention on Climate Change, and they require environmental plan and policies that support carbon emission minimization from the foreign investors. But Chinese financial institutions are lacking such plan and policies which results in lending and investment risk. Absence of such policies can produce environmental and social risks such as biodiversity loss, environmental degradation, and elite capture. China's activities on the island and reefs of the South China Sea is creative enough to destruct diverse marine biodiversity to imbalance environment. Hence, it is essential for local and international stakeholders to participate and map the potential impact of BRI projects on climate and development to reduce the considerable negative impact on the environment and society. Decisions regarding any BRI projects should be transparent, participative, and fully committed to international rules and regulations. Practising participatory approach in the decision-making process will promote the communication of knowledge and information among investors, locals, and experts and result in less conflict and a high social acceptance rate of projects. The effective mechanism should be developed to address issues related to the safe working environment, pollution prevention and reduction, ecological protection and biodiversity conservation, demolition and relocation, and protection of indigenous people and cultural heritage.

## 5.2. POLITICAL, GEOPOLITICAL, AND POLITICO-MILITARY EXPANSION RISK

### 5.2.1. POLITICAL RISK

Success or failure of OBOR projects depends on the political situation of the nation along the OBOR route. In fact, political factors such as civil disturbance, corruption control, rules of law, nationalization of the military, government effectiveness, and political stability of host countries are major factors determining the success and failure of Belt and Road Initiatives. Implementing OBOR projects in many countries inside the Middle East and Central Asia is tough enough from the political risk point of view. The political risk of various nations in the Middle East and Central Asia can easily be guessed from Marsh Political Risk Index Map, Corruption Perception Index, Regional Political Risk Index, New Coface Political Risk Index, Asia Political Risk Index and the like. Literally, terrorism, geopolitical rivalries, and political instability are factors that will complicate the BRI project more in 2020. Militants in Syria and Iraq are now dispersed in all important bridgeheads along the OBOR such as Southeast Asia, Europe, South Asia, Central Asia, North Africa, and the Middle East. Threats of terrorist on Belt and Road Initiative is continuously increasing rather than decreasing even though the Syrian and Iraqi government have declared victory over Islamic State. In the past, BRI initiatives have rejected the areas where the terrorist menace is high but this tactic does not work longer. Militants of Islamic State existing in the mountain terrain of Pakistan and Afghanistan can be a matter of high tension to proceed China-Pakistan Economic Corridor (CPEC). Recently, the Taliban has cut the power supply to Afghanistan that comes from Turkmenistan, Uzbekistan, and Tajikistan. Undoubtedly, China has to combat three evil forces, that is, separatism, terrorism, and extremism in every step of Belt and Road Initiatives. The pullout of NATO-led troops from different parts of the world also increasing threats to Belt and Road Initiatives. China has security challenges from the construction phase to the implementation phase. For instance, China's dependence on gas and oil on other nation will be reached to 41 per cent and 76 per cent respectively by 2035. The Indian Ocean and the South China Sea are the main routes for importing gas and oil, and this route can be cut off by the USA and India if war happens between them. It is hard for China to move forward in the path of BRI in most fragile countries as per the Fragile States Index (FSI) such as Yemen, Iraq, Somalia, and Afghanistan. BRI is a longterm process, and the election in the host nation profoundly impacts this process. Anti-Chinese and anti-BRI frame can be a campaign topic for the candidate during the election, and power transfer after the election can result in rejection of Belt and Road Initiatives. Similarly, political and social fissures in Ethiopia, Israel-Palestine conflict, Saudi-Iran conflict, and Arab-Israel conflict are major obstacles for China to run their projects smoothly. By contrast, BRI also likely to provide more opportunities for smugglers to traffick human, drugs, and arms. It is not easy for China to move forward as other big and powerful nations are also showing their interest in these conflict concentrated areas. For example, not only China but also The Eurasian Economic Union (EAEU) and EU are highly interested in supporting problematic regions of Central Asia for their peace and prosperity. The former military government of Myanmar has suspended Myitson Hydro Power Dam in mid-2012 due to environmental issues and public opposition. Fifty per cent of Chinese Foreign Domestic Investment went to OBOR countries, and China's share in infrastructure development in the host nation is escalating as compared to the local contractor. This situation has made some politician cautious and resulted in a local protest. Change in thought and policy due to change in government structure are risks factors of OBOR. Mahathir's government in Malaysia has cancelled USD 23 billion worth Chinese projects (Reuters, 2018). Imran Khan, Pakistani Prime minister, also trying to renegotiate CPEC project as it increases countries reliance on China (Pauley & Shad, 2018). One port project in Myanmar and two hydropower in Nepal are also under renegotiation process. Custom procedure and FDI policies in BRI nations are more burdensome and restrictive as compared to high-income Organization for Economic Co-operation and Development (OECD) countries. Hence, these sorts of unpleasant policies should be reformed to boost up connectivity.

### 5.2.2. GEOPOLITICAL RISK

Economic integration and geopolitics are two sides of a single coin. China wants to increase the economic dependency of peripheral countries on them to gain more support from these countries and to strengthen relationship and influence (The China Council for International Cooperation on Environment and Development, 2013). China has been using BRI as a tool for increasing peripheral relationship, which in turn would be supportive of their internal economic reforms. Involving in such initiatives may push developing nations in Asia, Africa, and Europe to obey China's fixed financial and security framework. China has been playing a leading role in many multilateral platforms like Asia-Europe Meeting (ASEM), Asia Pacific Economic Cooperation (APEC), Conference on Interaction and Confidence Building Measures in Asia (CICA), Asia Cooperation Dialogue (ACD), Shanghai Cooperation Organization (SCO), Brazil, Russia, India, China, and South Africa (BRICS), and the like and BRI will further leverage its political and economic influence in these platforms. China had already got an influential level of control in Central Asia even though Russia is a resident power there. Now China is focusing its politico-strategy in South East Asia (SE), and they want to keep South East Asian countries away from the US influence. Dual involvement of some ASEAN countries in the US-led Trans-Pacific Partnership (TPP) and in China-led Regional Comprehensive Economic Cooperation (RCEP) clearly indicates towards the existence of geopolitical motive of the different nations in the region and BRI is Chinese fuel to achieve this hegemonic ambition. China Pakistan Economic Corridor that passes through Indian territory illegally held by China and Pakistan can build geopolitical tensions among three countries and ignite political instability in the South Asian region. Constructions of less dynamic projects in different nation clearly verify China's interest to change the current geopolitical equations. For instance, Hambantota Port in Sri Lanka has received only 15 ships in the first year of its operation, and Mattala Rajapaksa Airport only received one flight per day (Shepard, 2016). Likewise, construction of Chittagong port in Bangladesh and expansion of Male airport can form strategic implication for India (The Guardian, 2016). Many scholars view BRI not only from a purely commercial perspective but also they think that it has geopolitical and geostrategic goals. China Ocean Shipping Company (COSCO) has gained a controlling stake in fundamental shipping hub that links the Mediterranean and Asian continent that is, the Greek Port of Piraeus (Laubier et al., 2018). China has achieved the privileges to operate Gwadar port for forty years (Manuel, 2017). However, a country like Romania can balance the geopolitical move of China as it is Eastern frontier of the Euro-Atlantic structure and a major geopolitical actor in the Black Sea and it is a strategic partner of U.S. (Ganea, 2016). Host nations of OBOR can balance the geopolitical move of China if they try to be an investing partner rather than the borrower. Like Romania, Russia can also play a vital role to balance the geopolitics of the region, but now Russia is supportive of China to weaken American influence in the region.

### 5.2.3. RISK OF POLITICO-MILITARY EXPANSION

OBOR initiative can be a big threat to the world as it has hidden objective to expand the role of People's Liberation Army (PLA) in the name of security guarantor for their own projects in different nations. China's regular attempts to deepen its foreign policy and strategic ties along with the expansion of boundary of the

military operation in the critical Indo-Pacific zone can pose serious strategic challenges to US (Tellis, 2017). In the year 2014, Liu Cigui, a director of the State Oceanic Administration, had stated that there must be sea post in every port made under BRI for sea lane security. China has been explaining this mission as an anti-piracy operation to support the UN mission (Verma, 2015). Building military camps and bases overseas without breaching international laws and regulations are not only interest of China (Tao, 2015) but also they consider it as their right (Dingli, 2010).

Along with promoting OBOR, China has been expanding the capacity and reach of PLA air force, and PLA Navy as per their strategical emphasis laid on China's Defence White Paper of 2015 (Tao, 2015). China wants to expand its marine corps from 20,000 to 100,000, wants to expand its navy's mission from offshore water defence to open seas protection, and wants to establish military camp and bases in each port. All these wants of China logically inform participating nations about their willingness to use military forces to protect their overseas interest (Lin & Singer, 2017). Such power projection activities of China can be dangerous if they use expanded military forces for an offensive mission rather than a defensive purpose. China has been continuously spending more money on its People's Liberation Army Navy (PLAN) to protect its mega constructions and infrastructure project. During the last decade, China has built 100 warships, and now China has 317 warships in total as compared to 283 of the U.S. Navy (Benli, 2019). Even though the U.S. Navy is technically better than the Chinese Navy, the Chinese navy is ready to combat anywhere with any sorts of enemies due to its stupendous size. U.S. has renamed its U.S. Pacific Command as the U.S. Indo-Pacific Command in the year 2018 to counter China's military influence in the South China Sea. This kind of arms race increases the risk of war.

### 5.3. BIG COMPETITION

BRI of China has been analysed from two different points of views. In reality, the OBOR vision of China has divided the entire world into two groups on the ground of their opinion on BRI. The first group is composed of wealthy nations who have invested a considerable amount of capital outside the nation and capturing or claiming specific part of the world as their market share and the second group is composed of developing countries who require Foreign Domestic Investment (FDI). Japan sees China as a competitor in Southeast Asia, Russia sees China as a competitor in Central Asia, EU sees China as a competitor in Europe and DC-based projects reconnecting Asia sees China's BRI as competitor's activities throughout the world. Group of developing nations are playing the balancing act with these nations. To compete with BRI, Japan announced a Partnership for Quality Infrastructure (PQI), which has 10 per cent more budget than that of Chinese led AIIB (Mardell, 2017). Except China other nation is just doing business in the name of cooperation. Besides doing business, they do not have any mission, vision and goal to connect every nation of the world and to provide mutual benefit through infrastructural development like China. As a counter moves to BRI Narendra Modi and Shinzo Abe had offered an alternative to Silk Road, that is Asia-Africa Growth Corridors. Even though India and Japan have not any vision to shape Asian future, they want to resist Chinese domination in the Asian future. One senior Russian official blamed BRI as another attempt to steal Central Asia from Russia (Mardell, 2017). Indian investment in Southeast Asia and Iran cannot compete with high scale Chinese capital in this region. Hence, Japan and India are using combined effort to compete with Belt and Road Initiatives. European Economic Union has already linked up with Belt and Road Initiatives, but it is tough for China to move forward in the Eurasian region due to the existence of other big players such as EU, South Korea, Iran, and Turkey.

India has been searching different alternative ways to compete with China's OBOR and recently India is in planning to start air cargo transportation between Iran, India, and Afghanistan to compete with China-Pakistan Economic Corridor (Marbler & Shan, 2017). In this big game, the U.S. has used security issues with its allies to become a superpower, whereas China offered connectivity plan for the same purpose (Bruce-Lockhart, 2017). In September 2018, EU initiated a Euro-Asian connectivity strategy to expand existing EU project in Asia (European Union, 2018). Likewise, the US is also expanding its reach to the Asia-Pacific region through the US International Development Finance Corporation, consisting of USD 60 billion. Finally, we can conclude that unlike other players, China has actual imagine and visionary plan to connect the continent and to bring mutual "win-win" benefit to all. The only thing is that China has to brush up against the unhealthy regional interest of other nation to reach the goal. In February 2016, the US government launched a policy called US-ASEAN Connect, which is similar in nature of OBOR. Business Connect, Energy Connect, Innovation Connect, and Policy Connect are the primary objectives of this initiation.

### 5.4. ECONOMIC RISK

It seems that OBOR is by the Chinese, for the Chinese and to the Chinese. Hence, Chinese investors are surrounded with various economic risk such as traffic demand risk, inflation risk, commodity price risk, construction risk, cash flow risk, operational risk, tax policy risk, exit strategy risk, bankruptcy risk, emerging market risk, operational risk, security credit risk, and sovereign risk (The Economist Intelligence Unit, 2015). Corruption, languages, culture, insufficient skills are other factors giving birth to the additional economic risk associated with Belt and Road initiatives. Lack of skill, experience, and expertise in Chinese counterpart to oversee large and complex projects may create operation dilemma and lead to delay in project operation. Corruption in the host nation may result in waste, unsuitable firm, and poor quality construction. Generally, projects have three phases that are, build (Construction), Operation, and transfer but lack of operation, maintenance, and management skill result in quick deterioration of highways, bridges, and railways, and it has a negative impact on project returns. For illustration, local transportation of Bangladesh has the problem of quick deterioration of railways and roads due to which Asian Development Bank prepared a road master plan and long-term railway investment program for this country (Asian Development Bank, 2014). China has built unprofitable, unnecessary, and unsuitable projects in some parts of the globe. For example, big Chinese SOE has built a large oil refinery in Kyrgyzstan and now its operation level is only 6 per cent of total capacity. In practice, this project is useful and global need but the place where they built it does not need that (Mersol & Luo, 2017). As per the Economist, Chinese contractors anticipated a loss of 30 per cent in Central Asia, 80 per cent in Pakistan, and 50 per cent in Myanmar. China will have to face the same problem in an underdeveloped nation where many large-scale projects are under construction. Corruption oriented behaviour of high ranking Chinese officials is also another cause of economic risk. For example, Cao Baiyu, the director of International Liaison Department of the Communist Party of China (CPC) and Sun Zhengcai, the Party Committee Secretary of the Chongqing Municipal were found corrupted during the investigation of the Central Commission for Discipline Inspection (Benli, 2019). Nearly around 170 senior executives of SOEs of China have been prosecuted, and many of them were involved in OBOR. Some political experts also view OBOR as money laundering machine for Chinese ruling classes and believe that they are secretly transferring national wealth overseas and preparing for their future lives after the collapse of the CPC regime. For instance, Wang Jianlin of Wanda Group sold 80% of its assets and spent 250 billion Yuan in purchasing assets overseas (Benli, 2019).

### 5.5. FUNDING AND FINANCIAL RISK

There is a far gap between projects that they want to construct and fund required to complete them. The Chinese government has promised US\$ 150 billion from different sources such as Silk Road Fund, Chinese Central Bank, Asian Infrastructure Investment Bank (AIIB) and New Development Bank but this fund is less enough to cover fund required to complete projects under construction. Many countries along the OBOR route has followed capital control, and exchange control policies and this policy in the host nation can create a financial risk to Chinese investors. In some countries, China is investing in such a way that creating a financial risk to themselves along with creating debt burden to the host nation. For example, US\$ 15 billion China-Uzbekistan investment is equal to 25 per cent of Uzbekistan's Gross Domestic Product (GDP) and US\$ 24 billion China Bangladesh agreement is equivalent to 25 per cent of Bangladesh's GDP (Chaudhury, 2017). It is essential for China to open up and reforms financial markets as their overall leverage ratio were 247 per cent, and corporate sector leverage was reached to 165 per cent in the year 2016 (Zhou, 2017). Chinese bank should stop lending debt-heavy large companies working outside the nation. In Sri Lanka, debt to GDP was elevated from 36% to 90% during China's investment in Hambantota (Gautrin, 2018). Mattala Rajapaksa International Airport in Hambantota was built on Chinese assistance of US\$ 190 billion that was 90 per cent more than the total cost (The Economic Times, 2018). Like Sri Lanka, other Southeast Asian countries such as Cambodia and Laos can be trapped in debt of BRI (Abi-Habib, 2018; and Hurley, Morris, & Portelance, 2018). Most of the projects constructed in developing nation are of political gains rather than economic benefits and is the major factor for the host nation to be in debt trapped. Construction of rail from Yunnan border to Vientiane in Lao People's Democratic Republic was the US \$ 7 billion, while their GDP was the only US \$ 12 billion (Gautrin, 2018). Here we see that 58.33% of total GDP was invested in a single project and was illogical.

Chinese banks loaned US\$16 billion with 13 per cent interest to Pakistan for Gwadar Port, and if Pakistan is unable to pay this loan, then they will have to hand over all their coal mines and oil pipelines to China as compensation (Desjardins, 2018). Putting a small nation in debt trap can be a colonial stratagem of China. The high-interest rate charged by Chinese lenders is the leading cause of losses on built projects. For instance, China is charging 6.3 per cent interest to Sri Lanka, but the interest rate on a soft loan from the World Bank and Asian Development Bank is only 0.25 – 3 per cent and even interest on a loan provided by India to its neighbouring country is of 1 per cent or less (The Economic Times, 2018). If host nations do not analyze financial deals and debt structure before choosing any

megastructure, then they have to exchange their sovereignty with a key player of OBOR. OBOR funding to Laos railway link represents half of its GDP. China is funding in one currency, operating in another currency and generating profit in yet more currencies, and this can be a matter of dispute in the long-run.

#### 5.6. DOMESTIC RISK

There is a high probability of losing control over capitals, which results in smuggling of money outside the nation in the name of Belt and Road Initiatives. Heavy investment under Belt and Road Initiatives cause domestic economic hardship. This hardship causes drop in government expenditure on major areas such as education, health and medical care, and social welfare. For instance, the local government has reduced the class size of Leiyang's public school due to the lack of adequate resources and transferred 10,000 students to an expensive private school. Parents in Leiyang city protested this incident. Likewise, People's Liberation Army (PLA) veterans have shown their dissatisfaction to the government of Heilongjiang Province due to a deficit in their pension insurance. These events are clear message of China's domestic financial deficiency. Now Beijing is spending more money (6.1% of government spending) on internal security to suppress social unrest caused by domestic financial deficiency.

#### 5.7. REGULAR CRITICISM

Scholars and political leaders have both positive and negative thought on OBOR. Some negative thoughts are presented here as criticisms. The Chinese government must have a definite answer for each objection associated with OBOR.

**Criticism 1:** Some scholars and politicians view it as an imitation of the Marshal Plan used by the US to rebuild Western Europe after World War II, which makes them a global superpower.

**Criticism 2:** Some scholars view OBOR as China's part of a plan to restore its old prestige, that is, Asia's leading power (Pax Sinica).

**Criticism 3:** China's State-owned companies working abroad for OBOR are opening shops, hiring employees from China, rejecting local workers, and exporting mined raw material to home. For instance, as per scholars observing Chinese investment in Africa since 1991 to 2010 identified that Chinese investment has not been supporting in economic growth but their cheap export to Africa replacing African local firms (Manuel, 2017).

**Criticism 4:** Accepting Chinese fund means mortgaging their futures (Manuel, 2017).

**Criticism 5:** OBOR projects are encouraging terrible governance, and violating environmental and human rights standard. Therefore, China's big investments are in countries run by dictators such as Uganda, North Korea, Angola, Zimbabwe, Burma, Niger and the like.

**Criticism 6:** This game will increase the dependency of developing nation on China.

**Criticism 7:** Belt and Road Initiatives are a new version of colonialism (Benli, 2019).

**Criticism 7:** OBOR actions are vague but the vision is clear.

## 6. SUMMARY, CONCLUSION, AND RECOMMENDATION

Even though politician and scholars from different nation criticize it as a copy of the US Marshall Plan, in fact, it is China's huge foreign policy until date. Criticisms do not have a place in Belt and Road Initiatives as it creates a win-win situation to both partners and non-partners nations if implemented correctly. In truth, investments always entail geopolitical issues, financial risk, debt risk, and funding risk, whether an investor is the U.S.A., China, Japan, India, or EU. Rather than blaming and criticizing China it is better for recipient country to think twice about their current economic and political status, size and need of projects, criteria of involvement (from project designing to handover phase), possible interest rate and cost fluctuation and expected benefit of projects before accepting loan from any nation for big projects.

Chinese companies involving in OBOR projects should try to increase the number of international partners rather than moving alone. They have to evaluate their stratagem regularly and continuously rebalance their business mix and innovation. China should develop strict defense criteria for big investment projects, and there should be an independent financial auditing system for projects with high investment. To minimize the risk of project rejection, every project should be presented in the public domain of both nations, along with the project's benefits. Bankable investment should be increased. China has to increase the investment proportion of the host nation. Nations participating in BRI should balance debt to GDP ratio to minimize the risk of being trapped in debt. To share the risk, the benefit of projects should be evaluated on the ground of projected cash flows rather than on the ground of a supporter's balance sheet. Direct participation of locals, experts, NGOs, lawyers, auditors will play an effective role in achieving long-term objectives, ensuring profit, managing local community and environment, and reducing risk related to unfamiliar regulatory and legislative environment. China's current strategy to capture the international market through production and export of cheap goods will be of worthless in the future owing to high carbon emission, and labour-intensive products and services. Every sovereign country has the right to reject any OBOR project, which is not beneficial for them.

## REFERENCES

1. Abi-Habib, M. (2018, June 25). How China Got Sri Lanka to Cough Up a Port. Retrieved from <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>
2. Altenburg, T., & Rodrik, D. (2017). *Green industrial policy: accelerating structural change towards wealthy green economies*. In *Green Industrial Policy: Concept, Policies, Country Experiences*. Geneva, Boon: UN Environment. Retrieved from German Development Institute/ Deutsches Institut für Entwicklungspolitik (DIE) website: [https://www.diegdi.de/uploads/media/GREEN\\_INDUSTRIAL\\_POLICY.Endf.pdf#page=17](https://www.diegdi.de/uploads/media/GREEN_INDUSTRIAL_POLICY.Endf.pdf#page=17)
3. Aoyama, R. (2016). "One belt, one road": China's new global strategy. *Journal of Contemporary East Asia Studies*, 5(2), 3-22. doi:10.1080/24761028.2016.11869094
4. Aris, S. (2016). *One Belt, One Road: China's Vision of "Connectivity"* (195). Retrieved from Center for Security Studies (CSS), ETH Zurich website: <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/CSSAnalyse195-EN.pdf>
5. Ascensao, F., Fahrig, L., Clevenger, A. P., Corlett, R. T., Jaeger, J. A., Laurance, W. F., & Pereira, H. M. (2018). Environmental challenges for the Belt and Road Initiative. *Nature Sustainability*, 1, 206-209. Retrieved from <https://doi.org/10.1038/s41839-018-0059-3>
6. Asian Development Bank. (2014, December 15). *Bangladesh: Road Maintenance and Improvement Project* (33243-013). Retrieved from Asian Development Bank website: <https://www.adb.org/documents/bangladesh-road-maintenance-improvement-project>
7. BBC. (2016, October 5). Ethiopia-Djibouti electric rail opens. Retrieved from <https://www.bbc.com/news/world-africa-37562177>
8. BBC. (2017, May 31). Kenya opens first railway for a century. Retrieved from <https://www.bbc.com/news/world-africa-40092600>
9. Benli, Q. (2019, January 2). The domestic consequences of China's 'One Belt One Road Initiative'. Retrieved from <http://www.cadm.org/The-Domestic-Consequences-of-China-s-One-Belt-One-Road-Initiative>
10. Black, E. (2017, March 2). Southeast Asia's \$3.5 trillion infrastructure crisis. Retrieved from <http://sea-globe.com/southeast-asias-3-5-trillion-infrastructure-crisis/>
11. Blanchard, J. F., & Flint, C. (2017). The Geopolitics of China's Maritime Silk Road Initiative. *Geopolitics*, 22(2), 223-245. doi:10.1080/14650045.2017.1291503
12. Bo, X. (2018, March 18). China-Europe freight train service extended southwards to Vietnam - Xinhua | English.news.cn. Retrieved from [http://www.xinhuanet.com/english/2018-03/18/c\\_137047977.htm](http://www.xinhuanet.com/english/2018-03/18/c_137047977.htm)
13. Bruce-Lockhart, A. (2017, June 26). China's \$900 billion New Silk Road. What you need to know. Retrieved from <https://www.weforum.org/agenda/2017/06/china-new-silk-road-explainer/>
14. CCICED. (2013, October 30). Important Speech of Xi Jinping at Peripheral Diplomacy Work Conference. Retrieved from [http://www.cciced.net/cciceden/NEWSCENTER/LatestEnvironmentalandDevelopmentNews/201310/t20131030\\_82626.html](http://www.cciced.net/cciceden/NEWSCENTER/LatestEnvironmentalandDevelopmentNews/201310/t20131030_82626.html)
15. Chankaew, P., Lefevre, A. S., & Macfie, N. (2017, December 21). After delays, ground broken for Thailand-China railway project. Retrieved from <https://www.reuters.com/article/us-thailand-china-railway/after-delays-ground-broken-for-thailand-china-railway-project idUSKBN1E1E6>
16. Chao, Z. (2018, January 18). The Climate Change Promise of China's Belt and Road Initiative. *The Diplomat Online*. 18 January 2018. Retrieved from <https://thediplomat.com/2018/01/the-climate-change-promise-of-chinas-belt-and-road-initiative/>

17. Chaudhury, D. R. (2017, May 25). UN warns about financial risks in China's One Belt One Road project. Retrieved from <https://economictimes.indiatimes.com/news/defence/un-warns-about-financial-risks-in-chinas-one-belt-one-road-project/articleshow/58831087.cms> The Economic Times
18. Chen, S. (2017). Regional Responses to China's Maritime Silk Road Initiative in Southeast Asia. *Journal of Contemporary China*, 27(111), 344-361. doi:10.1080/10670564.2018.1410960
19. Cheng, L. K. (2016). Three questions on China's "Belt and Road Initiative". *China Economic Review*, 40, 309-313. doi:10.1016/j.chieco.2016.07.008
20. China Daily. (2017, October 12). China-Belarus industrial park makes breakthrough in attracting investors. Retrieved from [http://www.chinadaily.com.cn/business/2017-10/12/content\\_33154129.htm](http://www.chinadaily.com.cn/business/2017-10/12/content_33154129.htm)
21. Chung, C. (2017). What are the strategic and economic implications for South Asia of China's Maritime Silk Road initiative? *The Pacific Review*, 31(3), 315-332. doi:10.1080/09512748.2017.1375000
22. Cigui, L. (2014, September 14). Reflections on Maritime Partnership: Building the 21st Century Maritime Silk Road. Retrieved from [http://www.ciis.org.cn/english/2014-09/15/content\\_7231376.htm](http://www.ciis.org.cn/english/2014-09/15/content_7231376.htm)
23. CNC. (2015, May 19). Thai-Chinese Rayong Industrial Zone. Retrieved from [http://en.cncnews.cn/news/v\\_show/49239\\_Thai-Chinese\\_Rayong\\_Industrial\\_Zone.shtml](http://en.cncnews.cn/news/v_show/49239_Thai-Chinese_Rayong_Industrial_Zone.shtml)
24. Das, K. C. (2017). *The Making of One Belt, One Road and Dilemmas in South Asia* (53:2). Retrieved from Sage Publications website: <https://journals.sagepub.com/doi/pdf/10.1177/0009445517696624>
25. Desjardins, J. (2018, March 15). Visualizing China's most ambitious megaproject. Retrieved from <http://www.mining.com/web/visualizing-chinas-ambitious-megaproject/>
26. Dingli, S. (2010, January 28). Don't shun the idea of setting up overseas military bases. Retrieved from [http://www.china.org.cn/opinion/2010-01/28/content\\_19324522.htm](http://www.china.org.cn/opinion/2010-01/28/content_19324522.htm)
27. Du, J., & Zhang, Y. (2018). Does One Belt One Road initiative promote Chinese overseas direct investment? *China Economic Review*, 47, 189-205. doi:10.1016/j.chieco.2017.05.010
28. Du, M. M. (2016). China's "One Belt, One Road" Initiative: Context, Focus, Institutions, and Implications. *The Chinese Journal of Global Governance*, 2(1), 30-43. doi:10.1163/23525207-12340014
29. EIU Digital Solutions. (2017, May 18). Progress and next steps for China's Belt and Road Initiative. Retrieved from <https://country.eiu.com/article.aspx?articleid=1825436566&Country=China&topic=Politics>
30. European Union. (2018, September 19). Explaining the European Union's approach to connecting Europe and Asia. Retrieved from [http://europa.eu/rapid/press-release\\_MEMO-18-5804\\_en.pdf](http://europa.eu/rapid/press-release_MEMO-18-5804_en.pdf)
31. Gabuev, A. (2016). Crouching Bear, Hidden Dragon: "One Belt One Road" and Chinese-Russian Jostling for Power in Central Asia. *Journal of Contemporary East Asia Studies*, 5(2), 61-78. doi:10.1080/24761028.2016.11869097
32. Ganea, M. (2016, December 19). *The Impact of China's One Belt, One Road on Romania*. Retrieved from <https://www.geopoliticalmonitor.com/the-impact-of-chinas-one-belt-one-road-on-romania/>
33. Gautrin, J. F. (2018, March 5). One Belt One Road and the Risks Behind the Win-Win Situation [Web log post]. Retrieved from <https://www.asiapathways-adbi.org/2018/03/one-belt-one-road-and-the-risks-behind-the-win-win-situation/>
34. Haiquan, L. (2017). The Security Challenges of the "One Belt, One Road" Initiative and China's Choices. *Croatian International Relations Review*, 23(78), 129-147. doi:10.1515/cirr-2017-0010
35. Hali, S. M., Shukui, T., & IQbal, S. (2015, March). One Belt and One Road: Impact on China-Pakistan Economic Corridor. Retrieved from [http://issi.org.pk/wp-content/uploads/2015/12/Shafei\\_Moiz\\_and\\_Tan\\_and\\_Sumera\\_3435\\_SS\\_41\\_20142015.pdf](http://issi.org.pk/wp-content/uploads/2015/12/Shafei_Moiz_and_Tan_and_Sumera_3435_SS_41_20142015.pdf)
36. Huang, Y. (2016). Understanding China's Belt & Road Initiative: Motivation, framework and assessment. *China Economic Review*, 40, 314-321. doi:10.1016/j.chieco.2016.07.007
37. Huang, Y. (2016). Understanding China's Belt & Road Initiative: Motivation, framework and assessment. *China Economic Review*, 40, 314-321. doi:10.1016/j.chieco.2016.07.007
38. Huang, Z. (2017, May 15). Your guide to OBOR, China's plan to build a new Silk Road. Retrieved from <https://qz.com/983460/obor-an-extremely-simple-guide-to-understanding-chinas-one-belt-one-road-forum-for-its-new-silk-road/>
39. Hurley, J., Morris, S., & Portelance, G. (2018). *Examining the debt implications of the Belt and Road Initiative from a policy perspective* (CGD Policy Paper 121). Retrieved from Center for Global Development website: <https://www.cgdev.org/sites/default/files/examining-debt-implications-belt-and-road-initiative-policy-perspective.pdf>
40. IEA. (2017). *Southeast Asia Energy Outlook 2017*. Paris, IEA/OECD.
41. Jian, W. (2017, May 9). 'One Belt One Road?: A Vision for the Future of China-Middle East Relations. Retrieved from <http://studies.aljazeera.net/en-reports/2017/05/belt-road-vision-future-china-middle-east-relations-170509102227548.html>
42. Jinchen, T. (2016, June). 'One Belt and One Road?: Connecting China and the world. Retrieved from <https://www.globalinfrastructureinitiative.com/article/one-belt-and-one-road-connecting-china-and-world>
43. Josephs, J. (2017, January 18). All aboard the China-to-London freight train. Retrieved from <https://www.bbc.com/news/business-38654176>
44. KJM Verma. (2015, November 26). China to build military logistics base at Djibouti. Retrieved from <https://www.indiatoday.in/pti-feed/story/china-to-build-military-logistics-base-at-djibouti-519571-2015-11-26>
45. Laubier, R. D., Burfeind, A., Zhou, Y., Xie, A., Heck, P., & Siegrist, A. (2018). *The trillion-dollar plan for the new Silk Road*. Retrieved from The Boston Consulting Group website: [http://image-src.bcg.com/Images/BCG-The-Trillion-Dollar-Plan-for-the-New-Silk-Road-May-2018\\_tcm9-193930.pdf](http://image-src.bcg.com/Images/BCG-The-Trillion-Dollar-Plan-for-the-New-Silk-Road-May-2018_tcm9-193930.pdf)
46. Laubier, R. D., Burfeind, A., Zhou, Y., Xie, Z., Heck, P., & Siegrist, A. (2018, May 30). The Trillion-Dollar Plan for the New Silk Road. Retrieved from <https://www.bcg.com/publications/2018/trillion-dollar-plan-new-silk-road.aspx>
47. Lin, J., & Singer, P. W. (2017, April 28). *China's naval task force begins its 6-month, 20-nation grand tour*. Retrieved from <https://www.popsci.com/chinese-naval-task-force-starts-20-nation-grand-tour>
48. Liu, B. (2018). The Role of Chinese Financial Institutions in Promoting Sustainable Investment Under the One Belt One Road Initiative. *SSRN Electronic Journal*, 1(1), 1-31. doi:10.2139/ssrn.3148085
49. Manuel, A. (2017, October 17). China Is Quietly Reshaping the World. Retrieved from <https://www.theatlantic.com/international/archive/2017/10/china-belt-and-road/542667/>
50. Marbler, P., & Shan, L. (2017). *Chinese investments in infrastructure worldwide* (36). Retrieved from THE FRENCH INSTITUTE FOR INTERNATIONAL AND STRATEGIC AFFAIRS website: <http://www.iris-france.org/wp-content/uploads/2017/06/Asia-Focus-36.pdf>
51. Mardell, J. (2017, December 15). One Belt, One Road, and One Big Competition. Retrieved from <https://thediplomat.com/2017/12/one-belt-one-road-and-one-big-competition/> The Diplomat
52. Mersol & Luo. (2017, June 6). *The Belt and Road Initiative, Challenges and the Impact On Business*. Retrieved from <https://medium.com/@mersolluo/what-is-the-belt-and-road-initiative-and-how-will-it-impact-businesses-958ac6304b37>
53. Mishra, R. (2016). Asian Infrastructure Investment Bank: An Assessment. *India Quarterly: A Journal of International Affairs*, 72(2), 163-176. Retrieved from <https://doi.org/10.1177%2F0974928416643582>
54. Pantucci, R., & Lain, S. (2016). I. China's Grand Strategy: The Belt and Road Initiative. *Whitehall Papers*, 88(1), 7-16. doi:10.1080/02681307.2016.1274604



55. Pauley, L., & Shad, H. (2018, October 5). Gwadar: Emerging Port City or Chinese Colony?. Retrieved from <https://thediplomat.com/2018/10/gwadar-emerging-port-city-or-chinese-colony/>  
The Diplomat
56. Piman, T., & Shrestha, M. (2017, November 4). *Case Study on Sediment in the Mekong River Basin: Current State and Future Trends*. SEI Project Report. Retrieved from Stockholm Environment Institute website: <https://www.sei.org/publications/sediment-mekong-river/>
57. Räsänen, T. A., Varis, O., Scherer, L., & Kummu, M. (2018). Greenhouse gas emissions of hydropower in the Mekong River Basin. *Environmental Research Letters*, 13(3), 034030. doi:10.1088/1748-9326/aaa817
58. Reuters. (2018, July 6). Malaysia's Mahathir says will raise 'unfair' contracts in visit to China. Retrieved from <https://www.reuters.com/article/us-malaysia-politics-china/malaysias-mahathir-says-will-raise-unfair-contracts-in-visit-to-china-idUSKBN1JW0QB>
59. Ruta, M. (2018, April 5). Three Opportunities and Three Risks of the Belt and Road Initiative [Web log post]. Retrieved from <https://blogs.worldbank.org/trade/three-opportunities-and-three-risks-belt-and-road-initiative>
60. Saliu, O. (2019, January 15). Nigeria's first standard gauge railway marks 900 days of safe operation. Retrieved from <https://eng.yidaiyilu.gov.cn/qwyw/rdxw/77420.htm>
61. Shanshan, G. (2019, February 12). China's central SOEs lead way in B&R construction. Retrieved from <https://eng.yidaiyilu.gov.cn/qwyw/rdxw/79294.htm>  
Xinhua Silk Road Information Service
62. Shapiro, J. L. (2017, January 12). One Belt, One Road, No Dice. Retrieved from <https://geopoliticalfutures.com/one-belt-one-road-no-dice/>
63. Shepard, W. (2016, May 28). The Story Behind The World's Emptiest International Airport. Retrieved from <https://www.forbes.com/sites/wadeshepard/2016/05/28/the-story-behind-the-worlds-emptiest-international-airport-sri-lankas-mattala-rajapaksa/#528612f07cea>
64. Sriring, O., & Staporncharnchai, S. (2016, May 16). From car parts to condos, faltering Thailand lures Chinese money. Retrieved from <https://www.reuters.com/article/thailand-china-investment/from-car-parts-to-condos-faltering-thailand-lures-chinese-money-idINKCNOY72DF>
65. Swaine, M. D. (2015). *Chinese Views and Commentary on the "One Belt, One Road" Initiative* (47). Retrieved from China Leadership Monitor website: <https://www.hoover.org/sites/default/files/research/docs/clm47ms.pdf>
66. Tao, Z. (2015, August 10). General Zhu Wenquan: How to Win Island War! Retrieved from [http://english.chinamil.com.cn/news-channels/china-military-news/2015-08/10/content\\_6623644.htm](http://english.chinamil.com.cn/news-channels/china-military-news/2015-08/10/content_6623644.htm)
67. Tao, Z. (2015, May 26). Full Text: China's Military Strategy. Retrieved from [http://eng.mod.gov.cn/Press/2015-05/26/content\\_4586805\\_4.htm](http://eng.mod.gov.cn/Press/2015-05/26/content_4586805_4.htm)
68. Tellis, A. J. (2017, April 25). Protecting American Primacy in the Indo-Pacific. Retrieved from <https://carnegieendowment.org/2017/04/25/protecting-american-primacy-in-indo-pacific-pub-68754>
69. The Economic Times. (2018, July 12). A scary glimpse into how China's OBOR can ruin small countries. Retrieved from <https://economictimes.indiatimes.com/news/defence/a-scary-glimpse-into-how-chinas-obor-can-ruin-small-countries/articleshow/60173526.cms?from=mdr>
70. The Economist Intelligence Unit (EIU). (2015). *Prospects and challenges on China's 'one belt, one road': a risk assessment report*. Retrieved from The Economist Intelligence Unit (EIU) website: <https://static1.squarespace.com/static/529fcf02e4b0aa09f5b7ff67/t/554c49cee4b06fc215162cb4/1431062990726/One+Belt%2C+One+Road.pdf>
71. The Guardian. (2016, April 8). Maldives airport to be expanded with controversial \$800m China contract. Retrieved from <https://www.theguardian.com/world/2016/apr/08/maldives-airport-expanded-800m-china-contract>
72. The Jakarta Post. (2018, February 19). Jakarta-Bandung railway project won't meet target: Minister. Retrieved from <https://www.thejakartapost.com/news/2018/02/19/jakarta-bandung-railway-project-wont-meet-target-minister.html>
73. Uberoi, P. (2016). *Problems and Prospects of the BCIM Economic Corridor*. *China Report* (52). Retrieved from Sage Publications website: <https://journals.sagepub.com/doi/pdf/10.1177/0009445515613868>
74. Wang, X., Ruet, J., & Richer, X. (2017). *One Belt One Road and the Reconfiguration of China-EU Relations* (hal-01499020). Retrieved from HAL website: <https://hal.archives-ouvertes.fr/hal-01499020/document>
75. Webb, J. (2017, January 10). The New Silk Road: China Launches Beijing-London Freight Train Route. Retrieved from <https://www.forbes.com/sites/jwebb/2017/01/03/the-new-silk-road-china-launches-beijing-london-freight-train-route/#2ae01f061f13>
76. XING, Y. (2016). The Asian Infrastructure Investment Bank and China's Role in Regional Economic Governance. *East Asian Policy*, 08(02), 25-36. doi:10.1142/s1793930516000179
77. Xinhua. (2018, August 11). Interview: China-Belarus Industrial Park propels Belarusian economy - Xinhua | English.news.cn. Retrieved April 29, 2019, from [http://www.xinhuanet.com/english/2018-08/11/c\\_137383743.htm](http://www.xinhuanet.com/english/2018-08/11/c_137383743.htm)
78. Xinhua. (2018, August 27). China-Europe freight trains make 10,000 trips - Xinhua | English.news.cn. Retrieved from [http://www.xinhuanet.com/english/2018-08/27/c\\_137422376.htm](http://www.xinhuanet.com/english/2018-08/27/c_137422376.htm)
79. Xinhua. (2018, August 28). Spotlight: Sudan expects to play bigger role in Belt and Road Initiative -- analysts - Xinhua | English.news.cn. Retrieved from [http://www.xinhuanet.com/english/2018-08/28/c\\_137424486.htm](http://www.xinhuanet.com/english/2018-08/28/c_137424486.htm)
80. Xinhua. (2018, June 29). Construction of Jakarta-Bandung high-speed railway in full swing in Indonesia - Xinhua | English.news.cn. Retrieved from [http://www.xinhuanet.com/english/2018-06/29/c\\_137290654.htm](http://www.xinhuanet.com/english/2018-06/29/c_137290654.htm)
81. Xinhua. (2019, January 16). Argentine president calls Argentina-China hydropower project "highly important". Retrieved from <https://eng.yidaiyilu.gov.cn/qwyw/rdxw/77500.htm#p=3>
82. Yang, D., Cai, J., Hull, V., Wang, K., Tsang, Y., & Liu, J. (2016). New road for telecoupling global prosperity and ecological sustainability. *Ecosystem Health and Sustainability*, 2(10), e01242. doi:10.1002/ehs2.1242
83. Yu, H. (2017). Motivation behind China's 'One Belt, One Road' Initiatives and Establishment of the Asian Infrastructure Investment Bank. *Journal of Contemporary China*, 26(105), 353-368. doi:10.1080/10670564.2016.1245894
84. Zhou, X. (2017, November 4). Hold the bottom line of avoiding systemic financial risk. Retrieved from <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/3410388/index.html>
85. Zhu, L., & Zhu, J. (2016). The Study on the International Production Capacity Cooperation of the China - Indochina Peninsula Economic Corridor. *Proceedings of the 2016 International Symposium on Business Cooperation and Development*. doi:10.2991/isbcd-16.2016.39
86. Zimmerman, T. (2015, October 13). The New Silk Roads: China, the U.S., and the Future of Central Asia. Retrieved from <https://cic.nyu.edu/publications/new-silk-roads-china-us-and-future-central-asia>

**A STUDY ON BENEFITS AND CHALLENGES OF DIGITALISATION OF INDIAN ECONOMY**

**Dr. GADDAM JIMMY CORTON**  
**HEAD**  
**DEPARTMENT OF ECONOMICS**  
**PG COLLEGE**  
**PALAMURU UNIVERSITY**  
**MAHABUBNAGAR**

**NAGASUDHA K**  
**ASST. PROFESSOR**  
**DEPARTMENT OF MBA**  
**PG COLLEGE**  
**PALAMURU UNIVERSITY**  
**MAHABUBNAGAR**

**ABSTRACT**

*The present paper attempted to explain about the concept of digitalisation of Indian economy. The main focus of this work is to educate the readers about the various benefits of digitalization besides focussing on the challenges that the country has to face. The present work also explained the need for digitalization of the economy. This work focuses on the merits of digitalisation such as Creation of Digital Infrastructure and Electronic Manufacturing in India, Digital Empowerment of Native Indian People, Delivery of all Government Services electronically (E-Governance), a Digital Identification which will verify the end user, a Mobile for worldwide access to all services etc. This work focussed on various challenges ahead before digitalisation of the Indian economy, such as lack of digital infrastructure, high dependency on cash by the Indian population, challenge of digital literacy, Scepticism in Merchants etc. A part from various merits and demerits the present work also focused on the need of digitalisation of Indian economy.*

**KEYWORDS**

digitalization, economy, benefits challenges, infrastructure.

**JEL CODE**

C80

**INTRODUCTION**

**D**igital economy refers to an economy that is based on digital computing technologies. The digital economy is also sometimes called the Internet Economy, the New Economy, or Web Economy. Increasingly, the "digital economy" is intertwined with the traditional economy making a clear delineation harder.

**DEFINITION**

The term "Digital Economy" was coined in Don Tapscott's 1995 book. The Digital Economy: promise and peril in the age of Networked intelligence. The Digital Economy was among the first books to consider how the Internet would change the way we did business. According to Thomas Mesenbourg (2001), three main components of the 'Digital Economy'<sup>1</sup> concept can be identified:

e-business infrastructure (hardware, software, telecoms, networks, human capital, etc.),

- e-business (how business is conducted, any process that an organization conducts over computer-mediated networks),
- E-commerce (transfer of goods, for example when a book is sold online).

But, as Bill Imlah comments, new applications are blurring these boundaries and adding complexity; for example, consider social media and Internet search.

In the last decade of the 20th century. Nicholas Negroponte (1995) used a metaphor of shifting from processing atoms to processing bits. "The problem is simple. When information is embodied in atoms, there is a need for all sorts of industrial-age means and huge corporations for delivery. But suddenly, when the focus shifts to bits, the traditional big guys are no longer needed. Do-it-yourself publishing on the Internet makes sense. It does not for a paper copy

In this new economy, digital networking and communication infrastructures provide a global platform over which people and organizations devise strategies, interact, communicate, collaborate and search for information. More recently Digital Economy has been defined as the branch of economics studying zero marginal cost intangible goods over the Net.

**IMPACT**

The Digital Economy is worth three trillion dollars today. This is about 30% of the S&P 500, six times the U.S.' annual trade deficit or more than the GDP of the United Kingdom. What is impressive is the fact that this entire value has been generated in the past 20 years since the launch of the Internet.

It is widely accepted that the growth of the digital economy has widespread impact on the whole economy. Various attempts at categorizing the size of the impact on traditional sectors have been made. The Boston Consulting Group discussed "four waves of change sweeping over consumer goods and retail", for instance In 2012, Deloitte ranked six industry sectors as having a "short fuse" and to experience a "big bang" as a result of the digital economy.

Telstra, a leading Australian telecommunications provider, describes how competition will become more global and more intense as a result of the digital economy.

**OBJECTIVES OF THE STUDY**

1. To study benefits of Digitalization of Indian economy
2. To examine the various challenges ahead in Digitalization of Indian economy
3. To explore the need for Digitalization of Indian economy

**RESEARCH METHODOLOGY**

This study is a secondary data analysis of reports and articles regarding digitalization of Indian economy benefits and challenges.

**SOURCES OF DATA**

The analysis of reports and articles of economic change considers secondary data essential, as it is impossible to conduct a new survey that can adequately capture past challenges and benefits developments. However, secondary data analysis is used in preparing this paper. It has been collected from all the sources available

and is used in previous research, making it easier to carry out further research. A clear data using secondary data is that much of the background work which has been already been carried out, such as review of literature and studies.

## REVIEW OF LITERATURE

*Chaudhuri payel in her work "Role of Digitization and E-commerce in Indian Economic Growth: An Employment Generation Perspective"*<sup>2</sup> explained that the objective of the paper is to investigate the impact of digitization on economic growth and its potential for creating employment opportunities. Digitization being a key economic driver in the present world it is important to integrate the economy by creating digital markets. Firms, prices and productivity are the three benefits derived by an economy. It is found in large economies internet accounts for about 3.4% of GDP on average along with stable employment generation. During global downturn 6 million jobs were created worldwide by the digitization effects and 94% were from emerging economies and 6% from North America and Western Europe. This showcases the potential of the digitization in creating employment opportunities. Researches show developing economies has more possibilities of gaining advantages of e-commerce than the developed economies as developing economies have wider scope of reducing inefficiencies and increase production. In India, increasing internet penetration, rapid technology adoption and high sale of technical gadgets like smart phones, tablets, etc, have led to an attractive online customer base and unprecedented growth of e-commerce.

*Saima khan, Dr shazia khan, Mohsina Aftab in their paper "Digitalization and its impact on Economy"*<sup>3</sup> attempted to explain that The waves of adoption and usage of ICTs (Information and Communication Technologies) have revolutionized our world by introducing distinct technology— enabled services in every sphere of our lives. There are various applications of ICT, digitization is one of them. Digitization is a process of converting the diverse forms of information, such as text, sound, image or voice into digitalized format. The digitization has a proven impact on economy and society by reducing unemployment, improving quality of life, and boosting access to knowledge and other public services. The process of digitization is marked by cost effectiveness to cut the cost that incurred in various knowledge practices related to the production, organization and communication of information that makes long-term economic growth. Their s paper highlights the concept of digitization along with the social economic and ecological benefits of digitization of knowledge and information.

*Besley Tina, Peters A Michael in their paper "Digitized youth: constructing identities in the creative knowledge Economy"*<sup>4</sup> attempted to explain that some of the recent research findings about US youths' engagement and identities in the digital world that have become available since 2007. It examines the creativity of youths and the constructive means they use to develop new identities and subjectivities that resist the worst excesses of the market while engaging and negotiating the emergent social media and developing their own hybridized sense of style in music and culture. Finally, the article looks at youth and creativity—the implications for the creative knowledge economy with this new generation of digital natives and how education might finally take an active role rather than banning children's participation.

*Bingham Adrian in his work "The Digitization of Newspaper Archives: Opportunities and Challenges for Historians"*<sup>5</sup> attempted to explain that It is clear even to the most casual observer of the historical profession that research practices are being gradually transformed by the digitization of archives and primary sources. So many new digital resources are being released—cabinet papers, parliamentary proceedings, sound recordings, photographic collections—that it is difficult to keep up with the riches available. One of the most useful of these developments for modern British historians is the digitization of a number of significant newspaper archives. Although there was once widespread scepticism about using newspapers because of their doubtful accuracy and their ephemeral nature, ever since the 'cultural turn' and the increasing scholarly interest in language, representation and meaning, there are few who deny the value of newspaper content for understanding politics, culture and society.

## DIGITAL INDIA

Digital India is an initiative by the Government of India to ensure that Government services are made available to citizens electronically by improving online infrastructure and by increasing internet connectivity. It was launched on 1 July 2015 by Prime Minister Narendra Modi.

The initiative includes plans to connect rural areas with high speed internet networks. Digital India has three core components. These include:

- The creation of digital infrastructure
- Delivering services digitally
- Digital Literacy

## NEED FOR DIGITALISATION

The basic idea of digitization is to make full use of ICT facilities for accessing worldwide resources and beneficial for society at the same time. As going digital is the need of the hour, to remain environment healthy and safe. Various organizations are involved in digitizing their material because they remain influenced of the enduring value of such resources for learning. Digitization also raises the reputation of the institutions as global users can know the institutional collection and utilize these resources from distant locations. The main reasons to digitize are to enhance access and improve preservation. By digitizing their collection, institutions can make information accessible that was previously only available to a select group of users. Digitization can also help preserve materials making high-quality digital images available electronically and may reduce wear and tear on brittle and fragile documents.

## BENEFITS AND CHALLENGES OF DIGITALISATION

The recent move of demonetization has rattled the dusty cages of cash based economy. The demonetization drive was initially termed as a tool to tackle the problem of black money and fake currency, but since then, the narrative has clearly shifted base. Now it is a way to promote cashless transactions among citizens, which is really a good idea for the country. But the question is whether India is ready for it or how feasible it would be for the government to turn India into a cashless economy by 2020.

India has a large amount of black money. According to recent estimates around 1/4th of Indian GDP is the shadow economy of India, which is like a parallel dimension slowly sucking out energy and matter from our dimension (economic ecosystem). However, one thing needs to be made clear that of all the black money in India only 10% of it is in hoarded cash and the rest is in floating in the market or is in form of gold, stocks or real estate. The success or failure of demonetization as a means to curb black money and fake currency can only be determined after a couple of months but the fact that digital economy is good for the country, is overwhelmingly accepted as true.

What you need to know is, how it can be beneficial for our country and what are the challenges in front of India in going cashless.

Now let's move on to the **MAJOR ADVANTAGES**:

1. Creation of Digital Infrastructure and Electronic Manufacturing in Native India.
2. Digital Empowerment of Native Indian People.
3. Delivery of all Government Services electronically (E-Governance).
4. A Digital Identification which will verify the end user.
5. A Mobile for worldwide access to all services.
6. A Bank account for Immediate Benefit Transfers of subsidies and payments.
7. The program also aims to eliminate all electronics imports from foreign countries by 2020 and make India an electronics manufacturing super power.

**OTHER ADVANTAGES:**

1. It will help in decreasing crime if applied on whole.
2. It will help in getting things done easily.
3. It will help in decreasing documentation.
4. Some of the services which will be provided through this desire effort are Digital Locker, e-education, e-health, e-sign and nationwide scholarship portal.

5. It will ostensibly create a lot of jobs.

6. It will be a boost to industry; both large and small enterprises.

Digital India without a doubt is a very commendable project and deserves full support. As far no disadvantages could be noticed as it's an initiative we are talking about. However, the initiative also lacks many crucial components including lack of legal framework, absence of privacy and data protection laws, civil liberties abuse possibilities, lack of parliamentary oversight for e-surveillance in India, lack of intelligence related reforms in India, insecure Indian cyberspace, etc.

### CHALLENGES INCLUDED IN DIGITALISATION OF NATION

However, in a country of 1.3 billion people, not all is perfect and not all is rosy. Going cashless must be an exponential curve, slow initial builds up then fast paced in later stages, not a digital step signal. That could be counterintuitive to the whole process. India is a large country that needs a change that is systemic and systematic. Here is a list of challenges-

1. High Cash Dependency: India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries. This goes to show our dependence on cash is acute and it requires time to tackle it.
2. Lack of Digital Infrastructure: The first and foremost requirement of a digital economy is the penetration of internet and smart phone. Although a billion mobile subscriptions (not users), only 30% of subscribers use smart phones. With 370 million mobile internet users, over 70% of them are in cities while 70% of Indian population lives in villages.
3. Scepticism in Merchants: Small time merchants as well as users have high amount of suspicion over plastic money and they need to be educated over the potential benefits of using it. One cannot expect an overnight change in the perception of a majority of Indians over the use of plastic money. Government needs to come out with awareness and incentive schemes to promote digital economy.
4. High Merchant Discount Rate: These are the percentage deducted from each purchase a merchant makes by the card issuing authority or bank. These are volume dependent and are more economical if the merchant is able to sell a large amount of products, thereby beneficial for big merchants. For smaller merchants, it does not provide enough incentive to make the shift from cash.
5. The challenge of digital literacy when major part of rural Indian folk is illiterate.
6. Proper and efficient access to connectivity in geostrategic areas with challenging physical features like seven sister states, Border States etc.
7. Cyber security
8. Effective database management, skilled professionals, inclusion
9. Management of e-waste

### POTENTIAL

1. India is the largest exporter of IT services which is evident of having skilled and qualified human resource that would help in building a digitally aware society by public private partnership programmes and community programmes.
2. Recommending the Corporate Social Responsibility programmes to be in focus of digital literacy and towards building digital infrastructure.
3. Surge in e-Commerce reveals that e-transactions are preferred to real time transaction.

### CONCLUSION

The government thought of going for Digitalisation is no doubt sound but for a country like India having a huge amount of population living on the country side, who does not have proper banking facilities in their villages. First of all, before planning for Digitalisation the government must provide the basic infrastructure, with which a citizen can able to use digital services. In this context let the government provide proper banking facilities to all parts of the country, including remote areas. Each and every person of the country must be provided a bank account with Debit card facility along with sufficient ATM services in the country.

Apart from all these facilities the government must provide good internet services to do transactions Digitally. The government must bring proper awareness among the people about the benefits of doing the transactions digitally through print and electronic media. It is the responsibility of the government to resolve the apprehensions of the people relating to cyber frauds. Over and above the most important challenge on the part of the government is to see the citizens of the country are well educated then only the idea of the government to make digital economy would be successful otherwise it would be sound on paper and poor in actions.

### REFERENCES

1. Besley AC Tina, (2010-jan 1), "Digitized Youth: Constructing Identities in the Creative Knowledge Economy" Policy Futures in Education Volume 8 Number 1.
2. Bingham Adrian, (2010 june1), "The Digitization of Newspaper Archives: Opportunities and Challenges for Historians' Twentieth Century British History," Volume 21, Issue 2, 1 June 2010, Pages 225-231
3. Chaudhuri payel (2015-Dec), "Role of Digitization and E-commerce in Indian Economic Growth: An Employment Generation Perspective": 98th Annual Conference of Indian Economic Association.
4. Saima Khan, Dr. Shazia Khan, Mohsina Aftab (2015, April- June), "Digitization and its impact on economy", International Journal of Digital Library, Services" Vol 5, issue- 2.
5. Tapscott, Don (1997). The digital economy: promise and peril in the age of networked intelligence. New York: McGraw-Hill. ISBN 0-07-063342-8.

## EMPLOYEE ATTITUDE TOWARDS ORGANIZATIONAL CHANGES IN AUTOMOBILE INDUSTRIES WITH REFERENCE TO PEENYA INDUSTRIAL AREA, BENGALURU

**GANGADHARAPPA K**  
**ASST. PROFESSOR**  
**DEPARTMENT OF COMMERCE**  
**GOVERNMENT FIRST GRADE COLLEGE**  
**TARIKERE**

### ABSTRACT

*The life is continuously changing. That helps to people move, career changes, the climate changes and life cycle begins and ends. If a person can adapt to these changes and become a ready to participate in a continuously changing world. The employee attitude can influence character communicate the repose to change. Employee attitude concentrated on individual attitude towards change in organization. Attitude is related to psychology; attitude is differing from person to person perception. The main focus of research on attitude concerns the nature and function of the attitude and how employees shape themselves towards change. Employee attitude focused on individual attitude towards organizational changes. There are 2 types of employee's attitude towards change. The attitude brings Positive and Negative type of activities of employees during the change process. In negative attitude towards the change, the employees are refusing to accept the change in organization. And in positive attitude towards the change, the employees are likely to accept the change in organization. The purpose of this study the employee attitude towards organizational change, to understand the factor that resists the employees to accept the changes and to suggest the strategies to overcome from the resistance to change and to better implement the changes.*

### KEYWORDS

change, career, attitude, employees, psychology, organization, perception.

### JEL CODES

J28, J29, J53.

### 1. INTRODUCTION

Change in some way is the necessary aspect of human life is change. Change is the only constant in this world. Everything keeps on changing continuously. Change simply refers to alteration in the existing conditions of an organization. Occupational stress and organizational change are now widely accepted as two major issues in organizational life. The current study explores the linkage between employees attitudes towards organizational and two of the most significant constructs in organizational behavior; occupational stress and organizational commitment. This study focuses on employ workplace and demographic predictors to know the employee attitudes and behaviors regarding organizational change.

Mentality is a word identified with brain science, and disposition vary from individual to individual discernment. The principle center of research around disposition concerns the nature, capacity of state of mind and how workers shape themselves towards the change. The representative disposition can impact character to plan the reaction to change. Representative state of mind concentrated on individual mentality towards change in the association. The state of mind brings positive and negative sort of exercises of representatives amid change handle.

In this way they reflect how one feels about something. The ideal proclamations may give beneficial outcomes in regards to the concerned question, individual or occasion while troublesome articulation may give negative impacts. An attitude is a constructive or pessimistic feeling or mental condition of preparation, learned and sorted out through experience that applies particular impact on a man's reaction to individuals, items and circumstance.

Constraining a change on others has its place. After some time, notwithstanding, when this is the main approach that you use to roll out improvement, you'll see that your change comes about endure. In the event that you abuse this approach, you will hurt your viability over the long haul as others will discover immediate and backhanded approaches to oppose you. Without an attentive change methodology to deliver imperviousness to change, you will trigger solid resistance and hierarchical turnover.

### 2. LITERATURE REVIEW

**Cummings, & Worley, (2011):** Explains that Forces from both the internal and external business environment result in organizations adapting to new ways of handling business operations. In the view of severe global competition, it is essential for organizations to have the quick-wittedness to accept new changes and adapts to survive (Gondo, Patterson, & Palacios, 2013). Discovering the behavioral origins of employee reactions to change is an important part of understanding the recipe for tractability, endurance, and organizational success.

**According to Hampel & Martinsons (2009):** In his study organizational policies and strategies have to be changed due to the growing globalization of business, increasing competition and technological advancement.

**According to Elias (2009):** Attitude towards organizational change may be defined as an employee's overall positive or negative evaluative judgment of a change initiative implemented by the organization.

**According to Bareil Et Al (2007):** In this study attitude towards organizational changes is as well proposed to be related to personality traits. However, an individual in an organization is not isolated, hence attitudes will be influenced by other factor than solely personality traits. These other determinants are the characteristics of the organizational change and social influence. The combination of determinants sheds a new light on an individual's attitude towards organizational change.

**According to Bharijoo (2005):** Mentioned that some of the reasons for the need for change may be as a result of environmental changes such as economic and market changes, legal or political changes and the availability of resources. Some other reason are deficiencies in the present organization as a result of poor organizational structure, duplication of work, poor procedure, weak management and a lack of cooperation. Change managers may therefore identify the need for change and may implement changes to solve these problems.

**Khademian (2002):** Explains, "Determining what needs to be changed and articulating those changes is an essential part of the effort to manage the integration of cultural roots. If managers want to change how the job gets done, they must understand the commitments driving the work of the program and how those commitments might need to change. Articulating those changes helps participants to see the task, the resources, and the skills they bring to the table, and the environment in which they work, differently". Organizational change can be stressful time for employees for a number of reasons ranging from learning a new task to jobs being eliminated. As such, some employees are more resistant to change while others are more receptive to change.

### 3. OBJECTIVES OF THE STUDY

1. To study the employee attitude towards organizational change.
2. To understand the factor that resists the employees to accept the changes.
3. To suggest the strategies to overcome from the resistance to change and to better implement the changes.

**4. LIMITATIONS OF THE STUDY**

1. The data was collected through the questionnaire. There will be biased response.
2. The sample for the study is taken only 100.

**5. SCOPE OF THE STUDY**

- Measure the level of resistance among the representatives for the length of changes.
- The study will render an instrument for the association to go about future changes.

**6. METHODOLOGY ADOPTED**

The required data will be collected through 2 sources:

- 1) **Primary Data:** Primary data was collected through personal interview and questionnaires.
- 2) **Secondary Data:** Secondary data was collected through those have been by another person and which have been gone through factual process.
  - 1) Various websites.
  - 2) Publications.
  - 3) Company annual reports, brochures.

**6.1. SAMPLING TECHNIQUE:** Random sampling technique is used for the study.

**6.2. QUESTIONNAIRE CONSTRUCTION:** Likert’s scale and open ended question.

**6.3. SAMPLING DESIGN**

**Sampling unit:** randomly selected respondents this is the technique used by sampling unit. Sampling size: nearly 100 samples are taken from various selected auto mobile Industries.

**7. ANALYSIS AND INTERPRETATION**

- ❖ **Employees always have positive attitude towards organizational changes.**

**TABLE 7.1: EMPLOYEES ALWAYS HAVE POSITIVE ATTITUDE TOWARDS ORGANIZATIONAL CHANGES**

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	20	20%
2	Agree	18	18%
3	Neither agree nor disagree	12	12%
4	Disagree	42	42%
5	Strongly disagree	08	8%
TOTAL		100	100%

The above table reveals that 20% of the employees are strongly agree, 18% of the employees are Agree, 42% employees are Neither agree nor disagree, 12% employees are Disagree, and 8% employees are Strongly disagree.

- ❖ **Employees in the organization are always ready to accept the changes.**

**TABLE 7.2: EMPLOYEES IN THE ORGANIZATION ARE ALWAYS READY TO ACCEPT THE CHANGES**

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	10	10%
2	Agree	14	14%
3	Neither agree nor disagree	24	24%
4	Disagree	36	36%
5	Strongly disagree	16	16%
TOTAL		100	100%

The above table reveals that 10% of the employees are strongly agree, 14% of the employees are Agree, 24% employees are Neither agree nor disagree, 36% employees are Disagree, and 16% employees are Strongly disagree.

- ❖ **Loss of status or job security is a factor that resists the employees to accept the changes.**

**TABLE 7.3: LOSS OF STATUS OR JOB SECURITY IS A FACTOR THAT RESISTS THE EMPLOYEES TO ACCEPT THE CHANGES**

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	40	40%
2	Agree	28	28%
3	Neither agree nor disagree	24	24%
4	Disagree	04	4%
5	Strongly disagree	04	4%
TOTAL		100	100%

The above table reveals that 40% of the employees are strongly agree, 28% of the employees are Agree, 24% employees are Neither agree nor disagree, 4% employees are Disagree, and 4% employees are Strongly disagree.

- ❖ **Fear of unknown is a factor that resists the employees to accept the changes.**

**TABLE 7.4: FEAR OF UNKNOWN IS A FACTOR THAT RESISTS THE EMPLOYEES TO ACCEPT THE CHANGES**

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	20	20%
2	Agree	28	28%
3	Neither agree nor disagree	40	40%
4	Disagree	08	8%
5	Strongly disagree	04	4%
TOTAL		100	100%

The above table reveals that 20% of the employees are strongly agree, 28% of the employees are Agree, 40% employees are Neither agree nor disagree, 8% employees are Disagree, and 4% employees are Strongly disagree.

❖ Lack of sufficient time is a factor that resists the employees to accept the changes.

TABLE 7.5: LACK OF SUFFICIENT TIME IS A FACTOR THAT RESISTS THE EMPLOYEES TO ACCEPT THE CHANGES

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	10	10%
2	Agree	40	40%
3	Neither agree nor disagree	10	10%
4	Disagree	20	20%
5	Strongly disagree	20	20%
TOTAL		100	100%

The above table reveals that 10% of the employees are strongly agree, 40% of the employees are Agree, 10% employees are Neither agree nor disagree, 20% employees are Disagree, and 20% employees are Strongly disagree.

❖ Lack of support from by the supervisors is a reason that resists the employees to accept the changes.

TABLE 7.6: LACK OF SUPPORT FROM BY THE SUPERVISORS IS A REASON THAT RESISTS THE EMPLOYEES TO ACCEPT THE CHANGES

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	08	8%
2	Agree	12	12%
3	Neither agree nor disagree	10	10%
4	Disagree	40	40%
5	Strongly disagree	30	30%
TOTAL		100	100%

The above table reveals that 8% of the employees are strongly agree, 12% of the employees are Agree, 10% employees are Neither agree nor disagree, 40% employees are Disagree, and 30% employees are Strongly disagree.

❖ Required skill and communication should be provided by the organization to overcome from resistance to change.

TABLE 7.7: REQUIRED SKILL AND COMMUNICATION SHOULD BE PROVIDED BY THE ORGANIZATION TO OVERCOME FROM RESISTANCE TO CHANGE

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	20	20%
2	Agree	36	36%
3	Neither agree nor disagree	24	24%
4	Disagree	14	14%
5	Strongly disagree	06	6%
TOTAL		100	100%

The above table reveals that 20% of the employees are strongly agree, 36% of the employees are Agree, 24% employees are Neither agree nor disagree, 14% employees are Disagree, and 6% employees are Strongly disagree.

❖ Employee participation and involvement reduces employee resistance to change.

TABLE 7.8: EMPLOYEE PARTICIPATION AND INVOLVEMENT REDUCES EMPLOYEE RESISTANCE TO CHANGE

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	34	34%
2	Agree	40	40%
3	Neither agree nor disagree	16	16%
4	Disagree	06	6%
5	Strongly disagree	04	4%
TOTAL		100	100%

The above table reveals that 34% of the employees are strongly agree, 40% of the employees are Agree, 16% employees are Neither agree nor disagree, 6% employees are Disagree, and 4% employees are Strongly disagree.

❖ Lack of prior training (advance training) is a reason that resists the employees to accept the changes.

TABLE 7.9: LACK OF PRIOR TRAINING (ADVANCE TRAINING) IS A REASON THAT RESISTS THE EMPLOYEES TO ACCEPT THE CHANGES

SL NO	PARTICULARS	No. of respondents	Percentage
1	Strongly agree	16	16%
2	Agree	26	26%
3	Neither agree nor disagree	20	20%
4	Disagree	30	30%
5	Strongly disagree	08	8%
TOTAL		100	100%

The above table reveals that 16% of the employees are strongly agree, 26% of the employees are Agree, 20% employees are Neither agree nor disagree, 30% employees are Disagree, and 8% employees are Strongly disagree.

## 8. HYPOTHESIS TESTING

### Hypothesis -1

Data is taken from the table: 7.2

**H<sub>0</sub> (Null hypothesis):** Employees in the organization are always ready to accept the changes.

**H<sub>1</sub> (Alternative hypothesis):** Employees in the organization are not ready to accept the changes.

From the test result, it is observed that the table value at 5% level of significant for 4 degree of freedom is 9.49 and the calculated chi-square value is 10.6 and it is more than the table value.

So the alternative hypothesis (H<sub>1</sub>) is accepted at 5% level of significance.

### Conclusion

Employees in the organization are not ready to accept the changes at Auto Mobile Industries with reference to Penya Industrial Area, Bengaluru”

### Hypothesis - 2

Data is taken from the table: 7.9

**H<sub>0</sub> (Null hypothesis):** Lack of prior training (advance training) is a reason that resists the employees to accept the changes.

**H<sub>1</sub> (Alternative hypothesis):** Lack of prior training (advance training) is not a reason that resists the employees to accept the changes.

From the test result, it is observed that the table value at 5% level of significant for 4 degree of freedom is 9.49 and the calculated chi-square value is 7.3 and it is less than the table value.

So the null hypothesis (H<sub>0</sub>) is accepted at 5% level of significance.

#### **Conclusion**

Lack of prior training (advance training) is a reason that resists the employees to accept the changes.

#### **9. FINDINGS**

- The employees do not have positive attitude towards organizational changes.
- The employees are not ready to accept the changes in in the organizations.
- Employees are not satisfied with the job security in the organization.
- Employees are feeling pressure to adopt them self to the organizational changes.
- Employees are not satisfied with the prior training (advance training) in the organization.
- Non-reinforcing reward system is a factor that resists the employees to accept the changes in the company.
- The organization provides the required skill and communication to employees.
- Employee participation and involvement reduces employee resistance to change.

#### **10. SUGGESTION**

- The employee's attitude towards organizational changes should be positive in nature.
- Organization should provide all required facilities to make the employee ready to accept the changes.
- Organization has to provide job security to the employee to accept the changes.
- Organization should not create pressure to adopt changes in the organization.
- Organization has to provide sufficient time to get adjust the organizational changes.
- Prior training (advance training) should provide by the organization.

#### **11. CONCLUSION**

Organization is always providing all the facilities, but still employees are not ready to accept the changes in the organization. So organization has to provide required facilities like job security, sufficient time and also provide prior training (advance training) to employees in the organization.

One of the most baffling and recalcitrant of the problems which business executives face is employee resistance to change. Resistance is usually created because of certain blind spots and employee attitudes with the technical aspects of new ideas. Management can take concrete steps to deal constructively with these employee attitudes. The steps include emphasizing new standards of performance and encouraging them to think in different ways, as well as making use of the fact that signs of resistance can serve as a practical warning signal in directing and timing technological changes.

The organization should not create pressure to adopt changes in the organization. If organization concentrates on these issues, employees will be ready to accept the changes in the organization.

#### **REFERENCES**

1. Business.Eby, L.T., Adams, D.M., Russell, J.E.A. and Gaby, S.H. 2000. 'Perceptions of organizational readiness for change: Factors related to employees' reactions to the implementation of teambased selling.' *Human Relations*, 53(3): 419-442.
2. Drucker, P.F. (1999). *Management Challenges for the 21st Century*. New York: Harper
3. Fatima, M. 2002, "Management of Quantum Change in Pakistan Organizations", *The Journal*, 7(3), 1-17.
4. Fullan, M. and Pomfret, A. (1977). Research on curriculum and instruction implementation. *Review of Educational Research*, 1, 335-397.
5. K. Aswathappa (2013). Human Resource Management-Tata McGraw hill publication
6. M.N.Mishra (2010).Organizational behaviour& corporate development-Himalya publishing house.
7. Stephen P. Robbins (2011). Organizational behaviour-Pearson.



## A STUDY ON IMPACT OF KNOWLEDGE MANAGEMENT ON EMPLOYEE'S PERFORMANCE WITH SPECIAL REFERENCE TO IT SECTORS ERNAKULAM

**DEVIKA R**

**LECTURER**

**SAINTGITS COLLEGE OF APPLIED SCIENCES**

**CHANGANASERY**

### ABSTRACT

*The goal of every organization is to manage their knowledge successfully. A firm's knowledge management strategy should reflect its internal competitive strategy. The strategy chosen should create value for the firm's customers, turn a profit for the firm and focus on how the firm's employees deliver on the value, differentiation, and speed. The objective of the study is to analyse the impact of Knowledge Management on employees performance. The study focus on various benefits of adopting Knowledge management in an organisation. The Hypothesis were drawn which give an insight into the role of Knowledge management in employees performance the study also analyse the relationship between Knowledge Management and employees years of experience. Data were collected from 50 employees from different IT sectors in Ernakulum. The study shows that knowledge Management will affect the performance of the employees. The study concludes that Knowledge Management is effective for smooth functioning in an organisation which creates knowledge sharing among employees.*

### KEYWORDS

employees performance, knowledge acquisition, knowledge creation, knowledge management, knowledge sharing.

### JEL CODES

J24, J29, D83.

### INTRODUCTION

Today, most experts believe that organizations should look for effective ways to disseminate organizational knowledge among various levels of manpower throughout the organization. Hence, they have begun extensive efforts by creating basic changes in their attitude and organizational strategies to use and manage knowledge in all working and organizational aspects systematically. One of the factors influencing knowledge management success which should be considered in making strategy is organizational structure. Many organizations decide to set aside the traditional management which is based on the hierarchies of authorities and try to engage all members of the organization and individuals in the current affairs completely.

Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. Knowledge management must therefore create/provide the right tools, people, knowledge, structures (teams, etc.), culture, etc. so as to enhance learning; it must understand the value and applications of the new knowledge created; it must store this knowledge and make it readily available for the right people at the right time; and it must continuously assess, apply, refine, and remove organizational knowledge in conjunction with concrete long and short term factors.

### REVIEW OF LITERATURE

**Pawlowski and Bick (2012)** The findings of the study revealed development knowledge management framework trying to stimulate discussion and initiating a broad initiative working towards global knowledge management for identifying the job performance. **Rono (2011)**, effective knowledge management may be an important source of achieving long term sustainable competitive advantage. The effective management of knowledge has been described as a critical ingredient for organization seeking to ensure sustainable strategic competitive advantage. **Adhikari (2008)**, revealed that the roles of knowledge management programs and knowledge creation and transfer for increasing the effectiveness of organizational performance. **Katuwal (2011)**, knowledge management enhances productive capacity of human resources and improves individual lives to enrich wider society. **Almudalal (2012)** investigated the implementing of KM in The Palestinian Governmental Institutions, and its impact on organizational performance. Study revealed a significant relationship between the availability of KM implementation infrastructure and the level of performance. **Fonceca (2011)** concluded that Knowledge Management has been recognized as a crucial component of a proactively managed organization. The purpose of the study was to investigate and study the implementation strategy and the initiatives of the Human Resource towards Knowledge Management. **Zack (2009)** investigated the organizational impact of Knowledge. The study revealed that Knowledge Management practices were found to be directly related to organizational performance which, in turn, was directly related to financial performance. There was no direct relationship found between Knowledge Management practices and financial performance.

### STATEMENT OF THE PROBLEM

This study seeks to investigate knowledge management effect on employees' performance in an industry as complexity and dynamic stimulating factor of an industry and stimulus power enhancement in increasing knowledge application with the aim of strengthening employees' performance power.

### OBJECTIVES

1. To analyze impact of knowledge management on employees performance.
2. To study the tools used to increase knowledge management.
3. To analyze the benefits of implementing knowledge management.

### HYPOTHESIS

H<sub>0</sub>: There is no significant relationship between experience and improvement in employee performances.

H<sub>0</sub>: There is no significant difference between knowledge Sharing and impact on employees performance.

### RESEARCH METHODOLOGY

The primary data are collected from the respondents of IT sector Ernakulum through questionnaire method in Google form. The population of the study includes employees from various IT sector. Out of this 50 employees are being selected as sample for the study. The Sampling tools used for the study are percentage, Likert scale, chi square, ANOVA.

**RESULTS & DISCUSSION**

**TABLE 1: GENDER OF RESPONDENTS**

Gender	No. of respondents	Percentage
Male	24	48%
Female	26	52%
Total	50	100%

Source: Primary Data

**INTERPRETATION**

Table 4.1 reveals that 52% of respondents are female and 48% are male.

**TABLE 2: EXPERIENCE OF RESPONDENTS**

Experience	No. of respondent	Percentage
0-1 years	20	40%
1-2 years	11	22%
2-4 years	13	26%
4-8 years	3	6%
8 above	3	6%
Total	50	100%

Source: primary data

**INTERPRETATION**

Table 4.6 shows that about 40% of respondent are having experience is 0-1 years, 26% of respondent having is 2-4 years, 22% have 1-2 years, 6% have 4-8 years and another 6% of respondent have experience above 8 years.

**TABLE 3: KINDS OF KNOWLEDGE MANAGEMENT PRACTICES EFFECTIVE FOR ORGANIZATION**

Practices	N	Mean	Std. Deviation
knowledge acquisition	50	1.7400	.44309
knowledge sharing	50	1.9800	.14142
knowledge creation	50	1.9400	.23990
knowledge codification	50	1.6400	.48487
knowledge retention	50	1.5000	.50508

Source: primary data

**INTERPRETATION**

From table 4.8 it is clear that majority of the respondents were of the opinion that knowledge sharing with mean value (1.9800) is the kind of knowledge Management practices to be followed for the effective organization, knowledge creation with mean 1.9400, knowledge acquisition with mean 1.7400.

**TABLE 4: BENEFITS OF IMPLEMENTING KNOWLEDGE MANAGEMENT**

Benefits	N	Minimum	Maximum	Mean	Std. Deviation
Better and faster decision making	50	3	5	4.48	.544
Quick problem solving	50	3	5	4.10	.580
Increased rate of innovation	50	2	5	3.90	.707
Employee growth and development	50	3	5	4.12	.558
Better communication	50	2	5	4.26	.694
Increases operation efficiency	50	2	5	4.00	.782
Benchmark against competitors	50	1	5	3.90	.886

Source: Primary data

**INTERPRETATION**

The above table shows that majority of the respondent strongly agree with the benefits of implementing knowledge management. In the opinion of respondents "Better and faster decision making" with the mean value of 4.48, better communication with mean 4.26 and employee growth and development with mean value 4.12 are the main benefits of implementing knowledge management.

**TABLE 5: TOOLS TO BE USED FOR INCREASE KNOWLEDGE MANAGEMENT**

Tools	N	Minimum	Maximum	Mean	Std. Deviation
Connecting people with information and knowledge	50	2	5	4.34	.717
Connecting people with people	50	2	5	4.20	.670
Organization improvement	50	2	5	4.02	.795
Learn Before, during and after	50	2	5	4.30	.678
Become a knowledge Owners	50	3	5	4.18	.629
Knowledge mapping	50	1	5	3.92	.752

Source: Primary data

**INTERPRETATION**

The above table shows tools to be used for increase knowledge management. "Connecting people with information and knowledge" with the mean value of 4.34, learn before, during and after with mean 4.30 and connecting people with people are the tools to be used to increase knowledge management. They are agreeing with all other statements having mean value more than 3.

**HYPOTHESIS 1**

H0: There is no significant relationship between experience and improvement in employee performances

H1: There is significant relationship between experience and improvement in employee performances

**TABLE 6: CHI-SQUARE TESTS**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.969a	4	.290
Likelihood Ratio	3.886	4	.422
Linear-by-Linear Association	1.560	1	.212
N of Valid Cases	50		

Source: Primary Data

**INTERPRETATION**

Table 4.17 interprets that since the significant value at 5% level of significance is greater than 0.05 the null hypothesis is accepted. That is there is no significant relationship between experience and improvement in employee’s performance due to Knowledge Management

**Hypothesis 2**

H0: There is no significant difference between knowledge Sharing and impact on employees performance.

H1: There is significant difference between knowledge sharing and impact on employee’s performance.

**TABLE 7: ANOVA**

Particulars		Sum of Squares	df	Mean Square	F	Sig.
Retain knowledge in company	Between Groups	.000	1	.000	.000	1.000
	Within Groups	13.520	48	.282		
	Total	13.520	49			
Develop cooperation and trust	Between Groups	.720	1	.720	2.009	.163
	Within Groups	17.200	48	.358		
	Total	17.920	49			
Knowledge sharing	Between Groups	.180	1	.180	.302	.585
	Within Groups	28.640	48	.597		
	Total	28.820	49			
Learn something new every day	Between Groups	.080	1	.080	.183	.671
	Within Groups	21.040	48	.438		
	Total	21.120	49			
Reduces mistakes by sharing best practices	Between Groups	.020	1	.020	.048	.828
	Within Groups	20.000	48	.417		
	Total	20.020	49			
Helps to take corrective actions	Between Groups	.320	1	.320	.719	.401
	Within Groups	21.360	48	.445		
	Total	21.680	49			
Increases employee productivity	Between Groups	.020	1	.020	.043	.837
	Within Groups	22.560	48	.470		
	Total	22.580	49			
Helps to work more efficiently	Between Groups	.080	1	.080	.150	.700
	Within Groups	25.600	48	.533		
	Total	25.680	49			
Employee get motivated for better performance	Between Groups	.000	1	.000	.000	9
	Within Groups	21.680	48	.452		
	Total	21.680	49			

Source: primary data

**INTERPRETATION**

Since the significant value at 5% level of significance is greater than 0.05 the null hypothesis is accepted. There is no significant difference between knowledge Sharing and impact of knowledge management on employees performance.

**FINDINGS**

1. About 48% of respondents are male and 52% are female.
2. Most of the respondents are having experience 0-1 years, only 6% of respondent are having experience above 8 years.
3. 50% of respondent opinions that are knowledge sharing is the best knowledge management practices to be followed
4. Majority of the respondent strongly agree with the benefits of implementing knowledge management. “Better and faster decision making” with the mean value of 4.48,
5. Majority of respondents are strongly agreed with the Tools to be used for increase knowledge management. “Connecting people with information and knowledge” with the mean value of 4.34
6. The null hypothesis is accepted. That is there is no significant relationship between experience and improvement in employees performance due to Knowledge Management
7. The null hypothesis is accepted. There is no significant difference between knowledge Sharing and impact of knowledge management on employees performance.

**SUGGESTIONS**

1. It’s important to understand that knowledge management isn’t a one-time affair.
2. Every organization should understand their Key business drivers so as to reduce cost and expenses while implementing Knowledge Management.
3. Organisations should attempt to collect and distribute all knowledge in the organization
4. Many organizational cultures do not reward the sharing of knowledge. To make KM successful, every organization must reward their employees. New incentives need to be put in place
5. Before managing knowledge effectively, IT Sector needs a platform where that knowledge can be captured and curate. Organizations should build a user-friendly and flexible system is an essential foundation.
6. IT Sectors should grow their Audience. They should aim to change behavior and make knowledge sharing part of the culture.

**CONCLUSIONS**

Knowledge management is essential for storing and sharing insight relative to your organization, as well as the industry. From correct procedures for setting up a new user through to an information and communication technology asset register, this important information should be safely stored and managed. Effective knowledge management assists with both small and big projects, helping with faster response times and efficiency. Allowing easy transition of other team members also protects your organization against a gap in services if a key team member also is lost. Knowledge management allows for consistency when responding to issues or making changes. By having a process of storing vital information, documentation or even checklists, appropriate action can be taken to resolve issues. Knowledge management provides the tools for team members to acquire a thorough understanding of any intricacies in your systems.

**LIMITATIONS**

1. The respondent's interpretations of questions were different due to their varying levels of knowledge. Hence there is a possibility of bias.
2. Loyalty of the respondents to a particular service provider might have influenced their responses.
3. Time was a major limitation for the study.
4. Difficulty in the data collection due to lack of responses from respondents.

**REFERENCES**

1. Ajmal, M. M., & Koskimen, K. U. (2008), "Knowledge transfer in project-based organizations: An organizational culture perspective". *Project Management Journal*, 39(1), 7–15.
2. Akdere, M. (2009), "The role of knowledge management in quality management practices: Achieving performance excellence in organizations". *Advances in Developing Human Resources*, 11(3), 349–361.
3. Blessing, D., Goerk, M., & Bach, V. (2001), "Management of customer and project knowledge: Solutions and experience at SAP". *Knowledge & Process Management*, 8(2), 75–90.
4. Bock, G. W., & Kim, Y. G. (2002), "Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing". *Information Resources Management Journal*, 15(2), 14–21.
5. Ciborra, C. U., & Andreu, R. (2001), "Sharing knowledge across boundaries". *Journal of Information Technology*, 16(1), 73–81.
6. Cope, R. F., Cope, R. F., & Hotard, D. G. (2006), "Enhancing project management with knowledge management principles". *Proceedings of the Academy of Information & Management Sciences*, 10(1), 41–45.
7. Desouza, K. C., & Awazu, Y. (2004), "Need to know: Organizational knowledge and management perspective". *Information Knowledge Systems Management*, 4(1), 1–14.
8. Dutta, S. (1997), "Strategies for implementing knowledge-based systems". *IEEE Transactions on Engineering Management*, 44(1), 79–90.
9. Feng, K., Chen, E. T., & Liou, W. (2005), "Implementation of knowledge management systems and firm performance: An empirical investigation". *Journal of Computer Information Systems*, 46 (2), 92–104.
10. Gokmen, A., & Hamsioglu, A. B. (2011), "The effect of knowledge management, technological capability and innovation on the enterprise performance: A comprehensive empirical study of the Turkish textile sector". *The Journal of Information & Management*, 10(1), 1–10.
11. Gottschalk, P. (2000), "Strategic knowledge networks: The case of IT support for Eurojuris law firms in Norway". *International Review of Law Computers & Technology*, 14(1), 115–129.
12. Karlsen, J. T., & Gottschalk, P. (2004), "Factors affecting knowledge transfer in IT projects." *Engineering Management Journal*, 16(1), 3–10.
13. Lee, K. C., Lee, S. & Kang, W. (2005), "KMPI: Measuring knowledge management performance." *Information & Management*, 42(3), 470–482.
14. London: Roudlege. Choi, B., Poon, S. K., & Davis, J. G. (2008), "Effects of knowledge management strategy on organizational performance: A complementary theory-based approach". *The International Journal of Management Science*, 36(1), 234–251.
15. Marques, D. P., & Simon, F. J. G. (2006), "The effect of knowledge management practices on firm performance" *Journal of Knowledge Management*, 10(3), 143–156.
16. Noh, M., Kim, H., & Jang, H. (2014), "Learning performance and business performance of knowledge management organizations: The moderating effect of technology capability" *Information Development*, 30(5), 1–18.
17. Plessis, M. D. (2007), "The role of knowledge management in innovation". *Journal of Knowledge Management*, 11(4), 20–29.
18. Rajaei-pour, S., & Rahimi, M. (2008), "Study of the relationship between process of transforming knowledge management and performance of Isfahan faculty members". *Researches of Human & Social Sciences of Management*, 8, 59–76.
19. Ravishankar, M. N., & Pan, S. L. (2008), "The influence of organizational identification on organizational knowledge management (KM)". *The International Journal of Management Science*, 36(1), 221–234.
20. Wild, R., & Kenneth, G. (2008), "A model of information technology opportunities for facilitating the practice of knowledge management" *The Journal of Information Knowledge Management Systems*, 38 (4), 490–506.

**GROWTH OF E-COMMERCE AND ITS IMPACT ON INDIAN ECONOMY****RITU YADAV****RESEARCH SCHOLAR****RAJ RISHI BHARTRIHARI MATSYA UNIVERSITY****ALWAR****ABSTRACT**

*In the last ten years, the way of buying and selling of goods and services has been changed by the Internet. E-commerce is converting the shopping practice of Indian consumers. The introduction of electronic data interchange spreads into producer, retail traders, stock market operation and travel reservations etc., which ensue in a higher development of the economy. The objective of this paper is to assess factors driving the growth of e-commerce and to study the impact of e-commerce on Indian economy. The research methodology is descriptive cum analytical in nature and the data for this study is collected through secondary sources such as websites, research journals, newspapers, magazines etc.*

**KEYWORDS**

Indian economy, e-commerce.

**JEL CODE**

L81

**INTRODUCTION**

The term 'E-commerce' means doing online dealing with the help of computer, fax, e-mail and telephone. It has been come out from the word 'E-mail'. In 1972, the term 'E-commerce' used by IBM for the foremost moment. In 1973 with the development of computers, the first successful operation was carried out between the European Union and the USA. In 1995, the beginning of internet in India marked the launch of e-Commerce in the country. Internet and Mobile Association of India states that Indian online retail market is anticipated to grow at the rate of 52 % and will reach USD 36.7 billion in 2020.

E-Commerce businesses may occupy some or all of the following:

- Online shopping sites for retail sales direct to consumers.
- Participating in online market places, which process third-party Business to Customer or Consumer to Consumer sales.
- Business to Business buying and selling.
- Collecting and using demographic data from contacts and social media.
- Business to Business EDI.
- Marketing to prospective and establish new clients by e-mail or fax (for e.g. with newsletters).
- Engaging in retail for induction new products and services.

**MODES OF E-COMMERCE**

E-commerce can be categorized into three modes based on the participants involved in the transaction.

- **Consumer-to-Consumer (C2C):** It finds new ways to allow the consumer to interact with each other and by doing so consumer can sell goods or services to each other.
- **Business-to-Consumer (B2C):** B2C transaction is conducted on the internet between a business and a consumer. E.g. an online publisher may put up for sale his book to a customer and receive payment without meeting him/her.
- **Business-to-Business (B2B):** It refers to a condition in which one business make a deal with other.

**LITERATURE REVIEW**

- **Elizabeth Goldsmith and Sue L.T. McGregor (2000)** analysed the impact of e-commerce on consumers, public policy, and business. A talk of public policy initiatives, research question and ideas for future study are given.
- **Jackie Gilbert Bette Ann Stead (2001)** studied that growth of e-commerce and presented ethical issues that have been arisen. Security concerns, spamming, websites that do not carry a "marketing" label, cyber squatters, online marketing to children, conflicts of interest, producers competing with mediators online and "dinosaurs" were discuss.
- **Nir B. Kshetri (2001)** this paper attempts to identify and synthesizes the available evidence on forecasters of magnitude, global circulation and forms of electronic commerce. The analysis indicates that the lookalike forces of globalization and major revolutions in ICT are fuelling the fast growth of global e-commerce
- **James Christopher (2004)** examined all the best component of ecommerce does not guarantee consumers will visit or remain faithful. But looking at what they want and their satisfaction levels of other well established e-tailors such as Amazon and eBay who have already invest significant resources to know what consumer's needs, wants and desires. Perhaps it would be helpful to emulate these established pure players since they have been and continue to be very much successful as retain high marks for customer satisfaction.

**OBJECTIVES**

1. To evaluate factors driving the growth of e-commerce.
2. To know the impact of e-commerce on Indian economy.

**RATIONALE OF THE STUDY**

This study attempt to know the impact of e-commerce on Indian economy. The outcome of the study helps in identifying the factors driving the growth of e-commerce and its impact on Indian economy. It will also help in formulating the better policy and strategy in future.

**RESEARCH METHODOLOGY**

This research is based on secondary data which are collected from several sources i.e. research papers, publications from Ministry of Commerce, Govt. of India etc. which is available on the internet.

**ANALYSIS OF DATA****GROWTH OF E COMMERCE IN INDIA**

According to reports published by International Monetary Fund (IMF) and Central Statistics Office (CSO), India is among the fastest growing economies of the world. For the financial year 2016-17, e Commerce sales moved the US \$16 billion with a projection of a seven fold growth within the next two fiscals as estimated by Morgan Stanley. By 2020 online commerce sales is expected to cross over \$120 billion. Large percentage of individuals subscribed to broadband Internet, burgeoning 3G internet users, and a recent introduction of 4G across the country.

**Rising income levels**

- Increasing purchasing power of people
- Increasing disposable income of the urban youth

**Changing socio-economic environment**

- Rising middle class incomes
- Changing demographics (close to 50 per cent of the population is below 25 years of age)
- Global exposure (increasing penetration of international brands in India)

**Changing technology landscape**

- Rise in internet usage (growing at 20 per cent) and 3G penetration
- Increasing smartphone customers with availability of internet on mobile phones
- Delivering better quality user experience (detailed product catalogue, website performance)

**Changing consumer behaviour**

- Less time to spend in traveling to places & shopping
- Increase in expenses for luxury items
- Increased availability of global products making Indian consumer conscious of quality along with price

**Changing mind set and outlook of Indian customers**

- Indians becoming more attentive and embracing the idea of online shopping

In addition to the above factors leading to growth in e-commerce, the following factors will play a key role in shaping the way ahead for the industry:

- Online user base is expected to cross 370 million in the next 2–3 years and a larger percentage of people are expected to transact online by 2015 (according to a report by McKinsey & Company Online and upcoming: The Internet's impact on India)
- Customers are connected to high-speed internet on mobile phones
- E-commerce is expanding into non-metropolitan India (Tier II and Tier III cities)
- Increase in online shopping is due to the availability of multiple payment options like cash-on-delivery (COD), EMI and free shipping

In a report titled "India's Digital Leap—The Multi Trillion Dollar Opportunity", Morgan Stanley said that growth in e-commerce will help in growing market penetration to 12% in the next 9 years, versus 2% today. An increasing number of internet users, all new to e-commerce, will help to lead this growth. Our analysis of some worldwide e-commerce companies highlights that two-thirds of the growth in their e-commerce sales occurred due to new users coming online and shopping, while the balance was driven by existing online customers buying more frequently and/or driving up order values," the report said. India had 60 million online customers in 2016, which is 14% of the internet user base of the country. This will rise to over 50% by 2026.

**GOVERNMENT INITIATIVES**

Since 2014, the Government of India has announced several initiatives namely, Digital India, Make in India, Start-up India, Skill India & Innovation Fund. The timely and effective implementation of these programs will likely support the e-commerce growth in the country. Some of the key initiatives taken by the government to promote the e-commerce sector in India are as follows:

- Reserve Bank of India (RBI) has decided to allow "inter-operability" among Prepaid Payment Instruments (PPIs) such as digital wallets, prepaid cash coupons and prepaid telephone top-up cards.
- Finance Minister Mr Arun Jaitley has proposed many measures to quicken India's transition to a cashless economy, including a prohibition on cash transactions over Rs 300,000 (US\$ 4,655.1), tax incentives for creation of a cashless set-up, promoting greater usage of non-cash means of payments, and making Aadhaar-based payments more widespread.

**CHALLENGES FACED BY E- COMMERCE IN INDIA**

- **Infrastructure problems:** Internet is the main pillar of electronic commerce. Unfortunately, internet penetration in India is so low at 0.5% of the population as compared to 50% in Singapore. Similarly, penetration of PC in India is as low as 3.5 per thousand of population compared to 6 per thousand in China and 500 per thousand in United states. Internet is still accessible through Personal computers with the help of telephone lines. Given the penetration of telephone only 2.1% of population, e-commerce remains far away from the common man. It is difficult for e-commerce to reach to 1000 million population spread over 37 million households in 6, 04,374 odd villages and 5,000 towns and cities. Besides, both cost of personal computers and internet access are quite high.
- **Absence of cyber laws:** Other big challenges associated with e-commerce market is the near absence of cyber laws to regulate transactions on the Net. World Trade Organization is expected to enact cyber laws soon. The India's Information Technology (IT) bill approved by the Indian Parliament on May 17, 2,000 plans to tackle legislatively the growing areas in e-commerce. The bill also intends to facilitate e-commerce by eliminating legal uncertainties created by the new technology. As it stands today, the bill deals with commercial and criminal areas of law. However, it does not take care of matters such as individual property rights, content regulation to privacy and data protection specific legislation.
- **Privacy and security concern:** As of today, quite vulnerable issues related to e-commerce are privacy and security. So far, there is no protection offered either by websites or outside watchdogs against risks created by exploiting one's privacy.
- **Digital illiteracy and consumer psyche:** At present, digital illiteracy is one of the challenging problems e-commerce is facing in India. On the other hand, the continuous exodus of skilled computer engineers to other countries has demanded India of software engineers. This has posed a real threat to India information technology industry. Obviously, solution to this problem lies in reducing the computer brain drain and uses this in the country. The Indian consumer is also characterized by his unique psyche. Usually, the Indian consumer does not go long distances for having any food of his choice when a neighbourhood store provides him whatever he wants. That is why the customer does not browse the Net knowing the consequent difficulties of connectivity and other botheration. Added to this is that building trust on the electronic media also takes long time more specially when the vendor is situated at a very distant place.
- **Virus problem:** That computer virus is also a formidable problem in the execution of e-transactions is confirmed by the computer originated at Manila. A computer virus named "I Love You" originated in Manila, Philippines on May 5, 2000 rippling across world, inflicted lots of computer files causing colossal loss of US \$7 billion to the government and the industries.

**ECONOMIC IMPACTS OF E- COMMERCE**

- Governments and especially corporates are confronted with an "adapt or die" scenario, particularly in developing countries, to fall last in technology and innovation could increase the gap with wealthier, much advanced economies.

- E-Commerce presents unique opportunities for less developed nations to greatly enlarge their markets, both internally and externally. Externally, the internet and other technologies may permit for low-cost international trade, even for small, local businesses. Internally many groups of people who had been considered "marginalized" and "unbanked" may gain reasonable access to financial services, and may thus participate more willingly in all aspects of the economy.
- Rural areas considered very costly or unprofitable for business development might increasingly become a focus for investment and market development, and also for relocating corporate offices.
- Development of micro finance institutions to deliver financial services to the semi-urban and rural areas.
- E-Learning and M-learning enhances the access of the educational institutions in remote areas.
- E-Governance initiatives increases access to information and thereby reduce corruption.
- Mobile banking reduces the transaction cost of banking industry thereby increasing access to financial services through quickly growing mobile market. Eight Micro, small and medium enterprises can leverage the technology to market their goods globally.

## SOCIAL IMPACTS

- Some of the intangible downside risks of increasingly virtual interaction within rural community include the possible de-socialization of persons who have less and less direct contact with their peers, their co-workers, and their community. This can extend to family relations as well, particularly if technology creates further imbalances between those who are "online", and those without access to these technologies. On the other hand, equitable deployment of infrastructure and resources could provide a means of maintaining and expanding family and communal ties that would otherwise be broken by distance and cost.
- Other problem consists of psychological and physical health related effects of sedentary, computer anchored work environments. Early experience suggests that as this type of work (and social) activity expands businesses and government will have to consider broad based means and offset health hazards with new policies and treatments.
- E-Commerce may propose the potential for shifting the balance of opportunity, wealth, and social and political inclusion. As much as these trends are beneficial to the majority of rural community, they are also likely to bring unexpected effects on cultural and social norms. Indigenous traditions that have so far survived the intrusion of modernity may be less resilient in the face of global networks and instantaneous communication. This type of impact is just as significant as changes in bottom-line incomes, and can really only be "measured" by the persons whose lives are being changes by forces largely beyond their control.
- Electronic opportunities are valuable for giant corporations and small entrepreneurs alike. In the latter case, however the technologies and market options available through e-commerce may foster a true revolution in the way business structure and relationships are organized. The prospect of establishing new micro, small and medium enterprises is greatly boosted by the efficiencies available through information and communications technology. A study by Google presented that 57% of small medium enterprises used website as a sales channel and got direct leads from their websites. According to internet and mobile association of India (IMAI) 73% of MSME's have their own websites. Importantly 99% of MSME's use online Business to Business market places to generate business.

## IMPACT OF E-COMMERCE INDUSTRY ON VARIOUS SECTORS

The impact of e-commerce can be seen in the following sectors:

- **Technology**- One of the main drivers of technology will be E-Commerce industry and vice versa. We are seeing new age of technological solutions (AI/Machine Learning) being taken up to resolve the business problems to bring commerce to everyone digitally. This is seen in both Business to Consumer and Business to Business sector. Investment into technology sector is driving the growth in the E-Commerce domain.
- **Logistics**- Logistics business is both a bottleneck and a driver for e-commerce industry. For the same we see how last mile and inter-city logistics solutions have come up to digitally connect the different stakeholders across the country. The Uber model of moving passengers is executed in some form or the other in the logistic sector. The growth of E-Commerce will initiate innovation in the logistic sector to make the products available to the end consumer.
- **Travel**- At the moment 70% of the input to E-Commerce comes from the travel sector which comprises the online ticket bookings to other travel arrangements. This has made the market more competitive by bringing all players on the same platform and has also given customer more options. Travel industry will be initial adopters to become completely digitised and that is appreciations to E-Commerce.
- **Education**- One of the industries to have the most intense impact of E-Commerce is the education. The capability of E-Commerce to provide quality education to everyone is immense. India will have one of the major set of youth population and hence the scope for education segment to be the biggest achievers because of E-Commerce is sure.
- **Etail**- The flag bearers of the E-commerce wave have been the numerous E-Retail commerce platforms. Etail sector is projected to contribute to nearby 3% of the total Retail sells by 2020 and is at present around 1%. This wave is seen in both Business to Consumer and Consumer to Consumer model and is bound to grow further. This is not only for goods but also has taken the food sector.
- **Other Industries**- The mode of working in the Real Estate sector is already seeing the change because of the E-Commerce. This will change further with all property connected transactions coming online and getting closed online as well. Banking sector is promoting as well with reduced operations charge of online transactions. E-Commerce in health care has carried health related solutions to the urban India and will more penetrate deep into Tier I and Tier II cities.
- **Support Industries**- There are numerous support industries which have developed because of E-Commerce. These are digital marketing, analytics, payment gateways etc. These will become billion dollars areas as E-Commerce grows exponentially.
- In addition to the impact to these industries, E-Commerce is also helping in making the market more competitive, driving improved consumer experience and driving availability of goods to all. E-Commerce is also taking transactions online which creates the system more transparent and to an extent may further drive technological adoption. This will also help in driving corruption levels down using everything coming online.

## CONCLUSION

After taking a complete view of the business trends, it is seen that e-commerce is emerging as a significant tool to certify explosion growth of Indian economy. It has the opportunity to lead India into an Economic superpower. With a quickly growing internet penetration e-commerce offers an attractive choice for the retailers to expand. To achieve this, there should be more investments in supporting infrastructure and innovative and game changing business models in India.

## REFERENCES

1. Arjun Mittal (2013), "E-commerce: It's Impact on consumer Behavior", Global Journal of Management and Business Studies, ISSN 2248-9878 Volume 3, Number 2 (2013), pp. 131-138.
2. Elizabeth Goldsmith and Sue L.T. McGregor: Ecommerce consumer protection issues and implications for research and education, J. Consumer studies & Home. Economics Volume 24, No.-2 June (2000), pp.124-127.
3. International Journal of Commerce and Management Research, ISSN: 2455-1627, Impact Factor: RIJF 5.22, www.managejournal.com, Volume 2; Issue 10; October 2016; Page No. 39-41
4. James Christopher. November (2004); E-commerce: Comparison of online shopping Trends, Patterns and Preferences against a selected Survey of Women.
5. Kalakota, Ravi and Andrew B Whinston, Frontiers of Electronic Commerce (7th Edition), Addison Wesley, 2000

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce, Economics & 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 to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## **DISCLAIMER**

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



## ABOUT THE JOURNAL

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

### *Our Other Journals*

