INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

CONTENTS

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We invite unpublished novel, original, empirical and high quality research work pertaining to the recent developments & practices in the areas of Computer Science & Applications;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** <mark>anytime</mark> in _**M.S. Word format**_ after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (_**FOR ONLINE SUBMISSION, CLICK HERE**_).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1.   <mark>**COVERING LETTER FOR SUBMISSION**</mark>:

                                                                              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, <mark>**please specify**</mark>**)**

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.aeaweb.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

THE EFFECT OF DEMONETISATION ON THE INDIAN ECONOMY AT DIFFERENT TIME INTERVAL

AMISH BHARATKUMAR SONI
ASST. PROFESSOR
GLS UNIVERSITY
AHMEDABAD

KOMAL BHAGWANDAS SIDHNANI
ASST. PROFESSOR
GLS UNIVERSITY
AHMEDABAD

ABSTRACT

As per the recent Government decision of demonetisation, we would like to do research on the topic "The effect of demonetisation on the Indian economy at different time interval." because it is the decision which affect not only the Individuals but the Indian economy as a whole. The papers' concentration is on the effect of demonetisation on the Indian economy at different time interval. To understand Indian economy, we selected Indian sectors indices, stock indices and commodity indices and tries to see the fluctuation, correlation and overall effect at different time interval such as a week, month and a quarter. In this paper, the main focus is on the last week, quarter and month effect from the declaration dates on the indices such as small capital market, mid capital market, large capital market, sectors such as bankex, reality, finance, IT and in commodity gold and silver. In the past few months it was observed that at the time of declaration the market shrinks as it starts up with high expectations. With the help of this paper, know the overall effect after the demonetisation and before the demonetisation on the selected sectorial indices, stock indices and currency indices.

KEYWORDS
demonetisation, market indices, sectorial indices, commodity indices, demonetisation effect on stock indices, demonetisation effect on Indian economy.

1. INTRODUCTION
As per the recent Government decision of demonetisation, we would like to do research on the topic "The effect of demonetisation on the Indian economy at different time interval." because it is the decision which affect not only the Individuals but the Indian economy as a whole.

The papers' concentration is on the effect of demonetisation on the Indian economy at different time interval. To understand Indian economy, we selected Indian sectors indices, stock indices and commodity indices and tries to see the fluctuation, correlation and overall effect at different time interval such as a week, month and a quarter. In this paper, the main focus is on the last week, quarter and month effect from the declaration dates on the indices such as small capital market, mid capital market, large capital market, sectors such as bankex, reality, finance, IT and in commodity gold and silver

In the past few months it was observed that at the time of declaration the market shrinks as it starts up with high expectations. With the help of this paper, know the overall effect after the demonetisation and before the demonetisation on the selected sectorial indices, stock indices and currency indices.

2. LITERATURE REVIEWS
2.1 (2016, November 9). Industry fears liquidity crunch. Times of India, Ahmedabad, p.g. No. 2.
The surprising and sudden announcement of Rs. 500 and Rs. 1000 currency notes will not be a legal tender created a huge chaos and panic among the common people and industries alike. Many sectors are expected to affect by this move, especially those sectors who are dealing in cash are expected to see hectic dealings in coming days. Banks will also have affected by the demonetization because of the mad rush for replacing the currency notes. Diamonds, garments, gems and jewellery, real estate, building materials, cottage, handicrafts and MSMEs among other sectors are expected to feel a major heat. Over the next month, there will be a slowdown in many industries because most of the industries make their deals in cash and due to demonetization they will face payment related issues. Not only the angadias but also the retailers are going to face harsh issues of liquidity. Especially the small retailers will have to face a lot of problems in day to day dealings. Besides the angadias and retailers, gems and jewellery sector will also be adversely affected as there are high values of transactions take place in the gold market which are driven by high value currency notes. However, the courier service business will not be affected as they get their commission from the payment made by the customers.

2.2 Sinha Prabhakar (2016, November 9). Realty sector, where cash is king, May see black days. Times of India, Ahmedabad, p.g. No.6.
Demonetization will severely impact the real estate sector as real estate and land purchases are one of the most prominent segments of the cash economy. There will significant impact on the secondary market transactions where 60:40, the ratio of legal to black money had become a norms of sort. Due to black money the value of the real estate has appreciated in many markets.

2.3 Times News Network (2016, November 10). Retailers reel as cash dries up. The Times of India, Ahmedabad, p.g. No.4.
The government's decision to with draw existing currency notes of Rs. 500 and Rs. 1000 from circulation has adverse effect on the retail industry and neighbour-hood stores. According to industry players, the government's move was too surprising and abrupt. The government is targeting the black money hoarders but the government did not consider the difficulties and problems face by the small scale traders and traders of perishable goods, who are heavily dependent on cash transactions. A day after the demonetization, due to the worse situation and liquidity crunch the traders shut down their shops in the afternoon. Besides the traders, the small kirana store owners and milk shop owners were also affected by the demonetization

2.4 Times News Network (2016, November 10). Cash-loaded patients beg helplessly for tests, treatment. Times of India, Ahmedabad, p.g. No.3.
The PM had promised that there is no inconvenience at hospitals but there is exact opposite situation seen at the hospitals. The people are stranded at private hospitals due to demonetization. The private hospitals authorities were struggling with patients as government has barred them from accepting invalid currency. Due to this many people didn't receive treatment. In many cases hospitals turned a tidy profit by refusing unless payment was made in lower denomination notes-which was unavailable to patients. A twenty six year old lady named Jyotsna Parmar was also faced problem at hospital. As she had 1000Rs. note and she wanted to do a sonography and Echo-2D test of her one year old son Meet who was suffering from pneumonia but the staff of UN Mehta hospital declined to perform the tests because they refused to accept the old currency notes of Rs. 500 and Rs. 1000. Similar helplessness of patients was visible at major private hospitals where cash loaded.

2.5 (2016, November 12). Demonetization would only affect common man
Chidambaram says people are facing difficulties in buying medicines, bus and train tickets and paying for auto rickshaws because of demonetization. Central board of direct taxes (CBDT) in 2012 had advised the centre to avoid issuing Rs.2000 currency noted, saying it would bring more harm to the public than benefit. P. Chidambaram said it would only adversely affect the common man. He said there were currency notes worth about rs17 lakh crore in circulation across the country, and according to the RBI, about Rs. 400 crore of this was believed to be fake currencies, "just to destroy Rs. 400 crore fake currencies, why the circulation of total Rs. 17 lakh crore was needed to be blocked."

2.6 Chakraborty Pathikrit, Khan Urooj (2016, November 13). New Rs. 2000 note as useful as invalid currency. Times of India, November 13, 2016.
The banks are handing some of the new Rs. 2000 notes to the people in the exchange of invalid notes of Rs. 500 and Rs. 1000. The people are facing difficulty in spending the new currency notes of Rs. 2000 because most of the vendors are unable to return the balance in smaller currency which they are short of. Therefore, Rs. 2000 is worthless as just like the invalid Rs. 500 and Rs. 1000 notes, no one is accepting these either. On the fourth day of demonetisation move, the struggle at bank continued as the large number of people are stood in long queues at bank still evening. Because of the sudden announcement of demonetization by prime minister, the banks have not been able to update their systems accordingly and due to this the people are facing many difficulties. A major problem faced by the people on Saturday was that as ID proof was demanded only from those not holding account in the bank but on Saturday even account holders of a bank were asked to bring their ID proof for transaction. This is causing the people inconvenience.

2.7 By R. Jagannathan (Nov 14, 2016), demonetization seems like deflation for many people; danger single for PM Modi.
For, the first time in independent India's history, we are getting a life demonstration of what deflation may look like. Deflation is more dangerous for governments in power than inflation. People who used autos and taxies are travelling by bus and so the average auto vala's and cabs have seen a drastic fall in earnings; the Karana guys and vegetable vendors are finding it tough to sell enough to service are daily needs, and their turnover is down; people are putting off every day small-ticket FMCG purchases to conserve cash. The poor and non-poor live and work in the shadow of black money, and they are not amused by the demonetization. It is time for enchasing the JAM dividend JAN DHAN, Aadhaar and mobile money, if not, Modi sarkar will be in a jam.

2.8 (2016, November 14). Retail, wholesale trade affected due to demonetisation: CAIT.
The Economic Times, New Delhi.
"The commercial markets wore a gloomy and deserted look. Since demonetization, consumer football is very less. Not only is the retail activities but even the wholesale trade affected severely because of very low volume of transaction of goods." Post demonetisation, trade in markets across the country has reduced to 25% in comparison to normal days. The move has caused hardships to people who have to wait for their turn in long, unending queues to change the money. Several cash based businesses have been witnessed a slowdown.

2.9 (November 17, 2016), common people most affected by demonetization: Ram Gopal Yadav, Indian expresscom, New Delhi.
The former leader said the situation in the rural areas is very bad as the banks have failed to transport the stock of the new currency in the ATM and branches in rural and semi urban areas. He said that demonetization of the high value currency notes did not affected the rich people or the business class but majorly to the people from the villages and women. "People are very much disturbed by this demonetization. Farmers are not getting seeds and fertilizers.
And the biggest problem facing are the women of our country. Prime minister should thing that when even his mother is being forced to stand in queue than what about others, it's a crisis".

2.10 Renjhen Pankaj. (2016, November 22). The impact of demonetisation on Indian retail.
The government's recent demonetization move has definitely impacted the India retail industry in the short term due to lack of liquidity in the economy. As Indian retail segment generates a let of cash transaction, there might be reduction in the sales over the next one or two quarters. Some sectors like jewellery and the luxury segment have been impacted more than much longer to receive. Demonetization has resulted in visibly reduced low footfalls in shopping malls, but this effect is temporary and will turn around in few weeks as more currency circulated in the system and improves the purchasing power and appetite of the consumers. The long term growth story of the Indian retail sector continues to be one of resilience and growth.

2.11 (2016, December 2). I-T recovers Rs. 58cr assets in 22 days. Ahmedabad mirror, p.g. No. 5.
Gujarat income tax department has recovered Rs. 58 crore in unaccounted cash and wealth from multiple raids conducted across Gujarat since announcement of demonetization on November 8, as part of the exercise to tighten screw on money lenders, money exchangers and black money hoarders. 11 person were found exchanging new legal tenders against scrapped currency notes in Rs 500 and Rs 1000 demonetization. In the past few days multiple cases of people trying to exchange cash through commission agents and black money launderers have been reported from all over the state.

2.12 (2016, December 2), US: Demonetisation crucial to fight graft, Ahmedabad, pg no.8.
The US supported India's move of demonetization Rs. 500 and Rs. 1000 currency notes, saying that it was on "important "and "necessary" step to address corruption. According to mark toner, demonetization is an important step to crack illegal action. The American citizen who are working and living in India may also find inconvenience nut they are having proper information in regard to exchange of notes.

2.13 (2016, December 4). Go digital, even beggars using swipe machine: PM. Ahmedabad Mirror, p.g. No. 10.
Prime minister Narendra Modi on Friday referred to a whatsapp video showing a beggar using a swipe machine to persuade people to shift to digital monetary transactions, but Indian people do not accept new things if known the intension behind an action is right. People who live in villages they do not have electricity power after independence. They want to see TV serials but they can't because of electricity. The government has said that demonetization exercise would be used for people welfare like infrastructure development opposition party said that farmers are very much affected from this step. Modi said that "I especially want to thank farmers who despite all problems have not allowed showing to be affected it has rather gone up from last time.

2.14 Patadiya, vishal (2016, December 5). Demonetisation dries up tips earned by waiters. Ahmedabad mirror, p.g. No.7.
The demonetisation drive has grinded gears of many businesses across the spectrum. One of the sectors that has been a negative impact of the current monetary policy is the hotel and restaurant business, especially waiters who earn a substantial chunk of their pay through tips. The all-encompassing liquidity crunch has brunt a hole through the pockets of the waiters as their customers have run out of change. Bhavanisinh, has been working in a fast food restaurant near HL commerce college area of the city. He said, "Earlier only 30% of our customers paid with card. Due to this income i earn out of tips has come down by 25%.

2.15 Chakravorti Bhaskar. (2016, December 14). India's Botched War on cash.
In the meantime, retail and wholesale markets have stalled around the country. Supply chain transactions, real estate deals, and even weddings and funerals have been frozen. Consumers are coping with lines that are frustrating even for Indians used to standing in lines or waiting for basic services, people up and down the income spectrum are dealing with changing cash withdrawal policies and empty ATMS. The leading digital payments players have experienced a bump since the demonetization experiment began

2.16 Qureshi, Zahid. (2016, December 16). Spare some change for the beggars. Ahmedabad, Mirror, pg. No. 4.
The union government's move to curb black money through demonitization has affected all the sections of the society from last few months. Not only farmers, business men and daily wage labourers, beggars all are affected from this decision. The daily earned through charity has plummeted by 80 to 90 percent after Rs 500 and Rs 1000 notes were declared illegal. One beggar she begs near Bhardra mandir she said," since the currency issue has started, our situation has worsened. Earlier, we used to earn more than enough to eat food as well as save some. Now it's even difficult to manage two square meals". And other one is Yusuf sheikh begs near teen darwaza and ali masjid while carrying his 80 years old mother sharita on his back.He said earlier people gave us Rs 50 or Rs 100 note. But now we are getting small notes and coins like Rs 1, Rs 2 or at most Rs 10. Funny things are people ask me for change, where do I got change from. So that they all are very much affected from this demonitization.

3. OBJECTIVES

3.1 PRIMARY OBJECTIVE
Primary objective of the paper is to see the effect of demonetisation on Indian economy at different time interval.

3.2 SUBSIDIARY OBJECTIVES
1. To observe the fluctuation in the different indices at the time of demonetisation in the last week, month and quarter before and after the event.
2. To see the trend in the different indices on that date, after and before the demonetisation declaration.
3. To find out any correlation in the indices (i.e. small cap, mid cap and large capital market) within a week time, month and a quarter before and after the demonetisation.
4. To find out any correlation in the selected sectors (i.e. banking, finance, IT & reality) before and after the demonetisation
5. To find out any correlation in the commodity indices (i.e. gold and silver) before and after the demonetisation.

4. RESEARCH DESIGN

4.1 RESEARCH DESIGN
Descriptive to causal Research because in this paper it is the cause and effect analysis shown, the effect of demonetisation on the different indices we are try to check.

4.2 POPULATION
The population of our research is taken from Indian stock indices.

4.3 SAMPLING FRAME
Indian Stock Indices which are registered on the Indian Stock Exchanges mainly BSE.

4.4 SAMPLING UNIT
Sampling unit will be primarily consisting of the nine indices from sectors, market and commodity for before and after demonetisation.

4.5 SAMPLE SIZE
Sample size will be of last week i.e. 5 days from the implementation of the decision, month i.e. 20 days and a quarter i.e. 65 days before and after demonetisation, of nine indices i.e BSE large capital market, mid cap and small cap fluctuations, of sectors bankex, finance, reality and IT and of commodity gold and silver on the day of Demonetisation & after and before declaration of Demonetisation.

4.6 SAMPLING METHODS
Non probability sampling - judgemental sampling method.

5. RESEARCH TYPE

5.1 PRE DEMONETISATION & POST DEMONETISATION PERFORMANCE
Pre demonetisation & Post demonetisation, 3 days moving average prices all nine selected indices to see the fluctuation before and after declaration of demonetisation.

5.2 IMPACT OF DEMONETISATION
To see the effect R square, paired T test and correlation used with the help of values after and before the week, month and quarter of the declaration of the demonetisation.

6. DATA SOURCE

6.1 SECONDARY DATA
➢ BSE website
➢ Government of India Website
➢ News Paper Articles

7. HYPOTHESIS

7.1 PRICE FLUCTUATION BEFORE DEMONETISATION AND AFTER DEMONETISATION

7.1.1. MARKET INDICES VALUE
H0: There is no difference in the moving average market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is a difference in the moving average market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.1.2. SECTOR INDICES VALUE
H0: There is no difference in the moving average sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is a difference in the moving average sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.1.3. COMMODITY INDICES VALUE
H0: There is no difference in the moving average commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is a difference in the moving average commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.2 R SQUARE TEST

7.2.1. Market indices value
H0: There is no effect in the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is an effect in the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.2.2. Sector indices value
H0: There is no effect in the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is an effect in the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.2.3. Commodity indices value
H0: There is no effect in the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is an effect in the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.3 PAIRED T TEST

7.3.1. Market indices value
H0: There is no difference in the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is a difference in the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.3.2. Sector indices value
H0: There is no difference in the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.
H1: There is a difference in the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.3.3. Commodity indices value

H0: There is no difference in the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a difference in the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.4 CORRELATION

7.4.1. Market indices value

H0: There is a negative relation between the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a positive relation between the market indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.4.2. Sector indices value

H0: There is a negative relation between the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a positive relation between the sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

7.4.3. Commodity indices value

H0: There is a negative relation between the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a positive relation between the commodity indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

8. FINDINGS AND ANALYSIS

8.1 MOVING AVERAGE

8.1.1 Three days moving average for quarter before and after the demonetisation implemented for the BSE large capital market, small capital market and mid capital market.

TABLE 1: 3 DAYS MOVING AVERAGE A QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED MARKET INDICES

Particulars	3 Days Moving Average of Quarter			
	Before	**After**	**Difference**	**% Change**
BSE_Large Cap	3,394.11	3,138.24	-255.87	**-7.54**
BSE_Small Cap	12861.64	11959.12	-902.52	**-7.02**
BSE_Mid Cap	13218.79	11950.17	-1268.62	**-9.60**

From the above findings we can say that BSE indices value are showing negative effect after the decision had taken by the government and it is significant in the three months after the decision. BSE mid capital market value shows the highest effect up to 9.6 % negative.

8.1.2 Three days moving average for quarter before and after the demonetisation implemented for the BSE bankex index, finance index, IT index and reality index.

TABLE 2: 3 DAYS MOVING AVERAGE A QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR SELECTED SECTORIAL INDICES

Particulars	3 Days Moving Average of Quarter			
	Before	**After**	**Difference**	**% Change**
Bankex	22,626.74	20596.48	-2,030.26	**-8.97**
Finance	4,493.92	4,025.52	-468.40	**-10.42**
IT	10293.28	10011.08	-282.20	**-2.74**
Realty	1545.67	1273.99	-271.68	**-17.58**

From the above findings we can say that BSE all sectorial indices value is showing negative effect after the decision had taken by the government and it is significant in the three months after the decision. BSE reality sector shows highest negative up to 17.58% and IT sectorial indices shows the minimum but negative effect.

8.1.3 Three days moving average for quarter before and after the demonetisation implemented for the gold index and silver index. (All Moving Averages tables found with the help of Micro Soft Excel)

TABLE 3: 3 DAYS MOVING AVERAGE A QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR SELECTED COMMODITY

Particulars	3 Days Moving Average of Quarter			
	Before	**After**	**Difference**	**% Change**
Gold	2,837.43	2,493.86	-343.57	**-1.21**
Silver	41.24	35.11	-6.11	**-0.15**

From the above findings we can say that Commodity indices value are showing negative effect after the decision had taken by the government but it is the indices which shows minimum percentage of negative effect in official market compare to BSE indices.

8.2 R SQUARE

8.2.1 R square for a week, month & quarter before and after the demonetisation implemented for the BSE large capital market, small capital market and mid capital market.

TABLE 4: R SQUARE FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED MARKET INDICES

Particulars	R square		
	Quarterly	**Monthly**	**Weekly**
BSE_Large Cap	0.1528379	0.0201974	0.665851
BSE_Small Cap	0.4383101	0.0631235	0.8422395
BSE_Mid Cap	0.0299614	0.1201397	0.9068003

R square shows the percentage of movement due to its own and due to the demonetisation.

For example in large cap quarterly it shows 0.1528379, it mean index effected 15 percent due to demonetisation and remaining 85 percent on its own. So, higher percentage shows the effect of demonetization on that index.

From the above findings we can say that BSE indices values are effected highest with in the week time then it's reduce. As we observed in moving average its effect is highest here also in mid capital indices but its quarterly effect here it shows weekly stronger than after month and quarter it reduces faster than other indices.

8.2.2 R square for a week, month & quarter before and after the demonetisation implemented for the BSE bankex index, finance index, IT index and reality index.

TABLE 5: R SQUARE FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED SECTORIAL INDICES

Particulars	R square		
	Quarterly	**Monthly**	**Weekly**
Bankex	0.1608453	0.1745222	0.0397259
Finance	0.050653	0.0996115	0.6163288
IT	0.2657858	0.5020727	0.1928709
Realty	0.2962781	0.0050806	0.8855665

From the above findings we can say that BSE sectorial indices values are effected differently sector wise also and time interval wise. As we observed in majority indices except in realty it shows highest effect after and before the month. But in reality it reduces after month and then it tries to stabilize the effect. The special sector to see the effect is finance which shows highest n week time but it reduces significantly and reaches to almost no effect.

8.2.3 R square for a week, month & quarter before and after the demonetisation implemented for the gold index and silver index.

TABLE 6: R SQUARE FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED COMMODITY INDICES

Particulars	R square		
	Quarterly	**Monthly**	**Weekly**
Gold	0.0525915	0.5880751	0.0122985
Silver	0.077408	0.0286572	0.0553711

From the above commodity indices, we can see that in week and quarter time in gold there is not much effect of demonetisation and in silver at different time interval it is almost no effect of the demonetisation. But the special effect shows in the Gold commodity index after month time which is very significant.

8.3 T TEST

8.3.1 T test for a week, month & quarter before and after the demonetisation implemented for the BSE large capital market, small capital market and mid capital market.

TABLE 7: T TEST (p VALUE) FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED MARKET INDICES

Particulars	T Test		
	Quarterly	**Monthly**	**Weekly**
BSE_Large Cap	4.66359E-15	7.942E-11	0.0289805
BSE_Small Cap	6.40591E-14	4.186E-11	0.0046039
BSE_Mid Cap	2.07651E-19	2.742E-10	0.0057031

Here T test vale shows majority like 4.66359E-15 in excel, which means 0. 14 times zero than 455359. Which is less than 0.05 p value. Now if it shows more than 0.05 it means there is no effect of demonetization and if it's less than 0.05 p value it means there is an effect of demonetisation.

In indices values, at all after different time interval it shows the effect of demonetisation.

8.3.2 T test for a week, month & quarter before and after the demonetisation implemented for the BSE bankex index, finance index, IT index and reality index.

TABLE 8: T TEST (p VALUE) FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED SECTORIAL INDICES

Particulars	T Test		
	Quarterly	**Monthly**	**Weekly**
Bankex	4.13061E-08	0.0002896	0.4271529
Finance	3.53121E-14	6.133E-09	0.0824297
IT	1.82925E-12	1.351E-05	0.0002776
Realty	4.70123E-28	5.164E-16	0.0002578

Here T test vale shows majority like 4.13061E-08 in excel, which means 0. Than 07 times zero than 413061 which shows (0.0000000413061). Which is less than 0.05 p value. Now if it shows more than 0.05 it means there is no effect of demonetization and if it's less than 0.05 p value it means there is an effect of demonetisation.

In sectorial indices we show again the same p value to all the indices at different time interval.

Except weekly Bankex and finance sector indices all indices at different time interval shows significant effect of demonetisation on sectorial indices.

8.3.3 T test for a week, month & quarter before and after the demonetisation implemented for the gold index and silver index.

TABLE 9: T TEST (p VALUE) FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED COMMODITY INDICES

Particulars	T Test		
	Quarterly	**Monthly**	**Weekly**
Gold	3.9341E-24	5.691E-06	0.0096997
Silver	8.84272E-18	0.0001081	0.0452896

In commodity index all the p values as per t test shows that there is an effect of the demonetisation at different time interval, because all values are less than 0.05.

8.4 CORRELATION

8.4.1 Correlation for a week, month & quarter before and after the demonetisation implemented for the BSE large capital market, small capital market and mid capital market.

TABLE 10: CORRELATION FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED MARKET INDICES

Particulars	Correlation		
	Quarterly	**Monthly**	**Weekly**
BSE_Large Cap	-0.39094483	-0.142117	0.3235738
BSE_Small Cap	0.66204996	-0.251244	0.894494
BSE_Mid Cap	0.17309369	-0.346612	0.9460537

INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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

http://ijrcm.org.in/

38

Correlation result varies weekly to monthly drastically. As weekly it shows positive relation than after a month it shows negative relation in all the three indices. In quarterly there is only negative index in large capital market but other shows positive relation in other two indices, i.e. small capital and midterm capital index.

8.4.2 Correlation for a week, month & quarter before and after the demonetisation implemented for the BSE bankex index, finance index, IT index and reality index.

TABLE 11: CORRELATION FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED SECTORIAL INDICES

Particulars	Correlation		
	Quarterly	Monthly	Weekly
Bankex	-0.4010552	-0.417759	-0.394129
Finance	-0.22506227	-0.315613	0.4242476
IT	-0.5155442	-0.708571	0.4692272
Realty	-0.54431435	-0.071279	0.8908317

Correlation result varies weekly to monthly drastically in sectorial index also. As weekly it shows positive relation, except in bankex, then after a month and quarter it shows negative relation in all the four indices.

8.4.3 Correlation for a week, month & quarter before and after the demonetisation implemented for the gold index and silver index.

TABLE 12: CORRELATION FOR A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE ANNOUNCEMENT OF DEMONETIZATION IN 2016 FOR THE SELECTED COMMODITY INDICES

Particulars	Correlation		
	Quarterly	Monthly	Weekly
Gold	-0.22932839	-0.718343	0.0230959
Silver	-0.27822297	-0.316382	0.6417655

Correlation result varies weekly to monthly and quarterly drastically in commodity index also. As weekly it shows positive relation after a month and quarter it shows negative relation in both the indices.

9. HYPOTHESIS TESTING

9.1 THREE DAYS MOVING AVERAGE OF A WEEK, MONTH AND QUARTER BEFORE AND AFTER THE DEMONETIZATION

Three days moving average of a quarter shows negative percentage changes from table 1, 2 and 3, in all the indices i.e. BSE market indices, BSE sectorial indices and Commodity indices.

So, in **all the three hypothesis H0 is rejected** means there is a difference in the moving average sector indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

9.2 R SQUARE

H0: The indices having no effect of the demonetisation and its moves on its own.

H1: The indices having an effect of demonetisation and its moves due to the effect.

R square for **BSE market indices** it shows very significant effect of demonetisation in a week time but after a month and quarter it reduces.

So, out of 9 different result of three indices from table 4 only three weekly result shows effect due to demonization and remaining six shows the value less than 0.5 which means after a week it moves on its own than demonetisation.

So, in BSE market indices we can say **H0 is accepted.**

R square for **BSE Sectorial indices** it shows very significant effect of demonetisation in a week time but after a month and quarter it reduces.

So, out of 12 different result of three indices from table 5 only two weekly result shows effect due to demonization and remaining 10 shows the value less than 0.5 which means after a week it moves on its own than demonetisation.

So, in BSE sectorial indices we can say **H0 is accepted.**

R square for **Commodity indices** out of 06 different result of two indices from table 6 only one monthly result shows effect due to demonization and remaining 5 shows the value less than 0.5

So, in commodity indices also we can say **H0 is accepted.**

9.3 T TEST

H0: There is no difference in the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a difference in the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

In T test from table 7, 8 and 9 we can say as the p value is less than 0.05 in all the 09 indices at different time interval i.e. week, month and quarter. We can say **H0 is rejected for all the three T test hypothesis** for all the indices at different time interval which means there is a difference in the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

9.4 CORRELATION

H0: There is a negative relation between the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

H1: There is a positive relation between the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval

Correlation are for **BSE market indices** it shows positive relationship after a week, negative relationship after a month and majority indices shows positive relationship after a quarter also.

Out of 9 different result of three indices from table 10 four shows negative result which mostly from monthly results of all the indices but majority five shows positive relation.

So, in BSE market indices we can say **H0 is rejected.** Which means there is a positive relation between the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

Correlation for **BSE Sectorial indices** shows from table 11 positive relation due to demonetisation in a week time but after a month and quarter it shows negative result for all the sectorial indices.

In BSE sectorial indices we can say **H0 is accepted.** Which means there is a negative relation between the indices value before the announcement of Demonetisation and after the announcement of Demonetisation at different time interval.

Correlation for **Commodity indices** shows from table 12 same as sectorial indices does. In a week time it shows positive result than after a month and a quarter time it shows negative results. Which proves in majority indices after a week its negative correlation. So, **H0 is accepted** here.

10. CONCLUSION

In this paper we observe that after the decision of the Government for the currency withdrawal or demonetisation. Not only it effected the Indian people but also it effected significantly to the Indian economy at different time interval.

We selected Indian sectors indices, stock indices and commodity indices and tries to see the fluctuation, correlation and overall effect at different time interval such as a week, month and a quarter. It shows the different result at different time interval which signifies as a whole the effect of demonetisation is there on Indian economy.

11. SUGGESTION

As the demonetisation is a one of the decision that Government had taken which shows the significant effect on different indices at different time interval. So, in future any Government decision is taken investors need to invest carefully.

12. SCOPE FOR FURTHER RESEARCH

From the research it clearly shows that it is a short term perspective, we can go for long term perspective after a year or two and see the effect is same or different. We can consider some more sectors and currency from the economy and see there is any change in or not.

13. ACKNOWLEDGEMENT

REFERENCES

1. (2016, November 9). Industry fears liquidity crunch. Times of India, Ahmedabad, pg No. 2.
2. Sinha Prabhakar (2016, November 9). Realty sector, where cash is king, May see black days. Times of India, Ahmedabad, pg. No.6.
3. Times News Network (2016, November 10). Retailers reel as cash dries up. The Times of India, Ahmedabad, pg. No.4
4. Times News Network (2016, November 10). Cash-loaded patients beg helplessly for tests, treatment. Times of India, Ahmedabad, pg. No.3.
5. (2016, November 12). Demonetization would only affect common man: P.Chidambaram.www.livemint.com
6. Chakraborty Pathikrit, Khan Urooj (2016, November 13). New Rs. 2000 note as useful as invalid currency. Times of India, November 13, 2016. http://timeso-findia.indiatimes.com/city/lucknow/New-Rs-2000-note-as-useful-as-invalid-currency/articleshow/55393953.cms
7. (2016, November 14). Retail, wholesale trade affected due to demonetisation: CAIT. The Economic Times, New Delhi. http://m.econom-ictimes.com/news/economy/policy/retail-%20wholesale-trade-affected-due-to-demonetisation-cait/amp_articleshow/55416897.cms
8. By R.Jagannathan (Nov 14, 2016), demonetization seems like deflation for many people; danger single for PM Modi, www.firstpost.com,Ahemdabad.
9. (November 17, 2016), common people most affected by demonetization: Ram Gopal Yadav, Indian expresscom, New Delhi.
10. Renjhen Pankaj. (2016, November 22). The impact of demonetisation on Indian retail. http://www.indiaretailing.com/2016/11/22/retail/expert-speak-im-pact-demonetisation- indian-retail/
11. (2016, December 2). I-T recovers Rs 58cr assets in 22 days. Ahmedabad mirror, pg no.5.
12. (2016, December 2), US: Demonetisation crucial to fight graft, Ahmedabad, pg no.8.
13. (2016, December 4). Go digital, even beggars using swipe machine: PM. Ahmedabad Mirror, p.g. No. 10.
14. Patadiya, vishal. (2016, December 5). Demonetisation dries up tips earned by waiters. Ahmedabad mirror, pg no.7.
15. Chakravorti Bhaskar. (2016, December 14). India's Botched War on cash. https://hbr.org/2016/12/indias-botched-war-on-cash
16. Qureshi, Zahid. (2016, December 16). Spare some change for the beggars. Ahmedabad, Mirror, pg. No. 4.

REQUEST FOR FEEDBACK

Dear Readers

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

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

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

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

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