# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT



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

Indexed & Listed at:

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

n Citation Index (ICI), J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (University Grants Commission (Unidex Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 6575 Cities in 197 countries/territories are visiting our journal on regular basis.

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

# **CONTENTS**

Sr. No.	TITLE & NAME OF THE AUTHOR (S)							
1.	A REVIEW ON FACTORS AFFECTING ADOPTION OF MOBILE BANKING	1						
	SHILPA BIDANI & Dr. M. S. SENAM RAJU							
2.	EFFECT OF NON-PERFORMING ASSETS ON BANKING SECTOR: A STUDY ON STATE BANK OF INDIA  Dr. JYOTIRMOY KOLEY	6						
3.	A STUDY ON THE PROVISIONS OF NOTIONAL RENT IN INDIAN INCOME TAX	10						
	VARANASI. RAHUL							
4.	A STUDY OF CUSTOMER BEHAVIOR TOWARDS TECHNOLOGY IN BANKING SECTOR: A STUDY ON DHARWAD CITY	13						
	PAVANKUMAR U D & MEGHA G PATIL							
5.	IMPACT OF PANDEMIC INDUCED LOCKDOWN ON STOCK MARKET PERFORMANCE WITH SPECIAL REFERENCE TO INDIAN EQUITY MARKET							
	Dr. RAVINDRA							
	REQUEST FOR FEEDBACK & DISCLAIMER	23						

#### FOUNDER PATRON

#### Late Sh. RAM BHAJAN AGGARWAL

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

#### CO-ORDINATOR

#### **Dr. BHAVET**

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

#### ADVISOR.

#### Prof. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

#### EDITOR.

#### **Dr. PARVEEN KUMAR**

Professor, Department of Computer Science, NIMS University, Jaipur

#### CO-EDITOR

#### Dr. A. SASI KUMAR

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

#### EDITORIAL ADVISORY BOARD

#### Dr. S. P. TIWARI

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

#### **Dr. CHRISTIAN EHIOBUCHE**

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

#### **Dr. SIKANDER KUMAR**

Vice Chancellor, Himachal Pradesh University, Shimla, Himachal Pradesh

#### Dr. JOSÉ G. VARGAS-HERNÁNDEZ

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

#### **Dr. 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. A SAJEEVAN RAO

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

#### Dr. D. S. CHAUBEY

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

#### Dr. CLIFFORD OBIYO OFURUM

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

#### Dr. KAUP MOHAMED

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

#### Dr. VIRENDRA KUMAR SHRIVASTAVA

Director, Asia Pacific Institute of Information Technology, Panipat

#### Dr. MIKE AMUHAYA IRAVO

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

#### **Dr. SYED TABASSUM SULTANA**

Principal, Matrusri Institute of Post Graduate Studies, Hyderabad

#### **Dr. BOYINA RUPINI**

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

#### **Dr. NEPOMUCENO TIU**

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

#### **Dr. SANJIV MITTAL**

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

#### Dr. RAJENDER GUPTA

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

#### Dr. SHIB SHANKAR ROY

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

#### Dr. SRINIVAS MADISHETTI

Professor, School of Business, Mzumbe University, Tanzania

#### Dr. NAWAB ALI KHAN

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

#### **MUDENDA COLLINS**

Head, Operations & Supply Chain, School of Business, The Copperbelt University, Zambia

#### Dr. EGWAKHE A. JOHNSON

Professor & Director, Babcock Centre for Executive Development, Babcock University, Nigeria

#### Dr. A. SURYANARAYANA

Professor, Department of Business Management, Osmania University, Hyderabad

#### P. SARVAHARANA

Asst. Registrar, Indian Institute of Technology (IIT), Madras

#### Dr. MURAT DARÇIN

Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey

#### Dr. ABHAY BANSAL

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

#### Dr. YOUNOS VAKIL ALROAIA

Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran

#### **WILLIAM NKOMO**

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

#### Dr. JAYASHREE SHANTARAM PATIL (DAKE)

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

#### **SHASHI KHURANA**

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

#### **Dr. SEOW TA WEEA**

Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia

#### Dr. OKAN VELI ŞAFAKLI

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

#### Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

#### **Dr. BORIS MILOVIC**

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

#### **Dr. LALIT KUMAR**

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

#### Dr. MOHAMMAD TALHA

Associate Professor, Department of Accounting & MIS, College of Industrial Management, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

#### Dr. V. SELVAM

Associate Professor, SSL, VIT University, Vellore

#### Dr. IQBAL THONSE HAWALDAR

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

#### **Dr. PARDEEP AHLAWAT**

Associate Professor, Institute of Management Studies & Research, Maharshi Dayanand University, Rohtak

#### **Dr. ALEXANDER MOSESOV**

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

#### Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

#### Dr. BHAVET

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

#### **YU-BING WANG**

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

#### **SURJEET SINGH**

Faculty, Department of Computer Science, G. M. N. (P.G.) College, Ambala Cantt.

#### **Dr. TITUS AMODU UMORU**

Professor, Kwara State University, Kwara State, Nigeria

#### Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

#### Dr. SAMBHAVNA

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

#### Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

#### **Dr. SHIVAKUMAR DEENE**

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

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

#### 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** 

1.

Nationality

#### 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; Dewelopment 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** or online by clicking the link **online submission** as given on our website (**FOR ONLINE SUBMISSION, CLICK HERE**).

#### GUIDELINES FOR SUBMISSION OF MANUSCRIPT

	<u> </u>
COVERING LETTER FOR SUBMISSION:	2.552
	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 'your journals.	
I hereby affirm that the contents of this manuscript are original. Furthermore fully or partly, nor it is under review for publication elsewhere.	e, it has neither been published anywhere in any language
I affirm that all the co-authors of this manuscript have seen the submitted v their names as co-authors.	ersion of the manuscript and have agreed to inclusion of
Also, if my/our manuscript is accepted, I agree to comply with the formalitie discretion to publish our contribution in any of its journals.	es as given on the website of the journal. The Journal has
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	:

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

#### NOTES:

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

#### THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION

**REVIEW OF LITERATURE** 

**NEED/IMPORTANCE OF THE STUDY** 

STATEMENT OF THE PROBLEM

**OBJECTIVES** 

**HYPOTHESIS (ES)** 

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

**FINDINGS** 

**RECOMMENDATIONS/SUGGESTIONS** 

CONCLUSIONS

LIMITATIONS

**SCOPE FOR FURTHER RESEARCH** 

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably be in **2000** to **5000 WORDS**, But the limits can vary depending on the nature of the manuscript.

- 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 REVIEW ON FACTORS AFFECTING ADOPTION OF MOBILE BANKING

SHILPA BIDANI
RESEARCH SCHOLAR
INDIRA GANDHI OPEN NATIONAL UNIVERSITY
NEW DELHI

Dr. M. S. SENAM RAJU
PROFESSOR
SCHOOL OF MANAGEMENT STUDIES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
NEW DELHI

#### **ABSTRACT**

Mobile banking has arisen as an important distribution channel. It facilitates its customers to perform banking transactions on their mobile phones. This facility is provided by most of the banks in India and abroad. Customers can do various activities like viewing account balance, transfer funds, paying various bills etc. Mobile banking has already adopted by many consumers for doing banking transactions but the adoption is high only in some urban areas and metro cities but rest of the country is still untapped. This review paper aims to briefly review the literature on various factors influencing adoption of mobile banking identified by various researchers in worldwide and in India and advise guidelines for future research in this still developing field The most important drivers to adopt m banking are perceived usefulness, perceived ease of use and Perceived risk is the most important factor which inhibits the adoption.

#### **KEYWORDS**

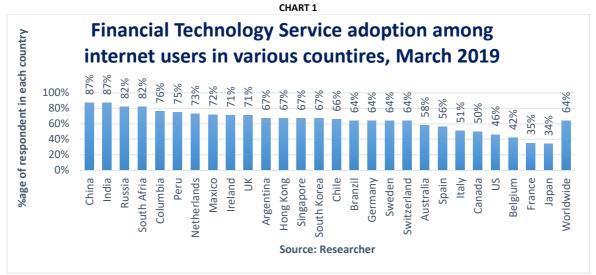
mobile banking, banking transactions.

#### **JEL CODES**

033, 033.

#### INTRODUCTION

obile banking is an ability which allows customers to perform banking tasks on their mobile phones. This is offered by most of the banks across the world. Customers can use mobile banking to do various banking activities like checking account balance, make fund transfers and pay bills, etc. Mobile banking can be done by various ways such as mobile apps, SMS, USSD. Financial technology services adoption among internet users has doubled during the past two years, and the adoption rate is growing. The data was collected from 27 markets in March 2019. It shows average 64% of digitally active consumers. (Global FinTech Adoption Index 2019)



Rising of consumer awareness and the swiftness at which customers can access their accounts using mobile has also led in a fall in usage of website usage and visits to bank branches. Footsteps to branch has fell from 476 million in 2011 to 278 million in 2016(UK finance report 2016). The current stats of mobile adoption are good news for the banks and the economy. This review paper aims to briefly review the existing literature on Mobile banking carried out worldwide and in India. The review paper has also made an attempt to produce the results and highlight the factors that affect Mobile banking adoption in India and Worldwide. This research examines 30 journal articles published between 2011 and 2019 in top journals. This review is an analysis based on studies published in technology, innovation, finance, banking journals, and major conferences.

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

Mobile banking is one of the most significant development to occur in the retail banking sector. It has provided convenience to the customer of accessing banking information anytime and anywhere. But still it is not accepted well by the banking customers. Hence it is important to explore the factors that motivate consumers in adoption of this new technology. The objective of this paper is to review the existing literature on M banking done in India and worldwide. The paper has made an effort to highlight the factors that predict the consumer's intention to adopt m banking. The review results indicate Perceived usefulness, perceived risk, perceived ease of use, self-efficacy, Social Norms, Personal Innovativeness, Financial Cost, Performance Expectancy, Hedonic Motivation are the important factors that affect adoption of m banking among the consumers.

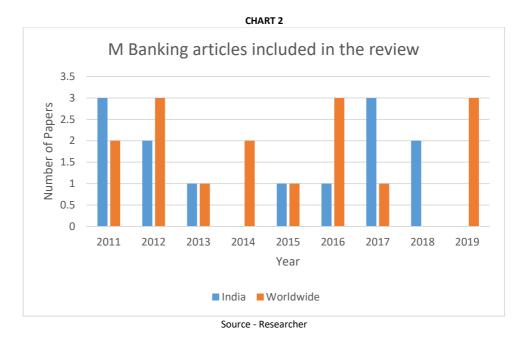
#### RESEARCH METHODOLOGY

To determine the up-to-date and future directions in identifying the factors affecting adoption of m-banking we conducted an extensive and systematic literature review using Google scholar and Ebsco. The search scope was performed for the 9 years period from 2011 to 2019. We identified published articles pertaining to factors affecting m-banking, the search was further refined by reading the abstract and the papers which were not strictly focused on our research objective were excluded. The first abstraction included 50 papers, but the final assortment included 30 articles, including conceptual and empirical research papers. The following points were considered for including or excluding an article from the review:

- Identify and understand the main themes of research on mobile banking.
- Identify the factors affecting adoption of mobile banking.

The rest of the paper is organized as follows. The next section is of previous literature reviews on mobile banking with classification done in India or outside India with an objective to explore factors affecting mobile adoption. The findings in the next section and, finally, we present the conclusions, limitations, and future directions for research.

At the end of this selection stage, the number of studies was 30. Figure 1 summarizes the works in India and worldwide by year of publication.



#### **REVIEW OF FACTORS AFFECTING MOBILE BANKING STUDIES WORLDWIDE**

Ching Mun Cheah et al. (2011) Researcher investigated the factors affecting consumer intention to adopt mobile Banking in Malaysia. A self-administrated questionnaire had been developed to the customers. He found factors such as perceived usefulness (PU), perceived ease of use (PEOU), relative advantages (RA) and personal innovativeness (PI) were positively influencing the intention to adopt mobile banking whereas social norms (SN) found to be insignificant and perceived risks (PR) was negatively affecting the adoption.

Shallone K. Chitungo et.al (2011) This empirical study investigates the applicability of the extension TAM in determining the factors that influence unbanked rural communities in Zimbabwe and found perceived usefulness, perceived ease of use, relative advantages, personal innovativeness and social norms have significant effect on user's attitude to adopt mobile banking.

Zohra Saleem et.al (2011) The purpose of this research is to identify the major factors influencing customer in Pakistan for mobile technology and found that security, authenticity and reliability of the technology are most significance.

Chian-Son Yu (2012) This study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) to examine the factors impacting people to adopt mobile banking and found social influence, perceived financial cost, performance expectancy, and perceived credibility significantly influence consumer in adoption.

Ulun Akturan et al. (2012) aims to examine consumers' adoption of mobile banking by integration of the technology acceptance model from 435 university students who were future prospects and found that perceived usefulness, perceived social risk, perceived performance risk and perceived benefit directly affect attitudes towards mobile banking adoption.

Yong-Ki Lee et al. (2012) researcher examined factors based on general technology perceptions, technology-specific perceptions, user characteristics, and task-user characteristics influencing the intention to use mobile financial services (MFS). The data was collected from the bank customers of Korea and found that perceived task technology, versus a task characteristic view, significantly influences perceived usefulness.

Mohammad Rokibul Kabir (2013) The study investigates the factors that influence the users to use mobile banking in Bangladesh. Researcher analysed these factors under the four major factors Perceived Risk, Trust, Convenience, Relative Advantage and found ability, integrity, benevolence, perceived usefulness, perceived ease of use relative cost and time advantages are positively related with the intention to use mobile banking services

Payam Hanafizadeh et al. (2014) Researcher provides insights into factors affecting the adoption of mobile banking in Iran and found eight latent variables of perceived usefulness, perceived ease of use, need for interaction, perceived risk, perceived cost, compatibility with life style, perceived credibility and trust found significant affect the adoption of mobile banking.

Tiago Oliveira et al. (2014). This study found that factors influencing m banking adoption are facilitating conditions, Initial trust, performance expectancy, technology characteristics, task technology fit and behavioual intentions directly influence m banking adoption. The study was conducted in Portugal with a sample of 194 individuals.

John Wamai et al. (2015) This study investigates the factors that effects the adoption of mobile by customers of Microfinance Institutions in Kenya. 210 customers were selected randomly and found that both perceived usefulness and perceived ease of use positively affects adoption of mobile banking technology. Perceived Risk and Perceived transaction costs have negative effect on the adoption of mobile banking technology.

Adegbenjo A.A et.al (2016) This paper examines adoption and usage of m banking services for potential uses in developing countries and found lower interactions cost, availability of 24 hours services in a day and increase in the efficiency of the banking process are some of the positive factors for its adoption.

Shunbo Yuan et.al (2016) This researcher develops a research model and studied the factors in on the users of mobile banking in China and found satisfaction, perceived usefulness, perceived task-technology fit, and perceived risk are the main predictors of continuance intention of adoption of m banking.

Veera Bhatiasevi (2016) attempts to identify the factors for the adoption of mobile banking in Thailand. Researcher has used extended existing UTAUT model. The results showed that performance expectancy, effort expectancy, social influence, perceived credibility, perceived convenience, and behavioual intention posited a positive relationship to use mobile banking.

Sujeet Kumar Sharma (2017) This paper explores major antecedents influencing the mobile banking acceptance by extending two factors autonomous motivation and controlled motivation to TAM. Data was collected in Oman from 225 respondents and found major factor influencing adoption was trust and autonomous motivation.

Abdullah M. Baabdullah et al. (2019) combines two models UTAUT2 and the D&M IS Success Model. It was found that factors like performance expectancy, price value, facilitating conditions, hedonic motivation, habit, system quality and service quality have a significant impact on actual use behaviour.

Abdulkader Kaakeh et al. (2019), researched on bank customers living in UAE. to investigate the effects of factors like image, awareness, Shariah compliance and individualism, on the attitude and intention of customers. It was found that attitude and awareness affect intention directly, while image, awareness, Shariah compliance and individualism affect attitude directly and intention indirectly mediated by attitude.

Lute Sakala et al. (2019) The study was done in Zambia to identify the factors that affect the adoption and use of mobile banking services. Researcher designed the questionnaire using TAM and collected a sample of 384 respondents having retail saving or current account in commercial bank and found positive relationship between perceived ease of use, perceived usefulness, user attitude, external variables, user intention and system use.

#### **REVIEW OF FACTORS AFFECTING MOBILE BANKING STUDIES IN INDIA**

Archana Sharma (2011) This paper examines consumer adoption of a new electronic payment service and the positive factors influencing its adoption found are perceived risk, security and trustworthiness of the services.

Purnima S. Sangle et al. (2011), this paper empirically explores the factors that can be used for making better mobile customer relationship services in banking and found perceived utility value is regarded as the most important factor.

Siddhartha, Dasgupta et al. (2011) This study examined the antecedents to behavioual intention of mobile banking in Hyderabad and found Perceived Usefulness, Perceived Ease of Use, Perceived Image, Perceived Value, Self-Efficacy, Perceived Credibility and Tradition all positively affects behavioual Intentions towards mobile banking usage.

Mohini S Samudra et al. (2012) This paper attempts to study the adoption of mobile banking in Pune city using the UTAUT model. Researcher used wide array of constructs to study the adoption and found convenience, compatibility, perception, social influence and Information are useful for the adoption of mobile banking services.

Reji Kumar et al. (2012) examines the factors influencing the continuance decisions of adopters of m-banking services in Kerala and found perceived service quality, satisfaction and continuance intentions are positive towards adoption of m banking.

Yogesh Jain (2013) paper examines factors influencing the adoption of consumer adoption of a new electronic payment service in South Rajasthan and found risk and security are the most significant factors for banking service adoption.

P. S. Aithal et al. (2015) This is an empirical study to explore customer acceptance of mobile banking by developing six hypotheses and found demography of customers, personal banking experience & incentives, technology experience, psychology & culture, and security & trust are the factors affecting usage of M banking.

**S.** V. Krishna Kishore et al. (2016) examined respondents of rural provinces in Karnataka state and used mixed sampling technique to collect 959 samples and found PE, EE, SI, Attitude, and PR significantly affect the dependent variable BI.

Deepak Chawla et al. (2017) empirically examined the influence of different factors on user attitude and intention towards adopting mobile banking and found perceived trust, perceived ease of use (PEOU), perceived lifestyle compatibility, perceived efficiency and perceived convenience significantly affect user attitude towards adoption.

Sumeet Gupta et al. (2017) researcher exploratory attempts to understand that the levels of security affect perceived risk and control on the consumer and ultimately it effects the adoption of mobile banking by Indian customers. It was found perceived risk and control plays and important role in influencing customers' intention to adopt mobile banking.

V.V. Ravi Kumar et.al (2017) article studies the factors influencing intention to use mobile banking on management students. The study utilizes two constructs of the technology adoption model and then extends it further to include two additional constructs. The results suggest that perceived usefulness and perceived ease of use, social influence and trust propensity are the underlying factors in respect of the behavioural intention to use mobile banking services.

Amit Shankar et al. (2018) identified perceived ease of use (PEOU), perceived usefulness (PU), trust, and self-efficacy (SE) are significant and have positive impact on affecting mobile payment adoption intention in India.

Richa Priya et al. (2018) examined the factors affecting mobile banking adoption among young Indian consumers. 269 respondents aged between 23 and 30 years. findings of the study suggest that perceived usefulness (PU), perceived ease of use (PEU), perceived credibility (PC) and structural assurance (SA) are strong determinants of user satisfaction (US) and behavioual intention (BI) to use the mobile banking service.

#### **DISCUSSION**

The review reveals that which factors influence more in accepting mobile banking adoption across the world. It also helps us to identify the degree of influence of each one of the factors. The literature also gives the vision in to the modality of Mobile banking transactions. Literature review has experiential some significant points that needs attention by the banks and financial institutions to know about the fear of the customers that is not encouraging them to use m banking. These findings can help the banks to customise their services focussing on demographic feature or as per the geographic needs. Figure 2 summarizes the factors highlighted by various researchers in India and worldwide undertaken in the study.

#### TABLE 1

Source	Various Factors identified												
Authors	PU	PEOU	RA	PI	SN	PR	PC	FC	PE	Trust	lifestyle	PM/SE	НМ
Ching Mun Cheah et al. (2011	$\uparrow$	1	$\uparrow$	$\uparrow$									
Shallone K. Chitungo et.al (2011)		<b>↑</b>	$\uparrow$	1	$\uparrow$								
Purnima S. Sangle et al. (2011)													
Siddhartha, Dasgupta et al. (2011)													
Archana Sharma(2011)						$\uparrow$	$\uparrow$			1			
Chian.Son Yu (2012)					$\uparrow$		$\uparrow$						
Ulun Akturan et al. (2012)	$\uparrow$					<b></b>	$\uparrow$						
Yong.Ki Lee et al. (2012)	$\uparrow$	$\uparrow$		$\uparrow$									
Mohini S Samudra et al. (2012)	$\uparrow$	$\uparrow$			$\uparrow$						$\uparrow$		
Reji Kumar et al. (2012	$\uparrow$						$\uparrow$						
Yogesh Jain (2013)						$\uparrow$	$\uparrow$						
Mohd. Rokibul Kabir (2013)		$\uparrow$	$\uparrow$			$\leftarrow$				$\uparrow$			
Tiago Oliveira et al. (2014).		$\uparrow$						$\uparrow$	$\uparrow$	$\uparrow$			
Payam Hanafizadeh et al. (2014)	$\uparrow$	$\uparrow$				$\uparrow$	$\uparrow$	$\uparrow$		$\uparrow$	$\uparrow$		
P. S. Aithal et al. (2015)	$\uparrow$				$\uparrow$		$\uparrow$			$\uparrow$			
John Wamai et al. (2015)	$\uparrow$	$\uparrow$											
Adegbenjo A (2016)								$\uparrow$					
Veera Bhatiasevi (2016)		$\uparrow$											
Shunbo Yuan et.al (2016)	$\uparrow$	$\uparrow$					$\uparrow$						
S. V. Krishna Kishore et al. (2016)	$\uparrow$	$\uparrow$			$\uparrow$		$\uparrow$		$\uparrow$				
Deepak Chawla et al. (2017)	$\uparrow$	$\uparrow$			$\uparrow$					$\uparrow$	$\uparrow$		
Sumeet Gupta et al. (2017)						$\uparrow$							
V.V. Ravi Kumar et.al (2017)	$\uparrow$	$\uparrow$			$\uparrow$					$\uparrow$			
Amit Shankar et al. (2018)	$\uparrow$	$\uparrow$										$\uparrow$	
Richa Priya et al. (2018)	$\uparrow$	$\uparrow$					$\uparrow$						
Sujeet Kumar Sharma (2017)										$\uparrow$		$\uparrow$	
Lute Sakala et al. (2019)													
Abdulkader Kaakeh et al. (2019)													
Abdullah M. Baabdullah et al. (2019)								$\uparrow$	$\uparrow$				$\uparrow$

Source - Researcher

SN Social Norms, PR Perceived Risk, RA Relative Advantage, PEOU Perceived ease of use, PU Perceived usefulness, PI Personal Innovativeness, FC Financial COST, PE Performance Expectancy, PI Personal Innovativeness, HM Hedonic Motivation

The user will adopt m-banking only when they find its benefits are more than the cost associated with it. The common findings across the studies in India and world-wide are that Perceived usefulness and Perceived ease of use, compatibility are the common factors which are the positive motivators for the customers to use mobile for banking activities whereas trust, risk, security, are found to be important factors that affect m banking adoption. Banks should work upon framing of relevant policies, proper regulations, and legal frameworks that will abide more confidence in the customer to shift from traditional banking to m banking.

#### **CONCLUSION**

Mobile banking is a convenient and fast, way to do banking transactions. Banks should offer some value-added service and take steps to develop confidence in the customers to promote mobile banking adoption. If customers observe that bank has sound managerial and technical system of managing mobile banking transactions and their financial transactions will be performed without any error. Moreover, banks should demonstrate how to do m-banking in their branches and website. Banks should offer some advantages to customers doing mobile banking so that users are encouraged to take the advantages. A satisfied customer will motivate his family, friends around to use m banking.

#### SCOPE FOR FUTURE RESEARCH

Smartphones devices have allowed constantly on the go in many ways. There are many banking applications, or apps assisting the users to fulfil banking needs virtually. Users love this convenience but risk in their mind is not allowing them to use this facility. Researcher should explore this these unfounded fears. Secondly most of the research is done in urban areas. Financial Conduct Authority (FCA) also recently published the latest analysis from its Financial Lives survey, which surveyed about the preferences of approximately 13,000 people in U.K. and it interestingly, revealed people in rural areas looks like they are suffering from technophobia to use banking services so that can be the departure for more research.

#### **REFERENCES**

- Adegbenjo, A.A., Oyebola, A (2016) Mobile Banking: Adoption, Benefits and Usage in Developing Countries. International Journal of Computer Science and Information Technology & Security, Vol.6, No3.
- 2. Aithal, P S., Varambally, K. V. M., (2015). Customer perspective on online mobile banking in India- An Empirical study. *International Journal of Management, IT and Engineering, Volume 5, Issue 7*
- 3. Akturan, U., Tezcan, N., (2012). Mobile banking adoption of the youth market: Perceptions and intentions. *Marketing Intelligence & Planning, Vol. 30 Issue:* 4, pp.444-459.
- 4. Alalwan, A A., Dwivedi, Y K., Rana, N P P., Williams, M D., (2016). Consumer adoption of mobile banking in Jordan: Examining the role of usefulness, ease of use, perceived risk and self-efficacy. *Journal of Enterprise Information Management, Vol. 29, pp.118-139*
- 5. Baabdullaha, A M., Alalwan, A A., Rana, N P., Kizgin, H., Pati, I P., (2019). Consumer use of mobile banking (M-Banking) in Saudi Arabia: Towards an integrated model. *International Journal of Information Management*, 44, 38–52.
- 6. Bhatiasevi, V., (2016). An extended UTAUT model to explain the adoption of mobile banking. Information Development, Vol. 32(4), 799–814.
- 7. Chawla, D., Joshi, H., (2017). High Versus Low Consumer Attitude and Intention Towards Adoption of Mobile Banking in India: An Empirical Study. *Vision 21(4)* 410–424.
- 8. Cheah, C M., Teo, A C., Sim J J, Oon K H, Tan B I. (2011). Factors Affecting Malaysian Mobile Banking Adoption: An Empirical Analysis, *International Journal of network and Mobile Technologies, volume 2 Issue.*
- 9. Chitungo, S K., Munongo, S., (2013). Extending the Technology Acceptance Model to Mobile Banking Adoption in Rural Zimbabwe. *Journal of Business Administration and Education, Volume 3, Number 1, 51-79*

- Dasgupta, S., Paul, R., Fuloria, S., (2011). Factors Affecting Behavioral Intentions towards Mobile Banking Usage: Empirical Evidence from India. Romanian Journal of Marketing, Vol. 6 Issue 1, p6-28. 23p.
- Gupta, S., Haejung, Yun., Heng, X., Kim, H W., (2017). An exploratory study on mobile banking adoption in Indian metropolitan and urban areas: a scenario-based experiment. Information technology for development, Vol. 23, No. 1, 127–152
- 12. Hanafizadeh, P., Behboudi, M., Koshksaray, A A., Tabar, M J S., (2014). Mobile-banking adoption by Iranian bank clients. *Telematics and Informatics 31, 62–*
- 13. Jain, Y., (2013). Mobile Banking: A Study On Adoption & Challenges in Southern Rajasthan, India. *International Journal of innovative Research & development, Vol 2 Issue 4.*
- 14. Kaakeh, A., Hassan, M. K., Stefan, F., Almazor, V H., (2019). Factors affecting customers' attitude towards Islamic banking in UAE, *International Journal of Emerging Markets*.
- 15. Kabir, M R., (2013). Factors Influencing the Usage of Mobile Banking: Incident from a Developing Country World Review of Business Research Vol. 3. No. 3. Issue Pp. 96 114
- 16. Kishore, S V K., Sequeira, A H., (2016). An Empirical Investigation on Mobile Banking Service Adoption in Rural Karnataka. SAGE Open, 1–21
- 17. Lee, Y K., Jong-Hyun P., Chung, N., Blakeney, A., (2012). A unified perspective on the factors influencing usage intention toward mobile financial services. Journal of Business Research 1590–1599.
- 18. Oliveira, T., Faria, M., Thomas, M.A., Popovi, A., (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34 (2014) 689–703
- 19. Priya, R., Gandhi, A V., Shaikh, A., (2018). Mobile banking adoption in an emerging economy: An empirical analysis of young Indian consumers. *Benchmarking: An International Journal, Vol. 25 Issue: 2, pp.743-762.*
- 20. Ravikumar, V V,. Lall, A., Man, T., (2017). Extending the TAM Model: Intention of Management Students to Use Mobile Banking: Evidence from India. *Global Business Review 18(1) 238–249 (2017)*
- 21. RejiKumar, R. G., D., Ravindran, S., (2012). An Empirical study on service quality perceptions and continuance intention in mobile banking context in India. *Journal of Internet Banking and Commerce, vol. 17, no.* 1
- 22. Sakala, L., Phiri, J., (2019). Factors Affecting Adoption and Use of Mobile Banking Services in Zambia Based on TAM Model. *Open Journal of Business and Management, 7, 1380-1394.*
- 23. Saleem, Z., Kashif, R., (2011). Relationship between Customer Satisfaction and Mobile Banking Adoption in Pakistan. *International Journal of Trade, Economics and Finance, Vol. 2, No. 6*
- 24. Samudra, M S., Phadtare, M., (2012). Factors Influencing the Adoption of Mobile Banking with special Reference to Pune City. *ASCI Journal of Management* 42 (1): 51–65
- 25. Sangle, P.S., Awasthi, P., (2011). Consumer's expectations from mobile CRM services: a banking context, Business Process Management. *Journal, Vol. 17 No. 6, pp. 898-918*
- 26. Shankar, A., Datta, B., (2018). Factors Affecting Mobile Payment Adoption Intention: An Indian Perspective. Global Business Review, 19(3S) 725–895.
- 27. Sharma, A., (2011). Mobile banking as technology adoption and challenges, International Journal of Multidisciplinary Research Vol.1 Issue 6.
- 28. Sharma, S.K., (2017). Integrating cognitive antecedents into TAM to explain mobile banking behavioural intention: A SEM-neural network modelling. *Inf Syst Front* 21, 815–827.
- 29. Wamai. J., Kandiri, J M., (2015). Determinants of Mobile Banking Adoption by Customers of Microfinance Institutions in Nairobi County in Kenya. *International Journal of Science and Research, Volume 6 Issue 6.*
- 30. Yu, C S., (2012). Factors Affecting Individuals to Adopt Mobile Banking: Empirical evidence from the UTAUT model. *Journal of Electronic Commerce Research,* Vol 13. No 2
- 31. Yuan, S., Liu, Y., Yao, R., Liu, J., (2016). An investigation of users' continuance intention towards mobile banking in China. *Information Development, Vol. 32(1)* 20–34.

### REQUEST FOR FEEDBACK

#### **Dear Readers**

At the very outset, International Journal of Research in Commerce, IT & 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 <a href="mailto:infoijrcm@gmail.com">infoijrcm@gmail.com</a> for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail <a href="mailto:infoijrcm@gmail.com">infoijrcm@gmail.com</a>.

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, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

### **ABOUT THE JOURNAL**

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

# Our Other Fournals





