# **INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT**



Indexed & Listed at:
Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,
Indian Citation Index (ICI), I-Gage. India (link of the same is duly available at Inflibent of University Grants Commission (U.G.C.),
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world.
Circulated all over the world & Google has verified that scholars of more than 6185 Cities in 195 countries/territories are visiting our journal on regular basis.
Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

# **CONTENTS**

Sr.	TITLE & NAME OF THE AUTHOR (S)	Page
No.		No.
1.	CHANGING BUSINESS DYNAMICS IN ERA OF TECHNOLOGICAL DISRUPTIONS	1
	MONICA GUPTA, Dr. SHASHI SHEKHAR & Dr. KAVITA AGGARWAL	
2.	INFLUENCE AND VALIDITY OF ONLINE REVIEWS ON CUSTOMERS PURCHASE	5
	DECISION – A STUDY	
	MONISHA D & Dr. S. GURUSAMY	
3.	FINANCIAL STRUCTURE OF SELECT BATTERY COMPANIES IN ANDHRA	10
	PRADESH – AN ANALYTICAL STUDY	
	Dr. KOMMINENI KALYANI & Dr. P. MOHAN REDDY	
4.	A STUDY ON THE IMPACT OF GST ON GOODS TRANSPORT AGENCIES (GTA)	17
	WITH REFERENCE TO TAMIL NADU	
	ANAND SHANKAR RAJA M & KRISHNA B	
5.	ENHANCED SPARSE SYSTEM FOR MULTI-CHANNEL MANAGEMENT USING	26
	REDUCED MONOTONE GEOMETRIC ALGEBRA	
	Dr. R. MARIMUTHU	
6.	THE STUDY OF CRYPTOCURRENCIES AROUND THE WORLD	30
	GURUCHARAN SINGH BAGGA	
	REQUEST FOR FEEDBACK & DISCLAIMER	34

ii

## <u>CHIEF PATRON</u>

Prof. (Dr.) K. K. AGGARWAL

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

## FOUNDER PATRON

## Late Sh. RAM BHAJAN AGGARWAL

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

## CO-ORDINATOR

Dr. BHAVET

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

## ADVISOR

## Prof. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

## <u>EDITOR</u>

## Dr. PARVEEN KUMAR

Professor, Department of Computer Science, NIMS University, Jaipur

## CO-EDITOR

## Dr. A. SASI KUMAR

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

EDITORIAL ADVISORY BOARD

## Dr. CHRISTIAN EHIOBUCHE

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

## Dr. SIKANDER KUMAR

Chairman, Department of Economics, Himachal Pradesh University, Shimla, Himachal Pradesh

## Dr. JOSÉ G. VARGAS-HERNÁNDEZ

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

Mexico

## Dr. RAJENDER GUPTA

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

## Dr. D. S. CHAUBEY

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

## Dr. TEGUH WIDODO

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

## Dr. S. P. TIWARI

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

## **Dr. BOYINA RUPINI**

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

## Dr. KAUP MOHAMED

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

## SUNIL KUMAR KARWASRA

Principal, Aakash College of Education, ChanderKalan, Tohana, Fatehabad

## Dr. MIKE AMUHAYA IRAVO Principal, Jomo Kenyatta University of Agriculture & Tech., Westlands Campus, Nairobi-Kenya Dr. M. S. SENAM RAJU Professor, School of Management Studies, I.G.N.O.U., New Delhi **Dr. NEPOMUCENO TIU** Chief Librarian & Professor, Lyceum of the Philippines University, Laguna, Philippines **Dr. A SAJEEVAN RAO** Professor & Director, Accurate Institute of Advanced Management, Greater Noida Dr. H. R. SHARMA Director, Chhatarpati Shivaji Institute of Technology, Durg, C.G. Dr. CLIFFORD OBIYO OFURUM Professor of Accounting & Finance, Faculty of Management Sciences, University of Port Harcourt, Nigeria Dr. SHIB SHANKAR ROY Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh **Dr. MANOHAR LAL** Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi **Dr. SRINIVAS MADISHETTI** Professor, School of Business, Mzumbe University, Tanzania Dr. ANIL K. SAINI Professor, Guru Gobind Singh Indraprastha University, Delhi Dr. VIRENDRA KUMAR SHRIVASTAVA Director, Asia Pacific Institute of Information Technology, Panipat **Dr. VIJAYPAL SINGH DHAKA** Professor & Head, Department of Computer & Communication Engineering, Manipal University, Jaipur **Dr. NAWAB ALI KHAN** Professor & Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P. Dr. EGWAKHE A. JOHNSON Professor & Director, Babcock Centre for Executive Development, Babcock University, Nigeria **Dr. ASHWANI KUSH** Head, Computer Science, University College, Kurukshetra University, Kurukshetra **Dr. ABHAY BANSAL** Head, Department of Information Technology, Amity School of Engg. & Tech., Amity University, Noida **Dr. BHARAT BHUSHAN** Head, Department of Computer Science & Applications, Guru Nanak Khalsa College, Yamunanagar **MUDENDA COLLINS** Head, Operations & Supply Chain, School of Business, The Copperbelt University, Zambia Dr. JAYASHREE SHANTARAM PATIL (DAKE) Faculty in Economics, KPB Hinduja College of Commerce, Mumbai Dr. MURAT DARÇIN Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey **Dr. YOUNOS VAKIL ALROAIA** Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran **P. SARVAHARANA** Asst. Registrar, Indian Institute of Technology (IIT), Madras **SHASHI KHURANA** Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala Dr. SEOW TA WEEA Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia Dr. OKAN VELI ŞAFAKLI Professor & Dean, European University of Lefke, Lefke, Cyprus **Dr. MOHINDER CHAND** Associate Professor, Kurukshetra University, Kurukshetra **Dr. BORIS MILOVIC**

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

iv

v

#### Dr. IQBAL THONSE HAWALDAR

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

#### Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

#### Dr. ALEXANDER MOSESOV

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

#### Dr. MOHAMMAD TALHA

Associate Professor, Department of Accounting & MIS, College of Industrial Management, King Fahd University of

Petroleum & Minerals, Dhahran, Saudi Arabia

#### Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

#### Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

#### WILLIAM NKOMO

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

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

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

### Dr. SHIVAKUMAR DEENE

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

#### Dr. MELAKE TEWOLDE TECLEGHIORGIS

Faculty, College of Business & Economics, Department of Economics, Asmara, Eritrea

## Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

#### Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

#### Dr. ASHISH CHOPRA

Faculty, Department of Computer Applications, National Institute of Technology, Kurukshetra

#### SURAJ GAUDEL

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

#### Dr. SAMBHAVNA

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

## Dr. LALIT KUMAR

Faculty, Haryana Institute of Public Administration, Gurugram

### FORMER TECHNICAL ADVISOR

AMITA

## FINANCIAL ADVISORS

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

## LEGAL ADVISORS

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

## SUPERINTENDENT

SURENDER KUMAR POONIA

## CALL FOR MANUSCRIPTS

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

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

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

#### 1. COVERING LETTER FOR SUBMISSION:

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

THE EDITOR

IJRCM

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

(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

#### DEAR SIR/MADAM

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

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

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

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

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

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

#### NOTES:

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

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

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

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

INTRODUCTION REVIEW OF LITERATURE NEED/IMPORTANCE OF THE STUDY STATEMENT OF THE PROBLEM OBJECTIVES HYPOTHESIS (ES) RESEARCH METHODOLOGY RESULTS & DISCUSSION FINDINGS RECOMMENDATIONS/SUGGESTIONS CONCLUSIONS LIMITATIONS SCOPE FOR FURTHER RESEARCH REFERENCES APPENDIX/ANNEXURE

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

- 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

#### CHANGING BUSINESS DYNAMICS IN ERA OF TECHNOLOGICAL DISRUPTIONS

## MONICA GUPTA ASST. PROFESSOR DEPARTMENT OF MANAGEMENT ITFT COLLEGE CHANDIGARH

## Dr. SHASHI SHEKHAR PROFESSOR QUEST GROUP OF COLLEGE MOHALI

## Dr. KAVITA AGGARWAL ASSOCIATE PROFESSOR DEPARTMENT OF MANAGEMENT RAYAT BAHRA UNIVERSITY MOHALI

#### ABSTRACT

There is no doubt that digital business is changing the nature of competition. Today, it is not just traditional industry competitors we need to worry about, but new entrants from outside our industry, equipped with new digitally based business models and value propositions. This is often tech giants and startups that have envisioned and built a new business model from the ground up, powered by a new platform ecosystem for digital business. In effect, tomorrow's leader may not be someone we know. We often think of industry competition as a perpetual battle between the same set of incumbents, but in reality, things are far more dynamic and transitory. As an example, whereas 89% of the Fortune 500 went out of business between 1955 and 2014, in recent years, according to R "Ray" Wang of Constellation Research, 52% have been merged, acquired, gone bankrupt or fallen off the list solely since 2000. Why can new entrants move in so easily? Digital business the rules by lowering the traditional barriers to entry. A digitally based business model of the five forces of industry competition; Digital Transformation And Innovation In Today's Business World; Leadership in the Era of Digital Disruption; Changing Retail, Dynamics in the Face of Technology Disruption; How Disruptive Technology Is Changing Business for Good and The Coming Wave of Digital Disruption.

#### **KEYWORDS**

business dynamics, technological disruptions, substitutes, innovation.

JEL CODE M15

#### INTRODUCTION

xactly why is digital business so disruptive to traditional business models and traditional notions of industry competition? A useful way to analyze the situation is by looking at Porter's model of the five forces of industry competition and exploring how digital business is impacting each of the various forces. According to Michael E. Porter, in one of his landmark books, titled *Competitive Strategy*, "In any industry, whether it is domestic or international or produces a product or a service, the rules of competition are embodied in five competitive forces: the entry of new competitors, the threat of substitutes, the bargaining power of buyers, the bargaining power of suppliers, and the rivalry among the existing competitors."



CHART 1

Let's look at each of these five forces and examine the role and impact of digital business:

## The entry of new competitors

#### THE THREAT OF SUBSTITUTES

The threat of substitutes deals with the threat of substitute products or services. In terms of digital business, this can come from a purely digital substitute or a hybrid digital/physical substitute. Taxi services, such as Uber and EasyTaxi for example, provide a hybrid model via a digital app for consumers and taxi drivers, coupled with the physical taxis.

#### VOLUME NO. 8 (2018), ISSUE NO. 09 (SEPTEMBER)

The threat of substitutes is high in many industries since switching costs are low and buyer propensity to substitute is high. In the taxi services example, customers can easily switch from traditional models to the new model simply by installing an app on their smartphone. Propensity to switch from the traditional model is high due to consumer wait times for taxis, lack of visibility into taxi location and so on.

#### THE BARGAINING POWER OF BUYERS

Perhaps the strongest of the five forces impacting industry competition is the bargaining power of buyers since the biggest driver of digital business comes from the needs and expectations of consumers and customers themselves.

This bargaining power lays out a new set of expectations for the digital customer experience and necessitates continual corporate innovation across business models, processes, operations, products and services.

#### THE BARGAINING POWER OF SUPPLIERS

Suppliers can accelerate or slow down the adoption of a digitally based business model based upon how it impacts their own situation. Those pursuing digital models themselves, such as the use of APIs to streamline their ability to form new partnerships and manage existing ones, may help accelerate our own model. Those who are suppliers to the traditional models, and who question or are still determining their new role in the digital equivalent, may use their bargaining power to slow down or dispute the validity or legality of the new model.

Good examples are the legal and business issues surfacing around the digital-sharing economy (i.e. ride-sharing, room-sharing etc.) where suppliers and other constituents work to ensure the business model and process innovations still adhere to established rules, regulations, privacy, security and safety.

#### THE RIVALRY AMONG THE EXISTING COMPETITORS

Finally, existing competitors are all looking at digital business, trying to understand the disruptions occurring, and prepare their response. The responses can range all the way from defensive to offensive measures, and even a first-mover attack. This rivalry among competitors is always in play, but in recent years, digital business has added fuel to the fire, just as the e-business era did many years ago.

The rivalry is heating up because entry and exit barriers are going down due to the comparative low-cost of digital business models, and in many cases new entrants do not even need to own physical assets or infrastructure. In particular, the "platform" model is seeing considerable success in the marketplace by simply connecting stakeholders and applying a set of peripheral services to enhance the customer experience.

#### LITERATURE REVIEW

Many books have discussed the interplay between technology and business. For instance, Berkun (2010, p. 62), Isaacson (2014, p. 288), Lessig (2008, p. 143), Naim (2014, p. 71), Norman (1998, p. 235), Rogers (1962/2003, 5th ed., p. 247), and Varian (2004, p. 26) approvingly reference Christensen's original thesis about disruptions. Typically, the attitude in such technical papers is that "disruptive" is a desirable trait, because the choice of the term suggests that the paper is presenting something important and possibly highly valuable. The greater the effect or the more disruptive the innovation, the better.

Sood and Tellis (2011) state that technology disruption occurs when a new technology exceeds the performance of the dominant technology on the primary dimension of performance. Similar definitions can be found in Govindarajan and Kopalle (2006), Schmidt and Druehl (2008), and Utterback and Acee (2005). Linton (2002) refers to Abernathy and Clark (1985) and states that "Disruptive innovations are based on a different technology base than current practice, thereby destroying the value of existing technical competencies." Kassicieh et al. (2000), Kostoff et al. (2004), Rothaermel (2002), and Volberda et al. (2011) have provided similar definitions. According to Danneels (2004) "a disruptive technology is a technology that changes the bases of competition by changing the performance metrics along which firms compete." Similar definitions are presented by Obal (2013) and Nagy et al. (2016). According to Walsh et al. (2002), Geoffrey Moore has noted in 1991: "disruptive technologies generate discontinuous innovations that require users/adopters to change their behavior in order to make use of the innovation." Albors-Garrigos and Hervas-Oliver (2014), Lyytinen and Rose (2003), Bessant et al. (2010), Paap and Katz (2004), and Urban et al. (1996) have presented similar kinds of definitions. Sometimes disruptions are initiated by a new business model rather than by new technology, as discussed in Ghezzi et al. (2015), Pisano (2015), Sabatier et al. (2012), and Sosna et al. (2010). Finally, many articles (e.g., Kassicieh et al., 2002; Laplante et al., 2013; Markides, 2006 and Yu and Hang, 2010) discuss several aspects of disruptions without giving one clear definition.

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

The objective of the study is to bring forward the Porter's model of the five forces of industry competition; Digital Transformation and Innovation in Today's Business World; Leadership in the Era of Digital Disruption; Changing Retail, Dynamics in the Face of Technology Disruption; How Disruptive Technology Is Changing Business for Good and The Coming Wave of Digital Disruption.

#### METHODS OF DATA COLLECTION

Primary Data: Are those, which are, collected a fresh and for the first time and thus happen to be original in character and known as Primary data.

Secondary Data: Are those which have been collected by someone else and which have already been passed through the statistical process are known as Secondary data.

#### TYPE OF RESEARCH USED

The research will be conducted by means of descriptive research in which main data is taken from the internet and other journals or books. I.e. mainly secondary data will be used. These are already available i.e. they refer to the data which have already been collected and analyzed.

#### DIGITAL TRANSFORMATION AND INNOVATION IN TODAY'S BUSINESS WORLD

When businesses and the way they operate shift from their traditional mode of operation and management to the modern and technology oriented ways of operation, the transitions referred to as Digital Transformation or disruption.

Since change is the only thing constant, digital transformation has become imperative for all businesses, small, medium large. Be it automation, logistics, software, retail or medical — digital disruptions is omnipresent. Delivering a good digital business experience to customers and employees requires the use of-of new innovative business application.

Digital transformation is not just about embracing new technology; it is about a change in thought and organization culture. There is a need for organizations to address the change in business scenarios, dynamic business demands and innovate ways to quickly cater to these changing needs.

Digital business transformations are driven by key factors like Innovative Technology, consumer customer behavior and market demand, and also environmental factors.

Technological innovations lead to technology disruptions. The business process moves away from legacy systems to adopt modern technology like a cloud. Big data, IoT, RAD etc.

Then comes the next factor: customer behavior. What are the customer demands and expectations on the business (and the demands on technology to meet business needs)? Customers demand increased technological capabilities combined with the desire for ease of use.

#### LEADERSHIP IN THE ERA OF DIGITAL DISRUPTION

In this era of "digital disruption" — which refers to how technology can transform everything about the way businesses are run and interact with customers — leaders who don't transform to master the digital era to disrupt will get disrupted. And it will be a brutal disruption, where the majority of companies will not exist in a meaningful way 10 to 15 years from now.

Those in leadership positions can guide their organizations through the new digital era by following a simple five-step operational blueprint:

- Build and execute a compelling vision.
- Adopt a partner-centric model to deliver.
- Reinvent yourself.
- Turn people into the business's secret weapon.
- Accelerate the speed of innovation.

Digital disruption is bound to propel the rise of new companies that master the digital transformation, and bring about the demise of those that fail to do so. Business leaders can either take the steps to embrace it or risk being left behind.

#### CHANGING RETAIL, DYNAMICS IN THE FACE OF TECHNOLOGY DISRUPTION

The Indian retail landscape is going through a major shake-up and becoming intensely competitive. Consequently, retail brands are adopting various winning strategies to enhance customer experience, which in turn helps acquire new customers and retain the existing ones.

#### TECHNOLOGY DISRUPTION

With the advent of the digital era, conventional models of customer service are getting disrupted. Technological advancements have been transforming the way a customer shops or share his/ her shopping experiences. Presently, websites, social media, blogs and vlogs play a key role in propelling customers' process of buying.

#### SOCIAL MEDIA

Good customer experience comes with flawless customer service. Retailers are already aware of this and have been sprucing up their customer service so as to gain a competitive edge in the market. Digitalization is playing a crucial role on this shift, thereby making it imperative for retailers to perk up their customer service. In the olden times, customers used to share their poor customer experience with their friends and family, and currently, customers' share their good and bad experiences via a simple tweet or a post on Facebook that reaches millions of people worldwide.

#### **THE IoT Movement**

Connected devices are also reshaping experiences by adding more connectivity and intelligence to objects, thereby revolutionising the retail sector. For example, the Internet of Things is not only propelling digital transformation but also bringing fresh opportunities by bringing everything including consumers' activity into the digital sphere. This is compelling retailers to use intelligent devices for digitizing their offerings, processes as well as employees.

#### DATA ANALYTICS

Retailers are increasingly leveraging the power of Big Data for making precise strategic decisions besides enhancing customers' shopping experience. Big Data enables retailers to comprehend what their customers are looking for throughout their buying journey. It also helps retailers to predict the demand of customers so that they can adapt to the market changes accordingly.

#### GLOBAL INFLUX OF BRANDS

The Millennial customers put a strong emphasis on global brands; thus, the latter is taking centre stage in shopping malls. Mall owners today are embracing global brands as they bring in a new set of customers and also yield better returns per square ft. compared to the domestic retail brands. For example, Indian malls having retail outlets of brands like Forever 21, Zara, Massimo Dutti, H&M, Armani or Starbucks attract good number of customers. Thus, to enhance customer experience, shopping malls are increasingly accommodating global brands by expelling domestic brands altogether or by reducing the size of domestic stores.

#### FOOTFALLS

Footfall is a crucial factor for retailers. Decent footfalls not only help drive sales but also enhance conversion rates. Footfall analytics can provide crucial insights for enhancing customer service, boosting sales and optimizing staff. Footfall analytics tracks the pattern of visitor traffic to reveal when the levels of footfalls in a retail store rise and fall, and how many people visiting the store are actually buying its products or services. Improved customer experience is the only factor that motivates shoppers to spend more with a brand. Thus, retailers have been taking measures to convert footfalls into sales by offering visitors more than just a transaction in their stores so as to improve customer experience.

#### DIGITAL DARWINISM: HOW DISRUPTIVE TECHNOLOGY IS CHANGING BUSINESS FOR GOOD

The real threat and opportunity in technology's disruption lies in the evolution of customer and employee behavior, values, and expectations. Companies are faced with a quandary as they invest resources and budgets in current technology and business strategies (business as usual) versus that of the unknown in how those investments align, or don't, with market and behavior shifts.

This is a time of digital Darwinism — an era where technology and society are evolving faster than businesses can naturally adapt. This sets the stage for a new era of leadership, a new generation of business models, charging behind a mantra of "adapt or die."

Digital transformation is not a specifically about technology, its empowered by it. Without an end in mind, digital transformation continually seeks out how to use technology in ways that improve customer experiences and relationships. It also represents an effort that introduces new models for business and, equally, creates a way of staying in business as customers become increasingly digital.

#### THE COMING WAVE OF DIGITAL DISRUPTION

For the past 30 years, business has changed dramatically because of digital innovation — but only up to a point. Although many practices, products, and services have evolved, and a few sectors (such as media) have been fundamentally changed, very few enterprises have had their core businesses disrupted. But that is about to change, in a way that will — or should — affect the strategy of your company.

All disruption (digital or otherwise) takes place on an industry-wide scale, forcing a significant shift in profitability from one prevailing business model to another. The new model typically provides customers with the same or better value at a much lower cost. Companies wedded to the old business model lose ground, and some are even pushed out of business. A group of challengers that embrace the new business model gain advantage and take a dominant position in the market. The winners may be new entrants, as were Southwest Airlines in the 1980s, Google in the 1990s, and Netflix and Facebook more recently.

Business people have been worried about disruption at least since 1996, when Clayton M. Christensen popularized the word in his book *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail.* But the degree of actual disruption in business over the past 15 years is much lower than you might expect. Our colleagues at PwC discovered that discrepancy in a research project published this year, in which they tracked the top 10 companies (by revenue) in 39 key sectors. On average, only 6 percent of company value shifted over a full 10-year period, except for the three most volatile sectors (Internet software and services, IT, and biotechnology), where the figure was 10 percent. In short, if you measure disruption by the degree of market share gain or loss in the dominant companies in each sector, most industries have not yet been affected.

Digital disruptions are different in several critical ways. They involve technologies that can reduce the need for physical assets; for example, streaming media took the place of compact discs, and algorithms that specify traffic routes for shared-vehicle enterprises can raise the efficiency of passenger travel and thus reduce the number of cars and vans needed in an area. Digital systems accumulate data and, through machine learning, they continually improve the performance of the new business models, thereby accelerating their impact. Digital disruptions reshape value chains and markets, rendering the old differences among sectors irrelevant; now one home device can be a music player, a thermostat, a security system, and a retail portal. They affect a broad number of sectors, and they encourage demand in a broad range of industries for people with software skills (which are more fungible than other forms of engineering provess) and a Silicon Valley

#### VOLUME NO. 8 (2018), ISSUE NO. 09 (SEPTEMBER)

4

sensibility. It's safe to say that no one from inside the aerospace and defense industry of the 1980s would have developed the remote-controlled military vehicles and drones emerging today, piloted from far away as if they were video games. Only those from the computer industry could accomplish that.

#### FINDINGS

Business Transformation is the real change that is causing a storm in the business world. Its impact is felt not only in operations but also in industry structures and also at all levels in the organization. Business leaders and CIOs are coming forward to ensure that digital transformation coupled with innovation is driving business and bringing in productive changes and delivering value. The future of our enterprise will depend on how well we understand these dynamics in our industry and in general. Focus on strategic changes that reflect and incorporate our own existing strengths, as opposed to those that may impress investors in the short run but not add to our sustained performance. For example, some retailers try to ramp up their digital prowess rapidly by outsourcing functions such as same-day delivery. This gives investors the impression they are proactive; but in the long run, the addition may not be profitable unless it gives the company a sustained advantage tied to their own innovation.

#### REFERENCES

- 1. http://bwdisrupt.businessworld.in/article/Changing-Retail-Dynamics-in-the-Face-of-Technology-Disruption/16-07-2017-122232/
- 2. http://inbusinessphx.com/leadership-management/leadership-era-digital-disruption#.WISNCqiWbIU
- 3. https://www.cio.com/article/2976572/emerging-technology/digital-disruption-from-the-perspective-of-porters-five-forces-framework.html
- 4. https://www.cio.com/article/2976572/emerging-technology/digital-disruption-from-the-perspective-of-porters-five-forces-framework.html
- 5. https://www.forbes.com/sites/brianrashid/2017/06/13/digital-transformation-and-innovation-in-todays-business-world/#38e73a264905
- 6. https://www.salesforce.com/blog/2017/09/disruptive-innovations-in-the-digital-era.html
- 7. https://www.strategy-business.com/article/The-Coming-Wave-of-Digital-Disruption?gko=33381
- 8. https://www.wired.com/insights/2014/04/digital-darwinism-disruptive-technology-changing-business-good/

## **REQUEST FOR FEEDBACK**

## **Dear Readers**

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

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

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

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-Co-ordinator

## **DISCLAIMER**

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

## **ABOUT THE JOURNAL**

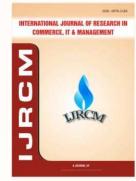
In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived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

Our Other Fournals

RNAL OF RESEARCH

ERCE & MAN





INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories <u>http://ijrcm.org.in/</u>