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CPJ Global Review

A Journal of Chanderprabhu Jain College of Higher Studies

An Insight of Management Thinking, Empirical Research Studies
& Management Practices Around The Globe

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Chanderprabhu Jain College of Higher Studies & School of Law

CHANDERPRABHU JAIN COLLEGE OF HIGHER STUDIES & SCHOOL OF LAW

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Recognized Under Section 2(f) of UGC Act, 1956

VISION

We consistenly strive to excel educational perseverance, persistence and patience for ensuring continually rich, value – based and globalized career and lifestyle for all the students who enroll themselves in the academic programmes conducted at CPJ-CHS & School of Law.

MISSION

To introduce market focused and utility based professional programmes in emerging areas of IT, Management and Law which has high job potential, economic viability and enterpreneurship qualitites etc.

We maintain close association with the different growing sectors of economy to update the sets of necessary knowledge and skills that are pertinent in the job profiles of differnt levels of Human Resource and keep a constant watch on the emerging challenges in order to upgrade the existing academic programmes and replace the same by new ones to meet the requirements of the market.

We constantly emphasize value and ethics that are needed for the smooth and harmonious functioning of the society.

We identify and undertake activities of local, global and universal concerns in general and those which may improve the well being of the underprivileged, the physically challenged and the economically weaker section of the society.

ABOUT THE COLLEGE

Chanderprabhu Jain College of Higher Studies and School of Law has been promoted by the Rishi Aurobindo Educational Society to start market focused professional programmes in the emerging areas of higher educaion in those disciplines which have high growing job potential.

The College aims to impart high quality professional education in a vibrant academic ambience, with a body of distinguished lecturers and resource persons from academia and industry. Besides their intensive involvement in stimulating academic work, students get ample time for sports, cultural and other personalitiy enriching activities.

Delhi, the capital of the country, is known for its multi-cultural milieu, dynamism and rich academic legacy. Students joining CPJ-CHS & School of Law will be nurtured within this rich cultural and educative environment.

We strive to keep a close liaison with the different growth sectors of the economy in order to discern the industry oriented sets of knowledge and skills to keep our academic programmes updated in accordance with the emerging globalization, privatization and liberalized economic policy.

The main campus of CPJ-CHS & School of Law is located in a beautiful area within the sprawling sub-city Narela, Delhi and is affiliated to GGS Indraprastha University, Delhi. It has about 2500 students, 80 faculty members and a similar number of supporting staff. We have a state-of-the-art infrastructure including computer-laboratories, libraries and other facilities.

Sh. Subhash Chand Jain,a well-known name in the educational world, is the Chairman of the College. The College runs 3 year full time BBA(GEN), B.Com(H), BCA, BBA(CAM) and 5 year Integrated B.A.LL.B(H) & BBA LL.B(H) courses affiliated to GGS Indraprastha University, Delhi. The credibility of education of this College is increasingly being realized and recognized by the Corporate World.

CPJ GLOBAL REVIEW

CPJ GLOBAL REVIEW is an Academic Journal that brings together all the Academicians and Corporate to provide an insight of Management Thinking, Empirical Research Studies and Management Practices around the globe. This National Journal is devoted to disseminate findings from Research Work and exploration of original ideas concerning Business, Management and Technology.

A Annual Journal of Chanderprabhu Jain College of Higher Studies

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CHANDERPRABHU JAIN COLLEGE OF HIGHER STUDIES & SCHOOL OF LAW

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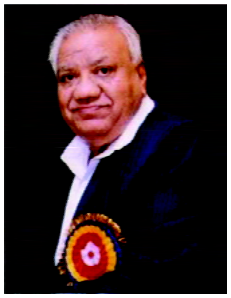
MESSAGE FROM CHAIRMAN'S DESK



We, at **CPJ College**, continuously strive to enhance our programs to stay at the forefront of higher educational trends. Our accreditations ensure that high academic standards are maintained. We inculcate amongst students a spirit to strive and achieve the desired goals and one of the ways is providing a Management & IT Journal for the Management/ IT fraternity. Here, we have provided a platform where in they can flourish their calibre and potential to the maximum. This encouragement is provided to them by highly skilled and experienced faculty who play the role of a mentor to guide them to their way to success.

I congratulate the whole Editorial Board for this issue of **CPJ Global Review** Journal and my sincere thanks to the Advisory Board also for supporting and giving their valuable suggestions and insights.

Sh. Subhash Chand Jain
Chairman

MESSAGE FROM GENERAL SECRETARY'S DESK

In today's competitive and globalized world, having a professional and specialized education becomes an imperative for future success. We, at the **CPJ College**, are committed to providing academic excellence in the fields of Management, Commerce, IT and Law. The search skill has been the most important part of any academic discipline along with other interndisciplinary subjects. Keeping this in mind, we sought to create a platform which appreciates and accept search and every idea and thought which are there in the form of treasure.

The initiative of the Chanderprabhu Jain College of Higher Studies & School of Law in regularly publishing **CPJ Global Review** Journal containing insightful research papers is an appreciable attempt by the Editorial Team in spreading academic awareness and knowledge. Quality legal research and standard publications constitute one of the important mandates of the respective journal. I am confident that readers will find the present issue of the **CPJ Global Review** Journal interesting and thought provoking. My highest regards to the Editorial Board to have meticulously worked and created this impeccable Journal.

We hope that this XIII volume of our prestigious Journal shall be beneficial for the Management, Commerce & IT fraternity.

Dr. Abhishek Jain
General Secretary

EDITORIAL

FROM THE DESK OF EDITOR-IN-CHIEF

The Editorial for CPJ Global Review-2020 was penned during the first phase of the Covid-19 Pandemic in April-2020. A year down, we are still undergoing tough and even worse unprecedented times ever witnessed by the mankind. The gruesome impact of COVID-19 has brought in drastic changes in the ways and working of the Education industry and the academia.The shift to e-learning methodology and opening up of new avenues is indeed a commendable step towards the same.

Research has always been a challenging field with positive outcomes witnessed as a result of meticulous and persistent efforts. Researches in the fields of Management, Commerce or IT have benefitted both the Industry and the Academia. It has always been our continuous endeavour to publish such scholarly Research papers in **CPJ Global Review,** the Annual National Journal of **MCIT** (Management, Commerce & IT) Department of our College.

It is a Peer-reviewed Journal and this issue of CPJ Global Review has papers from the Contemporary areas of Research in the field of Business Management & Information Technology, including Stock Markets, Artificial Intelligence, Cyber Security, Corporate Social Responsibility, Organisational Behaviour and other allied disciplines including Impact of Covid-19 on diverse sectors.

We appreciate the tremendous response towards our "Call for Papers" and regret that due to the decision of the editorial board, some papers could not be included in the present issue but we welcome contributions in the form of unpublished original articles, case studies or research reviews for publication. We are obliged to our wide spread readership for their continued support in our endeavour to strengthen every issue of **CPJ Global Review**. The credit to this achievemental so goes to all Authors, Academicians, Editorial Board and Advisory Committee who have contributed to make CPJ Global Review a quality journal. We highly solicit to have your support and feedback for further growth of the Journal with quality learning for all the readers.

With this note, welcome to **CPJ Global Review**-July' 2021 edition!!

Sh. Yugank Chaturvedi

Director General

EDITORIAL

FROM THE DESK OF EDITOR

It is a matter of great honour and privilege to present the latest edition of the **CPJ Global Review, Vol. XIII, July 2021 (ISSN No. 0975-1874)** comprises with interdisciplinary research papers highlighted with the challenging domain in present pandemic globally. **CPJ Global Review** encourages academicians, researchers and practitioners to share their cross- cultural investigations addressing the challenges in the context of global issues concerning Business and Management.

Our journal has come a long way since its inception. We hope that this present edition of **CPJ Global Review** will serve the intended purpose for immense use to researchers and our revered readers. This journal seeks to facilitate learning environment. It is a converted effort to give academic researchers a platform to present their ideas for an erudite community.

Authors have made substantial contributions in the field of Management, IT & Commerce. They have presented the latest thinking and innovative research on major topics impacting profoundly the theory and practice for their area of research. We are thankful to all members of Editorial Advisory Committee and our Editorial Board Members and Learned Reviewers for their continuous and incredible support in bringing out this issue successfully.

I would like to thank the eminent Academician & Researchers, who have contributed their research work in making **CPJ Global Review** a comprehensive and resourceful Journal.

Dr. Ashutosh Agarwal
Director

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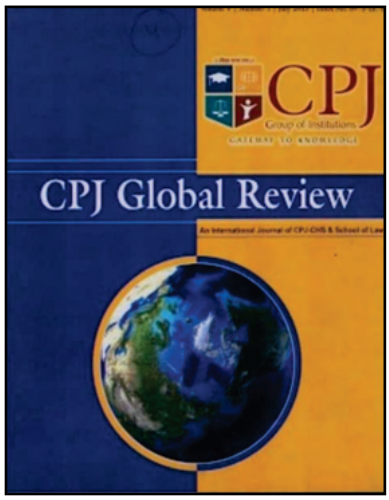

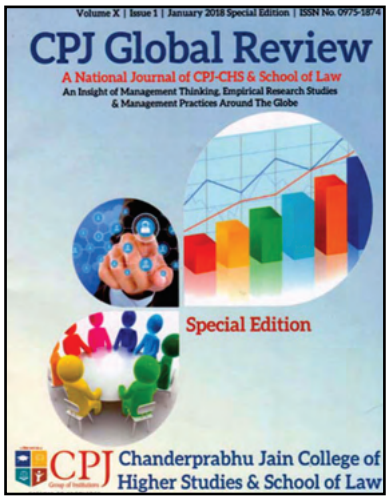

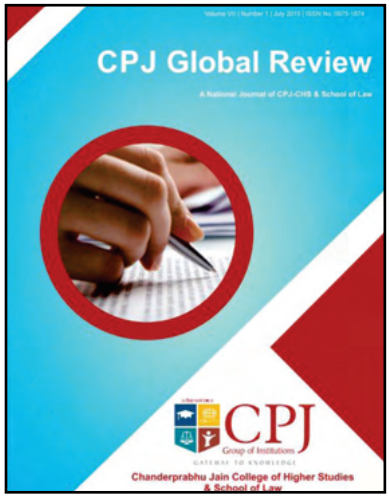

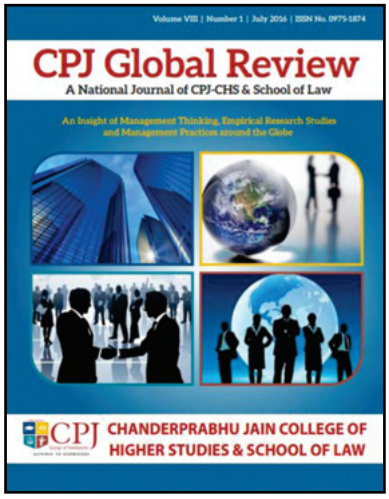

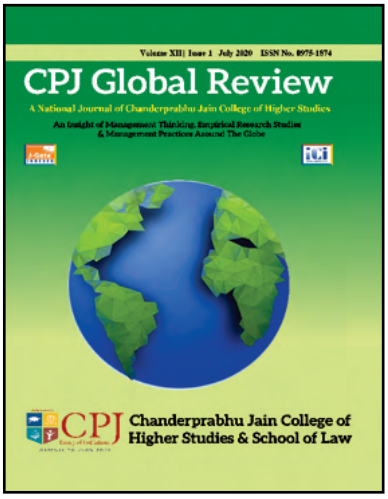

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Assessment of Utilization of PhD, Post Graduate Degree and Post Graduate Diploma Holder Technical Professionals in Industries/Establishments: A Case Study of Delhi

Mr. S K Yadav* & Ms. Anita Nihaliya**

Abstract

Assessment of quality of institutions which are providing technical education is one of the foremost issues concerning all stakeholders. Findings of many studies/reports revealed that employability level of pass outs from many institutions is incredibly low due to lower level of quality of education. Utilization of pass outs is one of the indicators to assess the quality of institutions and their pass outs. The present paper deals with the assessment of utilization of recently passed outs PhD, Post Graduate Degree and Post Graduate Diploma Holder Technical Professionals employed in industries/establishments. Assessment of utilization of recently passed outs was done through a sample survey which was conducted in various establishments in Delhi. In three categories of qualifications viz PhD, Post Graduate Degree and Post Graduate Diploma, in all 119 technical professionals were surveyed out of which 12 were PhDs,95 was Post Graduate Degree and 12 were Post Graduate Diploma holders. The broad findings of the paper includemajority of PhD, Post-Graduate Degree and Post-Graduate Diploma holder technical professionals who are recently passed outs and employed were working and residing in urban area. Majority of these Technical Professional pass outs in three qualifications were in regular employment and working in private sector and took minimum time to get their first employment (less than three months). Highest percent of Technical Professional pass outs got their first employment through newspaper/ print media, getting monthly emoluments in the range of Rs. 20,001-40,000 and employed in large size establishments. They were performing main functions such as production, repair and maintenance, logistics, stores, HRD, finance and administration.

Keywords: Technical Education, Employment, Quality, Qualification, Utilization.

1. Introduction

In recent years as well as during last two decades technical education has become the focus of government of India as well as State Governments. Government of India during last 15-20 years made lot of serious efforts in expansion of technical education by opening new institutions in government sector as well as in private sector. All India Council of Technical education (AICTE) was set up and strengthened to expand technical education in India quantitatively and qualitatively. The responsibility was entrusted to AICTE to regulate and monitor the institutions of technical education in India at all levels including degree and diploma level.

The present National Democratic Alliance (NDA) government in India has been specially focusing on technical and vocational education including Engineering, Management,Architecture & Town Planning, Pharmacy, Hotel Management & Catering Technology through its Skill India Mission and Pradhan Mantri Kaushal Vikas Yojana. Skill India is one of the important flagship programmes of the present government. Government of India has planned to open Indian Institute of Technology (IIT),

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National Institute of Technology (NIT), Indian Institute of Management (IIM) and Institute of Hotel Management (IHM) at least one in each state to enhance quality technical education in India. Due to this policy, majority of states presently have IIT, NIT, IHM and IIMs. Remaining states will be soon getting these institutions. In recent years mushrooming growth of private technical institutions such as universities and colleges has been witnessed. These institutions are more than their actual requirement. As resultant, lot of seats in these colleges in many states is lying vacant and they do not find candidates for admission.

Institutions providing qualitative education are in actual demand. Quantitatively saturation level has been reached but qualitatively lot of improvement is needed. Quality of institutions in respect to technical education must be improved to improve the employability level of pass outs. Institutions must be qualitatively improved which are lagging. It is better to close those institutions which fail in quality indicators. Institutionsshould not be allowed to play with the future of students. Substandard pass out technical professionals are no more in demand in industrial establishments. This question has been discussed at many forums regularly from time to time by industries and their associations, government, academia, and policy makers. According to the third edition of the National Employability Report that there was a huge gap in skills of engineers, as needed, to work in large industry, less than 8 percent Indian engineers fit for core engineering role (Economic Times, 2016)[1].

AICTE in its wisdom put many inputs to improve the quality of technical institutions providing technical education within its jurisdiction. AICTE run programmes for faculty development and institution building for improvement of the quality of teaching staff. AICTE also revise the curriculum periodically to make the students more employable according to the need of industries. Quality of technical institutions depends upon many factors such as quality faculty, good infrastructure, well equipped laboratories, excellent R&D facilities, good networking with industrial establishments etc. All these play an important role in quality improvement. According to latest reports available in order to improve the quality of engineers, AICTE has decided to cut down the seats available in India by 40 percent which is approximately 6 lakhs (India Times, 2016)[2].

To monitor the quality of institutions, National Assessment and Accreditation Council (NAAC) was set up with it headquarter at Bengaluru. NAAC assess the quality of institutions based on specific indicators and grading the institutions. NAAC conducts inspection of institutions and prepare the reports on quality of institutions and provide them with grade. In addition to NAAC, some specific studies have been conducted from time to time. Some studies on quality aspects were conducted by then National Technical Manpower Information System (NTMIS), lead centre at National Institute of Labour Economics Research and Development (NILERD) erstwhile Institute of Applied Manpower Institute (IAMR) with its 16 Nodal Centers all over India funded by AICTE, Government of India, Ministry of Human Resources Development, New Delhi. NTMIS conducted studies on demand and supply of technical professionals as well as utilization of professionals through establishment surveys and tracer studies of pass outs. NTMIS also prepared and published reports on Employment Scenario of recently pass outs Graduate and Diploma Engineers, Management, Pharmacy, Architecture & Town Planning and Hotel Management & Catering Technology professionals in India. Last report was published in 2010 of 2007 pass out batch of Engineering Degree holders. But NTMIS now has become history after celebration of its silver jubilee as AICTE decided to wind up the project. According to the study conducted by NTMIS on Graduate Engineers of 2007 pass out batch that average waiting period was five months for getting first employment. On an average a fresh Graduate Engineer earns monthly emoluments of Rs. 16,094. Nearly 85 percent of employed engineers were working in their own field in their current job. Lowest percent of employed engineers were employed in small establishments (Yadav and Shukla, 2010)[3].

In view of above background, it is imperative that such type of studies may be conducted from time

to time which reflects the quality aspects of technical professionals. Utilization of engineers has several dimensions such as sector and field of employment, rates of unemployment, primary activities, and mobility (NAP, 1985)[4]. According to a study conducted by Aspiring Minds, a employability assessment company, only 4.77 percent engineers can write the correct logic of the programme, concluded that about 95 percent of engineers are not fit to take up software development jobs (Hindustan Times,2017)[5] In this series, Institute of Applied Manpower Institute (IAMR) renamed as National Institute of Labour Economics Research and Development (NILERD) conducted a sample survey of industrial and service establishments in 2013 in Delhi in which technical professionals are employed as a pilot project to set up National Information System for Technical Human Resource (NISTECHR). The sample survey was conducted among 239 establishments in Delhi. Sample establishments were chosen from central & state government and private establishments mainly from manufacturing, communication, construction, trade & hotels, education, and public services etc. Size of the establishment was also considered as one of the criteria for selection of establishments for sample survey.

In the same establishments' tracer survey was also conducted simultaneously to study the utilization of all type of technical professionals those who passed out recently during last five years. The establishment and tracer survey were conducted through a set of structured questionnaire. The questionnaire was canvassed among selected establishments and technical professionals.

Since the area of utilization of technical pass outs is very much pertinent and important for technical education planners and policy makers in government, in view of this the present paper is an attempt to assess the utilization of technical professionals passed outs recently.

2. Objective of the Paper

The paper has been prepared with the sole objective to assess the utilization of recently passed out PhD, Post Graduate Degree and Post Graduate Diploma HolderTechnical Professionals working in Industries/ Establishments in Delhi.

3. Research Methodology

IAMR conducted a sample survey in 2013 for setting up NISTECHR among 239 industrial and services establishments and tracer survey of 268 Technical Professionals among the same establishments which includes 164 engineering, 6 Architecture and Town Planning, 70 Management, 8 Pharmacy and 20 Hotel Management & Catering Technology Professionals passed outs recently. Out of 268 surveyed Technical Professionals, 12 PhD Degree holders, 95 Post Graduate Degree holders, 12 Post Graduate Diploma holders, 96 Graduates and 53 Diploma holders were selected for sample survey. Scope of this paper is limited only to PhD, Post Graduate Degree and Post Graduate Diploma holder technical professionals. Thus only 119 Technical Professionals fall in three categories of qualifications covered in the paper for analysis and presentation. The survey was conducted in Delhi on pilot basis. The survey was conducted through a structured questionnaire in the selected establishments and tracer survey among passed outs working in the same establishments. The data collected through this survey has been used and analyzed to prepare this paper and derive conclusions.

4. Utilization of PhD, Post Graduate Degree and Post Graduate Diploma Holder Technical Professionals

Utilization of Technical Professionals having PhD, Post Graduate Degree and Post Graduate Diploma has been analyzed mainly in terms of functions performed, place of work, emoluments, Size, and main activity of establishments where working, source of getting first employment, sector and nature of employment and time taken for getting first employment. Details of these items will be discussed as under:

4.1 Area of Residence

Analyses of data indicate that majority of recently passed out employed Technical Professionals were residing in urban area (83.19 percent) and remaining

only 16.81 percent were residing in rural area. Qualification wise analyses observed that out of 12 PhD degree holders, 10 (83.33 percent) were residing in urban area while two (16.67 percent) were residing in rural area. Out of 95 Post Graduate Degree holders, 81 (85.26 percent) were residing in urban area and remaining 14 (14.74 percent) were residing in rural area. Out of 12 Post Graduate Diploma holders, majority of them i.e., 8 (66.67 percent) were residing in urban area while remaining 4 (33.33 percent) were residing in rural area. Overall qualification wise analyses indicate that out of total 119 technical professionals, 95 (79.84 percent) were Postgraduates followed by PhDs and and Post Graduate Diploma holders i.e., 12 each (10.08 percent each). Out of total 99 technical Professionals residing in urban area, highest 81 (81.82 percent) were Postgraduates followed by PhDs i.e., 10 (10.10 percent) and Post Graduate Diploma holders i.e., 8 (8.08 percent) (Table 1).

4.2 Place of Work

Study indicates that out of 119 respondents, 84.87 percent were working in urban area and remaining 15.13 percent were working in rural area. Qualifications wise analyses indicate that out of 12 PhD degree holders, 9 (75.00 percent) were working in urban area. Out of 95 Post Graduate Degree holders, 86.32 percent (82) were found working in urban area and13.68 percent (13) were working in rural area. Out of 12 Post Graduate Diploma holders, 83.33 percent (10) were working in urban area while 16.67 percent (2) were residing in rural area. Analyses of data concluded that majority of pass outs in all qualifications were working in urban area. A small fraction of pass outs was working in rural area (Table 1).

Table 1: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals

Sl. No.	Qualification Level	Place of Work			Area of Residence		
		Rural	Urban	Total	Rural	Urban	Total
1	PhD	3 (25.00) [16.67]	9 (75.00) [8.91]	12 (100.00) [10.08]	2 (16.67) [10.00]	10 (83.33) [10.10]	12 (100.00) [10.08]
2	Post-Graduate	13 (13.68) [72.22]	82 (86.32) [81.19]	95 (100.00) [79.83]	14 (14.74) [70.00]	81 (85.26) [81.82]	95 (100.00) [79.84]
3	Post-Graduate Diploma	2 (16.67) [11.11]	10 (83.33) [9.90]	12 (100.00) [10.09]	4 (33.33) [20.00]	8 (66.67) [8.08]	12 (100.00) [10.08]
4	Total	18 (15.13) [100.00]	101 (84.87) [100.00]	119 (100.00) [100.00]	20 (16.81) [100.00]	99 (83.19) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.3 Main Activity of Establishments

Analyses of data revealed that out of 12 PhD degree holders, 11(91.67 percent) were found employed/ engaged in educational establishments only one was employed in Post & Telecommunication establishment. Out of 95 Post Graduate Degree holders, highest 63 (66.32 percent) were employed in educational establishments followed by 11.58 percent were employed in Manufacturing establishments and 7.37 percent were employed in Electricity, Gas and Water Supply. Out of 12 Post Graduate Diploma holders, highest 3 (25.00 percent)

were employed in Post & Telecommunication establishments followed by 2 (16.67 percent) in Financial Intermediation establishments and one each employed equally in Manufacturing; Electricity, Gas & Water Supply; Construction; Sale, Maintenance & Repair of Motor Vehicles; Hotel & Restaurants; Education and Other Activities.

Overall scenario of all 119 technical Degree/ Diploma holders indicates that highest 75 (63.02 percent) were employed in Educational establishments followed by 12 (10.08 percent) in Manufacturing establishments and 8 (6.72 percent) in Electricity, Gas and Water Supply. 6 (5.04 percent) were engaged in Hotel & Restaurants, 5 (4.21 percent) were employed in Post & Telecommunications, 4 (3.37 percent) in Financial Intermediation and 3 (2.52 percent) were employed in Other Activities while 2 (1.68 percent) each in Construction and Sale, Maintenance & Repair of Motor Vehicles, Motorcycles. Study further observed that no one was employed in Mining & Quarry; Wholesale Trade; Real Estate &, Renting Business; Public Administration and Defence, Compulsory Social Security; Health and Social Work; and Other Community, Social and Personal Service Activities (Table 2).

Table 2: Distribution of PhD, Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals According to Main activity of Establishments Where Employed

Sl.No.	Main Activity	Qualification Level			
		PhD	Post-Graduate	Post-Graduate Diploma	Total
1	Manufacturing	0 (0.00) [0.00]	11 (91.67) [11.58]	1 (8.33) [8.33]	12 (100.00) [10.08]
2	Electricity, Gas and Water Supply	0 (0.00) [0.00]	7 (87.50) [7.37]	1 (12.50) [8.33]	8 (100.00) [6.72]
3	Construction	0 (0.00) [0.00]	1 (50.00) [1.05]	1 (50.00) [8.33]	2 (100.00) [1.68]
4	Sale, Maintenance & Repair of Motor Vehicles, Motorcycles	0 (0.00) [0.00]	1 (50.00) [1.05]	1 (50.00) [8.33]	2 (100.00) [1.68]
5	Retail Trade	0 (0.00) [0.00]	1 (100.00) [1.05]	0 (0.00) [0.00]	1 (100.00) [0.84]
6	Hotel & Restaurants	0 (0.00) [0.00]	5 (83.33) [5.26]	1 (16.67) [8.33]	6 (100.00) [5.04]
7	Transport & Storage	0 (0.00) [0.00]	1 (100.00) [1.05]	0 (0.00) [0.00]	1 (100.00) [0.84]
8	Post & Telecommunications	1 (20.00) [8.33]	1 (20.00) [1.05]	3 (60.00) [25.00]	5 (100.00) [4.21]
9	Financial Intermediation	0 (0.00) [0.00]	2 (50.00) [2.11]	2 (50.00) [16.67]	4 (100.00) [3.37]
12	Education	11 (10.89) [91.67]	63 (62.38) [66.32]	1 (0.99) [8.33]	75 (100.00) [63.02]
15	Other Activities	0 (0.00) [0.00]	2 (66.67) [2.11]	1 (33.33) [8.33]	3 (100.00) [2.52]
16	Total	12 (10.08) [100.00]	95 (79.84) [100.00]	12 (10.08) [100.00]	119 (100.00) [100.00]

Note: 1. No one was found working in the establishments related to Mining &Quarrying; Wholesale trade; Real Estate &, Renting Business; Public Administration and Defence, Compulsory Social Security; Health and Social Work; and Other Community, Social and Personal Service Activities

2. ( ) Denotes percentage to Row total

3. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.4 Employment Size of Employing Establishments

Analyses of data indicates that out of 12 PhD degree holders, highest 7 (58.33 percent) employed in 51-100 employees class size of establishments followed by 2 (16.67 percent) each employed in 10-50 and more than 500 employees class size of establishments. Out of 95 Postgraduates, highest 37 (38.95 percent) were employed in 101-500 employees size establishments followed by 23 (24.21 percent) employed in more than 500 employees size establishments and 20 (21.05 percent) employed in 51-100 employees size establishments. Out of 12 Post Graduate Diploma holders, highest 4 (33.33 percent) were employed in 101-500 employees size establishments followed by 3 (25.00 percent) each were employed in 51-100 employees size establishments and more than 500 employees.

Study observed that out of 119 sample surveyed Technical Professionals recently pass outs, highest 42 (35.29 percent) were employed in 101- 500 employees size establishments followed by 30 (25.21 percent) employed in 51-100 employees size establishments and 28 (23.53 percent) employed in more than 500 employees size establishments. Only 19 (15.97 percent) were employed in 1-50 employees size establishments (Table 3).

Table 3: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals and Employment Size of Establishments in Various Establishments of Delhi

Sl. No.	Qualification Level	Employment Size of Establishment				Total
		1-50	51-100	101-500	More than 500	
1	PhD	2 (16.67) [10.52]	7 (58.33) [23.33]	1 (8.33) [2.38]	2 (16.67) [7.14]	12 (100.00) [10.08]
2	Post-Graduate	15 (15.79) [78.95]	20 (21.05) [66.67]	37 (38.95) [88.10]	23 (24.21) [82.14]	95 (100.00) [79.84]
3	Post-Graduate Diploma	2 (16.67) [10.53]	3 (25.00) [10.00]	4 (33.33) [9.52]	3 (25.00) [10.72]	12 (100.00) [10.08]
6	Total	19 (15.97) [100.00]	30 (25.21) [100.00]	42 (35.29) [100.00]	28 (23.53) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.5 Nature of Employment

Out of 119 Technical Professionals, vast majority of them, 99 (83.19 percent) were in regular employment followed by 10 (8.40 percent) on contractual/ ad hoc appointments and 5 (4.21 percent) were working on temporary nature of jobs. Remaining 5 (4.21percent) were in other types of jobs which are not specified. Qualification wise analyses indicate that out of 12 PhDs, 9 (75.00 percent) were holding regular employment/position while 2(16.67 percent) were in temporary position. Vast majority of Postgraduatesi.e. 81 (85.26 percent) were in regular position followed by 7 (7.37 percent) were on contract appointments and 3 (3.16 percent) were in temporary position. Out of 12 Post Graduate Diploma holders, 9 (75.00 percent) were holding regular positions while 2(16.67 percent) were on contractual appointment (Table 4).

Table 4: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals According to Nature of Employment in Various Establishments of Delhi

Sl. No.	Qualification Level	Nature of Employment				Total
		Regular	Temporary	Contractual / Ad-hoc	Any Other	
1	Ph.D.	9 (75.00) [9.09]	2 (16.67) [40.00]	1 (8.33) [10.00]	0 (0.00) [0.00]	12 (100.00) [10.08]
2	Post-Graduate	81 (85.26) [81.82]	3 (3.16) [60.00]	7 (7.37) [70.00]	4 (4.21) [80.00]	95 (100.00) [79.84]
3	Post-Graduate Diploma	9 (75.00) [9.09]	0 (0.00) [0.00]	2 (16.67) [20.00]	1 (8.33) [20.00]	12 (100.00) [10.08]
4	Total	99 (83.19) [100.00]	5 (4.20) [100.00]	10 (8.40) [100.00]	5 (4.21) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total
2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013.

4.6 Sector of Employment

Analyses of data indicates that out of 119 sample surveyed Technical Professionals, majority of them i.e.96 (80.68 percent) got employment in private sector followed by 10 (8.40 percent) in central government and 7 (5.88 percent) in state government. 6 (5.04 percent) got employment in other sectors not specified in the table. Qualification wise analyses indicate that out of 12 PhDs, 10 (83.33 percent) got employment in private sector and 2 (16.67 percent) were employed in central government. Out of 95 Postgraduates, majority of them i.e.77 (81.05 percent) were in private sector followed by 7 (7.37 percent) in state government and 6 (6.32 percent) in central government.5 (5.26 percent) got employment in other sectors of employment. Out of 12 Post Graduate Diploma holders, highest 9 (75.00 percent) were employed in private sector followed by 2 (16.67 percent) in central government and 1 (8.33 percent) in other sectors of employment (Table 5).

Table 5: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals According to Sector of Employment in Various Establishments of Delhi

Sl. No.	Qualification Level	Sector of Employment				Total
		Central Govt.	State Govt.	Private	Others	
1	PhD	2 (16.67) [20.00]	0 (0.00) [0.00]	10 (83.33) [10.42]	0 (0.00) [0.00]	12 (100.00) [10.08]
2	Post-Graduate	6 (6.32) [60.00]	7 (7.37) [100.00]	77 (8I.05) [80.21]	5 (5.26) [83.33]	95 (100.00) [79.84]
3	Post-Graduate Diploma	2 (16.67) [20.00]	0 (0.00) [0.00]	9 (75.00) [9.37]	1 (8.33) [16.67]	12 (100.00) [10.08]
6	Total	10 (8.40) [100.00]	7 (5.88) [100.00]	96 (80.68) [100.00]	6 (5.04) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total
2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.7 Emoluments

As regards the monthly emoluments received by the Technical Professionals, out of 119 surveyed professionals, highest 50 (42.02 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 31 (26.05 percent) in the range of Rs.40001 – 60000 and 25 (21.00 percent) in the range of Rs. 10,001-20,000. 6 pass outs (5.4 percent) each was getting monthly emoluments in the range of Rs. 5,001-10,000 and above Rs.60, 001. Only one was getting monthly emoluments less than Rs. 5000. Qualification wise analyses of data indicates that out of 12 PhDs, 6 (50.00 percent) were getting monthly emoluments in the range of Rs. 40,001-60,000 followed by 3(25.00 percent) were getting in the range of Rs. 60,001 and above. Only one (8.33 percent) was getting monthly emoluments in the range of Rs.10, 001-20,000. Out of 95 Postgraduates, highest 43 (45.26 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 25 (26.32 percent) in the range of Rs.40, 001-60,000 and 20 (21.05 percent) in the range of Rs. 10,001-20,000. 3 (3.16 percent) each were getting monthly emoluments more than Rs.60, 000 and Rs 5,001-10,000. Only one Postgraduate was getting less than Rs.5000. Among 12 Post Graduate Diploma holders, one was getting monthly salary more than Rs. 60,000. 4 (33.33 percent) each were getting monthly emoluments in range of Rs. 20,001-40,000 and Rs.10, 001-20,000 and 3 (25.00 percent) were getting in range of Rs. 5,001-10,000 (Table 6).

Table 6: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals by Average Monthly Emoluments (Rs.) in Various Establishments of Delhi

Sl. No.	Qualification Level	Monthly Emoluments (Rs.)						Total
		Less than 5000	5001 - 10000	10001 - 20000	20001 - 40000	40001 - 60000	60001 &Above	
1	PhD	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (8.33) [4.00]	3 (25.00) [6.00]	6 (50.00) [19.35]	2 (16.67) [33.33]	12 (100.00) [10.08]
2	Post-Graduate	1 (1.05) [100.00]	3 (3.16) [50.00]	20 (21.05) [80.00]	43 (45.26) [86.00]	25 (26.32) [80.65]	3 (3.16) [50.00]	95 (100.00) [79.84]
3	Post-Graduate Diploma	0 (0.00) [0.00]	3 (25.00) [50.00]	4 (33.33) [16.00]	4 (33.33) [8.00]	0 (0.00) [0.00]	1 (8.34) [16.67]	12 (100.00) [10.08]
6	Total	1 (0.84) [100.00]	6 (5.04) [100.00]	25 (21.00) [100.00]	50 (42.02) [100.00]	31 (26.05) [100.00]	6 (5.05) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.8 Source of Getting First Employment

Survey outcome reflects that out of 119 total Technical Professionals surveyed, highest 48 (40.34 percent) got first employment through newspaper/ print media followed by 27 (22.69 percent) through websites/internet and 24 (20.17 percent) through campus placement. 8 (6.72 percent) were helped by friends and relatives in getting their first employment. 4 (3.36 percent) each got first employment through service provider and any other source. 3 (2.52 percent) got first employment through Public Service Commissions and 1 (0.84 percent) got first employment through employment exchange.

Qualification wise analyses of pass outs indicates that out of 12 PhDs, highest 7 (58.33 percent) got first employment through newspaper/print media and 3 (25.00 percent) through websites/internet. Out of 95 Postgraduates, highest 37 (38.95 percent) got

first employment through newspaper/print media followed by 22 (23.16 percent) got first employment through websites/internet and 21 (22.11 percent) through campus placement. Out of 12 Post Graduate Diploma holders, highest 4 (33.33 percent) got first employment through newspaper/print media followed by 3 (25.00 percent) through campus placement. Study concluded that newspaper/print media, websites/internet and campus placement plays an important role in getting first employment. Role of friends and relatives cannot be ignored in getting first employment (Table 7).

Table 7: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals by Source of Getting First Employment in Various Establishments of Delhi

Sl. No.	Qualification Level	Source of getting first employment								
		Campus placement	Through employment exchange	Public service commission	Newspaper / print media	Website / internet	Service provider	Helped by relative and friend	Any Other	Total
1	Ph.D.	0 (0.00) [0.00]	1 (8.33) [100.00]	0 (0.00) [0.00]	7 (58.33) [14.59]	3 (25.00) [11.11]	0 (0.00) [0.00]	1 (8.34) [12.50]	0 (0.00) [0.00]	12 (100.00) [10.09]
2	Post-Graduate	21 (22.11) [87.50]	0 (0.00) [0.00]	3 (3.16) [100.00]	37 (38.95) [77.08]	22 (23.16) [81.48]	4 (4.21) [100.00]	5 (5.26) [62.50]	3 (3.15) [75.00]	95 (100.00) [79.83]
3	Post-Graduate Diploma	3 (25.00) [12.50]	0 (0.00) [0.00]	0 (0.00) [0.00]	4 (33.33) [8.33]	2 (16.67) [7.41]	0 (0.00) [0.00]	2 (16.67) [25.00]	1 (8.33) [25.00]	12 (100.00) [10.08]
4	Total	24 (20.17) [100.00]	1 (0.84) [100.00]	3 (2.52) [100.00]	48 (40.34) [100.00]	27 (22.69) [100.00]	4 (3.36) [100.00]	8 (6.72) [100.00]	4 (3.36) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

4.9 Main Functions Performed

As regards the main functions performed in the employing establishments by the 119sample surveyed Technical Professionals, study observed that they were performing functions such as Production, Repair & Maintenance, Logistics, Stores, HRD, Finance and Administration. Some of them were performing more than one function. 119 Technical Professionals were performing 128 functions. Out of 128 functions performed by Technical Professionals in their employing organizations, highest 82 (61.19 percent) functions performed comes in the category of any other functions other than the specified in the table followed by 17 (13.28 percent) functions performed in HRD and 13 (10.16 percent) functions performed in Production area. 9 (7.03 percent) functions performed in finance, 3 (2.54 percent) functions each performed in Repair & Maintenance and Administration.

All 12 PhD degree holders were performing 12 functions out of which 9 (75.00 percent) functions covers in the category of any other functions other than the specified in the table. 95 Post Graduate degree holders performed 102 functions out of which 69 (67.65 percent) functions covers in the category of any other functions other than the specified in the table followed by 15 (14.71 percent) functions performed in HRD area and 10 (9.80 percent) functions performed in Production. 12 Post Graduate Diploma holders were performing 14 functions out of which 4 (28.57 percent) functions each covers in the category of Finance and any other functions other than the specified in the table followed by 2 (14.29 percent) functions each performed in Production and HRD (Table 8).

Table 8: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals by Qualification Level and Main Functions Performed in Various Establishments of Delhi

Qualification Level	Main Functions								Total
	Production	Repair & Maintenance	Logistics	Stores	HRD	Finance	Administration	Any Other	
Ph.D.	1 (8.33) [7.69]	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	0 (0.00) [0.00]	1 (8.33) [5.26]	1 (8.34) [33.33]	9 (75.00) [10.98]	12 (100.00) [9.37]
Post-Graduate	10 (9.80) [76.92]	2 (1.96) [66.67]	0 (0.00) [0.00]	0 (0.00) [0.00]	15 (14.71) [88.23]	4 (3.92) [21.05]	2 (1.96) [66.67]	69 (67.65) [84.14]	102 (100.00) [79.69]
Post-Graduate Diploma	2 (14.29) [15.38]	1 (7.14) [33.33]	1 (7.14) [100.00]	0 (0.00) [0.00]	2 (14.29) [11.76]	4 (28.57) [21.06]	0 (0.00) [0.00]	4 (28.57) [4.88]	14 (100.00) [10.94]
Total	13 (10.16) [100.00]	3 (2.34) [100.00]	1 (0.78) [100.00]	0 (0.00) [100.00]	17 (13.28) [100.00]	9 (7.03) [100.00]	3 (2.34) [100.00]	82 (61.19) [100.00]	128 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

3. Some were performing more than one function

Source: IAMR Survey, 2013

4.10 Time Taken for Getting First Employment

Study revealed that out of 119 Technical Professional pass outs, majority of them i.e. 90 (75.63 percent) took minimum time which is less than three months to get first employment followed by 13 (10.92 percent) took 4-6 months and 11 (9.25 percent) took more than a year. 3 (2.52 percent) took 7-9 months to get first employment while remaining 2 (1.68 percent) took 10-12 months. Qualification wise analyses revealed that out of 12 PhDs, 8 (66.67 percent) took less than three months to get first paid employment followed by 3 (25.00 percent) took more than one year. Likewise, Post Graduate Degree holders, majority of them, 73 (76.84 percent) took less than three months to get their first employment followed by 11 (11.58 percent) took 4-6 months. Out of 12 Post Graduate Diploma holders, highest 9 (75.00 percent) got their first employment in less than three months followed by 2 (16.67 percent) took more than one year and one (8.33 percent) in 4-6 months (Table 9).

Table 9: Distribution of PhD,Post-Graduate Degree and Post-Graduate Diploma Holder TechnicalProfessionals by Qualification Level and Time Taken for Getting First Employment in Various Establishments of Delhi

Sl.No	Qualification Level	Time taken for getting first paid employment					Total
		Less Than 3 months	4-6 months	7-9 months	10-12 months	More Than 1 year	
1	Ph.D.	8 (66.67) [8.89]	1 (8.33) [7.69]	0 (0.00) [0.00]	0 (0.00) [0.00]	3 (25.00) [27.27]	12 (100.00) [10.09]
2	Post-Graduate	73 (76.84) [81.11]	11 (11.58) [84.62]	3 (3.16) [100.00]	2 (2.11) [100.00]	6 (6.31) [54.55]	95 (100.00) [79.83]
3	Post-Graduate Diploma	9 (75.00) [10.00]	1 (8.33) [7.69]	0 (0.00) [0.00]	0 (0.00) [0.00]	2 (16.67) [18.18]	12 (100.00) [10.08]
6	Total	90 (75.63) [100.00]	13 (10.92) [100.00]	3 (2.52) [100.00]	2 (1.68) [100.00]	11 (9.25) [100.00]	119 (100.00) [100.00]

Note: 1. ( ) Denotes percentage to Row total

2. [ ] Denotes percentage to column total

Source: IAMR Survey, 2013

5. Conclusions

From the analyses of data, the following conclusions has been drawn:

Majority of PhD,Post-Graduate Degree and Post-Graduate Diploma holder recently passed out employed Technical Professionals were residing in urban area (84.87 percent) and remaining 15.13 percent were residing in rural area. Likewise, majority of respondents i.e., 83.19 percent were working in urban area and remaining 16.81 percent were working in rural area

Out of 119 PhD, Post-Graduate Degree and Post-Graduate Diploma Holder Technical Professionals, highest 75 (63.02 percent) were employed in educational establishments followed by 12 (10.08 percent) in Manufacturing establishments and 8 (6.72 percent) in Electricity, Gas and Water Supply.

Study observed that out of 119 pass outs, 42 (35.29 percent) were employed in 101- 500 employees size establishments followed by 30 (25.21 percent) employed in51-100 employees size establishments and 28 (23.53 percent) employed in more than 500 employees size establishments.

Out of 119 surveyed Technical Professionals, majority of them, 99 (83.19 percent) were in regular employment followed by 10 (8.40 percent) on contractual/ ad hoc appointments and 5 (4.20 percent) were working on temporary nature of jobs. Majority of pass outs i.e.,96 (80.68 percent) got employment in private sector followed by 10 (8.40 percent) in central government and 7 (5.88 percent) in State government.

As regards the monthly emoluments received by Technical Professionals, out of 119 surveyed professionals, highest 50 (42.02 percent) were getting monthly emoluments in the range of Rs. 20,001-40,000 followed by 31 (26.05 percent) in the range of Rs. 40,001-60,000 and 25 (21.00 percent) in the range of Rs.10,001-20,000.

Survey outcome reflects that out of 119 surveyed total Technical Professionals, highest 48 (44.34 percent) got first employment through newspaper/ print media followed by 27 (22.69 percent) got first employment through websites/internet and 24 (20.17 percent) through campus placement.

The main functions performed in the employing establishments by the 119 sample surveyed Technical Professionals such as production, repair & maintenance, logistics, HRD, finance and administration. Some of them were performing more than one function.

Study revealed that out of 119 Technical Professionals, majority of them i.e., 90 (75.63 percent) took minimum time which is less than three months to get first employment followed by 13 (10.92 percent) took 4-6 months and 11 (9.25 percent) took more than a year.

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Analysis of Stock Price Movement of Select Oil and Gas Companies

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Abstract

Investment on equity stock depends on the expected movement of stock prices. Movement of stock price can be predicted on the basis of historical stock prices. Stock prices can be predicted with the use of tools technical analysis, especially charts. There are three types of charts namely bar chart, line chart and point and figure chart. The present study aims to analyse stock price movement of select oil and gas companies with the use of line chart and find chart patterns. The study is based on historical daily closing stock prices of sample companies collected from BSE Ltd for one year from 1.1.2018 to 31.12.2018. After deducting all the actual time frame for the study is 246 days. The findings of the study shows that all the sample companies' stock prices were recorded downward trend over the study period indicating bearish trend. Stock prices of sample companies oil and gas sector moving in the same direction. Therefore, an investor who wants to buy can buy and investor who holds stock not to sell.

Keywords: Stock, Price, Movement, Charts, Technical, Analysis

Economic development of a country depends on the investments on various projects, which involve in selling products and services. Availability of funds for investment depends on savings. There are several factors which influence savings and avers save for various purposes. Today there are a good number of investment options for a saver and investor. Safety of principal amount, return, liquidity and marketability are the prime factors which influence selection of a particular investment avenue. Equity investment is one of the investment avenues, which involves a very high risk. There may be chances of losing principal amount, but return also very high if happens. Identification of right equity stock for investment is not an easy task. Identification an equity stock for investment depends on the company's and industry's future prospects; and past returns from the stock. Therefore, a prospective investor has to put lot of effort in short-listing equity stocks from various sectors, evaluation of the short-listed stocks, selection of stocks; and deciding the proportion of investment amount on each stock.

Equity analyst can evaluate identified stock either using fundamental approach or technical approach, or both.

Equity analysts use two approaches – fundamental analysis and technical analysis. One of these is fundamental analysis wherein the analyst tries to determine the true worth or intrinsic value of a share based on the current and future earnings capacity of the company. A second approach to security analysis is called technical analysis it is an alternative approach to the study of stock price behavior. Analysts who depend on fundamentals for evaluation of equity stock are known as fundamentalists. Fundamentalists' predict stock prices on the basis of economy, industry and company statistics. The principal decision variables ultimately take the form of earnings per share and dividend per share. The fundamentalists make a judgment of the stock's value with risk-return framework based upon earning power and the economic environment. The other categories of analysts are technical analysts, who evaluate equity stock on the basis of

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historical stock price movements. Historical stock prices are available only when a stock is listed in stock exchange. Prices of securities are volatile, because buying and selling happens on the basis of various factors. An investor who wants to invest in the listed equity stock has to identify a stock which is undervalued or selling at less than the intrinsic value of the select stock; and expected to provide attractive future returns. On the other hand, a holder of equity stock and wants to sell when the stock is overvalued or selling at above the intrinsic value. Therefore, any person who wants to trade listed equity stock has to analyse the movement of share prices in the stock market.

A technical analyst trusts that stock price is determined on the basis of demand and supply factors in the market. These demand and supply forces in turn influence by number of fundamental factors as well as certain psychological or emotion factors. Many of these factors cannot be quantified. Therefore, a technical analyst, focuses on the movement of share prices. He/she claims that by examining past share price movements future share price can be accurately predicted. The rationale behind technical analysis is that share price behaviour repeats itself overtime and analyst attempt to derived methods to predict this repetition. A technical analyst looks at the past year price data to see if he can establish any patterns. He then looks at current price data to see if any of the established pattern applicable and, if so, extrapolation can be made to predict the future price movements. Although past share prices are the major data used by technical analyst, other statistics such as volume of trading and stock market indices are also utilized to some extent. The basic assumption of technical analysis is that the stock prices move in trends which may be upward or downward. Technical analysts usually use three types of charts - bar chart, line chart and point and figure chart.

There are various studies on technical analysis. But, they may on different sectors and done for different period. To know the research gap a review of literature has been done and it is in order.

Review of Literature

Researcher reviewed published paper to identify the research gap.

- A study analyzing the price movements of selected companies stocks using technical analysis. For technical analysis, the daily share price movements of the selected companies in NSE has been obtained for three years from 1.4.2007 to 31.3.2010 and analyzed using technical analysis tools such as Beta, Relative strength index, Moving average (Chithra, 2011).
- The study covers the Dow Theory in primary trend, secondary trend, and minor trend in past one year data and to find out price variations of five major companies like Tata Motors, TCS, GMR, SBI, and ITC. The study covers the Dow Theory trends and the calculation of Risk and Return of the different securities in order to find out at what percentage funds should be invested among the companies in the portfolio. Time frame taken for the study is from 2011-12 to 2007-08 that is the length of five years (Sudheer, Malyadri, 2012).
- The paper aims at carrying out Technical Analysis of the securities of the selected companies from the Information Technology sector and to assist investment decisions in this sector. It has proven to be one of the leading and fastest growing sectors of the Indian Economy. In this study, Secondary Data of the daily share prices of the last two financial years (from 1-4-2010 to 31-3-2012) is collected for five leading IT companies and analysed using various methods technical analysis (Pandya, 2013).
- This study aims at analyzing the price movements of selected company's scrip. The study is based on the weekly historical stock price of the sample companies listed in NSE. The period of the study is three years from February 2011 to March 2014. With the use of stratified random sampling the researcher has selected five companies that actively traded in NSE. The sample companies are

WIPRO, State Bank of India ,Gas Authority of India Limited ,Oil & Natural Gas Corporation Ltd and Imperial Tobacco Company of India Limited (Boolan, (2014).

- The researcher explains the ways and importance of movement of stock price of selected companies from NSE. Data has been taken from secondary sources. Out of 50 pharmaceutical companies listed in NSE, three sample companies were selected on the basis of market capitalization. The sample companies are Dr. Reddy's Laboratory, Lupin and Sun Pharma. The study covers a period of three months from 1st April 2014 to 30th June 2014. The data has been analyzed with the use of Beta, Relative Strength Index and Simple Moving Average (Umaprabha, Malavika, 2015).
- Padma (2015) analyzed the price movement of selected industries. The research design is followed in descriptive and analytical in nature. Published secondary data are used for this study which is obtained by NSE website. For technical analysis, the daily closing share prices of selected industries in NSE are to be taken which covers only one financial year from 1 April 2014 to 31 March 2015 (short term analysis). While analyzing and interpreting the results, statistical tools such as Relative strength Index, Simple Moving Average, Mean and Standard deviation are to be used. Graphical presentations are also to be plotted. For this study, selected industries are taken on stratified sampling basis. Here selected industries which are actively traded in NSE are Axis Bank, Housing Development Finance Corporation Bank Limited (HDFC), Industrial credit and Investment Corporation of India Bank (ICICI), Industrial Development Bank of India Limited (IDBI), State Bank of Bikaner & Jaipur (SBBJ) and State Bank of India (SBI).

Research Gap

After review of literature it was found that there are many studies have been done on different aspects of technical analysis with special reference to sectors such as Pharmaceutical sector, IT sector, Banking sector, Energy sector. The studies have been conducted taking frame work prior to 31.12.2018. The tools used are Beta, moving average analysis, relative strength index on various sectors except oil and gas sector. Hence the present study titled "Analysis of Stock Price Movement of Select Oil and Gas Companies" is undertaken to address the research gap, which has been found after review of literature.

Objectives of the Study

The aims of the paper are to analysis of stock price movement of select Oil and Gas companies, and predict movement patterns.

Scope of the Study

The study has been conducted for evaluation of Oil and Gas sector's selected stocks of five companies. Time frame taken for the study is for one year -1-1-2018 to 31-12-2018.

Methodology

The study is based on Desk Research design. It is purely based on secondary data - the daily closing stock price movements of the selected companies in BSE (Bombay Stock exchange) are obtained for one year from 1.1.2018 to 31.12.2018. After deducting all the holidays including Saturdays and Sundays the actual time frame will be for 246 days. Which means for this study one year is interpreted as 246 days. The data was analyzed with the use of line Charts.

Sample Design

The total population of the study is 10 companies which are listed in BSE under the sector of Oil and Gas sector. For the purpose of the study the required five companies are taken on the basis of simple random sampling technique. The sample five companies are - Oil and Natural Gas Corporation (ONGC); Bharat Petroleum corporation Limited (BPCL); Indian Oil Corporation (IOC); Gas Authority of India Limited (GAIL); and Hindustan Petroleum Corporation Limited (HPCL).

Analysis and Discussion of Movement of Stock Prices

A basic strategy in securities investment is to buy underpriced securities and sell overpriced securities but the problem is how to identify underpriced and overpriced securities or in other words mispriced securities. There are two methods available to analyse identified securities - fundamental analysis and technical analysis. Speculators uses technical analysis - Charts (line chart) and select strategy based on the patterns of stock price movements.

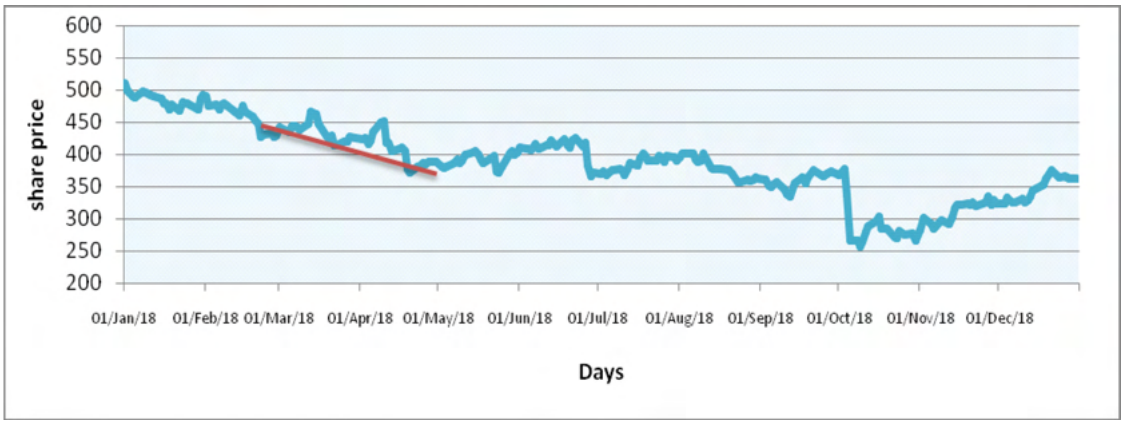
Charts are simply graphical representations of a series of closing prices over time. A chart show a stock's price movement over a one-year period where each point represents an individual day's closing price. Stock price is shown on the Y-axis and time is on the X-axis. Line chart is constructed using closing prices of a share, stock prices are plotted on the XY graph on a day to day basis. Each dot in the chart represent day's closing price, and the points connected to get the stock price movement. Stock price trend may be upward or downward. When the prices move upwards, it is a rising trend or uptrend. When a day's closing price records above the price of previous day, it upward trend and vice-versa. Another trend is called as flat trend when prices move within a narrow range.

For the purpose of this study line chart is used to evaluate selected companies stock. The Historical data required for the purpose of study has been obtained from Bombay Stock Exchange for the period of one year from 1st January 2018 to 31st December 2018.

Chart 1: Movement of Stock Price of Oil and Natural Gas Corporation (ONGC)

Chart 1 provides movement of stock price of ONGC during study period. From the Chart we can observe that the stock price line is showing declining trend from the month of January to December 2018 indicating Bearish trend. The closing price of Rs.199.29 recorded in the month of January, and the lowest average share price was Rs.145.32 in the month of December 2018. The highest share price in 52 weeks is Rs.210.5 and lowest price in 52 weeks is Rs.137.25. We can observe invert head and shoulder pattern from the mid of March to the month of August and from September to mid-October, November to December the chart is showing double bottom chart pattern. As per double bottom chart formation, the Stock Price Line will increase in future, but in the chart after double bottom chart formation, the line is in flat trend.

Chart 2: Movement of Stock Price of Bharat Petroleum Corporation Limited (BPCL)



From the Chart 2 we can observe that the stock price line is showing declining trend from the month of January to October 2018 indicating bearish trend. The closing price of Rs.486.56 in the month of January, and the lowest average price was Rs.288.71 in the month of October but again there is nominal increase in share price in the months of November and December. The highest share price in 52 weeks is Rs.511.1 and lowest price in 52 weeks is Rs.257. We can observe there is a Double top chart pattern from March to April. As per Double Top chart formation, the stock price will move in downward trend in future.

Chart 3: Movement of Stock Price of Indian Oil Corporation (IOC)

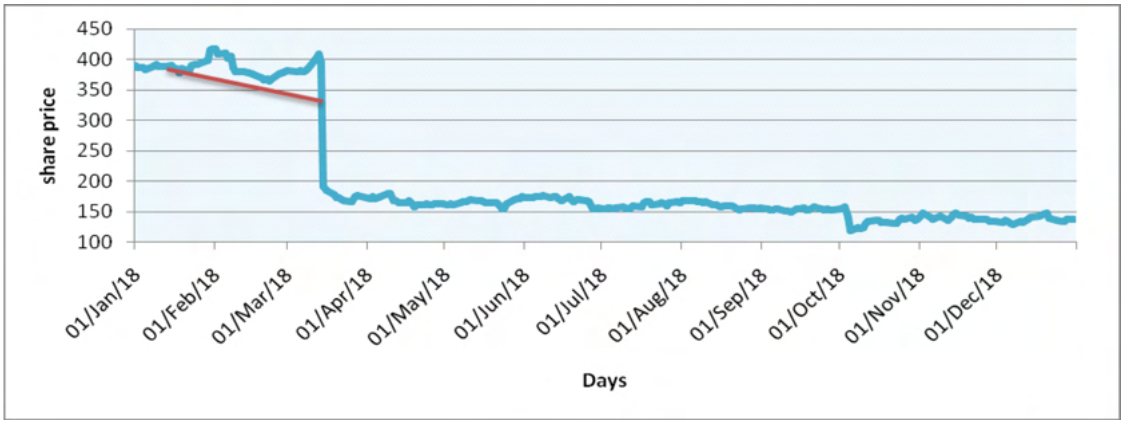


Chart 3 shows movement of stock price of IOC. From the Chart we can observe that the stock price line is showing declining trend from the month of January to December 2018 indicating Bearish trend. The highest stock price was recorded at Rs. 390.45 is in the month of January, and the lowest Rs.134.788 in the month of October, but there is an increase in share price in the months of November and December which is nominal. The highest share price in the 52 weeks is Rs.417.75 and the lowest share price in the 52 weeks is Rs.118.05. There is a new low in the month of March, that is, there is an abnormal fall in share price from 400 per share to 192.15 per share. We can observe a double top chart pattern formation from month of January to March and it indicates price decline. It actually happened.

Chart 4: Movement of Stock Price of Gas Authority of India Limited (GAIL)

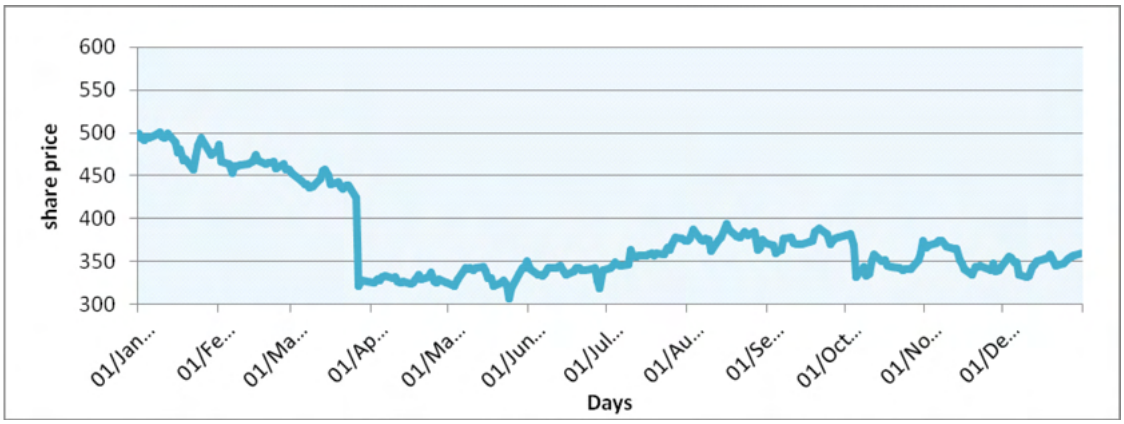


Chart 4 depicts movement of stock of GAIL. Stock price line is showed bearish trend, the stock price line is decreasing from the month of January up to the month of December. A closing of Rs.486.11 was recorded in the month of January, but it decreased to average share price of Rs.329.17 in the month of April, from April it is shown only nominal increase in the average share price thereafter. The highest share price in 52 weeks is Rs.500.25 and the lowest share price in 52 weeks is Rs.306.8.There is a significant price drop in the month of March from Rs.424.75 per share to Rs.321 per share. There is no clear indication of any pattern of chart.

Chart 5: Movement of Stock Price of Hindustan petroleum Corporation Limited (HPCL)

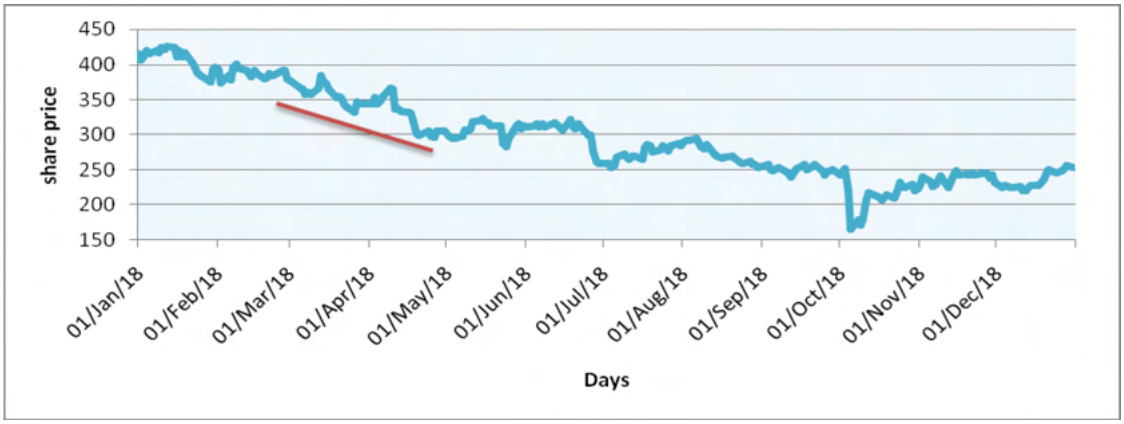
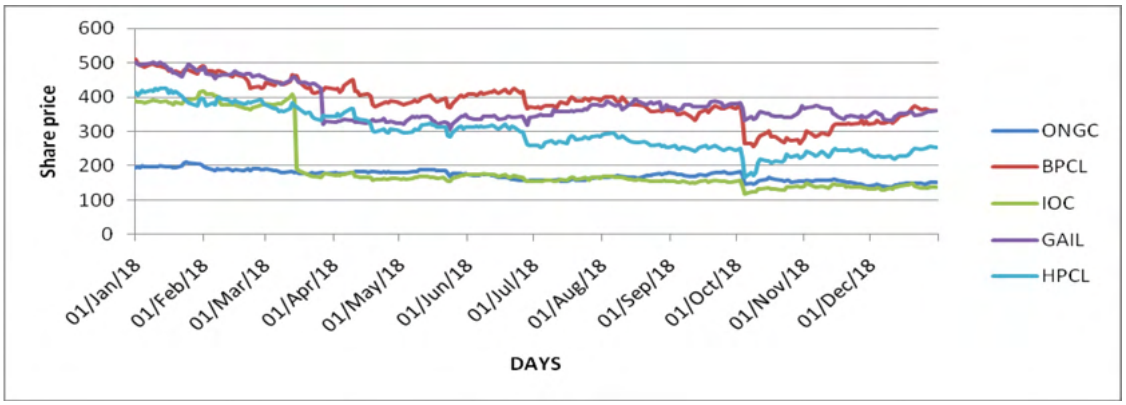


Chart 5 presents movement of stock price. From the Chart we can observe that the stock price line is showing declining trend from the month of January to December 2018 indicating Bearish trend. The closing price of Rs.408.68 is in the month of January, and the lowest average share price is Rs.212.73in the month of October, there is an increase in share price in the months of November and December but nominal. The highest share price in the 52 weeks is Rs.435.65 per share and the lowest share price in the 52 weeks is Rs.165.05 per share. We can observe that from the month of March up to the mid of April in the above chart there is a double top chart formation. As per Double Top chart formation the price line will move in downward trend in future.

Movement of Stock Price–Comparison

The behaviour of stock prices of select companies in presented in Chart 6.

Chart 6: Comparison - Movement of Stock Price of Sample Companies



All the sample companies' stock price is showing bearish trend as the stock price is moving downward continuously.

Findings

From the above analysis we can draw the following:

- One common finding among the sample companies' stock is stock price is declining of stock price line showing bearish trend as the stock price is moving downward continuously.
- The highest closing stock price of all the companies is registered at BPCL Rs.511.1 and lowest share price of all the five companies is of IOC, share price is Rs. 137.1.
- On an overall the stock performance of Oil and Gas sector remain same. Put in simple, the sample five companies stock price moving in the same direction.
- From the above analysis and discussion we can say that all the five samples companies' stock price is decreasing with bearish trend, an investor who wants to buy can buy and investor who holds stock not to sell.

Conclusion

Today, the health of stock exchange is solely dependent on the pattern of investment by the investor. As the financial market goes through brisk changes, investors should look for right opportunities keeping in tune with the dynamics of market environment. Financial market reflects a country's economic growth as they supply necessary financial inputs for the development of the country. Technical analysis gives investor a better understanding of the stocks and also gives them right direction to go on further to buy or sell the stocks .Therefore, the investors and traders should not blindly make an investment rather they should analyze using the various tools to check if the stock is technically strong. Technical analysis gives investor a better understanding of the stocks and also gives them right direction to go on further to buy or sell the security. Technical Analysis is the useful guide in guiding investment decision. In the light of our study on five companies, it is seen how Technical Analysis can be used to predict the possible future swings of stock prices.

The stock price movement is influenced by various fundamental factors as economy, industry and company factors as a whole. It must be remembered that technical analysis is more an art form than a science. As an art form, it is subject to interpretation. However, it is also flexible in its approach and each investor should use only that which suits his or her method of trading. Once the method is developed, rewards can be significant.

Analysis can offer great insight but if used improperly they can also produce false signal. As the stock prices are dynamic in nature, combination of fundamental analysis and technical analysis will increase the percentage of accuracy and thus giving an idea to the investor to invest in the stock which will yield him/her good return.

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Speed Control Mechanism in Intelligent Vehicles with Emergency Situation Handling System

Dr. Deepti Sharma* & Mr. Kaushal Gupta**

Abstract

This paper focuses on the root cause behind Accidents and preventive measures to avoid the accidental losses. The main reason of accidents is people don't follow traffic rules that cause accidents. Every city has its own speed limit rules for roads identified by authorities. But vehicle users don't follow these speed limits or sometimes they don't know about the speed limit of that particular road they are using. Even in city interiors, no signboards are there to mention the speed limits of vehicle. The idea behind this paper is to limit the vehicle by an automatic system which can control the limit of a vehicle using GPS and speed limit set for that particular area. The paper also focuses on the mechanism one can use for de-activating the speed control button in case of emergency followed by the verification process completed by authorities.

Keywords: Speed Control, Transport Rules, Accidents, Over Speed, Emergency.

1. Introduction

The inclusion of automatic devices in urban life should not compromise the development in anyway. The next era of automatic vehicles followed by intelligent vehicles. Intelligent vehicles now-a-days are evolving to become sophisticated automatic machines running to make decisions on the basis of an intelligent transport system. But this major shift from present transport system to intelligent transport system require a confluence of vehicular technology, geographical infrastructure, authority intervention and policy change to get rid of high traffic congestion and accidents.

2. Intelligent Vehicles

Intelligent vehicles [1] uses Advanced driver assistance systems (ADAS). ADAS system automates the driving operations such as braking, monitoring and steering for save and better driving experience. ADAS system helps to reduce the road accidents by minimizing human errors such as temporary blindness experienced by vehicle driver due to high beam feature of vehicles coming from opposite side and even acts smartly in a fraction of seconds in case of collision to save the vehicle owners. It includes lighting system, braking features, collision avoidance, alert generation and instigate warning at the time of blind spots. ADAS system includes warning tones that specifically used to alert the driver and not to divert the focus. ADAS system technologies discussed by e-infotech are Adaptive cruise control which let the driver know about the distance between vehicles and maintains the speed accordingly. Lane departure warning system warns the driver if he/she incidentally changes the lane. One technology includes [5] the measures to be taken to avoid forward collision that will warn the driver if there is a chance to have forward collision. Traffic Sign recognition system helps the vehicular driver to follow traffic rules related to traffic signs. Tire pressure monitoring system ensures tire pressure, suspension etc. The night vision pedestrian detection and parking assistance system enables the vehicle driver to detect the human body or object in night and to obtain efficient parking assistance.

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3. Road Accidents due to Over-Speeding

Despite of existence and popularity inintelligent vehicles in new age transport system, Over speeding still are the major cause of road accidents. [6] Ministry of Road Transport and Highways, Government of India publishes its data annually as an extract to analysis report which includes the real cause of accidents. Accidents majorly are due to Drunken driving, Traffic rules violation like jumping red lights, Use of mobile phones, over speeding and driving on wrong side etc. here in this paper over speeding taken into consideration as its is carrying the largest part of causing total accidents in India and Delhi.

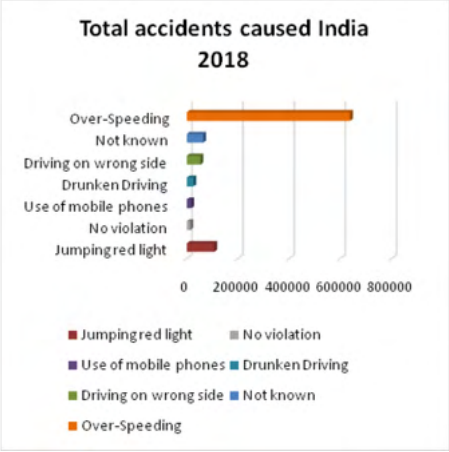
4. Road Accidents caused by over-speeding in India

Considering the case of causes of road accidents in India, we all must investigate the actual figures of year 2018 published by Ministry of road transport, which represents the fact that there is a tremendous gap in number of deaths caused by over speeding then other reasons like drunken driving or traffic rule violation.

Data into consideration includes both year wise trend and total number of deaths due to various reasons.

Cause of accident	Number of accidents
Over-Speeding	638,059.77
Not known	65,197.00
Driving on wrong side	53,929.00
Drunken Driving	26,088.87
Use of mobile phones	17,564.90
No violation	14,196.68
Jumping red light	10,765.05

- **Sample Dataset (2018)**



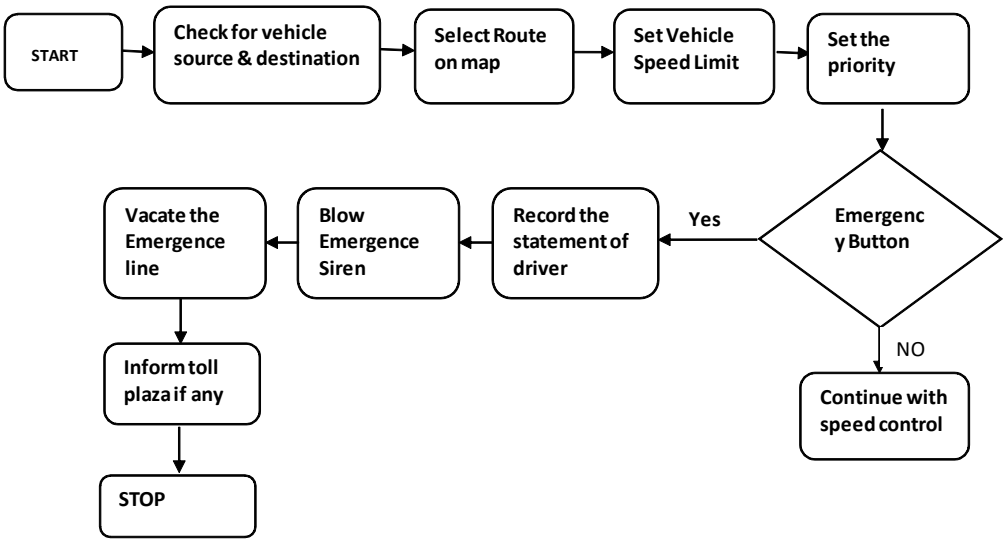
5. Proposed Work

The existing work [2] presents in speed control systems which can control the speed of the vehicle to overcome the problem of road accidents. But, in the existing speed control it is unable to handle the emergency. This paper proposes a mechanism to handle the situation in speed control system when the patient present in the vehicle is in critical condition and need to take to the hospital. In such case, the driver or owner has an emergency button which can be clicked in emergency. And by pressing the Emergency button the driver or owner of the vehicle can inform that patient is present in the car and it's a medical emergency.

Whenever the driver or owner of the vehicle press the Emergency button the mike installed in the car will get activated and driver needs to record the statement which consists of the reason for pressing the button. After recording the statement, the barrier for the speed limit of the vehicle will be vanish and driver can control the speed of the vehicle based on the traffic condition. Moreover, the Emergency alarm present in the vehicle will also start ringing, which willinform others about the critical condition to give space to the vehicle, after the statement of the driver has been recorded.There is a verification process through which a message will be forwarded to the owner of the vehicle which consists of the link of the form. The link consists of the fields such as name, age, address, etc. of the patient. The form needs to be filled by the owner and owner also needs to upload the reports of the patient.

The request for confirmation is send to Hospital authority to check the authenticity of the documents uploaded by the car owner. After the authority has confirm the same an message for confirmation is send to the car owner.

If the verification process is not done by owner of the vehicle or hospital do not verify the authenticity of the documents and details filled by the owner, the respective fine will be imposing, and the undersigned authorities are informed for the same.



Block diagram of speed control mechanism

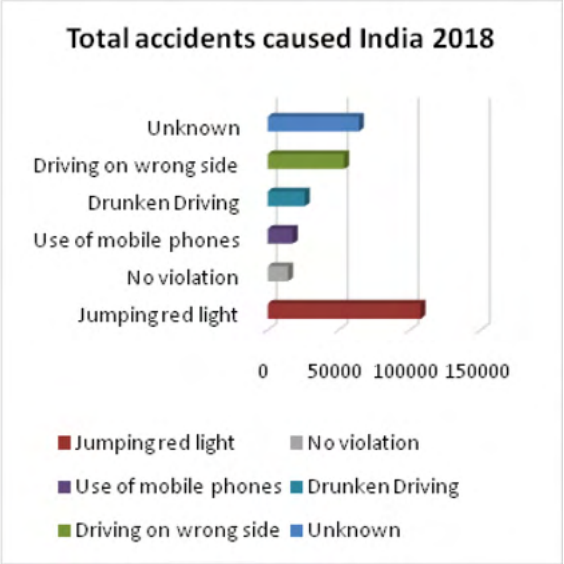
6. Formulation of reduction in accidents after mitigating the speed control mechanism

As given in the detail on number of accidents and the reasons behind them, presented by ministry of road transport and highways, we can formulate that accidents caused by over speeding is 77% of total number of accidents. It means we can reduce the number of accidents to 23% (approx.) of current number of accidents by implementing the proposed speed control mechanism. Taking the dataset of 2018 as sample, in tabular representation, this can be presented as:

Cause of accident	Number of accidents
Driving on wrong side	53,929.00
Drunken Driving	26,088.87
Use of mobile phones	17,564.90
No violation	14,196.68
Not known	65,197.00

Sample dataset (2018)

From the above sample dataset [6], we can analyze the fact that after implementation of proposed speed control mechanism, the number of accidents reduced to 23% of total accidents. This fact analysis can be represented in graphical form as follows:



7. Challenges identified in implementation of speed control mechanism in vehicles

Following are the speed control rules given on the website of ministry of road transport and highways website.

- Speed of vehicle [4]should be based on driving and vehicle conditions, weather, load on vehicle and visibility on road. This is the challenge faced by most of drivers un in extreme conditions.
- During fog, rainfall, storm, snowfall or desert winds, vehicle should be driven at lowest allowed speed.
- Signages specifying speed limit of almost each road and lane are specified for each area. The motor vehicle should not exceed that limit. This is the rule which most vehicle owners violate that causes accidents. The paper explains the measures we can take to overcome this problem and thus can reduce the accidents on roads.

8. Implementation Stages

Step 1—City level positioning

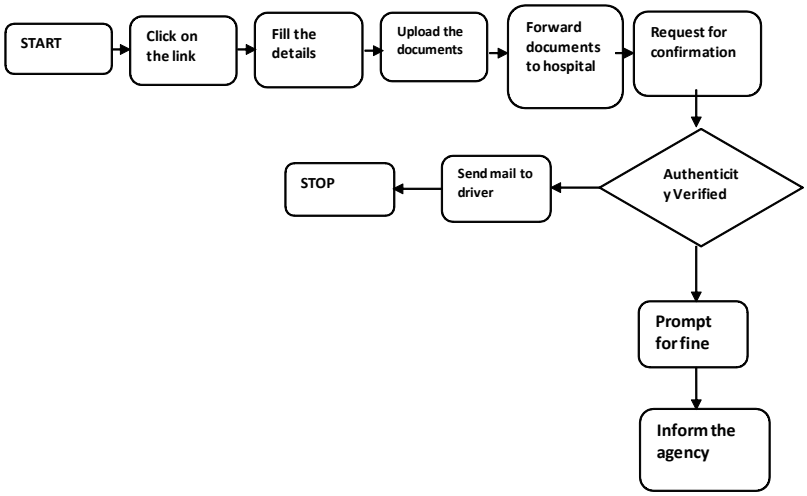
City wise positioning of traffic rules and speed limits are the first step need to be taken. This should be followed by various testing modules. This kind of positioning will only include load roads traffic rules.

Step 2–State level positioning

After successful implementation at city level, state level positioning will be done. This will include highways authority intervention in implementation. National highways, State highways and Expressways quote higher speed limit and more visibility issues so need more precautions in speed limit mechanism.

Step 3—Country level positioning

This will includeinternational road rules which come under jurisdiction of two countries between the road which is under consideration.



Block Diagram of Emergency Handling Mechanism

Implementation Challenges for Emergency and Overcoming Challenges

The challenges identified in the implementation of speed control mechanism through proposed model are as follows

1. **Perspective of other vehicle owners** - Vehicles not using [3] same mechanism are unable to identify the severity of situation. To overcome this challenge, GPS tracker or Google map can be used to inform the other vehicle.
2. **Unable to explain actual situation** - The members along with can be in panic situation and can make mistake in explaining the real situation in which they are. To overcome this challenge, additional button can be replaced with mike system.
3. **Submission of supported documents** - Owner of the vehicle with patient need to submit the documents in support of emergency for which they have delimit the speed. But users can identify it as a tedious task as they may still be facing difficulties at their place. To overcome this one can, ask to contact the respective hospital so that hospital authorities can confirm the emergency.

9. Future Scope

In this area further we can work on speed control mechanism in fuel specific engines like in diesel engines, CNG and LPG. Researchers [7] are focusing into this type of work as on the feedback stabilization when fuel conversion efficiency is considered, which is the major concern in automotive engines.

10. Conclusion

In this paper, a mechanism on handling emergency situation is given when a speed control device is already installed on intelligent vehicle. The transport department of every area has already specified the speed limits according to geographical locations. But still speed limit violations turn into accidents very frequently. The speed control device is is used to control the speed of vehicles as per the traffic regulations specified for each route. Here there may be a case where in case of emergency the vehicle driver need to go fast and disable the speed control mechanism in that particular vehicle. So the proposed model has been explained with the help of block diagram of both the situations that is in case of speed control system and in case of emergency situation. The paper also focused on stepwise implementation challenges and ideas to overcome these challenges. The level-wise positioning of speed control based on geographical boundaries also considered in this work.

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Critical Analysis of CSR (Corporate Social Responsibility) Expenditure in Rrespective Indian States Post 2013 after CSR Becoming Legal Mandate

Dr. Ravinder Kumar* & Mr. Sujata Jayant**

Abstract

Before 2013, CSR was largely contributed as either a volunteer activity or a charity.CSR was primarily based on donor-donee or give & take relationship. In 2013, with the enactment of Article 135 of the Companies Act, 2013. India became first country in the world to put forward a legal mandate on CSR, which was enforced in April 1, 2014. After a legal mandate, CSR is no more just a donor–donee relationship, rather it evolvedto being a partner with beneficiaries i.e., strategic or systematic CSR. The CSR mandate aimed to ensure corporate sector contribution in process of social-economic development of nation and to accelerate the development process of the country. A true transformation in the concept of CSR occurred after the law thatit has moved from earlier philanthropic approachwith no close coherent work with civil society to astrategic CSR activitywhere the corporate sector work closely with NGOs to resolve specific issues in a region.

India is a vast country with 28 states and 9 UTs,but the wealth distribution among the states is unevenand hence there are so many states which are less privileged than others. The list of 15 underprivileged states identified are the lowest CSR contributing states which includes Bihar, many North-East states, J&K and Andaman and Nicobar Islands. In principle, these states are in dire need of significant contribution from government and non-government agencies to overcome poverty and infrastructure development, but surprisingly the CSR contribution is extremely low in these states.

In this article, we'll analyse state-wise contribution of CSR for the period of 6 years i.e., 2014 to 2020, This article will discuss methods toemploytoenable CSR expenditure to be more active and useful for the overall nation building and maintaining sustainable growth in India.

Keywords: CSR (Corporate Social Responsibility), CSR expenditure, CSR legal mandate, CSR expenditure on state-wise, Need of CSR, Rationale behind the CSR law and Transformation of CSR Approaches: From philanthropic to responsibility.

1. Introduction

In accordance with Article 19(1)(g), Indian people have a fundamental right to practise any career of their choice or to engage in any occupation, trade or company of their choice. Although that right is subject to appropriate restrictions according to Article 19(6) of the Indian Constitution. Under Article 301 of the Constitution of India 1949, any person (whether Indian citizen or not) has the statutory right to engage freely in any trade or trade and exchange throughout India, even if they are subject to reasonable restrictions provided for In article 302 and 307. The above-mentioned Article 19(1)(g) and Article 301 led to create an environment of free trade, occupation and business activities subject to the reasonable restrictions for a person/group in India.There are five types of business organizations that can be formed to carry out the business i.e., Sole proprietorship, Hindu Undivided Family (HUF), Partnership, Limited Liability Partnership (LLP) and Company[1]

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Evolution of corporate social responsibility (CSR) in India-Historical Aspect

Ever since Ancient India, CSR has been recognized to be a social obligation. The businesses contributed to social causes for national advancement during the periods of mediaeval and modern Indian history[2].The principle of CSR in India was endorsed by many thinkers, including Atalaya and Mahatma Gandhi, the father of India. India has been following corporate philanthropy and industrial welfare traditions since the late 1800s. In the late 18th century, there were protests aimed at resisting industrialization or improving the lives of those affected by it. Socially responsible corporate practises took different forms in the late 1900s: service to the society, philanthropic contributions to charities, improving employee health and encouraging religious conduct. CSR developed over a period of time when industrial groups such as Tata, Birla, Godrej, etc. were inclined toward such practises to develop their brand, goodwill and credibility, they work uponCSR activities. CSR was known as an integral part of the organisation in the early stages of the 1970s, but the term was not abbreviated until then. Under different labour and environmental protection laws being implemented by the Indian Parliament, it got its push. It was followed by various large corporates and this way the practice developed evolving as a sustainable business strategy[3]

Global Recommendations and CSR Views

CSR has transformed from a social activity to an important instrument for industry.

Corporate sector and Human Rights Guiding Principles of the United Nations:

The Guiding Principles on Business and Human Rights were adopted by the United Nations Human Rights Council in 2011 to step beyond the debate on voluntary versus binding human rights instruments. The Guiding Principles rest on these three pillars:

- The responsibility of the state to secure
- The corporate obligation to honour
- Access to recourse

The OECD Guidelines for Multinational Enterprises include a comprehensive Code of Conduct to direct and assist multinational enterprises (MNEs) in their relationships with trade unions and in the fields of environmental protection, the fight against corruption and the consideration of consumer interests. The International Labour Organization (ILO), founded in 1919, strives across the world to enforce minimum social standards. The idea behind these steps is to prevent businesses from gaining competitive advantages by violating workers' rights. The mission of the ILO and its actions are focused on four basic principles:

- Freedom of forming associations and the right to ask for collective bargain
- Abolishing the forced labour
- Completely abolishing the child labour
- Obliteration of discrimination in the workplace and occupation

CSR's increasing significance can be an immense advantage for an organization because it forces leadership to study and implement ways to support society. The establishment of a CSR strategy is a crucial component of the competitiveness of a company and something that the company itself can lead.

Why CSR Needed in India

If we place corporate world on one hand and rest of the society/ nation on the other side, then we find out that the corporate sector is the most advanced sector in India. Majority of nation wealth lies with corporate sector and with rich skilled human resource. But on other side looking at Indian socio-economic status, India is a developing country with huge population living underprivileged. India has been badly impacted by illiteracy and poverty for years. Statistically, India is a country where

- 1/3rd of population is illiterate
- 2/3rd of population lacks sanitation

- 400 million population earning less than USD 2 per day
- Income disparity Only few people have control of large portion of India's wealth and majority of them relates to corporate sector[4]

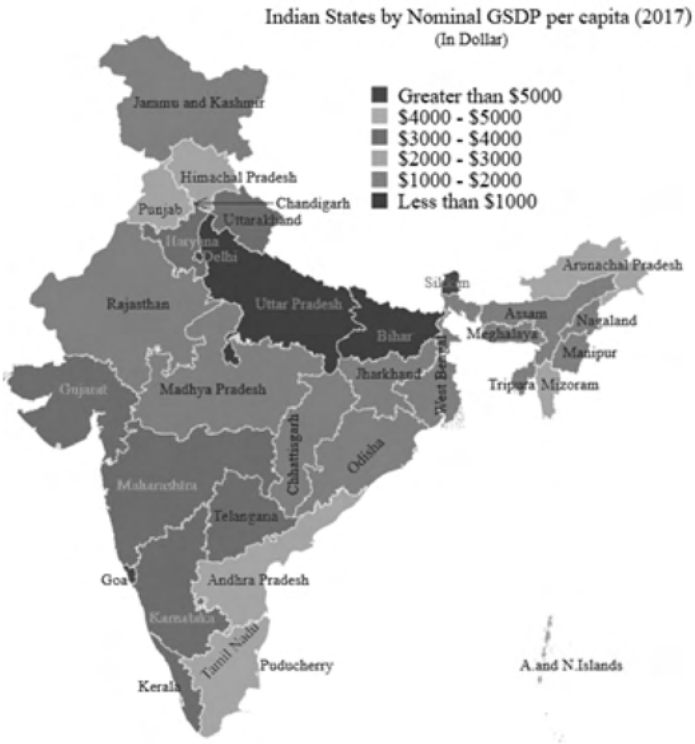
i.e.,in spite of the fact that the corporate sector has been uplifted and it controls large portion of nation's wealth but still on the flip side Indian society is still struggling with countless societal deficiencies. Therefore, CSR can be used as a tool to overcome such a radical situation and can allow a portion of wealth of corporate sector to be utilized for the poor man's wellbeing. In this article researcher will examine CSR expenditure in India on state wise after CSR become legal mandate for the period of 4 years i.e., 2014 to 2018 and suggest ways by which CSR expenditure can be more useful for nation building or sustainable growth in India.

2 Literature Review

2.1 Comparison of Indian statesas per-capita Income indicating the poor states

Among the 33 Indian States and Union Territories, Goa has the highest per capita income. The capital of Delhi is India's second-wealthiest of the list. Sikkim, the north-eastern province, is seventh, followed by Chandigarh and Haryana. Among India's five richest economies, three are states and two are Union territories. The population of all of the top four states/UTs is less than 20 million[5]. And, the fifth-richest economy has a population of less than three crore. The poorest five states are Bihar, Uttar Pradesh, Manipur, Jharkhand and Assam. Where the per capita GDP of Goa in the USD in 2017 is $7,045. Four states/UTs have a per capita GSDP of $5,000. GSDP is estimated per capita by dividing GSDP by population. Formula = 1981* to calculate GSDP per capita in dollars(NSDP of state in Rs)/129901[6].

Figure 1: Indian states by Nominal GDSP percapita (2017)



Source: from statisticstimes.com

Table 1: Indian states by Nominal GDSP percapita (2017)

GSDP per capita							
Rank	State	GSDP per capita (INR at Current prices)		Times to India	GDP per capita ($)	GSDP per capita (INR at 2011-12 prices)	
		18-19	17-18	17-18	2017	18-19	17-18
1	Goa	502,425	461,946	3.56	7,045	371,274	371,967
2	Delhi	402,172	362,790	2.79	5,533	310,898	291,719
3	Sikkim	405,856	359,798	2.77	5,487	267,104	252,182
4	Chandigarh	-	333,667	2.57	5,088	-	262,503
5	Haryana	250,700	225,110	1.73	3,433	186,504	174,836
6	Puducherry	240,527	222,114	1.71	3,387	160,378	151,545
7	Karnataka	231,491	205,813	1.58	3,139	171,389	158,176
8	Kerala	-	203,093	1.56	3,097	-	150,252
9	Uttarakhand	220,257	202,284	1.56	3,085	173,121	164,165
10	Gujarat	-	199,463	1.54	3,042	-	165,413
11	Telangana	226,265	198,994	1.53	3,035	161,669	147,766
12	Maharashtra	-	198,510	1.53	3,027	-	159,918
13	Himachal Pradesh	208,513	193,336	1.49	2,948	160,444	150,977
14	Tamil Nadu	215,050	190,659	1.47	2,908	156,041	145,597
15	Andaman & Nicobar Islands	-	178,485	1.37	2,722	-	146,973
16	Andhra Pradesh	180,745	158,607	1.22	2,419	131,740	120,059
17	Punjab	170,431	158,530	1.22	2,418	129,886	124,250
18	Mizoram	-	157,415	1.21	2,401	-	119,638
19	Arunachal Pradesh	-	139,617	1.07	2,129	-	99,464
20	Tripura	-	116,058	0.89	1,770	-	81,140
21	Nagaland	-	115,678	0.89	1,764	-	77,106
22	Rajasthan	121,582	110,916	0.85	1,691	88,892	84,017
23	West Bengal	119,636	102,568	0.79	1,564	81,368	72,998
24	Chhattisgarh	108,058	100,125	0.77	1,527	80,376	76,993
25	Jammu & Kashmir	-	99,962	0.77	1,524	-	77,652
26	Odisha	107,107	97,273	0.75	1,483	86,187	80,420
27	Madhya Pradesh	99,783	91,103	0.70	1,389	66,005	62,569
28	Meghalaya	-	90,213	0.69	1,376	-	69,562
29	Assam	-	85,089	0.66	1,298	-	64,763
30	Jharkhand	82,431	75,246	0.58	1,148	62,396	59,277
31	Manipur	-	72,757	0.56	1,110	-	54,315
32	Uttar Pradesh	68,792	62,323	0.48	950	49,479	47,190
33	Bihar	47,541	41,992	0.32	640	33,629	30,905
	India (Per Capita GDP)	142,719	129,901		1981	105,688	100,151

Source: statisticstimes.com[7]

(For example, Tamil Nadu GDP per capita = 1981 * 190659/129901. In 2017-18, Tamil Nadu GSDP per capita is 190,659. India's GDP per capita is $ 1981 in 2017 and $ 129,901 in 2017-18, according to the World Bank.)

2.2 Definition of CSR and CSR law

Definition of CSR

CSR, in the words of Michael Hopkins is an ethical responsibility of a firm towards its stakeholders, be it the internal or the external ones. Hopkins also emphasizes that the objective of the CSR is social upliftment of the people to let them enjoy the benefits of the profits of the business without effecting the net profitability[8]. The World Business Council for Sustainable Development states that the business entity's continuing contribution to ethical behavior and to improving the quality of life of the local community is CSR, which contributes positively to economic development.

In general, CSR refers to companies taking the societal interests into account by accepting responsibility for the impact of their corporate practises on the company's stakeholders, the local community, the environment and, eventually, the future generation.However it was earlier of the view that CSR is voluntarily done and the business entity pursue their social, economic and environmental responsibility by interacting with their stakeholders.[9]In its white paper, the European Union described CSR as 'commercial decision-making linked to ethical principles, compliance with legal requirements and respect for citizens, communities and the environment."[10]Corporate Social Responsibility has been established in the context of India under the CSR Rules, which provide an all-inclusive meaning. It states that, under Schedule VII of the Companies Act 2013, CSR includes programmes or initiatives related to specified activities. It also specifies that the Board of Directors should conduct certain programmes or projects in compliance with the guidelines outlined by the CSR Committee in regard to the CSR policy set out in Schedule VII. The flexibility of CSR is allowed by enabling businesses to select their chosen field of CSR that is coherent with the CSR policy.

2.3 CSR Law in India

India is the world's first country to legally impose CSR on companies based on certain financial conditions.

The sources of CSR law are as follows:

1) Section 135 Companies Act, 2013,
2) Companies' Laws (CSR Policy), 2014
3) Companies Act 2013, Schedule VII
4) Clarification from time to time from the MCA (Ministry of Corporate Affairs).

Applicability of CSR Law

In accordance with Section 135(1) of the Companies Act, 2013, any company that has either of them in the immediately preceding financial year has

(a) The net worth of the company must have been Rs 500 crore or more; OR

(b) The gross turnover of a company should be INR 1000 crore or more.

(c) The net profit (after deducting interest and taxes) of the company must be Rs 5 crore or greater. The section also notes that CSR provisions extend to all companies operating in India, whether they are Indian companies or branches/project offices of any foreign company in India[11].

The legal requirements of Companies where CSR law applies

These companies need to perform these three steps below:

First: Constitute CSR committee

Second: Spend 2% of its average net profit immediately prior to 3 years under the Schedule VII Business Activities Act, 2013

Third: Reporting on Director Report i.e., what to spend, where did you spend & how did to spend on CSR activity[12].

Where companies has to spend CSR Amount?

As stated in Schedule VII of the Companies Act, 2013, a company may undertake the following activities to fulfill its CSR obligations:

a) Activities targeting extreme hunger and poverty eradication

b) To promote advancements in primary and secondary education and focus upon higher education

c) Empowering women to promote gender equality in both rural and urban areas.

d) Health-related programs, including the reduction of infant mortality and enhancement of maternal health, combatting the spread of human immunodeficiency virus (HIV) and AIDS as well as malaria and other infectious diseases.

e) Working Strategy for Environmental Sustainability

f) Growing employment prospects by imparting vocational training and skills training

g) Contributing to the National Relief Fund of the Prime Minister or to any other fund developed by the Central Government or State Governments for the socio-economic development of a downtrodden and oppressed segment of society[13]

As per MCA Clarification, June 18, 2014: In order to capture the essence of the subjects specified in the said schedule, "Liberally" must be interpreted according to the points stated in Schedule VII [14].

As per MCA Clarification, 18 June 2014: one of activities such as marathons/awards/charitable contribution/advertising/TV show sponsorship etc. can't be considered as CSR[15]

As per MCA Clarification, June 18, 2014: Expenditure incurred for compliance with the Ant Act/Statute, can't be termed as CSR[16]

CSR Committee: What is the form & what is the CSR Committee's activity?

What is the form of CSR committee in the company?

Companies would be expected to form a dedicated CSR committee composed of three or more directors, of which at least one is an independent director.[17]

What are the CSR Committee's operations?

The following must be executed by the CSR committee:

1. Formulate the policy in regards to CSR.
2. As per CSR rule, the amount of expenditure on CSR has been recommended.
3. Track the policies of CSR.[18]

If companies fail to comply with the CSR Act? Then companies disclose in the Director Report the reason for not spending, i.e., either it is complying, or it will explain the reason of non-compliance.

Latest Updates in CSR rules: The CSR provision has been revised in the last two years in compliance with the latest changes to the Companies (Amendment) Act, 2019 and the Companies (Amendment) Act, 2020. The Companies (Amendment) Bill, 2019 was passed on 27 July, 2019 by Lok Sabha, then passed on 30 July, 2019 by Rajya Sabha, and then finally passed on 31 July 2019 by President. Companies (Amendment) Bill, adopted by the Lok Sabha on 19 September 2020, then passed by Rajya Sabha on 22 September 2020, then passed by the President on 28 September 2020. The provision of CSR is provided for in the two amendment acts, but the provision of CSR has not been notified and is yet to be notified. In addition, both changes incorporated amendments to the CSR law as follows:

- In accordance with section 135(9) of the Companies (Amendment) Act 2020, where the amount of CSR is to be invested, i.e., CSR liability in any financial year shall not exceed 50 lakhs; the condition for the establishment of the CSR Committee shall not apply, i.e. such companies shall be exempted from the position of the CSR Committee and discharged by the BOD Committee (Board of Director) [19].
- In compliance with section 135(5) of the Companies (Amendment) Act, 2020, if the company spends an amount in excess of the CSR obligations, the company may set an excess amount against the CSR duty and in such a manner as will be prescribed in the subsequent financial years[20].
- As per section 135(7) of the Companies (Amendment) Act, 2020 If the company

violates the CSR clause, then the company responsible for paying Twice the amount required to be transferred OR 1crore rupees whichever is less and Each officer in default penalty 1/10th of the amount required to be transferred to the fund OR the unspent CSR account as the case may be OR 2 lakh rupees whichever is less [21].

Impact of COVID-19 on the CSR provisions

The following amendments and clarifications regarding the CSR provision due to the impact of COVID-19[22]:

- Expenditure on CSR funds for COVID-19-March 23, 2020 Qualifying CSR service.
- If any ex-gratia payment is made to temporary/casual employees/daily wage staff over and above wage disbursement, expressly for the purpose of combating COVID-19, the same shall be admissible for CSR expenditure as a one-time exemption on April 10, 2020.
- Contribution to COVID-19-not admissible as CSR spending-April 10, 2020-'Chief Minister's relief fund 'or' State relief fund'.
- Contribution to the State Disaster Management Fund Authority to tackle COVID-19 approved as CSR- April 10, 2020.
- For fiscal years 2020-2021, 2021-2022 & 2022-2023, any organization engaged in new vaccine, drug and medical device R&D activities in its usual course of business may conduct new vaccine, drug and medical device R&D activities related to COVID-19

2.4 Impact on CSR Approach after being a Legal Mandate.

Evolution or Transformation of CSR Approaches after it become Legal mandate: From voluntary CSR to Strategic CSR[23]

The most popular CSR solution is to make donations for religious reasons/charitable purposes. We can therefore conclude that there is a transition from corporate profit/self-interest to philanthropy, i.e. passive donation to charities, as seen in Figure 1 below:

Figure 2: Evolution or Transformation of CSR approaches in India

There is a shift of CSR from philanthropy approach to society welfare approach i.e. Strategic societal benefits linked to business interest. It includes because related marketing. This approach means giving something to society by way of that strategy by which business interest can be achieved. Hence CSR is just doing to achieve the maximum profit of company with no emotional or cultural attachment to society/nation where it operates.

After community affairs approach, it shifted to corporate community investment i.e. good corporate citizenship. Investment in social growth as part of the business strategy, which is also set out in the National Voluntary Guidance on social, environmental and economic responsibility (NVGs). It was released in 2011 by the Ministry of Corporate Affairs (MCA). As part of its business strategy, therefore, the corporate sector is now spending on CSR activity, but this is voluntary& optional only as these are only guidelines. Some businesses have contributed to CSR operations, but there are other businesses that still do not contribute to CSR despite earning enormous profits.[24]

3. Research Methodology

The methodology involves, in-depth collection of data from various resources but here the direct sources of information from various government, non-government and research articles. The preference has been given tonational data repositories such as National CSR Portal[25]. The "National CSR Portal" provides data regarding CSR expenditure by the companies which registered under the Companies Act, 2013 and filled annual return in (ROC) Registrar of Companies. Our methodology involves use of MS-Excel statistical tools and techniques for the analysis and interpretation of data.The data has been validated by means of other articles, journals and data repositories as provided in the footnoting section.

4. Analysis and Interpretation of CSR Data Per State of India

After careful review and study of the CSR expenditure data available from the Ministry of Corporate Affairs, Government of India, on FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18,FY 2018-19, FY 2019-20 (INR Crores), one can conclude that the bulk of the CSR expenditure corresponds to the rich states of India. Maharashtra alone had close to last 25% of the six year average CSR expenditure in India. The same is followed by other rich states such as Karnataka, Gujrat, Tamil Nadu and National Capital Delhi. The average expenditure of FY 2014-20, the top five states with maximum CSR-led activities contributes to over 55% of total. The situation appears even more alarming if we look at the top 10 states average contribution in 2014-20 there is 76.9% of total Indian CSR activities take place. On the flip side if we look at the bottom 15 states starting from Bihar, North East States, J&K and UTs, the overall contribution drops down to a meagre 2.3% of the total Indian contribution.

Table 2: CSR spending year-wise across states, FY 2014-15, FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 (INR Crores) (figures as per the filings received as of 31 March 2019)[26]

*Excl. PAN India & NEC

YEAR 2014-17

States	FY 2014-15 (INR Cr.)	% Share*	FY 2015-16 (INR Cr.)	% Share*	FY 2016-17 (INR Cr.)	% Share*
Maharashtra	1445.92	26.7%	2052.23	21.8%	2487.38	27.5%
Karnataka	403.47	7.4%	784.66	8.3%	886.18	9.8%
Gujarat	313.45	5.8%	551.43	5.9%	870.64	9.6%
Tamil Nadu	539.64	9.9%	633.24	6.7%	550.94	6.1%
Delhi	237.44	4.4%	493.29	5.2%	520.37	5.7%
Odisha	252.18	4.6%	624.05	6.6%	316.71	3.5%
Uttar Pradesh	148.9	2.7%	423.72	4.5%	324.54	3.6%
Telangana	101.96	1.9%	265.4	2.8%	259.77	2.9%
West Bengal	194.86	3.6%	73.17	0.8%	28.9	0.3%
Andhra Pradesh	414.28	7.6%	1294.28	13.7%	753.33	8.3%
Rajasthan	299.76	5.5%	501.45	5.3%	327.15	3.6%
Haryana	187.41	3.5%	375.62	4.0%	379.67	4.2%
Kerala	68.23	1.3%	148.12	1.6%	135.47	1.5%
Madhya Pradesh	141.88	2.6%	185.4	2.0%	286.6	3.2%

Rajasthan	299.76	5.5%	501.45	5.3%	327.15	3.6%
Haryana	187.41	3.5%	375.62	4.0%	379.67	4.2%
Kerala	68.23	1.3%	148.12	1.6%	135.47	1.5%
Madhya Pradesh	141.88	2.6%	185.4	2.0%	286.6	3.2%
Punjab	55.61	1.0%	69.93	0.7%	75.83	0.8%
Assam	134.78	2.5%	164.6	1.7%	269.92	3.0%
Uttarakhand	74.79	1.4%	73.17	0.8%	101.52	1.1%
Chhattisgarh	161.3	3.0%	241.16	2.6%	84.94	0.9%
Himachal Pradesh	10.95	0.2%	52.29	0.6%	24.03	0.3%
Goa	27.11	0.5%	30.15	0.3%	35.87	0.4%
Jharkhand	79.56	1.5%	117.04	1.2%	95.69	1.1%
Bihar	36.69	0.7%	111.32	1.2%	100.77	1.1%
Chandigarh	1.77	0.0%	5.34	0.1%	21.99	0.2%
Daman And Diu	20.05	0.4%	2.43	0.0%	2.63	0.0%
Jammu And Kashmir	43.71	0.8%	107.81	1.1%	42.74	0.5%
Arunachal Pradesh	11.05	0.2%	1.48	0.0%	24.05	0.3%
Sikkim	1.19	0.0%	1.98	0.0%	6.83	0.1%
Dadra And Nagar Haveli	4.41	0.1%	12.03	0.1%	7.58	0.1%
Puducherry	2.02	0.0%	6.46	0.1%	7.43	0.1%
Meghalaya	3.53	0.1%	5.59	0.1%	10.97	0.1%
Manipur	2.44	0.0%	6.28	0.1%	12.35	0.1%
Lakshadweep		0.0%	0.3	0.0%		0.0%
Tripura	1.33	0.0%	1.47	0.0%	1.25	0.0%
Andaman And Nicobar	0.29	0.0%	0.55	0.0%	0.83	0.0%
Nagaland	1.11	0.0%	0.96	0.0%	0.92	0.0%
Mizoram	1.03	0.0%	1.07	0.0%	0.08	0.0%
PAN India	4614.89		4741.95		4988.17	
NEC/ Not mentioned	26.94		-		6.81	
Total	**5424.1**	**100.0%**	**9419.47**	**100.0%**	**9055.87**	**100.0%**

YEAR 2017-20, Average (2014-2020)

States	FY 2017-18 (INR Cr.)	% share*	FY 2018-19 (INR Cr.)	% Share*	FY 2019-20 (INR Cr.)	% share*	Average (2014-20) (INR Cr.)	% share*
Maharashtra	2482.8	29.8%	2846.9	23.9%	2108.8	21.4%	2237.3	24.9%
Karnataka	940.3	11.3%	1222.8	10.3%	1137.8	11.5%	895.8	10.0%
Gujarat	764.3	9.2%	1059.6	8.9%	655.6	6.6%	702.5	7.8%
Tamil Nadu	606.8	7.3%	823.7	6.9%	696.6	7.1%	641.8	7.1%
Delhi	522.8	6.3%	663.4	5.6%	412.4	4.2%	475.0	5.3%
Odisha	467.3	5.6%	682.6	5.7%	635.5	6.4%	496.4	5.5%
Uttar Pradesh	287.4	3.5%	477.0	4.0%	361.8	3.7%	337.2	3.7%
Telangana	286.7	3.4%	422.0	3.5%	265.3	2.7%	266.9	3.0%
West Bengal	277.7	3.3%	366.8	3.1%	283.2	2.9%	204.1	2.3%
Andhra Pradesh	265.7	3.2%	645.0	5.4%	587.8	6.0%	660.1	7.3%
Rajasthan	256.6	3.1%	546.5	4.6%	554.5	5.6%	414.3	4.6%
Haryana	254.2	3.1%	334.8	2.8%	367.0	3.7%	316.5	3.5%
Kerala	145.4	1.7%	386.1	3.2%	216.6	2.2%	183.3	2.0%
Madhya Pradesh	144.7	1.7%	245.7	2.1%	121.5	1.2%	187.6	2.1%
Punjab	86.4	1.0%	164.5	1.4%	91.4	0.9%	90.6	1.0%

Haryana	254.2	3.1%	334.8	2.8%	367.0	3.7%	316.5	3.5%
Kerala	145.4	1.7%	386.1	3.2%	216.6	2.2%	183.3	2.0%
Madhya Pradesh	144.7	1.7%	245.7	2.1%	121.5	1.2%	187.6	2.1%
Punjab	86.4	1.0%	164.5	1.4%	91.4	0.9%	90.6	1.0%
Assam	83.9	1.0%	205.6	1.7%	737.8	7.5%	266.1	3.0%
Uttarakhand	81.8	1.0%	173.3	1.5%	83.7	0.8%	98.1	1.1%
Chhattisgarh	65.5	0.8%	135.7	1.1%	133.3	1.3%	137.0	1.5%
Himachal Pradesh	60.5	0.7%	80.0	0.7%	67.0	0.7%	49.1	0.5%
Goa	51.5	0.6%	46.7	0.4%	30.3	0.3%	36.9	0.4%
Jharkhand	45.9	0.6%	70.3	0.6%	123.2	1.2%	88.6	1.0%
Bihar	41.3	0.5%	136.4	1.1%	112.4	1.1%	89.8	1.0%
Chandigarh	20.3	0.2%	11.7	0.1%	3.4	0.0%	10.7	0.1%
Daman And Diu	20.1	0.2%	6.2	0.1%	7.7	0.1%	9.8	0.1%
Jammu And Kashmir	14.2	0.2%	35.3	0.3%	17.9	0.2%	43.6	0.5%
Arunachal Pradesh	11.8	0.1%	24.5	0.2%	14.5	0.1%	14.6	0.2%
Sikkim	6.8	0.1%	4.6	0.0%	2.8	0.0%	4.0	0.0%
Dadra And Nagar Haveli	6.8	0.1%	13.5	0.1%	4.2	0.0%	8.1	0.1%
Puducherry	5.3	0.1%	8.3	0.1%	7.8	0.1%	6.2	0.1%
Meghalaya	4.0	0.0%	16.7	0.1%	16.0	0.2%	9.5	0.1%
Manipur	3.7	0.0%	7.6	0.1%	10.0	0.1%	7.1	0.1%
Lakshadweep	2.1	0.0%	0.4	0.0%			0.5	0.0%
Tripura	1.8	0.0%	23.1	0.2%	4.3	0.0%	5.5	0.1%
Andaman And Nicobar	0.8	0.0%	0.4	0.0%	0.5	0.0%	0.6	0.0%
Nagaland	0.4	0.0%	2.1	0.0%	0.0	0.0%	0.9	0.0%
Mizoram	0.2	0.0%	0.1	0.0%			0.4	0.0%
PAN India	5009.2		6766.0		8012.3		5688.7	
NEC/ Not mentioned	-		3.7		0.3		9.4	
Total	**8317.6**	**100.0%**	**11889.8**	**100.0%**	**9872.3**	**100.0%**	**8996.5**	**100.0%**

Note: The table illustrates a line called PAN India that also receives significant CSR funds. These cases were referred to as PAN India where I a company carry out CSR projects in two or more states but it has not separately reported project expenditure (ii) where a company carries out projects in two or more districts in different states and has not reported the breakdown of the expenditure of each project. CSR expenditure between separate states cannot be bifurcated in these instances, and it has been classified as PAN India.

The figures clearly reflect that the regions that need the maximum contribution are the least benefitted by the CSR law. The split of the states clearly exhibits the core issue that the implementation of the Section 135 of Companies Act 2013, was not fulfilled in true spirits where the states that need most often neglected by the corporates.

There are other alarming statistics showing that the instead of growing y-o-y CSR contribution, there is a degrowth observed from INR 14161.42 Crore in FY 2015-16 to INR 13326.73 Crore in FY 2017-18. Analysing through the same lens, the CSR led activities in the bottom 15 states has also shown a sharp downward trend, dropping down from INR 265 Crore in FY 2015-16 to INR139 Crore in FY 2017-18. However, the same had fared better with INR 18659.5 crore contributions in FY 2018-19 and INR 17884.9 and in FY 2019-20. It's peculiar that despite of the growing economy the same growth can't be inferred by evident decline in CSR contribution.

Clearly all these pointers indicate that the under-privileged states require more and more spending of the CSR contribution so as to ensure the proper implementation of section 135 in its full spirit and requirements. There is a strong need for the

implementing a suitable policies and framework to establish the contribution to the requirements.

5. Suggestions

As discussed, and analysed before in order to create a tangible solution and address the issue in the line of legal framework of the sector 135 companies Act 2013. We propose that the CSR funds should splitequally in the Regional, Rural, and National levels among all the states and the region in particular in those states that requires the maximum contribution of CSR.

5.1 Regional Development –We propose that the government should annually declare "most favoured states for CSR" and focus on the poor states and regulate the split of CSR expenditure in a manner so that at least 25% of total CSR expenditure by the companies should be utilised for the societal upliftment of those states. Such can be easily identified by looking at the statistics above are, Bihar, North East States, UP, Ladakh J&K.

5.2 National – At national level we should also identify new states and regions and government can release new list of such states annual basis and add and omit states were the CSR contribution should an offer suitable benefits to the whole country.

5.3 Rural region – Rural Development –There is another proposal to identify small "locus of interest" and a committee should be form to release the list, update annually and direct the organizations and industries to ensure a fund allocation to these smaller regions so as to bring suitable upliftment of the society in those regions[27].

6. Conclusion

This paper recognises the need of the government's legislation and effective execution of the CSR expenditure. This should ensure that the CSR expenditure should not be limited to the certain states and geographical areas rather the effective use of authoritative powers which in turns should push the impact of unbiased societal upliftment levels. The CSR should contribute to the strengthening for the advancement of a region in terms of healthcare, education, employment generation and infrastructure development. An effective leadership in the organizations guarantees execution levels which should benefits both organization and society. Today, we've been observing corporate battles to acquire larger market share which has resulted in the exploitation, poor execution, unfair practices, and supporting undue manipulation rather than empowerment and transformation in the society. This led to a lower CSR contribution in India before the implementation of section 135 of the Companies Act 2013 than after the implementation of the CSR Act 2013. Though even after the implementation of law we've been observing a trend of overall decreasing CSR contribution from FY 2015-16 to FY 2017-18,and FY 2018-2019 to 2019-20; instead of rising trend. There is another negative impact which have been observed while analysing the data that the corporates are choosing to utilise most of its CSR contribution towards nearby geographical areas rather than identifying and spending the region which are in dire need of support. This paper has also suggested a few pointers which could be effective after pass through and accepted by Indian legislative framework, specific and required action and implementation of the law by Indian government and effective execution strategy required to enforce section 135, companies Act 2013 in its truth spirits and purpose.

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Impact of Software Automation and Artificial Intelligence on Customer Relationship Management: A Review on Some Retail Giants in Bengaluru

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Abstract

Over the past decade, with the advent of digitisation, coding and development in the field of Artificial Intelligence, there is a paradigm shift from good looking, smiling, well dressed customer sales executives to affiliate marketing platforms. Not to say the COVID 19 situation has escalated this transition even faster. Leaving aside the 'millennial' and 'generation z', even the 'Baby- boomers' are also compelled to depend on digital platforms because of the current phobia of the pandemic situation. As a result physical footprints of consumers on retail industry is decreasing day by day, although the propensity of actual buying is increasing but on a digital level. Thus making it mandatory for the marketers to depend or take the aid of Artificial Intelligence and software automation for handling of digital traffic and easy flow of customer relationship management, especially when it comes to aspects like Customer Experience Management, Customer experience value, and Customer database management.

This paper will highlight on the usage of these software's and Artificial intelligence by big retails giants like Mc Donalds, Levis Strauss, Dominoes, D-Mart, etc. The qualitative study conducted by taking interview of the Customer relationship managers of different retail outlets have been considered for the study to understand the impact of use of Artificial Intelligence/Software Automation on customer satisfaction along with its usage and functions, although the sample is limited to the city of Bengaluru.

Keywords: Customer Relationship Management, Customer Experience Management, Customer Experience Value, Artificial Intelligence, Customer/Sales force Software Automation.

1. Introduction

Customer Relationship Management is an age old prerequisite for successful business, developing brand value and customer loyalty. "Customer is always right" is an age old tagline believed and maintained by successful retail organisations. Huge amount of training, development and recruitment has been done since ages for maintaining strong customer relationship. Scenario became more complex and dynamic with the advent of e-commerce and digitisation of the market. Age old tradition of good looking, smiling sales executives handling and cajoling customers changed hands with concepts and aspects of 'Customer Experience Management', Customer Experience value. Big thick log books and records were replaced with concepts like Customer Portfolio Management, Customer database management and terms like 'Big Data' and 'Data mining' became the talk of town. Today the success of any marketer does not depend on the revenue generated but the information and database he procures to interpret and predict the market. The big data he procures in order to predict consumer trends and demands of the market makes his product or service a hit or flop in the market. With more digital footprints it has become very essential to understand the concepts and amend strategies according to the need of the day. Recent study conducted by KPMG revealed that post Covid pandemic 63% of world population have inclined towards digital platform for retail marketing and 73% of the working class people are still working from home (KPMG, 2020). While the second wave

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of Covid is on the rise worldwide, psychologically a great bulk of consumers are breaking errands, trying hard to come back to normal life, still others are petrified for life and developed permanent psychological disorders like phobia, Obsessive Compulsive Disorders and clinical depression avoiding and missing social life and social mixing have become a cause of fear for them. These patients are tending towards online shopping to vent out and are becoming shopaholics but the only difference is that they are choosing online platform rather than physical retail therapy. This very situation can be considered an opportunity rather than challenge for the retail industry. Another important observation is a good boom in sales volume of FMCG and hypermarket but on platforms of 'Big Basket' and 'Amazon Pantry' while Physical stores are recording less footprints. The psyche behind the same is known, a combination of the pandemic fear and insecurity of untold Lockdown. Consumers are keeping their home well stocked but fearing contamination not visiting physical outlets. Before proceeding towards the same some conceptual aspects have to be understood.

2. Review of Literature

As discussed earlier the current trend of Customer Relationship Management have become more and more complex with the dynamicity of consumer behaviour and these concepts include the following:

2.1 Customer Experience Management (CEM)

Customer experience is the cognitive and affective outcome of the customer's exposure to, or interaction with, a company's people, process, technologies, products, services and other outputs. (Buttle, 2019). Customer experience management can be handled if the 4 Is' is understood and applied well which are Involvement, Interaction, Intimacy and influence. (Rai, 2018).

2.2. Customer Experienced Value (CEV)

Customer Experienced Value is depended on the value the customer sacrifices to the value he/she receives in return as product or service. It has three important components, value of cost (price), value in use (consumption), and value in experience (process or the blue print of the experience). (Greenberg, 2010)

2.3. Customer Portfolio Management

As mentioned earlier with increased number of population digitisation, globalization, maintaining the database of consumers have become an humungous task physically so comes in the role of Customer portfolio Management which not only maintains the basic database or information of the consumers but also helps in understanding the consumer minds, their trends, helping in sales forecasting and most importantly develops strategies to retain the consumers.

Predictive analytics technologies enable large companies to anticipate future customer behaviours using past or current behavioural patterns and thus substantiate their strategicdecisions. Predictive analytics can be used for reducing the churn rate of the brand (by identifying dissatisfied customers) and for detecting risk situations. Relevant examples include Urban Outfitters, Sephora, and Under Armor, which use an advanced machine learning engine provided by Dynamic Yield to segment their customers. (Popa, 2021)

2.4. Role of Artificial Intelligence on Customer Relationship Management

Artificial Intelligence as defined as the ability of a system to acquire and interpret data, learn, and then apply the new knowledge to achieve certain results or execute a task through adaptive behaviour, AI includes many subdomains. Among them we can mention Machine Learning (ML), with supervised, unsupervised, and semi-supervised algorithms for training a software agent, and Deep Learning (DL), based on artificial neural network techniques that can perform complex learning tasks (Lee and Shin, 2020; Madurai Elavarasan and Pugazhendhi, 2020). Learning algorithms (artificial neural networks, Bayesian networks, genetic algorithms, nearest k neighbours, vector support machines, etc.) use advanced processing capabilities to make associations, classifications, groupings, and regressions, by analysing large volumes of data.

(Kartal, et al., 2016). Deep Neural Networks (DNNs) combine many machine learning tasks and leverage other advanced technologies, such as cloud computing, the Internet of Things, or big data, enabling general purpose machine learning algorithms (GPML) to manage various data (video, audio, text) and to improve the accuracy of product demand forecasting by analysing customer behaviour.

According to Maghraoui and Belghith (2019), the data shared on the internet in the last decade exceeds those of the entire history of mankind. As a result, the company that owns, analyses, and harnesses this data properly will gain differentiation advantage. According to a study by BearingPoint (2019) there are two broad categories of emerging AI technologies that help improve the CE: (1) technologies facilitating direct interactions with customers; (2) technologies allowing for a better treatment of customer demands and expectations. Semantic recognition technologies or so-called chatbots improve the CE by providing 24/7 services while offering the great advantage of reducing the volume of low added value contacts involving human workers. These technologies are currently enjoying increasing popularity due to messaging applications. Retail companies use chatbots to align online and offline experiences. For example, in 2016 H&M was ahead of its competitors when it launched a chatbot on the Canadian messaging application Kik (Prokopiško, 2019), allowing customers to view, share and purchase products from the H&M catalogue. A personal stylist service was also provided by the chatbot, which uses photo options and asks questions about the buyer's style, creating a style profile for the customer. The supermarket chain Lidl delivered another example: the conversational chatbot Margot on Facebook Messenger, able to understand natural language and help buyers get the best product in the range of wines. It also provides users with tips on combining food with wines and tests their knowledge, generating a better customer experience.

3. Objective of the Study

- To study the concept and aspects of current Customer Relationship Management
- To explore the impact of Software Automation system in handling Customer Relationship Management by some of the eminent retails giants
- To suggest ways of improving strategies of customer relationship management leading to better Customer Retention through Customer Satisfaction.

4. Findings and Discussion

The paper is based on primary data collected in form of interview from Customer Relationship Manager of nine eminent retail chains. The sample collected is limited to the city of Bengaluru. The major research questions are stated below:

RQ1. What type of sales/marketing /service automation system does your company use?

RQ2. Is it a tailor made system or commercial software brought?

RQ3. As part of customer relationship management what are the function does it cover?

RQ4. Do you face any problem while using the software do you suggest any recommendation/ are you satisfied with the software used?

RQ5. While operating the software if you face any technical glitch what are you supposed to do?

The interpretation of the data collected is represented in form of a table below:

Name of the Retail outlet	Software Used	Tailor Made /Commercial	Functions covered by Automation Software	Problem faced if any?	Overcoming the glitch
Big Market	ZOHO CRM	Commercial	• Sales Management • Customer database Mgt. • Customer Support	Not much problem faced.	If any technical glitch arises the technical support updates the software to resolute the problem
Showoff	1. FOCUS CRM & Smart Retails (for Customer Database Mgt) 2. Quicken Premier 2019 (for Customer portfolio Management)	All three are Commercial	• Sales forecast and customer trends report generation. • Customer behaviour and campaign generation • Tracking Prospects • Anytime Access through CHAT BOTS • Automatic Call • Self Service Customer portal	Not much problem faced. Not much	
Titan Store (RMZ gallaria)	1. ETP (For Customer Database Mgt.) 2. ACE (For customer Experience Mgt.)	Both Commercial	• Database mgt of Customers • Tracking prospects and maintaining customer experience	Problem faced	If any glitch arises the company resolute the same within 1 or 2 hour.
Burger King (RMZ)	Oracle Based MICROS POS Sytem	Tailor made for global operations	• Database mgt. • Real time reporting • Fast issue resolution	Insecure as the system is used globally and if it crashes the impact would be immense	Insecure as the system is used globally and if it crashes the impact would be immense
D Mart (Yelahank a)	POS retail software	Tailor made developed by Yash System (Nagpur)	• Inventory control and Mgt • Billing and accounts		No CRM operation really implemented by the software, not even database mgt is done effectively
Dominoes (Hebbal)	Aazal	Customised current version 5.1	• Database mgt. • Real time reporting • Fast issue resolution	Not Much problem faced.	If any glitch occurs the front desk operators are trained to handle the situation, if the problem persists they report for technical support
Levis Strauss (RMZ)	Raymark	Customised and tailor made	• Point of Sale Merchandising • Mobile Retail • Electronic Kiosk Mgt. • E-Mail and SMS automation	Not much problem of technical glitch faced client mgt.	Helps in increasing and predicting sales, increased operational efficiencies and increased customer loyalty

Reliance Smart (Orion)	RPOS (Rug Plant Operational software)	Commercial	• Database Mgt. • Mobile compatibility • Forecasting Customer trends	Not Much problem faced.	
Mc Donalds (UB city)	Posiflex Software (POS software)	Commercial developed POS by Logic ERP Sol. Pvt Ltd	• Data Mgt. • Real time reporting • Fast issue resolution		Absence of security as globally used and if crashes down the impact would be immense.

Discussion

With the tabulation and interpretation of the above dataset it can be interpreted that commercial software carry a basic insecurity of crashing down specially if the same automation software is used by the company globally, but the same problem can be handled faster if it is tailor-made for the Organisation as the resolution time is faster.

Suggestions and Recommendations

- Use of Tailor made Automation Software tend to be more beneficial and have faster resolution impact compared to commercial ones.
- Many retail organisations although are using the software for database management but functions are not optimally used for creative strategies to retain and engage customers bending them towards loyalty.
- Although most of the retail organisations have membership options and the same is saved for future use but is not used optimally to be actually beneficial for the consumers. For example sometimes SMS and Email services used by the retail outlets does not turn out to be actually beneficial when it comes to conversion of the redemption points which sometimes decreases the customer loyalty towards the brand and consumers start looking for other options.
- Affiliate Marketing platforms are utilising the artificial intelligence functions more effectively than the physical showrooms when it comes to strategy like customer engagement, customer retention, or building customer loyalty. For example cash back points, gaming options, virtual scratch cards, instant discounts etc. which is thereby drawing more consumers towards the digital platform than the physical showroom.
- Physical showroom have the advantage of tangible feel and neuro-response of the products for the customers, while digital platform have the advantage of doorstep service, therefore physical showrooms should work on better strategies for customer retention through developing customer experience and the overall ambience and feel of shopping for the consumers.

Conclusion

It can be concluded with the above study that indeed use of Automation Software is not only a mandate for today's contemporary Retail industry but also helps in building strategies which earlier had the loop hole of human error. Sales forecasting, understanding Customer trends, market analysis etc. have become auto-generated with the help of these software and use of Artificial intelligence. Keeping the customer engaged through AI generated games, redemption points, membership types and database management of customers have become much easier and cost effective with the help of these software.

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A Framework for Disease Prediction Based on Symptoms using Big Data Analytics

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Abstract

The data is being collected from various sources in the world which belong to the Healthcare sector and is processed called Healthcare data management. The huge amount of healthcare data must be processed by efficient tools and methods to create value. In the technical market many BI is available to handle structured data only. But the unstructured data is also being generated which can be used to give valuable insights to improve the quality in healthcare. For understanding the patient needs, there is a need to collect structured and unstructured data from various stakeholders. Then the analysts get the whole idea about the patient's needs based on symptoms and able to give precision-driven care and treatment. The final treatment depends on the patient's present condition and earlier treatment which increases the perfectness in the treatment. This paper the consideration of 400 symptoms and 147 diseases. It analysis the performance of the machine learning algorithms including Decision-tree, Randomforest, Naïve Bayes and the proposed algorithm.

Keywords: Disease, Symptom, Decisiontree, Randomforest, Naïve Bayes.

1. INTRODUCTION

Big data shows its significance in every field in the world including healthcare industry. It changes the way to handle the patients and doctors with care. From more number of sample data, can expect more accurate insights for healthcare industry. Like many industries, healthcare industry is a framework which contains heterogeneous sectors are complex to handle with high accuracy, where the patients demanding better care with less price. Day by day, new technologies are being included to the healthcare industry, where the big data analytics plays a vital role for giving effective business insights to the hospitals as well as patients.

In the technical world, data analysis plays an important role in every field in the world where the data volume is so limited. But today, the world is in big data era. The existing statistics says that the data analytics is very important in near future for healthcare industry and it becoming very crucial in clinical, operational and financial sectors.

In digital era, a very large amount of data is required for the healthcare industry. Now a days, many attackers are being tried to mine the sensitive data and release it to public domain. So data privacy plays a vital role in healthcare industry. Various methods and procedures are available for security and privacy of healthcare data. The characteristics of data security are as follows:

Authentication: It is the process of recognizing the user's identity. It checks the given credentials within an authentication server.

Encryption: It is the process to prevent unauthorized access of sensitive data. So the healthcare industry tries to provide confidentiality to the patient health records and it also provide privacy and security to the healthcare organization data.

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Data Masking: It is the process to replaces the data which belongs to patient disease with an unidentifiable value. The data masking is one of the most popular approach to live data anonymization.

Access Control: It is the process of allocation of permission for accesses various files based on the need.

The collected data can potentially be used by the Govt. and public organizations create or improve policies, procedures, and trainings. Overall, the project has the potential to heighten awareness for the need to give best treatment in any healthcare environment.

Most of the patients are illiterates and those are not familiar precision treatment. So majority of people approaching private health care centers which are not able to store the details of patients and their diseases. So there is a need to organize health camps which educates and sensitize the community. Thisframework explains about diagnosis and various types of health hazards.

The objectives of the proposed algorithm are as follows:

- To map high-risk areas for disease prevention
- To devise the framework for sharing Electronic Health Records (EHRs) via secure information systems
- To devise dynamic descriptive decision tool for Real-Time Alerting to design security enhanced features
- Telemedicine – It is a process to provide the customized treatment for each patient for avoiding re-admission in hospital again and again.

2. LITERATURE SURVEY

The framework (Prableen Kaur et al., 2018) has been proposed for healthcare system, has four layers. The advantages of this framework are data optimization and data security. It is based on distributed model and enhances the performance of the system by data and storage optimization.

The data processing concept (Sunil Kumar et al., 2019) has been explained. The healthcare data is being generated and coming from various sources in the form of EHRs, genome database, text and imagery unstructured data, clinical reports, sources belongs to Govt. sector, lab reports from medical centres and pharmacies and health insurance companies. This data can be handled by HADOOP framework.

Fang et al. (2016) proposed a framework titled "Health informatics processing pipeline framework" which consists of data capturing, storing, analysing, searching and decision support. It offers dynamic services to the patients through mobile devices and sensor networks. Legaz Garca et al. (2016) proposed a framework based on OWL. It gathers patient data (EHR) and utilized for data exploration.

Sakr and Elgammal (2016) proposed a method that integrates sensors, cloud, IoT and Big data analytics. It is able to handle patient profile analytics, population management etc. But not able to handle complex data sources such as images and streams. Pramanik et al. (2017) proposed a layered framework on healthcare system. This framework yields useful smart system services.

Dencelin and Ramkumar (2016) proposed a framework for analysing big data with the help of Apache Spark. It applies machine learning algorithms using different set of input features and network parameters. D.W. Bates et al.(2014), Big data analytics can help early disease detection, deviation from healthy state and detection of fraud. It also helps in getting accurate predictions, cost-reduction in healthcare maintenance and it provides precision good health.

The framework which contains layers has been proposed for healthcare system by Raghupathi and Raghupathi (2014). The data source layer handles internal and external data sources for healthcare system. The transformation layer for transformation and loading the data. The analytics layer for querying, reporting and processing. Theatrically these concepts are good enough.

The role of stakeholders in the framework for disease prevention are as follows:

Patients

Expecting customized healthcare service is very important for patient community. The patient community always tries to check the disease symptoms, side effects, experts' doctors, good hospitals, drug information etc. They also tries to follow the telemedicine when not able to go to hospital directly. The patient community always tries to know their health condition in every minutes by wearable devices.

Medical Practitioners

During diagnosis and treatment, massive amount of data is being generated like clinical services, lab results, medical images and sensor data. The data integration from various wearable devices, provides significant benefits which enhances the customized services to the patients.

Hospital Operators

Optimized facilities can be provided to the patients based on the locality and economical condition of the population in that locality. The big data analytics gives the exact count like how many number of staff are required based on the number of patients in the hospital.

Pharma and Clinical Researchers

The huge amount of big data which is being collected from various sources from healthcare industry is very useful to understand the biological and drug process with the help of predictive models. The information like drug recommended by a physician, opinion from patients on various drugs and its usage, sales history from drug shops etc.

Health Insurers

The big data analytics gives the information about the frequently occurring diseases. The insurance companies can introduce novel health plans with minimal premium cost. It recommends various plans to the customers based on the diseases.

After data collection, predictions can be done using machine learning algorithms. For healthcare industry data, two types of prediction algorithms are required. Those algorithms are supervised and un-supervised.

Decision tree is very simple for gaining accurate and fast result, but the tree construction takes lot of time. It assigns class label to each patient for solving various problems. Random-Forest selects the most effective answer. It's appropriate for big knowledge bases and offers correct results by estimating missing data.Naive Bayes is the most simple algorithm that you can apply to your data. As the name suggests, Naive Bayesian classifier is based on Bayes' theorem with the independence assumptions between predictors.

3. METHODOLOGY

Data-Collection

The data can be collected from various repositories and store the entire data in Hadoop Distributed File System (HDFS). The data can be collected throughsurveys and questionnaires, focus groups, interviews, and observations and progress tracking.

Sources of Data

Data can be collected from different sources like hospitals, medical practitioners, patient health history, surveys, medical bills etc.

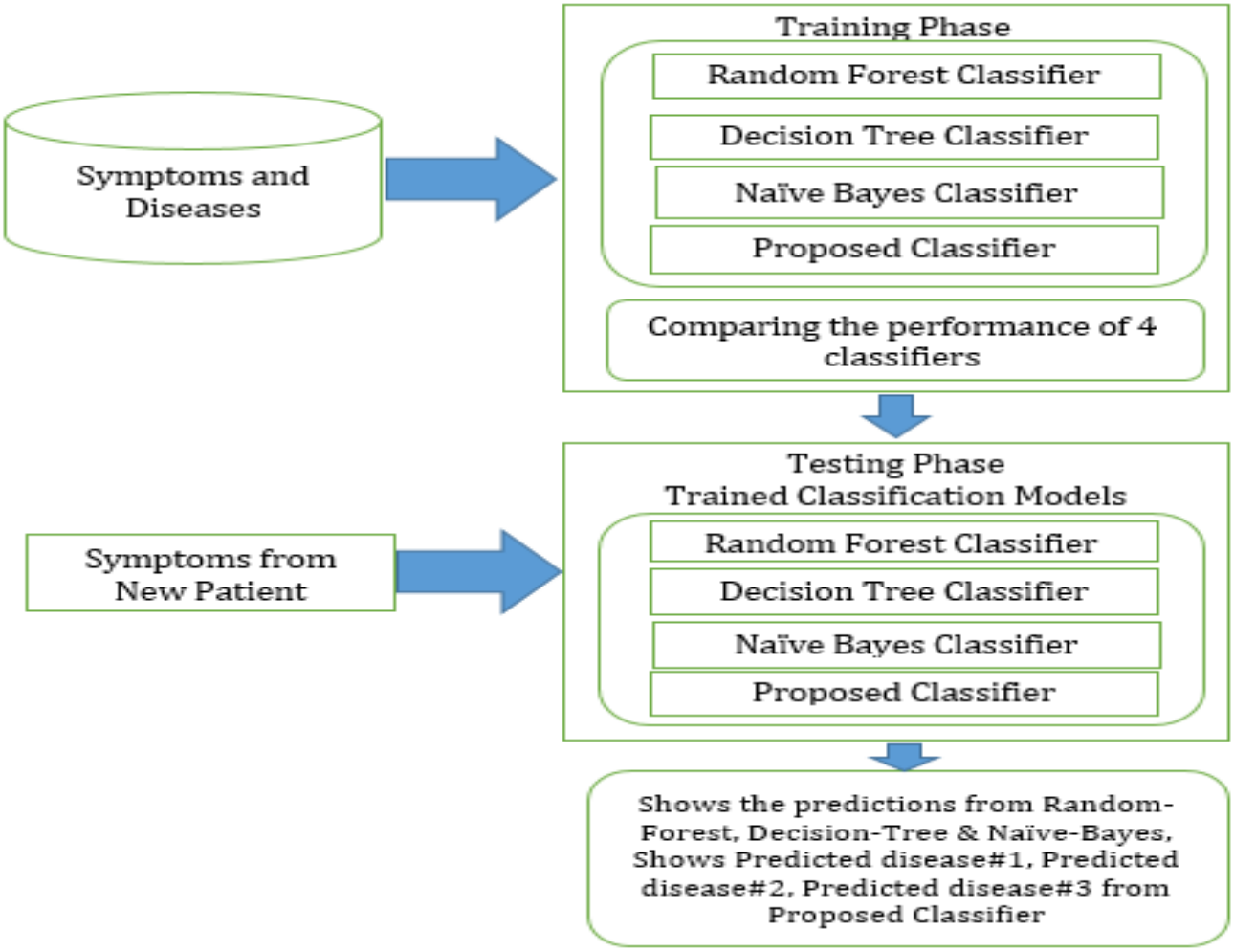
Patient Medical Records: The health history of the patient and diagnostics report can maintained in a single document called medical record or Electronic Health Records (EHRs) (Objective-3). It is readily available to both the patient and hospitals through electronic medical records.

Patient Surveys: This is the process for gathering the data from the various types of patients about their diseases, medical reports, treatment procedure, type of doctor, cost of the treatment, effect of the treatment, billing system etc.

Comments from Individual Patients: Today social networking websites plays a vital role for gathering the opinion from various types of patients in healthcare industry. It gathers the comments from patients informally rather than by prepared questionnaire.

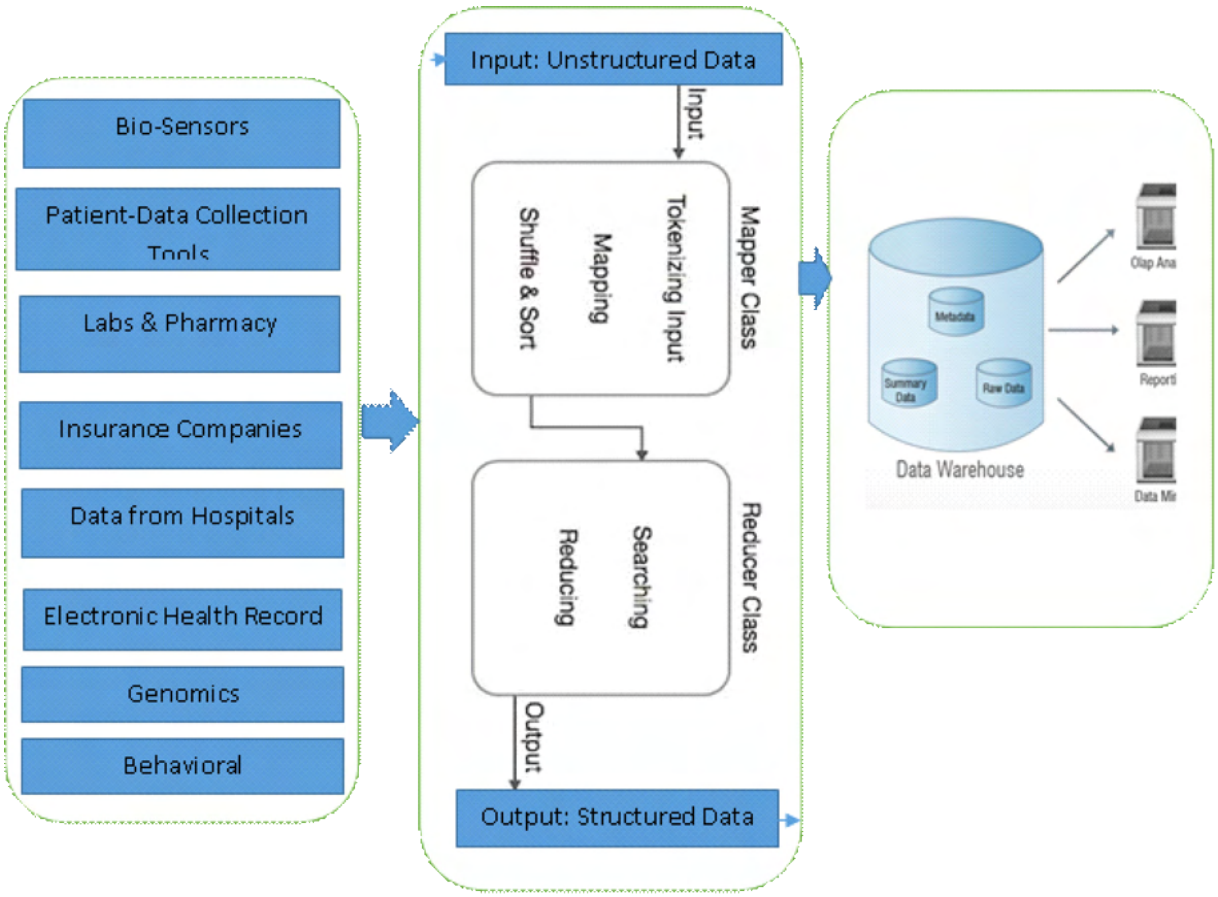
Standardized Clinical Data: The detailed information about each patient can be gathered from clinical and nursing homes, diagnostics centers and health agencies.

This concept was implemented through Python programming language and machine learning algorithms. The list of symptoms and diseases are stored in the form of dataset. The dataset contains 400 symptoms and 147 diseases which belongs various categories of diseases. Usually the user can enter the list of symptoms in the system. Then the system will finds the possible diseases as predictor-1, predictor-2 and predictor-3. The functionality of the proposed system is as follows:



Method of Processing and Analysis

The data for healthcare domain is being generated from various internal and external sources in the world. The data can be gathered and processed in the following:



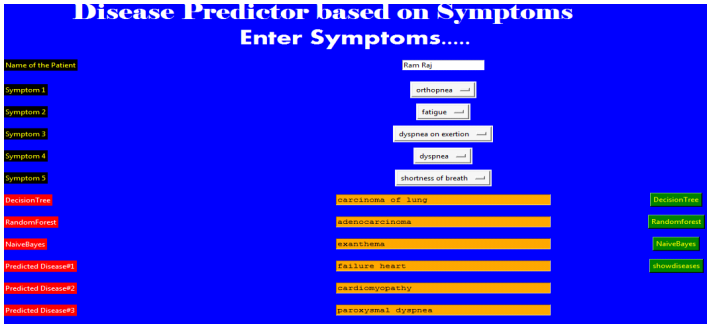
- Web and social media data: The data from the social networking websites like Facebook, Twitter, LinkedIn, health plan websites and various apps.
- Machine to machine data: Most of the unstructured data is being generated from sensors, meters and wearable devices.
- Big transaction data: Patient join report and discharge reports, medical bills, health care claims, medical images are available in semi-structured and un-structured formats only
- Biometric data: Finger prints, genetics, handwriting, retinal scans, blood pressures, blood sugar, pulse and other personal details of each patient related to his body.
- Clinical data: semi-structured and unstructured data such as EMRs, physician's prescription, email, telemedicine details etc.

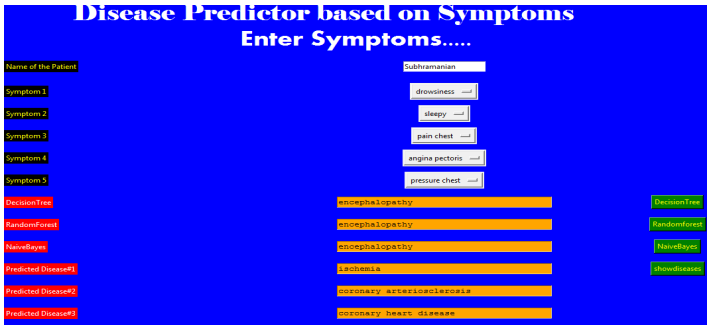
After collecting the raw data, it can be stored in a data warehouse. Then the big data analytics process the entire data and all types of data. Then it handles various queries, it generates reports, OLAP and data mining. In big data era, many techniques and methods have been developed for aggregate, manipulate, analyze and visualize the healthcare data.

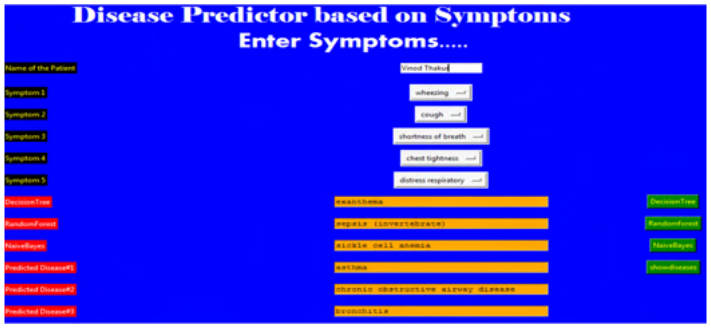
The healthcare big data can be handled by open-source data processing platform called HADOOP from Apache. Hadoop is based on horizontal scalability and is able to process extremely large amounts of data by large number of clusters of nodes, each node solve some part of the problem, integrates them for the final result. This project can handles the issues related to healthcare industry including ownership, privacy, security and standards.

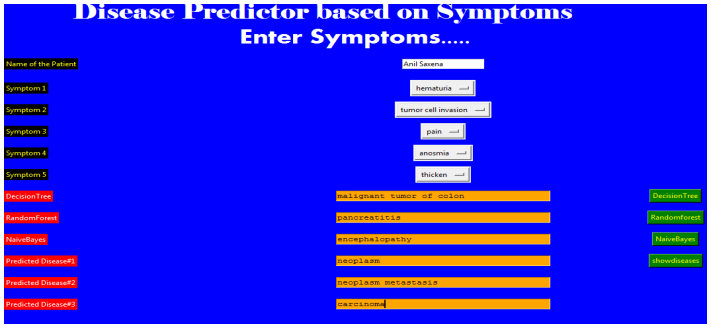
4. RESULTS AND DISCUSSION

The framework accepts the username and list of five symptoms. Then it applied Decision-Tree, Random-Forest and Naïve-bayes classifiers on training and testing data. Finally it gives predictions. Similarly the proposed algorithm also works on training and testing data, finally it gives 3 predictions of diseases based on the given symptoms as shown in the following figures:









The following table Table-1 shows the list of symptoms from the patient:

Table 1: List of symptoms given by the patient

S.No.	SYMPTOMS				
	1	2	3	4	5
Input#1	orthopnea	fatigue	dyspnea on exertion	dyspnea	shortness of breath
Input#2	drowsiness	sleepy	pain chest	angina pectoris	pressure chest
Input#3	Wheezing	Cough	Shortness of breath	Chest tightness	Distress respiratory
Input#4	Hematuria	tumor cell invasion	pain	anosmia	thicken

The above symptoms taken the machine learning classifiers as well as the proposed algorithm. Finally it predicts and shows the possible diseases based on the given symptoms. The final results as shown in the following Table-2.

Table 2: List of predictions given by Decision-Tree, Random-Forest, Naïve-Bayes and proposed algorithm

S.No.	PREDICTIONS					
	Decision Tree	Random Forest	Naïve Bayes	Proposed Classifier		
				1	2	3
Input#1	carcinoma of lung	adenocarcinoma	exanthema	failure heart	cardiomyopathy	paroxysmal dyspnea
Input#2	encephalopathy	encephalopathy	encephalopathy	Ischemia	coronary arteriosclerosis	coronary heart disease
Input#3	Exanthema	Sepsis (invertebrate)	Sickle cell anemia	Asthma	Chronic obstructive airway disease	bronchitis
Input#4	malignant tumor of colon	pancreatitis	encephalopathy	neoplasm	neoplasm metastasis	carcinoma

After giving the predictions, the accuracy has been calculated and shown in Table-3.

Table 3: Accuracy of Decision-Tree, Random-Forest, Naïve-Bayes and proposed algorithm

S.No.	Decision Tree	Random Forest	Naïve Bayes	Proposed Algorithm
Input#1	0.8911564	0.9047619	0.9047619	0.976
Input#2	0.9047619	0.9047619	0.9047619	0.984
Input#3	0.8911564	0.9047619	0.9047619	0.986
Input#4	0.9047619	0.9047619	0.9047619	0.934

Among Decision-Tree, Random-Forest, Naïve-Bayes and proposed algorithm, the accuracy is best in the proposed algorithm comparatively Decision-Tree, Random-Forest, Naïve-Bayes.

Benefits

The outcome of this paper is one type of software tool only. It collects and maintains very huge amount of data from various sources in the world related to health. It generates various types of reports and insights which gives precision treatment for the patients. The following are the expected benefits from this project:

- Medication is error-free
- Identification of high-risk patients easily
- It reduces hospital visits frequently
- It reduces patient waiting time in hospitals

Limitations and Future Enhancements

Data Aggregation Challenges: The data related to healthcare system is being generated from various sources in the world like hospitals, administrative offices, Government offices, Private medical practitioners, Laboratories etc. Pulling it together and create a big data set is a challenge.

Polity and Process Challenge: After getting big data set, there is a need to protect it. This project can provide the protection through access control, authentication, encryption and decryption etc. But some part of the data is in the hands of cloud providers which are 3rd party vendors. So privacy and protection may be one of the challenge.

Management and Administration: It is one of the upcoming technology for the staff in healthcare industry. Again there is a need to recruit new IT experts for using HADOOP framework or need to give training to the existing staff. It increases the cost to the hospital authorities.

5. CONCLUSION

Each country taking more care about human health issues in today's world. Always WHO used to give so many suggestions for preventions of many epidemics or diseases. Today the entire world is giving more importance to identification and prevention of many diseases based on the various symptoms from patients. In Bigdata era, huge amount of data is being generated from various sources in the world. So Bigdata analytics plays an important role for getting predictions in health-care industry. The health-care industry is in a position to predict the disease based on given symptoms and it will provide the suggestions healing of diseases. It reduces the patients to rejoin in the hospitals unnecessary. Physicians also get many suggestions about the good treatment for the patients. It provides the exact treatment for the patients and will provide the exact medicine. Automatically it eliminates the side-effects for the patients.Finally it helps the patients, Doctors, Hospitals.

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Youth Awareness Towards Cyber Security: An Exploratory Study

Dr. Seema Girdhar*, Rajat Saxena & Ankshit Singhal*****

Abstract

Earlier, there was a time when any information was sent via letters, telegrams, etc. Now situation has changed and people reliance on these modes have reduced tremendously. Development today has taken place of invention of telephone, wireless technology to communicate with individual and masses. In today's technical globe many most up-to-date technologies are changing the face of society. While doing this exchange, it is compulsory that your information need to be safe while going through many processes and stages. This implies the main function of cyber security.

Cyber Security plays a very vital role in the field of information technology .Securing the data has become one of the biggest challenges in the present era. When ever we sense about the cyber security the first thing that comes to our mind is cyber crimes which is increasing day by day. All the governments and non governmentcompanies are taking many measures in order to protect their information fromcyber crimes. Besides various measures cyber security is still a big challenge.

Internet has brought the whole world in our access and made things more accessible which were beyond imaginations just a decade ago. Today Internet is used not just in our personal lives but also is well-accepted and highly trusted channel for doing businesses all over the world. Internet is entering into our lives at a very fast pace, today it is becoming impossible for one to keep away from these mode. It is becoming thoughtless not to accept it.

An internet is spreading across the world it is attracting threats from all the directions, be it is your PC, mobile phones, printers etc. Any device connected to a network will always be prone to threats from cyberspace. Cybercrime has been a burning topic across the world and no country has addressed it on a lighter note, no one has completely succeeded in making their systems and networks unbeatable over the skills of hackers.

In the paper researcher has tried to study on awareness level of youth on cyber security. For thisboth close and open ended questionnaires are framed in order to collect the information and analyze the awareness level of youth on cyber security. Youth of capital city Delhi are targeted for gathering the information on cyber security. Various secondary sources like news papers, magazine, journals, internet etc are used to review the literature.

Keywords: Cyber Security, Internet, Youth, Awareness, Cyber Crime.

INTRODUCTION

Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access. It is the state or process of protecting and recovering networks, devices and programs from any type of cyberattacks. Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks

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Cyber attacks are evolving danger to organizations, employees and to a common man. They may be designed to access or destroy sensitive data or extort money. They can, effect, destroy businesses and damage your financial and personal lives especially if you're the victim of cyber attack.Network security is the practice of securing a computer network from stalkers, whether targeted attackers or opportunistic malware.

Information security protects the integrity and privacy of data, both in storage and in transit. *Operational security* includes the processes and decisions for handling and protecting data.

In the U.S., the National Institute of Standards and Technology (NIST) has created a cyber-security framework. To combat the proliferation of malicious code and aid in early detection, the framework recommends continuous, real-time monitoring of all electronic resources.Today, breaches are increasing at a rapid pace despite record levels of security spending. Global organizations are turning to human-centric cybersecurity, a new approach that places focus on changes in user behavior instead of an exponential number of growing threats.

Why is cyber security important?

We sleep in a digital world that understands that our personal information is additionally exposed than ever before. We tend to sleep in a world that is networked along, from web banking to government infrastructure, now a days information is kept on computers and different devices.

Cyber-attack is currently a global concern and has given several considerations that hacks and different security attacks may endanger the world economy. As the volume of cyber-attacks grows, corporations and organizations, particularly people who deal with information are compelled to take steps to shield their sensitive business and private information's. "What care we tend to take in an attempt to safeguard ourselves against cyber threat?" Well, in this 3 main aspects we tend to try i.e.,

- Unauthorised Access
- Unauthorised Deletion
- Unauthorised Modification

Today's interconnected world makes everybody a lot of prone to cyber-attacks. As anyone finds out challenging to safeguard their personal privacy on-line.

YOUTH AWARENESS TOWARDS CYBER SECURITY ?

In India youth today are biggest market of Internet. The internet isn't a secure place attributable to restricted laws. The unconsciousness of users concerning threats may become challenging for them. Youth need to establish a culture of awareness before getting into the system of cyber. Therefore, tutorial establishments ought to have interaction within the method to reinforce cyber security awareness (CSA) among students. So as to speak effectively on CSA, the medium of communication ought to be acquainted to the user and therefore the user needs to have interaction with this medium on a daily basis. Earlier data reveals that youth have interaction with social media platforms, minimum of once per week with Facebook and YouTube the foremost common. Now this is not the scenario every youth is connected on one or the other platform throughout.So as to safeguard oneself, a culture of security ought to be established. Security awareness isn't training; it's solely to lure the eye to security. Awareness is that the place to begin so as to cut back the quantity of threats. To protect youths from cyber threats the most important thing is awareness towards cybersecurityand along with this is acceptability.

TYPES OF CYBERSECURITY THREATS

The process of maintaining with new technologies, security trends and threat intelligence could be a difficult task. However, it is necessary so as to shield info and alternative assets from cyber threats, that take several forms. Cyber threats will include:

- Malware could be a kind of malicious code, that any file or program will be accustomed hurt a individual, like worms, pc viruses, Trojan horses and spyware.
- Ransomware attacks are a kind of malware that involves Associate in Nursing offender protection the victim's computing system

files usually through coding and hard-to-please a payment to decode and unlock them.

- Social engineering is Associate in Nursing attack that depends on human interaction to trick users into breaking security procedures to achieve sensitive info that's usually protected.
- Phishing could be a kind of fraud wherever fallacious emails are sent that match emails from estimable sources; but, the intention of those emails is to steal sensitive knowledge, like MasterCard or login info.

It is becoming very challenging to accept cybersecurity and to stay up with the dynamics of security risks. Awareness amongst youth towards cyber security is the key to safeguard against cyber threats.

RESEARCH METHODOLOGY

Research playsan important role in academic and industrial world, it is a contribution to the existing store of knowledge. Research is a way to systematically solve the research problem. It is a science and an art of studying how a research is done. In the present paper researcher has explained the methods and steps adopted for achieving the purpose of the study and to arrive at a meaningful conclusion. The Exploratory Research Design has been adopted by focusing on burning issue of cyber security in Internet world.

Sampling Plan

The present study was conducted in Delhi region focusing on educated general public specially youth who all could understand the concept of cyber security.

Sample Size & Method

The number of observations taken from a population through which inferences of a specific population are made.In total, around 150 respondents were contacted for gathering data.Only 102 filled questionnaire. For the study, Non Probabilistic sampling method has been used and in that convenience and judgmental sampling approach was adopted.

Sample Units

A sample Unit is a part of the target population carefully selected to represent that population. Educated public with knowledge of the topic has been selected for the study. Most of the respondents are students and working people. The study was confined to Delhi city and sample has been chosen from there.

Types of Data

Data are the base providing information which helps in research for the study. Data collection comprises of primary and secondary data for the study. An open ended and close ended questionnaire was designed to collect the primary data from the respondents. The questionnaire consists of various questions focusing on the issue of youth awareness towards cyber security. The survey consisted of close ended questions on a 5 point Likert Scale. Sample of respondents are person who were the user of internet platform in one or the other way.The secondary data was collected from related journals, publications and from web-sites and few popular search engines.

Data Analysis and Interpretation

In order to evaluate the feasibility of the research proposal, a survey was conducted through distribution of questionnaires to a group of 150 respondents were only 102 respondents filled questionnaire. Based on the information provided by the respondents, the questionnaires were analyzed. The data collected through the questionnaire is classified and tabulated according to the need of the study. Tables and charts have been made for the systematic presentation of collected data. Percentage have been used for the analysis purpose.

LITERATURE REVIEW

A literature review is related to search and evaluation of the accessible literature in our chosen topic area. It relates to the state of the art with respect to the subject or topic we are writing about. Literature review is secondary sources and do not shot new or original experimental work. Most often associated with academic-oriented literature, such reviews starts

in academic journals and are not to be jumbled with book reviews, which may also appear in the same publication. Literature reviews is the foundation for research in nearly every academic field. As per narrow-scope literature review may be embracedof part of peer-reviewed journal article offering new research, helping to situate the existing study within the body of the connected literature and to deliver context for the reader. In such a case, the review usually precedes the methodology.

TITLE	AUTHOR	YEAR	CONCLUSION
A study of cyber security challenges and itsemerging trends on latest technologies	G.Nikhita Reddy G.J.Ugander Reddy	Feb 2014	Researcher here concluded that Computer security is a huge topic that is becoming more and more important because the world is becoming highly interconnected, with networksbeing used to carry out serious transactions. Cyber crime continues to deviate down differentpaths with each New Year that passes and sodoes the security of the information. The modernand disruptive technologies, along with the novelcyber tools and threats that come to light eachday, are challenging organizations with not onlyhow they secure their infrastructure, but howthey require new platforms and intelligence todo so. There is no seamless solution for cybercrimes but we should try our level best tolessen them in order to have a safe andsecure future in cyber space.
A Literature Review on Cyber Security in Indian Context	Shweta Ghate and Pragyesh Kumar Agrawal	20th October, 2017	Researcher can conclude from this presentstudy that with increasing rate of cyber crimesmorerevealing techniques alongwith educating the users on beingsafe online needs to be established with complete guidancetoidentify about the pros and cons of the web before enteringintoit. One of the biggest security worries today is the insiderthreat and other major security concern is lack of consistencyin enforcing “acceptable use” policy. Concrete measures need to be foundout in order to trail electronics evidence andpreserve them so thatones systems are safe from cyber interferences.
Cyber Crime in India: An Introspection	Dr. T. Sadashivam	March -2020	Author here concluded that cyber crime is increasing day by day in all the countriesincluding India. Biggest challenge here relates to cyber crime being its vibrantnaturebecause of the ongoing evolution of digital technology. As a result, novelcyber crime methods and techniquesare coming into practice. However, the main stakeholder in our society i.e. government is taking number of initiatives in order to overcome cyber crime.
Cyber Security Infrastr-ucture in India: A Study	M.M Chaturvedi, M.P Gupta and Jaijit Bhattacharya	January 2009	Researcher in the study concluded that we have manylessons from US initiative to secure our cyber system, while planning and implementing India’s ICTinfrastructure. Natural or insurgency/ terrorist induced disaster increases pressure on available ICT systemsexponentially to facilitate coordination between various agencies like fire brigade, medical services, police,media and civil administration. It is proposed that the existing and planned ICT infrastructure of the nation,both in public and private domain be analyzed by a group of experts under aegis of NDMA to suggestsuitable operational arrangements to minimize their vulnerability to perceived attacks by inimical elementsand natural disasters.
Cyber Security: Strategy to Security Challenges-A Review	Vaishnavi J. Deshpande, Dr. Rajeshkumar Sambhe	March 2014	Researcher here concludes that to Protect wireless devices: Personal firewalls can protectindividual devices from attacks launched via the “airconnection” or from the internet. Everyone has a different idea of what ``security” is, and what levels of risk are acceptable. The key for building asecure network is to define what security means to yourorganization. Once that has been defined, everything that goeson with the network can be evaluated with respect to thatpolicy.

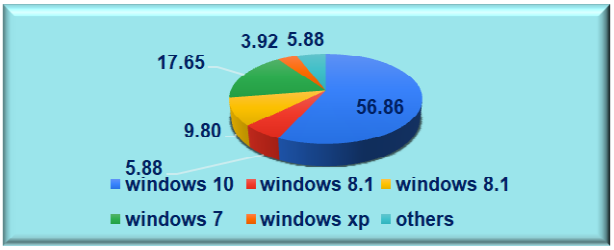
ANALSIS AND INTERPRETATION

Data analysis and interpretation is the procedure of conveying meaning to the collected information and determining the conclusions, significance and implications of the findings. It is an important and sensational step in the process of research. In all research studies, analysis follows data collection.

Our analysis states that maximum respondents use very popular frequently used device is smartphones. Operating system in pc used by maximum respondent is windows 10 and in phones operating system is android and ios, the android os is high in usage as compared to ios. Respondents however are aware of the concept of cyber security and said Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access. Cyber security may also be referred to as information technology security.

Table 1

Version of Windows installed	%
windows 10	56.86
windows 8.1	5.88
windows 8.1	9.80
windows 7	17.65
windows xp	3.92
others	5.88

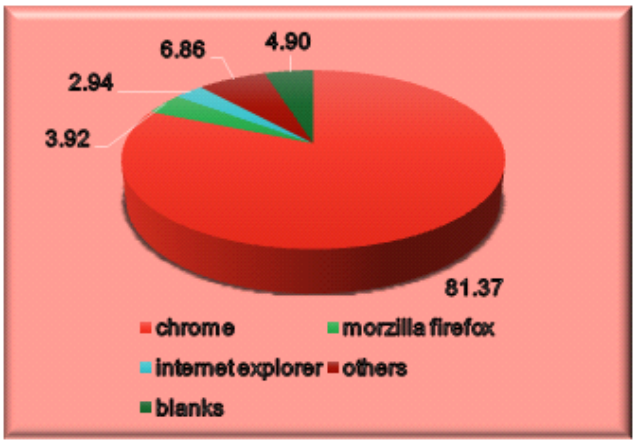


Above figure depicts that Windows 10 used by the respondents is 56.86%, Windows 8.1 contains 5.88%, Windows 8.0 contains 9.80%, Windows 7 contains 17.65%,windows XPcontains 3.92% and others contains 5.88%. The most popular version of windows installed on PC and Laptop is Windows 10.

Table 2

Web browser used	%
Chrome	81.37
Morzillafirefox	3.92
Internet explorer	2.94
Others	6.86
Blank	4.90

Graph 1

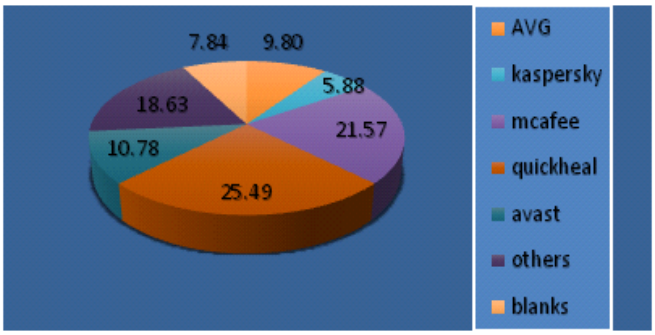


According to above graph the web browser Chrome used by the public is 81.37%,Morzillafirefox contains 3.92%, Internet explorer contains 2.94%, Others consists of 6.86% and Blank contains 4.90%. The famous Web Browser used by the respondents is Chrome.

Table 3

PC Anti virus software	%
AVG	9.80
Kaspersky	5.88
Mcafee	21.57
Quickheal	25.49
Avast	10.78
Others	18.63
Blanks	7.84

Graph 2

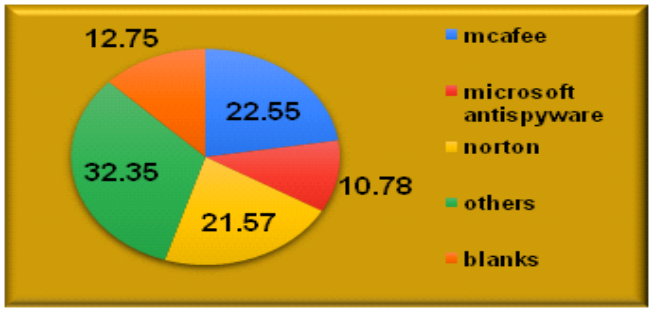


Above figure of antivirus depicts that, AVG used by respondents is 9.80%, Kaspersky contains 5.88%, Mcafee contains 21.57%, Quickheal contains 25.49%, Avast contains 10.78%, Others contains 18.63% and Blanks contains 7.84%. The most popular PC Antivirus Software used by the respondents is Quickheal.

Table 4

Phone Anti virus software	%
mcafee	22.55
microsoft antispyware	10.78
norton	21.57
others	32.35
blanks	12.75

Graph 4

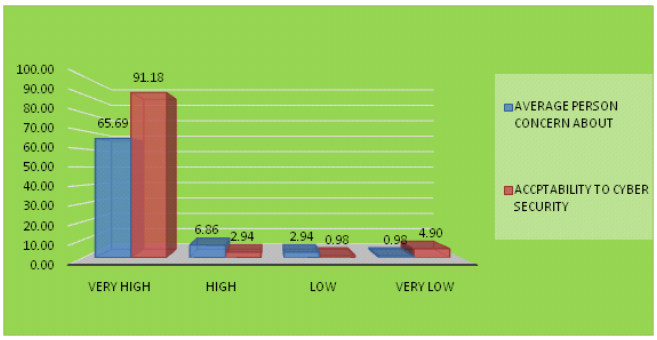


Abovegraph analysis clearly depicts that in phone Mcafee contains 22.55%,Microsoft antispyware contains 10.78%, Norton contains 21.57%, Others contains 32.35% and blanks contains 12.75%. The Phone antivirus software is used by the public according to the compatibility needs of the phone device and also customer requirements.

Table 5

SCALE	Average person concern about cyber security %	Acceptability of cyber security%
VERY HIGH	65.69	91.18
HIGH	6.86	2.94
LOW	2.94	0.98
VERY LOW	0.98	4.90

Graph 5

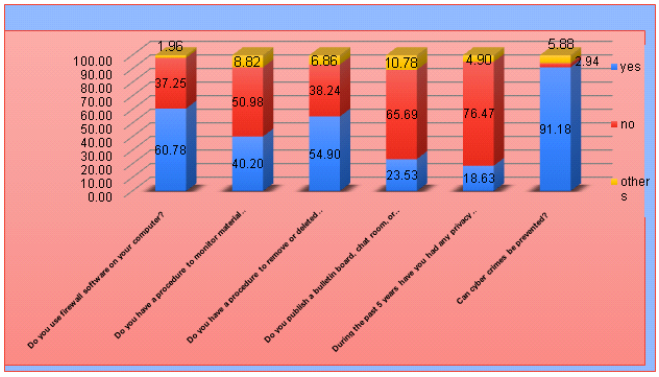


Above bar graph depicts that maximumrespondents are concerned about cyber security and at the same time to the acceptability of cyber security is also there. The comparison between these two elements explains that the percentage of concern about cyber security is very high it contains 65.69%, on the other hand the acceptability to cyber security is also very high it contains 91.18%. Thus, this creates the need and importance of cyber security in the Today's world.

Table 6

RESPONSE	Do you use firewall software on your computer? %	Do you have procedure to monitor material displayed on your website ? %	Do you have procedure to remove or delete offensive material? %	Do you publish a bulletin board, chat room or social networking on your site ? %	During past five years have you had any privacy breach incident ?%	Can cyber crime be prevented ? %
Yes	60.78	40.20	54.90	23.53	18.63	91.18
No	37.25	50.98	38.24	65.69	76.47	2.94
Others	1.96	8.82	6.86	10.78	4.90	5.88

Graph 6



Above bar graph shows that, the responses given by the respondents terms of yes or no. Various questions were asked to respondents focusing on various parameters but maximum people agreed thatcyber crime be prevented. However people agrees that cyber crime be prevented still they do not follow the procedure to prevent it. This clearly shows awareness level towards prevention is low this could be because maximum have not come across privacy breach.

FUTURE SCOPE

Cyber security is the burning issue of society not only nationally but also internationally. This problem is not only confined to youth but all the people directly or in directly related to internet use. Research can be carried on with people of different groups and categories of society. This level of research will help in better understanding the concept of cyber security awareness in Indian society.

CONCLUSION

Cyber security is a vast topic that is becoming more and more challenging in today's world asour computers, phones and other gazettes are highly interconnected with networks being used to carry out critical transactions. Cyber crime continues to diverge down different paths with each day that passes and so does the security of the information. The latest and disruptive technologies, along with the new cyber tools and threats that come to light each day, are challenging youths with not only how they can secure their personal information, but also how tokeep their financial and official information safe. There is no perfect solution for cyber crimes but we should try our level best to minimize them in order to have a safe and secure future in cyber space. The only answer to such a big challenge is awareness and alertness.

Cyber security is extremely vital and may not be unnoticed. There are additional hackers than cyber security specialists and they solely get lucky at times. With the threat being human and ever changing; seriously damaging attacks, however, don't seem to be inevitable if the proper cyber protocols arefollowed which is possible through awareness and acceptability.It is said cyber security is challenging but cyber hacking could be more challenging so youth have less challenge to face in securing data whether it is personal or professional. Little awareness on the part of youth could save the data and also helps in leaving tension free life.

Although the security awareness field is still very immature, the changing of people behaviortowards security can be achieved by using soft skills such as communication and marketing,initiatives like e-mail and posters can be used to endure a positive security culture.

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Role of Integrity and Care for in Organization

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Abstract

The purpose is to explore the Role of Integrity and care for Organization among young adults (25-35 years). The objective of this research work is to know how they incorporate integrity and love towards their organization and to what extent these are important to them for their professional growth. A culture of integrity creates a highly treasured work environment, it impact the quality of commercial governance and it provides a groundwork for solid long-term economic concert.The current conceptualization of integrity, at its core, is the combination of both, consistency in words and actions as well as the adherence to morality and one's values in these actions. Four factors are chosen to get better insight of the above topic. These are as follows: "Integrity", Love related constructs Self, Trust, Compassion. In the study integrity is considered as a dependent factor and Self, Trust and Compassion as an independent factor. Data collection was collected with the help of structured questionnaires. This research would offer an understanding of the role of integrity and love in organization based on the prevailing factors and eventual outcomes for each factor and would identify the most significant factor. The concept of Integrity and Love in the organizational culture needs to be considered as a significant factor in the overall functioning of an organization to accomplish great results that are effective and efficient workforce, which results in greater productivity and profitability.

Keywords: Love, Integrity, Self trust, Compassion, Great Place to Work, Work Environment.

I. Introduction to the Topic

Integrity is the feature to being honest and having strong moral principles, or moral uprightness. It is a personal choice to hold one's self to consistent standards. Of all the facets of character, integrity might be the most critical it builds valuable trust between people and yet also the most esoteric. Many sage leaders say, "Integrity is doing the right thing when no one is watching". There are two critical components of integrity that go beyond just doing the right thing when no one is looking (Collins & Schimidt, 1993).(Audi & Patrick, 2006) stated that integrity in its wide, sense is known as the key notion to reinforce the clearer and familiarity of any that represents the day-to-day working standards of morality. However, it may use as a substitute for some other notion like honesty which also may cause it to become less clear than the concept it replaces. While, integrity in the wide, international sense is crucial in upholding good character and moral act; but at the same time, draws to integrity in the sense of morally sound character, are not by themselves a enough guide for the specific characters traits or type of action that are the major structure of moral life both in organization and in other realms.

The role of integrity in personal and its effectiveness - Individuals that have integrity build trusting relationships with others (Goodstein, Jerry, 2000). At the corporate level will takes individual integrity to develop a consensus around shared values. As this consensus builds, and develop a culture of integrity. A culture of integrity creates a highly valued work environment; it impacts its corporate governance; and it provides a foundation for solid long-term financial performance.

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Individual Integrity- At the individual level, integrity is more than ethics, it is all about the character of the individual. It is those characteristics of an individual that are consistently considerate, compassionate, transparent, honest, and ethical. The characteristic of trust is closely associated with integrity. They are reliable and predictable in dealing with others and with issues, and they are defenders of what is fair, just, and acceptable. In the Turknett Leadership Character Model, developed by psychologist Dr. Robert Turknett, integrity is the foundation of the model, and without integrity, no leader can be successful. They notes that individual integrity will not twist facts for personal advantage, and are willing to stand up for and defend what is right, they will be careful to keep promises and they can count on to tell the truth. In their model, integrity is the foundation of leadership and it involves a careful balance between respect and responsibility (Turknett, 2005). Quigley goes on to note the critical importance of integrity and character in the workplace. Lacking trust, competencies are meaningless (Quigley, 2007).

Corporate Culture of Integrity: A culture of integrity has to start at the top and be seen in the manner and actions of the executives. The leadership of the firm must develop a consensus around mutual values. As Kouzes and Posner, 2002 point out, the development of shared values improves the work environment and productivity. High integrity in organizations are characterized as organizations that combined, productive, innovative, and transparent, with high employee morale, valued customer loyalty, and strong partnerships. They build teams and create value. Studies have shown that corporations with a culture of integrity tend to have governance systems with higher external ratings and higher quality of earnings (Kouzes and Posner, 2003). They tend to be good places to work, competitive in their markets, and offer higher, more predictable returns to investors.

Love in Organization: Is your workplace positive and loving? Does the question make you flinch? The word love is taken for the private space. It is a taboo at work. But that doesn't mean that there's no love in the workplace! Moreover, fresh research shows that employees who feel love do better. Love is being ready, willing and able to let go of your ego for the benefit of the other. Love is critical to business profitability as well as optimal employee engagement, performance and satisfaction. Research has found that Love is a foundational strength to life achievement and happiness (Palanski & Yammarino,2007). It is the unspoken language of a successful professional and personal life equation because at the root of the human experience is the need to belong. So, if you have not thought about adding Love to your management toolkit, you are missing an indispensable ingredient to your success as an employee, manager or leader not to mention in your personal life (Kouzes and Posner, 2007). The character strength of *Love* is valuing interpersonal relationships, the ability to be close to other people, caring about their wellbeing, honoring their needs, and celebrating their triumphs. It is the art of creating an environment where about the strengths of one and all is cultivated (Quigley& James, 2007).

Moreover, it is a choice to link the understanding the work**:** Gallup disclosed that as you spend time working in your area of strength, you are six times more engaged, have higher performance ratings, improve your levels of productivity, increase profitability, produce greater earnings per share for your business, and are more successful, happier and healthier. In addition, this will have you just plain Loving going into work every day. The good news is that by learning your strengths you become 7.8% more productive. What is the first step you can take to recognize your strengths (Kouzes and Posner, 2010)? Simply identify the times you have been most satisfied with your work, when you have felt as though you were being paid to do a project you Love.

Love Yourself as Leader in organization: It is ironic that as a leader you first must accept and value your abilities both your strengths and weaknesses. This Love acknowledged view of self causes you to realize that those around you are made of the same stuff. Every employee is endowed with worth and potential. Without this Love view of self, it is hard to have a Love-

view of others to guide them through the process of identifying, celebrating and unlocking their latent leadership potential. Leadership is not urging others forward without concern for their aspirations (Kouzes and Posner, 2010), wellbeing or personal needs. Rather, at its best, it engenders trust, provides support, encourages hidden potential to emerge and sets high standards. This energized; focused attitude brings about positive outcomes for both your employee's professional and personal life as well as improves the company's overall operation.

Love Your Fellow Employees: A recent Conference Board study reveals that one of the favorite aspects of going to work for 59.3% of the surveyed workers is their colleagues. Healthy relationships end conflicts (saving time as well as the emotional drain), improve collaborative outcomes, generate creative thought and increase productivity. It starts with healthy communication, respect for yourself as well as others co-workers bring to the job. The truth is that human beings are relational at the core of our nature, so human interaction is elemental to creating a productive, fulfilling work environment. When you nurture, care and support the development of your co-workers, they become more engaged and are positioned to achieve their full potential.

Love Your Customers: There is a magical Love cycle. It starts with the Love a company demonstrates toward their employees through how they treat them, the work environment they create and what they measure as important. In turn, employees Love their clients/customers with the same kind of respect, appreciation, and care they've received from their company (Quigley& James,2007).As people experience compassion and love, they feel more comfortable and have energy to create results. As a result, your clients/customers respond in kind.

Love is not rainbows and butterflies: love at work can often be tough and challenging. Love is about being comfortable with conflict and difficult conversations. Love gets expressed at multiple levels of the business system. Sometimes we have heard about it being expressed towards a colleague, sometimes within teams, sometimes within a whole company through HR practices, and sometimes outside the organization, such as with relationships with suppliers, customers and other stakeholders. We often get asked, "How do I bring love to my organization?" The great thing about love is that it is always present(Maslow,1962).Love's presence is evidenced throughout a typical day at work, often in the small interactions, which could easily be overlooked. A welcoming smile in the morning, a kind word from a colleague about your contribution to a project, concern or help when a co-worker is struggling an expression of gratitude, or a simple thank you to a stranger. Always try to find out new opportunities in your organization (Locke & Woiceshyn,1995).

Love and Integrity as a whole: It has been analyzed that the concept of integrity and love is neglected in the organization or we can say that these are the concepts that are considered to be of least importance. So this is the reason people do not feel connected with their work and their organization (Camera & Schneider,1995). So in this research work questionnaire is designed and data is collected to get better insight of these concepts with the help of various other factors like self, trust, compassion (Audi & Murpty ,2006).

II. Literature Review

Human beings are social beings and hardly ever live and work in isolation. We always plan, develop and manage our relations both consciously and unconsciously. The relations are the outcome of our actions and depend to a great extent upon our ability to manage our actions. From childhood each person acquired knowledge and experience on understanding others and how to behave in every situation in life. Later we carry forward this learning and understanding in carrying and managing relations at our workplace (Maslow, 1962). HRM is a multidisciplinary organizational function that draws theories and ideas from various fields such as management, psychology, sociology and economics. There is no best way to manage people and no manager has formulated how people can be managed effectively, because people are complex beings with complex needs. Effective HRM depends very much on the causes and conditions that an organizational setting would provide. Any Organization has three basic components, People, Purpose, and Structure

(Sutton, 2007). In 1994, a noted leader in the human resources (HR) field made the following observation: Yesterday, the company with the access most to the capital or the latest technology had the best competitive advantage. The goal of HRM is to maximize employees' contributions in order to achieve optimal productivity and effectiveness, while simultaneously obtaining individual objectives (such as having a challenging job and obtaining recognition), and societal objectives (such as legal compliance and demonstrating social responsibility).

Integrity in Organization

Integrity is not a value, integrity makes values meaningful. "Integrity is like the weather: Everyone talks about it, but no one knows what to do about it." by Stephen Carter. After creativity, integrity has been ranked the second most essential leadership quality for the next five years by CEOs, stressing the importance of integrity in decision-making and leadership. Indeed, integrity is often cited as a key leadership expectation and employees consistently demand integrity from their immediate supervisors (Sutton, 2007). Moreover, integrity itself can predict job performance, counterproductive work behaviors', and leadership across job types (Palanski & Yammarino, 2007). Despite its importance and relevance to business today, researchers and practitioners alike struggle to reach consensus about the true definition and scope of integrity in practice. Merriam-Webster defines integrity as: "a firm adherence to a code of especially moral or artistic values". Currently, there is a debate over if integrity is simply acting consistently with what you say, or if it should contain a moral and ethical element as outlined in the dictionary. Although, in its most basic sense, integrity does not contain a moral and ethical element, leading with integrity must be defined not only as consistency, but also as acting in a morally consistent matter that is congruent with your values and statements. If integrity is seen simply as consistency, the most horrid of leaders could still be defined as possessing integrity if they act consistently with their espoused values, regardless of how detrimental the values may be. Thus, leadership integrity will be elaborated as the act of being morally trustworthy, honest, true to oneself, and/or acting in accordance with what one says. Indeed, it is essential that leadership integrity definitions judge people based on the morality of the values they hold as well as whether they behave consistently with these values (Moorman, 2012). Given this understanding of integrity as consistency and morality, it can then be stated that integrity is, in fact, not a value. Integrity is much more than a value. Values, defined by Merriam-Webster as "a person's principles or standards of behavior and one's judgments of what is important in life", are essential components of successful leadership. Indeed, managerial values had been shown to strongly influence organizational behavior (Choi & Wang, 2007).

The Elements of Integrity

Integrity, an essential quality of successful leadership, has taken on many forms over the years. Here are the five main elements of leadership integrity and what they mean to you as a leader.

1) Integrity as wholeness. Integrity consists of a manager's personal values, daily actions, and basic organizational aims.
2) Integrity as consistency between words and actions. A demonstrated consistency with regards to social behavior.
3) Integrity as consistency in the face of adversity. This also includes consistency in the face of temptation and challenge.
4) Integrity as being true to oneself.
5) Integrity as morality/ethics. Acting accordance to socially acceptable behaviour, such as honesty, trustworthiness, justice and compassion.

Honesty and Integrity are important in the Workplace: In Terms, honesty and integrity are to be held in high regards being absolutely essential for success in all the areas of life including profession. Having honesty and integrity not only creates value in every communication, but it also leads to build the foundation of trust and confidence. Honesty does not just imply refusal to lie, but it does to live life with fairness and straight forwardness, whereas, integrity implies the quality of possessing and

steadfastly adhering to high moral principles. Integrity means following moral convictions and doing right things in all circumstances. It plays a vital role in the tenure of one's employment and it has a lot to do in return for it. Let's discuss as to how having honesty and integrity is important in the workplace. Before we go any further, let's discuss about the difference between the terms honesty and integrity. Honesty is the quality, condition, or characteristic of being fair, truthful and morally upright, while integrity is the quality of possessing and steadfastly adhering to high moral principles or professional standards(Collins ,& Schmidt,1993).It must be noted that the attainment of total organizational development is owing to the total organizational competencies and the total organizational competence is achieved if the employees serve the organization having honesty and integrity while working effectively and efficiently. The quality of being honest involves the employees to think in the right manner and behave with integrity (Thomas. E & Becker 1998). It thus advocates, being loyal to the owners, being punctual to the company, adhering to the rules and regulations of the company, maintaining the timings of the company and producing the results that organization expected.

Love in organization: Love as a Replacement for Fear in the Workplace. Fear is routinely used in organizations and interpersonal relationships as a source of motivation. Some research supports the use of fear to motivate employees to work and to change. However, fear has long lasting negative effects that outweigh the motivation that it produces. Love produces long lasting effects of inspiration and heart level motivation, increased creativity and effectiveness, and a release of energy (Thomas &Becker 1998). It offers holistic health and growth to individuals. Although replacing fear with love requires a paradigm shift, the effort produces an organizational environment that is more productive and more attractive to employees. The default motivator in organizations and relationships is fear. It comes naturally, is easy, and has immediate effects. It seems to fit nicely into the mechanistic view of organizations and the contractual relationship between employees and their supervisors. Many modern organizations use some sort of fear to control or motivate members. However, fear also has negative effects. Although it may produce motivation, it also undermines trust, crushes creativity and at best offers only moderate amounts of motivation. Love creates the foundation for trust, creativity, openness, and living up to one's full potential. Love has the quality to motivating from a heart level, motivating through inspiration (Thomas & Becker 1998). Where fear has crippling consequences for a mediocre boost in motivation, love produces positive results and motivates through heart level inspiration, unlocking potential that would be crushed by fear.

A tale of trust (Philia): Philia is the strength of trust that breaks the relational boundaries between Ego and Alter (Aristotle & Crisp, 2014). Philia extends its meaning beyond the affective and emotional contact that a person experiences while trusting the other it also incorporates trust towards the family and the political community, as well as trustworthy behaviour toward acquaintances and business partners (Thomas &Becker 1998).The first implication of trust for the study of organizations is portraying a kind of organization that is open to the other, that welcomes the other. Philia contributes to assimilate the newcomer, or the stranger, in the organization and to make her or him a citizen of the organization (Barthes ,1971,2009). Through 'altruism, conscientiousness, sportsmanship, and courtesy' (Organ, 1988), Philia intimately implies cultivating the practice of organizational citizenship behaviour, and nurturing its beneficial effects for organizational life and functioning (Derrida,1997). Trust reinforces the personal meaning that people assign to their organizations. By welcoming the other, people become themselves less strangers to their own organizational experience. Philia is a general, organizing principle of work-life and work practices, 'something which potentially prevails between the partners and an indeterminateof numbers and therefore gives the relation, which alone realize no inner and exclusive necessity' (Simmel,1950).

Trust, therefore, is not only one of the most fundamental judgments that can be made about another person (Ferrin, Dirks & Shah,2006) it is

also a powerful source of organizational functioning. Key components of trust are predictability, consistency and openness all elements that conflict with organizational logics of opportunism and efficiency (Tasselli & Kilduff, 2017). Hence the question: To what extent is Philia more an aspiration for communality with others than a real organizational practice? (Kant, 1997) claimed that 'Friendship is an Idea, because it is not drawn from experience, but has its seat in the understanding.' Following this logic, introduces an organizational paradox. Although aimed at empowering trust and reducing strangeness, Philia risks engendering closeness and favoritism within closely-knit cliques of trustworthy others, to the detriment of the rest of the organization (Gatewood & Carroll 1991).

'The pressures toward uniformity among group members instigate communication as a means of reducing attitude discrepancy between the communicator and other group members' (Newcomb, 1978). Because of homophile processes, organizations may become more homogeneous in norms and values but also increasingly stranger to those who do not share the same bounding characteristics and behavioural norms of other members. This paradox results in a dilemma is ultimately an ethical construct? What are the boundaries between closeness and rationality, between neutrality and favoritism? (Simmel, 1950). Interestingly, in the view of Simmel, 'objectivity does not simply involve passivity and detachment it is a particular structure composed of distance and nearness, indifference and involvement'. And he mentions the example of those Italian cities that used to 'call their judges from the outside, because no native was free from entanglement in family and party interests'. Despite those open questions, it is undeniable that people flourish in the workplace when they engage in trustworthy and positive relationships with co-workers (Colbert, Bono & Purvanova, 2016). We could even say that person uniqueness emerges from interactions with others (Gulati, Kilduff, Shipilov, & Tsai,2010). From this approach, Philia conceived as a different dimension of person personality, a system of construing by which the person relates to others, system where interpersonal closeness to others contributes to develop a whole theory of the self. Psychological research took this perspective in analyzing whether and how the individual's connection with others contributed to improve their personalities (Rogers, 1956). The others are a 'lighthouse' through which people see the outside world and can make a positive change (Kelly, 1955). Approaches to personal change based on common to the organizational experience they include coaching, empathic interaction, empowerment and even democratization of work processes, and are often adopted during leadership training or coaching programs (Farias, 2017) (Tasselli, Kilduff, & Landis, 2017), (Weiss, Bates & Luciano, 2008).

The Avoidance of Love in Organizations: Love has mostly been avoided in early and modern theorizing of organizations. The Marcusian 'great refusal' finds its roots in the foundations of the organizational discipline. The father of scientific management, Frederick Taylor (1914), traced an anti-categorical imperative, affirming, This characterization by scientific management scholars extended to classical organizational theorists, who described the 'human organism a relatively simple machine' stimulated by situational cues (March & Simon, 1958), and partly to contemporary organizational research claiming that 'context generic' cognitive abilities and personality itself represent 'the "building blocks" on which specialized expertise was developed' (Ployhart & Moliterno, 2011).

Love is passionate: Love imposes a quantum change in people's lives, such that lovers might claim, 'Love is a striking example of how little reality means to us'.'There is no love that is not an echo' (Adorno, 1951) love shapes the person as it shapes the way the person sees the context where she lives and works. On the other hand, organizational life tends to privilege authority over passion, normative over self-realization, and thus to shrink the feeling of the inner person identity. Love is neglected because it calls for a full expression of the self, something conflicting with the normative authority of organizations. Organizations constantly form macro-cultures that generate isomorphic and increase the level of inertia that employees and firms themselves experience (e.g. Abrahamson & Fombrun, 1994).

And people often display personality and value profiles similar to those of their top managers (Giberson, Resick, & Dickson, 2005).

Love is personal: Love is personal and subjective; it is the 'power to see similarity in the dissimilar' (Adorno, 1951). The Dionysian nature of love constantly changes, and suddenly changes the person who experiences it .The fire of love always burns itself out, and nothing stays the way it began.' The troubled flexibility of love contrasts with the rigidity of many aspects of organizational functioning (Hamlet,2003). Although modern organizations are intrinsically dynamic and evolving, as (Hanna ,1985) points out, 'Yet their structures, managerial styles and rewards systems actually inhibit using the inner connections that underlie creativity.'

III. Statement of Research Problem

In global environment, organizations are often confronted with the fact that today's employees' loyalty is inherently complex. No longer is the traditional notion of employees' loyalty once defined as a lifetime relationship with a particular employer appropriate in the current scenario of layoffs, mergers and talent wars. In general, employees' loyalty can be best described in terms of a process, where certain attitudes give rise to certain behaviors' (intended or actual). In the last three to four decades, there have been major changes in the industrial world. In the past, once hired, an employee believed that it was a life time job and the management expected their unstinted loyalty towards the organization. Similarly, the employees used to be devoted to their organization. This image of loyalty because of the employment has gradually changed with the advent of globalization when employees began to face restructuring, relocations of the manufacturing, and downsizing. Organizations 'broke the rules', mutual obligations are reconsidered, life time employment and devotion is no longer expected, job hopping is found to be a normal phenomenon, and people constantly striving for higher salaries or better working conditions has become a normal thing. Loyalty and trust have become more difficult to obtain and give in the work place. Employees' loyalty seems like a quality that is now becoming increasingly harder to find.

IV. Research Methodology

Research Objectives: The research aims to know how "Young Adults (25-35years)" join integrity and love towards their organization. To analyze how various factors like integrity, self, love, trust and compassion correlate with one another and to set up a relationship between them.

Research Questions: This study addresses the research question like how "Young Adults" incorporate integrity and love towards their organization. To what extent Role of Integrity and Love is important in an organization? And which is the pre-dominating factor among Integrity, Self, Trust and Compassion?

Significance of the study: The study will provide information about the perception and behaviour of young adults having different educational qualifications towards their organizations. Furthermore, it will help to decide the importance of integrity and love in the organizational culture.

Data type is Quantitative and all questions in the questionnaire are close ended as the main aim of the study is to decide whether the relationship between variables exists or not? And if it exists, to what extent they are correlated and what is the statistical equation that links those variables. Data was collected from both primary and secondary data. The research is primary and was collected through Google forms. Most questions were check-list questions in which respondents were to choose only one option. Individuals were accessed using a Likert scale. Young Adults (25-35years), working in different organizations and we check the behaviour of every individual characteristics and try to measured, understand the psychology of every respondent. Data collection was collected with the help of structured questionnaire. Data was collected from 100 respondents and there were 73 females and 27 males from different organizations, which show that this research work is, inclined more towards female employees. This research would provide an understanding of the role of integrity and love, self, trust, compassion in organization based on the prevailing factors and

eventual outcomes for each reason and would find the most significant factor. This study extends the understanding by highlighting that the concept of Integrity and Love in the organizational culture needs to be considered as an important factor in the overall functioning of an organization, to carry out great results that are effective and efficient workforce, which results in greater productivity and profitability. In this study we observed factor analysis, Regression and correlation analysis with the help of SPSS.These techniques were used to decide the factors influencing personal investment decision and the relative importance of those factors.

V. Data Analysis and Interpretation

The purpose of this study is to decide the importance of integrity and love in the organizational culture for this we have prepare a questionnaire which consisting of 4 major constructs namely Integrity, Self, Trust, Compassion. Items selected for each of the constructs were adapted from earlier studies to insure content validity. All the questions related to independent and dependent variables were surveyed on a Likert Scale ranging from 1 to 5. In this study love, self, trust,compassion are the most important factor which like the organization culture with human needs. The analytical representations are as followed:

1.Proposed Research Model:

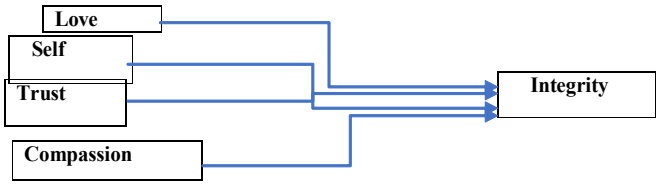

Figure No. 1: Proposed Research Model

2. Reliability test: Reliability of the measures was assessed with the use of Cronbach's alpha. Cronbach's alpha allows us to measure the reliability of the different factors. It consists of estimates of how much variation in scores of different variables is attributable to chance or random errors (Selltzm, 1976).

Table No. 1: Reliability of all variables

	Reliability Statistics	
a.	Cronbach's Alpha	N of Items
	.920	25

Interpretation: According to Table No-1 shows the overall Cronbach's alpha for the all four factors which is 0.920. The Cronbach's alpha shows that these factors are reliable and there is a good internal consistency.

2. Descriptive Statistics: The demographic Profile of the sample collected may be summarized as follows:

Table No. 2: (Gender and Educational Qualification)

S.No.	Options	Responses	Percentage
Gender ratio			
1	Female	73	73.0
2	Male	27	27.0
Educational Qualification			
1	Masters/PhDs. Level	49	49.0
2	Primary Level	0	1.0
3	Secondary Level	7	6.0
4	University Level	44	44.0

Interpretation: According to the research Table No.2 of them were females and 27% were males which indicate that the research is inclined towards female. Educational qualification of respondents are 7% were having secondary level education, 44%(44) were having University level education and, remaining 49%(49) were having Master's/PHD level education.

3.Factor Analysis: In this we are deal with four factors that are Integrity, Trust, Self and Compassion where Trust, Self and Compassion were considered to be an independent factors affecting the dependent factor which is Integrity.

Conditions for Normality:

1) Mean = Median = Mode
2) Skewness and Kurtosis lies between -1 and 1

Table 3: Normality Analysis

Statistics					
		Integrity	Self	Trust	Compassion
N	Valid	100	100	100	100
	Missing	0	0	0	0
Mean		4.4367	4.3400	4.4620	4.3033
Median		4.5000	4.4000	4.6250	4.3333
Mode		5.00	5.00	5.00	4.83
Skewness		-.814	-.602	-.969	-.634
Std. Error of Skewness		.241	.241	.241	.241
Kurtosis		.282	-.317	.238	-.124
Std. Error of Kurtosis		.478	.478	.478	.478

Interpretation: Table no. 4 satisfies the above two conditions for normality; hence the data is distributed normally.

Hypothesis Testing: Multiple Regression Techniques were applied on the data collected in order to test the hypothesis proposed in this study.

Null Hypothesis (H0): There is no relationship between independent variable (Self, Trust, Compassion) and dependent variable(Integrity).

Alternate Hypothesis (H1): There is a relationship between independent (Self, Trust, Compassion) and dependent variable(Integrity).

4. Regression: Linear regression is the most basic and commonly used predictive analysis. Regression estimates are used to describe data and to explain the relationship between one dependent variable and one or more independent variables. Here Self, Trust and Compassion are three independent variable and Integrity is dependent variable.

Table 4: Mean & Standard Deviation of Integrity, Self, Trust, Compassion

Descriptive Statistics			
	Mean	Std. Deviation	N
Integrity	4.4367	.49452	100
Self	4.3400	.63405	100
Trust	4.4620	.55733	100
Compassion	4.3033	.47400	100

5. Correlation: Correlations will measure the degree to which these variables are related. Correlations range in value from zero to one. The higher the value, the greater the level of correlation. The values can be positive or negative, signifying positive or negative correlation.

Table 5: Correlation

Correlations					
		Integrity	Self	Trust	Compassion
I	Pearson Correlation	1	.651**	.737**	.600**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
S	Pearson Correlation	.651**	1	.646**	.538**
	Sig. (2-tailed)	.000		.000	.000
	N	100	100	100	100
T	Pearson Correlation	.737**	.646**	1	.659**
	Sig. (2-tailed)	.000	.000		.000
	N	100	100	100	100
C	Pearson Correlation	.600**	.538**	.659**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).					

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation: According to table no. 5 Pearson's Bivariate Correlation give values of Integrity, Self, Trust and Compassion are ranging from 0.600 to 1, which shows that all 4 are significantly correlated. This statistic tells that how much of the variation in the value of the dependent variable is explained by regression model.

Table 6: R square & Adjusted R square Values Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.780[a]	.608	.596	.31443	.608	49.627	3	96	.000
a. Predictors: (Constant), C, S, T									
b. Dependent Variable: I									

Interpretation: The coefficient of R Square is 0.608 in the above table no.6, which indicates that all the independent variables i.e. Compassion, Self, Trust account for 60.8% of the variance in Integrity.

Result: The above table no. 6 shows that Level of significance or Sig. F Change or Sig value is less than 0.05 which means that null hypothesis is rejected.

Table 7: P-values for CoefficientsCompassion, Trust, Self

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.015	.303		3.345	.001		
	S	.212	.067	.272	3.192	.002	.561	1.784
	T	.412	.085	.464	4.854	.000	.447	2.237
	C	.154	.090	.148	1.705	.091	.544	1.837
a. Dependent Variable: I								

Interpretation: Table No.7 summarizes the results. Column B in the table gives the values of regression coefficients and the constant, which is the expected value of the dependent variable when the values of the independent variables equal zero. They represent the extent to which the value of that independent variable contributes to the value of the dependent variable. Here Self, Trust and Compassion contributes 0.212(21.2%), 0.412(41.2%), 0.154(15.4%) to Integrity.

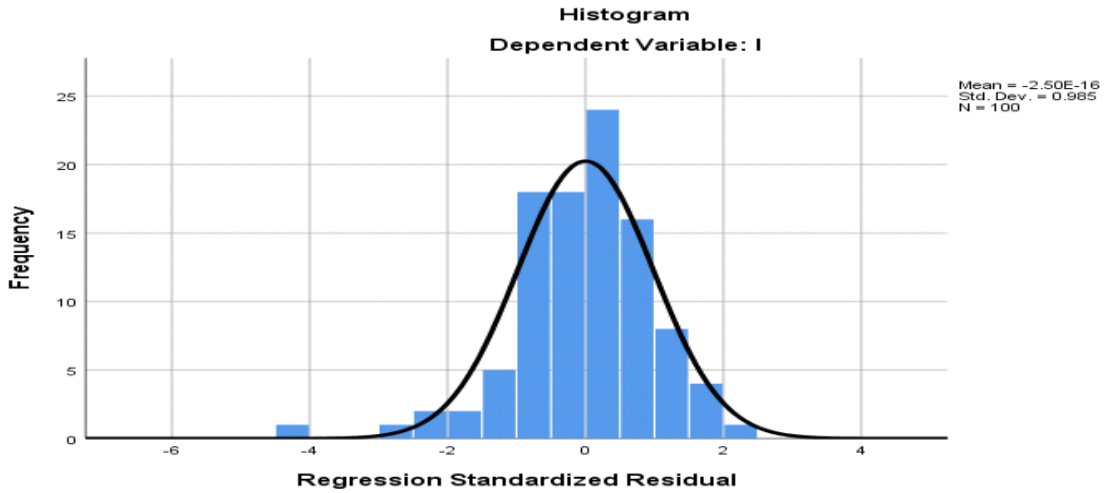

Figure No. 2: Regression Standardized Residual

Interpretation: Figure No. 2, Shows that there is a Normal distribution of data.

- **Factor Analysis**

Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy: Kaiser-Meyer-Olkin (KMO) Test is a measure of how suited your data is for **Factor Analysis**. The test measures sampling adequacy for each variable in the model **and** for the complete model. The statistic is a measure of the proportion of variance among variables that might be common variance. KMO values between 0.8 and 1 indicate the sampling is adequate.

Table 8: KMO and Bartlett's Test (measures the strength of relationship among variable)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.824
Bartlett's Test of Sphericity	Approx. Chi-Square	201.785
	Df	6
	Sig.	.000

Interpretation: By observing the values of KMO i.e. 0.824 from the above table no.8 we can conclude that this is satisfactory value for factor analysis to proceed.

Figure No. 3: Screen Plot

Interpretation: The screen plot is a graph of the Eigen value against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. By observing the above graph no.3 we conclude that curve begins to flatten between factors 3-4, that means factor 4 onwards have an Eigen value less than 1, so only 4 factors been retained.

VI. Conclusions

In this turbulent and dynamic business environment manager needs to treat his employees equally. It was believed that if you have integrity, you are honest and firm in your moral principles. Personal integrity is an inborn moral conviction to do what is right, and reject that which is wrong, regardless of the consequences that are attached to their decisions. Integrity comes in many forms, but the most important traits that are expected at the workplace are dependability, honesty, loyalty and good judgment, that needs to be taken care for. As an individual in the workplace, having integrity means: That your actions are consistent with your words, that you are trustworthy, reliable and honest, that you communicate honestly and openly, that you have right values, and behaviours that show these values and that you can admit mistakes and not be afraid to show you care. These concepts have a strong influence on workplace outcomes. The more love co-workers feel at work, the more engaged they are. It may not be surprising that those who perceive greater affection and caring from their colleagues do better, but few managers focus on building an emotional culture. That's a mistake. People who worked in a culture where they felt free to express affection, tenderness, caring, and compassion for one another were more satisfied with their jobs, committed to the organization, and accountable for their performance.

Limitation of the Study

The study suffered from a few limitations, the one of them is that it is a very broad area to analyze or explore the role of integrity and love in organization because there are a number of factors which contributes to this, and all factors cannot be incorporated in this study. Each person is unique in its own way to of behavioral values and so are their ways to deal with different situations. So to conduct a research using four factors and analyzing the results of varied respondents is quite arduous task.

Suggestions and Recommendations

The Managers must build up the concept of integrity, trust and companionship in their organization. They should merge the concept of love to smoother their functioning. Team building exercises will increase to create a cohesive environment. Managers must issue roles and responsibilities to its employees according to their potential. Jobs should be designed in such a way that employees become compassionate to do their work. According to the survey this has been observed that people are less compassionate. So this concept needs to be developed. Create awareness and educate about the "Role of Integrity and Love in organization". No one can expect true accountability for themselves, their people, or their organizations without these three values: Follow Through (do what you say you will do), Get Real (stick to the truth), Speak up (say what needs to be said) and the actions they drive. Establishing and promoting these values in your organization will increase accountability, promote trust, allow people, and create the sort of Organizational Integrity.

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The Impact of Motivational Tools on Employees Performance in an Organization

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Abstract

The motivation behind writing this paper is that employee's motivation is usually not govern by most of the managers in most of the organizations, despite knowing the fact that many studies have proven the key behind the success & Profitability of any organization is the committed manpower.

In today's world it becomes quite important to understand the impact of motivational tools on performance of the employees, as employees are a valuable asset of an organization & success of any organization largely depends upon the quality of work supplied by its manpower.

Various Dependent & Independent variables of Motivation are used to measure the extent to which they affect employees performance. Variables are like Training & Development, Job security, Rewards & Recognition & Delegation of Authority.

Different motivation theory models were also reviewed. However, the major focus was on examine the motivation theory of

- *Maslow's Hierarchy of Needs*

Furthermore, quantitative method was used in order to collect data. Firstly, a survey questionnaire comprised of 20questions prepared based on Likert Scale (strongly disagree -1 and 5 for strongly agree). Later it was sent to the sample size of 80 employees working in an organizations.

The most interesting fact is that result of this study found all the factors chosen have significant relationship with motivation & has a significant impact on performance of employee.

The purpose of this study is to investigate the impact of motivating the front line employees of retail stores in Jordan on the organizational commitment. The study is aim to appraise the existing literatures and build up the conceptual framework as well as hypotheses. The research was conducted with a convenience sample. A total of 97 respondents from C-Town retail stores and Sameh Mall have participated in this research survey. Analysis of data and the discussion is included. Data collected were analyzed by the application of statistical tests i.e., Cronbach's alpha reliability, Pearson correlation and Simple Linear Regression using SPSS 20.0. Results showed that significant impact from employee motivation of front line employees on organizational commitment (affective, normative and continuance). Some important recommendations are also derived from the study.

Keywords: Motivation, Employee Performance, Organization, Motivation Theories, Employee Motivation, Organizational Commitment, Affective Organizational Commitment, Continuance Organizational Commitment, Normative Organizational Commitment.

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INTRODUCTION

The focus of this chapter is to draw a brief layout and explain the objectives of thisStudy. The main focus of this study is on following segments, i.e.

(1) Framework of the study,

(2) Aim & objectives of the study, and

(3) Methodology used for collection of data

The first segment supportsgeneral acknowledgement of the topic. The second one clarifies the aim and objectives of the study followed by the third segment which specifies the sources used for collection of data required for the study.

Building a committed and motivated workforce is considered as the main objective, and a key to success in the competitive environment (Mohsen et al., 2004).

Organizational commitment is one of the most important work attitudes in the study of management and organizational behavior (Allen & Meyer, 2000), and it's one of the most widely-researched topics (Warsi et al.,

2009). Cho and Faerman (2010) mentioned, that organizational commitment continues to be a primary area for research in human resource management.

Meyer and Allen (1997) defined organizational commitment as a "psychological state that is concerned about how individuals feel about their organizational engagement, and the desire to remain and continue with the organization". Meyer and Allen (1987) divided into three components of commitment namely; affective, continuance and normative commitments.

Hence organizational commitment has played a crucial role in an organization in which result in high individual and organizational performance (Choong et al., 2011). Warsi et al., (2009) indicated, that the work motivation is strongly positive associated with organizational commitment.

1.1 Framework of the study

In today's competitive world, it becomes very difficult for any firm or organization to survive & grow without having a competent & dedicated manpower. The aim of every firm is to gain competitive advantage & capture/ hold more market share. In order to achieve this, it is very much importantfor an organization to clearly define the reason for its existence, and to know how to achieve it well with the use of available resources, ie, 3M's - Man, Money & Manpower.

However, managing manpowereffectively is the utmost difficult task managers are facing in today's scenario. As it becomes a very herculean task for managers to retain the productive employees as the hunt is always there to find and snatch employees from one organization to another.

The most common policy adopted by the managers to increase effectiveness of performance is motivating employees. Hence, motivation helps an organization reach its goals faster because employees tend to work towards it as a result of motivation. Age old technique of carrot and stick does not work in today's environment and managers need to revolutionize the way they motivate people and get the desired output and reward employee (Forson, 2012).

1.2 Aim & Objectives of the study

There are various factors that plays important role towards accomplishment of organizational objectives. However, manpower plays an important role among all the factors. The reason behind this is a very fact of plenty evidences, where it has been found that motivated employees contributed more towards achievement of end results as compared to employees having lack of motivation. Highly motivated employees working dedicatedly towards end results, deliver better quality of work, which ultimately results in effective company performance.

In order to recognize the signifance of motivated employees, this research is carried out with the goal to identify factors motivating employees the most:

- To understand the relevance of training and development on employee performance
- To scrutinize the impact of rewards on employee performance

- To review the influence of career growth on employee performance

1.2.1 The Importance of the study

Geomani (2012) argued, that motivation is very significant in the achievement of the growth of any organization.

Motivation is a very important part of understanding behavior (Tella, Ayeni and Popoola, 2007). The term "commitment" holds great significance in almost every sphere of our lives, and the importance of employee commitment in the workplace has been recognized all around the world since a long time (Mohsen et al., 2004). This study will provide support for administrators to have better understanding about motivation and its effect on organizational behavior and will make more information available about the study variables.

1.2.2 The problem of the study

This study is to investigate the influence of motivating the employee on the organizational commitment. It does so by investigating research questions:

Is there a significant relationship between the motivation and the organizational commitment? How far does motivation affect the organizational commitment?

Organization today lives in a very changeable environment, so it needs to change its manager's role, and expand its employee's capabilities, responsibilities and power; in order to deal with such changes (Alkhaffaf,2011).Low productivity is a problem that appears in many societies and a lot of money, energy and time is wasted, so we need to motivate, reward and stimulate employees to raise and enhance the commitment; in orderto support the productivity.

So, the current research examines the impact of motivation on the organizational Commitment.

1.3 Hypotheses

Based on the discussions presented in the literature review, the study proposed the following hypotheses:

1.3.1 Main Hypothesis

H1: Employee Motivation has significant impact on organizational commitment.

1.3.2 Secondary Hypothesis

H1-1: Employee Motivation has significant impact on affective organizational commitment.

H1-2: Employee Motivation has significant impact on continuance organizational commitment.

H1-3: Employee Motivation has significant impact on normative organizational commitment.

1.4 Research Methodology

This study analyzes the association between motivation and organizational commitment, employee motivation isthe independent variable and organizational commitment is used as the dependent variable.

1.5 Population of study

The research was conducted with a convenience sample of (97) participants, representing the front line employees in C-Town Retail Stores and Sameh Mall in Jordan. The sample gave representation to male and female employees.

1.6 Methods of data collecting

This research is categorized in survey-type studies A survey research is able to describe the situation of a company from information gathered through a questionnaire. Another method possible is to form explanationsbased on statistical analysis of the data Alkhaffaf, 2011).

A questionnaire was developed for the purpose of collecting data. As each survey was distributed, the researcher explained the directions for completing each survey, and explained that the respondents' identity was kept confidential and participation was voluntary.

LITERATURE REVIEW

Employee Motivation is a widely practiced exercise now across all corporate sectors, the idea of

motivation isderived from a Latin word "movere" which means "to move" and motivation is what moves the employees from weariness to attention (Mohsen et al., 2004).

Robbins (1993) define the employee motivation (as cited in Ramlall, 2004) as: "the willingness to exert high levels of effort toward organizational goals, conditioned by the effort's ability to satisfy some individual need", another definition is an action that stimulates an employee to take a course of action, which will lead to attain some goal or to satisfy certain psychological needs of employee (George and Sabapathy, 2011).

Robbins and Judge (2008) defined, motivation as the processes that account for an individual's intensity, direction, and persistence of effort toward achieving goal.

The three main components in the definition are intensity, direction, and persistence. Intensity is related with how hard a person tries.

This is the element most of us focus on when we talk about motivation. However, high intensity is unlikely to lead to favorable job-performance outcomes without the effort is channeled in a direction: that benefits the organization. Motivation has a persistence dimension. This is a measure of how long a person can maintain effort (Robbins and Judge, 2008).

There are multiple theories in management that discusses the work motivation and divided by (Johnson,2005) into four categories, Employee motivation need theories which profile motivational need theorists Maslow(1943) and McClelland (1961).

Employee motivation equity theories which explain the theories of Adams (1963), based off of prior work by Festinger (1957).

There are two types of motivation, intrinsic motivation and extrinsic motivation (Thomas & Velthouse, 1990, Mohsen et al., 2004, Gagne, 2005, Dwivedula et al., 2011, George and Sabapathy, 2011). Thomas & Velthouse (1990), defined intrinsic motivation as "a positively valued experiences that an individual employee gets directly from their work tasks", stems from a direct relationship between the doer and the task (George and Sabapathy, 2011), depend on employee's volition to predict her behavior (Dwivedula et al., 2011). They are self-motivated because they enjoy performing the actual tasks or enjoy the challenge of successfully completing the tasks (Mohsen et al., 2004).

The self- generated factors, that affect people to behave in a particular way or to move in a particular direction includes responsibility, freedom to act, scope to use and develop skills and abilities, interesting and challenging work and opportunities for advancement. Feelings of achievement, accomplishment and competence-derived from performing one's job are examples of intrinsic motivators and It is related to'psychological' rewards (George and Sabapathy, 2011).

Extrinsic motivation stems from the external work environment to the task and is usually applied by someone other than the person being motivated (George and Sabapathy, 2011), the external motivation maintains that the relationship between individual's motives and the behavior is moderated by the individual's affection, and cognition of the outcomes (Dwivedula et al., 2011). Extrinsic motivation is related to 'tangible' rewards. (George and Sabapathy, 2011).

This chapter plays a vital role in study as it gives a brief introduction of:

- Definition of motivation,
- Variables of motivation
  - Training and Development
  - Job Security
  - Rewards & Recognition
- Theory model
  - Maslow's Hierarchy of Needs,

Above mentioned topics act as a base for this study.

The word "motivation" has been derived from a Latin word "movere" which signify to move. Thus, it fabricates a mirroring of something up rise, keeping us working and serving us to accomplish our goals. The definition of "motivation" can be

extensive, and the term can be defined in several ways, depending on different viewpoints of Individuals.

Motivation plays a very crucial role behind human resource effectiveness & efficiency. it is the ultimate aspiration to achieve particular unfulfilled needs. It ushers to job satisfaction which in turn causes effective performance. Therefore, the dare for all organization is to assure that their employees are extremely motivated.

Motivation plays a major role at a workplace in producing a determined attempt by manpower towards work-related tasks. When an employee or human resource of any firm or organization is motivated correctly, as required, they start presenting a great zeal and zest with regards to work, which ultimately helps the organization in achievement of end results & taste the fruits of success.

There are plenty of evidences depicts that, inherently motivated or ambitious person accepts challenges by himself and attains the desired outcome without any outside force or compression. On the other hand, extrinsic motivation is interpret as an affair done absolutely for the occassion of attaining Rewards or non-attached outcome unlike intrinsic motivation wherein the projects or tasks are carried out for utter feeling of happiness, enjoyment or satisfaction out of passion for job.

The source for origination of extrinsic motivation can depend upon both (Factors and Forces), i.e., Internal or External. But most of the times it has been analyzed that it originates mostly due to the impact of External factors as compared to Internal Forces.

VARIABLES OF MOTIVATION

Variables of motivation can be classified into two major categories, i.e, Dependent Variables & Independent Variables. These variables are generally adopted by firms or organizations to assess the extent they affect the working of an employee, while he/she is contributing towards the achievement of end results of a firm. Some of the variables are like:

- Training & Development
- Job security
- Rewards & Recognition, and

TRAINING & DEVELOPMENT

Training helps in modernize aged talents and blossom new ones. The aim of training is to improve the proficiency & ability of employees to perform their job related tasks effectively & efficiently. Training is meant for all the employees of the organization, i.e, new joinee & old employees working at middle or lower level. The basic purpose of training is to make the employees familiar with the technical knowledge required to perform the task effectively, i.e, by proper utilizing the available resources with minimal wastage.

Whereas, development refers to the holistic process conducted with the aim of providing scholastic growth, leadership ability, creation of positive attitude and maturity to people holding managerial positions in the organization.

A training program can be only successful when it clearly conveys the trainee that what is actually expected out of him. Training needs should be carefully scrutinize and work out, because it probably has the extensive impact and domination on the employee performance. If a training program chosen properly, it will leads to successful performance; on the contrary, inappropriate one will attach no value towards the attainment of company's end result and can also be viewed as wastage of resources, i.e., time, cost, man & material.

There's a direct relationship between Training & Performance of employees. While delivering the training program, major focus is on educating employee's w.r.t careful handling of machines & materials while performing the tasks assigned to them, so that the employee will be able to contribute more towards the attainment of end results. Training helps the employees in better understanding as to how their work contributes towards achievement of mission & goals. Employees feel more motivated after realizing how their work matters for an organization.

Training is an expenditure that a firm is making on their work force. The motive behind offering the training program to employees, is to notify that the company values their people and their contributions they make.

On the contrary, *development has a long-term view & is especially designed for employees holding higher positions or designations in the organizational ladder.* The motive behind development program is to work out on employee for the ongoing as well as future jobs, by facilitating them with experience opportunities to strengthen their capacities, to handle more multiplex tasks.

JOB SECURITY

In today's competitive world job security has become a major concern for employees & an economic distress on the part of organizations. In other words, job security is as important as employee's salary. The challenge that organizationsare facing is not just to recruit and hold on to workers but also togive guarantee that employees are unwaived of their jobs for as long as they wish.

Job security is an employee certainty that they can stay at their current job for as long as they wish to be a part of that job. It's the guarantee given by the company to their employees that they cannot be dismissed from their current job, based on the type of contract, duration of which varies from one job to another, one department to another or from one company to another,.

Job security has a notable impact on the operational efficiency of the team as well as on the organization's performance. It has been found that the rate of attrition is more in companies where job security is not given to employees. This affects negatively/badly on the performance of employees which ultimately results in non-accomplishment of end results in a way as required to gain competitive advantage in the market.

In other words, high job security given by companies works as a motivational factor for its manpower which results in better performance with savor while performing the assigned tasks & ultimately reflects in the overall performance of the organization. Thus, it has been concluded that the performance of employees is directly linked to motivation which have a impact on organizational performance.If an employee feels low job guarantee, the contributionmade by them will also become unproductive and very fruitless, which ultimately causes a loss to the organization goodwill or balance sheet.

REWARDS & RECOGNITION

The volume of motivation of employees is directly linked to an effective system of rewards and recognition.

The notion of reward and recognition has earned muchimportance in the recent times and has detained the attention of both organizational managers and analyst. As a result, reward and recognition has gained the prime importance in each & every organization. This is the most crucial factor of motivation affecting the performance of employees which lastly reflect in the overall performance of the organization towards attainment of goals.

Reward & recognition are primarily benefits & are provided in two forms, i.e., monetary and non-monetary benefits or incentives for acknowledged desirable behaviors.

Something which is awarded or received in return for a victory or achievement is termed as reward.Reward can be either monetary or non-monetary benefits/ incentives for appreciating ones behavior in regards to contribution towards accomplishment of goals or achievement of success.

Recognition can be given by anyone in the company at any point of time in regards to appreciating a good work done by an individual.While giving the recognition to an individual, managers are not required to consider balance sheet of the firm, as it's inexpensive in nature & it comes unexpectedly for an employee done by manager/ employer by publically recognizing the amazing work done by them.

Many researchers have found that the reason behind rate of attrition is lack of recognition done by managers or employers. In order to retain the talented

employees in the organization, recognition of their work is must, for making them realize that they are the valued person or asset of an organization. This is the best way to keep employees motivated which leads to better performance & ultimately outcome is attainment of end results effectively & efficiently.

Reward can be given by any means, such as, Monetary awards, Certificates, Bonuses, Salary hike, Plaques, etc. whereas, recognition can be done through various means, such as, Appreciation, Positive feedback, Thank you notes, etc.

MASLOW'S HIERARCHY OF NEEDS

As per this theory needs are of two types Lower level & higher level needs. Lower level needs are further classified into three categories, whereas, higher level needs are classified into broad 2 categories. Classification of these needs is as follows:

1. Lower Level Needs
   - Physiological needs
   - Safety needs
   - Social needs
2. Higher Level Needs
   - Esteem needs
   - Self actualization needs

Needs of an individual can be satisfied by two ways – Extrinsically (externally) & intrinsically (internally). Lower needs can be satisfied extrinsically & higher level needs can be satisfied intrinsically. Lower needs are the basic needs of an individual & on the other hand, higher needs can be attained only after the achievement of lower needs. Lower & higher level needs can be varies from person to person. Some of the common lower level needs are food, shelter, water & clothing, and common higher level needs are strive for encouragement & recognition in the society.

According to this theory, needs of an individual appear in the hierarchy form. It means after procurement of physiological, safety & social needs, individual aim to work well/ hard for achievement of esteem & self actualization needs. As the needs of an individual gets satisfied, they automatically start feeling motivated which results in establishment of a positive environment at the workplace.

Physiological Needs – these needs are the requirement of every individual as it's the basic requirement for human survival. Such as, food, air, shelter, water, clothing.

Safety Needs - This is the successor of physiological need. It plays a very important role as safety is something, every individual looks for. Need of safety can be differ from person to person depending upon their interest. For e.g. – Person 'A' gives more value to job security, whereas, safe working environment is the priority of Person 'B' & family security is valued more for Person 'C' working in the same organization.

Social Needs – After satisfaction of first 2 needs, i.e., physiological & safety needs. The next need arises is social need. It includes the need for sense of belongingness at the workplace, need of love and care by friends & family members, acceptance among social groups, etc.

Esteem Needs – it's a higher level need. A human being strives for this need after accomplishment of lower needs. It is broadly classified into two parts, i.e.,

- Internal self esteem needs – Self-confidence, success, achievement
- External self esteem needs – Recognition, status, respect.

This need is basically an ego need and status need.

However, emotional imbalances can divert the person from achievement of high self esteem needs.

Self Actualization Needs – this is the higher level need of Maslow hierarchy. The achievement of this need results in the transformation of a person by becoming the one for what they're capable of & having the potential for.

However, this need cannot be achieved fully, as opportunities keep coming one after the another.

Thus, Maslow hierarchy theory widely reinforces the concept of reward and recognition. For example

– Physiological needs represents reward in the form of salary.

Social need reflects intangible rewards in the form of sense of belongingness.

Thus it can be concluded that intrinsic and extrinsic rewards intensifies employee's performance and it will results in higher job performance or delivery of quality work.

RESEARCH METHODOLOGY

The focus of this chapter is to draw a brief layout and explain the research methodology w.r.t how research is being conducted. The main focus of this chapter is on following segments, i.e.

(1) Research methods
(2) Sources of data collection, and
(3) Process of data analysis
(4) Limitations

Research is defined as the process through which new knowledge is created and using the existing knowledge in a different way with the motive of creation of new notion, process and understanding. For generation of a new & innovative or experimental outcomes, it may include the analysis of antecedents records or investigations.

A methodology refers to a process having some structure of technique or procedure and philosophy for doing something.

"Research methodology plays a very vital role in resolving the research problem". Research methodology shows a path to researchers for smooth conduct of their research work.

Research methods are broadly divided into 2 parts. These are as follows:

1. Inductive method – this method helps the researchers in doing qualitative research & its used for analyzing the observed event.
2. Deductive method – this method is mostly used by researchers doing some research associated with quantity. This method is generally used the purpose of verifying the observed incident.

3.1 Research methods

Research methods are broadly classified into two parts, i.e, quantitative & qualitative method.

Research methods are used for collection of data & analysis of data collected. It's very integral on the researcher part to develop a specific research method before initiating the process of research.While planning of research methods, a researcher is required to take 2 important(significant) decisions. These are as follows:

1. Collection of data – data can be collected through various sources. These are as follows:
   - Primary v/s. secondary source
   - Quantitative v/s qualitative source
2. Data analysis

3.2 Data collection

Data collection is a process of collecting and measuring information based on focusgroups which are done by using a systematic procedure. Implementing an appropriatedata collection method plays a vital character in every research as it permit researchers to assemble appropriate evidences that allows analysis,in turn, which provides the means to answer the research questions, and furthermore, to wind up all the possible outcomes.

Data can be collected through various sources. These are as follows:

- Primary v/s. secondary source
- Quantitative v/s qualitative source

Primary v/s. secondary source

- Primary data is known as the raw data & is collected directly by researchers through various means, such as, Interviews, Questionaire, experiment, observations, etc.
- Secondary data is usually refered to that data which is collected by someone in the past & made available for use by others also. There are various sources through which data is collected, such as, books, journal, website, blogs, newspaper, etc.

The time spent on collection of secondary data is usually less as compare dto the time spent on collection of primary data.

Quantitative v/s qualitative source

- Quantitative data is based on numbers and its widely used to analyse the data collected through surveys, filling up of questionnaire and for generation of numeric information while reviewing any document of record.
- Qualitative data is based on text and its subjective in nature. This enables the researcher to gather in-depth information while conducting interviews, group discussions, etc.

3.3 Data analysis process

Once data collection process is completed, the next step is to analyze the same in the light of certain factors & by reviewing the pros & consequences.

Analysis of data will began by using quantitative approach. This approach provides outcomes in numeric terms. Numeric data was then organized and converted into percentages,Pie-charts, and table illustrations to assist the researcher's progress of makinginspection and differentiation, as well as cease in further suggestion and recommendation.

3.4 Limitations

In this research the greatest limitation is of sample size. In order to acquire amore concreted result, the survey should have been carried out in a larger samplesize. However, due to the time, resources, and financial limits, the research was restricted to only the limited employees.

Additionally, it would have been useful to carry out in-depth interviews toreach a thoroughly exploited data and a more generalised outcome is received.

Data analysis and findings:

Frequency and descriptive data

A total of 125 questionnaires were distributed to different branches of C-Town retail stores and Sameh Mall employees, out of which 100 responses were collected back, 3 questionnaires were incomplete and were thus excluded from the study, thus leaving 97 responses for analysis.

Out of 97 respondents, total of 85 (87.6 %) were male respondents, and total of 12 (12.4 %) were female respondents, and the majority of respondents have less than 5 years working experience (n = 74, 76.3 %). Table (1) Gender of respondents

Table 2: Respondents experience

Gender	Frequency	Percentage
Male	85	87.6
Female	12	12.4
Total	97	100.0

Experience	Frequency	Percentage
5 or LESS	74	76.3
6-10	18	18.6
11 or more	5	5.2
Total	97	100.0

Besides to this, the largest number of respondents were Cashiers (n = 39, 40.2%), this was followed by Salesman (n = 27, 27.8%) and Supervisor job (n = 21, 21.6%). The distribution percentage of the respondents according to age group were 58.8 % of the respondents were from 18 to 25 years old, 18.6 % were from 26 to 30,22.7% were 30 or more.

Reliability Test

The cronbach's alpha reliability value of employee motivation and organizational commitment is

calculated which is (0.812). Sekaran (2003), stated that a scale alpha value greater than (0.7) is considered good reliable.

Thus the research reliability value reflects high level of reliability of the data.

Conclusion

This study has investigated the relationship between employee motivation and the three variables of organizational commitment namely; affective, continuance and normative organizational commitment. The study revealed that there is a significant impact from employee motivation of front line employees of retail stores in Jordan on organizational commitment (affective, normative and continuance).

Employees' motivation and commitment were investigated and it was found that the employees are neither motivated nor committed to their duties.

As we noticed from the analysis, the workers' attitude and perception of the motivational factors varies, however majority of them believe that "good wages" and "gratitude for a job well done" play a key role in motivating them into performing their duties in a desirable manner.

As we showed in previous analysis, the strong relationship between colleagues considered as the most motivational factor that affect employees in our study.

The present results has indicated that the correlation between employee motivation and affective commitment is strongest (r = 0.344), this was followed by normative commitment (r = 0.331) and continuance commitment (r = 0.238). Employee motivation has the least correlation with continuance commitment.

Employees with strong affective commitment feel an emotional attachment to the organization and therefore will have a greater motivation and desire to contribute to the organization than employees with weak affective commitment.

Employees with strong normative commitment are related to the organization by feelings of obligation and duty.

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CSR as a tool for COVID - Reference to Andhra Pradesh

Dr. Kantam Rajesh Kumar*

Abstract

Corporate Social Responsibility (CSR) was believed as an instrument for integrating social, environmental and human development concerns in the entire value chain of corporate business.Corporate Social responsibility (CSR) is continuing commitment by businesses to integrate social and environmental concerns in their business operations. The CSR duties of Indian companies are in line with the provisions of Section 135 with Schedule VII to the Companies Act, 2013.Changes in the global environment increasingly challenge business around the world to look beyond financial performance, and to integrate social and environmental concerns into their strategic management.The Corporate social responsibility initiatives of organisations thrust on creating value in the lives of the communities around its areas of business and manufacturing operations.CSR in India has traditionally been seen as a philanthropic activity. And in keeping with the Indian tradition, it was believed that every company has a moral responsibility to play an active role in discharging the social obligations, subject to the financial health of the company. In the early 90's Mahatma Gandhi introduced the concept of trusteeship helping socio-economic growth. Corporate social responsibility was influenced by family values, traditions, culture and religion.

CSR has become anbest tool to work in the line of Sustainable Development Goals (SDGs) with a strong focus on social performance indicated in the CSR projects of the organizations. The SDGs, otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.On 29th August 2013, The Companies Act 2013 replaced the Companies Act of 1956. The New Act has introduced far-reaching changes that affect company formation, administration, and governance, and incorporates an additional section i.e. Section 135 – clause on Corporate Social Responsibility obligations ("CSR") for companies listed in India. The clause covers the essential prerequisites pertaining to the execution of fund allotment and reporting for successful project implementation. Most of the businesses consider community as one of its apex stakeholders and believes in inclusive growth.India became the first country to legislate the need to undertake CSR activities and mandatorily report CSR initiatives under the new Companies Act 2013. This is the beginning of a new era for CSR in India.

Need For Corporate Social Responsibility

Corporate social responsibility works on the idea that a business has social obligation above and beyond making a profit. It requires a management to be accountable to the full range of stakeholders. Corporate social responsibility is the continuing commitment by the business to behave ethically and contribute to the economic development of the country while improving the quality of life of the workforce and their families and local community and society at large. CSR is achieving commercial success in the ways that honour ethical values and respect people, communities and the natural environment. CSR is a combination of policies, education and practices which extent throughout a corporation's operations and into the communities in which they operate. CSR is the commitment of businesses to behave ethically and to contribute to the sustainable economic development by working

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with all stakeholders to improve their lives in the ways that are good for business and the society at large.

Scope of CSR

1. Better Service for the Society

Every organisation must enhance its public image to secure more customers, better employees and higher profit. More possibility for the acceptance of social responsibility goals builds to improve public image.

2. Conversion of Resistances into Resources

If the innovative capacity of business is turned to social problems, many resistances can be transformed into resources and the functional capacity of resources can be increased many times.

3. Long Term Business Interest

A better society would produce a better environment in which the business may gain long term maximization of profit. An organisation which is sensitive to community needs would in its own self interest like to have a better community to conduct its business. To achieve this it would implement social programmes for social welfare.

4. Avoiding Government Intervention

Regulation and control are costly to business both in terms of money and energy and restrict its flexibility of decision making. Failure of businessmen to assume social responsibilities invites government to intervene and regulate or control their activities. The prudent course for business is to understand the limit of its power and how to use that power carefully and responsibly thereby avoiding government intervention.

Organisation's try to diverse projects and operations touch lives of people in many ways and create value by helping in overall and holistic development of communities within multiple geographies. Through its different initiatives, Companies endeavour to play a relevant role by serving communities and projects that address gaps in basic societal requirements.In the early literature on CSR, the principle of voluntarism was predominant as the traditional idea of a corporation stemmed from the belief that a company's primary motive is to create maximum shareholder value. This global consensus, however, started going through a period of churn with the advent of globalisation since the late 1980s and the emergence of multi-national corporations (MNCs). It was no longer feasible for governments to bank upon the inherent goodness of large MNCs to give back to the society when their primary motive for setting factories in other countries was guided by purely economic reasons - cheap labour, access to raw materials and lower legal compliance.

CSR initiatives are conceptualized and implemented through Corporate Foundations, Non-Government Organisation (NGOs) and Agencies and not-for-profit organisations. Most of the organisations worked on 4P model (Public-Private-People-Partnership) for empowering communities and stakeholders. Businesses have positively impacted lives particularly of several hundreds of thousand underprivileged people through various CSR activities and approaches.Ever since the Companies Act of 2013 was enacted, India assumed a pioneering role in channelizing CSR funds in alignment with national priorities, as enumerated under Schedule VII of the 2013 Act. The entries in the Schedule are to be interpreted liberally, thereby providing a wide scope of activities to be covered under it. The philosophy that has guided India's approach towards CSR is that corporations are social organisms with deep roots in the society and their physical presence in various districts of the country, including in under-developed and Adivasi-dominated ones, puts them in a unique position to complement the efforts of the state machinery in delivery of public goods. This preference for local area is reflected in the first proviso to sub-section (5) of Section 135 of the 2013 Act. In times of emergency, such as the present COVID-19 pandemic, the deployment of CSR funds becomes more crucial to rapidly fill critical gaps that overstretched state capacities may find difficult to deliver on. To achieve this aim, companies need to work in partnership with the district administration in their local areas, identify the areas where they can assist and synergise their resources with that of the government.

The Report of the High-Level Committee on CSR (2018 HLC Report), constituted by MCA in 2018, highlighted that delays in project identification and implementation, owing to lack of prior expertise in the companies, were major reasons for under-spending of CSR funds. Therefore, it is also essential for companies to identify some non-governmental organisations (NGOs) operating in their local area which can assist them in not only formulating projects, as per the local needs, but also in implementing them.

NITI Aayog maintains a comprehensive directory of such organisations on its NGO Darpan portal where more than 91,000 NGOs have already registered and the CSR teams of companies can avail this information to connect with them. The Federation of Indian Chambers of Commerce and Industry (FICCI) Socio-Economic Development Foundation of India, which has been developing public-private partnerships in various social development projects, also provides a good network for companies to tap into. Companies try to look at capitalising on the wealth of information and networking opportunities provided by sustainability platforms like Goodera and CSRBox which are using data analytics to not only identify suitable projects but also monitor their implementation and assess their social impact.

In this backdrop, the Aspirational Districts Programme, launched by the Prime Minster in January 2018 and anchored by NITI Aayog, is a persuasive case study to show how the synergy of these three stakeholders – the district administration, companies and NGOs – can foster more equitable channelization of CSR funds in under-developed pockets which have been historically deprived of them. It also serves as good evidence of the fact that when CSR is discharged with coaction, its impact is amplified.

Seven Pillars of CSR Strategy

1. Priority for need of partnership in CSR
2. Cross learning activities.
3. Supplementing and nurturing CSR benefits.
4. Beneficiary cost reduction and improves the impact while reaching more people
5. Knowledge management and documentation procedure.
6. Use and reuse of human resources for better CSR
7. Capacity building of the CSR workforce and re-skillingwork culture.

Business organisations now recognise Corporate Social Responsibility (CSR) as a great opportunity to significantly strengthen their businesses – while building, strengthening and renewing human, social and natural resources and wealth. Finding the right kind of partners is absolutely important to the success of a CSR strategy. The present COVID-19 pandemic is putting the corporate social responsibility to test. As the economic activity gradually resumes in the coming weeks, companies must strive to use this crisis as an opportunity to expand their CSR footprint. Instead of resorting to easier options of discharging their CSR obligations, like contributing to designated funds, they must first strive to professionalise their CSR teams, forge new partnerships with NGOs and work with the district administrations to deploy their CSR funds in the most effective manner. Contribution to designated funds already receives a small proportion of CSR funds (approximately 5.6%) which shows that it is being used as a last resort measure and not as the habitual way of discharging legal obligations. This statistic will certainly be drastically altered for 2020-2021 as large amount of CSR funds have already been committed to the PM CARES fund. While it is understandable, that given the urgent need for mobilising resources, donations to designated funds is a good option for smaller companies, the larger MNCs must follow the hybrid approach i.e. commit a part of their CSR to the relief/disaster management funds and the rest should be used by them in implementing Covid-19 resilience projects on the ground.

Cross learning is key to CSR strategies. Learning improves performance and minimise risks. Effective partnership among likeminded organisations for CSR execution ensures cross learning in Corporate Social

Responsibility. CSR leaders from different organisations must visit specific CSR locations of other organisation where CSR projects are being implemented and meanwhile they should meet the beneficiaries to gain new insights. CSR leaders must build a deep understanding of the socio-economic issues and they must be open enough to understand issues both from a business and a societal perspective. It has been observed that for Indian Companies, Corporate Social Responsibility (CSR) is the commitment of businesses to contribute to sustainable economic development by working with the employees, their families, the local community, experts and the society at large to improve lives in ways that are good for business and for its development.Companies following the hybrid approach are already setting a good example for others to follow. They have proactively lent their support to the Government in manufacturing ventilators, PPE kits and face covers. Defence Public Sector Units are building isolation wards and supplying N95 masks, santisers etc. to our frontline workers. Many private companies have already teamed up with NGOs to provide daily food and rations to the needy during the lockdown period and are doing exceptional work to complement the efforts of the state governments.

In times of crisis, people appreciate the efforts of those who help and will remember the companies which sacrifice their short-term gains in order to value their commitment to social responsibility. MCA's appeal to companies to go "over-and-above" their legally mandated CSR ceiling of 2% (of average net profit of 3 immediately preceding financial years) must be seen in this backdrop. The Government has made it clear that second phase of the lockdown will coincide with gradual resumption of economic activities. Therefore, companies must utilise this opportunity to leverage their CSR obligations in boosting their social responsibility credentials and provide thrust to the successful blending of the first phase of the lockdown with the second by cushioning this transition through creative deployment of their CSR funds.

CSR and Andhra Pradesh

Most of the public sector business organisations in India, CSR has been also looked upon as closely linked with the principle of sustainable economic development, which demand that organisations should make decisions and act based not only on financial factors but also on immediate and long term social and environmental consequences of their operations and activities.In Andhra pradesh, a non-profit society, by subsuming Smart Andhra Pradesh Foundation to streamline the mobilisation and utilisation of Corporate Social Responsibility (CSR) funds in an organised manner in education and health sectors. The government has also constituted two committees — Apex-cum-Executive Committee to be headed by the Chief Minister and District Level Committees to be headed by the respective District Collector.A Government Order RS 405 was issued by the Planning Department to this effect. Connect to Andhra will be headed by either Deputy Secretary, Joint Secretary or Special Secretary in the Planning Department as CEO to coordinate the CSR fund mobilisation and ensure effective monitoring of the flow of CSR funds from industries/companies in the State. The Apex Committee headed by the Chief Minister shall make policies for Connect to Andhra, which will work under the overall supervision of the Planning Department.

The committee will have Minister for Finance and Planning, Chief Secretary and three dignitaries as its members and E.O. Secretary, Planning Depar tment, as member-convenor. The terms of reference of the committee are standardsetting through the provision of policy frameworks, regulate the corporate engagement with social responsibility and protecting and promoting social objectives in the corporate sector apart from guiding the district level committees. The district-level committees will be headed by the collector and have district officials, including Zilla Parishad CEO, officials of Industry, Education, Medical & Health, Municipal Commissioner, Labour Commissioner as members and CPO as member convenor. These committees will also have a nominated local industry CEO as a representative and the committee will advise, supervise, monitor and review the CSR activities

and mobilisation of funds in identified sectors.Terms of reference of the district-level committees include identification of companies and industries in the district, identification of eligible works as per local needs in the district, mobilisation and receipt of funds from companies concerned, monitoring sanction and release of funds and proper utilisation, monitoring of timely and qualitative grounding of works in the district, monitoring the progress of works periodically, ensure to cover the SC, ST and minority areas or other vulnerable areas (community) while recommending and sanctioning the works with CSR funds, proper periodical reporting the status of CSR implementation to the government, review the status of implementation of CSR every quarter and overall responsibility for supervision, monitoring and coordination for smooth CSR implementation.

Connect to Andhra will mobilise resources from corporates, NRTs and individual donors for development of the State in three implementation modes — Contribution to 'Pool Fund' created for funding Navaratnalu's flagship programmes, contributions to specific Navaratnalu and related projects by companies/ individuals, execution to be done by Connect to Andhra or government agencies with the approval of the secretary of concerned department and contributions to specific Navaratnalu and related projects by companies/ individuals, along with their execution through CSR foundations or partner NGOs.Central Government's final tranche of COVID-19 economic packages included numerous reforms for the corporate sector, to facilitate self-reliance and ease of living for domestic corporations. These recommendations originally constituted the Cabinet-approved "Companies Amendment Bill, 2020", tabled in the Lok Sabha session of March 2020. The Government is now expediting these amendments, by promulgating an ordinance, as an economic measure.

The announcement only highlights some aspects of the Bill, perhaps intentionally illustrative in nature, but the expectation is the entirety of the Bill may be given full effect as an ordinance. Effective use and reuse of resources can improve the CSR performance. Awareness on use and reuse of resources among across the stakeholders can help in achieving the desired goals of CSR sustainability. Sustainable CSR can be achieved through community and beneficiaries engagement. CSR is a process oriented task.

India does not currently permit direct listing on foreign stock exchanges by domestic corporations and, reciprocally, neither are foreign companies allowed to directly list their equity shares on Indian stock exchanges. Depository receipts are the only permissible method for Indian companies to raise capital abroad. The Bill introduces a regime of direct listing of securities of domestic public corporations in certain foreign jurisdictions, thereby allowing domestic corporations to access a larger pool of capital. This is particularly beneficial for startups and specialized sectors, such as technology, which are always looking to raise capital from open markets, and can now do so without expanding or migrating to other jurisdictions.The Bill proposes decriminalization of penal provisions of the Companies Act, 2013 ("Act"), particularly provisions that are minor, technical, and lack subjective determination. This amendment has gained prominence due to its wide-ranging applicability to all corporations and key managerial personnel. The Bill attempts to introduce this reform by the following mechanism:

- Re-categorization of 23 compoundable offences to In-house Adjudication Mechanism of Adjudicating Officers with appeals lying before the Regional Director.
- Omission of the 7 compoundable offences from the penal regime.
- Limiting 11 compoundable offences to fines only.
- Alternate framework for 5 offences.
- Penalties for certain companies (One-Person Companies, Small Companies, Startup Companies, or Producer Companies) to be one-half of the penalty specified in the respective provisions, subject to a maximum of Rs 2 lakh in case of a company and Rs 1 lakh in case of individual or default officer.

This recommendation marks the second attempt of the Government to decriminalize the Act, the first being the Companies (Amendment) Act, 2019.

Currently, any company with net worth of Rs 500 crore or turnover of Rs 1000 crore or net profit of Rs 5 crore or more in the last three financial years is required to spend 2% of its average net profit towards its CSR policy and set up a CSR Committee.The Bill now allows eligible companies, whose spending exceeds their CSR obligation in a financial year, to set off the excess amount towards their CSR obligations in subsequent financial years. The Bill also introduces an exemption from constituting a CSR Committee for companies with a CSR obligation of less than Rs 50 lakh.Under the present regime, a "listed company" would also include private companies that choose to list their debt securities on stock exchanges, without listing their shares, and still be subject to the rigours of statutory compliances, thus discouraging private companies from listing debt securities. To incentivize private company listing, the Bill contemplates exclusion of companies issuing specified classes of securities from the definition of "listed company".The erstwhile Companies Act, 1956 introduced Chapter-IXA to regulate the agrarian economy; however, the same is not part of the new Act. The CLC Report defines a Producer Company as a "body corporate comprising farmers and agriculturalists who work in cooperation with each other to promote better standards of living and gain easier access to credit, technology, market, etc".Taking a cue therefrom, the Bill postulates insertion of Chapter-XXIA in the Act, to provide a framework for classification of Producer Companies and relaxations and benefits extended thereto, akin to the 1956 Act. These would include conducting meetings, memberships, and maintenance of accounts, etc.

The Act currently requires a company to file copies of board resolutions passed in respect of granting loans, security, and guarantees. This requirement was relaxed for banking companies vide the Companies Act (Amendment), 2017. However, non-banking financial companies (NBFC) and housing finance companies (HFC) were never extended these exemptions, despite being engaged in conducting regular lending activities, and they remained obligated to file resolutions that impacted the confidentiality of lending agreements.Therefore, the Bill seeks to further extend the exemption to NBFCs and HFCs, in accordance with prescribed Central Government rules. The Act defines "beneficial interest" as a person holding at least 10% shares in a company or exercising significant influence. A person with beneficial interest is required to make a declaration of interest in a company. The Bill empowers the Central Government to exempt any person from complying with these requirements, if it is deemed in the interest of the public. As the number of coronavirus positive cases are increasing in the State with each passing day, several private firms have extended a helping hand to the needy people in view of the lockdown.As part of their corporate social responsibility (CSR), they have volunteered to make available the products, which are necessary to meet the medical needs in the prevailing conditions.A few companies have donated 3 lakh hydroxychloroquine (HCQ) tablets and 10,000 N95 masks to the government.This apart, some of the pharmaceutical companies have also committed to provide anti-viral drugs.

"We have received the products and we will provide them to different people and locations across the State as and when necessary," The State government when the companies approached, had communicated the information regarding necessary products to it. As per the information, the State needs 2.5 lakh N95 masks and 2 lakh personal protective equipment (PPE)."We have the stock at present. But as the companies are willing to help we thought of using their aid to buy more stock, which will be useful in the coming days as new makeshift hospitals are being set up," he said.The higher education department aims to get funds under the Corporate Social Responsibility head from companies that will help establish or upgrade the infrastructure, develop opportunities and ensure sustainable quality education services delivery in the area of Higher Education.The department is gearing up to establish Andhra Pradesh Corporate Social Responsibility Society (APCSRS) that could help fill the gap between the Government and CSR funding institutions including public and private sector firms. The APCSRS will help to receive and manage CSR funds while coordinating, monitoring and implementing ongoing projects connected with it.

Benefits of Corporate Social Responsibility

Productivity and Quality

Improved working conditions, reduced environmental impacts or increased employee involvement in decision making which leads to – increased productivity and defective rate in a company.

Improved Financial Performance

Socially responsible businesses are linked to positive financial performances. Improved financial results are attributed to stable socio political legal environment, enhanced competitive advantage through better corporate reputation and brand image, improved employee recruitment, retention and motivation and a more secure environment to operate in.

Brand Image and Reputation

A company considered socially responsible can benefit both from its enhanced reputation with the public as well as its reputation within the business community, increasing the company's ability to attract trading partners.

Access to Capital

The growth of socially responsible investing concept means companies with strong CSR performance have increased access to capital that might not otherwise have been available.

Conclusion

Majority of the organisations continued its CSR initiatives in the realm of Education, Health, Livelihood, Rural Development and Social Entrepreneurship.The Ministry of Corporate Affairs (MCA) has already declared various activities related to COVID-19, such as promotion of healthcare, sanitation and disaster management, as an eligible CSR activity. Many have pointedout about the role that CSR funds can play in these testing times but much of the discourse has stemmed from the narrow notion of donating them to designated funds mentioned in Schedule VII of the Companies Act, 2013, which now also includes the PM CARES fund. Amidst this conversation, the original vision of unlocking CSR's potential as a tool to empower the social responsibility of businesses while capitalising on their physical presence in distributed pockets of the country has been lost in translation.

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Use of Information Technology for Activity Based Learning in Educational Institute

Prof. Asjad Usmani* & Ms. Farah Aqueel**

Absract

A study of the history of the world over the last 500 years shows that the fate of the nations appears to be increasingly tied to their success or failure in harnessing technology revolutions in military affairs. In current era, superiority in Information Technologies (IT) has been one of the key factors for military victories in the recent international wars. It is the IT, which rules the world in this modern era. In every sphere of life, IT has become integral part of the world.

The fast & continuous change in IT is widening the technological gap between 'Teachers and Taught'. Teachers need to continuously upgrade their skills and knowledge to meet the ever-changing & ever-increasing expectations of students.

This paper examines the scope of using IT for activity based learning in professional education. The paper explores the positive and negative effects of IT on the working of educational institutions. The paper suggests the care to be taken by teachers while using IT for activity based learning in professional education. The paper also suggests the ways for using IT for elevating teacher education & constructivism.

Keywords: Information Technology, Blend Learning, Industrial Revolution, Learning.

1. Introduction

Great nations / powers cease to be great for many reasons. Some of the frequently debated causes for the decline of nations are – economic failure, cultural orientations & limitations, disease & epidemics and geographical developments & constraints. Over the last 500 years, fate of the nation appears to be increasingly tied to their success or failure in harnessing technology revolutions in military affairs. These revolutions happen during the periods of momentous change when new technologies combine with new doctrines and new forms of the organizational structures, and which completely change the nature of state and international system.

If we look at the history over the last 500 years, until 15th century, mightiest armies belonged to Mongols. In 1450, Europeans controlled just 15% of the world's surface. The Gunpowder Revolution and the first Industrial Revolution enabled the Europeans to control 84% of the world's surface by 1914. The biggest gainers were northern European states from Britain to Russia.

The second Industrial Revolution brought internal combustion engine, the aeroplane and the radio on the international scene and shook up the international balance of power. Though by 1942, Germany, Italy and Japan controlled most of the resources of East Asia and Europe, they lost at the hands of Allied Forces in World War II due to better technological management of weapons and military by Allies Forces like the tank (Soviet Union) and the long range bomber & the aircraft carrier (USA). Both the Soviet Union and USA emerged as the biggest beneficiaries of second Industrial Revolution.

The Information Revolution of the late 20th century upset the seemingly stable post World War II order.

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The Soviet Union did not have Silicon Valley initially and did not compete with USA in integrating computer into economic or military spheres during the initial stages. Soviet Union collapsed in 1980s, leaving USA as sole Superpower. The US prowess at waging war in the Information Age was clearly visible in the Persian Gulf War (Iraq War I), Afghanistan War, Iraq War II and the most recent AfPak operations. Superiority in Information & Communication Technologies (ICT) has been one of the key factors for military victories in these recent international wars.

Next major war is expected to be Cyber War. Preparations for Cyber War are on the way. Major countries / nation-states are engaged in a "Cyber Cold War," amassing cyber weapons, conducting espionage, and testing networks in preparation for using the Internet to conduct war. In particular, countries gearing up for cyber offensives are the U.S.A., Israel, Russia, China, and France. For example, origin of recent cyber attack on PMO computers was traced to Russia. Another example is recent U.S. / Google vs. China rift.

It is the ICT, which rules the world in this modern era. Wherever we look around, we find that ICT has become integral part of the world.

Information and Communication Technology or ICTs allow users to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies.

ICT tools can be used to find, explore, analyze, exchange and present information responsibly and without discrimination. ICT can be employed to give users quick access to ideas and experiences from a wide range of people, communities and cultures.

Like all technologies, ICT is also witnessing fast and continuous change. The fast & continuous change in ICT is widening the technological gap between 'Teachers and Taught'. ICT has increased student awareness and hence has increased students' expectations from teachers. Teachers need to continuously upgrade their skills and knowledge to meet the ever-changing & ever-increasing expectations of students.

2. Contribution of ICT to Educational Institutions

ICT has transformed the way of working and shape of educational institutions. ICT has brought numerous benefits to educational institutions; some of which are reproduced as below:

- ICT has facilitated fast connectivity to anyone and anywhere in the world through email services provided by Internet Service Providers. ICT has somewhat reduced the role of post, fax and telegraph mode of communication.
- ICT has enabled formation of strategic alliances and partnerships amongst educational institutions for promotion of education & research.
- ICT has enabled formation of alliances & networking for admissions & placement
- ICT has led to emergence of big institutions and universities with multiple / global locations.
- ICT has facilitated Online Admission Tests, Online Counselling & Online Education etc.
- ICT has helped in creation of Wi-Fi Centres for better connectivity at campus.
- Internet has emerged as an important media for advertising & promotional activities.
- New fields of education have emerged / are emerging, viz – CAD, CAM, BBA (CAM), BCA, MCA, Bio-Genetics, New Medical Sciences
- Medical Research: Finding treatment for diseases, disease control and increasing health consciousness viz. Genome Decoding, Work on Brain-computer interface to help the paralyzed move.
- Simulation Research: Bio-genetics etc

3. Adverse Impact of ICT for Educational Institutions

Like a Coin, ICT has both positive & negative sides. ICT has brought forth many challenges and problems for the academic institutions and teaching fraternity.

Some of the adverse impacts of ICT are discussed as below:

- Too much flow of information may lead to stressful situations, creating new types of social and behavioural problems. Recent shooting incidents at US schools are grim reminders of such fallouts.
- Children as small as 7 years of age are reportedly doing porn surfing. As a result, there are increasing tendencies towards sexual violence, sexual exploitation & homosexuality; which is creating many problems in campus life.
- New forms of entertainment, such as gaming, videogames, and internet access is creating social impacts on areas - such as adverse impact on academic performance, family harmony etc.
- Children are ignoring sports and some are developing health and behavioural problems in the later part of life.
- We are becoming slave of technology. For example, when Internet is slow or not working, many works are held up and we are forced to wait. Similarly, many a times we become over dependent on PowerPoint Presentations for delivering a lecture. If we are unable to run PPT due to some of software or hardware problem, then lecture is stopped / deferred.
- Like all technologies, ICT is also witnessing fast and continuous change. The fast & continuous change in ICT is widening the technological gap between 'Teachers and Taught'. ICT has increased student awareness and hence has increased students' expectations from teachers. Teachers need to continuously upgrade their skills and knowledge to meet the ever-changing & ever-increasing expectations of students.
- E- Garbage i.e. electronic waste is being created through old computer monitors, as rate / degree of change in ICT is very high.

As discussed above, ICT is changing the cultural orientation, behaviour and expectations of the students, impact of which is felt by the educational institutions and teaching fraternity through social peace & harmony at campus, academic performance, discipline & job placements of its students.

4. Care to be Taken in Using ICT Tools for Teaching

ICT has brought forth both negative and positive effects for educational institutions and teaching fraternity. Despite some drawbacks, ICT has become integral part of life. ICT is here to stay. No one can avoid ICT.

Wisdom calls for enhancing the benefits and reducing the drawbacks while using ICT tools. Keeping above goal in mind, following care should be taken by the educational institutions and teaching fraternity for reaping & enhancing the benefits of ICT:

- The nature of teaching involves human process that cannot be automated as in manufacturing. The 'human touch' is very important in learning; and computers cannot replace that.
- Proper Faculty Training for using ICT
- Proper Student Training for using ICT
- Teachers should be cautious about time management problems as there could be increased teaching workload during initial stages due to downloading, typing, proofreading, editing etc.
- Adequate protection from Virus Problems, Data Loss
- Adequate protection from Theft of Data, Hacking
- Proper handling of differences in software at different locations, compatibility problems
- Proper handling of technological problems
- Caution about Health Problems – viz. - prolonged exposure to radiation, eye-problems, sore thumbs, backache
- Caution about Internet breakdowns; Power & UPS breakdowns

- There should not be excessive dependence on ICT.

If ICT fails / breaks down, then teachers should promptly switch to old / conventional methods so as to avoid wastage of time and so as to ensure quality education.

5. Using ICT for Value Addition

ICT can be used for enhancing academic effectiveness and for increasing value addition in variety of ways as discussed below:

- Internet can be used for data & study material collection, research surveys, research work, advanced learning, continuous updation
- Internet can be used for better connectivity with students, sending e-study material, sending e-assignments, e-feedback
- ICT can be used Simulation Exercises
- ICT can be used for Simulation Training
- Language lab can be used for enhancing communication skills.
- ICT can be used for Financial Markets Training
- ICT can be used for E-Commerce Training
- ICT can be used for Cross Cultural Training
- Web based education route can be used– for reaching out to students - viz. - e – Learning, Internet learning, Distance learning
- ICT can be used making teaching-learning process – more interactive, participative, practical oriented

6. Conclusion

Various studies show that we learn and retain in following manner:

As shown in above figure, higher levels of retention can be achieved through active involvement in learning process. An important principle of Adult Learning Process is – Students like more of practical orientation & learn more by doing. ICT / Technologies can be used to make teaching-learning process - more interactive, participative & practical-oriented.

There is always a technological gap between 'Teachers and Taught'. Younger generations are usually more conversant and comfortable with newer & latest technologies. The fast & continuous change in ICT is widening the technological gap between 'Teachers and Taught'. Teachers need to continuously upgrade their skills and knowledge to meet the ever-changing & ever-increasing expectations of students.

Mere class room theory lectures are never sufficient. Nor complete automation / mechanization is desirable. The nature of teaching involves human process that cannot be automated as in manufacturing. The 'human touch' is very important in learning process and computers cannot replace that.

Thus Teachers need to use a right blend of various teaching methodologies, teaching aids & ICT / Technologies to make teaching-learning process – more interactive, participative & practical-oriented.

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Awareness of COVID-19 Pandemic among People in Delhi Metropolitan Region

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Abstract

There is extensive widespread of the COVID-19 pandemic which has become a cause of concern for the entire world. It has impacted all of the countries in the world and the effect is devastating. The purpose of this study is to assess the awareness of COVID-19 among people in the Delhi Metropolitan Region. A total of 356respondentscompleted a questionnaire-based survey on the awareness related to the COVID-19 pandemic. The convenience sampling method was used for data collection. Descriptive statistics and chi-square test were performed for analysis using SPSS. It has been analyzedthat people are maintaining a hygiene lifestyle to protect themselves from the coronavirus. It can be concluded that the majority of the respondents have adequate awareness ofCOVID-19. ***Keywords:*** *covid-19 india, covid-19 mumbai, coronavirus, health care workers, who coronavirus, cdc coronavirus, covid-19, healthcare professionals, ppe, hand hygiene*

Results

The overall awareness for all subgroups was adequate with 71.2% reporting correct answers. The highest percentage of correct responses were from undergraduate medical students and the lowest was from non-clinical/administrative staff. Less than half of the total respondents could correctly define "close contact." More than three-fourths of the responders were aware of the various infection control measures like rapid triage, respiratory hygiene, and cough etiquette and having a separate, well ventilated waiting area for suspected COVID-19 patients. However, only 45.4% of the responders were aware of the correct sequence for the application of a mask/respirator, and only 52.5% of the responders were aware of the preferred hand hygiene method for visibly soiled hands.

Conclusion

There is a need for regular educational interventions and training programs on infection control practices for COVID-19 across all healthcare professions. Occupational health and safety are of paramount importance to minimize the risk of transmission to healthcare students and professionals and provide optimal care for patients.

Keywords: Covid-19 India, Covid-19 Mumbai, Coronavirus, Health Care Workers, who Coronavirus, CDC Coronavirus, Covid-19, Healthcare Professionals, PPE, Hand Hygiene.

I. Introduction

In late 2019, initial cases of a novel coronavirus were reported in Wuhan, China; on January 7, 2020, the novel coronavirus was associated with the respiratory disease COVID-19 (World Health Organization, 2020). After four months it speeded like a fire that is it has spread to 210 countries and territories and infecting over 3 million people and claiming more than 225,000 lives (as of April

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30, 2020; World meters, 2020). The consequences of this virus include physical consequences such as illness, hospitalization; financial consequences such as redundancy, financial insecurity (McKibben& Fernando, 2020).

The virus which caused COVID -19 was initially termed as 2019-nCoV and then afterward the International Committee on Taxonomy of Viruses (ICTV) termed it as syndrome coronavirus 2 i.e SARS-CoV-2(Cascella, M., et al., 2020). The virus has been originated from bats and the initial cases were from Wuhan, Hubei Province in China, which indicates that it is an animal-to-person spread from the animal market in China. Gradually the virus spread outside china and subsequently to the rest of the world. The World Health Organization (WHO) has also declared coronavirus disease as a pandemic on March 11, 2020.

II. Objectives of the Study

- To explore the background of COVID-19.
- To assess the awareness of COVID-19 among students and professionals.
- To test the hypothesis that males and females differ in terms of their awareness of the Corona Virus.

III. Research Methodology

This survey was conducted with students and professionals in Delhi. The awareness level of graduate and Post-Graduate students and Professionals from academia like a teacher, CA, and Doctor are assessed The survey was prepared in the form of an online form and was sent topotential respondents in Delhi, India. A total of 356 respondents completed the survey.

The self-administered questionnaire consisting of demographic questions, and 15 questions related to awareness of COVID-19. The questionnaire also included questions related to the respondents" present state of mind. It is impossible to include every candidate from the population since it is an easy, fast, inexpensive method therefore convenient sampling method was used for data collection, Responses were presented as frequency and percentages. Descriptive statistics were performed using SPSS 21.

IV. Result

Table 1: Level of Awareness Related to Corona Virus

Response	Frequency	Percentage
Low	130	36.5%
Average	181	50.8%
High	45	12.6%
Total	356	100%

The data is collected from male and female respondents regarding their awareness about COVID -19. In Indian society, both are having different mindsets and different sets of needs and wants so in this regard. Chi-square Test is applied to check their awareness level and what are various actions taken by a different set of respondents to protect themselves.

Hypothesis Statement

H_0: There is no relationship between Gender and awareness of corona.

H_1: There is a relationship between Gender and awareness of corona.

Table 2: Chi-square Test is Shown Below

	Value	df	Asymp. Sig (2-sided)
Pearson Chi-Square	5.298	2	.071
Likelihood Ratio	5.317	2	.070
Linear by linear Association	3133	1	.077
N of Valid cases	356		

Table 3: What is your level of Awareness? Cross Tabulation

			Low	Average	High	Total
Gender	Male	Count	76	82	22	180
		Expected Count	65.7	91.5	22.8	180
	Female	Count	54	99	23	176
		Expected Count	64.3	89.5	22.2	176
Total	Expected Count	Expected Count	130	181	45	356

The chi-square statistic is in the Value column of the Chi-Square Tests table immediately to the right side of "Pearson Chi-Square". The value of the chi-square statistic is 5.298. The *p*-value appears in the same row in the "Asymptotic Significance (2-sided)" column (.071). The result is significant if this value is equal to or less than the designated alpha level 0.01. In this case, the *p*-value is higher than the standard alpha value, so the null hypothesis is not rejected which asserts that the two variables are Gender and Awareness of Corona are independent of each other. The data suggests that the variables Gender and Awareness of Corona are not associated with each other.

Table 4: Frequency Distribution: Any member of your family belongs to the Health care Sector?

Response	Frequency	Percent
Yes	48	13.5%
No	308	86.5%
Total	356	100

The table shown above indicates that out of 356 people 13.5% of people are having their family members who belong health care sector and 86.5% are not having any of their family member who belongs to the health care sector.

Table 5: Frequency Distribution: During COVID-19, I am spending more on hygiene lifestyle (Sanitizers, Soaps)

Response	Frequency	Percentage
Yes	340	95.5%
No	16	4.5%
Total	356	100%

The table above shown indicates that 95.5% are spending on hygiene lifestyle (sanitizers and soaps) and only 4.5% are not spending on hygiene lifestyle.

Table 6: Frequency Distribution: Are you aware of this Arogya Setu App?

Response	Frequency	Percentage
Yes	196	55.1%
No	160	44.9%
Total	356	100%

The table shown above indicates that 91% of people are not aware of Arogya Setu App via various advertisements that are coming on television and 9% are not having any information about this app.

Table 7: Frequency Distribution: Is your family member dependent on any kind of medicine?

Response	Frequency	Percentage
Yes	324	91
No	32	9
Total	356	100

The above table shows that in the case of 55.1 percent people say that their family members are dependent on medicine and 44.9 percent say that they are not dependent on any kind of medicine.

Table 8: Frequency Distribution: During the Covid-19 situation, you are maintaining a stock of medicine because of fear of stockout?

Response	Frequency	Percentage
Yes	118	33.1%
No	238	66.9%
Total	356	100%

In the given table it has been concluded that only 33 percent of people are maintaining a stock of medicines because of fear of stockout and the remaining 66 percent are not maintaining any kind of stock.

Table 9: Frequency Distribution: During Covid-19, You think that the current supply of medicines is limited in the market?

Response	Frequency	Percent
Yes	80	22.5%
No	96	27%
May Be	180	50.6%
Total	356	100%

In the given table it has been concluded that 22 percent of people are saying that the current supply of medicines is limited in the market and nearly 50 percent of people are not sure whether it's limited or not.

Table 10: Frequency Distribution: During Covid-19, Do you find pharmacies crowded with too many people?

Response	Frequency	Percent
Yes	144	40.4%
No	212	59.6%
Total	356	100%

The given table highlights that 40 percent of people are saying that pharmacies are crowded with people and 59.6 are saying no it's not crowded.

Table 11: Frequency Distribution: During Covid-19, Do you face any problem during your transit to a pharmacy shop?

Response	Frequency	Percentage
Yes	40	11.2%
No	316	88.8%
Total	356	100%

The given table shows that 11 percent of people are saying that they face trouble during their transit in a pharmacy shop and more than 80 percent are saying that they didn't face any sought of problem during their transit.

Table 12: Frequency Distribution: During Covid-19, Do you purchase medicines online?

Response	Frequency	Percentage
Yes	39	11%
No	317	89%
Total	356	100%

The given table highlights that only 11 percent of people used to purchase medicines online and the rest 89 percent don't go for online medicine purchase.

Table 13: Frequency Distribution:: Indicate to what extent you feel the right way now, that is at the present moment

Response	Frequency	Percent
Very Weak	56	15.7%
Weak	96	27%
Neutral	148	41.6%
Strong	32	9.0%
Very Strong	24	6.7%
Total	356	100%

Table 14: Frequency Distribution::Indicate to what extent you feel the right way now, that is at the present moment

Response	Frequency	Percent
Highly Unprepared	52	14.6%
Unprepared	100	28.1%
Neutral	136	38.2%
Prepared	40	11.2%
Highly Prepared	28	7.9%
Total	356	100%

Table 15: Frequency Distribution: Indicate to what extent you feel the right way now, that is at the present moment

Response	Frequency	Percent
Very Fearful	28	7.9%
Fearful	136	38.2%
Neutral	104	29.2%
Courageous	56	15.7%
Very Courageous	32	9%
Total	356	100%

Table 16: Frequency Distribution::Indicate to what extent you feel the right way now, that is at the present moment

Response	Frequency	Percent
Very Stressed	36	10.1
Stressed	132	37.1
Neutral	116	32.6
Calm	48	13.5
Very Calm	24	6.7
Total	356	100%

Table 17: Frequency Distribution::Indicate to what extent you feel the right way now, that is at the present moment

Response	Frequency	Percent
Highly Unsecured	92	25.8%
Unsecured	104	29.2%
Neutral	116	32.6%
Secured	24	6.7%
Highly Secured	20	5.6%
Total	356	100%

Right now people are feeling more and more stressed, unsecured, weak, fearful, and unprepared. The table shown above shows the mindset of people in a given period and the troubles they are facing.

V. Discussion

Since the outburst in China in December 2019, the COVID-19 pandemic has had a devastating effect worldwide after that its outbreak can be seen in different parts of the world. This has affected human health and the number of cases continues to rise at an alarming rate. During this phase, there are a lot many workers who are denied basic nutrition facilities since most of them work in the informal sector which is hand to mouth. They didn't have much savings in their hands. It is a worldwide disruption and its effects can be seen in different parts of the world. There are several initiatives which are required to be taken on an urgent basis by government bodies such as -inform and educate people about this pandemic so that they may take necessary precautions, increase the availability of the testing facility, Face covering as a protocol been established, Provide health care facilities, Provide health insurance facilities, More and more developments are required in the field of health care infrastructure.

VI. Limitations

To carry out the study some limitations were encountered such as people were reluctant to respond and some of them didn't like to share their views on the topic. Another limitation is that the sample size may not be exactly representative of the universe. There is the possibility of some error to a limited extent. However, to maintain the value of research work sincere efforts were put in.However, the results of the study should be interpreted in terms of impermanence.So continuous efforts must be made to track people throughout the pandemic and varying results of the same.

VII. Future Directions

Future research can be done to look at the aftermaths during and after the pandemic. Another area that can be explored in the future is to understand how the virus, social distancing, and lockdown are experienced by people from different ethnic and socioeconomic groups (Van Bavel et al., 2020). Minority ethnicity is one of the risk factors for ongoing health problems following disasters and terrorist attacks (Bolin & Kurtz, 2018;Fothergill, Maestas, & Darlington, 1999). Apart from ethnicity, economic inequality will likely appear as a predictor of both mortality and recovery (Ayyub, 2020).

VIII. Conclusions

There are various challenges which are been faced up by people during the COVID-19 situation. It has been identified that awareness among the masses is quite low. Nowadays people are spending more on hygiene and they are pretty much aware of Arogya Setu App. Still, authorities should take the necessary steps to stop the Coronavirus and to generate awareness among the masses. The results of the studies done so far are depicted with the help of a tabular presentation. There is a strict need for the utmost care to the patients who are affected by this pandemic. Moreover, there is a need for proper vigilance on the transmission of this risk spread through this disease. This study shows that more and more awareness needs to be spread by conducting webinars, training sessions,interaction with the masses so that they can protect themselves.

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Analysis of Policy Responses to COVID 19

Dr. Swati Yadav*

Abstract

A pandemic affects people adversely, especially, as the government, health sector, private sector and social institutions are all taken off the guard.An unanticipated shock like Covid 19 can put any nation's economic development program and progress by many years with human and economic resources being diverted to manage the pandemic. The paper looks at the policy responses of India and other countries during the first wave of Covid 19 suggesting policy measures required in future. Emphasis should be to develop stabilizers on the supply side that can help in countering the supply shocks. The paper also looks at the reasons other than the pandemic responsible for recent slowdown in India.

Keywords: Pandemic, Fiscal Policy and Indian Economy.

I. Introduction

The current pandemic has resulted in breaking up of supply chain, change in consumption pattern leading to shift in demand to necessities, Pharma sector and information technology related industry. Since the problem is both on demand side and supply side the countries all over the world have used a combination of fiscal, monetary and trade policies to overcome the disaster. To remain prepared for such a scenario in future a thorough understanding of the effects of various stabilization policies on the economic activity is extremely important. The role different types of policies can play in stabilizing the economy will help in preparing us for the future when such shocks may become a regular part of our economy. This paper looks at the responses of the governmet all over the world and tries to suggest a policy for India. The main objectives of this paper are:

(i) To study the various policy responses adopted during the pandemic

(ii) To suggest the right policy mix for the Indian economy to deal with crisis resulting in cyclical shocks

This paper is divided into six sections. Second section gives a background of the current situation engulfing the world followed by a section summarising the policy responses implemented by various economies. Fourth section looks at the debate surrounding the emergence of slowdown in Indian economy even prior to Covid 19 followed by a section on policy suggestions and recommendations. The final section provides concluding remark along with a brief reference to the ongoing second wave of Covid 19 in India.

II. Background

A pandemic affects people adversely especially as the government, health sector, private sector, social institutions are all taken off the guard. But pandemics like covid is something which governments and people across the world needs to include in their economic and social planning so as not to be taken unaware. An unanticipated shock like covid 19 can put any nation's economic development program and progress by many years with human and economic resources being diverted to manage the pandemic. Lockdowns in order to contain infections have the capacity to cripple even the richest and the soundest economies as has been seen during the current crisis in case of USA. The state ends up taking decisions in haste with a lot of relief money going to places to which it is not required and money for small businesses being again getting

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into the coffers of large companies. A careful planning ahead of any such unanticipated events is required in future as these shocks will be part of coming times. A fund marked dedicatedly to offset the impact alongwith a proper plan and agency to be need of the time, Asian flu gave the world the warning to remain prepared but still the world was caught off guard. The 2008 recession again taught us to strictly follow countercyclical policies and maintain acountercyclical fund yet there were only few notable takers.

The pandemic may affect different sectors differently. Business sector will see a reduction in consumption demand, labour force, profits, bankruptcies, more medical payments, change in consumption pattern towards necessities and reduction in exports. Stock markets will behave erratically as has been observed. No new investment will come up , world will witness increased dependency on technology. With change in role of state governments worldwide will be under tremendous pressure as dependency on public sector increases. Health sector will again be under lot of pressure with health infrastructure stretched to limits, yet there will chances for growth. Transportation will suffer because of quarantine and lockdown rules. . Labour force gets affected adversely as not only they may fall sick because of covid, the impact of the pandemic alongwith lockdown is most intense on them. Within the work force the impact itself are very unequal. Ruchika Kapoor(2020) has highlighted the adverse impact on regular work force, self employedpersonnels and casual labourers for the Indian economy. It is the self employed and casual workforce who is badly affected the most in case of Indian economy. Together they constitute around 76% of Indian work force. Given the magnitude of adverse impact on economic health of the nation and its citizens, the quick response by the government becomes imperative. Next section provides a summary of policy actions adopted across various countries to reduce the economic hardships caused by lockdown resulting in large scale unemployment and recession.

III. Fiscal and monetary Policy response to Covid 19

Between the mid-1980s to the mid-2000s developed economies experienced satisfactory real output growth, low inflation and low unemployment rates. This led to emergence of a new macroeconomic consensus (NMC) among Friedman's monetarists' followers, Lucas' rational expectations supporters, New Classical economists of the real business cycles and even New Keynesians regarding the role of monetary and fiscal policies.

According to this consensus there does not exist long run trade off between inflation and unemployment with both the Phillips curve and the real output level being vertical in the long run. The trade-off may occur in the short term. As Nassiff et al (2020) pointed out that in NMC fluctuation in the output associated with changes in aggregate demand are mainly because of either money illusion(Friedman 1968) or Lucas' price surprise argument (Lucas 1973), or even temporary price or wage rigidities (Akerlof and Yellen1985). The resulting policy implication is that (i) the role of monetary policy is to focus on price stability with inflationary expectations as the monetary anchor (ii) due to the assumption of Ricardian equivalence the countercyclical power of expansionary fiscal policy is discarded.The NMC seems to be in need for introspection after the GFC of 2008 and the current recession giving rise to a new consensus recognising the importance and increasing role of fiscal policy in times to come.

The current crisis also saw immediate monetary policy measures alongwith automatic fiscal stabilisers. But the scale of crisis meant adoption of Discretionary Fiscal Measures by almost all countries. The table (Sourced from IMF website) below shows in brief the responses of some of the prominent countries. As can be seenfrom thetable (1) the magnitude of fiscal packages varies. Stronger the economy greater is the package. Common Monetary measures are infusing liquidity by reducing rates, open market operations and reducing reserve requirements, deferring loan payments etc. Common Fiscal measures included stimulus packages targeting lower income classes, small and medium business enterprisesalongwith providing income support to vulnerable households.

Table 1: Fiscal and Monetary responses during the first wave of Covid 19

Country	Fiscal package	Monetary package
Australia	Fiscal stimulus worth , 7 percent of GDP including measures on both expenditure and revenue side., Measures:wage subsidies ,income support to households, cash flow support to businesses, investment incentives, loan guarantees to cover the immediate cash flow needs of SMEs	The policy rate cut by 25 basis points twice in March.purchase of government bonds in the secondary market and deffered loan repayments for small businesses
Brazil	Fiscal measures adding up to 11 percent of GDP. The fiscal measures include temporary income support to vulnerable households, cash transfers to informal and unemployed workers, and advance payments of salary bonuses to low income workers	The central bank lowered the policy rate (SELIC) by 200bps. The reserve requirement has been reduced from 25 to 17.
Canada	Key tax and spending measures worth 9.8 percent of GDP, Liquidity support through tax deferrals.	Reduction in overnight policy rate by 150 bps in March, bond buyback
china	An estimated RMB 4.2 trillion (or 4.1 percent of GDP) of discretionary fiscal measures have been announced including accelerated disbursement of unemployment insurance and extension to migrant workers, tax relief and waived social security contributions, and public investment	liquidity injection of RMB 5.1 trillion (gross) into the banking system via open market , reduction of repo rates &medium-term lending facility (MLF) rate
Denmark	Discretionary fiscal support to the tune of about 2.6 percent of 2019 GDP. Another 2.5 percent of 2019 GDP in countercyclical support through Denmark's strong automatic stabilizers—including from weaker tax receipts and higher social benefits.	Increased the policy rate by 15bps andpre-emptively release the countercyclical capital buffer
Egypt	Stimulus policies worth 1.8 percent of GDP. Pensions have been increased by 14 percent. Expansion of the targeted cash transfer social programs reduction of Capital gains tax.	Reduction in policy rate by 300bps and preferential interest rates
Germany	Fiscal support worth 4.9 percent of GDP	Release of the countercyclical capital buffer for banks and expanded the short-term liquidity provision to companies and a payment moratorium on consumer loans until June 30th 2020
India	Stimulus package valued at approximately 0.8 percent of GDP. The key elements of the package are: in-kind (food; cooking gas) and cash transfers to lower-income households; insurance coverage for workers in the healthcare sector; and wage support to low-wage workers In May new measures targeting businesses (about 2.7 percent of GDP),expanding support for poor households, especially migrants and farmers (about 1.5 percent of GDP), targeted support for the agricultural sector (about 0.7 percent of GDP), and some expansion of existing programs providing work opportunities to low-wage labourers were announced. Removal of increase in cost of living allowance for government employees	Reserve Bank of India (RBI) reduced the repo and reverse repo rates by 75 and 90 basis points (bps) to 4.4 and 4.0 percent, respectively, and announced liquidity measures to the tune of 3.7 trillion Rupees (1.8 percent of GDP), for businesses: (i) a collateral-free lending program with 100 percent guarantee, (ii) subordinate debt for stressed MSMEs with partial guarantee, and (iii) partial credit guarantee scheme for public sector banks on borrowings of non-bank financial companies, housing finance companies (HFCs), and micro finance institutions.
Mexico	Plan includes: 1) frontloading of social pension and disability payments by four months; 2) accelerating procurement processes and VAT refunds; 3) lending to SMEs; 4) liquidity support to SMEs by development banks; 5) granting access to a part of social security accounts by workers.	Rates cut by 150 basis points until May 2020. Expansion of liquidity facilities and supporting the corporate bond market.
France	increase in the fiscal envelope devoted to addressing the crisis nearly 5 percent of GDP,	Same as EU
New Zealand	Fiscal measures amounting to a 21.3 percent of GDP through FY2023-24, of which NZ$20.5 billion will be disbursed by end-June.	The OCR was reduced by 75 basis points to 0.25 percent on March 17. The RBNZ has also announced open market operations in the secondary market
Russia	fiscal package is wortht 2.9 percent of GDP , it includes interest rate subsidies, tax deferrals for most affected companies on most taxes; deferrals on social contributions for SMEs in affected sectors for 6 months	CBR cut the policy rate by 100 bps to 4.5 percent.

Saudi Arabia	2.8 percent of GDP private sector support package includes the suspension of government tax payments, fees, and other dues to provide liquidity to the private sector and an increase in available financing through the National Development Fund	Reduction in its policy rates twice in March, lowering its reverse repo and repo rates by a combined 1.25 pp to 0.5 and 1 percent respectively. The injection of SAR 50 billion into the banking sector.
South Africa	The government is assisting companies and workers facing distress through the Unemployment Insurance Fund (UIF) and special programs from the Industrial Development Corporation.	The central bank (SARB) reduced the policy rate in total by 250 bps by end of May ,
UAE	Fiscal measures worth 2 percent	Reduction in its policy interest rate by a combined 125 basis points.
UK	Additional funding for the NHS, public services and charities (£16 billion); measures to support businesses (£29 billion) including property tax holidays, direct grants for small firms and firms in the most-affected sectors, strengthening the social safety net to support vulnerable people and schemes to facilitate business' access to credit.	Reduction in Bank Rate by 65 basis points to 0.1 percent; open market operations
USA	US$483 billion Paycheck Protection Program and Health Care Enhancement Act. Forgivable Small Business Administration loans and guarantees to help small businesses that retain worker. An estimated US$2.3 trillion (around 11% of GDP) Coronavirus Aid, Relief and Economy Security Act ("CARES Act").	Reduction in Federal funds rate by 150bp and Purchase of Treasury and agency securities

The entire world implemented fiscal support measures of varying degree and monetary measures including rate cuts to increase liquidity in the economy during the first wave and had to continue these measures even upto the last quarter of 2020-21. European Countries belonging to Euro Zone released their countercyclical buffers; they had created, putting less pressure on the already stressed fiscal positions. Thisactually provides avalid case for establishing a countercyclical fund to ensure that government follow a countercyclical fiscal policy to meet any cyclical issues that it will have to deal with in future, an important policy lesson for India to take note of.

IV. Indian Economy in the pre and post Covid period

It is now an accepted fact that Covid coupled with lockdown has caused massive damages to the world economy. Indian GDP shrank by more than 30%. But a deeper analysis of the data reveals that for India slowdown started way before Covid. The Indian economy was already in a slowdown with problems intensifying in the post covid scenario. Figure 1 shows the growth rate of GDP for past ten years. As the table 2 clearly shows there is a downward trend especially from 2015-16. GDP growth slowed down to 4.2% in 2019-20, the lowest level since 2002-03. In the pre-Covid19 period, nominal values of private sector investment also have been declining. The total outstanding investment projects between 2015-16 and 2019-20 declined by 2.4%, whereas new projects announced fell by 4%, as per data from the CMIE (Centre for Monitoring Indian Economy).

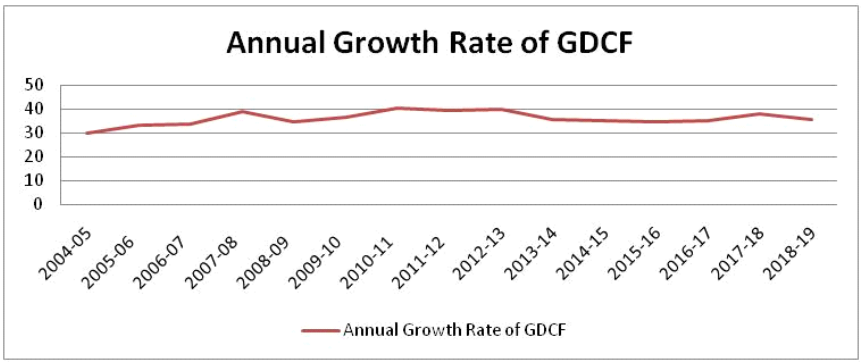
Table 2: Growth Rate of GDP in India

Year	Growth Rate of GDP (in %)	Decline from previous year (in %)
2015-16	8.26	0.26
2016-17	7.04	1.21
2017-18	6.12	0.92
2018-19	5.02	1.1
2019-20	4.2	0.82

Source: CMIE

Similar picture was seen in other indicators like growth in manufacturing sector and services sector. In the last quarter of 2019-20 industrial sector, that accounts for 30% of GDP, shrank by 0.58%. Unemployment reached a 45-year high and consumption expenditure fell for the first time in several decades (Mahendra Dev; 2020). Annual Growth rate of GDCF was also declining (Figure 1).

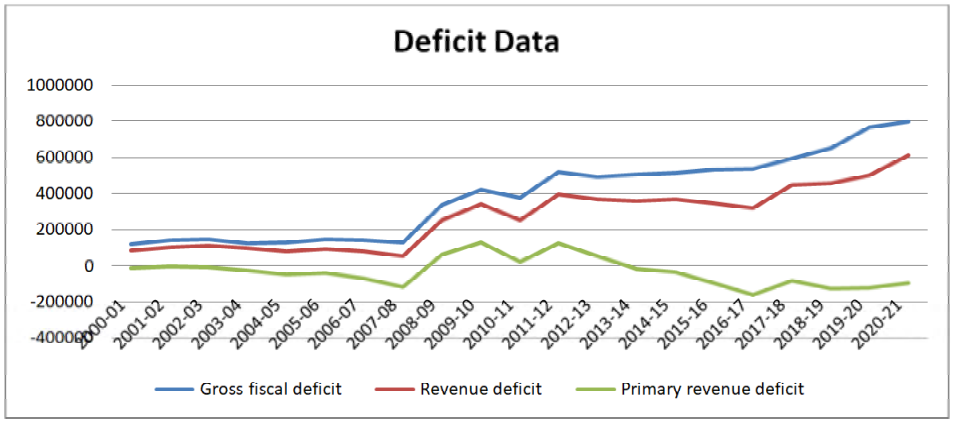
Figure 1: Annual Growth Rate of GDCF



Data Source: Handbook of Statistics RBI

Changes were being made in monetary policy to tackle it and hidden fiscal stimulus (fig 2 showing increased deficit) was also being given prior to 2020. Difficult situation faced by automobile sector and the steps to revive it is one such example.

Figure 2: Key Deficit Indicators



Data Source: Handbook of Statistics RBI

Now the question is whether the slowdown in Indian economy being observed today is due to Covid or we need to dig deeper to understand the structural issues being faced by Indian economy. Several studies (S. Mahendra Dev & Sengupta; 2020, Subramanium & Feldman; 2019) points towards the fact that slowdown is because of structural, cyclical and global factors. The response of the policies (fiscal and monetary) should accordingly be planned to counter both supply and demand factors. The measures adopted by Government of India provide (i) support in kind to vulnerable sections of the society and (ii) easy financing of loans to small businesses and MSME,s. These measures aim at solving liquidity problems in the society and providing some sort of social security net to weaker sections but do nothing to resolve the problem on supply side. On the other hand implementation of wage cuts of government employees initiated an environment in the society of expectation of income reduction which together with falling incomes in private sector deepens the crisis. Current recession as seen above is not just a result of covid but it was prevalent in Indian economy prior to that pointing towards structural issues impacting the Indian economy. Following only policies as prescribed by classical economists suggesting wage cut and not doing enough on demand front will

only result in a prolonged recession and recovery being more painful than as seen in V shaped.

An analysis of Indian economic policies shows that it is mostly countercyclical during the downturns but procyclical during the upswings largely due to Government expenditure variable (Yadav et al; 2014). This has led us to be completely unprepared with absolutely no shock absorbers. The Efficacy of MNREGA to act as automatic stabilisers will help us to support our migrant workforce. But the real test is whether we are able to utilise this labour force in productive activities leading to development of sturdy infrastructure in rural areas which will be useful in the long run and not projects which are of temporary nature , kutcha build up projects as has been observed at several places, a strict vigilance also needs to be kept on the transfer and utilisation of money with involvement of governments at local level. Otherwise money spent on MNREGA may become a scam later on.

V. Policy Response: Recommendation, Suggestions and Future Implications

Global crisis of 2020 triggered by Covid 19 pandemic has brought Keynesian fiscal stabilization policies again to the fore front. The discretionary part of fiscal policy will depend upon the discretion of government. Falling revenue income of the government during recessions may lead to reduction in government expenditure to balance the budget whereas rising levels of income during booms result in higher government expenditure. Thus the fiscal policy may end up being procyclical. The countercyclical budgetary/fiscal policy has a stabilizing effect on the economy whereas procyclical fiscal policy will end up destabilizing the economy. But what the world is experiencing should be treated as an exceptional situation which should not be used to advance the case of fine tuning the economy every time using discretionary fiscal measures. The pre crisis broad macroeconomic consensus still holds and the task of stabilization the economy undergoing a slowdown should first be left to monetary policy. On the fiscal front government should rely more on rule based inbuilt stabilizers for short term management of cyclical fluctuations in case of demand shocks and long run fiscal policy should focus more on growth and developing enabling factors to attract more investment. Fiscal stabilizers on expenditure side should be strengthened to provide adequate safety net to economically vulnerable sections of the society (both rural and urban poor). Emphasis should be to develop stabilizers on the supply side that can help in countering the supply shocks. The present crisis shows that the external factors can also result in significant slowdown of our economy in future. To remain prepared for such a scenario a thorough understanding of the effects of various stabilization policies on the economic activity is extremely important. In case of India, high public debt to gdp ratio acts as a limiting factor for use of discretionary fiscal policy.

VI. Conclusion

A loose policy stance by the fiscal and monetary authorities during the crisis will not result in an inflation spiral as the economy is performing far below its potential growth rate. Keynes idea of following a countercyclical fiscal policy always holds good. A prepared nation with enough money in its coffers can deal with such crisis relatively easier than an unprepared nation. The current pandemic lead recession has created problems on both demand and supply side. On one side the supply chain seems to be disturbed and on the other wages have declined, rising unemployment and uncertainty has lead to people focussing only on purchase of necessary goods cutting down on all other consumption requirements. Even if supply chain is managed it will not create demand on its own as the classical school of thought believes. Steps need to be taken to give boost to domestic consumption. But unfortunately the wage cuts seen in both government sector and private sector are generating negative sentiments. This is making people trying to save as much as they can for future needs. The paradox of thrift will result in further reduction in GDP. Even if loans at lower interest rates are offered to MSMEs they will hesitate to produce more because of piling up of inventories, lack of demand and migration of labour force back to their villages. The government needs to ensure demand increases

and do not go for further wage cuts. Instead public investment should be stepped up. Fiscal deficit will have to be taken care of once the economy recovers. The countries which have maintained countercyclical fund are in a much better position. India needs to learn and ensure taking steps to develop its rural areas using MNREGA fund, create countercyclical fund, pandemic management fund to ensure it is adequately prepared in future.

The Indian economy started recovering from the ill effects of covid 19. Similar recovery was seen in other parts of the world also. Unfortunately with India letting its guard down and got busy with elections the second wave quickly engulfed the entire economy.

Whereas the rest of the world focussed on vaccinating its citizens we were very slow in vaccinating our population. The mutated virus is not just rampaging the families it is badly affecting Indian economy giving its competitor, China, to take advantage of the situation. Although our finance minister is trying to allay the fears by arguing that effects of second wave will be less on the economy and government trying to stop short of enforcing strict national lockdown. The fact is the adverse impact of the second wave is affecting people, businesses and society in general both monetarily and psychologically. The wounds will take years to heal.

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Study on the Impact of ICT on Higher Education During Covid-19 Pandemic

Mr. Shubha V S* & Mr. Jayanth S Kashyap**

Abstract

In the field of higher education Information and Communication and Technology (ICT) is one major tool which is used to unlock the innovative practices in teaching and learning process from traditional method towards modern method. During this COVID-19 Pandemic, many changes took place not just in the field of business, economy, science and technology, etc. but also, in the field of education which is basically time bonded always. At this COVID-19 pandemic situation ICT is one of the major tools which is found more feasible in connecting academics and students. So, it is the teachers and the students who have to adopt, apply and act online which was found most challenging. The present survey is made to know the efficacy of ICT in reaching the respondents successfully and to identify whether it leads to positive or negative outcome.

Keywords: Information and Communication and Technology (ICT), Efficacy, Teaching, COVID-19.

1. Introduction

Information and Communication Technology' (ICT) first appeared in the mid-1980s and was defined as "All kinds of electronic systems used for broadcasting telecommunications and mediated communications". It is a vast subject and the concept are evolving in the field of education too. It is an extensional term for information technology (IT) that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage and audio-visual systems, that enable users to access, store and transmit information. The new reforms in the field of technology as paved us the way in bringing many innovations in the field of education system.

The main objective of the present survey is –

- To know the causes and effects of online teaching,
- To know the interest of students in learning online and
- To know the level of confidence that the students have gained to take up the examination.

2. Review of Literature

In 1981, Sylvia Scribner and Michael Cole studied a tribe in Liberia, the Vai people, that has its own local language. Since about half of those literate in Vai have never had formal schooling, Scribner and Cole were able to test more than 1,000 subjects to measure the mental capabilities of literates over non- literates. This research, which they laid out in their in their book The Psychology of Literacy, allowed them to study whether the literacy divide exists at the individual level. Warschauer applied their literacy research to ICT literacy as part of his model of ICT access.

Currently, there is a significant number of initiatives to assess and monitor the efficiency of ICT use and its impact on education. SITES (the second information technology in educational study), sponsored by the International Association for the Evaluation of Educational Achievement (IEA), is

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an exemplary study which identifies and describes the educational use of ICT across 26 countries in the world. The explores the use of computers in teaching through sampling teachers, principles and ICT responsibility in schools. While it does not look into student achievement, it does look at the perceived impact of ICT on students from the teacher's perspective (Pelgrum and Anderson, 1999; Kozma, 2003). Moreover, Balanskat et al.(2006) reviewed several studies on the impact of ICT on schools in Europe. They conclude that the evidence in scarce and comparability is limited. Each study employs a different methodology and approach, and comparisons between countries must be made cautiously. In addition, in several other studies (see Yusuf, and Afolabi. 2010; Shaikh, 2009; Jayson, 2008 ; Shaheed et., 2007) it is argued that ICT helps to improve the quality of learning and educational outcomes. Some other serveys (eg. Iqbal and Ahmed, 2012; Hameed, 2006; Khan and Shah, 2004) argue that, in order to be successful, a country should improve its education system by implementing effective and robust ICT policies.

3. Research Methodology

Primary Data: Its source is an original data source, that is, one in which the data are collected first-hand by the researcher for a specific research purpose or project.

Secondary Data: It refers to *data* that is collected by someone other than the user.This survey consists of both Primary and Secondary data. Primary data includes Questionnaire Method, interaction with faculties and students. Secondary data includes Articles, Newspaper, Journals and Magazines.

4. Survey report on the impact of ICT during COVID 19 pandemic

The ICT was unprecedented to adopt initially, complex to apply and obfuscated to act through various portals like Zoom, Loom, Google Meet, Microsoft etc., where in only few institutions trained their teachers to conduct classes online before lockdown, but majority of the institutions were in a dilemma on how to proceed with the online classes, how and which topic to be concentrated upon and how to complete the syllabus within the stipulated time. In the similar vein, the students were in a dilemma about completing the curriculum, distracted and not adjusted to the online classes due to various issues like network connectivity, not having tranquil environment at their places etc., initially, it was a challenging task to reach the students and complete the curriculum as planned. Some of the practical subjects' concepts were fussy and hard to compact the topics, which found erratic. With all these difficulties, we had to proceed with online classes which was the only choice. Let's elucidate the challenges that are been faced during the Pandemic.

Data About the Survey

For the study google form was prepared and circulated in the class groups for which few students' response was received from which the following data was collected and same response is put forth in the form graphs.

The summary of some of the challenges identified through survey are:

- **Network Connectivity issues/ Frequent Disconnections:**

  In the normal scenario, earlier to pandemic there were connectivity issues faced but, were not that vital for any of us. But this was the situation where the connection and bonding to be built between the teachers and the students simultaneously through network only, which was the major problem encountered.

  This pandemic made us identifying network related issues due to online classes which was not faced earlier. More and more usage of the network was leading us to face such issues for example, voice disturbance, server issue, distraction of interest etc.. This was the major reason encountered in reaching students.

- **Lack of Clarity in Discussion of Topic**

  The simultaneous connection and bonding to be built between the teachers and the students while delivering the lecture was not happening due to lack of connectivity,

with which the students were not able to learn the concepts in-depth.

- **Lack of Audio/ video Clarity**

  As there were many dimensions used in teaching-learning process, students found it difficult to inculcate the same. Added dimensions used in online classes for the effective teaching/learning, were very disturbing and were not reaching as planned.

- **Reaching poor people:**

  It was a very challenging task to reach the poor people who were not having the facility to take up the online classes as it was implemented without any prior notice. Students of the poor section were lagging behind the topics covered by the teachers and lack of other option to clarify doubts. They were distressed of the classes andafraid of their career.

- **Lack of training to the teachers:**

  As ICT was not encouraged as full-time teaching Teachers of 20th century were now started to take over the ICT, but who were still in the initial stage of taking on that was almost like switching on from the intermediate class to the Post Graduate class. Which was not fully learnt and was very difficult to practically and directly apply in front of the students without any prior preparation.

- **Lack of Concentration to the students**

  Due to the frequent disturbance and lack of prior preparation of the ICT concept, concentration to the students was reducing day by day. To know which student is understanding the concept, which student need to be cleared with some more examples, which student totally did not understand where more efforts needed to make them understand about the topic which was known with their facial expression in the offline classes was a difficult task in online classes.

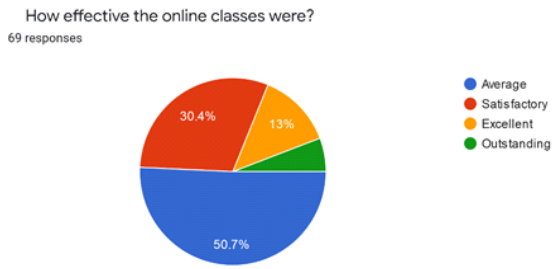
- **Lack of interest in learning:**As there were many distractions in learning process like family and friends interference and Social Medias etc., was leading students to lose their interest in learning, with which all the efforts was not too productive.

- **Lack of attention towards individual student:**It was not possible to pay individual attention towards students due to many reasons like network issues, non – availability of students, time constraints etc.,

- **Lack of training in using technology:**In many institutions it was not possible to train the teacher due to time constraint and with which in the initial stages it was found very difficulty to conducting online classes.

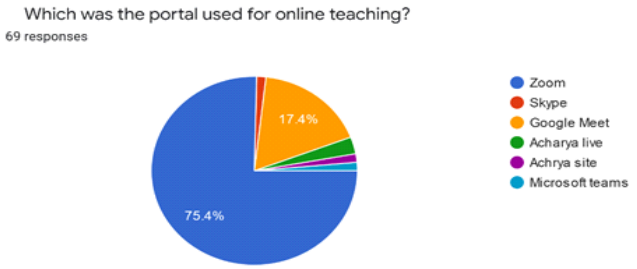
The outcomes as per survey conducted are:

1. Graph 1: showing the effectiveness of online classes



As per the survey, it is observed that 50.7% of the responses are showing Average result, 30.4% of the responses are Satisfactory, 13% of the responses are Excellent and 5.9% of the responses are Outstanding.

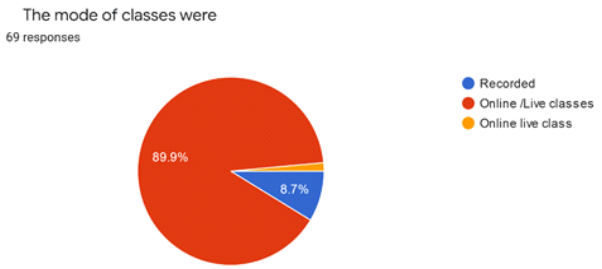
2. Graph2: showing the portal used for Online classes



From the above graph it is observed that, majority of the institutions opt to go with Zoom portal as the mode of communication to conduct online classes and very few opted to go with other portal like

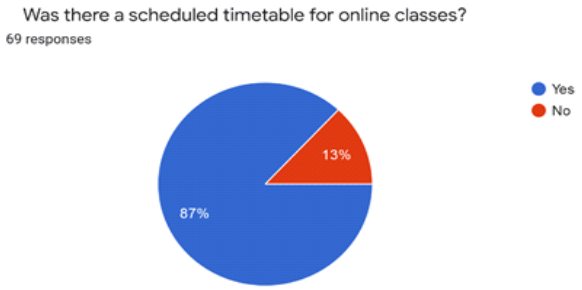
Skype, Google Meet, Microsoft team, etc., as per their convenience.

3. Graph 3: showing the mode of classes



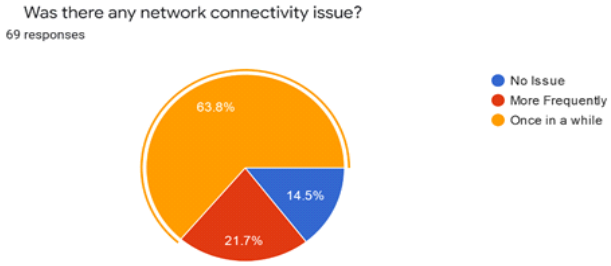
From the above graph, it is observed that majority of the online classes were Online-live classes and very few opted for recorded classes.

4. Graph 4: showing the details of the timetable



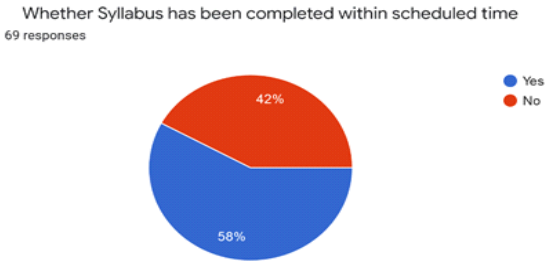
As per the survey it is found that majority of the institutions were having the scheduled timetable and hardly institutions did not frame the timetable.

5. Graph5: showingthe issues related to the network



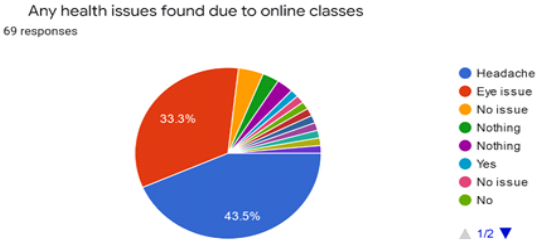
From the above graph it is observed that 14.5% of the students found no issues with the network, 21.7% of the students were facing network connectivity issue and 63.8% students were facing the issue once in a while.

6. Graph 6: showing the details of syllabus completion



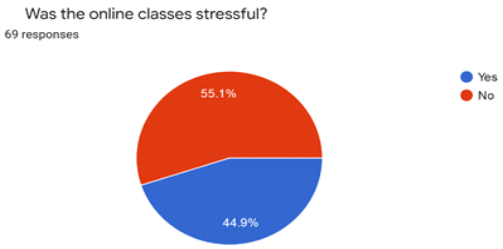
From the above it is analysed that 58% of the responses have said that the syllabus was fully completed and remaining percentage of the responses showing that the syllabus was not completed.

7. Graph 7: showing the details of health related issues during attending online classes



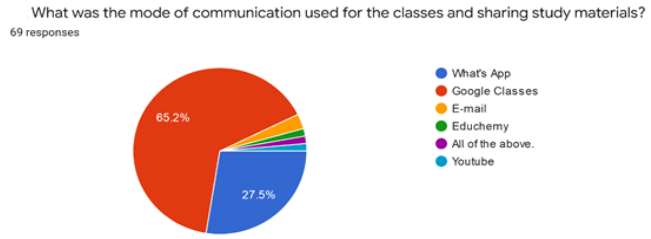
From the above graph it is observed that 43.5% respondents were suffering from headache, 33.3% respondents were suffering from eye issues, few respondents were undergoing other health issues and few free from heath issues.

8. Graph 8: showing the amount of stress generated by online classes



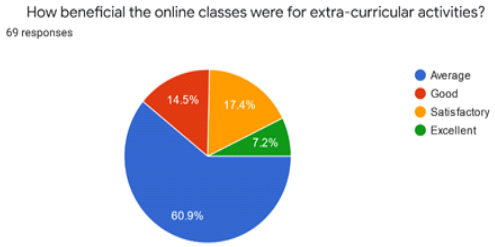
From the above graph it is noticed that 44.9% of the respondents were stressful and remaining respondents were free from stress.

9. Graph 9: showing the mode of communication used for the classes and sharing study materials



From the above graph it is noticed that 65.2% of the respondents were using Google classroom as the mode of communication majorly and remaining respondents were using the other modes like What's app, E-mail, etc.,

10. Graph 10: showing the benefits of online classes in conducting Extra-curricular activities



From the above graph it is observed that 60.9% of the respondents response were average and the remaining respondents were above average.

5. Suggestions

From the above study it is been observed that there are many constrains in reaching students when it comes to ICT based learning in higher education. The following are the points which are suggested from the above survey:

1. **Technology Constraints:** There is drastic change in the technology which has been constrained only to urban areas, but it has to be extended even to the rural areas to reach students in every corner of the country.
2. **Student-Teacher Training:** Workshops to be conducted for better access of the online learning in various streams.
3. **Optimum utilisation of the resources:** If it is implemented appropriately, it will be cost effective and time saving process in reaching majority of the aspirants.

6. Conclusion

To overcome the pandemic situation the institutions, academicians and students adopted ICT as a tool and slowly started functioning in a systematic manner in which everyone is accustomed to new education system and technology which paved the way to grow-morally, socially and intellectually. Due to the matter of time the technology amplified the rigid minds and started expanding towards the accomplishment of the goals.

It is the time to realise the proverb 'slow and steady wins the race' when it comes to 'the ICT challenges and learning outcomes', which took our race slowly to the greater heights in winning the battle of academics successfully during pandemic COVID-19. It was possible to take sagacious decisions towards perfection in that hard time. With this it can be concluded that, ICT can be used as a pedagogic tool to develop efficacy and conviction to strengthen the mindset of the students at this difficult time. Hence, ICT based learning shouldn't be limited only for pandemic period, in turn need to be used often as the practice in the process of learning extra skills to reach each and every students.

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Customer Perceptions in Making Decision to Buy Flats

Ms. Jyoti Gupta*

INTRODUCTION

Elite Homes Private Limited is a Private incorporated on 09 March 2005. It is a non-government Company and registered at Office of Registrar of Companies, Delhi. Itsauthorized share capital is Rs. 47,000,000 and its paid up capital is Rs. 35,280,500. Itisinvolved in constructions works ofcivil engineering.

Elite Homes Private Limited's Annual General Meeting (AGM) was conducted on 30 September 2019 and as per Ministry of Corporate Affairs (MCA) record, its balancesheetwas filed on 31 March 2019.

The directors of Elite Homes Private Limited are Mr. Vikash Kumar Agarwal and Mr. Dinesh Kumar Sharma.

Elite Homes Private Limited's Corporate Identification Number is (CIN) U45201DL2005PTC

13372 1and i ts registration number is 133721. Its Email address is elite homespvtltd@gmail.com and its registered address is SHOP NO. 30, M2KMALL, 16, MANGALAM PLACE, DIST. CENTRE, SECTOR-3, ROHINI NEW DELHI West Delhi 110085 INDIA.

Real Estate in India

Real estate is "property consisting of land and the buildings on it, along with its natural assets such as crop, minerals or water; immovable material goods of this nature; aninterest vested in this (also) an item of real property, buildings or housing in general. Also: the business of real estate; the profession of buying, selling, or renting land, buildings, orhousing."

The Indian Real Estate Sector is not as impressive for investments as it used to be from 2001 to 2007. The real estate sector is thought to be in trouble due to growing costs of financing. Real estate projects in India take along time to complete due to acomplicated and corrupt regulatory mechanism. Several of India's publicly trade dreal estate firms are in debt. The inventory of unsold real estate assets is growing and it is expected the market will under go price corrections. According to Mumbai-based market research agency, Liases For as, 30% of the transaction in the real estate sector is done with black money. Experts expect new property prices to fall up to 50% in next three months in Tier 1cities.

Recent history

In March 2005, the Government of India allowed 100% foreign direct investment inconstruction and development projects. Before that only non-resident Indians and persons of Indian origin were permitted to invest in the real estate sector. Foreign investors could only invest through wholly owned subsidiaries and partnerships with Indian firms. However, foreign investors were not allowed to hold land for speculative purposes.

In July 2013, the Reserve Bank of India increased the bank rate by 200 basis points to 10.25%. This increased the cost offunds for the entire banking sector.

In July 2013, the State Bank of India took ownership of a condominium project calledTeen Kanya in Kolkata after the builder, Bengal Shelter, defaulted on ` 1.77 billion (US$26 million). About 400 people, who had paid up to 90% of the prices, found them selves in legal complications.

On 14 August 2013, the RBI put various restrictions on the amount of funds individuals and companies can invest abroad, in a bid to protect the value of

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the Indian rupee. Among the restrictions was aban on the purchase of realestate abroad.

On 27 August 2013, the National Housing Bank, while presenting the quarterly updateof the Indian housing inder, Resider, that 22 of 26 indexed cities were seeing a fall inpricesduring the April–Juneperiod.

In October 2013, the RBI issued an advisory to buyers and banks. It asked banks torelease sanctioned individual housing loan amounts in phases linked to constructionstages, instead of releasing the funds as a lump sum. The unlinked loans used to act ascheap credit for builders. Builders used to encourage buyers to put 20% of the price ofthe housing unit as down payment and apply for the rest 80% as a loan. These we recalled were 80:20 or 25:75 schemes. This loan was used directly by the builder for construction. The builders would sometimes pay the interest on the loans for a period.The reason for this was that individual housing loans drew an interest rate of around 10%, where as housing project loans attracted an interest rate of 18%. The RBI also said that using such schemes may affect the credit rating of the buyer and expose banks to higher non-performing assets.

In July 2015, LIC Housing Finance put up the Orbit Residency Park project of Orbit Corporation, in Andheri, Mumbai, for auction. It had a reserve price of [1] 1.25 billion (US $18 million).

In May 2016, Real Estate (Regulation and Development) Act, 2016 (RERA) came into existence. RERA is considered to be as one of the landmark legislation passed by the Government of India for the betterment of real estate in India. The objective of Real Estate (Regulation and Development) Act 2016, is to reform the Indian real estate sector, by encouraging greater transparency, accountability and financial discipline.

The market size in India of the real estate sector in 2019 was US$1.72 billion which isexpected to reach US$1 trillion by 2030. It is expected that the sector would have a contribution of 13% to the GDP of the country by 2050.

OBJECTIVE OF THE STUDY

The purpose of this study is to assist housing developers to understand the current andfuture housing trend in order to improve or develop better policies. It is essential and imperative for any business corporation to come up with customer focused tactics through strategic transformations.

In general, requirement for customer purchase intention (from the relevant customer perceived value) drives housing developers increating houses with greater purchase intention to the end users leading to higher yield of customer loyalty and profitability as wellas improved standard of living.

The report intends to study "Study the factors that influence the consumers' buying decision". The objectives of thereport are:

- To explore which factors influence the buying decision of the customers.
- To analyse the significance of Ambience factor in consumers buying decision.
- To analyse the significance of Documentary factor in consumers buyingdecision.
- To analyse the significance of Area factor in consumers buying decision.
- To analyse the significance of Facilities factor in consumers buying decision.
- To analyse the significance of Location factors in consumers buying decision.
- To analyse the significance of Proximity in consumers buying decision.
- To analyse the significance of Possession factor inconsumers buying decision.
- To discover clients requirements or expectations for service.
- To forecast future expectation of clients.

LIMITATIONSOF THESTUDY

While preparing the report I have faced some limitations which are mentioned here:

- There have time constraint to me. If I get more time then I could enrich my report more.

- I have cover only Dharuhera, it would be better if could cover more cities in my report.
- I used 7 factors, more factors could have been explored to extend the scope of the study.
- The general views about each factor were taken from customers, more specific questions could have been asked to explore more on a particular factor and know the exact requirements of the customers.
- In certain factors like flooring and furnishing, the options given were in general for the whole apartment but it has been observed in many cases that theseoptions may be different in case of different rooms or places in the same apartment, so thereis a great scope to evaluate these factors further..
- Our courses on marketing were based on theories. Sometimes it was difficult to relate all the practices of operation to the theories.
- As far as the respondents are concerned they did not cooperate as cordially as it was expected.
- The designated authorities are also been hesitated to give the information because of the authority and policies.

If I had not to face these limitations then my report could be more perfect.

LITERATURE REVIEW

CRITICAL REVIEW OF KEY MODELS AND THEORIES

SHETH, ET AL. (1991)– Theory of Consumption Value: One of the most up to datemodels that explain consumers' purchase behavior is the consumption values model developed by Sheth (1991a). Developed out of the effects of personal values on consumer behavior, consumption values (Sheth et al., 1991) is an important model that shows why a product is preferred.

Usefulness, strength of this theory is its simplicity as it is simpler in comprehending customer perceived value through searching its dimensions (Aulia, et al., 2016) and this model is excellent in assessing the diverse traits and attributes of products through exploring customers' judgement (Animashaun, et al., 2016).

Criticism, However, it is also similarly vital for consumption values interms of preferences of product (Candan, etal., 2013) and this theory merely show that the choice made by customers as well as merely dealing with voluntary and logical selectionsinstead (Animashaun, et al., 2016). Hence, the uncommon functionality needs to be simplified (Animashaun, et al., 2016).

ZEITHAML (1988)–Model of Four Types of Perceived Value: Zeithaml

(1988) asserts that the perceived quality is regarded as benefits and that perceived price is considered as sacrifices for particular products or services, or as a compromise between what is given and what is received. Zeithaml (1988) model further classified four different elements of customer value which elaborates "*value as low price, value as whatever the consumer wants in product, value as quality obtained from the price paid and lastly value as what consumer gets for what he or she paid*."

Zeithaml's model of perceived value has a direct influence on purchase intention (Lundgren, 2013) and it allows for both benefits and sacrifices included in any action that increase customer value (Klanac, 2013).

Criticism, However, the difference between the characteristics of the object and higher level concepts does not exists in this theory (Klanac, 2013) as well as being unable to support the sources of value identification and reasons foundations of values provision (Klanac, 2013). Additionally, this model is not tackling the irrational experiences of the customers which is achievable via direct examination of customer activities (Klanac, 2013). However, there are limitations for this model as this resorted to the experience of service dueto the multi dimensional model defined by conventional aspects such as the perceived benefit, perceived quality, as wellas the perceived risk (Moosa & Hassan, 2015).

HOLBROOK (1999)– Typology of Consumer Value: The theory by Holbrook (1999) labeled perceived

value as an interactive relativistic preference experience in the context of comparativeness, subjectivity and specificity. Further more, this theory suggests that factors such as play, efficiency, status, excellence, spirituality, aesthetics, esteem, and ethics are values which are individually different where customers may acquire via consumption and these values are categorized according to three dimensions i.e. self- or other-oriented, extrinsic or intrinsic, and active or reactive. This theory isconsidered as the most complete model in a study by Sanchez-Fernandez & Iniesta-Bonillo (2007)and this is because it considered more dimensions and aspects such associal, economic, hedonic, and *Journal of Technology Management and Business (ISSN:2289-7224) Vol 5, No 2, 2018* 63 self less aspect. Moreover, this theory also eases in the identification of the value dimensions if the perceived value is based on customers' needs (Aulia, et al., 2016). The idea of this model and framework is basedon the product value encompassing goods and services through three-dimensionalaspects (Holbrook, 1999). Hence, this theory is deemed as one of the appropriate frameworks indetermining customer perceived value (Moosa & Hassan,2015). Criticism, However, this theory has a complicated operationalization for certain valueelements, for example the ethical and spiritual value which are overlooked and there is ambiguity between elements like status and esteem (Solomon, 1999). Moreover, it is not easy to classify perceived values to differentiate between active and reactive sources.

WOODRUFF (1997)– Consumer Value Hierarchy Model: The theory of Woodruffconsists of goals of customers, their consequences as well as product attributes or performance, and incorporating received value and desired value which concentrate on values themselves according to customers' assessments which changes over time. This theory provides in sights in understanding the customers' needs instead of benefit-sacrifice method (Woodruff & Gardial, 1996) which is outstanding in theclarification of the complication of perceived value as well as aids in explaining thereasons behind customers judgments of various benefits in evaluation of different kindof products (Khalifa, 2004). It alsoredirect thevalue emphasis from attributes to consequences to yield valuefor distinct and strategic competitive advantage.

Criticism, however, this theory is unable to explain the customer perceived valuediversity (Sanchez-Fernandez & Iniesta-Bonillo,2007) aswell asbeing incapableto pinpoint the attribute preference of customer values which shaped customer value.This is due toindividual preference of every customer regarding the features of the aproduct (Aulia, etal., 2016).

RESEARCH METHODOLOGY

Methodology is the systematic, the oretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, the oretical model, phases and quantitative or qualitative techniques.

A methodology does not set out to provide solutions-itis, therefore, not the samething as a method. Instead, it offers the theoretical underpinning for understanding which method, set of methods or so called "best practices" can be applied to specific case, for example, to calculate aspecific result.

To identify the following factors google form was circulated to customers and peoplewho showed interest in flats of Elite Homes Pvt. Ltd. (one of the major builder), realestatebrokers and buyersof apartments in Dharuhera:

Population: The population of the research paper is all the clients who are getting service from Elite Homes Pvt. Ltd. My population of this research is the Elite Homes Pvt.Ltd clients and theapproximate clients are100.

Element: The sampling element of the research paper is each who is getting thedifferentsurvives and productsin EliteHomes Pvt. Ltd.

Sampling Unit: In any organization, there are many employees in different levels inmanagement levels. So, the sampling unit of the research paper is the each level ofclients Elite Homes Pvt. Ltd.

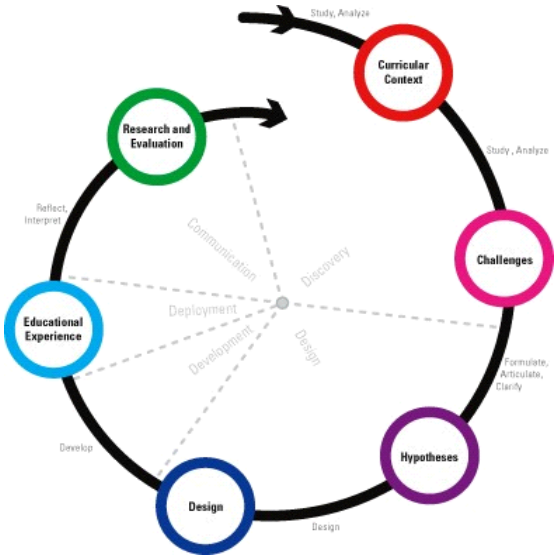
Extent: The extent of a research paper is the area, which the paper covers to fulfill the objectives. Hereit is Elite Homes Pvt. Ltd.'s Dharuhera project.

Sampling frame: A sampling frame is the list of all sampling elements available forselection. The sampling frame of this research paper is the list of clients who getdifferentservicesfrom Elite Homes Pvt. Ltd.

Sample size: Census research is conducted for the project paper. Sample size is thetotal number of sample elements from the population selected in the sample, which represents the

whole population of the research. Among 54 (approximate) clients I have interviewed 20 clients who have bought commercial places and apartments from Elite Homes Pvt. Ltd.

Descriptive research design was used for this research.



DATA ANALYSIS

Table 1: Rotated Component Matrix[a]

	Component						
	1	2	3	4	5	6	7
VAR00001	.740						
VAR00002	.761						
VAR00003	.591						
VAR00004	.635						
VAR00005		.809					
VAR00006		.837					
VAR00007			.760				
VAR00008			.599				
VAR00009				.582			
VAR00010				.662			
VAR00011				.674			
VAR00012				.954			
VAR00013				.824			
VAR00014					.772		
VAR00015					.808		
VAR00016						.602	
VAR00017						.685	
VAR00018					.520		
VAR00019							.915
VAR00020							.662

Extraction Method: Principal Component Analysis. Rotation Method:Varimax with Kaiser Normalization.
a. Rotation converged in 11 iterations.

Table 1, displays rotated component matrix and reports the factor loadings for each variable on the components or factors after rotation. Each number represents the partial correlation between the item and the rotated factor.

The secor relation shelp to formulate an interpretation of the factors or components, by looking for a common thread among the variables that have large loadings for a particular factor or component. The factor analys is rotation methods start with the original axes and apply a mathematical rotation which simplifies the relationships between factors and variables. (Refer Table 1.6) Through Factor Analysis, the extraction of 7 factors out of 20 consumer perception variables is possible.

Analysis and Interpretation

In order to understand the consumer perceptions while buying flats. An exploratory factor analysis has been used as shown in Table 1 to test the construct validity in data to evaluate the factors influencing the consumer buying decision for flats.

Factor 1-Ambience

Factor 2-Documentary

Factor 3-Area

Factor 4-Facilities

Factor 5-Location

Factor 6-Proximity

Factor 7-Possession

The rotated component matrix gives an idea about the factor loadings. Based on the factor loadings wewill consider theitems and reducethem to factors.

On the basis of the above limit, the items VAR 00001 (Sunlight entering the apartment), VAR 00002 (Furnishing), VAR00003 (Flooring) and VAR 00004 (Ventilation) were combined to form one factor and named as Ambience Factor. The items VAR00005 (The Banks which are available for financing) and VAR 00006 (Legal check of property) were combined as one factor and named Documentary Factor. The items VAR 00007 (The super built up area of the flat) and VAR00008 (Flat's carpet area) were combined as one factor and named as Size Factor. The items VAR 00009 (Electric Supply), VAR00010 (Water Supply), VAR00011 (In House Security), VAR 00012 (Security) and VAR00013 (Parking Space) were combined as one factor and named asAmenity Factor. The items VAR 000014 (Locality), VAR00015 (Prime Location) and VAR 00018 (Proximity to markets) were combined as one factor and name das Location Factor. The items VAR 00016 (Proximity to Schools, Colleges), VAR 00017 (Proximity to Hospitals) were combined as one factor and named as Proximity Factor. The items VAR 00019 (Time in Apartment Possession), VAR 00020 (Flat's Price per square feet) were combined as one factor and named as Possession Factor.

Table 2: Total Variance Explained

Component	InitialEigenvalues			Extraction Sums of SquaredLoadings			Rotation Sums of SquaredLoadings		
	Total	% ofVariance	Cumulative %	Total	% ofVariance	Cumulative %	Total	% ofVariance	Cumulative %
1	3.212	16.061	16.061	3.212	16.061	16.061	2.660	13.300	13.300
2	2.797	13.983	30.044	2.797	13.983	30.044	2.383	11.917	25.217
3	2.113	10.567	40.610	2.113	10.567	40.610	2.206	11.032	36.249
4	1.895	9.477	50.088	1.895	9.477	50.088	1.971	9.855	46.105
5	1.571	7.855	57.943	1.571	7.855	57.943	1.896	9.481	55.585
6	1.470	7.348	65.290	1.470	7.348	65.290	1.632	8.161	63.746
7	1.303	6.515	71.805	1.303	6.515	71.805	1.612	8.059	71.805
8	.973	4.867	76.673						
9	.924	4.619	81.292						

10	.755	3.777	85.069						
11	.575	2.874	87.942						
12	.508	2.538	90.480						
13	.444	2.221	92.701						
14	.387	1.934	94.635						
15	.327	1.633	96.269						
16	.275	1.374	97.643						
17	.248	1.240	98.882						
18	.107	.535	99.417						
19	.089	.445	99.862						
20	.028	.138	100.000						

Extraction Method: Principal Component Analysis.

Analysis and Interpretation

Factor 1: Ambience

This factor explains 13.300 percent of total variance. It includes variables like Sunlight Entering the Apartment, Furnishing, Flooring and Ventilation with factor loadings 0.740, 0.761, 0.591 and 0.635 respectively. It suggests that the customer decision is influenced by the internal factors consisting of sunlight entering the apartment, furnishing, flooring and ventilation in theapartment.

Factor 2-Documentary

This factor explains 11.9 17 percent of total variance. It includes variables like the banks which are available for financing and legal check of property with fact or loadings 0.809 and 0.837 respectively. It suggests that the customer decision is influenced by the trustwhich the consumers have in the builders in terms of the banks available for financingandlegal check of theproperty.

Factor 3-Area

This factor explains 11.032 percent of total variance. It includes variables like Superbuilt up area of flat and Flat's carpet area with factor loadings 0.760 and 0.599 respectively. It suggests that the customer decision is influenced by the internal factors consisting of like Super built up area of flat and Flat's carpet area.

Factor 4-Facilities

This factor explains 9.855 percent of total variance. It includes variables like electric supply, water supply, in-house security, security and parking space with factor loadings 0.582, 0.662, 0.674, 0.954 and 0.824 respectively. It suggests that the customer decisionis influenced by the additional factors consisting of electric supply, water supply, in-house security, security and parking space available.

Factor 5-Location

This factor explains 9.481 percent of total variance. It includes variables like locality,prime location and proximity to markets with factor loadings 0.772, 0.808 and 0.520 respectively. It suggests that the customer decision is influenced by the external factors consisting of locality, prime location and proximity to markets.

Factor 6-Proximity

This factor explains 8.161 percent of total variance. It includes variables like proximity to schools, colleges and proximity to hospitals with factor loadings 0.602 and 0.685 respectively. It suggests that the customer decision is influenced by the external factors consisting of proximity to schools, colleges and proximity to hospitals.

Factor 7-Possession

This factor explains 8.059 percent of total variance. It includes variables like time inapartment possession and Flat's price per square feet with factor loadings

0.915 and 0.662 respectively. It suggests that the customer decisionis influenced by the possession factors consisting of time in apartment possession and Flat's price persquare feet.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.720
Bartlett's Test of Sphericity	Approx. Chi-Square	410.679
	Df	190
	Sig.	.000

Analysis and Interpretation

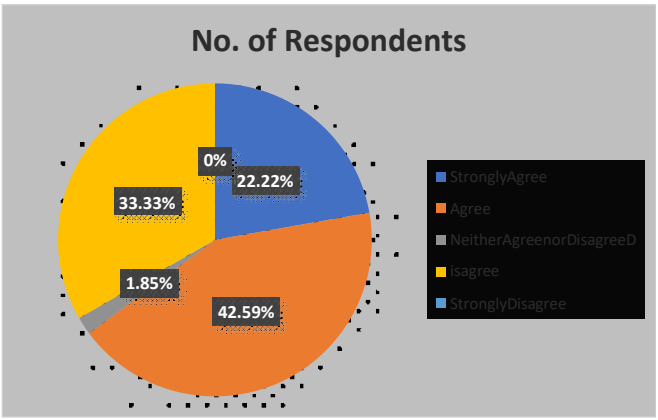
To determine the adequacy of the data, KMO measure of sampling adequacy is used. KMO is 0.720 which explains the data used is sufficient for factor analysis.

1. Sunlight entering the apartment plays a significant role in the decision to buy a flat.

Table 4

	No. of Respondents	Percentage
Strongly Agree	12	22.22%
Agree	23	42.59%
Neither Agreen or Disagree	1	1.85%
Disagree	18	33.33%
Strongly Disagree	0	0%
Grand Total	**54**	**100.00%**

Graph 1



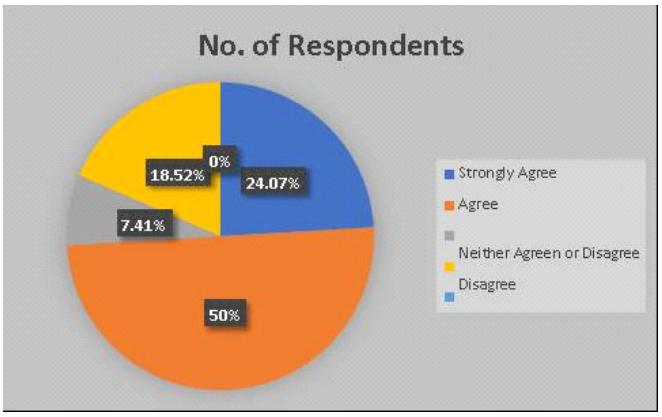
Interpretation: The above graph shows that 42% of customers Agree that Sunlight entering the apartment plays a significant role in the decision to buy a flat, 22% strongly agree on this and 33% disagrees while no respondent strongly disagrees with the statement.

1. Furnishing plays a significant role in the decision to buy a flat.

Table 5

	No. of Respondents	Percentage
Strongly Agree	13	24.07%
Agree	27	50.00%
Neither Agreen or Disagree	4	7.41%
Disagree	10	18.52%
Strongly Disagree	0	0%
Grand Total	**54**	**100.00%**

Graph 2



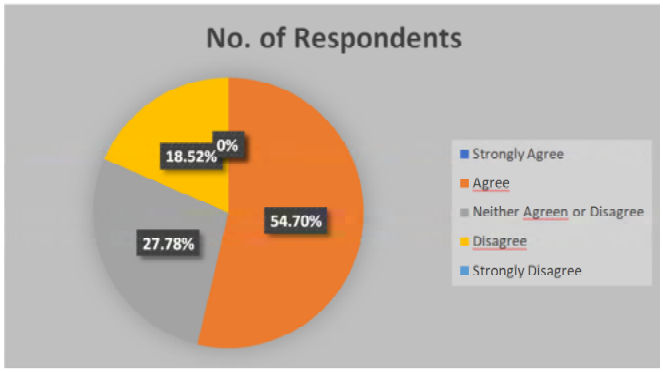
Interpretation: The above graph shows that 50% of customers Agree that Furnishingplays a significant role in the decision to buy a flat, 24% strongly agree on this and1 8.52% disagrees while no respondent strongly disagrees with the statement. But 7.41% respondents are unclear about it.

2. Flooring plays a significant role in the decision to buy a flat.

Table 6

	No. of Respondents	Percentage
Strongly Agree	0	0%
Agree	29	53.70%
Neither Agreen or Disagree	15	27.78%
Disagree	10	18.52%
Strongly Disagree	0	0%
Grand Total	**54**	**100.00%**

Graph 7



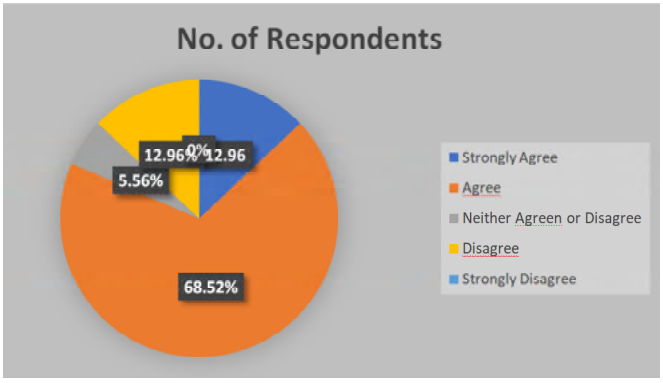
Interpretation: The above graph shows that 54.7% of customers Agree that Flooringplays a significant role in the decision to buy a flatand 18.52% disagrees while norespondent strongly agree or strongly disagree with the statement. But a significant amount of respondents i.e. 27.78% still cannot decide the variable is significant or not.

3. Ventilation plays a significant role in the decision to buy a flat.

Table 7

	No. of Respondents	Percentage
Strongly Agree	7	12.96%
Agree	37	68.52%
Neither Agreen or Disagree	3	5.56%
Disagree	7	12.96%
Strongly Disagree	0	0%
Grand Total	**54**	**100.00%**

Graph 8



Interpretation: The above graph shows that 68.52% of customers Agree that Ventilation plays a significant role in the decision to buy a flat, 12.96% respondents strongly agreeand 12.96% disagrees while no respondent strongly disagree with the statement. But some still cannot decide the variable is significant or not i.e. 5.56%.

FINDINGS AND SUGGESTIONS

Findings

1. 7 factors were identified from the 20 variables of consumer perception before buying flats.
2. It was found that Majority of customers considers that Sunlight entering the apartment plays a significant role inthe decision to buy aflat.
3. It was found that Majority of customers considers that Furnishing plays a significant role in the decision to buy aflat.
4. It was found that only 54% of customers considers that flooring plays a significant role in the decision to buya flat while the rest disagrees or areconfused.
5. It was found that Majority of customers considers that ventilation plays a significant role in the decision to buy aflat.
6. It was found that Majority of customers are confused (neither agree nor disagree) that Banks available for financing plays a significant role in the decision to buy a flat only a small proportion give significance

to this variable indeciding whet her to buy a flat or not.

7. It was found that Majority of customers (54%) are confused (neither agree nor disagree) that Legal check of property plays a significant role in the decision to buy a flat but also a significant proportion i.e. 35.19% agreeswith the significance of this factor.
8. It was found that Majority of customers considers that Super built up area of flat playsa significant role in the decision to buy a flat. But also a significant proportion (38.89%) is still confused regarding thisdecision.
9. It was found that Majority of customers considers that Flat's carpet area plays a significant role in the decision to buy a flat. But also a significant proportion (20.37%) is still confused regarding this decision.
10. It was found that Majority of customers (83.33%) are confused (neither agree nordisagree)that Electricsupply plays asignificant rolein the decisionto buyaflat.
11. It was found that Majority of customers considers that water supply play a significant role in the decision to buy a flat-77.78%.
12. It was found that Majority of customers (70.37%) are confused (neither agreen or disagree) that in-house security plays a significant role in the decision to buy a flat.
13. It was found that Majority of customers (70.37%) are confused (neither agreen or disagree) that Security plays a significant role in the decision to buy aflat.
14. It was found that Majority of respondents agrees to some extent that parking space is significant in deciding to buy a flat ornot.
15. All the respondents agree unanimously to the significant role of locality in decision making to buy aflat.
16. Prime location has been identified as a significant variable in decision to buy flat. Only 1.85% respondents disagree, strongly disagree and neither agree nor disagree in thismatter.
17. All the respondents agree unanimously to the significant role of proximity to markets indecision making to buy aflat.
18. It was found that Majority of customers considers that Proximity to hospitals plays a significant role in the decision to buy a flat. Only 9.26% is still confused regarding thisdecision.
19. It was found that Majority of customers considers that Proximity to schools, colleges plays a significant role in the decision to buy a flat. Only 1.85% disagree with this.
20. It was found that Majority of customers considers that Time in apartment possession plays a significant role in the decision to buy a flat. Only 11.11% disagree with this.
21. It was found that Majority of customers considers that Flat's price persquare feet play a significant role in the decision to buy a flat. Only 7.14% disagree with this and 12.96% neither a green or disagree.

SUGGESTIONS

1. The companies while building flats should give importance to the various factors that has been identified as significant in the decision making to buyaflat.
2. The ambience factors like sunlight entering the apartment, furnishing and ventilationare crucial and hence the flats should be developed after giving due consideration to each of these.
3. In case of the Documentary related factors, customers are not clear about the idea of giving importance to them or not, hence the company does not need to make hugere source investment on the following documentary related factors- Banks available for financing and legal check of property.
4. Super built up area and flat's carpet area are essential variables. More clearance can be obtained by asking more specific questions to the customers so that it can be developed accordingly.

5. Among the facilities and amenities, customers give more significance to water supply and parking space so the planning can be done accordingly. More information can be collected on the other variables like electric supply, security and in house security by being more specific.
6. Since the customers unanimously agree to the high level of significance of location related factors in deciding to buy flat or not, so the builders need to be very cautious indeciding the location of the project development.
7. Proximity to schools, colleges and hospitals also considered significant by customers, so the builders should eitheroptfora location close to these facilities or develop personalized facilities for the use of its customers depending on the feasibility of the options available.
8. Possession of apartment factors are significant hence the builders should mention thetime and price clearly to avoid any confusion in decision making and also reach the customers to know their preferences moreclearly.
9. The builders should focus on bringing in more private sector banks to provide loans asthey are preferred more. However a significant proportion prefers Public sector banks so the company can workon to know more about the financing needs of the customers.
10. Also, Vastu has been identified as an emerging trend among today's customers, so it should be given due importance.
11. Customer stend to go towards furnished and semi-furnished apartments, so the project planning needs to take into account the furnishing factors and also the kind of furnishing that will be provided.

CONCLUSION

6 Factors were identified from the 20 variables of consumer perception before buyingflats. 71% variance in the customer perceptions can be explained by these 7 factors. More factors can be explored to increase the scope of the study and variance in the data collected. Ambience Factors has emerged as the factor which explains the maximum variance i.e. 13% which is the highest among all the factors. Location factor has emerged as one of the important dimensions of customer perception for flat buying decision. Proximity factors, Area factors, possession factors & Ambience factors are also found to have very high effecton Customer Purchase Intention. Hence, the analysis of the research is used to identify the perceived values that might have impacted the customer purchase intention of flat by answering the research question and objectives and by determining the actual perceivedvalue dimensions influencing customer purchase intention of flats. Thus the research contributes academically to the existing literature. Practically, this study suggests thatproperty developers should enrich the functional aspects of their products i.e. residential houses (such as practical space planning and innovative architectural design) as well asfurther promote their residential properties through innovative marketing activities. Thisis in order to boost and fulfil customers' approval and their general understanding of thefunctional value of the new residential properties along with the development of anoptimistic attitude, intention to purchase and their actual purchase behaviour. Such enhancements will enable property developers in generating positive significant purchaseintention from customers. It is suggested that the marketers of the property developershould refine and enhance their rebates and overall package of properties as well asimproving and maintaining good workmanship so that customers' perception towards developer is further improved. It is equally important that the property developers in taking actions regarding customer loyalty and commitment in the relationship by making sureevery staff gives their full commitment in providing quality services to the customers sothat the customers' perception on the property developers is good and are willing to commit in the irrelationship with the developers, in turns lead to higher purchase intention. Hence, it is essential for developers to constantly maintain good communication and thelevel of confidence such

as maintain honesty, offering accurate information, maintain integrity with the customers.

This is so that the perceived relational value of the customers is increased with high purchase intention.

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Corona Virus and its Behavioral Impact - A Viewpoint

Ms. Shrushti Bajpai*

Abstract

The novel corona virus came out at the end of 2019 and since then it is threatening the entire world. The virus has affected millions of people in about 208 countries of the world. Those of have been affected there lives have been altered Now there is a more demand of a stress free coping adjustment process. The WHO has declared the COVID-19 disease as a pandemic. The main aim of this article is to provide a theoretical perspective on how people are psychologically affected by and coping with the pandemic and it mainly focuses on the behavioral changes that people are showing because of the disease. It talks about the individual, family and interpersonal coping with the COVID - 19.

Keywords: Corona, Virus, Pandemic, People, Government, Organization.

1. Introducton

The word "Pandemic "originates from the Greek pan meaning "all" and demos "the people. The World Health Organization has defined Pandemic as "worldwide spread of a new disease."

An influenza pandemic occurs when a new influenza virus emerges and spreads around the world, and most people do not have immunity. According to the US Centers for Disease Control and Prevention (CDC), a pandemic is a disease that has spread in multiple countries around the world, usually affecting a large number of people.

What is COVID -19?

- A bio weapon
- An economic weapon
- China's conspiracy
- Nature is rebooting itself
- Bringing the world together

The corona virus pandemic has serious consequences not just from the economic front but also it will affect the individual behavior. People are skipping handshakes and other gestures of greetings, they prefer to maintain a safe distance from other people and are now much aware about hygiene sense. The times are witnessing the impact that the virus is having on our culture, society and environment. Culturally, if it is to be seen then handshakes will be out for sometimes as people will be suspicious. Socially, products like sanitizers will be available more in public places which will definitely have a positive impact. Ladies will avoid going to beauty parlors and men will avoid going to gyms. This just shows that hygiene matters. Even the companies will permit people to work from remote locations. People are avoiding junk foods and are now eating more of homemade food. With the outbreak of corona virus, people are suspicious of eating outside. There is a higher focus on preparing food and snacks at home and maintaining the hygiene Level as much as possible. It is because of this virus which has infected lakhs of people across the globe that now there will be more savers of money. People will focus on saving more for the uncertain times like this ahead. Another change that people are going through is that home has become the new office for them. It is because of the pandemic that take aways, online shopping and online TV platforms are on a high rise among youngsters. On the environment front also, corona is having a positive impact. Air pollution in various nations including

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China and India has decreased to a great level. The water of holy rivers, Ganges and Yamuna in India is very clean now. People are amazed to see Himalayan ranges from Jalandhar, a city in the state of Punjab in India. It is possible because of almost no pollution in the country. Emissions from industries are falling as the industries and the manufacturing units are all closed because of the lockdown.

1.1. The behavioral changes in individuals can be viewed from the following perspective

1.1.1. Surge in e-commerce and digital payments: There is a rise in e-commerce sector as people prefer to stay indoors. During every problem there comes an opportunity. With the spread of covid 19, there is a surge in e-business as more and more number of people prefer buying goods like daily fast moving consumer goods, vegetables, milk, daily items and other such related products online. In India, there are various e-commerce stakeholders, companies like Grocers, Amazon, Big Basket, and Flip kart to name a few. These e-commerce giants have witnessed about 20-30% rise in their orders as consumers are not much willing to go out for shopping and are avoiding visiting crowded market places.

In such turbulent times, these companies are trying to bring convenience to customers. There is a massive rise in demand for products such as sanitizers, household cleaning products, noodles, flour, rice, pulses, vegetables, baby products, pet food etc.

People prefer virtual stores in place of visiting brick and mortar stores. Customers have shown purchase of micro fiber dusters, surface cleaning liquids which shows an increased emphasis on hygiene. This time period is a life time opportunity for the e-commerce industry to build trust with customers. Corona virus had a huge impact upon restaurant as people are avoiding visiting them and now there is a spike in online food delivery system and take aways.

There has been a growth in digital transactions during these unpredictable times. People are now availing the digital banking facilities, they are making online payment for monthly electricity bills, telephone recharges etc. The e-payment services are seeing a surge in usage.

In India alone there is an increase in digital payments of about 42%. People have to recharge mobiles online as there is no other opinion left. Buying essential food items also tops the list.

The topmost platforms used by the consumer's for digital payments are Paytm and Google pay. The shops that sell groceries have seen a massive spike in order for essential commodities and thereby an increase in e-commerce as well. People are avoiding making payment through notes as they worry about catching infection through them as well and they prefer online transactions. The National Payments Corporation of India (NPCI) has been urging Indians to use more digital payment, to reduce people coming to ATM and thereby to reduce social contact.

It is because of the lockdown that people who are not very tech savvy even they are getting closer to the digital payments Infrastructure.

1.1.2 Usage of drones for delivery of products- Ireland has taken help of drones to deliver medicines to vulnerable locals locked in their homes. This way the technology is actually helping the world and humanity.

People need food, they need medicines but they can't move out mainly because of government restrictions and also because there is a scare of catching infection and getting it transmitted. Thus, taking help of drones is likely to solve this problem. Even China is also taking help of the technology to deliver items. The delivery time is reduced by over 50% as compared with road transportation and it does not involve human beings there by the chances of spread of corona virus are reduced to a great extent.

In some places even medical equipments are also being supplied to hospitals by drones to treat covid 19 patients. The drones are also helpful as far as the shortage of human personnel is concerned. In simple terms, it can be asserted that with the assistance of drones, faster and contactless delivery of products will prove to be very beneficial in the days to come.

1.1.3 Online conferences - Many conferences got postponed due to corona and many are taking place online. People are socially distant but digitally connected. People can't go to conferences or to attend meetings, consequently there is a need to rethink the possibility of conducting online meetings or conferences. People are taking help of various apps through which a meeting can be attended. According to Prof. David Leiser, deputy director of the center for Pensions, Insurance and Financial literacy at Ben-Gurion University of Negev and expert in economic psychology, the current situation forcing people to move so many activities online will likely to produce a permanent impact on the relationship between people and technology.

1.1.4 Online education - Tech giants like Google, Apple and Microsoft offer various tools to enable schools and colleges to provide online learning platforms. Pandemic has acted as an opportunity for many IT based companies who specialize in providing online education to students of different age groups. The institutions connect over intranet. They connect with teachers through webinars. The lockdown in most of the nations would give online education a boost. It provides space for individualized learning. Teachers and students are vastly using e-learning apps like zoom, Google classroom etc. These online tools serve various educational purposes like connecting educators with students, providing information and lastly it helps in continuous break free learning. It is the duty of the teachers to make sure that online learning is as engaging as the classroom experience. In India, there are various online learning platforms like Swayam by government much before this crisis; it offers a plethora of free online courses for the educators as well as for the learners.

It would not be otherwise to say that online education has become the need of the hour amidst covid 19. Since it is important for people to remain indoors, the virtual learning platforms have been of a great support to learners. Even learning through mobiles is also very handy and helpful in communicating and disseminating information to a larger audience.

To a great extent, e-learning has transformed the way learning is imparted to learners. One of the most important benefits of online teaching is that lectures can be taken any number of times. It is cost effective also as compared to other methods of learning. Online learning is more effective as the students can retain the information for a long time. It is because of these reasons that e-learning is becoming more popular in crisis times.

1.1.5 Work from home - People around the world have moved to remote work amid the virus pandemic. TCS has asked more than 40% of its employees to work from home. Accenture has moved 60% of its employees to work from home in India and in Philippines. The government's all over the globe are insisting on social distancing and reduce the spread of the virus, the schools, colleges have been closed. The organizations across the world are closed and compelling people to work from home. The success to WFH is constant communication. The companies are encouraging WFH culture to limit the impact of the virus spread.

People who were earlier habitual to their daily routine are now bound to change their time. It is indeed a challenge to balance the excel sheets with domestic chaos.

1.1.6 Use of robots - During the pandemic, the robots are helping human maintain social distance. They rise to battle against the virus along with helping in disinfecting and delivery. In Washington DC, the robots help in keeping social distancing by providing products to people at their doorsteps. They are becoming local heroes. In the present times, the human contact is considered as a risk to health, robots in such a case are more useful than ever.

1.1.7 Self discipline - It is the need of the hour. The world is facing a tough time and if people practice government instructions of social distancing and stay at home then such self discipline will help in fighting corona. Self discipline is a learned behavior. People are following self discipline by creating and learning new habits and making themselves occupied for all this time. They have started practicing yoga, meditation, learning new language, following a hobby and reading books to name a few.

People are utilizing their time more productively and are focused on building new routines at home. This generates a feel good attitude in them. They are taking this as a time to re - invent themselves.

1.1.8 Hygiene centric - Another behavioral change that is seen during virus breakdown is that now people are becoming more safety conscious, they are more hygiene centric and they give importance to cleanliness. They are following social distancing and making less contact with people. Along with washing their hands on a regular basis, there is a rise in the usage of disinfectant household items.

2. Conclusion

The threat of corona virus is leading people to behave in different ways. The information of the virus is resulting in heightened anxiety leading to stress on our mental health. People are more morally vigilant during the spread of the virus. The outbreak of this covid 19 is changing the minds of the people. People are taking preventive measures against the virus, they are following different behavioral pattern and this new behavioral adjustment will have a huge impact on the society and on the economy as well. The mayhem called corona is creating unstable environment around us. People are adapting themselves according to the changing environment. Consumers are acting in different manners. There is a change in their consumption pattern and consequently in their behavioral pattern. In between this pandemic unsurety, people are adhering to the guidelines being given by the health authorities as well as the government and are following social distancing. The nature is rebooting itself. The world is changing and these changes outside us are indicating that it is high time we change ourselves.

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