

Jaipuria International Journal of Management Research

July - December 2020 • Issue 02

VOLUME

06

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CHIEF EDITOR

Dr. Dayanand Pandey

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Mr. Jitender Sharma



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Objective of the Journal

The objective of the journal is to provide a platform to faculty, research scholars and practitioners of management discipline globally to highlight new knowledge, innovation, technology usage and latest tools of research in the areas of management science. Its focus is on applied research and to bridge the gap between management theories and practice. The journal aims to follow international benchmarks in paper selection, refereeing, editing, proofing and production as per the latest methodology and standards. Its International Advisory Board provides policy guidelines for publications in the journal.

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Chief Editor's Desk

Dear Patrons, world has come a long way amidst the COVID-19 pandemic which has disrupted and affected all of us in one way or the other. Academic institutions and studies have been badly affected but this deadly pandemic has also given rise to many new opportunities and new methods of learning. Online teaching and learning has become a new normal during these last nine months. Even small children have adopted the online ways of learning.

So far, no one is able to study in depth the long term impact of COVID-19 in different aspects of life as there doesn't seem an end to this pandemic currently. Virus strains are mutating and research for an all effective vaccine is still going on in spite of some vaccines already launched in developed markets with mixed results.

Under these unprecedented times, I am with great pleasure put before you latest issue of our journal for the period of July to December 2020. With publication of this issue, we have completed six years' journey of IJMR as an independent journal that is sustaining itself and publishing in time in spite of all odds. As I always mention, this journey was not possible without active contribution of all our authors, reviewers and editors. My compliments to all on this occasion and I look forward for your continued association with the journal in future as well.

Current issue contains 9 research papers, a case study and a book review. Papers encompass different areas of management science where research is currently happening. It is really heartening to know that more and more researchers and even PGDM students are now continuously active in research. IJMR is an open platform for these budding researchers and invite them to send their contributions for reviewing and publication purpose.

Our reviewers will guide and suggest improvements in your manuscript and though you may have to go multiple rounds of review and editing process but I am sure after this long exercise you will be able to finally publish a really good quality publication.

We are continuously putting efforts to get this journal included in UGC-CARE list and in other indexing directories. Process will take its own time but I am hopeful for a positive outcome.

I would like to reiterate that we are publishing this journal to promote research culture across globe and it is entirely not-for-profit venture and authors can publish their research absolutely free of cost with only condition of providing original research contents relevant in today's context and in management discipline written strictly in accordance with author guidelines of the journal.

I look forward for your continued association and wish you all Very Happy New Year 2021.

Dr. Dayanand Pandey

Chief Editor - Jaipuria International Journal of Management Research
Director - Jaipuria Institute of Management, Noida

Editorial

We are pleased to present before you second and final issue of sixth volume of our journal "Jaipuria International Journal of Management Research" for the period of July to December 2020.

It is a matter of immense satisfaction that we are being able to bring out this issue well in time in spite of unprecedented pandemic spread across globe and still continuing. All credit goes to our contributors who had not taken these tough times as a crisis but as an opportunity to study and develop some useful research output and sent to us for publication consideration in the journal. We are happy to report that we have been able to maintain punctuality in publication of our issues during these last six years' journey.

Current issue of the journal contains nine research papers, a case study and a book review.

First paper entitled "A study of factors influencing the selection of specialization by MBA students with reference to B-schools in tier 2 & 3 cities" highlights that seniors' advice and placement records are two key reasons for choosing a particular specialization by MBA students.

Second paper on "A comparative study of the perception of clients and service providers in the areas of service recovery in human capital market" identifies the probable impact of Relationship Quality on various service quality parameters and thereby on perceived service quality of the customers in the context of HR services.

Next paper "Issues and challenges of gender equality for women in Indian male dominated society" identifies economic, social, cultural and legal biases as challenges for policy makers for bringing gender equality in society.

Fourth paper titled "Smart cities mission in India - great cry little wool?" is a critical study of identifying and developing 100 smart cities in India by Government of India and reflects upon the success and outcome of this initiative.

Fifth paper titled "Environmental accounting: one dimension of sustainable development" explores the concept of environmental accounting, benefits, forms of environmental accounting, classification of environmental costs and put forwards some useful suggestions for its impact on sustainable development.

Next paper "Management of Indian school education system - a select review of literature" is a literature review study.

Seventh paper titled "Study on trade pattern between Central Asian countries and India" discusses the share of Central Asian countries (CAC) in India's trade basket and also the nature of products traded between India and five countries of CAC.

Next paper titled "The future of supply chain - data logging via Internet of Things (IoT)" focusses on the next wave in supply chain i.e. data logging and why it is required in today's context.

Ninth paper titled "Revalidating Phillips curve in Indian context" looks at empirical association of Inflation and unemployment by validating the proposition of the Phillips curve in the Indian scenario.

Case study titled "Blockade: an opportunity to enhance international relations - case of Qatar" deals how international relations work and how the blockade of Qatar by neighboring countries gave a chance to Qatar to develop new ties with other countries and improve its international relations.

This issue also contains a book review of the title "Customers Relationship Management: Concept, Strategy, and Tools by V. Kumar and Werner Reinartz" which is a good and comprehensive new text in the CRM area.

We are quite hopeful that our readers will find contents of the present issue quite relevant, recent and addressing some of the current problems.

We once again request you to ask your institution and/or university Internal Quality Assurance Cell (IQAC) to recommend the journal to UGC-CARE bodies by sending your recommendation in prescribed format to The Office, UGC-CARE Nodal Centre, Jawaharlal Nehru University, New Delhi. Institutions/colleges have to send their recommendations forwarded through IQAC Cell of University they are affiliated with.

We assure to always strive hard for meeting your expectation levels from the journal.

Jitender Sharma
Deepankar Chakrabarti

A Study of Factors Influencing the Selection of Specialization by MBA Students with reference to B-Schools in Tier 2 & 3 Cities

Key words: *Career Objectives, Domain Preferred, Finance, Marketing, Human Resources, Work Experience, Specialization*

Arif Shaikh* and Shrirang A. Deshpande**

ABSTRACT

MBA program is a highly sought after course because it focuses on developing both the hard skills and soft skills which are essential to make a successful career. In most of the institutes, the first two semesters of an MBA program are crucial as there are courses covering all functional areas of management which will help the students in understanding the basics of management streams. Choosing the specialization from the areas such as marketing, finance, human resources, information technology, operations management, international business, business analytics, etc. is a crucial decision which needs to be taken with a lot of due diligence. It has been observed that the students pursuing MBA course in tier 2 & 3 cities choose specialization mainly based on the advice of their senior friends in the institute and

specialization wise past placement records. But there are many other factors which are influential in selecting specialization like the personal interest of the respondents, basic graduation, current market trends, family business, etc. The study reveals that institutes should have a mechanism to assess the students' interest and compatibility by conducting psychometric and personality test, counselling of students to be done with regard to specialization so that they make an informed decision.

INTRODUCTION

Management education in India has come a very long way in the last few decades. The management education scenario has undergone a massive transformation from a limited B-schools such as IIMs that are popular nationally to the spurt of private management colleges across the

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country that are able to match the education standards followed internationally. Indian Management Education structure comprises of Indian Institute of Management (IIMs) set up by the government of India, University departments of management studies, Colleges affiliated to universities and Private institutes approved by the All India Council for Technical Education (AICTE). MBA is one of the most sought after higher education programs by aspirants all across the country.

The MBA program is a highly sought after course because of the following reasons -

Corporate dynamics: The corporate demands of today have gone a 360-degree change in the last few decades. Seniority was a highly recognized merit in the earlier days. Today it is different. The performer is rewarded.

Personality development defines a career growth path: It is not just hard skills that set the tone for an ascending career. There are other traits that are required. These include strong communication skills, good interpersonal skills, and a dynamic approach to business. This is where an MBA can shape a career. In the start-up and digital era of today, brand building is more often the result of good soft skills.

In most of the institutes the first two semesters of an MBA program are crucial as there are courses covering all functional areas of management which will help the students in understanding the basics of various management streams. Choosing the specialization from the areas such as marketing, finance, human resources, information technology, operations management, international business, business analytics, etc. is a crucial decision that needs to be taken with a lot of due diligence.

LITERATURE REVIEW

Claudia Bobalca, Oana Gugulea & Cosmina Bradu (2014) in their research titled "How are the students selecting their bachelor specialization? A qualitative approach" identify important attributes considered by students i.e. familiarly with the specialization, the chances to obtain a safe job, the diversity of jobs, the pleasure to study a specific program, the curiosity, or parents' advice, personal capabilities and reputation.

Faldu, Tanvi & Pingle, Sameer. (2015) in their research paper titled "Establishing the Relationship between Marketing Specialization and Personality Traits among Management Students" investigate the relationship between personality traits and marketing specialization preferences among management students. Specialization should be selected on the basis of personality types and Holland's RAISEC framework is an ideal tool for knowing the same. A right match between personality and specialization selection may help an individual for giving his/her best to the profession.

The paper indicates that out of five personality traits (Big Five), only the extra version trait has a significant contribution in choosing marketing as a specialization. Gender and work experience do not have a significant impact on students for choosing their management specialization.

Murali. S, Saravana Kumar S, Dhanalakshmi (2019) in their research paper titled "Factors Influencing Selection of Major Specialization with Special Reference to MBA Students at Ramaiah Institute of Management Studies, Bangalore" focus on the factors like Economic Condition of Family, Chance of finding a secure job, Personal Interest to the subjects, Counselling services, Easy to study subjects, Health Issues, Individual Personality, Easy to score high marks in exams, Advice from parents, Word of Mouth, Educational Background (Stream of Graduation) Advice from friends, Easy to understand the subjects, Advice from Seniors, Campus Reputation, Involvement in other activities, Teachers Characteristics (Mastery of the subjects), Time Management, Occupational Prestige, Role of Media, Amount of Efforts required, Purpose of Pursuing Programme, Instructor-Student Relationship, Gender Role dictated by Society as the factors influencing the choice of MBA Specialisation.

Chandan Maheshkar & others (2019) in their research paper titled "Selection of Specialization in Management Program A Decision Tree Approach" revealed that the finance is the first choice among the MBA in present times and marketing as the second choice. Considering the fact that there are many opening in finance and marketing in present times but at the same time declining the employability rate is a big concern. The universities offering MBA program shall develop the infrastructure in such a way that will not only help students to be industry ready and at the same time there shall be a self-learning environment.

PROBLEM STATEMENT

It has been observed that the students pursuing MBA course in tier 2 & 3 cities choose specialization mainly based on the advice of their senior friends in the institute and specialization wise past placement records. But there are many other factors that are influential in selecting a specialization. Therefore, an attempt is made through this study to ascertain the factors influencing the students' specialization selection decision.

SCOPE OF THE STUDY

The study focuses on the factors influencing the decision regarding the selection of specialization by students while pursuing MBA in tier 2 & 3 cities of North Karnataka. The period of study is restricted to 2018-2019.

OBJECTIVES OF STUDY

Following are the objectives of the study-

- To know the career objectives of students pursuing MBA degree
- To identify various factors influencing the decision of students in selecting the specialization.
- To ascertain the sectors preferred by MBA students as their career option

RESEARCH METHODOLOGY

Tools of Data Collection -

The data required for the study is collected from both primary and secondary sources. The primary data is collected by administering a structured questionnaire to students pursuing a MBA course from B-Schools located in Tier 2 & 3 cities of North Karnataka.

SAMPLE DESIGN

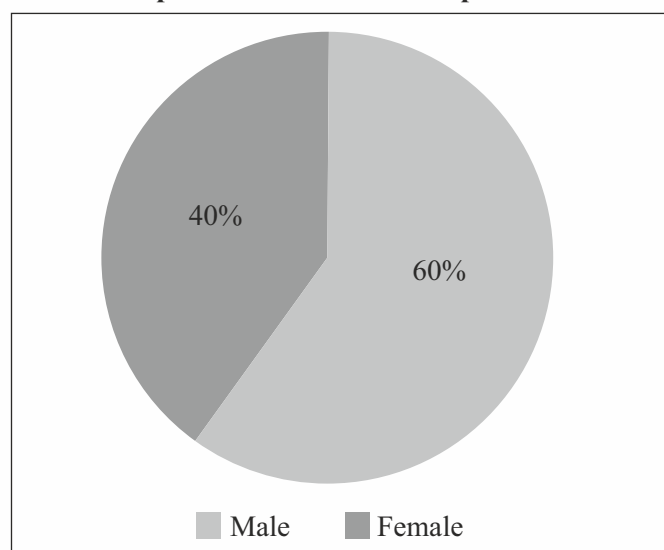
- Convenient Sampling (non-probability sampling) technique is adopted for the study.
- 200 students pursuing MBA degree in different colleges located in North Karnataka were taken as sample size.
- Descriptive research design is adopted for the study.

DATA ANALYSIS AND FINDINGS

Table 1 - Gender of the Respondents

Gender	Frequency	Percent
Male	120	60.0
Female	80	40.0
Total	200	100.0

Graph 1 - Gender of the Respondents

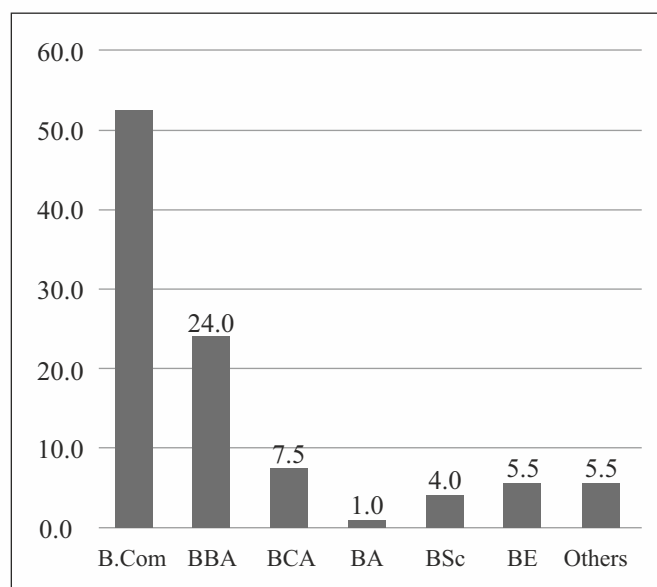


Interpretation - The data indicates that Male respondents are 60% and Female respondents are 40%

Table 2 - Basic Qualification

Qualification	Frequency	Percent
B.Com	105	52.5
BBA	48	24.0
BCA	15	7.5
BA	2	1.0
BSc	8	4.0
BE	11	5.5
Others	11	5.5
Total	200	100.0

Graph 2 - Basic Qualification

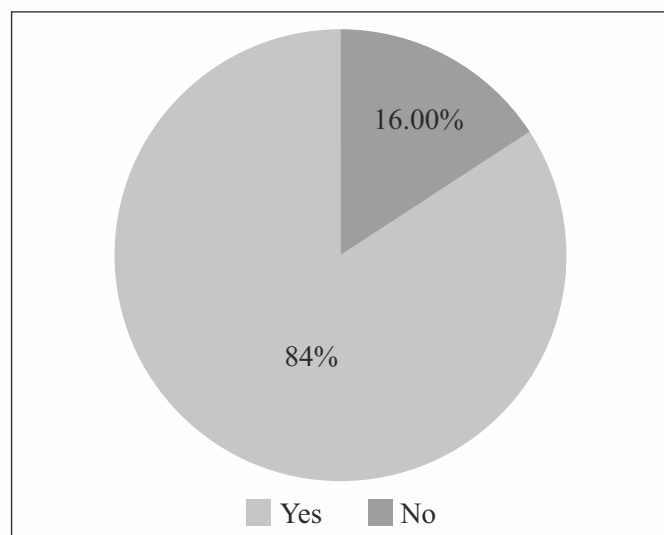


Interpretation - The study found the education profile of respondents i.e. 52.5% are B.Com. 24% are BBA and 23.5% are non-commerce graduates.

Table 3 - Prior Work Experience

Experience	Frequency	Percent
Yes	51	16.5
No	149	83.5
Total	200	100.0

Graph 3 – Prior Work Experience

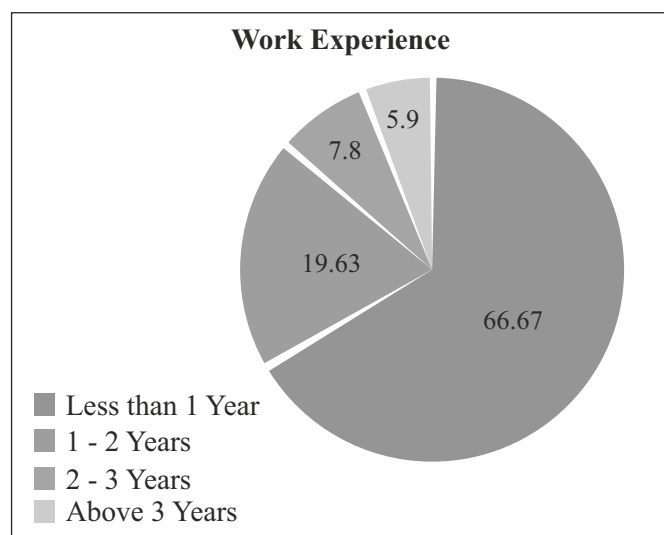


Interpretation - 16.5% of the respondents have got prior work experience in various domains before pursuing MBA programme while majority of them i.e. 83.5% are without any prior work experience.

Table 4 - Work Experience in Years

Experience	Frequency	Percent
Less than 1 Year	34	66.67
1 - 2 Years	10	19.63
2-3 Years	4	7.8
Above 3 Years	3	5.9
Total	51	100

Graph 4 - Work Experience in Years

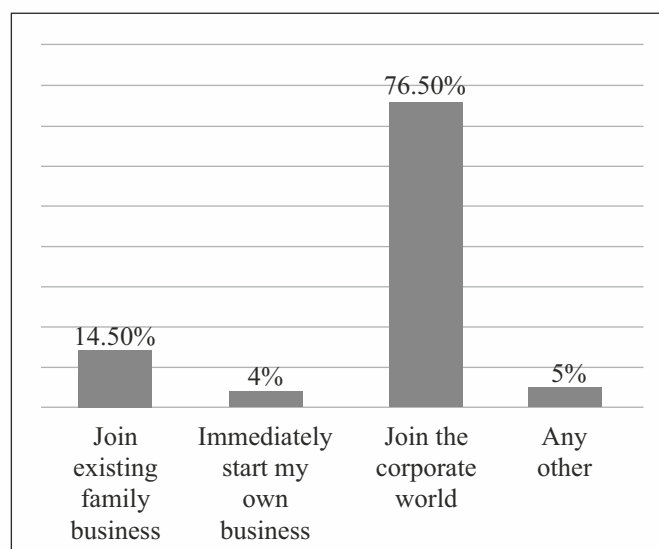


Interpretation - The survey reveals that out of 51 respondents with prior work experience 66.67% have less than one year of work experience, 19.6% have 1 to 2 year of work experience, 7.8% have 2 to 3 years of experience and remaining 5.9% of the respondents pursuing MBA have more 3 year of prior work experience.

Table 5 - Career Objectives

Career Objectives	Frequency	Percent
Join existing family business	29	14.5
Immediately start own business	8	4.0
Join the corporate world	153	76.5
Any other	10	5.0
Total	200	100.0

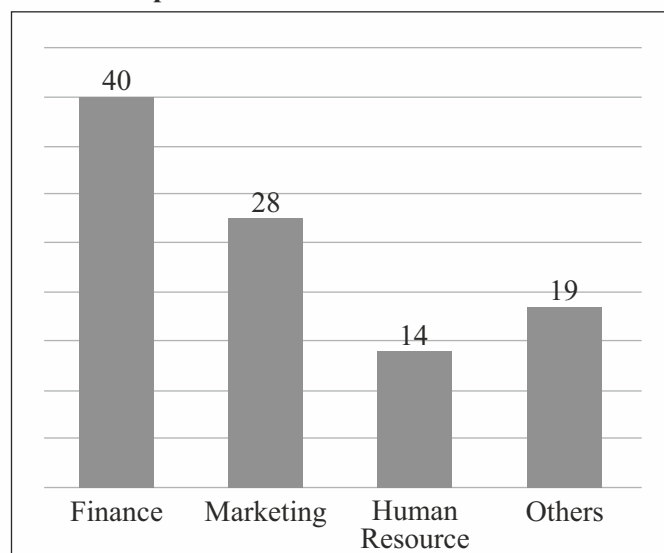
Graph 5 - Career Objectives



Interpretation - 77% of the respondents would like to seek employment in corporate after completing the course whereas 15% wish to join existing family business and 4% are willing to start their own ventures.

Table 6 - Preferred Stream of Career

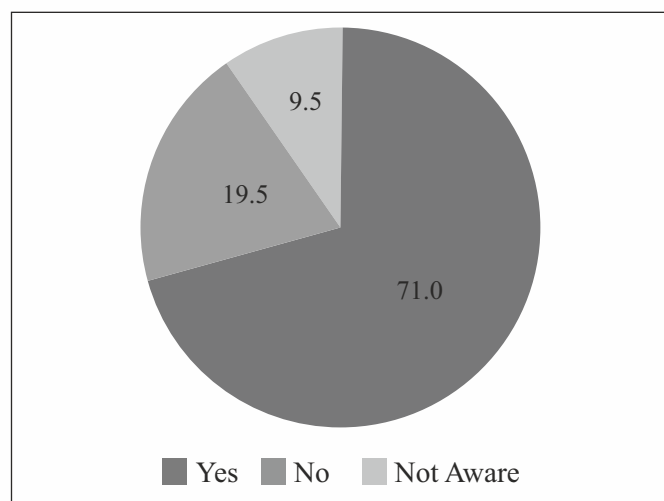
Stream	Frequency	Percent
Finance	80	40.0
Marketing	55	27.5
Human Resource	28	14.0
Others	37	18.5
Total	200	100.0

Graph 6- Preferred Stream of Career

Interpretation - The research reveals that 40 % of the respondents pursuing MBA prefer to make a career in Finance domain. Marketing stream is preferred by 28% whereas 14 prefer HR domain as their career option and 19% are interested in other domains such as Operations, Information Technology etc.

Table 7 - Provision of Dual Specialization

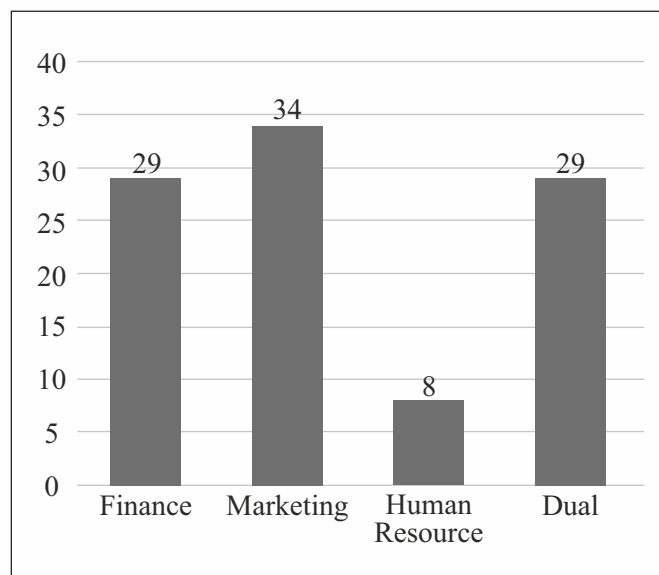
	Frequency	Percent
Yes	142	71.0
No	39	19.5
Not Aware	19	9.5
Total	200	100.0

Graph 7 - Provision of Dual Specialization

Interpretation - The study also made an attempt to find out is there a provision for opting dual specialization like Finance & Marketing, HR & Marketing etc. to which 71% of respondents have agreed that there is such provision while 19.5% have said that there is no such provision and 9.5% are not aware of such facility.

Table 8 - Specialization Opted or Planning to Opt

Specialisation	Frequency	Percent
Finance	58	29.0
Marketing	68	34.0
Human Resource	16	8.0
Dual	58	29.0
Total	200	100.0

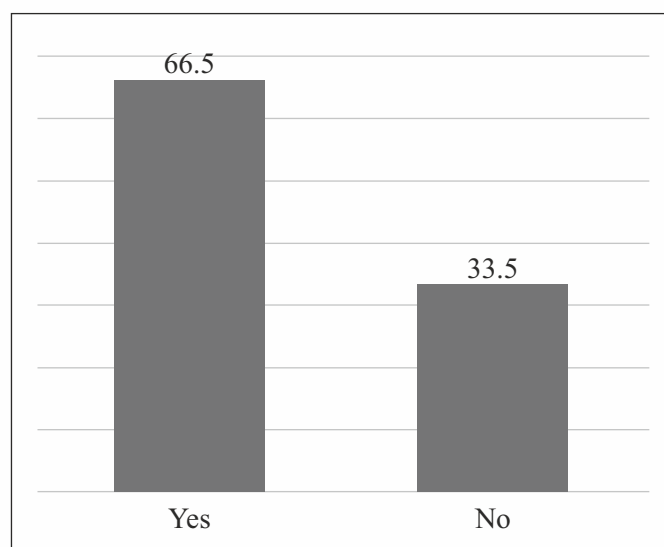
Graph 8 - Specialization Opted or Planning to Opt

Interpretation - The research indicates that 34% of the respondents are planning to opt Marketing as specialization whereas 29% of the respondents are planning to opt Finance specialization and 29 % are willing to opt dual specialization (Finance & Marketing, HR & Marketing) and 8% will opt HR as their specialization.

Table 9 - Counselling & Career Mapping Test

	Frequency	Percent
Yes	133	66.5
No	67	33.5
Total	200	100.0

Graph 9 - Counselling & Career Mapping Test

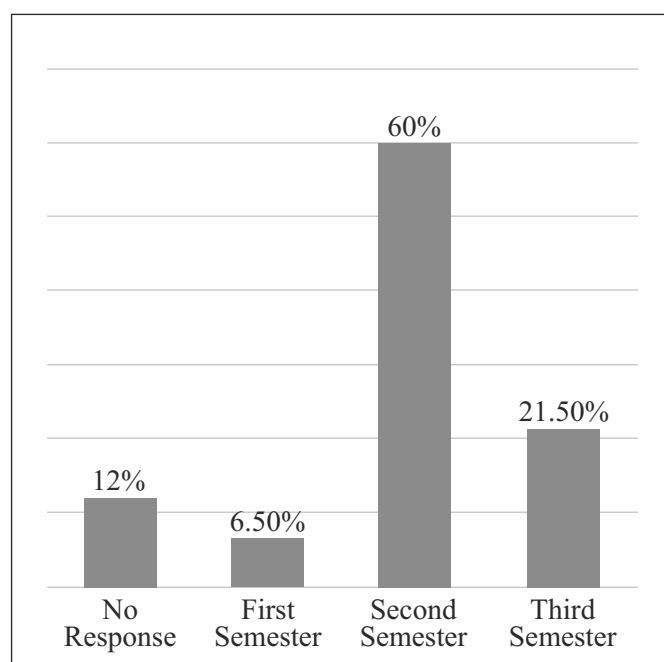


Interpretation - The study also made an attempt to find out is there any need for professional counselling in the area of career mapping and conduct of interest test before opting specialization to which 66.5% of the respondents have responded positively.

Table 10 - Commencement of Specialization

	Frequency	Percent
No Response	24	12.0
First Semester	13	6.5
Second Semester	120	60.0
Third Semester	43	21.5
Total	200	100.0

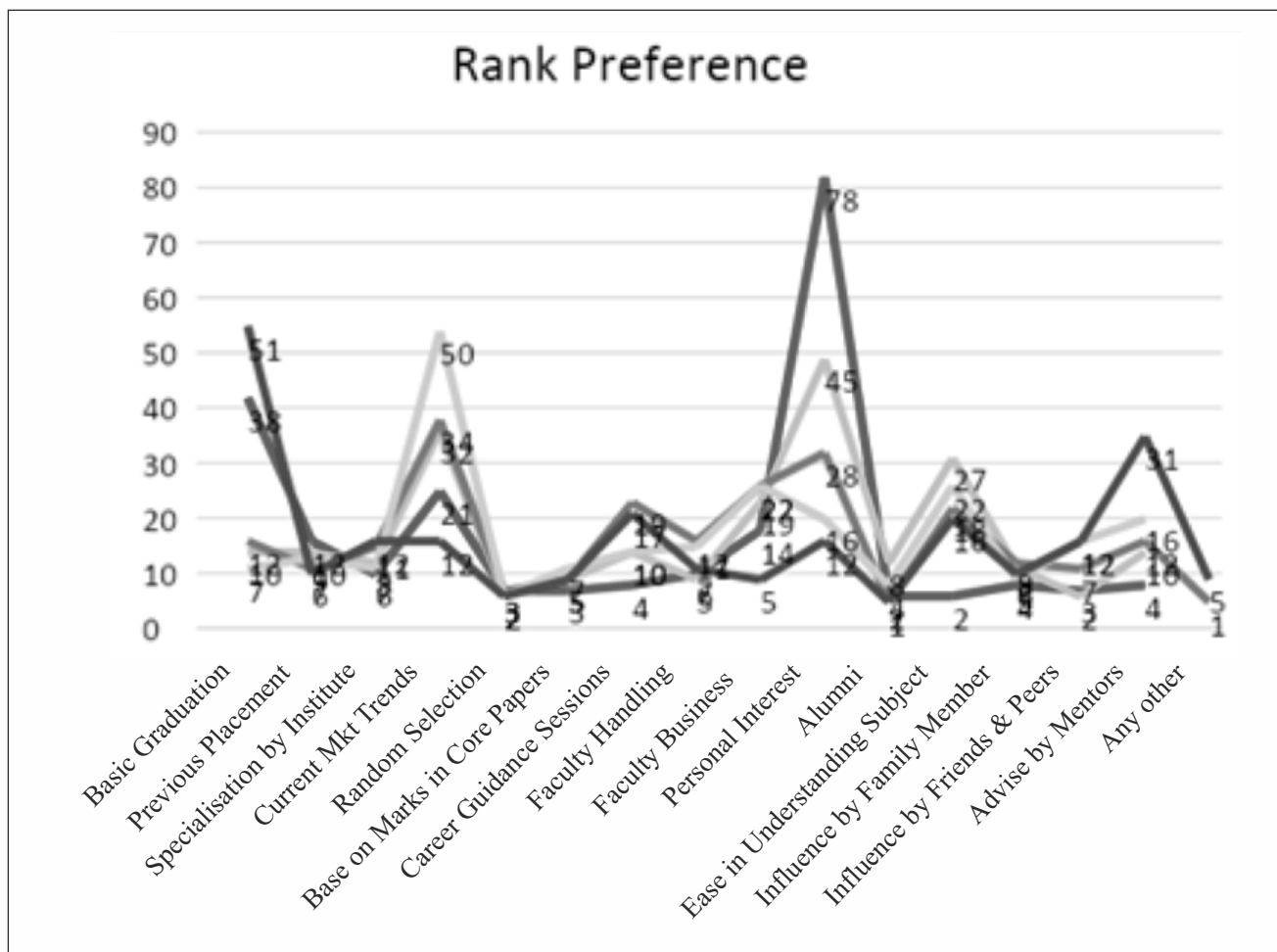
Graph 10- Commencement of Specialization



Interpretation - The researcher also made an attempt to find out the appropriate semester for offering specialization during the MBA programme and found out that 60% of the respondents are of the opinion that the specialization shall commence from second semester whereas 22% prefer third semester for commencement of specialization and 7% are of the opinion that it should commence from first semester itself.

Table No. 11 Factors Influencing the Selection of Specialization

Factors	Ranking				
	1	2	3	4	5
Basic Graduation	38	10	12	7	51
Previous Placement	12	10	7	9	6
Specialisation by Institute	6	8	11	7	12
Current Mkt Trends	21	32	34	50	12
Random Selection	3	2	3	2	2
Base on Marks in Core Papers	3	5	5	7	5
Career Guidance sessions	4	10	19	10	17
Faculty Handling	6	5	12	11	7
Family Business	14	19	22	22	5
Personal Interest	78	45	28	16	12
Alumni	2	8	1	4	1
Ease in Understanding Subject	2	27	18	22	16
Influence by Family Member	4	7	8	5	6
Influence by Friends & Peers	3	2	7	12	12
Advise by Mentors	4	10	12	16	31
Any other			1		5

Graph 11 - Factors Influencing Selection of Specialization

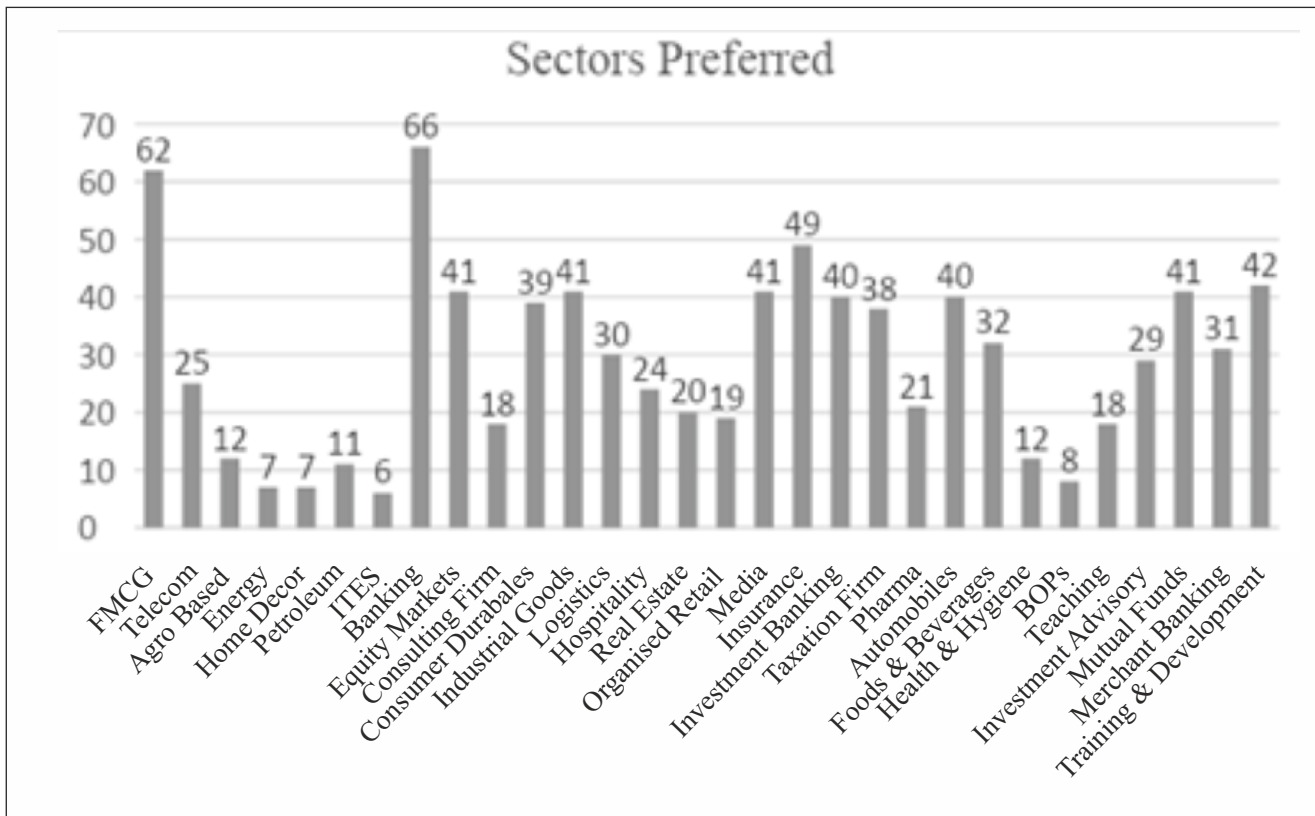
Interpretation - The research also made an attempt to find out the various factors influencing the choice of specialisation by the respondents. The most influencing

factor is the personal interest of the respondents followed by basic graduation, current market trends, family business and previous placement pattern at the institute.

Table 12 - Sectors Preferred for Careers

Sectors	No.	Sectors	No.	Sectors	No.
FMGC	62	Consumer Durables	39	Pharma	21
Telecom	25	Industrial Goods	41	Automobiles	40
Agro based	12	Logistics	30	Foods & Beverages	32
Energy	7	Hospitality	24	Health & Hygiene	12
Home Decor	7	Real estate	20	BPOs/KPOs	8
Petroleum	11	Organised Retail	19	Teaching	18
ITES	6	Media	41	Investment Advisory	29
Banking	66	Insurance	49	Mutual Funds	41
Equity Markets	41	Investment Banking	40	Merchant Banking	31
Consulting Firm	18	Taxation Firm	38	Training & Development	42

Graph 12 - Sectors Preferred for Careers



Interpretation - Banking, FMCG, Insurance, Training & Development, Equity Market, Industrial goods (B to B) Media, Mutual Funds, Investment banking and automobiles are the top ten sectors preferred by respondents for career opportunities.

SUGGESTIONS

The institutions while offering and the students while opting the specializations should take into consideration the following factors-

- Understand and assess the current market trends and employment opportunities.
- The institute shall provide knowledge regarding various specialization courses offered and their benefits in ones' career by organizing interactive sessions. Industry experts from various domains shall be invited before the commencement of the second semester for such sessions.
- The institute shall have a mechanism to assess the students' interest and compatibility by conducting psychometric, personality test etc.
- Counselling of students by their respective mentors shall be conducted to guide the students in choosing appropriate specialization.

CONCLUSION

The results of this study offer important data and information to the MBA institutes that can be used in understanding the important factors considered by students while choosing a specialization. Based on the results of research different strategies are proposed in guiding the students to make a well-informed decision about the choice of specialization. The MBA students should know where they want to build up their career. This should make them to opt for the specialization accordingly. The students with commerce background are more inclined towards finance specialization and some of them are interested in making their career in marketing such students shall be encouraged to take up the dual specialization (Marketing & Finance), they would be best suited for marketing the financial products and services, therefore the academic background is also an influential factor in choosing specialization. The personal interest of the student plays a crucial role and mentors shall guide them appropriately in opting for specialization based on their psychometric and personality test.

REFERENCES

- International Journal of Recent Technology and Engineering (IJRTE). (2019, November). 8(3), 53 (ISSN: 2277-3878).
- International Journal for Research in Engineering Application & Management (IJREAM). (2019, Feb). (ISSN : 2454-9150). 4(11),
- Paradigm. (2015, December). 15(2), 170-183.
- Procedia Economics and Finance (2014). 15, 894-902.
- <https://www.bmu.edu.in/social/how-to-choose-an-mba-specialization/>
- <https://www.upgrad.com/blog/which-mba-specialization-should-i-choose/>

A Comparative Study of the Perception of Clients and Service Providers in the Areas of Service Recovery in Human Capital Market

Key words: *Recruitment, Relationship Quality, Service Quality, Relationship Marketing, Service Recovery.*

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ABSTRACT

With the best service organizations, failures can happen – may be due to the fact that service not available as expected, it may be delivered too late or too fast or employees may be not courteous. These service failures develop negative experiences. If not fixed they can lead to customers leaving, bad mouthing about the services or even going to consumer courts. It has been seen that resolving the problems effectively has a very positive impact on the customer satisfaction and loyalty. Customers who experience service failures but the same has been fixed by the service providers as soon as possible then the loyalty level of the customers got increased. It has been identified that customers who are dissatisfied, but experience excellent service recovery, usually be more satisfied and more prone to repeat purchase than are those who are satisfied at the first place. It has been found that a customer give more importance on their recent service quality experiences in their decision for repeat purchase. Service Recovery plays a very important role in maintaining and improving

customer satisfaction and human capital market is not an exception. HR Service Industry in India is there for around more than three decades. Service Sectors were not great contributors to Indian GDP in pre-linearization era. But post 1991 Service Industry started gaining higher pie in the Indian GDP. IT/ITES Industry was the major contributor in such growth. However, HR Service Industry were not playing a big role in such growth mainly because of the Brick and Mortar Style traditional service delivery system as compared to the highly matured other service sectors playing globally like IT and ITES Industry. The primary focus of this study is identifying the probable impact of Relationship Quality on various service quality parameters and thereby on perceived service quality of the customers in the context of HR services and in the process develops measurement constructs both for service quality parameters and perceived service quality with specific fit to HR service operations in the recruitment domain. In this paper the authors have tried identify the factors that affect the Service Recovery Process in the HR Service Industry specifically in the Recruitment Industry.

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INTRODUCTION

Service transactions are typified with uncertainty and risk. This triggers a risk-aversion attitude in both buyer and seller which makes the dyad extremely complex to interpret. The quantum of non-monitory cost involved in accessing services makes it a lesser switch-prone industry and hence the relationship inertia sets in. But, unlike product market, the relationship in service market is multilayered. Research, thus far, has only focused on a static layer of relationship with an assumption that service transactions are successful at every instance. But given the high probability of failure due to unpredictable and non-standardized human interactions, the relationships are expected to be dynamic with recovery initiatives apprehended to inflict a major buffering or a magnifying impact on the quality of relationship. Existing models of relationship quality, namely, RELQUAL, fails to explain such dynamicity and it is inadequate to explain service recovery paradox too.

The relatively recent emergence of the relationship-marketing paradigm in modern marketing consolidates the increasing importance given by marketing academics to managing, developing and evaluating relationships (Berry, 1995; Payne et al., 1995; Sheth and Parvatiyar, 1992, 1995). Within this paradigm, the topic of relationship quality has stimulated a profuse production of scientific publications. Although previous literature has measured relationship quality between service firms and their customers (Roberts et al., 2003), between manufacturers/suppliers and distributors/resellers (Dorsch et al., 1998; Kumar et al., 1992, 1995) and between salespeople and customers (Bejouet al., 1996), there is no tested scale for its dynamicity in service aspects, particularly, considering the failure prone nature of service transactions triggered by extreme heterogeneity, non-standardization and intensive human interaction. There is a recent study which shows no support to recovery paradox. It shows the overall satisfaction was consistently lower for those customers who had experienced a service failure than for those who had experienced no failure, no matter what the recovery effort is. The explanation for why no recovery paradox is suggested by the magnitude of the service failure in this study it is-a three hour airplane flight delay. This type of failure may be too much to be overcome by any recovery effort. Considering mixed opinions on if recovery paradox exists it is safe to say "doing it right the first time" is the best and safest strategy. When a failure does occur then every effort at superior recovery should be made. In cases where the failure can be fully overcome the failure is less critical, or the recovery effort is clearly superlative, it may be possible to observe evidence of the recovery paradox.

LITERATURE REVIEW

Many researchers in services marketing have suggested that the quality of a customer-organization relationship affects customers' responses to service failures (Berry 1995; Goodman et al., 1995; Kelley and Davis 1994). Some propose that customer relationships provide an important buffer to service firms when service failures occur, resulting in less customer dissatisfaction. Berry (1995) suggested that customers may exhibit greater tolerance for failures when service personalization and customization lead to social relationships with the service provider (e.g., regular communications, continuity with the same employee, name recognition, and service augmentation). Ronald et al (2011) focused on customers' expectation of relationship continuity and observed that service recovery (following a perceived service failure) either acts as a buffer or magnify the impact of recovery on relationship quality, something which is closely related to service recovery paradox. This relationship quality is also expected to be affected with customers' service recovery expectations. Customers' service recovery expectations are customers' beliefs about the level of reparation that is appropriate after a service failure (Zeithaml, Berry, and Parasuraman 1993). Ronald et al (2011) found that customers' service recovery expectations are significantly affected by (a) severity of the failure, (b) customers' causal attributions regarding the failure, and (c) customers' expectations of relationship continuity. The dynamic nature of service transactions can be attributed to high probability of service failures and subsequent recovery initiatives. According to previous studies, build-up and decay impacts are modelled by impulse-response function (IRF) in dynamic models. Build-up means the increasing impact before IRF reaches its peak impact point, while decay refers to the decreasing impact over time from the peak impact point to zero (Bronnenberg et al. 2008; Pauwels and Hanssens 2007). Other studies have proposed 'persistence' or 'dynamic' erosion effects (Bronnenberg et al., 2009; Bronnenberg et al., 2000) and an adjusting period (Pauwels et al, 2002) or dust-settling period (Nijs et al. 2011) are likely to influence the recovery process. The causal attributions, such as, stability attribution and controllability (Ronald, 2011) A summary of service recovery variables and its dynamic effects are tabulated in Table-1.

Table 1 - Service Recovery Variables and Expected Dynamic Effects

Variables		Probable dynamic effects on relationship quality	
		Long Decay	Build-up Magnitude
Quality of Past Service Performance	Smith and Bolton (2002), Wirtz and Mattila (2004), Harris et al.(2006), Grewal et al. (2008)		
Customers' Expectations of Relationship Continuity	Bronnenberg et. al., 2000, Pauwels, Hanssens, and Siddarth 2002, Ronald, 2011		
Attributions of Stability	Bronnenberg et. al., 2000, Pauwels et al (2002), Ronald, 2011		
Attributions of Controllability	Fang et al (2012), Ronald, (2011)		
Compensation	Fang et al (2012), Ronald, (2011)		
Communication	Fang et al (2012), Ronald, (2011)		

RATIONALE OF THE STUDY

Service transactions are typified with uncertainty and risk. This triggers a risk-aversion attitude in both buyer and seller which makes the dyad extremely complex to interpret. The quantum of non-monitory cost involved in accessing services makes it a lesser switch-prone industry and hence the relationship inertia sets in. But, unlike product market, the relationship in service market is multilayered. Research, thus far, has only focused on a static layer of relationship with an assumption that service transactions are successful at every instance. But given the high probability of failure due to unpredictable and non-standardized human interactions, the relationships are expected to be dynamic with recovery initiatives apprehended to inflict a major buffering or a magnifying impact on the quality of relationship. Existing models of relationship quality, namely, RELQUAL, fails to explain such dynamicity and it is inadequate to explain service recovery paradox too. So it is of high importance to understand if there is any differences exists among the perceptions regarding the

Service Recovery Variables between the Clients and the Service Providers in the HR Service Industry (Recruitment Domain).

METHODOLOGY

- The Customers of HR Services (In this paper only Recruitment Services) i.e. HR professionals involved into hiring process are the best source of getting the exact data to explore the research problem.
- The authors have surveyed total 47 HR Professionals (Clients) of Kolkata from various industries like IT, ITES, BPO, Startups etc.
- The authors have also surveyed 20 HR Consultants (Service Providers from Kolkata).
- Sample Size-1 (Client): 47
- Sample Size-2 (Service Provider): 20
- The authors have taken a 5 Point Likert Scale to construct the questionnaire with 1=Strongly Disagree and 5= Strongly Agree

Variables for Measuring Service Recovery

Variable	Items
Quality of Past Service Performance	Past Service Performance Service Recovery Performance Rewards
Customers' Expectations of Relationship Continuity	Employee training Employee empowerment Teams
Attributions of Stability	Dependability Consistency Continuity
Attribution of Controllability	Perceived Controllability Behavioral Intentions Technological Control

Variable	Items
Compensation	Strategic Compensation Appropriate Compensations Service Continuity
Communication	Candid Communication Involving Clients Recovery Process Communication

- 47 HR professionals and 20 HR Service Providers have been surveyed to explore relationship between Service Recovery and Perception of Service Quality of the Recruitment Service Providers. 18 Questions were asked.
 - Null Hypothesis : There is no significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market.
 - Alternative Hypothesis: There is significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market.
- To identify the differences in the opinion between the Service Providers and the Clients regarding the impact of the identified variables of Service Recovery in the Service Recovery Process.
 - Identification of the most Significant Variables to be taken care off by the Service Providers to ensure efficient Service Recovery in case of any Service Failure in the HR Service Industry (Recruitment Vertical).

Our Null Hypothesis is there is no significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market.

DATA ANALYSIS

Objectives: Our Major Objectives are:

Here in this study the authors have used Mean Square Comparison Method in SPSS to identify the P-Value to test the significance level.

Table 2 - Mean Square Comparison

Mean	GROUP				
	CLIENT	SERVICE PROVIDER	Total	P Value	Significance
(Quality of Past Service Experience): Satisfactory Past Service Experience help to recover any Service Failure	4.11	3.85	4.03	0.154	Not Significant
(Quality of Past Service Experience): Efforts of the Service Providers to Recover Service Failure is a positive factor to manage future Service Failure	4.11	4.05	4.09	0.744	Not Significant
(Quality of Past Service Experience): Rewards for past Service Failure have a positive effect on the future Service Failure	3.80	3.65	3.76	0.429	Not Significant
(Customers Expectations of Relationship Continuity): Quality Employee Training Service Recovery Initiatives have a positive effect on future Service Failure Recovery.	4.11	4.35	4.18	0.293	Not Significant
(Customers Expectations of Relationship Continuity): Employee Empowerment in handling Service Failure have a positive impact on the Recovery of Future Service Failure.	3.94	3.25	3.73	0.008	Significant

Mean	GROUP				
	CLIENT	SERVICE PROVIDER	Total	P Value	Significance
(Customers Expectations of Relationship Continuity): A Well Defined and Trained Service Recovery Team always plays an important role in handling future Service Failure.	4.26	3.80	4.12	0.136	Not Significant
(Attribution of Stability): Consistent Efforts from the Service Providers to handle Service Failure create a Sense of Stability in the mind of the Clients.	4.04	4.05	4.04	0.954	Not Significant
(Attribution of Stability): Service Continuity even in Case of Service Failure give the Clients a sense of Stability	3.93	3.25	3.73	0.009	Significant
(Attribution of Control-ability): If Clients have a perceived Control over the situation during a Service Failure then it has a positive impact on the future service failure recovery.	3.57	3.25	3.48	0.277	Not Significant
(Attribution of Control-ability): Positive Behavioral Intentions of the Service Providers During Service Failure Recovery Initiative plays an important role future service failure recovery	4.04	3.40	3.85	0.016	Significant
(Attribution of Control-ability): If the Clients have direct control through Technological Platforms during Service Failure Recovery Process that will have positive impact future similar instances	4.13	3.35	3.90	0.014	Significant
(Compensation): Strategic Compensation to the clients during an Service Failure have a positive impact in maintaining Loyalty of the Clients.	4.09	3.75	3.99	0.358	Not Significant
(Compensation): Appropriate Compensation can ensure Service Continuity during any Service Failure	4.11	4.20	4.13	0.392	Not Significant
(Compensation): Compensation has a positive impact on any Service Recovery Initiatives	3.94	3.90	3.93	0.696	Not Significant
(Communication): Proper Candid Communication during any service failure can maintain trust among the Clients	4.19	2.70	3.75	0.000	Significant
(Communication): Involving Clients in the Recovery Process can have a positive effects during Future Service Failure Situations.	3.89	4.67	4.11	0.007	Significant
(Communication): Recovery Process Communication in every stages can help to maintain client's loyalty during any Service Failure	4.21	3.30	3.94	0.000	Significant

The lower the P-Value The More the value is significant means in those cases the Null Hypothesis is not accepted and alternative Hypothesis is accepted.

In the above Mean Square Comparison in Table-2, there are 7 instances where the P-Value is significant.

It indicates that in the identified instances, There is significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market.

In the following Variables there are considerable differences in opinion between the Clients and the Service Providers:

Candid Communication

Involving Clients

Recovery Process Communication

Behavioral Intentions

Technological Control

Continuity

Teams

Crosstab or Cross Tabulation is used to aggregate and jointly display the distribution of two or more variables by tabulating their results one against the other in 2-dimensional grids. In this Study the Authors have used Crosstab in SPSS to display the Client Perception and Service Provider Perception on different Service Recovery Variables in a Single Comparative Tab.

In order to further analyze the differences between the Service Provider and the Clients Regarding their opinions about the different Service Recovery Variables, the Authors have further conducted Chi-Square Test Using SPSS. The Results of the same have been described below:

(Quality of Past Service Experience): Satisfactory Past Service Experience help to recover any Service Failure

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Quality of Past Service Experience): Satisfactory Past Service Experience help to recover any Service Failure	Disagree	1 2.2%	0 0.0%	1 1.5%
	Neutral	12 26.1%	4 20.0%	16 24.2%
	Agree	14 30.4%	15 75.0%	29 43.9%
	Strongly Agree	19 41.3%	1 5.0%	20 30.3%
	Total	46 100.0%	20 100.0%	66 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	13.011	0.005

(Quality of Past Service Experience): Efforts of the Service Providers to Recover Service Failure is a positive factor to manage future Service Failure

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Quality of Past Service Experience): Efforts of the Service Providers to Recover Service Failure is a positive factor to manage future Service Failure	Disagree	2 4.3%	3 15.0%	5 7.6%
	Neutral	7 15.2%	4 20.0%	11 16.7%
	Agree	21 45.7%	2 10.0%	23 34.8%
	Strongly Agree	16 34.8%	11 55.0%	27 40.9%
	Total	46 100.0%	20 100.0%	66 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	8.756	0.033

(Quality of Past Service Experience): Rewards for past Service Failure have a positive effect on the future Service Failure

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Quality of Past Service Experience): Rewards for past Service Failure have a positive effect on the future Service Failure	Strongly Disagree	1 2.2%	0 0.0%	1 1.5%
	Disagree	5 10.9%	0 0.0%	5 7.6%
	Neutral	12 26.1%	12 60.0%	24 36.4%
	Agree	12 26.1%	3 15.0%	15 22.7%
	Strongly Agree	16 34.8%	5 25.0%	21 31.8%
	Total	46 100.0%	20 100.0%	66 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	8.191	0.085

(Customers Expectations of Relationship Continuity): Quality Employee Training Service Recovery Initiatives have a positive effect on future Service Failure Recovery.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Customers Expectations of Relationship Continuity): Quality Employee Training Service Recovery Initiatives have a positive effect on future Service Failure Recovery.	Disagree	2 4.3%	0 0.0%	2 3.0%
	Neutral	12 26.1%	6 30.0%	18 27.3%
	Agree	11 23.9%	1 5.0%	12 18.2%
	Strongly Agree	21 45.7%	13 65.0%	34 51.5%
	Total	46 100.0%	20 100.0%	66 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	4.703	0.195

(Customers Expectations of Relationship Continuity): Employee Empowerment in handling Service Failure have a positive impact on the Recovery of Future Service Failure.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Customers Expectations of Relationship Continuity): Employee Empowerment in handling Service Failure have a positive impact on the Recovery of Future Service Failure.	Strongly Disagree	1 2.1%	0 0.0%	1 1.5%
	Disagree	2 4.3%	4 20.0%	6 9.0%
	Neutral	13 27.7%	8 40.0%	21 31.3%
	Agree	14 29.8%	7 35.0%	21 31.3%
	Strongly Agree	17 36.2%	1 5.0%	18 26.9%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	10.186	0.037

(Customers Expectations of Relationship Continuity): Employee Empowerment in handling Service Failure have a positive impact on the Recovery of Future Service Failure.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Customers Expectations of Relationship Continuity): A Well Defined and Trained Service Recovery Team always plays an important role in handling future Service Failure.	Disagree	3 6.4%	3 15.0%	6 9.0%
	Neutral	6 12.8%	6 30.0%	12 17.9%
	Agree	14 29.8%	3 15.0%	17 25.4%
	Strongly Agree	24 51.1%	8 40.0%	32 47.8%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	5.059	0.168

(Attribution of Stability): Consistent Efforts from the Service Providers to handle Service Failure create a Sense of Stability in the mind of the Clients.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Attribution of Stability): Consistent Efforts from the Service Providers to handle Service Failure create a Sense of Stability in the mind of the Clients.	Disagree	4 8.5%	1 5.0%	5 7.5%
	Neutral	8 17.0%	6 30.0%	14 20.9%
	Agree	17 36.2%	4 20.0%	21 31.3%
	Strongly Agree	18 38.3%	9 45.0%	27 40.3%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	2.690	0.442

(Attribution of Stability): Service Continuity even in Case of Service Failure give the Clients a sense of Stability

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Attribution of Stability): Service Continuity even in Case of Service Failure give the Clients a sense of Stability	Disagree	3 6.5%	4 20.0%	7 10.6%
	Neutral	12 26.1%	11 55.0%	23 34.8%
	Agree	16 34.8%	1 5.0%	17 25.8%
	Strongly Agree	15 32.6%	4 20.0%	19 28.8%
	Total	46 100.0%	20 100.0%	66 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	2.690	0.442

(Attribution of Control-ability): If Clients have a perceived Control over the situation during a Service Failure then it has a positive impact on the future service failure recovery.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Attribution of Control-ability): If Clients have a perceived Control over the situation during a Service Failure then it has a positive impact on the future service failure recovery.	Strongly Disagree	2 4.3%	0 0.0%	2 3.0%
	Disagree	7 14.9%	8 40.0%	15 22.4%
	Neutral	12 25.5%	3 15.0%	15 22.4%
	Agree	14 29.8%	5 25.0%	19 28.4%
	Strongly Agree	12 25.5%	4 20.0%	16 23.9%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	5.789	0.215

(Attribution of Control-ability): Positive Behavioral Intentions of the Service Providers During Service Failure Recovery Initiative plays an important role future service failure recovery

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Attribution of Control-ability): Positive Behavioral Intentions of the Service Providers During Service Failure Recovery Initiative plays an important role future service failure recovery	Strongly Disagree	1 2.1%	0 0.0%	1 1.5%
	Disagree	2 4.3%	5 25.0%	7 10.4%
	Neutral	10 21.3%	4 20.0%	14 20.9%
	Agree	15 31.9%	9 45.0%	24 35.8%
	Strongly Agree	19 40.4%	2 10.0%	21 31.3%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	11.030	0.026

(Attribution of Control-ability): If the Clients have direct control through Technological Platforms during Service Failure Recovery Process that will have positive impact future similar instances

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Attribution of Control-ability): If the Clients have direct control through Technological Platforms during Service Failure Recovery Process that will have positive impact future similar instances	Strongly Disagree	1 2.1%	0 0.0%	1 1.5%
	Disagree	1 2.1%	8 40.0%	9 13.4%
	Neutral	9 19.1%	1 5.0%	10 14.9%
	Agree	16 34.0%	7 35.0%	23 34.3%
	Strongly Agree	20 42.6%	4 20.0%	24 35.8%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	19.284	0.001

(Compensation): Strategic Compensation to the clients during an Service Failure have a positive impact in maintaining Loyalty of the Clients.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Compensation): Strategic Compensation to the clients during an Service Failure have a positive impact in maintaining Loyalty of the Clients.	Strongly Disagree	1 2.1%	0 0.0%	1 1.5%
	Disagree	2 4.3%	5 25.0%	7 10.4%
	Neutral	9 19.1%	3 15.0%	12 17.9%
	Agree	15 31.9%	4 20.0%	19 28.4%
	Strongly Agree	20 42.6%	8 40.0%	28 41.8%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	7.063	0.133

(Compensation): Appropriate Compensation can ensure Service Continuity during any Service Failure

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Compensation): Appropriate Compensation can ensure Service Continuity during any Service Failure	Disagree	3 6.4%	4 20.0%	7 10.4%
	Neutral	11 23.4%	2 10.0%	13 19.4%
	Agree	11 23.4%	0 0.0%	11 16.4%
	Strongly Agree	22 46.8%	14 70.0%	36 53.7%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	9.874	0.020

(Compensation): Compensation has a positive impact on any Service Recovery Initiatives

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Compensation): Compensation has a positive impact on any Service Recovery Initiatives	Disagree	4 8.5%	0 0.0%	4 6.0%
	Neutral	11 23.4%	6 30.0%	17 25.4%
	Agree	16 34.0%	10 50.0%	26 38.8%
	Strongly Agree	16 34.0%	4 20.0%	20 29.9%
	Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	3.790	0.285

(Communication): Proper Candid Communication during any service failure can maintain trust among the Clients

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Communication): Proper Candid Communication during any service failure can maintain trust among the Clients	Disagree	1 2.1%	6 30.0%	7 10.4%
	Neutral	11 23.4%	14 70.0%	25 37.3%
	Agree	13 27.7%	0 0.0%	13 19.4%

	GROUP		Total
	CLIENT	SERVICE PROVIDER	
Strongly Agree	22 46.8%	0 0.0%	22 32.8%
Total	47 100.0%	20 100.0%	67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	33.489	0.000

(Communication): Involving Clients in the Recovery Process can have a positive effects during Future Service Failure Situations.

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Communication): Involving Clients in the Recovery Process can have a positive effects during Future Service Failure Situations.	Disagree	4 8.5%	0 0.0%	4 6.2%
	Neutral	16 34.0%	0 0.0%	16 24.6%
	Agree	8 17.0%	6 33.3%	14 21.5%
	Strongly Agree	19 40.4%	12 66.7%	31 47.7%
	Total	47 100.0%	18 100.0%	65 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	11.147	0.011

(Communication): Recovery Process Communication in every stages can help to maintain client's loyalty during any Service Failure

Crosstab

		GROUP		Total
		CLIENT	SERVICE PROVIDER	
(Communication): Recovery Process Communication in every stages can help to maintain client's loyalty during any Service Failure	Strongly Disagree	2 4.3%	0 0.0%	2 3.0%
	Disagree	0 0.0%	3 15.0%	3 4.5%
	Neutral	6 12.8%	9 45.0%	15 22.4%
	Agree	17 36.2%	7 35.0%	24 35.8%
	Strongly Agree	22	1	23

	GROUP		Total
	CLIENT	SERVICE PROVIDER	
Total	46.8% 47 100.0%	5.0% 20 100.0%	34.3% 67 100.0%

Chi-Square Tests

	Value	P Value
Pearson Chi-Square	21.562	0.000

- From the Mean Square Comparison and Chi-Square Test it has been identified that in 9 instances there are significant difference in opinion of the Clients and the Service Providers regarding the impact of Service Recovery on the Human Capital Market.
- So in this case our Null Hypothesis i.e. There is no significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market is void which means There is significant difference between Client and Service Provider's perception about the impact of Service Recovery Variables in Human Capital Market.

CONCLUSION

Service Recovery plays a vital role in any service industry and Human Capital Market is not an exception. From this study authors have identified that in case of Service Recovery Variables, in many instances there are significant differences in amongst the Clients and the Service Providers. So in case of Service Recovery Variables, the Service Providers need to reconsider their Service Recovery models by incorporating the factors that are highly weighted by the Clients. When the company fails to stand for its promises made to the customer on the basis they build expectation, it's to be said that there is service failure. When the service failure occurs, there can be again severe ramification. Customer is considered to be the bread and butter, hence retaining them is the biggest challenge, and however service failure acts as an obstacle to it.

REFERENCES

- Anderson, J. C. & Narus, J. A. (1990). A Model of Distributor Firm and Manufacturer Firm Working Partnerships. *Journal of Marketing*, 54(1), 44-53.
- Bejou, D., Ennew, C. & Palmer, A. (1998). Trust, Ethics and Relationship Satisfaction, *International Journal of Bank Marketing*, 16 (4), 170-75.
- Bejou, D., Wray, B. & Ingram, T. (1996). Determinants of Relationship Quality: An Artificial Neural Network Analysis. *Journal of Business Research*, 36, 137-43.
- Berry, L. L. (1995). Relationship Marketing of Services-Growing Interest, Emerging Perspectives. *Journal of the Academy of Marketing Science*, 23 (4), 236-245.
- Boles, J. S., Barksdale, H. C. & Johnson, J. (1997). Business Relationships: An Examination of the Effects of Buyer-Salesperson Relationships on Customer Retention and Willingness to Refer and Recommend. *Journal of Business & Industrial Marketing*, 12(3/4), 253-65.
- Bronnenberg, B. J., Dhar, S. K., & Dube, J. P. (2009). Brand History, Geography, and the Persistence of Brand Shares. *Journal of Political Economy*, 117 (1), 87-115.
- Bronnenberg, B. , DubO, ~J., Mela, J. P., Albuquerque, C., Erdem, F. P., T., Gordon, B., Hanssens, D., Hitsch, G., Hong, H., & Sun, B. (2008). Measuring Long-run Marketing Effects and their Implications for Long-run Marketing Decisions. *Marketing Letters*, 19 (3), 367-382.
- Bronnenberg, B. J, Mahajan, V. & Vanhonacker, W. R. (2000). The Emergence of Market Structure in New Repeat-purchase Categories: The Interplay of Market Share and Retailer Distribution. *Journal of Marketing Research*, 37 (1), 16-31.

- Cannon, J.P. & Homburg, C. (2001). Buyer-supplier Relationships and Customer Firm Costs. *Journal of Marketing*, 65(Jan):29-43.
- Crosby, L., Evans, K. and Cowles, D. (1990). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing*, 54 (July), 68-81.
- Day, G. S. (2003). Creating a Superior Customer-Relating Capability. *Sloan Management Review*, 44 (3), 77-82.
- Dorsch M.J, Swanson, S.R, Kelley, S.W. (1998). The Role of Relationship Quality in the Stratification of Vendors as Perceived by Customers. *Journal of Academy of Marketing Science*, 26(2), 128- 42.
- Dwyer, P., Schurr, H. and Oh, S. (1987). Developing Buyer-Seller Relationships, *Journal of Marketing*, 51 (April), 11-27.
- Geyskens, I., J., Steenkamp, E. M., & Kumar, N. (1998). Generalizations about Trust in Marketing Channel Relationships using Meta-analysis. *International Journal of Research in Marketing*, 15(3), 223-248.
- Goodwin, C. and Ross, I. (1992). Consumer Responses to Service Failures: Influence of Procedural and Interactional Fairness Perceptions. *Journal of Business Research*, 25 (2), 149-163.
- Holbrook, M. B. (1994), The Nature of Customer Value: An Axiology of Services in the Consumption Experience, *Service Quality: New directions in Theory and Practice* 21.
- Holloway, B. B., & Beatty, S. E. (2003). Service Failure in Online Retailing A Recovery Opportunity, *Journal of Service Research* 6 (1), 92-105.
- Holloway, B. B., Wang, S., & Parish, J. T. (2005). The Role of Cumulative Online Purchasing Experience in Service Recovery Management
- Kähkönen, A. K., Lintukangas, K., & Virolainen, V. M. (2013). The Effects of e-Business on Supply Management. *Operations and Supply Chain Management* 6 (2), 75-84
- Kaizer, H.F. (1974). An Index of Factorial Simplicity, *Psychometrika* 39 (1), 31- 36.
- Kuo, Y. F., & Wu, C. M. (2012). Satisfaction and Post-purchase Intentions with Service Recovery of Online Shopping Websites: Perspectives on Perceived Justice and Emotions, *International Journal of Information Management* 32 (2), 127-138
- Lai, F., Griffin, M., & Babin, B. J. (2009). How Quality, Value, Image, and Satisfaction Create Loyalty at a Chinese Telecom, *Journal of Business Research* 62 (10), 980-986.
- Miller, J. L., Craighead, C. W., & Karwan, K. R. (2000). Service Recovery: A Framework and Empirical Investigation, *Journal of Operations Management* 18 (4), 387-400.
- Nunnally, J.C. (1967). *Psychometric Theory*, 1st ed., McGraw-Hill, New York, NY
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ESQUAL a Multiple-item Scale for Assessing Electronic Service Quality, *Journal of Service Research* 7 (3), 213-233.
- Patterson, P. G., Cowley, E., & Prasongsukarn, K. (2006). Service Failure Recovery: The Moderating Impact of Individual-level Cultural Value Orientation on Perceptions of Justice, *International Journal of Research in Marketing* 23 (3), 263-277.
- Wang, Y. S., Wu, S. C., Lin, H. H., & Wang, Y. Y. (2011). The Relationship of Service Failure Severity, Service Recovery Justice and Perceived Switching Costs with Customer Loyalty in the context of E-tailing, *International Journal of Information Management* 31 (4), 350-359
- Zakaria, H., Zailani, S., & Fernando, Y. (2010). Moderating Role of Logistics Information Technology on the Logistics Relationships and Logistics Service Quality, *Operations and Supply Chain Management* 3 (3), 134-147.
- Zeithaml, V. A., Gremler, D. D., Bitner, M. J., & Pandit, A. (2010). *Services Marketing: Integrating Customer Focus across the Firm*, 4th ed., TMH, New Delhi.

Issues and Challenges of Gender Equality for Women in Indian Male Dominated Society

Key words: Gender, Equality, Economic, Social, Women, Society, Issues

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ABSTRACT

From the boardroom to the sports field, Indian women are making a mark in traditionally male-dominated areas and redefining their roles in society. This study considers the gender difference that exists among each region, class and prevents the expansion of Indian economy from up the lives of Indian folks. Gender difference in India is extremely advanced and heterogenous, and it exists in each field like education, employment opportunities, income, health, cultural problems, social problems, economic issues etc. An effort has been created to seek out those factors that are to blame for this problem in India. So, this paper highlights the multi-dimensional context of gender inequalities prevalent in India. Overall, the study indicates the differences in economic, social, cultural and legal biases which pose challenge for policy-makers and social scientists to ascertain proper equality within the entire social field. The researcher has tried to counsel some relevant

strategies and policies implication for reducing this gender difference and to market the dignified position for Indian ladies.

INTRODUCTION

Women empowerment - the essential ingredient to social development has become one of the most important concerns of 21st century. But practically women empowerment is still an illusion. Gender inequality exists in the form of socially constructed, predefined gender roles firmly anchored in India's social fabric that has deep cultural and historic roots (Renu Batra and Thomas, 2016). Gender equality is considered a critical element in achieving social institutional changes that leads to sustainable development with equality and gender growth. The difference between men and women exists in social, political, intellectual, cultural, and economic attainments. The global gender gap measures were introduced by the world economic forum to examine

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four critical areas - economic participation and opportunity, health and survival, educational attainment and political empowerment (Ambel Waris and Viraktash, 2013). Issues in access to education is affecting both girls and boys in India and various initiatives are needed to secure meaningful and sustainable access for education of girls belonging to disadvantaged groups (Madumita and Ramya, 2008).

Women constitute almost 50% of the world's population but India has shown disproportionate sex ratio whereby female population has been comparatively lower than male population. In over 69 years of Independence, India stands as the most progressive democracy, yet gender discrimination continues to be a humongous problem within the Indian society. One of the most regressive in forums of conferring upon women their rights for a country, which has been hailed all over the world for its feminism due to the worship of female clients. On 9th March, 2010 the upper house of Indian Parliament passed the Women's Reservation Bill, ensuring 33.3% reservation to women in Parliament and State Legislative Assemblies. The term women empowerment implies the ability of women to take all the important decisions independently related to her throughout her life span that will ensure her success in all aspects of life (Sutapa Saryal, 2014).

The word gender refers to the social economic definition of men and women -the way societies distinguish men and women and assign social roles to them. The distinction between gender was introduced to deal with general tendency to attribute women's subordination to the iranatomy (Suresh Kumar Kharana, 2016). In this context, this paper attempts to analyze gender equality in India related with the psychological aspects of the society.

Women all over the world are overwhelmingly concerned with the issue of gender equality through women's empowerment. Status of women in Indian society is a reflection of unequal relationships sustained by patriarchy built on male superiority and female inferiority, sex stereotyped roles, expectations and economic, social and political predominance of men and dependency of women. In the last few decades, women's issues and concerns have been debated widely; the major issue being equality. Though their contribution in different economic social and political activities is very well recognised, the idea of equality is still a distant dream. Women's movements have the credit of sharpening the issues confronting women and enabling them to participate in different spheres of life. Women's journey from survival to dignity and empowerment has not been an easy one. Though a lot of ground has been

covered, a lot remains to be achieved.

Indian women go through a state of great disadvantage reflected in discrimination practiced at different levels in a life cycle. They continue to be married even before attaining legal age at marriage of eighteen years, have multiple pregnancies, produce underweight babies and prone to various susceptible diseases during reproductive years. There is a strong evidence that given access to similar food, care and medical attention, fewer women and girls die at all ages than men and boys through childhood and reproductive years because they are biologically stronger. Yet in India, more women and girls die in early ages and during reproductive years due to unfavourable attitude of society towards them. Adverse sex ratio particularly child sex ratio is an important indicator of overall status of women in Indian society. Several studies have categorically pointed out at the relationship between low child sex ratio and prosperity pointing to the killing role of technology in enhancing the missing girl phenomena. There is unholy alliance between tradition (son complex) and technology which is playing havoc with the society at large.

OBJECTIVES

- The main focus of this research paper is to understand the gender equality in the status of women
- To study the women's position in Indian Society.
- To understand how gender equality affects women's role in the family regarding decision making.
- To highlight how gender inequality affects women's education especially higher education and job opportunity in the society
- To discuss issues and seek solutions and formulate corrective actions on gender equality and the sustainable development goals

HYPOTHESIS

Hypothesis 1: Gender equality increases well-being of women but decreases that of men.

Hypothesis 2: Gender equality increases well-being of men and women

Hypothesis 3: Gender equality is likely to exert no impact on people with high-income.

Hypothesis 4: Gender equality increases well-being of people with low-income.

LITERATURE REVIEW

Amutha (2017)¹ Man and woman both are equal and play a paramount role in the creation and development of their

¹ Amutha, D., *The Roots of Gender Inequality in India* (January 27, 2017). Available at SSRN: <https://ssrn.com/abstract=2906950> or <http://dx.doi.org/10.2139/ssrn.2906950>

families in a particular and the society in general. Indeed, the struggle for equality has been one of the major concerns of the women's movement all over the world. The difference in sex and physical form denotes no difference in status. Woman is the complement of man, and not inferior. In India, since long back, women were considered as an oppressed section of the society and they were neglected for centuries. The birth of the son is being celebrated while the birth of a daughter is filled with pain. Boys are encouraged to be tough and outgoing but girls are encouraged to be homebound and shy. All these differences are gender differences and they are created by society. It has adverse impact on development goals and consequently reduces economic growth. It hampers the overall well-being because blocking women from participation in social, political and economic activities can adversely affect the whole society. Gender inequality is, therefore, a form of inequality which is distinct from other forms of socioeconomic inequalities. Gender inequality in India is a crucial reality. In modern times, women are performing exceptionally well in different spheres of activities. Still majority of Indian women are facing the problem of gender inequality and discrimination. As per UNDP report, India ranks 132 out of 187 countries on gender inequality index (GII). India ranks low partly because of its skewed ratio, with only 914 females for every 1000 males, according to Indian government data. As per UNDP report, only 29% of Indian women above the age of 15 in 2011 were part of labour force, as compared to 80.7% men. In parliament, only 10.9% of law makers are women, while in Pakistan it is 21%. In India, 200 women died for every 100,000 child births and 80% of Indian women didn't have bank account in 2016 as per UNDP report Every day 39000 girls are forced for early marriage i.e. 27 girls are married a minute. This paper is trying to bring out the factors that are responsible for gender inequality and suggests measures to eradicate this problem.

Ramadevi (2017) in her article proposes that gender equality is a human right which entitles all persons irrespective of their gender to live with dignity and with freedom. Gender equality is also a precondition for all round development and reducing poverty. Empowered women make invaluable contribution to the improvement of health conditions and educational status and productivity of whole families and communities, which in turn improve prospects for the next generation. The Millennium Development Goal also puts emphasis on gender equality and empowerment of women. It is now widely accepted that gender equality and women's

empowerment are fundamental cornerstones for achieving development results. Keeping the status of women empowerment and its determinants in India, in this paper an attempt is made to present some of the key determinants of inequalities that exist in our country so as to have an idea about to what extent the women are empowered.²

Reshma Elizabeth Thomas (2013) writes that gender-based inequalities in India translate into greater importance being placed on the health and empowerment of males than of females. In India, health and population indicators that are driven by gender differences include sex ratios at birth, infant and child mortality by sex, and low ages at marriage for women. At the household level, dis-empowerment of women results in less access to education, employment, and income, and power and freedom of movement. Considering all these fact, India and its society has a mammoth task of empowering women to provide them the basic needs and to prepare them for a safe and productive future.³

Ankita Chakraborty (2019) found out that over a very long period of time, Gender Inequality and differences existed in almost all societies of the world and hence the problem regarding gender inequality in India is not a recent development. The complicated set of shared images and conceptions that are stereotypically attributed to women are passed on generation by generation because these over a span of time became social norms and have not been questioned. In India, gender inequality started showing its colour from the later Vedic period and till now it is a debatable issue because as argued, a woman throughout her life cycle faces numerous problems. Gender Equality refers to equality in the number and in the relative power, status and role of women in the society. This paper does not concern itself with Feminist Jurisprudence merely; rather it tries to evaluate the status of a woman in the light of Indian Constitution and how the Constitution as a foundation document can play an instrumental role in bringing gender equality in India and whether the goal has been at all achieved. When we go through the various provisions of the Constitution it seems evident that the Rights guaranteed to women are at par with the Rights of men. Along with that, in some cases women enjoy the benefit of certain special provisions as well. Here arises the question of gender neutrality which I have dealt with in my paper. I put emphasis on the Preamble of the Constitution, Fundamental Rights, Directive Principles, Fundamental duties and certain judicial pronouncements. Through my work I tried to analyze how far the Constitution of India is successful in

²T. Rama Devi, *Gender Equality: Women Empowerment*, GJRA, Volume-6, Issue-9, Special Issue September-2017

³Reshma Elizabeth Thomas, *Gender Inequality In Modern India –Scenario and Solutions*, Journal Of Humanities And Social Science, Volume 13, Issue 3 (Jul. - Aug. 2013), PP 48-50

making de jure equality into de facto equality and the methodology of my study is a Doctrinal one.⁴

Sharma (2016)⁵ in her book attempts to analyse the changing socio-economic, political and cultural status of Muslim women in medieval times (13th to 18th centuries). Literature on the status of Muslim women during medieval times is very scanty and whatever literature is available is found in the memoirs of contemporary Indian kings, diaries and travel accounts of foreign travellers, Hindi and Persian writers. Though she highlighted the role of Islam in raising the status of women, she pointed out how rigid Islamic rules for women led to deterioration in women's status. Islamic religious text laid down rules for women; any violation was considered a sin. The rigidity coupled with Ulema (Muslim religious scholars/ theologians-competent to interpret the holy Quran and Sunnah [traditions of Prophet Mohammad]) made the fort of Islam almost impregnable resulting in static status of Muslim women. Assimilation with other groups such as Hindus, Turks, Arabs, Mongols, Tartars, Afghans and Persians influenced Islamic society tremendously. Muslim invaders came to India without women and later took local women for wives. While addressing social and economic issues related to the status of Muslim women, Sharma discusses the deteriorating position of women in male dominant Indian society. There was universal preference for sons; both rulers and the ruled considered daughters a liability. She examines the position of different strata of women and explains how upper strata women enjoyed the privileges denied to common Muslim women. She also narrates the expensive and elaborate maintenance of harems—the top priority and status symbol for Mughals. In the pre-Mughal period, large harem was considered a status symbol. Some of the sultans even framed rules for harmonious living in the harem. The lavish lifestyle of ladies of nobility and royalty in harems in a way deteriorated their status, Sharma argued. The observance of Purdah and seclusion of women was part and parcel of the Muslim society. The women of the higher strata of the society were very strict about its observance. Purdah norms were generally strict during sultanate period, became relaxed during the time of Babur and Humayun and again strict during the reign of Akbar and most severe during the period of Aurangzeb. The women from economically backward strata never observed purdah as they had to come out to earn living. The observance of Purdah also reduced the overall status

of women in Islamic society. Large majority of Muslim women remained backward in the sphere of education. They were mainly taught the tenets of Islam and domestic work such as cooking, embroidery and stitching. The common Muslim women had little to offer due to lack of education, early marriage and purdah.

Bhatty (2016)⁶ in her memoir gives illustrative account of her journey of over 80 years in a male dominant society, fighting stereotypical images of women and making an identity of her own through perseverance and determination. She narrates her experiences in a traditional Muslim family in Lucknow in pre-partition India and highlighted the sociocultural and political conditions of undivided and post-Independence India. She has tried to show how Indian Muslims as well as Indian Christians adopted the Hindu customs and rituals which depicted a highly patriarchal structure of Indian society. Many customs and rituals have been practiced by Indian Muslims which are contrary to their religious teachings such as caste inequality and attitude towards women. Her journey from Lucknow where she was born and brought up in 1933 to Royal Albert hall where she was awarded PhD degree was eventful. She came from land owning families of Rudauli, a Muslim-dominated town in the erstwhile district of Barabanki, now in the district of Faizabad. Before independence, UP was called the United Provinces of Agra and Oudh (now Awadh). The Oudh region was ruled by dynasty of Muslim Nawabs until the British took over. The Nawabs of Oudh were famous for their leisurely and highly feudal life. The author gives an account of different rituals performed at all life events like birth, marriage and death, though Islam shuns rituals. What is worth mentioning is the fact that these customs, rituals and traditions are so gender specific that they undermine women's status in the society and make her feel weak and dependent throughout her life. Regarding social interaction with neighbours and community, there was not much interaction as Muslim women remained confined to their households, but at each other's festivals, gifts and goodies were exchanged between them and Hindu neighbours. Hindu neighbours did not take any cooked food from Muslims as they were known for being non-vegetarian; therefore, untouchability was observed but this did not make any issue then. They even participated in festivals such as Dussehra and Diwali known as Indian festivals but after the partition, the sentiments changed, and these festivals were regarded as Hindu festivals.

⁴Ankita Chakraborty, *Gender Justice Under Indian Constitution, International Journal Of Legal Developments And Allied Issues*, 2019

⁵Sudha Sharma. *The Status of Women in Medieval India*. New Delhi: SAGE Publications, 2016

⁶Zarina Bhatty. *Purdah to Piccadily: A Muslim Woman's Struggle for Identity*. New Delhi: SAGE Publications, 2016, xiv+196 pp., ₹595 (hardback). ISBN 978-93-515-0824-3.

METHODOLOGY

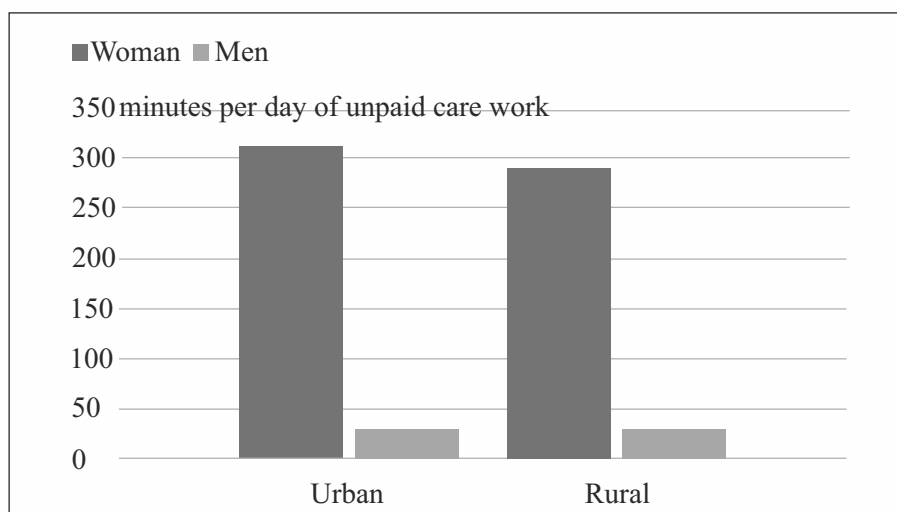
The objective of this research will be accomplished by using an exploratory research. Researcher will use some of the following important methods like primary and secondary, explanatory and exploratory, observational etc. to conduct research. Data is collected mainly from secondary sources. It consists of information that previously subsists somewhat in papers. A manuscript is very important trustworthy and priceless basis of information. Many researchers make use of this fundamental source. Manuscript is nothing of this imperative source but printed evidence that contains

important information about a problem or characteristics of learning. It may be purchased material, journals, magazines, newspaper articles and relevant websites.

ANALYSIS AND FINDINGS

Women in India spend around five hours a day on unpaid care work while men devote a mere half an hour on average. "This disproportionate burden of unpaid care work by women means they lose out on opportunities to participate in paid labour or are forced to undertake paid labour leading to their time poverty and loss in well-being" the report said.

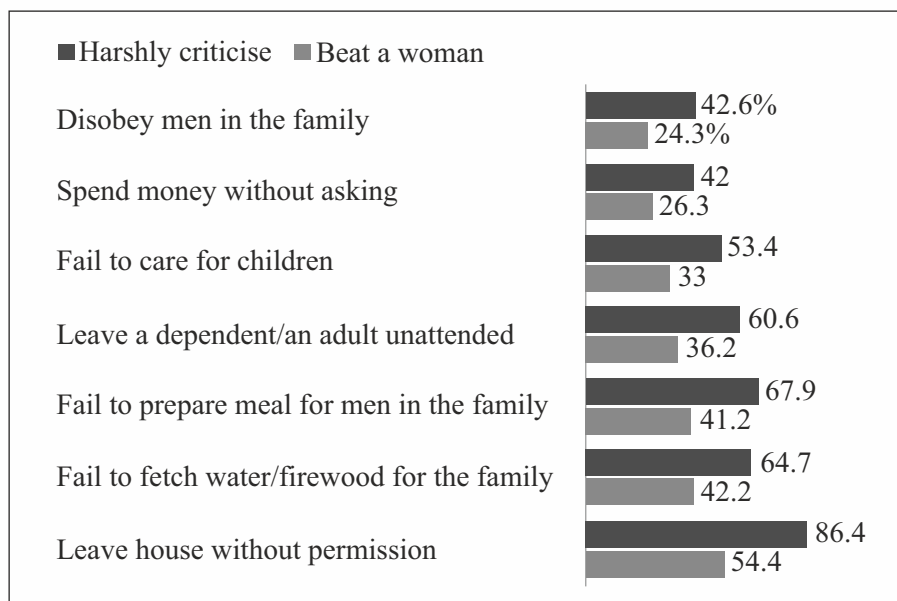
Figure 1 - Indian Woman Put in Many More Hours of Unpaid Work than Men



This imbalanced system leaves women vulnerable. A survey of 1,000 households across the central-Indian states of Bihar, Jharkhand, Chhattisgarh, and Uttar Pradesh last year revealed that people thought it was

acceptable to criticise and beat women if they slipped up while carrying out unpaid care work. In turn, violence continuously sets women back economically. It's a vicious cycle.

Figure 2 - Woman's Unpaid Work Leads to Gender-based Violence in India



Further up the social ladder, the inequality still persists. Even in India's elite club of three-comma fortunes, women make a blink-and-miss appearance. "There are only nine women billionaires in the list, constituting just 7.5% of the Indian billionaires".

INDIA'S PROBLEM

India ranks 132 out of 187 countries on the gender inequality index – lower than Pakistan (123), according to the United Nations Development Program's Human Development Report 2013. The report said all countries in South Asia, with the exception of Afghanistan, were a better place for women than India, with Sri Lanka (75) topping them all. Nepal ranked 102nd and Bangladesh 111th. Gender inequality is especially tragic not only because it excludes women from basic social opportunities, but also because it gravely imperils the life prospects of future generations. Indian families often prefer boys to girls, and female feticide is tragically common. Only 29% of Indian women above the age of 15 in 2011 were a part of the country's labor force, compared to 80.7% men. In Parliament, only 10.9% of lawmakers are women, while in Pakistan 21.1% are women. In United States which ranks 42nd on the list, 57.5% women and 70.1% men are a part of the labor force. China fared even better, landing 35th. Only 26.6% women above 25 years received a secondary education in 2010, compared to 50.4% of men. Pakistan scored even lower, with 18.3% of women having received secondary education compared to 43.1% of men. In the U.S., 94.7% women have received a secondary education – a figure slightly higher than for men (94.3%). In China, this figure was 54.8% for women and 70.4% for men.

In India, 200 women died for every 100,000 childbirths, says the report. In China, the number was considerably lower (37 deaths) and in the U.S. even lower than that (21 deaths).

THE REALITY

Firstly, the reality of gender inequality in India is very complex and diversified, because it is present in many ways, many fields and many classes. In fields like education, employment opportunities men are always preferred over women. Consider the case - a girl taking admission in mechanical engineering. Doesn't it sound a bit awkward because it's always considered a man's field. The gender inequality faced by women was so much that many women claimed May God give sons to all. This is a fact and India has witnessed gender inequality from its early history due to its socio-economic and religious practices that resulted in a wide gap between the position of men and women in the society. Clearly gender gaps that are widespread in access to basic rights, access to and control of resources, in economic opportunities and also in power and political

voice are an impediment to development.

RECOMMENDATIONS

- Organisations that need to attract women into male dominated occupations and to retain their services should not take for granted that these women will successfully assimilate in these environments.
- Organisations need to introduce formal organisational initiatives to create an environment conducive for women entering and remaining in male-dominated occupations.
- The nature of the organisational initiatives should include strong, visible and effective policies geared towards accommodating women's physical needs, change management strategies and practices to create female integrated cultures and to provide appropriate emotional support and mentorship.
- A review of current policies aimed at women, like maternity leave, is required along with the development of more effective strategies for pregnant women who can not work in hazardous environments.
- Organisations should begin to improve gender policies, in consultation with the women concerned, and should include gender-sensitivity training in all employees' induction and orientation programmes.
- In order to get a more comprehensive picture of the experiences of women in male-dominated occupations, future studies should include women who have worked in male-dominated occupations but who have subsequently left for more gender-neutral or female-dominated environments. Having noticed specific cultural traditions and gender role stereotypes from the participants' narratives, the authors suggest that future research should also investigate how different cultures affect the integration of women in male dominated occupations.

DISCUSSIONS

The proposed conceptual understanding reveals the unique challenges as women who worked in male-dominated occupations, as well as elements of their resilience. Formal and covert gender-discriminatory and biased organisational practices, as well as their unique physical, identity and work-life balance needs, were the main challenges the women in this study experienced. Their resilience is evident in their use of creative coping strategies and resources and in the motivational work aspects that enabled them to persevere in pursuing career success. Discrimination and bias seem to be the predominant challenges women face, whether they are evident in formal policies and tangible resources or in covert aspects of the organisational culture that reflect debilitating stereotypes and male resistance.

Previous studies also show that women in general experience both overt and subtle mistreatment that inhibits their career progression in male-dominated fields

The author's findings echo the findings of Madikizela and Haupt (2009), who reported a lack of written gender policies and of gender-based education material in the construction industry. The author agrees with them that a lack of visible and tangible commitment to empowering women in organisations remains, despite employment equity legislation.

Covert discriminatory behaviour manifests in stereotypical male-female gender roles and expectations that permeate the work place. It also manifests in male colleagues' resistance to accommodate and support female employees. Stereotypes and male resistance emanate from cultural and societal norms because of patriarchal structures in family units, where women play

submissive roles to men (cf. Bobbit-Zeher, 2011; Mathur-Helm, 2006; Cha, 2013).

CONCLUSION

These stereotypical gender roles and expectations spill over into organisations structures and behavioural dynamics, thereby sustaining biased and discriminatory work role allocations as well as unwillingness on the part of men to relinquish the masculine culture in order to incorporate female colleagues. Women still have to contend with the time efficiency problem of fulfilling their age-old stereotypical obligations as homemakers and their obligations as paid workers (Cha, 2013; Franks et al., 2006). Consequently, the author found that the organisational culture in male dominated occupations continues to reflect an underlying patriarchal role distribution to the detriment of female equality in male-dominated occupations

REFERENCES

- Chakraborty, A. (2019). Gender Justice Under Indian Constitution, *International Journal Of Legal Developments And Allied Issues*.
- Amutha, D., (January 27, 2017). The Roots of Gender Inequality in India Available at SSRN: <https://ssrn.com/abstract=2906950> or <http://dx.doi.org/10.2139/ssrn.2906950>
- Rama Devi, T. (2017). Gender Equality: Women Empowerment, *GJRA*, 6(9), Special Issue.
- Thomas, R.E. (2013). Gender Inequality In Modern India –Scenario and Solutions, *Journal of Humanities and Social Science*, 13(3), 48-50.
- Sharma, S. (2016). *The Status of Women in Medieval India*. New Delhi: SAGE Publications.
- Bhatty, Z. (2016). *Purdah to Piccadilly: A Muslim Woman's Struggle for Identity*. New Delhi: SAGE Publications.
- Roger, L. (2011). Promoting Gender Equality: An Equity-based Approach to Programming. Operational Guidance Overview in Brief. UNICEF. Retrieved 2011-01-28. "Gender equality". United Nations Population Fund. UNFPA. Retrieved 14 June 2015.
- Kwatra, N. and Alexander, S., (April 03, 2019). Gender Equality: How Urban India Views Women in Society, <https://www.livemint.com/news/india/gender-equality-how-urban-india-views-women-in-society-1554237479421.html>

Smart Cities Mission in India – Great Cry Little Wool?

Key words: *Smart Cities, Smart Cities Mission, Economic Development, India*

Jitender Sharma*

ABSTRACT

Government of India launched in June 2015, the Smart Cities Mission, amidst much fanfare with aim to develop 100 smart cities in India that would have state of the art infra structural facilities with extensive use of big data and information technology and with people's participation in governance. It was termed as a pilot project which could later be extended to other cities also. Five years have gone by and project has not yielded its desired result as postulated at the time of launch of project. This paper evaluates the 'smart cities mission' critically and tries to find if the project is worth the money spent on it or there could be better approaches to give better life to its citizens for a country like India.

INTRODUCTION

India is a developing country having ranked at 129th position in Human Development Index 2019 from among 189 countries and with over 364 million people still below poverty line that is about 28 percent of its total population. Though below poverty line figures are

shrinking each year but it is more due to changing measurement scales and indexes i.e. more the work of statisticians and economists. India, as a country, still has a large population below poverty line and number will be double of if one counts actual poor people in India. Inequality in India is wide spread and is not just confined to poverty but there are inequalities in terms of caste, gender, education, access to healthcare, technology and much more. Religion and caste based discrimination is still prevalent in Indian society in spite of strict legislations prohibiting the same.

As per Census (2011) data, over 31 per cent of Indian population lives in cities and cities contribute 63 per cent of GDP. It is expected that by 2030 urban settlements shall have about 40 per cent population with 75 per cent contribution to GDP. That means India needs to put in great efforts to develop all basic infrastructure in urban settlements including physical, institutional, social and economic infrastructure that will attract capital investment to these cities resulting in more employment opportunities. Both these will have compound impact in

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terms of improved quality of life and further growth and development.

To address the issues of inequality and improving quality of life, Government of India had launched a new grand scheme i.e. the Smart Cities Mission (SCM) in June 2015 to create 100 'smart cities' in the country by 2020. Later this time line is revised to 2023. Since its launch, government has finalized 99 cities in four rounds spread over 2015 to 2018 and one proposal of "Shillong" is pending for lack of some documents. Cities were selected based upon the Smart City Proposals submitted by them under the competition framework of the India Smart Cities Challenge. Investments worth 2.04 lakh crore Indian rupees will be made by these cities to develop required infrastructure and these cities will be developed on public private partnership model during the period of 2015 to 2023.

The objective of the Smart Cities Mission was to create compact spaces under chosen smart cities which act as a catalyst, set examples that could be replicated later by other cities or even at other places within the smart city.

WHAT ARE SMART CITIES?

Concept of 'Smart City' may have different connotation for different people and may vary on individual, city or country levels as per changing expectation level of people living there. For a city to be counted as 'Smart City' in India requires it to be fully developed in four key areas i.e.

institutional, physical, social and economic infrastructure. Smart cities always keep people first.

The smart cities contain facilities that any person living there can aspire of. A smart city offers smart facilities like delivery digital services to its citizens, all civil amenities in place, environment friendly with proper waste disposal and treatment of sewage water, intelligence traffic management, integrated multi-model transport, smart parking, converting waste to energy, proper infrastructure in place for start-ups and industries and their employees living in those cities in addition to have skills development centres to continually upgrade skills of personnel who will be delivering smart services to people living in smart cities. Smart cities can't be developed overnight hence it is essential to have long term goals which can be achieved incrementally, hence adding on layers of 'smartness' at each step.

Smart Cities adopt multiple approaches - digital and information technologies, urban planning best practices, public-private partnerships, and policy change to achieve their mission and to create a difference in people's life. Another important parameter for a smart city is focus on sustainable and inclusive development without discriminating on any aspect to its citizens.

One of the key criterion of a smart city is involvement of its people in its governance and role of information technology tools like mobile-based apps is very handy and useful for people greater involvement in governance.



(Source: Google)

OBJECTIVES

While there are positive developments in four-five of the smart city projects from among 99 chosen one, objective of this paper is to understand specifically if the gains of

this scheme are actually worth the costs involved in all terms including financial, ecological, and human, as well as the opportunity loss of not adopting an alternative approach.

LITERATURE REVIEWED

According to Smart Cities Mission official website (March, 2020), the mission has spread over 100 cities, it will make an impact on urban population counting to 99,630,069 with an estimated cost of 2,05,018 crore Indian rupees. There will be national level and city level monitoring.

Wikipedia (2020) defines a smart city as an urban area which makes use of information technology to collect data and insights to manage its resources and services effectively. Technologies used allow direct interaction between officials and citizens.

Deakin (2011) papers calls for increasing use of ICT that impact its people positively and people involvement as key component of smart city.

According to Forbes (2019) article, smart cities have potential to adopt block chain and crypto currencies as it will be extensively used technology for every aspect.

As per a study made by HLRN (2018), smart city mission is bound to fail its objectives unless government fix basic problems of adequate housing, violence and crime against women, children, minorities and caste based crimes. Merely infrastructural arrangements won't be adequate.

HYPOTHESES

After going through the literature and data available in public domain, following hypotheses is constructed.

H0: Null Hypothesis: Smart City project is not worth the costs involved in terms of financial, ecological and human

H1: Smart city project is worth the costs involved in terms of financial, ecological and human

ANALYSIS AND FINDINGS

Success of the Smart Cities Mission can be measured on certain parameters i.e. ecological impact, number of benefitted persons, what percentage of total area will be developed as smart cities, benefits versus costs involved for this mission, negative impacts if any and timely completion of the project. Author has collected data from official website of Smart City Mission and through secondary sources to assess the progress made by the mission since its launch.

The Smart Cities Mission which was initially spread over five years' period of 2015 to 2020 was later shifted to 2015 to 2023 as cities were identified not in a single round but in multiple rounds. There is very slow rate of implementation of this project as ground level hence timely completion won't be feasible.

India as on 2nd March 2020 houses a population around

1,375,492,629 out of which this mission only covers about 99 million urban people hence leaving the majority of people not covered by the scheme. Hence it fails on account of human development aspect as it covers very less population. As per data provided by Ministry of Housing and Urban Affairs (MoHUA) about 450 million people live in urban areas and this scheme will cover only 99 million people so from urban areas development angle also it neglects a major percent of people. India has over 4000 cities and for smart cities projects only 100 cities have been shortlisted so in terms of area coverage also, this mission falls short of any significant achievement.

Out of its proposed budget of about 2.039 billion, 80 per cent is devoted to 'Area Based Development' and only 20 per cent is kept for pan-city development that means development will be confined to very small pockets and/or areas neglecting vast areas of a city.

As per data provided by HLRN (2018) study, there will be large scale evictions and demolitions of homes in 32 of the 99 'smart cities' for various reasons including directly linked to 'smart city' projects and also for reasons like 'city beautification' to 'slum clearance.'

Smart cities with their state of art facilities and highly improved infrastructure will become unaffordable to poor people hence it will result in market-led mass evictions and social unrest. Real estate prices will become exorbitant in smart cities and only selected few would be able to afford living in those cities or buying a property in such cities.

For this large scale development, harm to ecological balance is easy to understood. In already fragile environment, there will be large scale cutting of trees and large scale construction will give rise to further pollution. Ecological balance will further be distorted as animal species are likely to hit most due to the disturbance in their natural habitats hence there will be disastrous impact on ecological balance as a result of this project.

Smart cities are going to make extensive use of technology (IoT) which will mean the agencies will have complete access to even private data of citizens. There are serious apprehensions that data security can easily be compromised resulting in possibility of violation of people's privacy.

The capital requirements as figured by ministry data, can't be met with government funding alone. It is estimated that over 80 per cent of total project cost will have to be pitched in by private sector through public private partnership (PPP) model. No private player will invest money unless they are getting significant profit out of their investment hence it is clear that this project is ultimately going to benefit private players and in fact government is going to spend about 20 per cent of total project cost without getting any output and in other words

bearing 20 per cent cost of private developers which will be making profit out of this venture.

Government of India has launched various other schemes like Pradhan Mantri Awas Yojana or Housing for All 2022 under which government is promoting affordable housing and providing easy loan, discount and lesser rate of interest. This Smart cities mission crosses and clashes with such schemes. It is not easy to comprehend why do government wants to spend such large funds on a project with very limited benefits.

Above findings and analysis of collected data indicates that hypothesis (H1) i.e. smart city project is worth the costs involved in terms of financial, ecological and human is not true and it confirms the null hypothesis (H0) that smart City project is not worth the costs involved in terms of financial, ecological and human.

CONCLUSION

India is a developing country with 364 million people still below poverty line that is about 28 percent of its total population. India is infested with multiple inequalities in terms of wealth, social status, rural/urban divide and so on. It has long way to go to eliminate its biggest enemy i.e. poverty and also to achieve objective of "education for all". India needs to invest hugely to bring its rural

areas at par with urban areas so as to stop migration of rural population to urban areas. India needs to invest a lot for employment generation for its youth and unemployed population. Under these wide spread inequalities as supported by data gathered and analysis done, it can be easily concluded that piece-meal approach of developing small pockets as smart cities while ignoring the masses will not make India great. Just adopting a policy measure since it has been successful in some other parts of the world without understanding local conditions and realities is a half-hearted measure and will not yield desired results. For a vast country like India, sample projects-based interventions will not work. India requires a mission like "fortune at the bottom of pyramid" that could reach to the bottom most section of the society and can place all citizens' growth and development, and not technology development or profit as priority of the mission.

India needs to invest in its social infrastructure, make its places liveable for entire population, provide basic healthcare for all, improve its environment, clear water and clean air, make its places safe for everyone and provide education and employment opportunities to all. If India can achieve this, India won't need any smart cities project as all its cities will be smart enough.

REFERENCES

- Deakin, M and Alwaer, H. (2011). From Intelligent to Smart Cities. *Intelligent Buildings International*, 3(3), 140-152
- HOUSING AND LAND RIGHTS NETWORK (2018). India's Smart Cities Mission: Smart for Whom? Cities for Whom? <https://www.escr-net.org/resources/indias-smart-cities-mission-smart-whom-cities-whom>
- [http://164.100.161.224/upload/uploadfiles/files/SmartCityGuidelines\(1\).pdf](http://164.100.161.224/upload/uploadfiles/files/SmartCityGuidelines(1).pdf)
- <http://censusindia.gov.in/2011-Common/CensusData2011.html>
- <http://smartcities.gov.in/content/>
- https://en.wikipedia.org/wiki/Smart_Cities_Mission
- https://en.wikipedia.org/wiki/Smart_city
- <https://www.downtoearth.org.in/news/governance/india-home-to-28-of-world-s-poor-human-development-index-2019-68336>
- <https://www.forbes.com/sites/chrisamcfarlane/2019/10/18/are-smart-cities-the-pathway-to-blockchain-and-cryptocurrency-adoption/#118597ae4609>
- <https://www.india.gov.in/spotlight/smart-cities-mission-step-towards-smart-india>
- https://www.researchgate.net/publication/324503184_Smart_Cities_Mission_in_India_An_Empirical_study_on_opportunities_and_Challenges
- <https://www.worldometers.info/world-population/india-population/>

Environmental Accounting: One Dimension of Sustainable Development

Key words: *Environmental Accounting, Green Accounting, Sustainable Development, Environmental Management System.*

Shaizy Khan*

ABSTRACT

Accounting is defined as the recognition, measurement and reporting of the financial information to various stakeholders. Environmental accounting is the measurement of costs, liabilities related to the environment. Environmental accounting is conducted at different scales such as national level, corporate level. Moreover, environmental accounting is at the infancy stage in India and gaining attention due to many reasons the most prominent being the statutory obligations. Environmental accounting suffers from various issues due to which a void is present between the theoretical framework and its implementation. Identification and measurement of environmental costs and liabilities has been a problem and till date no standard guideline has been published in this regard. This is a review paper based on secondary information. This paper explores the concept of environmental accounting, benefits, forms of environmental accounting, classification of environmental costs followed by suggestion in the field of environmental accounting. Environmental accounting

is a relatively new branch of accounting and requires special attention. Further, the paper tries to build a conceptual framework of environmental accounting.

INTRODUCTION

Environmental accounting is also known as green accounting. The term was used for the first time back in 1980s by professor peter wood. Environmental accounting is the identification, measurement and disclosure of environment related information in financial statements of the company. Environment accounting is gaining significance due to the increasing awareness of sustainable development in the society. Another reason for adoption of environmental accounting disclosure by organizations is the statutory guidelines issued by the government in this regard. Environmental accounting is at the embryonic stage in India due to the lack of proper framework and guidelines from the government. Environmental management system (EMS) comprise of all the policies, regulations, organizational structure regarding environment issues.

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OBJECTIVES

- To explore the concept of environmental accounting
- To study the various forms of environmental accounting
- To explain the benefits of environmental accounting
- To examine the various types of environmental accounting costs
- To analyze the current issues and challenges with environmental accounting in India
- To provide suggestions in regard to environmental accounting in India

RESEARCH METHODOLOGY

Research type: The research is descriptive in nature

Data Collection: The present research is based on secondary data collected from websites, books, journals, articles.

ENVIRONMENTAL ACCOUNTING

Environmental accounting term was first used by Professor Peter Wood in 1980s. As per Environmental Protection Law, 1986 environment comprise of land, water, soil and all the interrelationship between them. Environment, broadly, is categorized as internal and external in context of corporate environmental accounting. External environment consists of all the natural resources outside of the organization and internal environment comprise of all the resources such as plant, machinery, human beings, buildings which are contained within the business premises. Environmental accounting is defined as identification, measurement, verification and disclosure of all the environment related information which are contained by the businesses. Traditional accounting does not give proper weightage to environmental issues in the financial statements and hence there is a need to address the environment related information by the organizations. There are several driving forces which have surfaced due to which organizations are prioritizing green accounting namely:

- Increasing pressure from the government to make environment related disclosures in the annual reports of the company.
- Increasing awareness among the society to reduce the disturbing impacts of the business activities on the environment.
- Rapidly changing laws related to the environment in India and across the world.
- To improve the goodwill of the organization in the society.

Apart from these driving factors, organizations are

incorporating environmental accounting with the motive to increase firm performance and increase firm's profitability. Moreover, due to lack of clear policies and guidelines on environmental accounting and reporting, organizations are uncertain about how to account for the environment. Corporates manage their environmental activities under the system known as environmental management system (EMS). Broadly speaking, EMS consists of all the policies, rules, structure, procedures, processes towards managing environment related activities.

FORMS OF ENVIRONMENTAL ACCOUNTING

Broadly, there are two types of environmental accounting conducted. One is macro level accounting and other is at micro level. The macro level environmental accounting is conducted at the national level to calculate the national income considering environmental issues. On the other side, micro level accounting is followed by the corporates to account for the environment issues. Environmental protection agency (EPA), USA categorize environmental accounting into three forms namely National income accounting, Environmental financial accounting, and Environmental management accounting. National income accounting is practiced at the national level to calculate GNP, NNP. On the contrary environmental financial accounting and environmental management accounting is practiced by the organizations. Environmental financial accounting comprise of financial reporting of environment related information to the external stakeholder. This environment related information is disclosed by the organizations in their annual reports for multiple stakeholders for varied purposes such as investors like to know how organizations are solving the sustainability issues and would like to invest in a firm which is more sustainable, employees would like to see the information to know about the ethical practices of the firm in which they work, government would like to see if the organization is complying with the laws laid down. Some information, on the other hand, is required by the managers of the company for decision making. Environmental management accounting deals with the internal information which is required by the managers of the company to take important decisions regarding products, processes etc.

BENEFITS OF ENVIRONMENTAL ACCOUNTING

There are several benefits of accounting for the environment. Few important ones are listed under.

From organizational point of view:

- Provides better estimate of product pricing, process pricing, hence, helps the managers to take improved decisions while deciding the true cost of the products.

This in turn enhance profitability.

- Help organizations in waste management activities. It helps the organizations to reduce waste.
- Increase the firm reputation among the society by incorporating sustainable development activities and hence, greater acceptance of products by customers.
- Gives competitive advantage to the firm.
- Assists the firms in complying with the legal obligation towards the country.
- Assists the firm in quality management of the products and processes.

From government point of view:

- Government can use the environment related information published by various companies in their reports for better allocation of resources and helps policy makers in formation of budgets.

From stakeholder's point of view:

- Investors require environment related information for taking better investment decisions.
- Increased awareness among employees about the optimum usage of resources and the need to reduce wastage.
- Motivate employees in strategy formulation towards developing efficient methods of resource utilization.

From international point of view:

- The various international monetary bodies such as IMF, World Bank, United Nations check the environmental information before financial assistance extension to the countries.

ENVIRONMENTAL ACCOUNTING COSTS

The environmental accounting costs can be voluntary in nature or statutory. There are multiple types of costs involved in environmental accounting conducted by organizations. The green accounting costs are categorized by different agencies differently. This paper considers the EPA (Environmental Protection Agency, USA) Standard to classify green accounting costs. EPA has classified these costs as: Conventional costs, potentially hidden costs, contingent costs and relationship costs.

- **Conventional Costs:** These costs include cost of purchasing raw material, cost of utilities, cost of capital supplies and goods, labor cost, cost of equipment and machinery. These costs are mostly considered in capital budgeting decisions but are ignored in environmental accounting.
- **Potentially Hidden Costs:** These costs are further

classified as upfront costs, regulatory costs, voluntary costs and back-end costs. Upfront costs are all the costs incurred before functioning of the facility or system or a plant. The upfront costs include costs of site studies conducted prior to finalizing the location of plant, research and development costs, site preparation costs, cost of installation, procurement and engineering costs. The regulatory costs and voluntary costs are incurred during the operation of the facility or a system. These costs are crucial to the firm. Regulatory costs include cost of notification and reporting, training cost, inspection costs, waste management cost, taxes, pollution control costs, insurance costs, medical surveillance cost. Another costs voluntary in nature include auditing cost, habitat and wetland protection cost, social development costs such as development of nursing homes for the people working in the plant, feasibility studies etc. Another type of costs which are considered as less important by the firms are back-end costs which include decommissioning costs, inventory disposal cost, post closure care cost, site survey cost.

- **Contingent Costs:** These are future costs which have chances of occurring in near future. These costs are hence neglected in the present accounting. These costs include penalties or fines imposed by the government as a punishment on the firms for pollution, property damage, personal injury damage, natural resources damage.
- **Image and Relationship Costs:** These costs are intangible in nature. These include costs incurred in building goodwill of the company, publishing annual reports, and sustainability reports. The other such costs are costs incurred in developing relationship with the clients, investors, suppliers, regulators.

ISSUES AND CHALLENGES OF ENVIRONMENTAL ACCOUNTING

- **Problem of environmental cost identification:** Corporate executives and other concerned authorities find the identification of environmental costs a difficult task. Generally, the regulatory environmental costs are considered by the firms as they are mandatory requirement by the government.
- **No proper standardized framework:** There is no standard tool for measurement of environmental costs and benefits developed till date. The corporates are free to account for environmental costs as they like. Moreover, there is no legal compulsion on corporates to account for the environment separately.
- **Industrial factors:** Different types of industries operate within a country. These emit varying amounts of pollution.

- **Problem of environmental asset identification and measurement:** Corporates face difficulty in identification of environmental assets and liabilities. Environmental costs can be recognized as an asset to the company when they help in waste reduction, less contamination, increase the productivity, enhance safety, and increase the operational efficiency of other assets.
- **Difficulty in environmental liability identification and measurement:** Liability is the future obligation of the firm to pay for the past incidents. Environmental liability includes those costs which may or may not occur in future such as cost of cleaning up the site after completion of the project.
- There is a need to educate the future accountants and other professions on the need of environmental accounting and the methods to overcome the problem of measurement of environment related costs.
- The government should initiate more research and development in the field of environmental accounting, reporting and auditing. This applies for government of all the countries.
- Guidelines should be framed as how the tax treatment of environmental activities should be conducted.

SUMMARY

Environmental accounting, also popularly known as green accounting, is not a new concept under sustainable development. Though organizations are well aware of the importance of the need to incorporate environmental accounting to enhance profitability of the firm, there is no proper guidelines and framework laid down by ICAI. Corporates are uncertain on the measurement of environmental costs, taxation on environmental activities. Moreover, there are no proper regulations on disclosure of environmental activities by the corporates. There is a need for further research and development in this field.

SUGGESTIONS

There is a huge gap which needs to be filled in India as well as across the world in the field of environmental accounting and reporting. The companies are well aware of the importance of environment accounting and reporting but are uncertain about the type of information to be disclosed and measurement of the environmental costs. Few suggestions to overcome the problem on environmental accounting are listed.

- The regulatory agency of accounting (ICAI) in India should frame policies and procedure to disclose environment related information by the companies.

REFERENCES

- Antherjanam, S. G. (2014). A Novel Approach to Environmental Accounting and Reporting. *International Journal of Commerce, Business and Management*, 3(6), 813-818.
- Krishna Moorthy, P. Y. (2013). Green Accounting: Cost Measures. *Open Journal of Accounting*, 2, 4-7.
- Kumar, D. R., Jat, D. D., & Sharma, S. (2016). Towards Green Accounting: Effective Tool for. *International Journal of Applied Research*, 2(12), 604-607.
- Kumar, N. A., Pranitha, T. S., & Kumar, N. K. (n.d.). A Study on Green Accounting and Its Practices in India. *IOSR Journal of Business and Management*, 30-34.
- Malik, D. P., & Mittal, D. A. (2015). A Study of Green Accounting Practices in India. *IRACST - International Journal of Commerce, Business and Management*, 4(6), 779-787.
- Pahuja, S. (2009). *Environmental Accounting and Reporting*. New Delhi: New Century Publications.
- Unnithan, K. V., & Somasundaram, D. M. (2019). A Study on the Concepts and Importance of Green Accounting in India. *Compliance Engineering Journal*, 10(10), 221-229.
- Vandna. (2018). Green Accounting. *International Journal of Engineering Science and Computing*, 8(3), 16281-16283.

Management of Indian School Education System - A Select Review of Literature

Key words: *Store Image, Store Choice, Store Selection, Apparel Stores, Bangladesh.*

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ABSTRACT

Indian School Education system is characterised by multiplicity of players. Education as such is in the concurrent list of the Constitution leading to a situation where both the State and the federal governments can legislate, however the federal laws are supreme in case of a conflict. At the national level, there are government as well as private players. The KVS, NVS, CTSA, Army Schools, Tribal schools are major players in the government sector at the national level. (mhrd.gov.in). In private sector, at national level, there are major chains of schools, like DPS, Amity, Ryan, Millennium, Sriram, Mount Litera, Appejay, DAV, Saraswati Shishu Mandir, Vidya Bharti, Bhartiya Vidya Bhawan, Poddar. These are in addition to independent societies running one/ more (small number) of schools. These are recognised by the

respective state governments and are affiliated to national level boards like, CBSE or CISCE. Majority of the schools are affiliated to the CBSE. There are also few, (though the number is continuously increasing), schools affiliated to the international boards like IB, GCSE, etc. (cbse.gov.in, mhrd.gov.in). At the State level, all state government schools, except those of Sikkim, Arunachal Pradesh, Andaman and Nicobar islands, Chandigarh, and Delhi, are affiliated to the respective state governments. (cbse.gov.in). The states also have state affiliated private aided and unaided schools. In private aided schools, a large portion of operating expenditure (esp salaries) is given as a grant in aid by the state governments. In the largest national level board of CBSE, majority of the schools are private. As per the latest UDISE data (<http://dashboard.udiseplus.gov.in/#!/reports>) the proportion of schools by management is depicted below-

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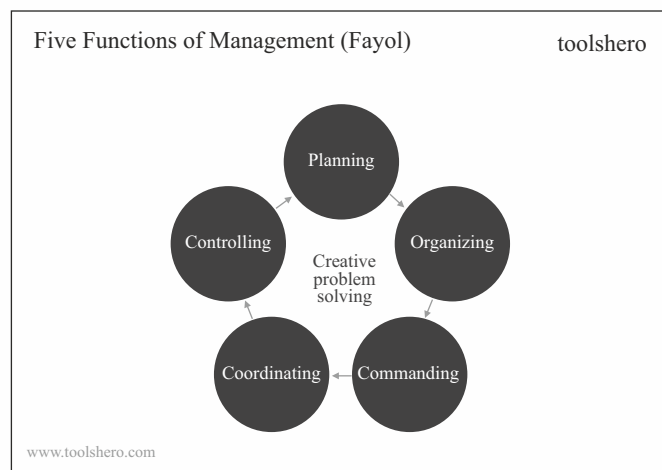
Sr. No.	State/UT	Government	Aided	Private	Others	Total
1	Andaman & Nicobar Islands	339	2	72	1	414
2	Andhra Pradesh	45013	2346	15862	400	63621
3	Arunachal Pradesh	3179	64	503	47	3793
4	Assam	47223	5065	6084	7952	66324
5	Bihar	72590	689	6031	9209	88519
6	Chandigarh	121	7	74	27	229
7	Chhattisgarh	48671	434	6842	327	56274
8	Dadra & Nagar Haveli	300	10	35	1	346
9	Daman & Diu	112	4	23	1	140
10	Delhi	2784	253	2666	0	5703
11	Goa	833	514	139	0	1486
12	Gujarat	35202	5734	13641	4	54581
13	Haryana	14516	26	7913	1079	23534
14	Himachal Pradesh	15433	0	2778	1	18212
15	Jammu And Kashmir	24080	29	5552	47	29708
16	Jharkhand	35954	1177	1400	7377	45908
17	Karnataka	50184	7417	20604	28	78233
18	Kerala	5011	7195	3156	1339	16701
19	Lakshadweep	45	0	0	0	45
20	Madhya Pradesh	122056	874	29105	1949	153984
21	Maharashtra	66033	23554	19400	955	109942
22	Manipur	3073	587	1003	181	4844
23	Meghalaya	7802	4181	2220	466	14669
24	Mizoram	2564	231	1025	93	3913
25	Nagaland	2007	0	745	0	2752
26	Odisha	55483	5770	4957	2507	68717
27	Puducherry	423	33	283	0	739
28	Punjab	19404	458	8495	280	28637
29	Rajasthan	67578	0	35603	2493	105674
30	Sikkim	854	19	417	0	1290
31	Tamil Nadu	37728	8355	12439	630	59152
32	Telangana	29822	707	11621	205	42355
33	Tripura	4309	46	343	247	4945
34	Uttar Pradesh	163142	8090	87433	14570	273235
35	Uttarakhand	16934	616	5519	490	23559
36	West Bengal	82876	127	11777	3048	97828
	Total	1083678	84614	325760	55954	1550006

OBJECTIVES

The paper is written with an objective to study the gaps in management of Indian School Education System. The gaps shall be studied keeping in consideration five functions of management i.e., planning, organising, controlling, coordinating and commanding.

LITERATURE SURVEY

Available literature was surveyed with the help of Google

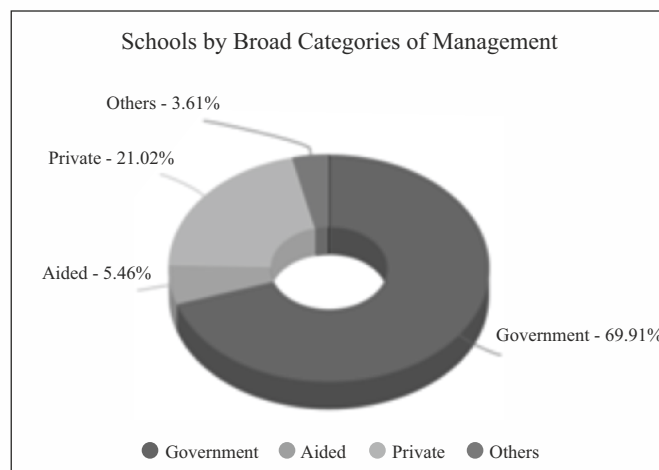


Hence, the available literature has been examined from the point of view of the above five functions of Management. Out of 37 papers reviewed, a goal of 23 pertain to Planning, 3 to Organising, 01 Commanding, 4 to Coordination and 6 to Control. Hence, the available literature has been examined from the point of view of the above five functions of Management.

PLANNING FUNCTION OF SCHOOL MANAGEMENT

According to Arun C Mehta (2005)-unrecognised schools do exist in all parts of India, and they do play an important role. Nicole Blum (2009) has stated that the NGO run schools have greater flexibility in curriculum design and transaction. Such schools improve access and quality as they are better connected with the grassroots than the government run schools. Gouda, J., Chandra Das, K., Goli, S. and Maikho Apollo Pou, L. (2013) found that the private schools have better infrastructure and more input cost per student, and it leads to better performance of students in private schools. As per Aggarwal-Gupta, M., & Vohra, N. (2010) the main stakeholders in the school system are teachers, principal and the students. James Tooley, Pauline Dixon & S. V. Gomathi (2007) stated that the role of Private schools in attaining MDG needs to be revisited. James Tooley (2007) also found that for profit schools also help poor by expanding their choice and helping children have schools at their doorsteps. James Tooley & Pauline Dixon (2006) have mentioned that the achievement of students in private schools is better than

scholar. A total of 37 papers were found dealing with various aspects of management of school education in India. As per the French engineer Henri Fayol (1916) the functions of management are defined as those related to Planning, Operating, Commanding, Coordinating and Control. Fayol is credited with the first principles of management theory and is regarded as the founding father of management.



the public schools and the expenditure on teachers lesser, hence defacto privatisation is not undesirable in meeting the educational needs of the poor. According to Dr. Madhumita Bandhopadhyay though there has been an improvement in the facilities available in the government schools as compared to the private schools, still there is a big gap that needs to be bridged. Also the use of these facilities which may be existing in the schools, still remains a challenge. Prasad, Dilip (2011) stated that the International schools are rising in numbers in India due to increased globalisation, economic growth, perceived value of international education and the snob vale of international schools. Yuki Ohara (2012) is of the view that there is a practical legitimacy of unrecognised low cost schools in view of students and teachers served by them. According to Yash Aggarwal the unaided private schools should be allowed to coexist with the public schools and they should be seen as supplemental to the government schools rather than a substitute. School performance, efficiency and effectiveness should be the parameters of quality assurance rather than the type of management. Rashmi Diwan (2010) found that the small under resourced schools in India are catering to the access of education issue, but in terms of the opportunity cost of foregoing quality education for the students enrolled there, the implications could be serious and thus needs to be addressed carefully. Prachi Srivastava (2008) mentioned that the low fee private schools run in an informal framework similar to the formal framework. These schools defy the assumptions of formal new

institutionalism in organisational theory. Prachi Srivastava (2010) stated that the initial PPP initiatives were seen more as a move of privatisation with reduced role of the state in financing, managing and regulating school education. S.M.I.A. Zaidi (2012) is of the view that the small primary schools with huge cost need to be relooked into from their utility point of view in universalising the primary education. James Tooley, Pauline Dixon (2007) mentioned that in slum areas, the private unaided schools are showing greater teaching activities and better results. Based on various state rules and laws, a model law has been suggested by Shruti Ambast Akriti Gaur Ajey Sangai (2017), which ensures minimum interference, proper accountability, well defined learning outcomes and empowerment of parents and communities. Based on various AP state laws, model law has been suggested for self regulation of schools in the country by James Tooley, Pauline Dixon (2005). Shanti Jagannathan (1999) has found that the government can work closely with the NGOs working in the field of education. The experience and models of NGOs in innovative pedagogy, assessment and teacher training could be used for the benefit of underprivileged. Since, many NGOs work with unserved areas and do bring out of school kids to the schools, their experiences can be used with proper modifications.

As per Santosh Mehrotra & Parthasarathi R. Panchamukhi (2006), the private schools, especially the ones which cater to the lower segment of the society do not contribute to gender and social equity. Though their outcomes are better than the government schools. Garg, Nupur (2011) found that the low cost private initiatives are prevalent in India and are competing well with the free government schools. There is a felt need for such a private sector but it needs proper regulation. Pulak Das (2014) is of the view that the privately managed elementary schools have a scope in Indian context where private schools are the preference of a household. Yet, in terms of expansion, the government system is moving fast. Thus there is a need for a balanced approach. Due to greater caste and religious diversity, there existed lesser than 3 primary schools for 10 villages stated Chaudhary, L. (2009).

ORGANISING FUNCTION OF SCHOOL MANAGEMENT

Khaparde, M.S., Srivastava, A.K. & Meganathan (2004) have stated that the successful schools of NVS deployed participative management systems. There was complete involvement of teachers and students in deciding the goals and being responsible to attain them. Balasubramanian Varadarajan (2016) found that Private International Schools in India are using branding strategies to communicate with their internal customers, viz. employees. They are also using social media to communicate about their core values, vision and mission.

According to Mooij, J.E. & Narayan, K. (2010), the teachers should have a role in deciding policies for themselves.

CONTROLLING FUNCTION OF SCHOOL MANAGEMENT

Renu Singh, Sudipa Sarkar (2015) are of the view that the students of private schools have better achievement in Mathematics than their counterparts in public schools. There is effect of teacher's professional qualification, his residential distance from the school, his attitude and practices like regular checking of answers rather than educational qualifications, gender, age etc. As per Singh, R., & Sarkar, S. (2012), the students of private schools do better than their counterparts in government schools. The professional qualifications of teachers effects the outcome of students, while only degree in Education does not have any significant effect on students achievements. Radhika Kapur has opined that the factors that affect students academic achievement include number of students in a class, parent support, and socio economic factors. Urvashi Sahni stated that improving learning levels in India would require better teacher attendance, increasing their responsibility in student learning as well as better assessment and monitoring systems. James Tooley, Pauline Dixon (2007) have concluded that in slum areas, the private unaided schools are showing greater teaching activities and better results. James Tooley, Pauline Dixon (2005) have suggested a model law based on various AP state laws, for self regulation of schools in the country.

COORDINATING FUNCTION OF SCHOOL MANAGEMENT

K. Sujatha (2014) has said that private tuitions are very much existing in the secondary classes across the country. Between Kerala, Maharashtra, Andhra Pradesh and UP, the largest percentage of secondary students going to tutoring is in Kerala, there is also more private tutoring in grade X in comparison to grade IX. In resource sharing between government and private schools, it is the long term responsive relationships based on respect that is critical in making government schools become locus of change in their own right, according to Laura Day Ashley (2006). Khaparde, M.S., Srivastava, A.K. & Meganathan (2004) have judged that the successful schools of NVS deployed participative management systems. There was complete involvement of teachers and students in deciding the goals and being responsible to attain them. In the considered view of Shanti Jagannathan (1999) the government can work closely with the NGOs working in the field of education. The experience and models of NGOs in innovative pedagogy, assessment and teacher training could be used for the benefit of underprivileged. Since, many NGOs work with unserved areas and do

bring out of school kids to the schools, their experiences can be used with proper modifications.

COMMANDING FUNCTION OF SCHOOL MANAGEMENT

Bloom, N., Lemos, R., Sadun, R. and Van Reenen, J. (2015) have concluded that higher management quality leads to better student outcomes. The management scores of autonomous government schools are better than those of regular government or private schools.

GAPS IN LITERATURE

The following gaps are noticed in literature-

1. Studies are mainly confined to the Planning, while ignoring one of the important aspect of Organising.
2. Management of assessments which influences teaching and learning inside the classrooms is discussed very sparingly.
3. The education management in a country like India is very complex due to wide variety being available. No study has been done with all India implications.

REFERENCES

1. Kingdon, G. (1996). Oxford Bulletin of Economics and Statistics, 58(1).
2. Jagannathan, S. (1999). Policy Research Working Papers
3. Khaparde, M.S., Srivastava, A.K. & Meganathan (2004), R. Educ Res Policy Prac 3:243.
4. Mehta, A.C. (2005). NIEPA, New Delhi.
5. Tooley, J. & Dixon, P. (2005). International Journal of Educational Development 25(3).
6. Ashley, L. D. (2006). Inter-school Working Involving Private School Outreach Initiatives and Government Schools in India, Compare: A Journal of Comparative and International Education, 36(4).
7. Mehrotra, S., Panchamukhi & Parthasarathi, R. (2006). Private Provision of Elementary Education in India: Findings of a Survey in Eight States, Compare: A Journal of Comparative and International Education, 36(4).
8. Tooley, J. & Dixon, P. (2006). 'De facto' Privatisation of Education and the Poor: Implications of a Study from Sub-Saharan Africa and India, Compare: A Journal of Comparative and International Education, 36(4).
9. Tooley, J. (2007). Could for-Profit Private Education Benefit the Poor? Some Priori Considerations Arising from Case Study Research in India, Journal of Education Policy, 22(3).
10. Tooley, J., Dixon P. & Gomathi S. V. (2007). Private Schools and the Millennium Development Goal of Universal Primary Education: A Census and Comparative Survey in Hyderabad, India, Oxford Review of Education.
11. Blum, N. (2009). Small NGO Schools in India: Implications for Access and Innovation, Compare: A Journal of Comparative and International Education, 39(2).
12. Tooley, J. & Dixon, P. (2007). International Journal of Educational Development, 27(2).
13. Srivastava, P. (2008). The Shadow Institutional Framework: Towards a New Institutional Understanding of an Emerging Private School Sector in India, Research Papers in Education, 23(4).
14. Chaudhary, L. (2009). Determinants of Primary Schooling in British India. The Journal of Economic History.
15. Aggarwal-Gupta, M, & Vohra, N. (2010). Measuring Effectiveness of Schools in India: A Multiple Stakeholder Framework. E-Journal of Organizational Learning & Leadership, 8(2), 1-13.

4. Cultural diversity and its effect on management has not been researched properly.
5. Effect of teachers and teaching on school management is also seen very rarely.

CONCLUSION

It is seen that in the context of management of schools in India, majority of writers have written about planning function, followed by Controlling function. Very few have written about other functions of Management like Commanding, Coordinating and Organising. It is also seen that most of the studies are confined to primary and elementary education, with very few discussing about secondary and senior secondary education. The research is also confined to the states of UP, Kerala, Andhra, Delhi, and a large number of states have not been part of any study. The studies also largely confined to planning of education system rather than school. There are very few studies on the organising function of education management which will include recruitment of teachers and staff, their methods of teaching, infrastructure of schools, etc. Studies don't include details of government secondary schools.

16. Diwan, R. (2010). Department of School and Non Formal Education, NUEPA New Delhi, EDUSEARCH - ISSN : 0976 - 1160, 1(2).
17. Mooij, J.E, & Narayan, K. (2010). Solutions to Teacher Absenteeism in Rural Government Primary Schools in India: A Comparison of Management Approaches. *The Open Education Journal*, 3, 63-71.
18. Srivastava, P. (2010). Public-Private Partnerships or Privatisation? Questioning the state's role in education in India, *Development in Practice*, 20:4-5.
19. Prasad, D. (2011). Rise of International Schools in India. Available at SSRN: <https://ssrn.com/abstract=2173051> or <http://dx.doi.org/10.2139/ssrn.2173051>.
20. Garg, N. (2011). Thesis (M.B.A.), Massachusetts Institute of Technology, Sloan School of Management.
21. Ohara, Y. (2012). Examining the Legitimacy of Unrecognised Low-Fee Private Schools in India: Comparing Different Perspectives, *Compare: A Journal of Comparative and International Education*, 42(1).
22. Singh, R., & Sarkar, S. (2012). Teaching Quality Counts: How Student Outcomes Relate to Quality of Teaching in Private and Public Schools in India. *Young Lives*.
23. Zaidi, S.M.I.A. (2012). Department of Educational Planning, National University of Educational Planning and Administration.
24. Gouda, J., Chandra Das, K., Goli, S. & Maikho Apollo Pou, L. (2013). Government versus Private Primary Schools in India: An Assessment of Physical Infrastructure, Schooling Costs and Performance", *International Journal of Sociology and Social Policy*, 33(11/12).
25. Vyas, A. (2013). *International Journal of Management & Behavioural Sciences (IJMBS)*. 05 (ISSN 2278-5671).
26. Das, P. (2014). Human Resource Group, Indian Institute of Management Calcutta, Joka, Kolkata 700104, India *International Journal of Education*, 6(1) (ISSN 1948-5476/2014).
27. Sujatha K, (2014). Private Tuition in India: Trends and Issues. *Revue internationale d'éducation de Sèvres* [Enligne], Colloque : L'éducation en Asie : Quels enjeux mondiaux ?, URL : <http://journals.openedition.org/ries/3913>
28. Bloom, N., Lemos, R., Sadun, R. and Van Reenen, J. (2015). Does Management Matter in schools?. *Econ J*, 125: 647-674.
29. Singh, R., Sarkar, S. (2015). *International Journal of Educational Development*, 41.
30. Balasubramanian, V. (2016). Walden University.
31. Ambast, S., Gaur, A. & Sangai A. (2017).
32. Aggarwal, Y. (2000). Operations Research and Systems Management Unit, National Institute of Educational Planning and Administration.
33. Bandhopadhyay, M. Present Status of Infrastructure Facilities in Schools in India: From National and State Level Perspective, National University of Educational Planning and Administration.
34. Sahni, U. (2015). The Second Modi-Obama Summit: Building the India-U.S. Partnership.

Study on Trade Pattern between Central Asian Countries and India

Key words: *International Trade, Central Asian Countries, CAC, India, Trade Pattern*

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ABSTRACT

India always had cultural and commercial linkage with Central Asian countries in past. However, in spite of these linkages, actual trade volume remained below potential after Independence of India. Since the beginning of the new millennium, the growing energy security needs compelled India to look for newer sources of energy products and the export basket of the five Central Asian countries, namely, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan fitted perfectly with this goal. This paper looks into the trade pattern between Central Asian Countries and India and it first discusses a brief account of the share of Central Asian countries (CAC) in India's trade basket and then it analyzes the nature of products traded between India and five countries of CAC viz. Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Major products exported and imported have been along with sectors with growing export inclination are identified.

INTRODUCTION

India allocated Rs.1000 million in its latest budget of 2020 to support development of Chabahar port to overcome the long lasting problem of direct connectivity between India and Central Asian countries. In spite of maintaining cultural and commercial linkage with Central Asian countries in past, actual trade volume remained below potential after Independence of India. Since the beginning of the new millennium, the growing energy security needs compelled India to look for newer sources of energy products and the export basket of the five Central Asian countries, namely, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan fitted perfectly with this goal. India's engagement with Central Asia came to limelight with Mr. Nursultan Nazarbayev, President of Kazakhstan becoming chief guest in Republic Day parade in New Delhi in 2009 (Media Advisory, Ministry of External Affairs, Media Center, 2009). The growing relationship got another stimulus with launch of "Connect Central Asia" policy in 2012. During 2015, visit of Indian Prime

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Minister Mr. Narendra Modi to Central Asian countries cemented the ties further with broad objective of emphasizing links in energy and transport connectivity. India has signed a deal with Kazakhstan for uranium supply and beginning of an exploratory oil-drilling backed by India. Late Ms. Sushma Swaraj, Minister of External affairs visited Kazakhstan, the Kyrgyz Republic and Uzbekistan in 2018. Several Changes have happened in the political landscape of Central Asia with China becoming a major player in terms of funding lot of infrastructure projects in the region and also the reduced influence of USA in the markets along with the independence from Soviet Union. Kazakhstan holds very good trade relation with Europe and China hence this should lead to more strengthening of trade between East-West countries. Therefore, this leads to need to facilitate trade between North-South countries so that India maintains visible presence in the Central-Asian countries.

DATA COLLECTION AND METHODOLOGY

The time period of the study was kept between 2010-2018 to see the impact of policy interventions after 2012 onwards. The data from ITC trade map were considered.

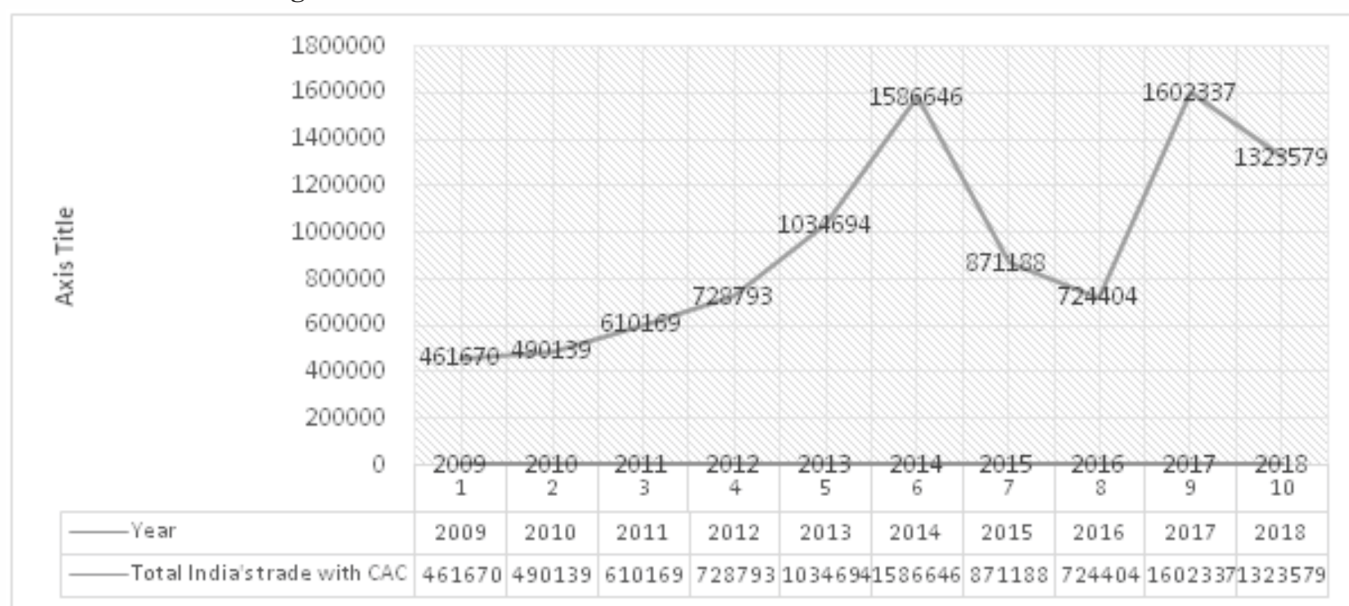
For this purpose, data on India's trade by product categories (at HS- 2-digit level) with five countries were downloaded in excel format for 2011-2019. The unit of the data thus obtained is reported in US \$000.

ANALYSIS

The current analysis is arranged along the following lines. First, a brief account of the share of Central Asian countries (CAC) in India's trade basket is discussed. Thereafter, nature of products traded between India and five countries of CAC viz. Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan has been analyzed, Major products exported and imported have been along with sectors with growing export inclination are identified. India's trade opportunities with Central Asia for the selected sector are viewed next.

For understanding the trade structure between India and five Central Asian countries the composition of major exports and imports between two regions is analyzed for the time period of 2010-2018. As seen in Figure 1 India's total turnover of trade with Central Asian countries has grown from less than \$1 billion in 2010 to US\$1.3bn in 2018 as per the Trade Map data.

Figure 1 - Share of Central Asian Countries in India's Trade Basket



Source: Author's compilation from Trade Map, ITC (n.d.) data

Table 1 shows the recent trend in India's export which has grown from US\$272 million in 2010 to US\$422 million

in 2018. It seems that due to governments efforts the trade is increasing though at a snail pace.

Table 1 - Composition of India's Export to Central Asia ((in US \$ thousand)

Country/Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kazakhstan	146212	236117	262961	275732	237906	168372	125026	118397	138684
Kyrgyzstan	24324	29496	31959	37240	36036	29861	26620	30896	28420
Tajikistan	16353	21288	29046	47654	60004	31348	19714	24389	20510
Turkmenistan	28849	39363	70595	62998	100736	80464	57245	59627	41705
Uzbekistan	56589	87818	110160	119823	168281	107855	90750	130671	193324
Total India's Export to CAC	272327	414082	504721	543447	602963	417900	319355	363980	422643

Source: Author's compilation from Trade Map, ITC(n.d.c) data

As seen in Table 2 amongst top ten products exported from India to Central Asian countries, vehicles (or tramway rolling stock, and parts and accessories HS Code 87) showed continuous rise. So other than

pharmaceutical products electronic machinery, mechanical machineries like boilers etc. also hold lot of potential and their share is continuously rising.

Table 2 - Major Products Exported from India to CAC (Percentage Share)

Product code	Product label	2010	2011	2012	2013	2014	2015	2016	2017	2018
30	Pharmaceutical products	37.8	32.9	28.97	33.84	31.9	37.53	36.45	46.9	40.58
85	Electrical machinery and electronic equipment and parts	7.15	15.84	15.64	9.75	2.92	3.06	3.32	1.79	4.35
84	Machinery, mechanical appliances, nuclear reactors, boilers	11.30	8.93	12.24	10.26	10.86	10.80	13.24	9.80	18.23
09	Coffee, tea, mate and spices	14.58	10.47	9.34	8.25	8.11	9.71	10.92	7.80	6.49
90	Optical, photographic, cinematographic, medical or surgical apparatus	2.24	3.18	1.95	0.97	1.45	1.38	2.14	2.11	2.13
27	Mineral fuels, mineral oils and products of their distillation	0.11	0.84	0.07	0.01	0.02	0.0021	0.0013	0.02	0.02
29	Organic chemicals	1.17	1.49	1.69	2.73	1.34	2.03	1.52	1.58	2.57
87	Vehicles other than railway or tramway rolling stock, and parts and accessories there of	0.40	2.25	6.15	3.12	5.09	1.54	4.09	2.88	4.93
61	Articles of apparel and clothing accessories, knitted or crocheted	1.19	1.83	2.94	4.35	6.95	2.97	1.50	1.06	1.13

Source: Author's compilation from Trade Map, ITC(n.d.) data

In terms of imports from Central Asia, India is importing from Uzbekistan, Kazakhstan and Turkmenistan as shown in Table 3.

The trend shows rising importance of Kazakhstan and Uzbekistan in terms of trade relations.

Table 3 - Composition of India's Import from Central Asia

Country/Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kazakhstan	157500	122562	163994	441841	924993	337545	320361	1040262	743400
kyrgyzstan	1032	726	2297	648	486	1582	1808	31112	1706
Tajikistan	22411	6744	15875	560	3619	9875	14689	47547	15394
Turkmenistan	12781	13917	8356	13118	15484	47786	21702	14982	33391
Uzbekistan	24088	52138	33550	35080	39101	56500	46489	104454	107045
Total India's Import from CAC	217812	196087	224072	491247	983683	453288	405049	1238377	900936

Source: Author's compilation from Trade Map, ITC (n.d.) data

Table 4 reveals that value of Indian exports to Central Asia over the time period of 2010-2018 which has been concentrated in the area of consumer goods but with capital goods holds lot of potential.

Table 4 - India's Exports to Central Asia by Stage of Processing (Value in US\$1000)

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kazakhstan									
Capital Goods	17543.8	7110.27	44323.1	72609.5	50902.3	19866.4	21077.3	26149.5	14065.3
Consumer Goods	108530	131955	181100	179655	197488	192759	137061	85964.7	89864.6
Intermediate Goods	5408.51	6272.91	8488.03	8128.77	24817.7	23859.4	8982.57	10586.2	10884.9
Raw Materials Goods	2334.65	816.915	1886.3	2345.81	2519.7	1418.05	1243.5	2248.12	3574.81
Kyrgyz Republic									
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Goods	654.297	2709.58	1465.1	2473.67	1322.1	1231.97	1455.49	1081.02	2274.22
Consumer Goods	23004.8	17859.8	23027.6	26046.8	33027.3	32601.2	23977.3	24131.6	26940.7
Intermediate Goods	1189.5	2483.93	2717.82	2917.51	2878.65	2116.35	4262.64	1388.82	1668.08
Raw Materials	227.219	1181.52	2271.35	518.343	9.413	85.363	165.209	18.363	38.4746
Uzbekistan									
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Goods	11552.4	12579	26257.8	41669.3	33985.5	49483	26110.8	26877.5	62380.3
Consumer Goods	27981.9	29004.6	40793.1	48073.2	59557.5	91873.8	65696.8	51055.1	52541.4
Intermediate Goods	10556	11659.2	15970	14973.2	18046.4	20264.2	15626.2	12734.3	15209.3
Raw Materials	534.452	1586	4718.77	5305.52	8116	6655.48	417.423	82.254	418.14

Tajikistan									
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Goods	568.238	2560.61	2768.77	871.779	730.03	943.195	2149.6	1214.55	1151.79
Consumer Goods	7256.7	8721.26	11868.6	19345.2	33279.8	35239	17142.4	11521.1	18331.1
Intermediate Goods	1561.6	345.07	1630.22	3323.43	1408.37	10332.1	2889.15	5116.14	3040.26
Raw Materials	6364.85	4627.15	4989.22	5447.1	12228.5	13485.9	9165.58	1856.93	1838.11
Turkmenistan									
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Goods	9833.66	6863.7	11373.2	42918.4	22777.5	22032.4	10868	16467.4	5747.5
Consumer Goods	23006.8	19943.3	22830.7	21194.4	24125.7	24421.1	19366.6	21051.8	20311.6
Intermediate Goods	1702.81	1632.76	2302.48	5015.1	6209.2	5716.97	5101.34	5866.35	2712.69
Raw Materials	1316.6	406.883	2853.26	1465.22	9884.26	48563.3	45117.5	13859.1	30811.8

Source: Author's Compilation from Trade Map, ITC (n.d) data

FINDINGS

India's total turnover of trade with Central Asian countries has grown from less than \$1 billion in 2010 to US\$1.3bn in 2018. So the trade ties are strengthening but at a snail pace. But importance of these countries cannot be undermined due to changing world order where China and Russia ties are becoming stronger. Hence importance of these countries are growing in comparison to earlier times where they were considered landlocked countries. Potential of capital goods cannot be ignored as seen in the trends. Hence there are other sectors which are becoming important in terms of growing export potential. Out of these five countries Uzbekistan, Kazakhstan and Turkmenistan are becoming important import partners.

CONCLUSION

The central Asian markets showed immense potential as untapped markets in terms of value added products. As trade ties will grow, export diversification is expected in terms of growing export vehicles, apparels, optical and surgical apparatus, machineries etc. The potential of service exports can be further explored in future researches. The engagements at various levels is showing moderate results. Hence there is room for more policy interventions. The proposals of air corridors between India and central Asian countries were making rounds in various discussion happening between business chambers of both countries and government official. This can boost trade of perishable products, raw material, capital goods between these countries.

REFERENCES

1. Agrawal, P. & Sangita, S. (2017). Trade Potential between India and Central Asia. Margin: The Journal of Applied Economic Research, 11(4), 418-448.
2. Media Advisory, Ministry of External Affairs, Media Center. (2009, January 23). Retrieved from [www.mea.gov.in: https://mea.gov.in/media- advisory.htm?dtl/6102/State+visit+of+HE+Mr+Nursultan+Nazarbayev+President+of+the+Republic+of+Kazakhstan+January+2326+2009](https://mea.gov.in: https://mea.gov.in/media- advisory.htm?dtl/6102/State+visit+of+HE+Mr+Nursultan+Nazarbayev+President+of+the+Republic+of+Kazakhstan+January+2326+2009)
3. ITC(n.d.), Trade Map. Retrieved 21 Feb, 2020, from <http://www.trademap.org/Index.aspx>
4. The World Bank (n.d.a), World Development Indicators. Retrieved on 10 Feb, 2020, from <http://data.bank.world bank.org/data/>

The Future of Supply Chain – Data Logging Via Internet of Things (IoT)

Key words: *Internet of Things, Supply Chain, Data Logger*

Abhijeet Kumar Singh*

ABSTRACT

This paper mainly focusses on the future of supply chain. data logging via the internet of things (IoT). Data logging is the process of collecting and storing data over a while to analyze specific trends or to records the data based events/actions of a system, network or IoT environment. And apart from this, the data logging also allows information security (is) and auditing staff to analyze system access information and identify suspicious activities

The uses of data loggers are required for a multiple of reasons, frequently to ensure compliance with industry-specific regulations, and quality and environmental control procedures. As the time is changing and technology is also changing day - by – day and due to this the data logging is influencing the supply chain in the form of warehouse, logistics trucks delivering the products, to supermarkets chillers in retail environments, and new high tech monitoring solutions on the market provide opportunities that greatly simplify the process, and many more.

INTRODUCTION

In the era of 1990, the computers connected to the internet were very less around 30,000 to 40,000 but as the time gets changed the numbers gets increased to around 3 million in the year of 2000, and after a decade in 2010, the digits of million gets converted to 2 billion by the end of the year 2010, and after some time in 2016, around 2 out of 10 people is capable and using the smart home appliances like automatic washing machines, water purifiers, air conditioner, Smart bed, Smart watches, and many more home Appliances. In 2017, the people become habituated to iPhone's "Siri". There are many more such applications that are changing our lives.

The future of entire world is only Internet of Things (IoT), which will transform the real-world objects to an intelligent virtual objects like after a decade mainly in the period of 2030 to 2040, your smart appliances may inform you about what steps to be taken at a required time and it may also inform you about what is need of them. IoT is mainly a network of internet-connected objects able to collect and exchange data or we can also say that

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Internet of Things (IoT) is a global network infrastructure with self-configuring capabilities based on standards and interoperable communications protocols

As a result, an enormous amount of data is being generated, stored and being processed into useful actions that can “command and control” the things to make our lives much easier and safer. For solving up these problems the methods used like the makings of projects, using a mix of public and private infrastructure also can help protect data, using an independent infrastructure such as cellular service to send data, LTE-M and LTE-NB use existing cellular towers and it provides much broader coverage.

The IoT based applications have huge advantages and will help people and various organizations in making of smart homes, smart cities, efficient use of electricity and energy, better management and healthcare, wearables, connected car, security, road safety, cost-efficient business operations, etc. This all is "The Internet of Things" applications and this is the Future.

Internet of Things (IoT) is powered by the combination of analytics, mobile computing and cloud services. Asset tracking is also influenced by IoT which is providing such gadgets to make better decisions, saving money and time. One of the biggest trends is asset tracking, which gives them the tools to make better decisions and save time and money. Newer asset tracking solutions have replaced the traditional bar code scanner with radio frequency identification (RFID) which provides more vital and usable data when paired with other IoT technologies.

Warehouses are also not untouched by the capabilities of IoT where inventory monitoring, stock level distribution are taking help from new models.

NETWORKS POWERED IoT

IoT technologies are useful in minimizing the human error when it comes to inbound and outbound packages as it provides several scales to scan different parameter like size, weight, density, etc. based on this collected data, accuracy can be ensured by shipping collaboration software with expected and actual received inventory. IoT is Key to Efficiency

- *Operational efficiency:* Deficiencies that occurred at a real-time can be traced quickly or rectified. Companies are affected by slowdown or delay that cost them money can be identified.
- *Inventory management:* IoT Devices provides automation to the organizations for inventory updates that when to reorder or restocked. This eliminates the delay and provides the product as per the customer's expectation on time.

- *Customer service:* IoT devices are reducing the time amount from requests to respond. On-time data accessibility is required to match up with the customer's expectations also the accurate delivery date time notifications are demanded by the customer as to where their product during the transit.
- *Loss management:* IoT devices make use of sensors that can sense almost all possible loss events that can occur with the product during the transit and if any such event occurs with the product that can be traced that at what point of time, place and factor that has contributed to merchandise loss.
- *Visibility:* A much better understanding of the product that exactly what amount of time and place product is stayed, equipped Supply chain management professionals with the data they require to make better decisions. Earlier, companies would get only occasional updates and outdated reports and it would be too late to make any real changes or adjustments.

EXAMPLES OF IoT TRANSFORMING SUPPLY CHAIN

- New Jersey Transport Authority (NJTA) – Undoubtedly IoT provides tools for cost-cutting in the long run. The NJTA is working with IBM to deploy 3,000 sensors along the New Jersey [1]. Turnpike [2] – one of the busiest roadways in the U.S. The data this generates is used by the emergency services and traffic management operators so that they can get to an accident quicker, and reduce congestion buildup.
- Amazon – Amazon handles their orders uniquely regardless of their shapes or size with the help of robots and AI system; they use Wi-Fi-connected robots [3] to identify products by reading QR codes using built-in cameras. Workers of Amazon work in coordination with the robots and IoT devices. The priority of the product is identified by the AI systems, humans perform restocking and packaging while the rest of the work is performed by the robots.
- Volvo – For shipping the ordering components to vehicles across the globe Volvo utilizes the cloud services with IoT technology to enhance its logistics of the supply chain. The company established a relationship with Microsoft, which involved trialing its mixed reality headset, HoloLens [4]. It is the company that believes that their headset can help in transforming car design with a better relationship with the customer.

IoT AND BIG DATA

The number of internet users and connected devices are increasing rapidly and influencing our daily life to incorporate with the Internet of Things (IoT) and Big

Data. IoT devices share a huge amount of data as they are the Physical devices that are connected to the internet.

According to a study by Gartner [5], the revenue generated from IoT-enabled services and products will exceed \$300 billion by 2020.

For any organization, well-analyzed data is utmost priority and IoT is generating a huge amount of data. To analyze that hugely generated data from IoT devices Big Data analysis and analytical tools are required. Big Data analytics tools help to generate and store the insight from the information received from various sensors of IoT devices.

Predictive analytics is possible with several machine learning algorithms that use the patterns and trends observed from the vast amount of data generated by IoT sensors. Predicting the problem before it happens, so that it can be fixed is possible with Big Data Analytics. The risk of damage and waste can be minimized with Big Data leads. Thus the IoT services with Big Data creates ample opportunities to enhance customer relationship.

The following statistics from Gartner [6] shows how IoT and big data is revolutionizing our everyday lives:

- By 2020 every person will create 1.7 MB of data every single second.
- There are 3.5 billion Google searches per day and 400 hours of new Youtube video added every minute.
- The number of IoT connected devices is forecasted to reach up to 30 billion by 2020.
- IoT investment is expected to reach \$58.14 trillion in the next 15 years.

IoT & BIG DATA IN THE SUPPLY CHAIN

According to a report from Transparency Market Research [7], the global supply chain and logistics market are set to exceed \$15 trillion by 2023.

Although there is rapid growth in the supply chain industry, still there are not that many field innovations happening and the companies still lacking efficiencies.

Based on a report by ZenCargo [8], supply chain inefficiencies cost businesses nearly USD 2 Billion in the UK alone.

The traditional outdated process in the supply chain is very complex involving controlling and monitoring product flow from material to final product delivery with a point to point communication that relies on e-mail and phone communication. While the controlling and monitoring of the product is very crucial. This can cause inefficiencies as the supply chain is slowed down by the large and complex network of point-to-point communications. IoT is on the rise towards restructuring the entire process by which supply chains operate.

A smart network ecosystem of people, process and data through sensors and actuators, that is consistently collecting, measuring and distributing real data, is the power of the Internet of things. This real data gives its benefits to the supply chain providing visibility in every process within the supply chain.

WHY THE INTERNET OF THINGS MATTERS TO THE SUPPLY CHAIN?

IoT devices are of great advantage in different aspects of supply chain management:

- Visibility and tracking of real-time shipment and inventory
- Stakeholders can easily plan supply and demand as they know when they can expect to receive and process goods
- Early identification of issues with lost or delayed goods
- Keeping raw materials and processed goods in optimal conditions provides enhanced quality management.
- Assurance of goods location in rest or motion as per stakeholder.
- Better storage and distribution of products.

IoT ENABLED DATA LOGGERS IN SUPPLY CHAIN

Technology is advancing at a rapid rate and companies still working with obsolete technologies are holding back. The same scenario is prevalent in supply chain industries. Traditionally, data loggers were having significant drawbacks although they were widely used in supply chains and covers basic cargo monitoring needs.

The old traditional data logging technology widely used in the supply chain with electronics devices (data loggers) used to log location-based environmental data was considered as state of the art innovative technology of the time but with the time that was affected with new trends and became obsolete. Traditional data loggers were replaced by IoT enabled solutions providing more vital real data with wider visibility.

IoT ENABLED DEVICES VS. TRADITIONAL DATA LOGGING TECHNOLOGY

1) Intelligent vs Non-Intelligent Analytics

The key component of IoT enabled data logging technology is the analytics, providing information on shipment, help in making decisions, future predictions and exposing risks. It can generate intelligent reports based on performance management with various quality checks in less time, such technology empowers the

business with better decision making ability. On the counter side, the traditional data logging technology using few independent electronic devices is not that intelligent that it can generate such future prediction reports on its own. Such devices are simply capable of collecting and storing data, the older data logging devices are not bothered about the predictions on shipment and related risk management neither with the financial management.

2) Instantaneous Data Exchange + Analytics vs Limited Data Accessibility

The power of IoT enabled devices is in its sensing, analytics and communicating the real data with all of its related stakeholders instantaneously. The IoT enabled devices to make use of a cloudbased dashboard and provides the information to all related parties in real-time. Whenever cloud dashboard updates, all parties get to know with the recent information, which makes easy communication between them. On the other hand, old data loggers are not equipped with such capability and communication technology of sending real-time data to all. Here data is stored in one device which along with the shipment. That data can be exchanged only when it is extracted from the device.

3) Automatic Data Transfer vs. Manual Setup

The IoT enabled technology transfers the data on the go which enables the problem-free quality condition monitoring of the product. Without any delay, the product reaches the destination it will be delivered to the buyer. Here no other means of IT infrastructure is required for data transfer and analysis as all the process is completed by the means of automation over the cloud. Whereas data extraction and analysis are not like that much easy in traditional data logging technologies since here dedicated software with data wiring is required to be installed at the destination to extract and analyze the data, sometimes this cause problem in case of quality condition monitoring as the extra time needed for data extraction and analysis.

4) Real-Time Data Stream Vs. Data Availability Post Shipment

Any disruption with the product can lead to affect customer satisfaction and business operation. IoT enabled devices provides all real-time updates related to the shipment and enables you to react against such disruptions. The traditional data logger technology is unable to act with real-time data as it provides the details only after the shipment reaches the destination. Traditional data loggers are not capable to reveal important conditional measures sometimes which are of utmost priority.

THE IoT TRANSPORT DATA LOGGER

TDL or the Transport Data Logger gives transparency in the supply chain process. TDL is moved with the shipment and measures several parameters like temperature, shock, and tilt. Different measures on those parameters can be settled and if any of the parameter is breached then that will be traced in the supply chain. TDL also facilitates data visualization through mobile applications.

BENEFITS OF THE TRANSPORT DATA LOGGER

- **Efficiency:** Easy to use and configure, easy integration without the pre-requisite of the logistic chain.
- **Condition Monitoring:** 360-degree approach of TDL with condition monitoring makes it more transparency in the supply chain. When any parameter threshold is exceeded, the TDL acquaints with verifiable proof of possible primary and secondary damage.
- **Simplicity:** It is a simple, versatile, reliable, and cost-effective delivery monitoring device.
- **Transparency:** The TDL creates trust between parties and provides data for enhancing the logistics process. It offers proof of a fail-safe transport chain.

FUTURE OF SUPPLY CHAIN WITH IoT

IoT today: an information flood that carries constant reaction to changing client needs and economic situations with late gauges of 28 billion IoT associated gadgets worldwide by 2021 [9]. The main thing IoT will do is add to the blast of data driving organizations' information intricacy challenge. Simultaneously, IoT will challenge supply chains to open up to a new plan of action and operational potential outcomes. These are empowered by IoT information streaming once more from clients as an immediate contribution from organized sensors joined to conveyed items, just as from a huge number of outside sellers. A foundation of this vision is that prescient investigation will caution organizations to issues rising with their gadgets in client use, and afterward, important inventory network procedures can be marshaled to react to the client-potentially even before the client becomes mindful of the issue. Supply chains reacting to changing client needs progressively adequately change items into "items as-an administration", another advanced plan of action.

IoT, tomorrow: wise, self-arranging supply chains. It is a little reasonable jump from items as-a support of shrewd, self-sorting out supply chains. As production network forms and their crude materials and segments become instrumented with IoT sensors, the sign they send about

the condition of those procedures can be investigated by progressively proficient AI frameworks. Joining that information with data about the different clients for

whom the store network's yield is predetermined, such frameworks could choose for themselves how to work and react progressively to evolving conditions.

REFERENCES

<https://www.govtech.com/fs/New-Jersey-Turns-to-Internet-of-Things-to-Improve-RoadwaySafety.html>

<https://www.govtech.com/fs/New-Jersey-Turns-to-Internet-of-Things-to-Improve-RoadwaySafety.html>

<http://www.informationweek.com/strategic-cio/amazon-robotics-iot-in-the-warehouse/d/did/1322366>

<https://www.media.volvocars.com/global/en-gb/media/pressreleases/169675/volvo-cars-to-develop-next-generation-automotive-technologies-with-microsoft>

<https://www.gartner.com/en/newsroom/press-releases/2017-02-07-gartner-says-8-billion-connected-things-will-be-in-use-in-2017-up-31-percent-from-2016>

<https://www.google.com/search?q=gartner+iot+study>

<https://www.prnewswire.com/news-releases/global-logistics-market-to-reach-us155-trillion-by-2023-research-report-published-by-transparency-market-research-597595561.html>

<https://www.google.com/search?q=ZenCargo+study+supply+chain+inefficiencies+cost+businesses+nearly+USD+2+Billion+in+the+UK+alone>

"IoT Will Surpass Mobile Phones as Most Connected Devices," Information Week, 4 August 2016, © 2016 UBM.

Revalidating Phillips Curve in Indian Context

Key words: *Phillips Curve, Inflation, Unemployment, Granger Causality, Cointegration*

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ABSTRACT

Current research tries to find out the empirical association of Inflation and Unemployment by validating the proposition of the Phillips curve in the Indian scenario. To check the operation of the Phillips curve in the current Indian economic situation the data of twenty-eight years i.e. 1992 to 2019, have been taken into consideration. To check the applicability of the already existing theory of the inverse relationship between jobless rate and inflation, researchers have applied Co-integration and Granger Causality Test. The findings of the research article conclude a long-run association between unemployment and inflation. Many studies do not confirm the long-run association between unemployment and inflation. The results of the study further confirm the short-run association between the said two variables. The study shows the direction of causality from inflation to unemployment but not from unemployment to inflation. This indirectly shows that unemployment cannot lead to inflation. So, the study has successfully validated the presence of the Phillips Curve in the Indian scenario.

INTRODUCTION

Inflation and unemployment are two economic concepts that are intricately related. The theory of the correlation between inflation and unemployment has been addressed by policymakers in all economies for decades. For many macroeconomic policies, unemployment in India has been the key issue, though inflation is considered a persistent economic problem. With the statistical evidence, A.W Phillips extracted "The indirect relationship between unemployment and the rate of money wages in the UK" (Phillips, 1958), as when Milton Friedman (1968) later criticized the Phillips curve at the time of severe recession as unstable as both unemployment and inflation was on the rise and claimed that there is no long-run association between inflation and unemployment. Many research scholars and academicians have tried to assess the applicability of the Phillips Curve in different fields over the years (Bårdsen, G., et.al. 2002; Fuhrer, J. C.1995; Hindrayanto, I., et. al. 2019).

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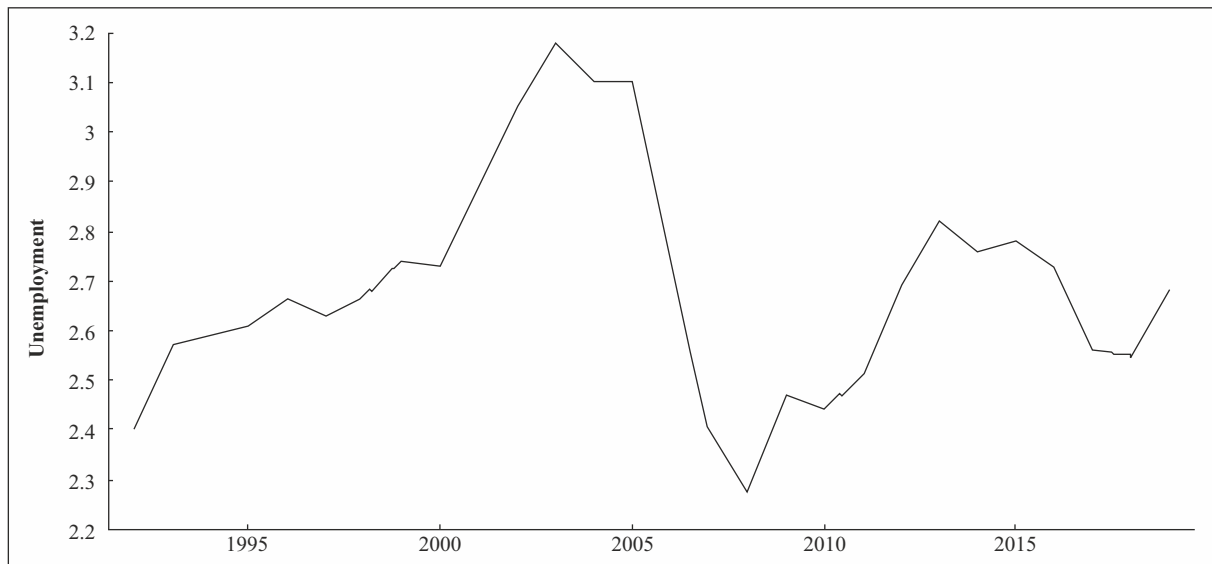
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Phillips Curve is discussed in two contexts, one is a short run and the other is a long run. Many countries observed high inflation and unemployment (stagflation) levels during the 1970s, so the Phillips curve was challenged by several economists who argued that the relationship of variables in the Phillips curve was just a notion of a short period. Milton Friedman and Edmund Phelps (1968) believed that there was no relationship of a trade-off between inflation and unemployment in the long run, but the Phillips Curve is a vertical straight line called NAIRU at the natural rate of unemployment. Only the unemployment rate which is the natural rate is consistent with a steady rate of inflation in the long run. The Phillips long-run curve is the thus straight vertical line. In the short term, policymakers may see a short-term tradeoff between the two variables of the Phillips curve,

but the Phillips Curve will change outwards, giving rise to the Current short-run Phillips curve if inflation expectations come into play. Inflation will only increase because of the reduced unemployment level below NAIRU. There will be no stable inflation.

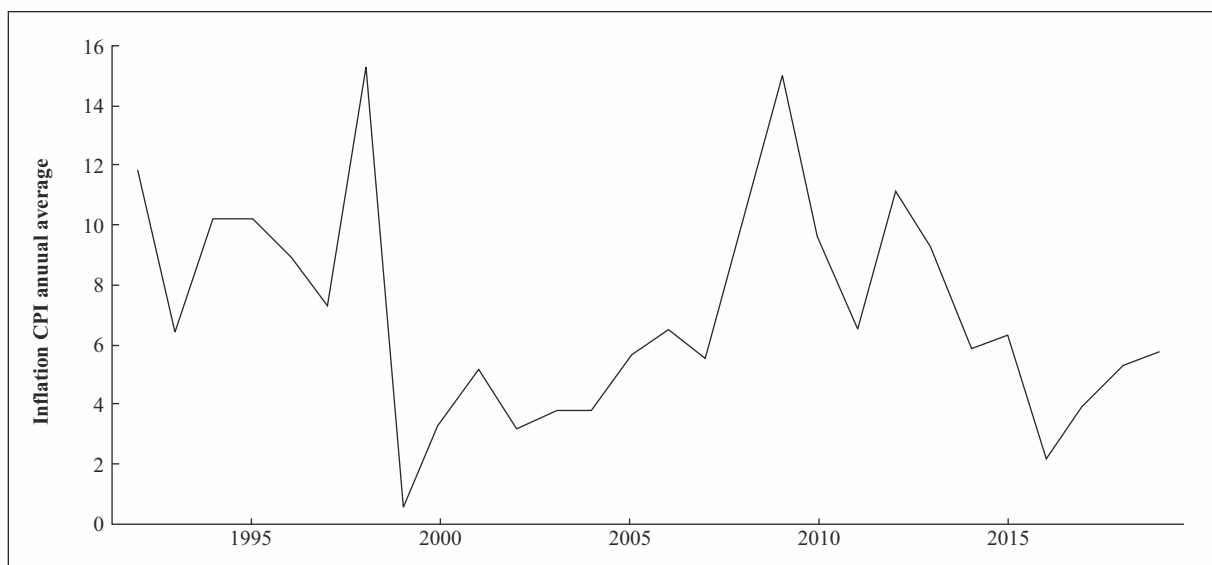
The incorrect and old base calculation of inflation and unemployment leads to plenty of difficulties in estimating the Phillips Curve, especially considering the case for India. To assess the rate of unemployment and inflation, different variables are discussed in the literature. So, the current topic has been chosen for the study to revalidate the Philips curve in the short as well as long run in the Indian economic environment. Following is the trend of Inflation and Unemployment over the given time duration, individually.

Figure 1 - Trends of Unemployment (1992-1999)



Source: Author's formation based on data collected

Figure 2 - Trends of Inflation (1992-1999)



Source: Author's formation based on data collected

The main purpose of this article is to retest the implication of the theory of the Phillips curve in the Indian context. The study is written into six sections. The first section provides the background of the study. The next second section presents the review of related literature accessible on the topic taken for study. The third section includes descriptions of the data definition and analysis methods implemented for the study to be carried out. The fourth section presents empirical findings and analysis of current research econometric methods applied. And the last section presents the conclusion of current research and its future direction.

REVIEW OF LITERATURE

This section focuses on an extensive survey of review of existing literature available on the offered topic. In 1958, the theory of the Phillips curve came into existence with the proposition of the tradeoff relationship between inflation and the jobless rate. After that, the failure of the Phillips curve tradeoff in the 1970s made Friedman (1968) validates this nexus of inflation and unemployment for short period only. Following this, the Phillips curve and its validation became the area of research for researchers worldwide. Just two years later Samuelson & Solow (1960) asserted a negative association between nominal wages and unemployment rate through the use of US macroeconomic data. Later, Solow (1970) & Gordon (1970) validated the Phillips curve using Solow-Gordon affirmation. On the contrary, Friedman (1968) and Lucas (1976) rejected the existence of the Phillips curve theory implying no trade-off between inflation and unemployment, also giving rise to "Lucas Critique". F Levi, M. D., & Makin, J. H. (1980) tested the evidence of inflation uncertainty and implication of the Philips curve. Incorporating data of macroeconomic level for the US, King and Watson (1994) checked the presence of the Phillips curve. Their results have shown that the current theory of the trade-off relationship of inflation and unemployment over time under review has been very supportive. Islam et al. (2003) tested the Phillips proposition for US data from 1950 to 1999 and discovered a poor long-term co-integration of unemployment-inflation relations. For developed economies, Reichel (2004) applied the co-integration approach to the Phillips hypothesis and discovered trade-offs between inflation and unemployment only for the US and Japan. Rudd, J., & Whelan, K. (2005) tested whether, as in the New Keynesian Phillips curve, lagging inflation values reflect backward-looking inflation expectations or not. By applying vector autoregression (VAR), Schreiber and Wolters (2007) discovered a long-run association between inflation and unemployment. Based on state-dependent pricing, Gertler, M., & Leahy, J. (2008) established an analytically tractable Phillips curve. In more recent papers, Orji et al. analyzed the

unemployment and inflation nexus in Nigeria using a distributed lag model and the findings invalidate the existence of the Phillips curve. Flattening of the Phillips curve is tested by Kojima (2020) and found that the recent Japanese Phillips curve has taken a concave shape from the original convex shape due to changes in the labor force population.

A local approximation around a steady-state of zero inflation was considered unusual idiosyncratic shocks were implemented. Paul (2009) with his study on the Phillips curve concluded its existence in India due to oil price shocks and post-liberalization policy. Dritsaki, Chaido & Dritsaki, Melina (2013) carried out an empirical analysis on the Phillips curve in Greece and concluded that inflation and unemployment have a long-term and causal correlation. Simionescu (2014) applied ARDL and DOLS approaches of measuring co-integration to study the Phillips relation and the relation was reported to be negative in the short run and positive relation in the long run in Romania. Gordon, R. J. (2018) challenged the fundamental premise in their paper of the Friedman-Phelps method that the labor market tends to clear and that shifts in unemployment down or up arise only in reaction to the 'fooling' of staff, businesses, or both. As calculated by the weighted median of industry price increases, Ball, L., & Mazumder, S. (2019) analyzed the behavior of U.S. core inflation. They found that core inflation since 1985 is well-explained by an increased Phillips curve of expectations in which anticipated inflation is calculated by expert projections and the short-term unemployment rate captures labor-market slack. Particularly in an Indian context, Singh (2011) applied a non-linear Kalman filter approach and found clear evidence of the Phillips curve for recent years. Another study by Dua & Gaur (2009) used the quarterly data and after accounting for agricultural shocks and imported inflation concluded a positive association between unemployment and inflation. Very recently, Behera (2018) explored the relationship of inflation and unemployment using sub-national data in a panel study approach, results confirmed the validity of the original Phillips curve from an Indian perspective.

From the conclusive summary of related literature, a gap can be seen for study on the offered topic in the Indian context. Thus, this gap can be utilized to validate the implications of the Phillips curve in the short as well as long run with a special focus on India. The purpose of the current study can be stated as under:

OBJECTIVES

1. To evident the Phillips Curve statement in Indian Economic Environment.
2. To check the existence of the Phillips curve in the short-run.

3. To find out the implications and nature of the Phillips curve in long-run.

RESEARCH METHODOLOGY

Data

To validate the implication of the Phillips curve, data of percentage average annual inflation (CPI) and percentage unemployment has been taken from 1992 to 2019 (28 Years). The Researcher has utilized secondary data obtained from World Bank Indicators and Economic survey. The statistical tools applied to test the presence of the Phillips curve in context have been described in econometric modeling which can be described as under:

Econometric Modelling

Augmented Dickey Fuller Test

The stationary testing was carried out using the ADF (Augmented Dickey Fuller) test as a precondition for the implementation of any econometric model. Specifically, here, to apply Johansen test co-integration, all data variables need to be stationary (Zayed et al. 2018) The equation of ADF is described as below:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \sum_{i=1}^m \alpha_i \Delta Y_{t-i} + \varepsilon_t$$

Where,

$Y(t-1)$ = lag 1 of time series

$\Delta Y(t-1)$ = first differential of the time series at time (t-1)

where ε_t is a pure white noise error term.

Johansen Cointegration Test

The Johansen Cointegration Test has been applied to identify the long-term links between joblessness and price rise. If the cointegration of variables is detected,

it suggests that they have a long-term association of variables. Co-integration equations will be identified using trace statistics and eigenvalues (Islam et al. 2003). The optimal lag length has been determined by minimizing the Akaike information criterion (AIC) criterion (Akaike 1974).

Granger Causality Test

The Granger Causality Test was used to find out the short-term relationship. If there is cointegration among variables then we apply the Granger Causality test to check short-run association among variables (Granger, 1986). The confirmation of causality concludes the short-run relation among variables.

The test to verify the causality between unemployment and inflation includes estimating the following pair of regressions:

$$INF_t = \sum_{i=0}^n \alpha_i UNEP_{t-i} + \sum_{j=1}^n \beta_j INF_{t-j} + u_{1t} \quad (1)$$

$$UNEP_t = \sum_{i=0}^n \lambda_i INF_{t-i} + \sum_{j=1}^n \delta_j UNEP_{t-j} + u_{2t} \quad (2)$$

Where u_{1t} and u_{2t} (the perturbations) are uncorrelated. Equation 1 states that Inflation is dependent on the past values of inflation and unemployment and equation 2 postulates the same for unemployment.

EMPIRICAL RESULTS AND DISCUSSION

The stationarity testing results have been shown in Table 1. The null hypothesis as per the ADF test of unit root indicates that there is no unit root present in the time series. As per the result, it can be concluded that both the time series i.e. unemployment and inflation are stationary at level (p-value indicated to accept the null hypothesis). If the p-value is more than 0.05 level of significance, the null hypothesis is said to be accepted.

Table 1 - Augmented Dickey-Fuller Test

Variable	ADF	
	test statistic	P-value
Unemployment	-2.8804	0.2357
Inflation	-1.7793	0.657

Source: Author's calculation

Table 2 presents the result of the Johansen cointegration test. As per the result, it can be noticed that the test value is more than the calculated value at 5% level of significance. This indicated towards rejection of the null hypothesis which is "there is no cointegration between

Unemployment and inflation". The results specify that there is a long-run association between unemployment and inflation in the Indian context. Since the long-run association amongst the variables is established, the short-run linkages are to be checked.

Table 2 - Test Results (Johansen Cointegration)

Cointegration Equations	Eigenvalues (lambda)	trace statistic		maximal eigenvalue statistic	
		Test statistic	Critical Value (5%)	Test statistic	Critical Value (5%)
r= 0	4.983250e-01	22.23	19.96	17.93	15.67
r <= 1	4.983550e-01	4.30	4.24	4.30	4.24

Source: Author's Calculation

Before applying the Granger causality test, the optimum lag selection is required. For this AIC values have been analyzed. Table 3 shows the values of AIC (Akaike information criterion) up to 5 lags. As per the results the

as per the minimum value of AIC the lag selection has been made (Thornton, D. L., & Batten, D. S. 1985). So here lag length has been taken to 1 to run the granger causality test.

Table 3 - Optimum Lag Selection

Variable	AIC (n)				
	1	2	3	4	5
Unemployment	-3.56	-3.91	-3.81	-3.77	-3.69
Inflation	2.11	2.21	2.17	2.14	2.22

Source: Author's calculation

Table 4 shows the result of the short-run association between the variable i.e. unemployment and inflation. As per the values, it can be noticed that there is a unidirectional association between the variables and the direction of connection runs from inflation to

unemployment. The study does not capture the causality running from unemployment to inflation. Indirectly the study reveals that unemployment does not cause inflation. The findings are successfully contributing to existing literature.

Table 4 - Results (Granger Causality)

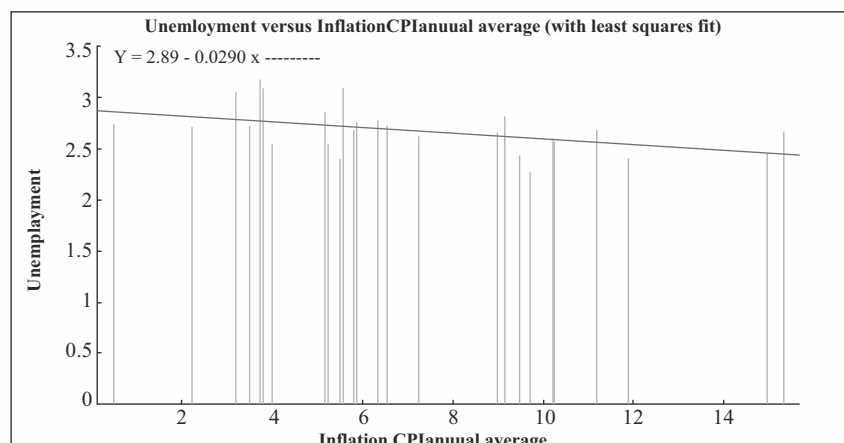
Direction of causality	F-statistic	Years of lags	Probability	Existence of causality
Unemployment to Inflation	2.5835	1	0.09928	No
Inflation to Unemployment	7.2411	1	0.01277	Yes

Source: Author's calculation

The following figure shows the unemployment on the Y-axis and inflation on the X-axis. In this figure, it can be noticed that unlike other studies the Phillips curve is a downward sloping curve that confirms the inverse

relationship between joblessness and inflation in long run. Many studies do not confirm the long-run association between unemployment and price rise.

Figure 3 - Long Run Phillips Curve: The Indian Evidence



Source: Author's formation on the basis of data collected

CONCLUSION AND FUTURE DIRECTION OF RESEARCH

The tradeoff and negative connection between unemployment and price rise have become a foundation in the area of macroeconomic management. This has led to the debate towards the current existence of the Phillips curve proposition (Furuoka, 2007). The current research study was undertaken to revalidate the Phillips curve in emerging and developing countries like India. The findings show that in the Indian sense, there is a long-term association between unemployment and inflation. The validity of the Phillips curve is supported by Sing (2018) and Singh & Verma (2016). As per the results, it can be said that the variables are unidirectionally related and that the path of causality runs from inflation to unemployment. The analysis does not capture the causality between unemployment and inflation. The research indirectly discloses that inflation is not caused by unemployment.

As per the report, the Phillips curve is a sloping downward curve that confirms the inverse relationship between unemployment and inflation in the long run, unlike other research. The long-term correlation between unemployment and inflation is not supported by several studies. We have seen the relationship in variables and the existence of the Phillips curve in the long period in the Indian context.

In the compilation of an economy's economic policies, the research offers observations and valuation viewpoints in line with the two most important macroeconomic targets, to keep inflation and unemployment as low as possible. Future research in the field of validating the Phillips curve in the context of developing and emerging economies has ample scope. Also, since India is prone to supply shocks, further validation of the Phillips curve can be carried out after controlling supply shocks and structural breaks. Another area of future research could be to forecast the inflation basis Phillips curve.

REFERENCES

- Akaike, H. (1974). A New Look at the Statistical Model Identification, *IEEE Transaction on Automatic Control*, 19, 716-723.
- Ball, L., & Mazumder, S. (2019). A Phillips Curve with Anchored Expectations and Short Term Unemployment. *Journal of Money, Credit and Banking*, 51(1), 111-137.
- Bårdsen, G., Jansen, E. S., & Nymoen, R. (2002). Testing the new Keynesian Phillips curve (No. 2002, 18). Memorandum.
- Behera, H. K., Wahi, G., & Kapur, M. (2017). Phillips Curve Relationship in India: Evidence from State-level Analysis. Available at SSRN 3050414.
- Dritsaki, Chaido & Dritsaki, Melina. (2013). Phillips Curve Inflation and Unemployment: An Empirical Research for Greece. *Int. J. of Computational Economics and Econometrics*. 3. 27 - 42. 10.1504/IJCEE.2013.056265.
- Dua, P., & Gaur, U., (2009). Determination of Inflation in an Open Economy Phillips curve Framework. Centre for Development Economics, Delhi School of Economics, New Delhi, India. Working Paper No. 178.
- Friedman, M. (1968). The Role of Monetary Policy, *American Economic Review*, 58, 1-17.
- Fuhrer, J. C. (1995). The Phillips Curve is Alive and Well. *New England Economic Review*, 41-57.
- Furuoka, F. (2007). Does the "Phillips Curve" Really Exist? New Empirical Evidence from Malaysia. *Economics Bulletin*, 5(16), 1-14.
- Gertler, M., & Leahy, J. (2008). A Phillips Curve with a Ss Foundation. *Journal of political Economy*, 116(3), 533-572.
- Gordon, R. J. (1971). Price in 1970: The Horizontal Phillips Curve. *Brookings Papers on Economic Activities*, 3 (Washington, DC: Brookings Institution), 449, 58.
- Gordon, R. J. (2018). Friedman and Phelps on the Phillips Curve Viewed from a Half Century's Perspective. *Review of Keynesian Economics*, 6(4), 425-436.
- Granger, C. W. J. (1986). Developments in the Study of Cointegrated Economic Variables. In *Oxford Bulletin of economics and statistics*.
- Hindrayanto, I., Samarina, A., & Stanga, I. M. (2019). Is the Phillips Curve Still Alive? Evidence from the Euro Area. *Economics Letters*, 174, 149-152.
- Hooper, P., Mishkin, F. S., & Sufi, A. (2020). Prospects for Inflation in a High Pressure Economy: Is the Phillips Curve Dead or is it Just Hibernating?. *Research in Economics*, 74(1), 26-62.

- Islam, F., Hassan, K., Mustafa, M. and Rahman, M. (2003). The Empirics of US Phillips Curve: A Revisit, *American Business Review*, 20(1), 107-112.
- King, R.G. and Watson, M.W. (1994). The Post-war US Phillips Curve: A Revisionist Econometric History, *Carnegie-Rochester Conference Series on Public Policy*, 41, 157-219.
- Kojima, H. (2020). The Flattening of Japan's Phillips Curve: An Unemployment Rate Analysis.
- Levi, M. D., & Makin, J. H. (1980). Inflation Uncertainty and the Phillips curve: Some Empirical Evidence. *The American Economic Review*, 70(5), 1022-1027.
- Lucas, Robert E. (1973). Some International Evidence on Output-Inflation Tradeoffs. *American Economic Review* 63, pp. 326—44.
- McLeay, M., & Tenreyro, S. (2020). Optimal Inflation and the Identification of the Phillips Curve. *NBER Macroeconomics Annual*, 34(1), 199-255.
- Orji, A., and Orji, O., and Okafor, J. (2015). Inflation and Unemployment Nexus in Nigeria: Another Test of the Phillips curve. *Asian Economic and Financial Review*, 5(5) 766-778
- Paul, B. P. (2009). In Search of the Phillips Curve for India. *Journal of Asian Economics*, 20, 479- 488
- Phelps, E. (1967). Phillips Curve, Expectation of Inflation, and Optimal Inflation over Time, *Economica*, 34, 254-281.
- Phillips, A.W. (1958). The Relationship between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, *Economica*, 25, 258-299.
- Richard G. Lipsey. (1960). The Relation between Unemployment and the Rate of Change of Money Wage Rate in the United Kingdom 1862-1957; A Further Analysis, *Economica* 27, 1-31
- Reichel R. (2004). On the Death of the Phillips Curve: Further Evidence, *Cato Journal*, 24, 341-348.
- Rudd, J., & Whelan, K. (2005). New Tests of the New-Keynesian Phillips curve. *Journal of Monetary Economics*, 52(6), 1167-1181.
- Samuelson, P. A. & Solow, R. II. (1960). Analytical Aspect of Anti-inflation Policy. *American Economic Review* 50, 177- 94.
- Schreiber, S. & Wolters, J. (2007). The Long Run Phillips Curve re-visited: Is the NAIRU Framework Data-consistent? *Journal of Macroeconomics* 29, 335, 67
- Simionescu, M. (2014). Testing the Existence and Stability of Phillips Curve in Romania. *Montenegrin Journal of Economics*, 10(1), 67.
- Sing, R. (2018). Impact of GDP and Inflation on Unemployment Rate: A Study of Indian Economy in 2011-201S. *International Journal of Management, IN H Engineering* 8(3), 329-40.
- Singh, B., Kanakaraj, A., & Sridevi, T. (2011). Revisiting the Empirical Existence of the Phillips Curve for India. *Journal of Asian Economics*, 22(3), 247-258. doi: 10.1016/j.asieco.2011.01.002
- Singh, D. & Verma, N. (2016). Tradeoff between Inflation and Unemployment in the Short Run: a case of the Indian Economy. *International Finance and Banking* 3(1), 77, 96.
- Solow, R. II. (1970). Discussion of R.J. Gordon's Recent Acceleration of Inflation and its Lessons for the Future. *Brookings Papers on Economic Activities*, 1 (Washington, DC: Brookings Institution), 42(6).
- Thornton, D. L., & Batten, D. S. (1985). Lag-length Selection and Tests of Granger Causality between Money and Income. *Journal of Money, credit and Banking*, 17(2), 164-178.
- Zayed, N. M., Islam, M. R., & Hasan, K. R. (2018). Testing Phillips Curve to Examine the Inflation Rate Regarding Unemployment Rate, Annual Wage Rate and GDP of Philippines: 1950-2017. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-9.

Case Study

Blockade : An Opportunity to Enhance International Relations-Case of Qatar

Key words: *Blockade, International Relations, Qatar*

Uzma Reyassuddin Ahmed^{*} and Aditya Kumar Gupta^{}**

ABSTRACT

This case throws light on the blockade that had occurred in Qatar. The blockade had been caused by its neighboring countries and wrongfully accusing Qatar of supporting terrorism without any solid proof rather than the fact they maintain good relations with Iran. How Qatar grew as a country, overcame blockade, and maintained themselves in the world eyes rather than collapsing they got revived. The Emir made sure that the day never comes where they will have to lean on the countries that had caused them blockade.

How Qatar took it as an opportunity to grow to extend itself and make new relations with other countries. Despite the serious violations caused by the four countries with regards to human rights and the innumerable infringements of law, they managed to

utilize their wealth and human potential to withstand the sanctions and absorb the shock.

INTRODUCTION

Qatar is an independent Emirate in the Gulf Region. The country is situated on a peninsula that extends from the Arabian Peninsula into the Persian (Arab) Gulf; it is bordered by Saudi Arabia. Qatar has been ruled by the House of Thani since 1868.

Qatar had faced a diplomatic crisis back in 5 June 2017, when Saudi Arabia, the United Arab Emirates, Bahrain, Egypt, the Maldives, Mauritania, Senegal, Djibouti, the Comoros, Jordan, the Tobruk-based Libyan government, and the Yemeni government severed diplomatic relations with Qatar and banned Qatari airplanes and ships from utilizing their airspace and sea routes along with Saudi Arabia blocking the only land crossing. During the crisis,

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Qatar was supported by Turkey (food aid, diplomatic and military support) and Iran (food aid, airspace access and diplomatic support).

HOW DID THE BLOCKED START?

The roots of the conflict

There had been a diplomatic rift back in 2014, when UAE, Saudi Arabia, and Bahrain had pulled out their diplomats, claiming that Qatar has been supporting armed groups. However, the border remained open and Qataris were not expelled. Tensions with Qatar usually revolved around due to their alleged support for political Islamic movements, such as the Muslim Brotherhood, as well as complaints about the Al Jazeera Media Network,



which has its headquarters in Doha. These tensions were aggravated due to the Arab Spring in 2011 when Saudi Arabia and Qatar were seen taking different sides. On June 7, 2017, the Saudi foreign minister said that Qatar must cease its support of groups such as Hamas and the Muslim Brotherhood.

THE CURRENT SITUATION

On May 23, 2017 hackers had posted fake remarks attributed to Qatar's Emir on the Qatar News Agency website criticizing US foreign policy and praising Iran. Due to Saudi Arabia having bad blood with Iran it led to the authorities in Saudi Arabia and the UAE block out Al Jazeera's website (which is a Qatari pay television news channel owned by the Al Jazeera Media Network, headquartered in Doha, Qatar.) On June 5 early morning, the Ministry of Foreign Affairs in Bahrain, UAE, Saudi Arabia, and Egypt had issued statements announcing the severing of diplomatic relations with Qatar. Soon Saudi



Arabia had then shut down its land border with Qatar; joining forces with three other countries Saudi implemented a land, sea and air embargo on Qatar. The four countries are trying to claim that Qatar supports 'terrorism' as they maintained close relations with Iran and meddled in the internal affairs of their countries. The United States President Donald Trump had claimed that he had engineered the diplomatic crisis in a series of tweets he had posted on twitter.

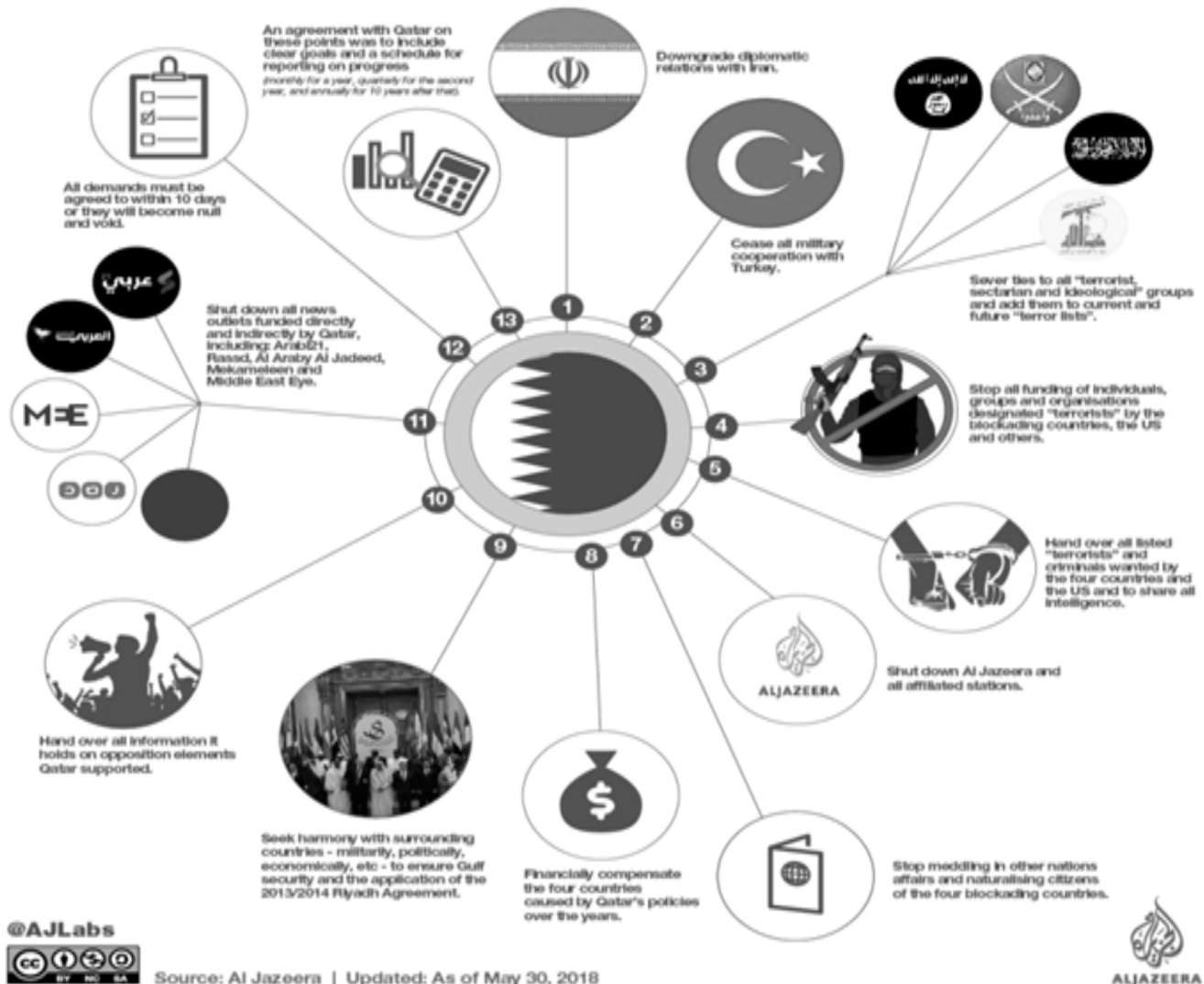
BLOCKADING COUNTRIES' DEMANDS

The four countries had issued a list of demands to Qatar which had to be carried out within 10 days to ensure that their relationship goes back to normal, Qatar promptly rejected those demands.

At the top of the list was cutting diplomatic ties with Iran, but it also included ceasing military cooperation with Turkey and shutting down Al Jazeera.

Qatar-Gulf crisis: The 13 demands presented by the blockading countries

Qatar rejected the accusations and list of demands by Saudi Arabia, the United Arab Emirates, Bahrain and Egypt.



AFTER-EFFECTS OF THE BLOCKADE BEING IMPLEMENTED.

a. Food supply

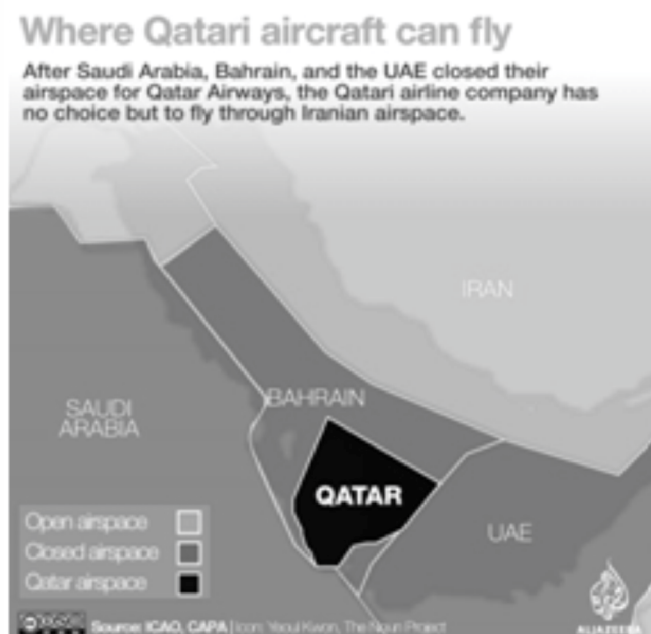
Emirates Post of UAE had halted their postal services to Qatar on 6 June 2017. This had caused a serious issue to Qatar as nearly 80% of their food requirement was fulfilled by the Persian Gulf Arab neighbors, with merely 1% being produced domestically. Immediately once the civilians had found out about the cutting of relations the residents of Qatar had swarmed the stores to stock on food as they were worried about food shortage. But they were well stocked and had been talking to Turkey and Iran to secure the supply of food.

As Qatar depended entirely on Saudi Arabia and Dubai for their supply of dairy products, Qatar gave birth to their

very own dairy company. In June 2019, exactly two years after the diplomatic crisis, Baladna confirmed that it is now supplying half of Qatar's fresh milk. The company has started exporting milk to Oman, Afghanistan, and Yemen; with plans to extend to Libya soon. The IPO of Baladna has made the country self-reliant in the production of milk and dairy products.

b. Air travel

More than 70 flights were grounded across the region, according to data from scheduling firm OAG. Most of them being Qatar Airways. Other airlines were affected as well include Dubai's Emirates, Abu Dhabi's Etihad Airways, Saudi Arabia's Saudia, and Bahrain's Gulf Air, which have all canceled flights to and from Doha. Alexandre de Juniac, the Director-General of the



International Air Transport Association (IATA) has expressed his concern over the blockade. "We would like borders to be reopened, the sooner the better," he told reporters at the group's annual meeting in the Mexican city of Cancun on Monday. "Aviation is globalization at its very best." Qatar Airways, in a statement on its website, said passengers holding a confirmed ticket to any of the four Arab nations between June 5 and July 6 are permitted to rebook their flights up to 30 days after their current departure date as more than 30 flights were canceled. The airline said its offices would continue to operate as normal in affected countries. Analysts said the altered routes for Qatar Airways flights will lead to longer flying time, lowering demand, thus affecting the airline's profits. Due to the restricted routes, the aircraft was being forced to take a single flight path out of Doha. Saudi Arabia-led blockade has had its fair share of negative impact on Qatar Airways' operations. While the airline's latest report includes a statement by its Chief Executive Officer Akbar Al Baker claiming that the Doha-based carrier's "adversaries have suffered far more than" Qatar Airways did, a \$639 million (QAR2.3 billion) loss in FY2019 might point otherwise. A \$1.3 billion increase in fuel expenses compared to FY2018, in part due to the blockade, forced the flag carrier to navigate some tough waters and airspace, quite literally, as the neighboring countries are not too keen on letting Qatar-registered aircraft bypass their airspace. Qatar Airways had called the initial year of the blockade as the most challenging year in its 20-year history.

Qatar is coping up well with the given circumstances and is trying to build new relations with other countries, and prove that they are strong enough to withstand the effects of the blockade. The diplomatic crisis has given Qatar a chance to prove that they are independent and

don't need the 4 countries (Bahrain, UAE, Saudi Arabia, and Egypt) approval.

"We carried on; we moved on with our economy; we moved on with our life," said the Foreign Minister Mohammed bin Abdulrahman Al Thani at the Doha Forum, an international conference that's held in Qatar.

Many countries would have collapsed under the type of condition put upon Qatar by its larger and more powerful neighbors, who accused it of financing terrorism, interfering in their domestic affairs and growing too close to Iran. They were especially incensed by Qatar's support for a range of activists across the Arab world, including the political Islamists that other Gulf monarchs consider a threat to their rule. Qatar's leaders deny the allegations of interference and financing terrorism, and say what really angered their neighbors was the country's independence, its refusal to march in lockstep with the Saudi and Emirati leaders who have long called the shots in the region.

The country's vast wealth had cushioned the blow of the blockade. Qatar dipped deeply into its \$340 billion reserve funds to establish new trading partners, to build up domestic industries and, in some cases, create new ones from scratch.

WHY IS QATAR BLOCKADE 'UNLAWFUL, UNJUSTIFIED AND DISPROPORTIONATE'?

When Saudi initiated the blockade took place the Emir of Qatar Tamim bin Hamad al-Thani wanted to call for negotiations to resolve the issue rather than come up with a solution that would compromise Doha's sovereignty and dignity. The crisis had not only shaken up the politics and religion but also on the civilians, and made a huge psychological impact on the overall population especially to the families that were separated during the event this has caused a lot of strain on families to cope up with displacement and financial loss.

The UN's human rights office has accused the four countries of organizing the hate campaign against Qatar, which also included death threats directed towards Sheikh Tamim.

With the issue regarding the legality of the event, only a competent international organ can authorize such kind of move. And it is clear that the four countries' decision was not asked by the Security Council, General Assembly or even the Gulf Co-operation Council to take action against Qatar. It is strongly said that Qatar has not committed an internationally wrongful act. Moreover, the 4 countries violated the international convention on the Elimination of All Forms of Discrimination as they had targeted only the Qatari nationally and had them leave their country. The decision also violates the 1944 Convention on International Civil Aviation.

CONCLUSION

From the above analysis, one can understand a bit more about the blockade that had occurred in Qatar by their neighboring countries. Any other country that's the size of Qatar who have taken a huge blow if the blockade was carried out on them and might not even be able to fund them self and regain themself in the record time that Qatar has other than the downside of the Aviation sector taking the biggest blow due to the airspace being blocked. Regardless of what they have been overcoming the blow and rather had added more destinations to their airline and are planning on buying other companies' stakes and investing they have been even collaborating with Indigo which is an Indian Airline.

Qatar has been growing and getting more independent day by day and is even hosting the FIFA 2022, sure some of the old relations have been broken but it helped Qatar make new relations with other countries and expand themself and come catch the public's attention regardless of being a very small country in the middle east. Qatar has made sure to have this shown in their national museum to tell them the story about the political issue as well as their history from prehistoric times.

REFERENCES

- <https://www.nytimes.com/2019/03/28/arts/qatar-national-museum-jean-nouvel.html>
- <https://www.aljazeera.com/news/2018/06/qatar-blockade-case-international-criminal-court-180627081742617.html>
- <https://www.aljazeera.com/news/2018/01/qatar-report-proof-saudi-led-blockade-illegal-180108152547009.html>
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- <https://www.aljazeera.com/news/2017/06/gulf-blockade-disrupts-qatar-airways-flights-170606081841215.html>
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- <https://www.nytimes.com/2018/12/19/world/middleeast/qatar-blockade-goods.html>
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- <https://www.worldbulletin.net/middle-east/qatar-airways-urges-un-action-against-gulf-blockade-h190716.html>
- <https://www.alaraby.co.uk/english/indepth/2018/6/4/qatar-blockade-unlawful-unjustified-and-disproportionate-new-report-says>

Book Review

Customer Relationship Management: Concept, Strategy, and Tools by V. Kumar and Werner Reinartz. 3rd Edition.

*Germany: Springer. 2018
(ISBN: 978-3-662-55380-0)*

Jitender Sharma*

Businesses run for the customer. 'Customer is King' is success mantra for any business. Over the years, customer relationship management has evolved from a mere concept to highly critical and essential issue in the business world. In today's technological, digital and social media era, customer relationship has become more prominent. It is now part of core strategy, business tactics which make in depth use of technology to manage relationships with customers and to continually understand their behavior, their needs and also to see what your competitors are offering and provide a better deal to them in order to retain your customers.

This book has been successful in providing a comprehensive outlook to both strategic and tactical aspects of customer relationship management in today's

context. Authors have emphasized developing an understanding of economic customer value as the guiding concept for marketing decisions.

It not only offers a detailed discussion on concepts of customer relationship management, database marketing but provides useful metrics to evaluate and measure customer value. It provides all necessary tools and applications details for managing profitable customer relationships.

This book has analyzed CRM strategies implementation in different areas including loyalty programs, marketing campaigns, and channel management and provides different strategies to keep your customers engaged for life time. It has incorporated a large number of case

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studies to make readers easily understand how CRM is managed in this information and technology age. A number of mini cases are used to further explain key managerial issues, stimulate thinking, and encourage a problem-solving approach. It also incorporates many recent advances in customer relationship management practices.

The book is divided into total five parts and 18 chapters.

Part I of the book in Chapter one deals with conceptual framework including definition of CRM and why CRM is important along with growth and evolution of CRM with concept of Customer Value is covered in second chapter.

Part II, Chapter three deals with strategic aspects of CRM. Chapter 4 deals with implementation part of CRM strategy including different steps of CRM strategy including different techniques to evaluate alternative customer selection strategies.

Part III of the book is about Analytical CRM. Chapter five and six contain customer analytics covering traditional marketing metrics, customer activity metrics, popular customer-based value metrics, strategic customer-based value metrics and techniques to evaluate strategies. Chapter 7 is on data mining and Chapter 8 deals with databases, types of databases, use and benefits of marketing benefits etc.

Part IV is about operational aspects of CRM. Chapter 9 has dealt with software tools and dashboards for CRM implementation. Chapter 10 has described loyalty programs designs and effectiveness and Chapter 11 deals with CRM campaign management aspects. Next Chapter 12 has described impact of CRM on marketing channels and Chapter 13 is about CRM issues in business-to-business context. Chapter 14 covers customer privacy concerns and privacy protection responses. Chapter 15 in this part deals with social media aspects of CRM.

Part V of the book deals with advancement in CRM applications. Both Chapters 16 and 17 have described in detail application of CRM in B2B and B2C context. Final Chapter 18 deals with future aspects of CRM including social CRM.

In nutshell, it is a mini bible that has covered all aspects of CRM in synchronization with modern times and techniques and is very useful for students, faculty and even practitioners of CRM.

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Michaels, P. J., & Balling, R. C., Jr. (2000). *The satanic gases: Clearing the air about global warming*. Washington, DC: Cato Institute.

In-text reference: (Michaels & Balling, 2000)

Miller-Rushing, A. J., Primack, R. B., Primack, D., & Mukunda, S. (2006). *The satanic gases: Clearing the air about global warming*. Washington, DC: Cato Institute.

In-text reference: (Miller-Rushing, Primack & Mukunda, 2006)

Edited volume

Galley, K. E. (Ed.). (2004). *Global climate change and wildlife in North America*. Bethesda, MD: Wildlife Society.

In-text reference: (Galley, 2004)

Journal Publications

Allen, L. (2004, August). Will Tuvalu disappear beneath the sea? Global warming threatens to swamp a small island nation. *Smithsonian*, 35(5), 44-52.

In-text references: (Allen, 2004)

Begley, S., & Murr, A. (2007, July 2). Which of these is not causing global warming? A. Sport utility vehicles; B. Rice fields; C. Increased solar output. *Newsweek*, 150(2), 48-50.

In-text references: (Begley & Murr, 2007)

If journal pages are continuous

Miller-Rushing, A. J., Primack, R. B., Primack, D., & Mukunda, S. (2006). Photographs and herbarium

specimens as tools to document phonological changes in response to global warming. *American Journal of Botany*, 93, 1667-1674.

In-text reference: (Miller-Rushing, Primack, Primack, & Mukunda, 2006)

If journal pages starts again in new issue

Bogdonoff, S., & Rubin, J. (2007). The regional greenhouse gas initiative: Taking action in Maine. *Environment*, 49(2), 9-16.

In-text reference: (Bogdonoff & Rubin, 2007)

If journal article is available in some database

Mora, C., & Maya, M. F. (2006). Effect of the rate of temperature increase of the dynamic method on the heat tolerance of fishes. *Journal of Thermal Biology*, 31, 337-341. doi: 10.1016/j.jtherbio.2006.01.055

In-text reference: (Mora & Maya, 2006)

Website contents

United States Environmental Protection Agency. (2007, May 4). Climate Change. Retrieved from the Environmental Protection Agency website: <http://www.epa.gov/climatechange>

In-text reference: (United States Environmental, 2007)

Gelspan, R. (2007). *The Heat Is Online*. Lake Oswego, OR: Green House Network. Retrieved from The Heat Is Online website: <http://www.heatisonline.org>

In-text reference: (Gelspan, 2007)

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